TSMC’s Vision, Mission & Core Values

TSMC’s Vision

Our vision is to be the most advanced and largest technology and foundry services provider to fabless companies and IDMs, and in partnership with them, to forge a powerful competitive force in the semiconductor industry.

To realize our vision, we must have a trinity of strengths:

3. be the most reputable, service-oriented and maximum-total-benefits silicon foundry

Our mission is to be the trusted technology and capacity provider of the global logic IC industry for years to come.

TSMC’s Mission

Our mission is to be the trusted technology and capacity provider of the global logic IC industry for years to come.

TSMC’s Core Values

Integrity

Integrity is in our mission statement and is a most basic value of TSMC. We believe the exact opposite of our values and principles is the best part of our work. Hence, we do not permit our employees to stretch commitments lightly. Over we make a commitment, we devote ourselves completely to meeting that commitment. The same applies to our customers, suppliers, and shareholders. These stakeholders all contribute to TSMC’s success, and TSMC is dedicated to serving their best interests. In short, TSMC base all stakeholders will make a mutual commitment to the Company. Innovation

Innovation is the wellspring of TSMC’s growth, and is a part of all aspects of our business, from strategic planning, marketing and management, to technology and manufacturing. At TSMC, innovation means more than just new ideas; it means putting ideas into practice.

Customer Trust

Customer Trust is the most critical of the core values. Without customers, we would not exist. We value the ability to compete as much as the potential for new ideas, it means putting ideas into practice.

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2016 was a good year for TSMC as we delivered another year of record revenue and earnings. Our revenue grew double-digit outpacing a relatively flat global semiconductor industry.
Letter to Shareholders

Dear Shareholders,

2016 was a good year for TSMC as we delivered another year of record revenue and earnings. Our revenue grew double-digit outpacing a relatively flat global semiconductor industry. We also achieved our highest gross and operating margin in the last twenty years, which is a direct result of our ongoing and unrelenting company-wide focus on driving productivity improvement, higher operating efficiency, and across-the-board cost reduction efforts.

TSMC’s growth is propelled by our ability to earn a premium to the overall semiconductor industry’s growth by being a trusted provider of technology and capacity to the world logic IC industry. This position allowed us to participate actively in the growth of the faster-growing segments, such as the strong demand from 4G+ smartphones in the China market, the replacement and upgrade of Gamming, and the emergence of AI (Artificial Intelligence) in 2016. These applications require the use of technologies over a wide spectrum, and TSMC holds a leading position over this spectrum. Our strong position in technology leadership and our commitment to invest in both R&D and in Capex are what enabled us to continually gain foundry market share.

We made significant advances in leading-edge process technologies in 2016. Revenue from 16-nanometer grew more than five-fold in 2016 and reached above 20% of total wafer revenue. Our 10-nanometer successfully began volume production for customers’ products in 2016, while 7-nanometer is on schedule to complete technology qualification in early 2017. Our 5-nanometer development is also well-underway and will see use of EUV (extreme ultraviolet) lithography. Our proprietary InFO (integrated fan-out) advanced packaging solution was adopted by a major customer for a significant mobile product in 2016 while we were working on the next generation of InFO solution for 2017 volume production.

Highlights of TSMC’s accomplishments in 2016:

- Total wafer shipments increased 9.6 percent from 2015 to reach 9.6 million 12-inch equivalent wafers.
- Advanced technologies (28-nanometer and beyond) accounted for 54 percent of total wafer revenue, up from 48 percent in 2015.
- We deployed 249 process technologies, and manufactured 9,275 products for 449 customers.
- TSMC’s market share in the total semiconductor foundry sector rose successively during the last seven years and reached 56 percent in 2016.

2016 Financial Performance

Consolidated revenue totaled NT$947.94 billion, an increase of 12.4 percent over NT$843.50 billion in 2015. Net income was NT$334.25 billion and diluted earnings per share were NT$12.89. Both increased 9 percent from the 2015 level of NT$306.57 billion net income and NT$11.82 diluted EPS. Excluding major one-off items, namely share disposal gains and the closure of TSMC Solar operations in 2015 and the negative impact from the earthquake in 2016, our EPS would have grown 17.4 percent year-on-year in 2016.

TSMC’s market share in the total semiconductor foundry segment rose successively during the last seven years and reached 56 percent in 2016.


Gross profit margin was 50.1 percent compared with 48.7 percent in 2015, and operating profit margin was 39.9 percent compared with 37.9 percent a year earlier. Net profit margin was 35.3 percent, a decrease of 1.0 percentage points from the prior year’s 36.3 percent.

TSMC raised its cash dividend payment to NT$6.0 per share for 2015 earnings distribution from NT$4.5 a year ago to reflect continued rising free cash flow generation. We remain confident in our ability to maintain and steadily improve our free cash flow in the next few years, and will consider increasing the cash dividends when appropriate.

Technological Developments

Thanks to continuous innovation and improvement, TSMC’s 28-nanometer technology remained robust with rising revenue in 2016, its sixth year of volume production. We will continue to roll out differentiated and cost-effective solutions and expect our strength in this significant node to persist for many more years.

We continued to reduce defect density and improve cycle time in our 16-nanometer FinFET technology. In addition to mobile processors, this node has gained strong acceptance for many other applications including cellular baseband, graphics processors for video games, augmented reality and virtual reality devices, and artificial intelligence systems. We further pushed the envelope of performance, die size and power consumption to roll out our 12-nanometer technology, which will enter volume production in the second half of 2017. Both 16-nanometer and 12-nanometer technologies can serve customers in mainstream and ultra-low power market segments, including low-to-mid-end mobile phones, consumer electronics, digital TV, automotive, and Internet of Things (IoT), as well as high-end applications, including high-end mobile and networking.

10-nanometer FinFET technology began production ramp in the fourth quarter of 2016 with shipments commencing in the first quarter of 2017. We expect a healthy ramp throughout 2017. With its aggressive geometric shrinkage, our 10-nanometer technology provides excellent density and is well positioned to serve the premium mobile market segment.

During the year, we collaborated with major customers and IP vendors to complete the IP design for our 7-nanometer technology and started silicon validation. We are on plan to start risk production in the spring of 2017. Meanwhile, development activities for our 5-nanometer node continued with risk production targeted for first half of 2019. We plan to use EUV lithography extensively at 5-nanometer to reduce process complexity. In addition, intensive early development efforts focusing on new transistors and technology definition were on-going for the technologies beyond 5-nanometer.

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In the area of advanced packaging technologies, TSMC’s proprietary InFO began volume production in 2016 while we also successfully qualified the next generation InFO solution with volume production expected in 2017. We extended our interposer CoWoS™ (chip-on-wafer-on substrate) technology to 16-nanometer and led the industry with volume production of super high-end accelerators that integrate multiple second generation high bandwidth memory chips (HBM2) and GPUs (Graphics Processing Unit) for the high performance computing market segment of artificial intelligence and deep learning.

TSMC’s ecosystem, the Open Innovation Platform™ (OIP), continued to expand in 2016 with more than 12,000 items contained in our libraries and silicon IP portfolio. More than 8,200 technology files and over 270 process design kits were available to customers via TSMC-Online which saw more than 100,000 customer downloads in 2016.

Corporate Developments

In March 2016, TSMC and the municipal government of Nanjing, China signed an agreement affirming that TSMC will make an investment to establish TSMC Nanjing Co. Ltd., a wholly-owned subsidiary of TSMC that will own and operate a 12-inch wafer fab and a design service center. The purpose is to provide closer support to customers as we expand our business opportunities in China. The facility is scheduled to commence production of 16-nanometer process technology in the second half of 2018.

Honors and Awards

TSMC received recognitions for achievements in innovation, business information disclosure, corporate governance, sustainability, investor relations and overall excellence in management from organizations including Newsweek, CommonWealth Magazine, PricewaterhouseCoopers, GlobalViews Magazine, Channel NewsAsia, RobecoSAM and the Taiwan Stock Exchange. TSMC received multiple awards from Institutional Investor Magazine and was ranked number one in IR Magazine’s Global Top Fifty Awards. TSMC was also selected as a component of the Dow Jones Sustainability Indices for a 16th consecutive year, reflecting our ongoing commitment to sustainability and corporate social responsibility. In 2016, TSMC was included as the largest component in the newly-launched FTSE4Good Emerging Index by the London Stock Exchange, and we remained a major component in MSCI Global Sustainability Indexes, an important global benchmark for CSR.

Outlook

Entering our fourth decade, TSMC has advanced into the forefront of semiconductor technology and has grown to become the world’s largest wafer capacity provider for logic ICs. TSMC’s innovative foundry business model has flourished and placed us at the center of a comprehensive ecosystem of IC designers, IP providers, and equipment suppliers with unmatched ability to unleash innovation. ICs manufactured by TSMC formed the backbone of information technology today.

As silicon becomes pervasive and computing is ubiquitous, the intelligent future requires continued advancement and innovation in semiconductor process technologies. As our technology development collecting pace, we now can provide our customers the most competitive leading-edge technology to develop their product. Combined with their innovative algorithm, customized architecture and strength in designs, our customers are able to provide the most competitive products in the applications where they were not used to compete before. Through our customers, we are expanding our footprint into the global high performance computing market as well.

TSMC has evolved over the last three decades, but our core values of integrity, commitment, innovation, and customer trust remain unchanged. We remain committed to creating value and generating strong returns to shareholders who have placed their trust with us. As we carry our heritage of excellence forward into an exciting future, we look forward to prospering together with our shareholders.

Morris Chang
Chairman
TSMC is the world’s largest semiconductor foundry, manufacturing 9,275 different products using 249 distinct technologies for 449 different customers in 2016.
Company Profile

2.1 An Introduction to TSMC

Established in 1987 and headquartered in Hsinchu Science Park, Taiwan, TSMC pioneered the pure-play foundry business model by focusing solely on manufacturing customers' designs. The Company does not design, manufacture or market semiconductor products under its own brand name, ensuring that it does not compete directly with its customers. Today, TSMC is the world's largest semiconductor foundry, manufacturing 9,275 different products using 249 distinct technologies for 449 different customers in 2016.

With such a large and diverse global customer base, TSMC-manufactured semiconductors are used in a wide variety of applications covering various segments of the computer, communications, consumer, industrial and standard semiconductor markets. Such strong diversification helps to smooth fluctuations in market demand, which, in turn, leads to higher levels of capacity utilization and profitability.

Annual capacity of the manufacturing facilities managed by TSMC and its subsidiaries reached above 10 million 12-inch equivalent wafers in 2016. These facilities include three 12-inch wafer fabs in Taiwan, as well as two 8-inch wafer fabs at wholly owned subsidiaries: WaferTech in the United States and TSMC China Company Limited.

In March 2016, TSMC and the municipal government of Nanjing, China signed an investment agreement affirming that TSMC will make an investment to establish TSMC Nanjing Company Limited, a wholly-owned subsidiary managing a 12-inch wafer fab and a design service center. Planned capacity is 20,000 12-inch wafers per month. The facility is scheduled to commence production of 16nm process technology in the second half of 2018. The purpose is to provide close support to customers as well as expand TSMC's market share and business opportunities in China in step with the rapid growth of the Chinese semiconductor market over the last several years.

TSMC provides customer service through its account management and engineering services offices in North America, Europe, Japan, China, South Korea and India. The Company employed about 47,000 people at the end of 2016.

The Company is listed on the Taiwan Stock Exchange (TWSE) under ticker number 2330, and its American Depositary Shares (ADSs) are traded on the New York Stock Exchange (NYSE) under the symbol TSM.

2.2 Market/Business Summary

2.2.1 TSMC Achievements

In 2016, TSMC maintained its leading position in the total foundry segment of the global semiconductor industry, with an estimated market share of 56%, despite intense competition from both established players and relatively new entrants to the business.

Leadership in advanced process technologies is a key factor in the Company's strong market position. In 2016, 54% of TSMC’s wafer revenue came from manufacturing processes with geometries of 28nm and below.

With TSMC’s focus on customer trust, the Company strengthened its Open Innovation Platform® (OIP) initiative in 2016 with additional services. During the 2016 Open Innovation Platform® Ecosystem Forum, held in September in San Jose, California, and in October in Beijing, the Company revealed 7nm FinFET Reference Flow (both full-chip and IP design), which highlighted the success of OIP-enabled design. Both forums were well attended by customers and ecosystem partners and demonstrated the value of collaboration through OIP to foster innovation.

TSMC offers the foundry segment’s widest technology portfolio and continues to invest in advanced technologies and specialty technologies, which are key differentiators vis-à-vis our competitors and provide customers more added value.

Technologies that the Company either developed or introduced in 2016 include:

Logic Technology
- 7nm FinFET (fin field-effect transistor) technology made good developmental progress. Risk production of this technology is planned in April 2017. A very fast yield ramp-up is expected as more than 95% of tools for 7nm FinFET are compatible with those for 10nm FinFET. Compared to 10nm FinFET, 7nm FinFET offers approximately a 25% speed improvement or a 35% power reduction. In addition, 7nm FinFET can be optimized for mobile applications and high-performance computing devices.
- 10nm FinFET technology began production ramp-up in the fourth quarter of 2016 and started shipments in the first quarter of 2017. Thanks to its aggressive geometric shrinkage, this technology provides excellent density/cost benefits. It can be used by customers in performance-driven market segments, including mobile, server and graphics.
- 16nm FinFET Plus technology (16FF+) received over 50 product tape-outs in 2016, bringing the total of product tape-outs to over 90 since this technology entered volume production in 2015. And most of them achieved first-time silicon success. This technology is aimed at customers in high-performance market segments, including mobile, server and graphics. The cost-effective 16nm FinFET Compact technology (16FFC) started volume production in the first quarter of 2016. 16FFC can maximize die cost scaling by incorporating optical shrink and process simplification at the same time. In addition, the development of 12nm FinFET Compact technology (12FFC) is progressing smoothly. This technology, which drives die size and power consumption to the best levels of the foundry’s 16/14nm technology, is expected to enter volume production in the second half of 2017. Both 16FFC and 12FFC can satisfy customers in mainstream and ultra-low-power (ULP) market segments, including low-end to mid-range mobile phones, consumer electronics, digital TV and the IoT (internet of things). With innovative structures, 16FFC and 12FFC can also be used in more advanced applications, including high-end mobile and networking.
- 28nm High Performance Compact (28HPC) technology led the way in mainstream smartphones, DTVs, storage and SoC applications. 28HPC enables smaller die size circuits, less over-design and extraordinary power reduction with excellent process control and optimized design rules.
- 28nm High Performance Compact Plus (28HPC+) technology provided further performance enhancement or power reduction in mainstream smartphones, DTVs, storage, audio and SoC applications. Compared to 28HPC, 28HPC+ improves device performance by 15% or reduces leakage by 50%. 28HPC+ also enables low Vt (voltage drain) designs in ULP applications for the IoT market. In addition, this process is seamlessly applicable to the 28nm ecosystem, accelerating time-to-market for customers.
- 40nm ULP and RF technologies started production in the first quarter of 2016 for the IoT and wearable devices related applications, such as wireless connectivity, application processors and sensor hub applications.
- 55nm Ultra-Low Power (55ULP) technology went into production, with more than 10 customers having already taped out using this technology. Compared to 55nm Low Power (55LP) process, 55ULP can significantly increase battery life for IoT applications. In addition, it integrates RF and eFlash (embedded flash) to simplify customers’ SoC designs.

Specialty Technology
- 16FFC foundation IP passed the Automotive Council AEC-Q100 Grade-1 qualification and were certified for functional safety standard ISO 26262 ASIL-B. In addition, TSMC 9000A was introduced for automotive IP management to complete the automotive ecosystem with third-party IP vendors.
- 16FFC RF technology started production in the first quarter of 2016. This technology supports wireless connectivity applications, including smartphones, wireless local area networks (WLAN), and fifth-generation (5G) mobile networks.
- 28nm RF (28HPC RF and 28HPC+ RF) technologies offered extreme high-frequency devices, reliable model and comprehensive design support for wireless components in smartphone, automotive and IoT markets.
- 40nm eFlash started volume production in the first quarter of 2016 for applications such as high-endurance security MCU (microcontroller unit), wireless MCU, and high-performance MCU, as well as IoT devices.
- 40nm ULP eFlash was developed and started volume production in the second half of 2016 for applications such as wireless MCU, IoT devices, wearable devices and high-performance MCU.
Advanced Packaging Technology

Integration of 16nm SoC, larger interposer (>1400mm²) and memory (HBM2) began production in the first half of 2016. Integration of 16nm SoC, larger interposer (>1400mm²) and more than 8 4-H high) HBM2 stacks is expected to be developed in 2017.

Fine pitch (80µm) Bump-on-Trace (BoT) Cu bump for flip-chip packaging on ≥16nm silicon continued volume production in 2016. Cu bump on 10nm silicon was qualified for production start-up in 2017. Volume production also continued on ≥28nm silicon in WLCSP technologies for high-end smartphone applications in 2016. 16nm WLCSP qualification was started and is expected to be completed in the first half of 2017.

2.2.2 Market Overview

TSMC estimates that the worldwide semiconductor market in 2016 was US$357 billion in revenue, representing 1% year-over-year growth, continuing the flattish growth in 2015. In the foundry sub-segment of the semiconductor industry, total revenue was US$147 billion in 2016, representing 8 YoY growth.

2.2.3 Industry Outlook, Opportunities and Threats

Industry Demand and Supply Outlook

The increase in the foundry segment growth to 8% in 2016 from 4% in 2015 was driven mainly by healthier market and inventory replenishment.

TSMC forecasts the total semiconductor market to grow 4% in 2017. Over the longer term, driven by increasing semiconductor content in electronic devices, continuing market share gains by fabless companies, gradual increase of IDM outsourcing, and expanding in-house Application-Specific Integrated Circuits (ASIC) from system companies, the Company expects foundry segment revenue growth to be much stronger than the 3% compound annual growth rate projected for the total semiconductor industry from 2015 through 2020.

As an upstream supplier in the semiconductor supply chain, the foundry segment is tightly correlated with the market health of the three Cs, communications, computer, consumer, and the emerging IoT (Internet of Things).

Communications

The communications sector, particularly the Smartphone segment, posted a 6% growth in unit shipments for 2016. Although the growth is slowing down, continuing transition to 4G/LTE and LTE-Advanced will bring about mid-single digit growth to the Smartphone market in 2017. Smartphones with increasing performance, longer battery life, and more intelligent features will continue to propel buying interests. The increasing popularity of low-end smartphones in emerging countries will also drive the growth of the sector.

Low-power IC is an essential requirement among handset manufacturers. The SoC design for more optimized cost, power and form factor (device footprint and thickness), plus the appetite for higher performance to run complex software and higher resolution video will continue to accelerate the migration to advanced process technologies, in which TSMC is already the leader.

Computer

After an 8% decline in 2015, the computer sector’s unit shipments dropped 6% YoY in 2016. The decline was due to prolonged replacement cycle and consumer usage moving towards mobile computing.

The personal computer market is expected to decline by mid-single digit percentage in 2017. Increasing variety (e.g. Convertible, Ultrabook and Chromebook), the business adoption of Windows 10, and consumer replacements of aging PCs, however, are expected to help buoy PC demand.

In terms of process technologies used in computers, requirements of lower power, higher performance and the integration of key computer components such as CPU, GPU, Chipset, etc., should drive demand for product refresh towards leading process technologies.

Consumer

The consumer sector’s unit shipments declined 5% in 2016 comparing to 2015. Set top boxes and TV game consoles showed positive growth, while the rest of the sector – TVs, MP3 players, digital cameras and hand held game consoles – continued to decline due to unsettled environment in Eurozone and foreign exchange issues, as well as functional cannibalization by smartphones.

Although consumer electronics will continue to decline in 2017, TV game consoles, 4K (UHD) TVs, and over-the-top (OTT) set-top boxes should achieve high growth within the sector. TSMC will be able to capture these trends with advanced technology offerings.

IoT

The Internet of Things (IoT) is taking shape as the “next big thing,” since more and more devices are being connected to the Internet. The IoT will have 10X greater installed unit potential than the smartphone will have in 2025. Applications and products benefiting from IoT related technologies include smart wearables, home robots, smart meters, smart manufacturing, self-driving cars, and so on. These applications and products will require much longer battery life, diversified sensors and low-power wireless connections, which will challenge technology development in new ways. TSMC’s ultra-low-power logic and RF solutions and diversified offered sensing technologies will lead the way for this future growth.

Supply Chain

The electronics industry consists of a long and complex supply chain, the elements of which are highly dependent and correlated with each other. At the upstream IC manufacturing level, IC vendors need to have sufficient and flexible supply to handle the demand dynamics. The foundry vendors are playing an important role to ensure the health of the supply chain. As a leader in the foundry segment, TSMC provides leading technologies and large-scale capacity to complement the innovations created along the downstream chain.
2.2.4 TSMC Position, Differentiation and Strategy

Position
TSMC is the worldwide semiconductor foundry leader for both advanced and specialty process technologies, commanding a 56% market share in 2016. Net revenue by geography, based mainly on the country in which customers are headquartered, was: 66% from North America; 15% from the Asia Pacific region, excluding China and Japan; 9% from China; 6% from Europe, the Middle East and Africa; and 5% from Japan. Net revenue by end-product application was: 8% from the computer sector, 9% from consumer products, and 21% from industrial and standard products.

Differentiation
TSMC’s leadership position is based on three defining competitive strengths and a business strategy rooted in the Company’s heritage. The Company distinguishes itself from the competition through its technology leadership, manufacturing excellence and customer trust.

As a technology leader, TSMC is consistently first among dedicated foundries to provide next-generation, leading-edge technologies. The Company has also established its leadership on more mature technology nodes by applying the lessons learned on leading-edge technology development to enrich its specialty technologies to more advanced process nodes. Beyond process technology, TSMC has established frontend and backend integration capabilities that result in faster time-to-production and create the best power, performance and area sweet spot.

TSMC has gained manufacturing acclaim for its industry-leading management and is extending that leadership through its Open Innovation Platform™ and Grand Alliance initiatives. The TSMC Open Innovation Platform® initiative hastens the pace of innovation in the semiconductor design community and among its ecosystem partners, as well as the Company’s IP, design implementation and design for manufacturing capabilities, process technology and backend services. A key element is a set of ecosystem interfaces and collaborative components initiated and supported by TSMC that more efficiently empower innovation throughout the supply chain and drive the creation and sharing of new revenue and profits. The TSMC Grand Alliance is one of the most powerful forces for innovation in the semiconductor industry, bringing together customers, electronic design automation (EDA) partners, IP partners, and key equipment and material suppliers at a new, higher level of collaboration. Its objective is to help customers, alliance members and TSMC win business and stay competitive.

The foundation for customer trust is a commitment TSMC made when it opened for business in 1987: to never compete with its customers. As a result, TSMC has never owned or marketed a single semiconductor product design, but instead has focused all of its resources on becoming the trusted foundry for its customers.

Strategy
TSMC is confident that its differentiating strengths will enable it to prosper from the foundry segment’s many attractive growth opportunities. In light of the rapid growth in four major markets, namely mobile, high-performance computing, automotive electronics, and the Internet of things, and the fact that focus of customer demand is shifting from process-technology-centric to product-application-centric, TSMC has constructed four different technology platforms to provide customers with the most comprehensive and competitive logic process technologies, specialty technologies, IPs, and packaging and testing technologies to shorten customers’ time-to-design and time-to-market.

Mobile platform: TSMC will offer leading 7nm FinFET, 10nm FinFET, 11FF+, 20nm SoC, 28nm High-Performance (HP), and 28nm High-Performance Mobile (28HPM) logic process technologies as well as comprehensive IPs for high-end product applications to further enhance chip performance, reduce power consumption, and decrease chip size. For low-end to mid-range product applications, TSMC will offer 12FFC, 16FFC, 28nm Low Power (LP), 28nm High-Performance Low Power (HPL), 28HPC, 28HPC+, and 22ULP logic process technologies in addition to comprehensive IPs to satisfy customer needs for high-performance and low-power chips. Furthermore, for high-end or low- to mid-level product applications, TSMC also offers the most competitive, leading-edge specialty technologies, including RF, embedded flash memory, emerging memory technologies, power management, sensors, and display chips and advanced packaging technologies such as the leading integrated fan-out (iFanOut) technology.

High-performance computing platform: TSMC will offer customers leading 7nm, 16nm FinFET and 28nm logic process technologies, as well as comprehensive IPs, including high-speed interconnect IPs, to meet customers’ high performance computing and transmission requirements. TSMC also offers multiple advanced packaging technologies such as CoWoS® and 3D IC technologies to enable homogeneous and heterogeneous chip system integration to meet customers’ high-performance, low-power, and smaller system footprint requirements. TSMC will continue to optimize its high-performance computing platform offerings to help customers capture market growth driven by massive data and applications, including data analytics, artificial intelligence, and 5G wireless communications.

Automotive electronics platform: TSMC will offer leading 7nm FinFET, 16nm FinFET, 28nm, and 40nm logic process technologies, various leading and competitive specialty technologies in RF, embedded flash memory, sensors, multiple power management technologies that pass the AEC-Q100 Grade-Q qualifications, and many advanced packaging technologies.

IoT platform: TSMC will provide customers with leading ULP logic process technology options, from 16nm, 12nm, 28nm, 40nm to 56nm, the most competitive and leading-edge specialty technologies in RF, embedded flash memory, emerging memory, sensors, and display chips, as well as, multiple advanced packaging technologies including the leading iFanOut technology.

TSMC continually strengthens its core competitiveness and deploys both short-term and long-term technology and business development plans, and assists customers in taking on the challenges of short product cycles and intense competition in the electronic products market to meet ROI and growth objectives.

Short-Term Semiconductor Business Development Plan
1. Substantially ramp up the business and sustain advanced technology market share by increased capacity investment.
2. Maintain mainstream technology market share by expanding business to new customers and market segments with off-the-shelf technologies.
3. Continue to enhance the competitive advantages of TSMC’s platforms in mobile, high-performance computing, automotive electronics, and IoT design ecosystems so as to expand TSMC’s dedicated foundry services in these product applications.
4. Further expand TSMC’s business and service infrastructure into emerging and developing markets.

Long-Term Semiconductor Business Development Plan
1. Continue developing leading-edge technologies at a pace consistent with Moore’s Law.
2. Broaden specialty business contributions by further developing derivative technologies.
3. Provide more integrated services, covering system-level integration design, design technology definition, design tool preparation, wafer processing, and backend services, all of which deliver more value to customers through optimized solutions.
2.3 Organization

2.3.1 Organization Chart

As of 02/28/2017

Shareholders’ Meeting

Audit Committee

Compensation Committee

Board of Directors, Chairman, Vice Chairman

Internal Audit

Co-CEO Office

Finance and Spokesperson

Legal


Research and Development-Specialty, Operations, Human Resources

2.3.2 Major Corporate Functions

Operations
- Operations of all fabs including in Taiwan and overseas; product development, manufacturing technology development, and backend technology development and production

Human Resources
- Human resources management and organizational development, as well as proprietary information protection and physical security management

Research and Development
- Advanced and specialty technology development and exploratory research, as well as design and technology platform development

Asia
- Sales, market development, field technical support and service for customers in Asia

Europe
- Technical marketing, field technical support and service for customers in Europe

North America
- Sales, market development, field technical support and service for customers in North America

Business Development
- Business development for electronic products, identification of new applications, development of markets for specialty technology, exploration and development of new markets, and strengthening customer relations, as well as managing the Company’s brand

Corporate Planning Organization
- Planning for operational resources, as well as for production and demand; the integration of business processes, corporate pricing, market analysis and forecasting

Quality and Reliability
- Assurance of the quality and reliability of the Company’s products via: resolution of reliability issues at development stage, improvement and management of production quality, solutions for customers’ quality related issues, services for advanced materials and failure analysis

Information Technology
- Integration of the Company’s technology and business IT systems; infrastructure development, communication services and assurance of IT security and service quality

Materials Management and Risk Management
- Procurement, warehousing, import and export, and logistics support; also environmental protection, industrial safety, occupational health, and risk management

Customer Service
- Support and service for customers in Asia, Europe, and North America

Internal Audit
- Inspection and review of TSMC’s internal control system, its adequacy in design and effectiveness in operation with independent risk assessment to ensure compliance with TSMC’s policies and procedures as well as with external regulations

Finance and Spokesperson
- Corporate finance, accounting and corporate communications; the head of the organization also serves as company spokesperson

Legal
- Corporate legal affairs including regulatory compliances, commercial transactions, patents and management of other intellectual properties, litigation, etc.
## 2.4 Board Members

### 2.4.1 Information Regarding Board Members

<table>
<thead>
<tr>
<th>Title/Name</th>
<th>Gender</th>
<th>Nationality or Place of Registration</th>
<th>Date Elected</th>
<th>Date First Elected</th>
<th>Shares &amp; Minor Shareholding</th>
<th>Selected Education, Past Positions &amp; Current Positions at Non-profit Organizations</th>
<th>Selected Current Positions at TSMC and Other Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chairman</strong> Morris Chang</td>
<td>Male</td>
<td>U.S.A.</td>
<td>06/09/2015</td>
<td>12/10/1986</td>
<td>125,317,914</td>
<td>Bachelor of Science in Mechanical Engineering, MIT</td>
<td>Chairman of: TSMC Semi-Company Ltd. Globalfoundries Inc. Member of the National Science and Technology Council, Taiwan Chair of: Semiconductor International</td>
</tr>
<tr>
<td><strong>Vice Chairman</strong> F.C. Tseng</td>
<td>Male</td>
<td>R.O.C.</td>
<td>06/09/2015</td>
<td>06/08/2018</td>
<td>34,472,675</td>
<td>Bachelor of Science in Electrical Engineering, National Cheng Kung University</td>
<td>Vice Chairman of: TSMC America Corporation, Global Foundries, Inc. Independent Director of: Acer Inc. <strong>Note:</strong> As of 02/28/2017</td>
</tr>
<tr>
<td><strong>Director</strong> National Development Fund, Executive Yuan</td>
<td>Male</td>
<td>R.O.C.</td>
<td>06/09/2015</td>
<td>12/10/1986</td>
<td>1,653,709,980</td>
<td>Bachelor of Science in Chemical Engineering, University of Illinois</td>
<td>Independent Director of: Far Eastern New Century Corp., Zhen Ding Technology Holding Ltd., Everlight Electronics Co., Ltd., San Fu Chemical Co., Ltd. <strong>Note:</strong> As of 02/28/2017</td>
</tr>
<tr>
<td><strong>Independent Director</strong> Sir Peter Leahy Bonfield</td>
<td>Male</td>
<td>UK</td>
<td>06/09/2015</td>
<td>06/08/2018</td>
<td>-</td>
<td>Bachelor of Science in Engineering, Loughborough University</td>
<td>Director &amp; Honorary Chairman, Acer Inc. <strong>Note:</strong> As of 02/28/2017</td>
</tr>
<tr>
<td><strong>Independent Director</strong> Stan Shih</td>
<td>Male</td>
<td>R.O.C.</td>
<td>06/09/2015</td>
<td>04/14/2000</td>
<td>1,480,286</td>
<td>Bachelor of Science in Electrical Engineering, National Taiwan University</td>
<td>Director &amp; Honorary Chairman, Acer Inc. <strong>Note:</strong> As of 02/28/2017</td>
</tr>
</tbody>
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(Continued)
<table>
<thead>
<tr>
<th>Title/Name</th>
<th>Gender</th>
<th>Nationality or Place of Registration</th>
<th>Date Elected</th>
<th>Term Expires</th>
<th>Date First Elected</th>
<th>Shares</th>
<th>%</th>
<th>Shares</th>
<th>%</th>
<th>Shares</th>
<th>%</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Director</td>
<td>Male</td>
<td>U.S.A.</td>
<td>06/09/2015</td>
<td>06/08/2018</td>
<td>06/10/2009</td>
<td>-</td>
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<td>Bachelor of Science in Electrical Engineering, Purdue University.</td>
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<td>Former Executive Vice-President and President of the Semiconductor Group, Texas Instruments Inc.</td>
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<td></td>
<td>Former President and CEO, Texas Instruments Inc.</td>
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<td>Former Chairman of the Board of Catalyst</td>
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<td>Former Chairman of the Board of U.S. Memory Company, Inc.</td>
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<td>Former Lead Director, J.C. Penney Company, Inc.</td>
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<td>Member of National Academy of Engineering</td>
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<td>Member of Texas Business Hall of Fame</td>
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<td>Honorary Director of Catalyst</td>
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<td></td>
<td>Honorary Trustee, Southern Nevada Medical Foundation</td>
<td></td>
</tr>
<tr>
<td>Independent Director</td>
<td>Female</td>
<td>R.O.C.</td>
<td>06/09/2015</td>
<td>06/08/2018</td>
<td>06/09/2011</td>
<td>5,120</td>
<td>0.05%</td>
<td>-</td>
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<td>Barrister-at-law, England</td>
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<td>Advocate &amp; Solicitor, Singapore</td>
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<td>Attorney-at-law, California, U.S.A.</td>
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<td>Law Firm, Taiwan, 1992-1993</td>
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<td>Member of the American Bar Association, New York, U.S.A., 1969-1971</td>
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<td>Former Vice-President and Managing Director, China Bank, Taipei, 1991-1993</td>
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<td>Member of the American Bar Association, New York, U.S.A., 1969-1971</td>
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<td>Member of the American Bar Association, New York, U.S.A., 1969-1971</td>
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<td></td>
<td>Former President and CEO, Texas Instruments Inc.</td>
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<td>Former Chairman of the Board of Catalyst</td>
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<td>Former Chairman of the Board of U.S. Memory Company, Inc.</td>
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<td>Former Lead Director, J.C. Penney Company, Inc.</td>
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<td>Honorary Trustee, Southern Nevada Medical Foundation</td>
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<tr>
<td>Independent Director</td>
<td>Male</td>
<td>U.S.A.</td>
<td>06/09/2015</td>
<td>06/08/2018</td>
<td>06/09/2015</td>
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<td>Bachelor of Science in Electrical Engineering, Purdue University.</td>
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<td>Honorary Ph.D, in Engineering, University of Wisconsin Madison</td>
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<td></td>
<td>Former Executive Vice-President of Technology and Manufacturing group, Intel Corporation</td>
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<td></td>
<td>Former Executive Vice-President of Sales and Marketing, Intel Corporation</td>
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<td>Former Chairman, Applied Materials, Inc.</td>
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<td>Director, Silicon Valley Leadership Group</td>
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<td></td>
<td>Director, Semiconductor Equipment and Materials International (SEMI)</td>
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<td></td>
<td>Director, University of Wisconsin Foundation</td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:**
1. No member of the Board of Directors held TSMC shares by nominee arrangement.
2. No member of the Board of Directors had a spouse or relative within two degrees of consanguinity serving as a manager or director at TSMC.

**Note 1:** Major Shareholder of TSMC's Director that is an Institutional Shareholder.

**Director that is an Institutional Shareholder of TSMC:**

| National Development Fund, Executive Yuan |
| National Development Fund, Executive Yuan |

**Selected Shareholders at TSMC and Other Companies**

| National Development Fund, Executive Yuan |
| National Development Fund, Executive Yuan |

**Note 2:** Mr. Johnsee Lee was appointed as the representative of National Development Fund on August 6, 2015.
2.4.2 Remuneration Paid to Directors (Note 1)

Unit: NT$ thousands

Note 1: Remuneration policies, standards/packages, procedures, the linkage to operating performance and future risk exposure: The base compensation for the Chairman, Vice-Chairman and directors are determined in accordance with the procedures set forth in TSMC's Articles of Incorporation. The Articles of Incorporation also provide that the compensation to directors shall be no more than 0.3% of annual profits and directors who also serve as executive officers of TSMC are not entitled to receive compensation to directors. The distribution of compensation to directors shall be made in accordance with TSMC’s "Rules for Distribution of Compensation to Directors”.

Note 2: Pensions funded/paid according to applicable law.

Note 3: The above-mentioned figures include expenses for Company cars and gasoline reimbursement, but do not include compensation paid to Company drivers (totaled NT$4,815 thousand).

Note 4: Total remuneration and compensation of TSMC and all consolidated entities paid to TSMC’s directors in 2015 were NT$394,468 thousand, accounting for 0.13% of 2015 net income.

<table>
<thead>
<tr>
<th>Title/Name</th>
<th>Director’s Remuneration</th>
<th>Compensation Earned by a Director Who is an Employee of TSMC or of TSMC’s Consolidated Entities</th>
<th>Compensation Paid to Directors from Non-consolidated Affiliates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base Compensation (A)</td>
<td>Severance Pay and Pensions (B) (Note 2)</td>
<td>Compensation to Directors (C)</td>
</tr>
<tr>
<td>Chairman</td>
<td>22,314</td>
<td>582</td>
<td>230,680</td>
</tr>
<tr>
<td>Vice Chairman</td>
<td>F.C. Tseng</td>
<td>12,585</td>
<td>334</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Sir Peter Leahy Bonfield</td>
<td>-</td>
<td>15,156</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Stan Shih</td>
<td>-</td>
<td>15,156</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Thomas J. Engibous</td>
<td>-</td>
<td>15,156</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Kok-Choo Chen</td>
<td>-</td>
<td>15,156</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Michael R. Splinter</td>
<td>-</td>
<td>15,156</td>
</tr>
<tr>
<td>National Development Fund, Executive Yuan Representative (Johnsee Lee)</td>
<td>-</td>
<td>9,600</td>
<td>9,600</td>
</tr>
<tr>
<td>Total</td>
<td>34,899</td>
<td>926</td>
<td>376,422</td>
</tr>
</tbody>
</table>

Note: Remuneration policies, standards/packages, procedures, the linkage to operating performance and future risk exposure: The base compensation for the Chairman, Vice-Chairman and directors are determined in accordance with the procedures set forth in TSMC’s Articles of Incorporation. The Articles of Incorporation also provide that the compensation to directors shall be no more than 0.3% of annual profits and directors who also serve as executive officers of TSMC are not entitled to receive compensation to directors. The distribution of compensation to directors shall be made in accordance with TSMC’s "Rules for Distribution of Compensation to Directors”.

Note 2: Pensions funded/paid according to applicable law.

Note 3: The above-mentioned figures include expenses for Company cars and gasoline reimbursement, but do not include compensation paid to Company drivers (totaled NT$4,815 thousand).

Note 4: Total remuneration and compensation of TSMC and all consolidated entities paid to TSMC’s directors in 2015 were NT$394,468 thousand, accounting for 0.13% of 2015 net income.
2.5 Management Team

2.5.1 Information Regarding Management Team

As of 02/28/2017

<table>
<thead>
<tr>
<th>Title Name</th>
<th>Gender</th>
<th>Nationality</th>
<th>On-Board Date (Note 1)</th>
<th>Shareholding</th>
<th>Spouse &amp; Minor</th>
<th>TSMC Shareholding by Nonmine Arrangement (Shares)</th>
<th>Education &amp; Selected Past Positions</th>
<th>Selected Current Positions at Other Companies</th>
<th>Managers Who are Spouses or within Second-degree Relative of Consanguinity to Each Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>President and Co-Chief Executive Officer</td>
<td>Male</td>
<td>R.O.C.</td>
<td>11/14/1997</td>
<td>7,817,176</td>
<td>0.00%</td>
<td>-</td>
<td>Ph.D., Electrical Engineering &amp; Computer Science, University of California, Berkeley, U.S.</td>
<td>Director, TSMC subsidiary</td>
<td>None</td>
</tr>
<tr>
<td>President and Co-Chief Executive Officer</td>
<td>Male</td>
<td>R.O.C.</td>
<td>02/01/1987</td>
<td>7,176,207</td>
<td>0.00%</td>
<td>263</td>
<td>0.00%</td>
<td>Ph.D., Electrical Engineering, Yale University, U.S.</td>
<td>Director, TSMC subsidiary</td>
</tr>
<tr>
<td>Senior Vice President &amp; Chief Information Officer</td>
<td>Male</td>
<td>R.O.C.</td>
<td>02/01/1987</td>
<td>12,897,064</td>
<td>0.00%</td>
<td>-</td>
<td>Ph.D., Electrical Engineering, University of California, Berkeley, U.S.</td>
<td>Director, TSMC subsidiary</td>
<td>None</td>
</tr>
<tr>
<td>Director</td>
<td>Male</td>
<td>R.O.C.</td>
<td>02/01/2004</td>
<td>1,404,132</td>
<td>0.07%</td>
<td>-</td>
<td>Ph.D., Solid State Physics and Surface Chemistry, University of California, Berkeley, U.S.</td>
<td>Director, TSMC subsidiary</td>
<td>None</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Male</td>
<td>R.O.C.</td>
<td>01/01/1987</td>
<td>6,811,850</td>
<td>0.00%</td>
<td>2,194,107</td>
<td>0.01%</td>
<td>Master, Electrical Engineering, National Cheng Kung University, Taiwan</td>
<td>None</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Male</td>
<td>R.O.C.</td>
<td>11/14/1994</td>
<td>1,808,478</td>
<td>0.00%</td>
<td>-</td>
<td>Ph.D., Electrical Engineering, University of California, Los Angeles, U.S.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Male</td>
<td>R.O.C.</td>
<td>02/11/1987</td>
<td>7,403,924</td>
<td>0.00%</td>
<td>-</td>
<td>Ph.D., Applied Chemistry, National Tsing Hua University, Taiwan</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Male</td>
<td>R.O.C.</td>
<td>01/01/1987</td>
<td>2,801,821</td>
<td>0.00%</td>
<td>-</td>
<td>Ph.D., Electrical Engineering, University of Mining &amp; Technical Changi, Taiwan</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Male</td>
<td>R.O.C.</td>
<td>02/11/2004</td>
<td>1,404,132</td>
<td>0.00%</td>
<td>-</td>
<td>Ph.D., Solid State Physics and Surface Chemistry, University of California, Berkeley, U.S.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Male</td>
<td>R.O.C.</td>
<td>03/01/2000</td>
<td>1,404,132</td>
<td>0.00%</td>
<td>-</td>
<td>Ph.D., Applied Chemistry, National Tsing Hua University, Taiwan</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Male</td>
<td>R.O.C.</td>
<td>02/01/1987</td>
<td>6,548,387</td>
<td>0.00%</td>
<td>263</td>
<td>0.00%</td>
<td>Ph.D., Electrical Engineering, Yale University, U.S.</td>
<td>Director, TSMC subsidiary</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Male</td>
<td>R.O.C.</td>
<td>03/01/2000</td>
<td>1,404,132</td>
<td>0.00%</td>
<td>263</td>
<td>0.00%</td>
<td>Ph.D., Electrical Engineering, University of Mining &amp; Technical Changi, Taiwan</td>
<td>Director, TSMC subsidiary</td>
</tr>
</tbody>
</table>
| Senior Vice President | Male | R.O.C. | 02/11/1987 | 2,530,497 | 0.00% | 106,846 | 0.00% | Ph.D., Chemical Engineering, National Cheng Kung University, Taiwan | None | None | 028 029
<table>
<thead>
<tr>
<th>Title Name</th>
<th>Gender</th>
<th>Nationality</th>
<th>On-board Date (Note 1)</th>
<th>Shareholding</th>
<th>Spouse &amp; Minor</th>
<th>TSMC Shareholding by Nominee Arrangement (Shams)</th>
<th>Education &amp; Selected Past Positions</th>
<th>Selected Current Positions at Other Companies</th>
<th>Managers Who are Spouses or within Second-degree Relative of Consanguinity to Each Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President Corporate Planning Organization</td>
<td>Female</td>
<td>R.O.C.</td>
<td>10/01/2003</td>
<td>420,709</td>
<td></td>
<td></td>
<td>PhD, Materials Science and Engineering, Cornell University, U.S.</td>
<td>Senior Director, Corporate Planning Organization, TSMC</td>
<td>None</td>
</tr>
<tr>
<td>Vice President Research and Development/Design and Technology Platform</td>
<td>Male</td>
<td>R.O.C.</td>
<td>12/15/1997</td>
<td>252,542</td>
<td></td>
<td></td>
<td>PhD, Electrical Engineering, Syracuse University, U.S.</td>
<td>Senior Director, Design and Technology Platform, TSMC</td>
<td>Director, TSMC subsidiaries, Director, TSMC Affiliates, President, TSMC subsidiaries</td>
</tr>
<tr>
<td>Vice President Business Development</td>
<td>Female</td>
<td>R.O.C.</td>
<td>04/20/2009</td>
<td>220,000</td>
<td></td>
<td></td>
<td>PhD, Chemistry, University of Southern California, U.S.</td>
<td>Senior Director, Business Development, TSMC</td>
<td>None</td>
</tr>
<tr>
<td>Vice President and General Counsel Legal</td>
<td>Female</td>
<td>R.O.C.</td>
<td>02/27/1995</td>
<td>702,285</td>
<td></td>
<td></td>
<td>Master of Comparative Law, School of Law, University of Iowa</td>
<td>Senior Director, TSMC</td>
<td>Director and/or Supervisor, TSMC subsidiaries</td>
</tr>
<tr>
<td>Vice President Human Relations</td>
<td>Female</td>
<td>R.O.C.</td>
<td>06/01/2014</td>
<td>88,000</td>
<td></td>
<td></td>
<td>PhD, Electrical Engineering, National Chiao Tung University, Taiwan</td>
<td>Senior Vice President of Global Human Resources</td>
<td>None</td>
</tr>
<tr>
<td>Vice President Research and Development/Technology Development</td>
<td>Male</td>
<td>R.O.C.</td>
<td>06/01/1992</td>
<td>218,521</td>
<td></td>
<td></td>
<td>PhD, Electrical Engineering, National Chiao Tung University, Taiwan</td>
<td>Senior Director, R&amp;D, Senior Director, Fab 14B operations, TSMC</td>
<td>None</td>
</tr>
<tr>
<td>Vice President Research and Development/Integrated Interconnect &amp; Packaging</td>
<td>Male</td>
<td>R.O.C.</td>
<td>11/21/1994</td>
<td>225,000</td>
<td></td>
<td></td>
<td>PhD, Materials Engineering, Georgia Institute of Technology, U.S.</td>
<td>Senior Director of Integrated Interconnect &amp; Packaging Division in R&amp;D, TSMC</td>
<td>None</td>
</tr>
<tr>
<td>Vice President Research and Development/More-than-Moore Technologies</td>
<td>Male</td>
<td>U.S.A.</td>
<td>09/10/2009</td>
<td></td>
<td></td>
<td></td>
<td>PhD, Electrical Engineering, Delft University, Canada</td>
<td>Senior Director of More-than-Moore Technologies Division in R&amp;D, TSMC</td>
<td>None</td>
</tr>
<tr>
<td>Vice President Research and Development/Design and Technology Platform</td>
<td>Male</td>
<td>U.S.A.</td>
<td>11/10/2016</td>
<td></td>
<td></td>
<td></td>
<td>PhD, Electrical Engineering, Delft University, U.S.</td>
<td>Vice President, Technology and Manufacturing Group, Intel Corp.</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note 1:** On-board date means the official date joining TSMC.
**Note 2:** Mr. Y.P. Chin and Dr. Y.J. Mii were promoted to Senior Vice President, effective November 8, 2016.
**Note 3:** Dr. Douglas Yu, Dr. Alexander Kalnitsky and Dr. Kevin Zhang were promoted to Vice President, effective November 8, 2016.
### 2.5.2 Compensation Paid to President & Co-CEO and Vice Presidents (Note 1)

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Salary (A)</th>
<th>Severance Pay and Pensions (B)</th>
<th>Bonuses and Allowances (C)</th>
<th>Employees’ Profit Sharing Bonus (D)</th>
<th>Total Compensation (A+B+C+D) as a % of 2016 Net Income (Note E)</th>
<th>Compensation Received from Non-consolidated Affiliates</th>
</tr>
</thead>
<tbody>
<tr>
<td>President and Co-Chief Executive Officer</td>
<td>Y.P. Chin</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>President and Co-Chief Executive Officer</td>
<td>D.C. Wu</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President, Chief Financial Officer and Spokesman for TSMC</td>
<td>C.C. Wei</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President and Chief Internal Office Director</td>
<td>Sylvia Fang</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Been-Jon Woo</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>J.K. Wang</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Irene Sun</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Jack Sun</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>N.S. Tsai</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>M.C. Tzeng</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Y.P. Chin</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Y.J. Mii</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Rick Cassidy</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Wei-Jen Lo</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Stephen T. Tso</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Lora Ho</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>C.C. Wei</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Mark Liu</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Note 1: Compensation policy, standard packages, procedures, the linkage to operating performance and future risk exposures

The total compensation paid to Chief Executive Officer, Chief Financial Officer and Senior Vice President (Note 3) is determined by the Compensation Committee of the Board of Directors, taking into consideration the Company's financial performance, competitive market conditions, and individual performance of each executive officer. The Compensation Committee and the Board of Directors approve the total compensation paid to Chief Executive Officer, Chief Financial Officer and Senior Vice President (Note 3) on an annual basis. The total compensation paid to the President and Co-Chief Executive Officer in 2015 was NT$1,406,547 thousand and NT$1,491,529 thousand, respectively, accounting for 0.46% and 0.49% of 2015 net income respectively.

#### Note 2: Compensation paid to senior management (Note 2)

The Company's senior management is composed of Chairman, President and Co-Chief Executive Officer, Chief Financial Officer, Vice Presidents, Senior Vice Presidents, and other officers. The total compensation paid to senior management in 2015 was NT$732,775 thousand.

#### Note 3: Promotion of Vice Presidents (Note 3)

Dr. Douglas Yu, Dr. Alexander Kalnitsky and Dr. Kevin Zhang were promoted to Vice President, effective November 8, 2016.

#### Note 4: Promotions of 2015 (Note 4)

Mr. Y.P. Chin and Dr. Y.J. Mii were promoted to Senior Vice President, effective November 8, 2016.

#### Note 5: Compensation received from non-consolidated affiliates

The above-mentioned figures include the expenses for the employees’ cash bonuses distributed in May, August, November 2016 and February 2017, Company cars and gasoline reimbursement, but does not include compensation paid to Company drivers (totaled NT$3,432 thousand).

#### Note 6: Compensation received from non-consolidated affiliates

The total compensation paid to Chief Executive Officer, Chief Financial Officer and Senior Vice President was NT$0 ~ NT$2,000,000 for Rick Cassidy, NT$2,000,000 ~ NT$4,999,999 for Douglas Yu, NT$5,000,000 ~ NT$9,999,999 for Kevin Zhang, NT$10,000,000 ~ NT$14,999,999 for none, NT$15,000,000 ~ NT$29,999,999 for Kevin Zhang, NT$30,000,000 ~ NT$49,999,999 for J.K. Wang, Irene Sun, Been-Jon Woo, Sylvia Fang, Connie Ma, Y.L. Wang, NT$50,000,000 ~ NT$99,999,999 for Y.P. Chin, Y.J. Mii, M.C. Tzeng, Jack Sun, N.S. Tsai, J.K. Lin, Cliff Hou, Rick Cassidy, Y.P. Chin, Y.J. Mii, M.C. Tzeng, Jack Sun, N.S. Tsai, J.K. Lin, and Over NT$100,000,000 for Mark Liu, C.C. Wei, Lora Ho, Stephen T. Tso, Wei-Jen Lo.

#### Note 7: Compensation received from non-consolidated affiliates

The total compensation paid to Chief Executive Officer, Chief Financial Officer and Senior Vice President in 2015 was NT$0 ~ NT$2,000,000 for Rick Cassidy, NT$2,000,000 ~ NT$4,999,999 for Douglas Yu, NT$5,000,000 ~ NT$9,999,999 for Kevin Zhang, NT$10,000,000 ~ NT$14,999,999 for none, NT$15,000,000 ~ NT$29,999,999 for Kevin Zhang, NT$30,000,000 ~ NT$49,999,999 for J.K. Wang, Irene Sun, Been-Jon Woo, Sylvia Fang, Connie Ma, Y.L. Wang, NT$50,000,000 ~ NT$99,999,999 for Y.P. Chin, Y.J. Mii, M.C. Tzeng, Jack Sun, N.S. Tsai, J.K. Lin, Cliff Hou, Rick Cassidy, Y.P. Chin, Y.J. Mii, M.C. Tzeng, Jack Sun, N.S. Tsai, J.K. Lin, and Over NT$100,000,000 for Mark Liu, C.C. Wei, Lora Ho, Stephen T. Tso, Wei-Jen Lo,
<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Stock (Fair Market Value)</th>
<th>Cash</th>
<th>Total Employees' Profit Sharing Bonus as a % of 2016 Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>President and Co-Chief Executive Officer</td>
<td>Mark Liu</td>
<td>$101,588</td>
<td></td>
<td></td>
</tr>
<tr>
<td>President and Co-Chief Executive Officer</td>
<td>C.C. Wei</td>
<td>-</td>
<td>$101,588</td>
<td>191,368</td>
</tr>
<tr>
<td>Senior Vice President, Chief Financial Officer and Spokesperson Finance</td>
<td>Yau Ho</td>
<td>-</td>
<td>$47,318</td>
<td>0.014%</td>
</tr>
<tr>
<td>Senior Vice President and Chief Information Officer Information Technology, Materials Management and Risk Management</td>
<td>Stephen T. Tao</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President Research and Development/Technology Development</td>
<td>Chih-an Lu</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President of TSMC and President of TSMC North America</td>
<td>Bill Caudly</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President Operations/Product Development</td>
<td>P.Y. Chen (Note 1)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Vice President Research and Development/Technology Development</td>
<td>S.L. Mo (Note 1)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Operations/Office Fabs</td>
<td>M.C. Tsang</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President and Chief Technology Officer Research and Development/Corporate Research</td>
<td>Jack Sun</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Quality and Reliability</td>
<td>S.L. Tsai</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Operations/Manufacturing Fabs and Manufacturing Technology</td>
<td>HC. Lin</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Operations/300mm Fabs</td>
<td>CK. Wang</td>
<td>-</td>
<td>4,311,170</td>
<td>4,311,170</td>
</tr>
<tr>
<td>Vice President Corporate Planning Organization</td>
<td>Sam Sun</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Research and Development/Design and Technology Platforms</td>
<td>JHF Hsu</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Business Development</td>
<td>Ben Chen Wieu</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President and General Counsel</td>
<td>Sylvia Fang</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President HR</td>
<td>Corona Ma</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Research and Development/Technology Development</td>
<td>Y. L. Wang</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Research and Development/Integrated Environment &amp; Packaging</td>
<td>Douglas Yu (Note 2)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Research and Development/More-than-Moore Technologies</td>
<td>Alexander Kalinitsky (Note 2)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice President Research and Development/Design and Technology Platforms</td>
<td>Kevin Zhang (Note 2)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>-</td>
<td>681,672</td>
<td>681,672</td>
</tr>
</tbody>
</table>

Note 1: Mr. P.Y. Chen and Dr. S.L. Mo were promoted to Senior Vice President, effective November 8, 2016.
Note 2: Dr. Douglas Yu, Dr. Alexander Kalinitsky and Dr. Kevin Zhang were promoted to Vice President, effective November 8, 2016.
Global Top Corporate Governance

TSMC was one of 5 companies named by IR Magazine for Global Top Corporate Governance.
3.1 Overview

TSMC advocates and acts upon the principles of operational transparency and respect for shareholder rights. We believe that the basis for successful corporate governance is a sound and effective Board of Directors. In line with this principle, the TSMC Board delegates various responsibilities and authority to two Board Committees, Audit Committee and Compensation Committee. Each Committee has a written charter approved by the Board. Each Committee’s chairperson regularly reports to the Board on the activities and actions of the relevant committee. The Audit Committee and Compensation Committee consist solely of independent directors.

2016 Corporate Governance Awards

<table>
<thead>
<tr>
<th>Organization</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dow Jones Sustainability Indices (DJSI)</td>
<td>Standout in the Dow Jones Sustainability World Index for the 16th consecutive year; DJSI Global Sustainability Award – Gold Class</td>
</tr>
<tr>
<td>S&amp;P Global Sustainability Indices</td>
<td>Selected as S&amp;P Global Sustainability Indices component</td>
</tr>
<tr>
<td>FTSE Russell India</td>
<td>Selected at FTSE Russell India index component</td>
</tr>
<tr>
<td>TransMath</td>
<td>&quot;Transvision&quot; 25th Anniversary Platinum Awards: Best Company – in Taiwan</td>
</tr>
<tr>
<td>W Magazine</td>
<td>Global Top Corporate Governance – Five Winning Companies</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Named Best Managed Company - Large Cap – Taiwan</td>
</tr>
<tr>
<td>CSR100</td>
<td>Selected as one of The World’s Most Admired Companies</td>
</tr>
<tr>
<td>Shares()</td>
<td>Selected as Top 100 World’s Most Admired Companies</td>
</tr>
<tr>
<td>CommonWealth Magazine</td>
<td>Excellence in Corporate Social Responsibility Award – Large cap – 2nd Place – Most Admired Company in Taiwan for the 2nd consecutive year and Most Admired Entrepreneur in Taiwan</td>
</tr>
<tr>
<td>Taiwan Institute of Sustainable Energy</td>
<td>Taiwan Corporate Sustainability Awards 2016 – Taiwan Corporate Responsibility Report Awards – Electronics Industry – Gold Class</td>
</tr>
<tr>
<td>Taiwan Stock Exchange</td>
<td>Ranked in top 5% in Corporate Governance Evaluation of Listed Companies for the 2nd consecutive year</td>
</tr>
</tbody>
</table>

3.1 Overview

In the spirit of Chairman Chang’s approach to corporate governance, a board of directors’ primary duty is to supervise. The Board should supervise the Company’s compliance with relevant laws and regulations, financial transparency, timely disclosure of material information, and maintaining of the highest integrity within the Company. TSMC’s Board of Directors strives to perform these responsibilities through the Audit Committee and the Compensation Committee, the hiring of a financial expert for the Audit Committee, and coordination with the Internal Audit department.

The second duty of the Board of Directors is to evaluate the management’s performance and to appoint and dismiss officers of the Company when necessary. TSMC’s management has maintained a healthy and functional communication with the Board of Directors, has been devoted in executing guidance of the Board, and is dedicated in running the business operations, all to achieve the best interests for TSMC shareholders.

The third duty of the Board of Directors is to resolve the important, concrete matters, such as capital appropriations, investment activities, dividends, etc.

The fourth duty of the Board of Directors is to provide guidance to the management team of the Company. Quarterly, TSMC’s management reports to the Board on a variety of subjects. The management also reviews the Company’s business strategies with the Board and updates TSMC’s Board on the progress of those strategies, obtaining Board guidance as appropriate.

Selection and Election of Directors

TSMC envisions the membership of its esteemed Board of Directors to be composed of highly ethical professionals with the necessary knowledge, experience and understanding from diverse backgrounds. TSMC envisions its Board to be composed of as many independent directors as possible, and the independence of each independent director candidate is also considered and assessed under relevant laws. Based on the above selection criteria, TSMC composes its Board with world-class candidates who are international or local business leaders in the high-tech industry, prestigious academics or other professionals excelling in their chosen field of expertise.

Directors shall be elected pursuant to the candidates nomination system as specified in Article 192-1 of the R.O.C. “Company Law”. The tenure of office for Directors shall be three years. The independence of each independent director candidate is also considered and assessed under relevant law such as the Taiwan “Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies”. Under R.O.C. law, in which TSMC was incorporated, any shareholders holding one percent or more of our total outstanding common shares may nominate their own candidate to stand for election as a Board member. This democratic mechanism allows our shareholders to become involved in the selection and nomination process of Board candidates. The final slate of candidates are put to the shareholders for voting at the relevant annual shareholders’ meeting.

There are no limits on the number of terms that a director may serve. We believe the Company benefits from the contributions of directors who have over their years of dedicated service acquired unique insights into the operations and financial developments of the Company. The Company reviews the appropriateness of each director’s continued service to ensure there are new viewpoints available to the Board.

Transition of Responsibility

In November 2013, following nomination by Chairman Dr. Morris Chang and approval by the Board of Directors, Dr. Mark Liu and Dr. C.C. Wei assumed duties as Presidents and Co-Chief Executive Officers of TSMC, reporting directly to the Chairman. Demonstrating TSMC’s steady and deliberate transition of responsibilities, the Board of Directors approved in April 2017 the nomination of Dr. Liu and Dr. Wei to serve as members of the Board, and they will stand for election to the Board at the TSMC Annual Shareholders’ Meeting to be held in June 2017.

3.2 Board of Directors

Board Structure

TSMC’s Board of Directors consists of eight distinguished members with a great breadth of experience as world-class business leaders or professionals. We rely on them for their diverse knowledge, personal perspectives, and solid business judgment. Five of the eight members are independent directors: former British Telecommunications Chief Executive Officer, Sir Peter Bonfield, Co-Founder, Chairman Emeritus of the Azer Group, Mr. Stan Shih; former Texas Instruments Inc. Chairman of the Board, Mr. Thomas J. Engibous; former Chairman of National Performing Arts Center and former Advisor of Executive Yuan, R.O.C., Ms. Kok-Choo Chen; and former Chairman of Applied Materials, Inc., Mr. Michael R. Splinter. One of the members of the Board Directors is female. The number of independent Directors is more than 50% of the total number of Directors.

In February 2017, TSMC’s Board of Directors determined the number of directors to be ten and approve the election of two additional directors at TSMC’s 2017 Annual Shareholders’ Meeting; and authorized the Chairman to nominate Dr. Mark Liu and Dr. C.C. Wei as candidates for directors to stand for election at TSMC’s 2017 Annual Shareholders’ Meeting.

Board Responsibilities

Under the leadership of Chairman Morris Chang, TSMC’s Board of Directors takes a serious and forthright approach to its duties and is a dedicated, competent and independent Board.

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Board Responsibilities

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### 3.2.1 Audit Committee

The Audit Committee assists the Board in fulfilling its oversight of the quality and integrity of the accounting, auditing, reporting, and financial control practices of the Company.

The Audit Committee is responsible to review the following major matters:
- Financial reports;
- Auditing and accounting policies and procedures;
- Internal control systems and including related policies and procedures;
- Material asset or derivatives transactions;
- Material lending funds, endorsements or guarantees;
- Offering or issuance of any equity-type securities;
- Derivatives and cash investments;
- Legal compliance;
- Related-party transactions and potential conflicts of interests involving executive officers and directors;
- Ombudsman reports;
- Fraud prevention and investigation reports;
- If security;
- Corporate risk management;
- Performance, independence, qualification of independent auditor;
- Hiring or dismissal of an attesting CPA, or the compensation given thereto;
- Appointment or discharge of financial, accounting, or internal auditing officers;
- Assessment of Committee Charter and fulfillment of Audit Committee duties; and
- Assessment of the Committee’s performance, etc.

Under R.O.C. law, the membership of Audit Committee shall consist of all independent Directors. TSMC’s Audit Committee satisfies this statutory requirement. The Committee also engaged a financial expert consultant in accordance with the rules of the U.S. Securities and Exchange Commission. The Audit Committee annually conducts self-evaluation to assess the Committee’s performance and identify areas for further attention.

TSMC’s Audit Committee is empowered by its Charter to conduct any study or investigation it deems appropriate to fulfill its responsibilities. It has direct access to TSMC’s internal auditors, the Company’s independent auditors, and all employees of the Company. The Committee is authorized to retain and oversee special legal, accounting, or other consultants as it deems appropriate to fulfill its mandate. The Audit Committee Charter is available on TSMC’s corporate website.

### 3.2.2 Compensation Committee

The Compensation Committee assists the Board in discharging its responsibilities related to TSMC’s compensation and benefits policies, plans and programs, and in the evaluation and compensation of TSMC’s directors of the Board and executives.

The members of the Compensation Committee are appointed by the Board as required by R.O.C. law. According to TSMC’s Compensation Committee Charter, the Committee shall consist of no fewer than three independent directors of the Board. Currently, the Compensation Committee is comprised of all five independent directors; the Chairman of the Board, Dr. Morris Chang, is invited by the Committee to attend all meetings and is excused from the Committee’s discussion of his own compensation.

TSMC’s Compensation Committee is authorized by its Charter to retain an independent consultant to assist in the evaluation of CEO, or executive officer compensation. The Compensation Committee Charter is available on TSMC’s corporate website.
Compensation Committee Members’ Professional Qualifications and Independent Analysis

According to the relevant requirements set by Taiwan’s Securities and Futures Bureau, the professional qualifications and independence status of the Company’s Compensation Committee members are listed in the table below.

<table>
<thead>
<tr>
<th>Name Title</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>An Instruction or Higher Position in a Department of Commerce, Law, Finance, Accounting, or Other Academic Department Related to the Business Needs of the Company in a Public or Private Junior College, College or University</td>
<td>A judge, Public Prosecutor, Attorney, Certified Public Accountant, or Other Professional or Technical Specialist who has passed a National Examination and Awarded a Certificate in a Profession Necessary for the Business of the Company</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name Title</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Independent Director</td>
<td>New Work Experience in the Area of Commerce, Law, Finance, or Other Necessary for the Business of the Company</td>
</tr>
</tbody>
</table>

Number of Other Taiwanese Public Companies - Consistently Serving as a Compensation Committee Member in Taiwan

3.2.3 Director and Committees Members’ Attendance

Each Director is expected to attend every Board meeting and the committees meeting on which he or she serves. In 2016, the average Board Meeting attendance rate was 90.63% and the attendance rate for the Audit Committee and Compensation Committee’s Meetings were 92% and 90% respectively.

Board of Directors Meeting Status

Dr. Morris Chang, the Chairman of the Board of Directors, convened four regular meetings in 2016. The directors’ attendance status is as follows.

<table>
<thead>
<tr>
<th>Meeting Dates Resolution</th>
<th>Attendance (%)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 4th Regular Meeting February 11 &amp; 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 5th Regular Meeting February 11 &amp; 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 5th Special Meeting February 13 &amp; 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 6th Regular Meeting May 5 &amp; 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 6th Special Meeting May 7 &amp; 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 7th Regular Meeting November 17 &amp; 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 7th Special Meeting November 19 &amp; 20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Audit Committee Meeting Status

Sr Peter Bonfield, Chairman of the Audit Committee, convened four regular meetings and one special meeting in 2016. The Committee members and consultant’s attendance status is shown in the following table. In addition to these meetings, the Committee members and consultant participated in four telephone conferences to discuss the Company’s Annual Report to be filed with the Taiwan and U.S. authorities and investor conference materials with management.
3.3 Major Decisions of Shareholders’ Meeting and Board Meetings

3.3.1 Major Resolutions of Shareholders’ Meeting and Implementation Status

TSMC’s 2016 Annual Shareholders’ Meeting was held in Hsinchu, Taiwan on June 7, 2016. At the meeting, shareholders present in person or by proxy approved the following resolutions:

1. The resolutions to the Articles of Incorporation;
2. The 2015 Business Report and Financial Statements; and
3. The distribution of 2015 profits.

Implementation Status

All the resolutions of the Shareholders’ Meeting have been fully implemented in accordance with the resolutions.

3.3.2 Major Resolutions of Board Meetings

During the 2016 calendar year, and as of the date of this Annual Report, major resolutions approved at Board meetings are summarized below:

1. Board Meeting of February 1 & 2, 2016:
   - approving 2015 business report and financial statements;
   - approving distribution of 2015 profits, and cash dividends, employee cash bonus and employee profit sharing;
   - approving the establishment of a wholly owned subsidiary in Nanjing with capital injection not exceeding US$1 billion, subject to approval from the Investment Commission of Taiwan’s Ministry of Economic Affairs, to set up a 12-inch fab and a design service center with a total capital investment not to exceed US$3 billion;
   - approving capital appropriations of US$22,536.9 million (including: 1. installation and expansion of advanced technology capacity; 2. second quarter 2016 R&D capital investments and sustaining capital expenditures);
   - approving the capital injection of not more than US$2.5 billion (including: 1. expansion of advanced technology capacity; 2. conversion of certain logic capacity to specialty technology; 3. third quarter 2016 R&D capital investments and sustaining capital expenditures).

2. Regular Board Meeting of May 9 & 10, 2016:
   - approving capital appropriations of US$4,101.3 million (including: 1. installation and expansion of advanced technology capacity; 2. conversion of certain logic capacity to specialty technology; 3. third quarter 2016 R&D capital investments and sustaining capital expenditures);
   - approving TSMC’s acquisition from VisÈra Holding Company Ltd of the book value, and 6.9% shareholding in Xintec Inc at the market price to simplify investment structure. As a result, VisÈra Holding Company Ltd will be dissolved and merged into TSMC Partners, Ltd, which is 100% owned by TSMC. After the transaction, TSMC will own 86.9% of VisÈra Technologies Company Ltd and 41.3% of Xintec Inc directly, which are the same as what TSMC has held directly and indirectly prior to this transaction.

3. Regular Board Meeting of August 1 & 2, 2016:
   - approving capital appropriations of US$37,840.4 million (including: 1. expansion of advanced technology capacity; 2. conversion of certain logic capacity to specialty technology; 3. fourth quarter 2016 R&D capital investments and sustaining capital expenditures); and
   - approving TSMC’s acquisition from VisÈra Holding Company Ltd of the book value, and 6.9% shareholding in Xintec Inc at the market price to simplify investment structure. As a result, VisÈra Holding Company Ltd will be dissolved and merged into TSMC Partners, Ltd, which is 100% owned by TSMC. After the transaction, TSMC will own 86.9% of VisÈra Technologies Company Ltd and 41.3% of Xintec Inc directly, which are the same as what TSMC has held directly and indirectly prior to this transaction.

4. Regular Board Meeting of November 7 & 8, 2016:
   - approving capital appropriations of US$4,908.9 million (including: 1. installation and expansion of advanced technology capacity; 2. upgrading advanced packaging capacity to next generation technology; 3. first quarter 2017 R&D capital investments and sustaining capital expenditures);
   - approving the promotion of Mr. Y.P. Chin as Senior Vice President;
   - approving the promotion of Dr. Y.J. Mi as Senior Vice President;
   - approving the promotion of Dr. Douglas Yu as Vice President;
   - approving the promotion of Dr. Alexander Khatsyrs as Vice President; and
   - approving the appointment of Dr. Kevin Zhang as Vice President.

5. Board Meeting of February 13 & 14, 2017:
   - approving 2016 business report and financial statements;
   - approving distribution of 2016 profits, and cash dividends, employee cash bonus and employee profit sharing;
   - approving capital appropriations of US$1,927.58 million (including: 1. upgrading advanced technology capacity and expanding advanced packaging capacity; 2. hedging costs; and
   - approving the 2016 Annual Shareholders’ Meeting.
3.4 Taiwan Corporate Governance Commission as Required by Taiwan Financial Supervisory Commission

Assessment Item

1. Does the Company establish “Taiwanese Corporate Governance Implementation” to establish and disclose its corporate governance practices?

Yes No Explanation

V TSMC has always followed excellent corporate governance practices, provided the utmost to operational transparency, and safeguard shareholders’ equity. Although the Company does not have a formal code of practice for corporate governance, however TSMC has always been highly regarded as the industry leader in corporate governance. In addition, the Company also has a world class Board of Directors.

2. Does the Company have Internal Operation Procedures for handling shareholder’s suggestions, complaints, disputes, and litigation matters, if yes, has these procedures been implemented accordingly?

Yes No Explanation

V TSMC has established its “Insider Trading policy” that applies to all employees, managers and officers of the Board of Directors of the Company, as well as any person having a duty or trust in confidence, with respect to transactions in the Company’s securities. This policy prohibits any insider trading and the Company strictly enforces this policy.

3. Does the Company have a diversification policy for the composition of the Board of Directors and has it been implemented accordingly?

Yes No Explanation

Note

4. Does the Company establish a formal code of practice for corporate governance?

Yes No Explanation

V TSMC has designated appropriate departments, such as Corporate Communication Department, the SEC Compliance Department, the Corporate Affairs Department, etc., to handle shareholder suggestion, conspiracy, dispute, and litigation matters.

5. Does the Company establish internal risk management and “fiduciary” behavior of the Board and its officers?

Yes No Explanation

V TSMC has set up an internal risk management and “fiduciary” behavior of the Board and its officers.

6. Has the Company established external risk-generating rules and prohibiting insider trading and undisclosed information?

Yes No Explanation

V TSMC has established internal policies to prevent insider trading and undisclosed information.

7. Corporate Responsibility: Does the Company establish a formal code of practice for corporate governance?

Yes No Explanation

V TSMC has established a formal code of practice for corporate governance: as the explanation of Assessment Item 1 of this table, although the Company does not have a formal code of practice for corporate governance, however TSMC has always been highly regarded as the industry leader in corporate governance practices.

8. Corporate Education and Training of Directors: TSMC’s Board of Directors consists of distinguished members with a great breadth of experience as world-class business leaders or professionals. The Company continually arranges training and workshops to help directors understand their corporate governance responsibilities. We rely on each directors’ knowledge, personal insight and experiences. We offer each board director a specific term and continuous support, in addition to the training the Board of Directors provides internally and outside the Board.

9. The implementation status for the result of Corporate Governance Evaluation remains unaltered.
Continuing Education/Training of Directors in 2016

The major training methods of Directors include:

- At quarter Board meetings, TSMC management regularly presents updates on the Company’s business, regulatory developments and other information to Directors;
- The Company arranges speeches regarding politics, economics, and regulatory compliance, etc.; and
- At quarter Audit Committee meetings, regular update reports are provided by TSMC’s General Counsel and by the Company’s independent auditors; and
- Directors participate relevant training courses as needed.

In addition, from time to time, Directors are invited by other parties to give speeches on corporate governance and related topics.

Note: Selected speeches on corporate governance and related topics.

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Meeting</th>
<th>Training/Speech Title</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morris Chang</td>
<td>02/02</td>
<td>TSMC</td>
<td>President’s Speech: New Talent of a New Era</td>
<td>1 hour</td>
</tr>
<tr>
<td>F.C. Teng</td>
<td>05/05</td>
<td>Securities and Finance Institute</td>
<td>Legal Liability of Directors and Supervisors in Mergers and Acquisitions</td>
<td>3 hours</td>
</tr>
<tr>
<td>Steve Wu</td>
<td>11/19</td>
<td>Taiwan Corporate Governance Association</td>
<td>Introduction to Significant Mergers and Acquisition Agreements (Including Code Sharing)</td>
<td>5 hours</td>
</tr>
<tr>
<td>Alvin Lee</td>
<td>02/12</td>
<td>Taiwan Corporate Governance Association</td>
<td>Audit Committee Practice</td>
<td>3 hours</td>
</tr>
<tr>
<td>Johnsee Lee</td>
<td>02/21</td>
<td>Taiwan Mergers &amp; Acquisitions and Private Equity Council</td>
<td>2016 Private Equity Forum</td>
<td>4 hours</td>
</tr>
<tr>
<td>Sylvia Fang</td>
<td>02/25</td>
<td>Economics</td>
<td>Global Economic Outlook Seminar</td>
<td>3 hours</td>
</tr>
<tr>
<td>Michael S. Splinter</td>
<td>04/26</td>
<td>Academy College of Entrepreneurial Association</td>
<td>Developing Entrepreneurs</td>
<td>2 hours</td>
</tr>
<tr>
<td>Morris Chang</td>
<td>05/11</td>
<td>Computer Audit Association</td>
<td>Case Sharing of Procurement Auditing</td>
<td>6 hours</td>
</tr>
<tr>
<td>F.C. Teng</td>
<td>06/06</td>
<td>6 hours</td>
<td>Taiwan Corporate Governance Association</td>
<td>6 hours</td>
</tr>
<tr>
<td>Steve Wu</td>
<td>11/10</td>
<td>6 hours</td>
<td>Taiwan Corporate Governance Association</td>
<td>6 hours</td>
</tr>
<tr>
<td>Johnsee Lee</td>
<td>11/11</td>
<td>6 hours</td>
<td>Taiwan Corporate Governance Association</td>
<td>6 hours</td>
</tr>
</tbody>
</table>

In addition, various training programs and speech presentations were also provided by TSMC’s Legal Organization for Management and the relevant divisions, such as:

- Ethics code and anti-bribery/corruption
- Intellectual Property Protection
- Export Control Compliance and Practice

3.5 Code of Ethics and Business Conduct

Ethics at TSMC

Code of Conduct: Integrity is the most important core value of TSMC’s culture. TSMC is committed to acting ethically in all aspects of our business; constantly and vigilantly promoting integrity, honesty, fairness, accuracy, and transparency in all that we say and do. At the heart of our corporate governance culture is TSMC’s Code of Ethics and Business Conduct (the “Code”) that applies to TSMC and its subsidiaries. The Code requires that each employee bears a heavy personal responsibility to preserve and to protect TSMC’s ethical values and reputation and to comply with various applicable laws and regulations.

Major Ethics Code Obligations

- Do not advance personal interests at the expense of or in conflict with the Company;
- Refrain from corruption, unfair competition, fraud, collusion, and waste or abuse of corporate assets;
- Avoid any efforts improperly to influence the decisions of anyone, including government officials, agencies, and courts, as well as our customers and suppliers;
- Do not undertake any practices detrimental to TSMC, to the environment, or to society;
- Procure all of our raw materials from socially responsible sources;
- Protect proprietary information of TSMC and our customers; and
- Abide by both the letter and spirit of all applicable laws, rules and regulations.

Intellectual Property Protection: In order to build and sustain an environment of innovation, technology leadership, and sustainable profitable growth, the Code requires that we promote business relationships founded upon an unwavering respect for the intellectual property rights, proprietary information and trade secrets of TSMC, our customers, and others.

Public Disclosures: TSMC’s officers, especially our CEO, CFO, and General Counsel, with oversight from our Board, are responsible for the full, fair, accurate, timely, and understandable financial and financial and accounting disclosure in reports and documents filed by the Company with securities authorities and in all TSMC public communications and disclosures. TSMC has a variety of measures in place to ensure compliance with these disclosure obligations.

Any modification to the Code requires the approval of our Audit Committee to ensure our ethics compliance program is independently reviewed against corporate best practices.

Code Implementation

High Standard Ethical Culture: Our ethics program is implemented in four ways by all of our employees, officers and Board members. First, TSMC’s management sets the “tone from the top” by acting in accordance with the Code so that they may be an example to all stakeholders. Second, working-level managers are responsible for ensuring their staff’s understanding of and compliance with applicable rules and regulations. Third, we encourage an environment of open communications in discussing any questions related to the Code. Any employee may consult his or her direct supervisor, Human Resources or Legal to obtain timely advice. Lastly, TSMC requires all employees to stay vigilant and report any noncompliance by anyone to their supervisors, the function head of Human Resources, the responsible corporate Vice President that oversees the Ombudsman system, or to the Chairman of the Company’s Audit Committee directly.

Self-Assessment of All Departments and Employees: Self-assessment of all departments and employees is an important part of our ethics compliance program. All departments and subsidiaries of TSMC are required to conduct Control Self-Assessment (CSA) tests annually to review employees’ awareness of the Code. The CSA results are reviewed to track the results of our compliance program. In addition, all employees must disclose any matters that cause, or may cause, actual or potential conflict of interest. In addition to such proactive disclosure requirement, employees with certain job responsibilities and senior officers must annually declare any relationships that may constitute a conflict of interest, which is then reviewed by executive management.
Internal Auditing: The Internal Auditor of TSMC plays a critical role in ensuring the Company’s compliance with the Code and relevant rules and regulations. To ensure that our financial, managerial, and operating information is accurate, reliable, and timely and that our employee’s actions are in compliance with applicable policies, standards, procedures, laws and regulations, our Internal Auditor conducts audits of various control points within the Company in accordance with its annual audit plan approved by the Board of Directors and subsequently reports its audit findings and remedial issues to the Board and management on a regular basis.

Training and Promotion: To promote awareness to our employees of their responsibilities under the Code, we publish our Code and related policies and documents on our intranet and, provide training courses, posters, and internal news articles. For incoming employees, we provide an introductory training course on the Code which is available to all employees online, as well as advanced courses delving into more specific compliance topics such as anti-corruption, PIP, export control and insider trading.

In addition to our internal compliance efforts, we expect and assist our customers, suppliers, business partners, and any other entities with whom we deal (such as consultants or third party agents who act for or on behalf of TSMC) to recognize and understand TSMC’s ethical standards to fulfill our responsibilities as a corporate citizen. For instance, we require all of our suppliers to declare in writing that they will not engage in any fraud or any unethical conduct when dealing with us, our officers, or employees. In 2015, TSMC became a full member of the Electronic Industry Citizenship Coalition (EICC) dedicated to electronics supply chain sustainability. In addition to adopting the EICC Code of Conduct at all of its facilities, TSMC applied the EICC’s standards to enhance our audit program of our suppliers and relevant business partners. We provide training and communicate our ethical culture to our suppliers through live seminars to prevent any unethical conduct.

TSMC treats any complaint and the investigation thereof in a confidential and sensitive manner, and strictly prohibits any form of retaliation against any individual who in good faith reports or helps with the investigation of any complaint. Due to the open reporting channels, TSMC received reports on various issues from employees and external parties such as our customers and suppliers from time to time. Below is a summary of the Number of Reported Incidents. We did not receive any report related to finance or accounting matters in 2016.

<table>
<thead>
<tr>
<th>FY 2016</th>
<th>FY 2015</th>
<th>FY 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidents reported to the Ombudsman System</td>
<td>68</td>
<td>64</td>
</tr>
<tr>
<td>Incidents reported to the Audit Committee</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Incidents reported to the “Irregular Business Conduct Reporting”</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>Sexual Harassment Investigation Committee</td>
<td>4 (Note 3)</td>
<td></td>
</tr>
<tr>
<td>Total incidents investigated as founded</td>
<td>2 (Note 3)</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: Among the 80 cases, no incidents related to ethics matters.
Note 2: Among the 25 cases, 14 cases related to ethics matters.
Note 3: Two employees involved in three cases respectively were discharged after TSMC’s investigation confirmed their violation of the Code. TSMC also presented to in-house counsel against one of the employees, and the case is currently under investigation by the authority.

Reporting Channels and Whistleblower Protection

To ensure that our conduct meets relevant legal requirements and the highest ethical standards under the Code, TSMC provides multiple channels for reporting business conduct concerns. First of all, our Audit Committee approved and we have implemented the “Complaint Policy and Procedures for Certain Accounting and Legal Matters” and “Procedures for Ombudsmen System” that allow employees or any whistleblowers with relevant evidence to report any financial, legal, or ethical irregularities anonymously through either the Ombudsmen or directly to the Audit Committee. TSMC maintains additional internal reporting channels for our employees. To foster an open culture of ethics compliance, we encourage our employees and the third parties we do business with to report any suspected wrongdoing by TSMC or by any parties with whom we do business.

TSMC treats any complaint and the investigation thereof in a confidential and sensitive manner, and strictly prohibits any form of retaliation against any individual who in good faith reports or helps with the investigation of any complaint. Due to the open reporting channels, TSMC received reports on various issues from employees and external parties such as our customers and suppliers from time to time. Below is a summary of the Number of Reported Incidents. We did not receive any report related to finance or accounting matters in 2016.

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<td>4 (Note 3)</td>
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Note 1: Among the 80 cases, no incidents related to ethics matters.
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Note 3: Two employees involved in three cases respectively were discharged after TSMC’s investigation confirmed their violation of the Code. TSMC also presented to in-house counsel against one of the employees, and the case is currently under investigation by the authority.

Code Violation Disciplinary Action

We do not tolerate any violation of the Code and treat every possible violation incident seriously. Any violator of the Code (or relevant regulations) will be severely disciplined to the full extent of our policies and the law, including immediate dismissal, termination of business relationship, and judicial prosecution as appropriate.

3.5.1 Taiwan Corporate Conduct and Ethics Implementation as Required by the Taiwan Financial Supervisory Commission

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Yes</th>
<th>No</th>
<th>Summary</th>
<th>Implementation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Establishment of Corporate Conduct and Ethics Policy and Implementation Measures</td>
<td>V</td>
<td></td>
<td></td>
<td>Non-implementation and the Reason(s)</td>
</tr>
<tr>
<td>2. The company establish relevant policies which are duly enforced to prevent unethical conduct and provide implementation procedures, consequences of violation and complaint procedures in such policies</td>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The company establishes appropriate compliance measures for the business activities prescribed in paragraph 2, article 7 of the Ethical Corporate Management Best Practice Principles for TWSE/TWM Listed Companies and any other such activities associated with high risk of unethical conduct</td>
<td>V</td>
<td></td>
<td></td>
<td>Non-implementation and the Reason(s)</td>
</tr>
<tr>
<td>4. The company have bylaws and publicly available documents to address its corporate conduct and ethics policy and measures, and the corresponding regulatory implementation of such policy from the Board of Directors and the management team</td>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The company is committed to act fairly in all aspects of our business. We have established TSMC’s Code of Ethics and Business Conduct (the “Code”) to require that each employee bears a heavy personal responsibility to uphold TSMC’s ethical values. For more details of the Code and the measures that TSMC Board of Directors (the “Board”) and the management team take to ensure compliance of the Code please refer to TSMC’s Annual Report and the Corporate Social Responsibility Report</td>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: None

We do not tolerate any violation of the Code and treat every possible violation incident seriously. Any violator of the Code (or relevant regulations) will be severely disciplined to the full extent of our policies and the law, including immediate dismissal, termination of business relationship, and judicial prosecution as appropriate.

(Continued)
2. Ethic Management Practice

(1) Does the company establish a system of financial controls? V
(2) Does the company establish a system of financial controls that is audited by internal auditors or CPA periodically? V
(3) Does the company set up a unit which is dedicated to or tasked with implementing relevant policies on ethical conducts? V
(4) Does the company adopt proper measures to prevent a complainant from handled in a confidential manner? V
(5) Does the company establish specific complaint and reward procedures, responsible individuals to handle the complaint received? V

TSMC treats any complaint and the investigation thereof in a confidential and sensitive manner, and such manner is clearly stated in our bylaws. In addition, TSMC’s Audit Committee approved and TSMC has implemented the Code of Corporate Conduct and Ethics Best Practice Principles, which state that the company is committed to maintaining the integrity of its financial reporting processes and the independence of its Audit Committee, external auditors, and internal auditors. To implement such policies properly, TSMC continues maintaining the integrity of its financial reporting processes and the independence of its Audit Committee, external auditors, and internal auditors. To implement such policies properly, TSMC continues maintaining the integrity of its financial reporting processes and the independence of its Audit Committee, external auditors, and internal auditors.

3. Regulatory Compliance

TSMC’s robust compliance efforts are comprised of legislative monitoring, developing and implementing of effective compliance policies and programs, and training, and maintaining an open reporting environment.

Legislative Monitoring

TSMC operates in many countries. To comply with governing legislation, applicable laws, regulations and regulatory expectations, we closely monitor domestic and foreign government policies and regulatory developments that could materially impact TSMC’s business and financial operations. Our Legal organization periodically updates our relevant internal departments, management and the Audit Committee of applicable regulatory changes so that internal teams ensure compliance with new regulatory requirements in a timely manner. We are also a proactive advocate for local legislative and regulatory reform, and our comments and recommendations on legislation have been accepted constructively.

Policy and Compliance Program Development and Implementation

Under the framework of the Code, TSMC has established a regulatory compliance program that includes policies, guidelines and procedures in different compliance areas, including: Anti-bribery, Anti-corruption, Anti-harassment/discrimination, Employment Regulations, Antitrust (unfair competition), Environment, Export Control, Financial Reporting, Internal Controls, Insider Trading, Intellectual Property, Proprietary Information Protection (“PIP”), Privacy, Record Retention and Disposal, as well as procuring raw materials from socially responsible sources (“Conflict-free Minerals”). It is our belief that these policies are crucial in strengthening overall compliance with the Code and compliance program. TSMC, its employees and its subsidiaries are expected to fully understand and comply with all laws and regulations that govern our businesses and make ethical decisions in every circumstance.

Compliance Awareness Training

Training is a major component of our compliance program, conducted throughout the year to refresh TSMC’s employees’ commitment to ethical conduct, and to updated information on laws and regulations related to their daily operations.

Highlights of our training include:

- Awareness promotion emails to employees, posters at our facilities, and news articles, compliance guidelines, tips and FAQs which our employees can access through our intranet;
- Live seminars focusing on specific topics such as Anti-Corruption (this was the highlight of our compliance training activities for 2016, PIP, Intellectual Property, Personal Data Protection, Conflict Minerals Compliance and Export Control Management. Training was made mandatory for those employees whose jobs are especially relevant to a particular topic to ensure sufficient awareness of relevant laws and internal policies;
- On-line learning programs updated frequently to provide most up-to-date information and timely and flexible access for employees to understand the law and key compliance issues, covering topics of Antitrust, Anti-harassment, Insider Trading, Export Control Management, PIP, and Privacy Protection among others;
- External training, in Taiwan and abroad, for TSMC’s legal team to receive current developments of new laws and regulations, and for its lawyers to comply with applicable continuing legal education requirements. External experts are also invited to give in-house lectures on key issues.
Major Accomplishments
In 2016, TSMC achieved several major accomplishments in regulatory compliance:

- Public Promotion Activities: In addition to fulfilling our obligations on regulatory compliance matters, TSMC exercised its civic duties as a responsible corporate citizen by advising the local government on law and policy reform, including urging the Government to amend certain outdated laws and regulations, which we believe were inconsistent with global practice, to improve Taiwan’s investment environment and economic development. For example, since Taiwan’s legislature’s acceptance of TSMC’s advice to impose criminal liability for trade secret misappropriation in 2012, TSMC continues to be an advocate of trade secret protection which is critical to innovation and fair competition, and hosted and attended multiple events to raise industries awareness of the importance of this topic.

- Internal Training: Throughout 2016, TSMC offered a wide range of training courses on various compliance topics, including 12 on-line training courses, and 42 topics covered via live seminars. These courses were all developed and conducted by internal and external compliance experts and legal professionals.

- Continuous Awareness Enhancement of Ethics Code and Anti-Corruption: Any corruption or other violation of the Code could not only impose long-term negative influence on our competitiveness, but could also seriously damage our strong industry reputation. To enhance employees and external partners’ awareness of the Code and anti-corruption rules, the Legal organization set the two topics as our annual training agenda. We also introduced annual on-line training and updated, if necessary, relevant on-line courses and posters at our facilities to further enhance relevant employees’ awareness of the topic.

- Other Major Compliance Topics: For other importance and mandatorily required to complete on-line courses for both anti-harassment and PIP.

Conflict-Free Supply Chain: As a recognized global leader in the electronics industry supply chain, we acknowledge our corporate social responsibility to strive to procure conflict-free minerals in an effort to recognize humanitarian and ethical social principles that protect the dignity of all persons and have implemented a series of compliance safeguards. In 2016, TSMC has made continued progress to ensure a conflict-free supply chain, and our conflict-free minerals compliance program has also been highly ranked by independent third party rating agencies.

- Export Compliance: TSMC’s export management system (EMS) and policy have been in place for a number of years, and is continuously maintained to ensure compliance with all applicable regulations covering the export of information, technologies, products, materials and equipment. Our EMS was certified in September 2012 by the Bureau of Foreign Trade, the Taiwan regulator, as a qualified IOP (Internal Compliance Program) exporter. In addition, TSMC implements No ECCN, No Shipment control and customers are required to provide end use and export control classification number (ECCN) of the products, among other required information, for TSMC to apply for applicable export licenses. TSMC has frequently earned recognition as ‘best in class’ and often shares our experience on EMS implementation to third parties including a variety of domestic and foreign organizations and industry peers. In 2016, TSMC was recognized by World Export Control Review (World ECR), a well-known international online journal of export controls, as the Export Controls Compliance team of the year for the Rest of the World (outside USA and Europe). We also provided an on-line learning program, live seminars, promotion emails, and posters at our facilities to further enhance relevant employees’ awareness of the topic.

3.7 Internal Control System Execution Status
3.7.1 Statement of Internal Control System

Taiwan Semiconductor Manufacturing Company Limited
Statement of Internal Control System

Date: February 14, 2017

Based on the findings of a self-assessment, Taiwan Semiconductor Manufacturing Company Limited (TSMC) states the following with regard to its internal control system during the year 2016:

1. TSMC’s board of directors and management are responsible for establishing, implementing, and maintaining an adequate internal control system. Our internal control is a process designed to provide reasonable assurance over the effectiveness and efficiency of our operations (including profitability, performance and safeguarding of assets), reliability, timeliness, transparency of our reporting, and compliance with applicable rulings, laws and regulations.

2. An internal control system has inherent limitations. No matter how perfectly designed, an effective internal control system can provide only reasonable assurance of accomplishing its stated objectives. Moreover, the effectiveness of an internal control system may be subject to changes due to extenuating circumstances beyond our control. Nevertheless, our internal control system continues to be an advocate of trade secret protection which is critical to innovation and fair competition, and is continuously maintained to ensure compliance with applicable rulings, laws and regulations.

3. TSMC evaluates the design and operating effectiveness of its internal control system based on the criteria provided in the Regulations Governing the Establishment of Internal Control Systems by Public Companies (herein below, the Regulations). The criteria adopted by the Regulations identify five key components of managerial internal control: (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, and (5) monitoring activities.

4. TSMC has evaluated the design and operating effectiveness of its internal control system according to the aforesaid Regulations.

5. Based on the findings of such evaluation, TSMC believes that, on December 31, 2016, it has maintained, in all material respects, an effective internal control system (that includes the supervision and management of our subsidiaries), to provide reasonable assurance over our operational effectiveness and efficiency, reliability, timeliness, transparency of reporting, and compliance with applicable rulings, laws and regulations.

6. This Statement is an integral part of TSMC’s annual report for the year 2016 and prospectus, and will be made public. Any falsehood, concealment, or other illegality in the content made public will entail legal liability under Articles 20, 32, 171, and 174 of the Securities and Exchange Law.

7. This Statement was passed by the board of directors in their meeting held on February 14, 2017, with none of the eight attending directors expressing dissenting opinions, and the remainder all affirming the content of this Statement.

Taiwan Semiconductor Manufacturing Company Limited

Morris Chang,
Chairman

Mark Liu,
President and Co-Chief Executive Officer

C.C. Wei,
President and Co-Chief Executive Officer
3.7.2 If CPA was Engaged to Conduct a Special Audit of Internal Control System, Provide Its Audit Report: None.

3.8 Status of Personnel Responsible for the Company’s Financial and Business Operation

3.8.1 Resignation or Dismissal of Chairman, President, and Heads of Accounting, Finance, Internal Audit and R&D during the 2016 Calendar Year and as of the Date of this Annual Report: None.

3.8.2 Certification of Employees Whose Jobs are Related to the Release of the Company’s Financial Information

3.9 Information Regarding TSMC’s Independent Auditor

3.9.1 Audit Fees

The Audit Committee approves all fees payable to TSMC's independent auditor and recommends the same to the Board of Directors for further approval. The Board of Directors has authorized the Audit Committee to approve any increase not exceeding 10% of the approved fees.

3.9.2 CPA’s information

(1) Former CPAs

<table>
<thead>
<tr>
<th>Date of Change</th>
<th>Approved by BOD on November 10, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason and Explanations of Changes</td>
<td>Due to its internal personal changes, Deloitte &amp; Touche updated the audit partners for TSMC from Yin-Hsin Kao and Yu-Feng Huang to Yin-Hsin Kao and Yu-Feng Huang in 2016.</td>
</tr>
<tr>
<td>CPA</td>
<td>Deloitte &amp; Touche</td>
</tr>
<tr>
<td>CPA's Audit Period</td>
<td>01/01/2016-12/31/2016</td>
</tr>
<tr>
<td>CPA’s Audit Period 2</td>
<td>01/01/2016-12/31/2016</td>
</tr>
</tbody>
</table>

(2) Successor CPAs

| CPA | Deloitte & Touche |
| CPA’s Audit Period | 01/01/2016-12/31/2016 |

(3) The Reply of Former CPAs on Article 10.6.1 and Article 10.6.2.3 of the Standards: None.

3.9.3 TSMC’s Chairman, Directors, Chief Executive Officer, Chief Financial Officer, and Managers in Charge of Its Finance and Accounting Operations did not Hold any Positions within TSMC’s Independent Audit Firm or its Affiliates in the Most Recent Year.

3.9.4 Evaluation of the External Auditor’s Independence

The Audit Committee regularly monitors the independence of TSMC’s external auditor by conducting the below evaluations and reports the same to the Board of Directors:

1. The auditor’s independence declaration
2. The Audit Committee pre-approves all audit and non-audit services conducted by the auditor to ensure that the non-audit services do not influence the results of the audit
3. Ensure the audit partner rotates every five years
4. Annually evaluate the independence of the external auditor based on the results of the auditor survey

3.10 Material Information Management Procedure

TSMC has established relevant procedures for managing and disclosing material information. The responsible departments regularly remind all officers and employees about the need to comply with these procedures and other applicable regulations when they become aware of any potential material information and the possible need to publicly disclose such information. To ensure that our employees, managers and board directors are aware of and comply with these relevant regulations, TSMC has also established our “Insider Trading Policy”. To reduce the risk of insider trading, on-line training programs and live seminars are conducted periodically.

In addition, employees can familiarize themselves with relevant internal policies and training articles by easily accessing TSMC’s Legal Organization intranet website.
TSMC intends to maintain a stable and sustainable dividend policy and has proposed to raise its cash dividend payment to NT$7.0 per share for 2018 earnings distribution from NT$6.0 a year ago.
4.1 Capital and Shares

4.1.1 Capitalization

As of 07/03/2016 (last record date)

<table>
<thead>
<tr>
<th>Share</th>
<th>Source of Capital</th>
<th>Capital Stock</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR-Taiwan Semiconductor Manufacturing Company, Ltd.</td>
<td>5,363,175,253</td>
<td>20.68%</td>
<td></td>
</tr>
<tr>
<td>National Development Fund, Executive Yuan</td>
<td>1,653,709,980</td>
<td>6.38%</td>
<td></td>
</tr>
<tr>
<td>Government of Singapore</td>
<td>683,323,892</td>
<td>2.64%</td>
<td></td>
</tr>
<tr>
<td>JPMorgan Chase Bank N.A. Taipei Branch in Custody for Saudi Arabian Monetary Agency</td>
<td>391,625,559</td>
<td>1.51%</td>
<td></td>
</tr>
<tr>
<td>JPMorgan Chase Bank N.A. Taipei Branch in Custody for EuroPacific Growth Fund</td>
<td>354,750,649</td>
<td>1.37%</td>
<td></td>
</tr>
<tr>
<td>Norges Bank</td>
<td>311,950,515</td>
<td>1.20%</td>
<td></td>
</tr>
<tr>
<td>JPMorgan Chase Bank, N.A., Taipei Branch in Custody for Stichting Depositary APG Emerging Markets Equity Pool</td>
<td>253,958,873</td>
<td>0.98%</td>
<td></td>
</tr>
<tr>
<td>Vanguard Emerging Markets Stock Index Fund, a Series of Vanguard International Equity Index Funds</td>
<td>252,443,845</td>
<td>0.97%</td>
<td></td>
</tr>
<tr>
<td>JPMorgan Chase Bank N.A. Taipei Branch in Custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds</td>
<td>240,686,063</td>
<td>0.93%</td>
<td></td>
</tr>
<tr>
<td>JPMorgan Chase Bank N.A. Taipei Branch in Custody for ABU DHABI Investment Authority</td>
<td>237,325,761</td>
<td>0.92%</td>
<td></td>
</tr>
</tbody>
</table>

4.1.2 Capital and Shares

As of 07/03/2016 (last record date)

<table>
<thead>
<tr>
<th>Type of Stock</th>
<th>Authorized Share Capital</th>
<th>Issued Shares</th>
<th>Unissued Shares</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock</td>
<td>25,930,380,458</td>
<td>25,930,380,458</td>
<td>26,856,000,000</td>
<td></td>
</tr>
</tbody>
</table>

Shelf Registration: None.

4.1.3 Composition of Shareholders

As of 07/03/2016 (last record date)

<table>
<thead>
<tr>
<th>Type of Shareholders</th>
<th>Government Agencies</th>
<th>Financial Institutions</th>
<th>Other Juridical Persons</th>
<th>Foreign Institutions and Natural Persons</th>
<th>Domestic Natural Persons</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Shareholders</td>
<td>0</td>
<td>172</td>
<td>1,113</td>
<td>4,081</td>
<td>329,327</td>
<td>329,620</td>
</tr>
<tr>
<td>Shareholding</td>
<td>1,834,935,189</td>
<td>716,010,519</td>
<td>1,164,887,280</td>
<td>20,542,513,081</td>
<td>2,050,506,449</td>
<td>25,930,380,458</td>
</tr>
<tr>
<td>Holding Percentage (%)</td>
<td>6.83%</td>
<td>2.74%</td>
<td>4.49%</td>
<td>78.45%</td>
<td>7.92%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

4.1.4 Major Shareholders

As of 07/03/2016 (last record date)

<table>
<thead>
<tr>
<th>Shareholder Ownership (Unit: Share)</th>
<th>Number of Shareholders</th>
<th>Ownership (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000,001 – 5,000,000</td>
<td>124,998</td>
<td>264,699,814</td>
</tr>
<tr>
<td>5,001 – 10,000</td>
<td>24,922</td>
<td>171,313,808</td>
</tr>
<tr>
<td>10,001 – 15,000</td>
<td>3,241</td>
<td>172,698,303</td>
</tr>
<tr>
<td>15,001 – 20,000</td>
<td>4,179</td>
<td>73,077,817</td>
</tr>
<tr>
<td>20,001 – 30,000</td>
<td>4,177</td>
<td>114,582,324</td>
</tr>
<tr>
<td>30,001 – 40,000</td>
<td>2,655</td>
<td>77,940,708</td>
</tr>
<tr>
<td>40,001 – 50,000</td>
<td>1,691</td>
<td>64,502,170</td>
</tr>
<tr>
<td>50,001 – 100,000</td>
<td>2,603</td>
<td>200,355,719</td>
</tr>
<tr>
<td>100,001 – 150,000</td>
<td>1,568</td>
<td>216,022,804</td>
</tr>
<tr>
<td>150,001 – 200,000</td>
<td>1,287</td>
<td>236,322,419</td>
</tr>
<tr>
<td>200,001 – 300,000</td>
<td>497</td>
<td>223,811,901</td>
</tr>
<tr>
<td>300,001 – 500,000</td>
<td>289</td>
<td>231,307,575</td>
</tr>
<tr>
<td>500,001 – 1,000,000</td>
<td>170</td>
<td>186,283,707</td>
</tr>
<tr>
<td>1,000,001 – 2,000,000</td>
<td>1,491</td>
<td>21,090,174,202</td>
</tr>
<tr>
<td>Over 2,000,001</td>
<td>1,411</td>
<td>23,696,714,250</td>
</tr>
<tr>
<td>Total</td>
<td>328,626</td>
<td>25,930,380,458</td>
</tr>
</tbody>
</table>

Preferred Share: None.

4.1.5 Shelf Registration:

None.

4.1.6 Distribution Profile of Share Ownership

As of 07/03/2016 (last record date)

<table>
<thead>
<tr>
<th>Type of Shareholding</th>
<th>Number of Shareholders</th>
<th>Ownership (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR-Taiwan Semiconductor Manufacturing Company, Ltd.</td>
<td>1,563,175,253</td>
<td>20.60%</td>
</tr>
<tr>
<td>National Development Fund, Executive Yuan</td>
<td>1,653,709,800</td>
<td>6.30%</td>
</tr>
<tr>
<td>Government of Singapore</td>
<td>683,325,761</td>
<td>2.64%</td>
</tr>
<tr>
<td>JPMorgan Chase Bank N.A. Taipei Branch in Custody for Saudi Arabian Monetary Agency</td>
<td>391,625,938</td>
<td>1.51%</td>
</tr>
<tr>
<td>JPMorgan Chase Bank N.A. Taipei Branch in Custody for EuroPacific Growth Fund</td>
<td>237,325,761</td>
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</tr>
<tr>
<td>Morgan Bank</td>
<td>311,950,515</td>
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</tr>
<tr>
<td>JPMorgan Chase Bank N.A. Taipei Branch in Custody for Stichting Depositary APG Emerging Markets Equity Pool</td>
<td>253,556,817</td>
<td>0.98%</td>
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<td>Vanguard Emerging Markets Stock Index Fund, a Series of Vanguard International Equity Index Funds</td>
<td>252,413,815</td>
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</tr>
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<td>JPMorgan Chase Bank N.A. Taipei Branch in Custody for ABU DHABI Investment Authority</td>
<td>237,325,761</td>
<td>0.92%</td>
</tr>
</tbody>
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4.2.1 Composition of Shareholders

As of 07/03/2016 (last record date)

<table>
<thead>
<tr>
<th>Type of Shareholders</th>
<th>Government Agencies</th>
<th>Financial Institutions</th>
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<td>329,327</td>
<td>329,620</td>
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<td>4.49%</td>
<td>78.45%</td>
<td>7.92%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

4.2.2 Capital and Shares

As of 07/03/2016 (last record date)

<table>
<thead>
<tr>
<th>Type of Stock</th>
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<td>25,930,380,458</td>
<td>26,856,000,000</td>
<td></td>
</tr>
</tbody>
</table>
## 4.1.5 Net Change in Shareholding by Directors, Management and Shareholders with 10% Shareholdings or More

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>2016</th>
<th>01/01/2017 ~ 02/28/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Morris Chang</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice Chairman</td>
<td>F.C. Tseng</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>National Development Fund, Executive Yuan Representative: Johnsee Lee</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Sir Peter Leahy Bonfield</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Thomas J. Epley</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Hsi-Chou Chen</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Independent Director</td>
<td>Michael T. Sparber</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>President and Co-Chief Executive Officer</td>
<td>Mark Liu</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>President and Co-Chief Executive Officer</td>
<td>C.C. Wei</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Senior Vice President and Chief Information Officer</td>
<td>Stephen T. Tso</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Senior Vice President and Chief Financial Officer, Finance</td>
<td>Lora Ho</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Wei-Jen Lo</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Y.P. Chin</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Senior Vice President</td>
<td>Y.J. Mii</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President</td>
<td>M.C. Tzeng</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President</td>
<td>Jack Sun</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President</td>
<td>N.S. Tsai</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President</td>
<td>Been-Jon Woo</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President and General Counsel</td>
<td>Sylvia Fang</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President and General Counsel</td>
<td>Connie Ma</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President</td>
<td>Been-Jon Woo</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President</td>
<td>Sylvia Fang</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President</td>
<td>Connie Ma</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vice President</td>
<td>Kevin Zhao (Panel)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Dr. Douglas Yu, Dr. Alexander Kalnitsky and Dr. Kevin Zhao were promoted to Vice President, effective November 8, 2016. Their shareholdings were disclosed starting from that date.
## 4.1.9 Long-term Investment Ownership

**Table:**

<table>
<thead>
<tr>
<th>Ownership by TSMC (1)</th>
<th>Ownership by Directors, Managers and Direct/Indirect Own Subsidiaries (2)</th>
<th>Total Ownership (1) + (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares</td>
<td>%</td>
<td>Shares</td>
</tr>
<tr>
<td>TSMC Partners, Ltd.</td>
<td>988,246,244</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC Global Ltd.</td>
<td>7,264</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC North America</td>
<td>11,000,808</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC Europe B.V.</td>
<td>208</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC Japan Limited</td>
<td>9,808</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC Korea Limited</td>
<td>98,008</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC China Company Limited</td>
<td>Not Applicable (Note 1)</td>
<td>-</td>
</tr>
<tr>
<td>TSMC Nanjing Company Limited (Note 2)</td>
<td>Not Applicable (Note 1)</td>
<td>-</td>
</tr>
<tr>
<td>TSMC Solar Europe GmbH (Note 3)</td>
<td>800</td>
<td>100%</td>
</tr>
<tr>
<td>VisEra Technologies Company Ltd. (Note 4)</td>
<td>253,120,000</td>
<td>86.94%</td>
</tr>
<tr>
<td>Systems on Silicon Manufacturing Co. Pte. Ltd.</td>
<td>313,603</td>
<td>38.79%</td>
</tr>
<tr>
<td>Vanguard International Semiconductor Corp.</td>
<td>740,134,215</td>
<td>45.16%</td>
</tr>
<tr>
<td>Global UniChip Corporation</td>
<td>46,687,859</td>
<td>34.84%</td>
</tr>
<tr>
<td>VentureTech Alliance Fund II, L.P.</td>
<td>Not Applicable (Note 1)</td>
<td>98.00%</td>
</tr>
<tr>
<td>VentureTech Alliance Fund III, L.P.</td>
<td>Not Applicable (Note 1)</td>
<td>98.00%</td>
</tr>
<tr>
<td>VentureTech Alliance Holdings, LLC (Note 7)</td>
<td>100%</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note 1:** Not applicable. These firms do not issue shares. TSMC’s investment is measured as a percentage of ownership.

**Note 2:** TSMC Nanjing Company Limited was established in May 2016.

**Note 3:** The dissolution procedures of TSMC Solar Europe GmbH will be completed by the end of June 2017.

**Note 4:** Pursuant to TSMC Board’s approval on August 2, 2016, TSMC acquired 86.94% shareholding in VisEra Technologies Company Ltd. from VisEra Holding Company, a wholly-owned subsidiary of TSMC, in August 2016. To streamline investment structure, VisEra Holding Company was merged into TSMC Partners, Ltd., the subsidiary of TSMC, in October 2016.

**Note 5:** TSMC’s Director, National Development Fund of Executive Yuan, holds 16.72% while other Directors and Management hold 0.11%.

**Note 6:** Pursuant to TSMC Board’s approval on August 2, 2016, TSMC acquired 6.87% shareholding in Xintec Inc. from VisEra Holding Company, a wholly-owned subsidiary of TSMC in August 2016. After the share purchase transaction, TSMC directly owned 41.24% of Xintec Inc.

**Note 7:** Due to the expiration of the investment agreement between Emerging Alliance Fund, L.P. and TSMC, Emerging Alliance Fund, L.P. completed the liquidation procedures in April 2016. As a result, Emerging Alliance Fund, L.P. ownership in VentureTech Alliance Holdings, LLC was transferred to TSMC.
4.1.10 Share Information
TSMC’s earnings per share in 2016 increased 9.0% from 2015 to NT$12.89 per share. The following table details TSMC’s market price, net worth, earnings, and dividends per common share, as well as other data regarding return on investment.

**Market Price, Net Worth, Earnings, and Dividends Per Common Share**

<table>
<thead>
<tr>
<th>Item</th>
<th>2015</th>
<th>2016</th>
<th>01/01/2017 – 02/28/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Price Per Share (Note 1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Market Price</td>
<td>154.90</td>
<td>180.00</td>
<td>180.00</td>
</tr>
<tr>
<td>Lowest Market Price</td>
<td>115.90</td>
<td>131.50</td>
<td>179.50</td>
</tr>
<tr>
<td>Average Market Price</td>
<td>139.84</td>
<td>160.14</td>
<td>160.00</td>
</tr>
<tr>
<td>Net Worth Per Share</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value Allocation</td>
<td>45.11</td>
<td>52.59</td>
<td></td>
</tr>
<tr>
<td>After Pay-Bonus</td>
<td>45.11</td>
<td>52.59</td>
<td></td>
</tr>
<tr>
<td>Earnings Per Share</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted Average Shares (thousands)</td>
<td>25,930,087</td>
<td>25,930,087</td>
<td></td>
</tr>
<tr>
<td>Diluted Earnings Per Share</td>
<td>11.82</td>
<td>12.89</td>
<td></td>
</tr>
<tr>
<td>Dividends Per Share</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Dividends</td>
<td>7.06</td>
<td>7.06</td>
<td></td>
</tr>
<tr>
<td>Accrued (undistributed) Dividends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on Investment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price/Earnings Ratio (Note 2)</td>
<td>11.82</td>
<td>12.91</td>
<td></td>
</tr>
<tr>
<td>Price/Earnings Ratio (Note 3)</td>
<td>23.31</td>
<td>23.77</td>
<td></td>
</tr>
<tr>
<td>Cash Dividend Yield (Note 4)</td>
<td>4.3%</td>
<td>4.2%</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: Referred to TWSE website
Note 2: Price/Earnings Ratio = Average Market Price / Diluted Earnings Per Share
Note 3: Price/Earnings Ratio = Average Market Price / Dividends Per Share
Note 4: Cash Dividend Yield = Cash Dividends Per Share / Average Market Price
Note 5: Pending for shareholders’ approval

4.1.11 Dividend Policy and Distribution of Earnings
TSMC does not pay dividends when there are no profits or retained earnings. TSMC has distributed cash dividends every year to its shareholders since 2004. TSMC intends to maintain a stable and sustainable dividend policy, and will consider raising dividends when the free cash flow is sufficient to cover the previous level of dividend payment and any debt repayment. On February 14, 2017, TSMC’s Board of Directors adopted a proposal recommending distribution of a cash dividend of NT$7 per share as shown in the table below. The proposal will be implemented in accordance with the relevant regulations, upon the approval of shareholders at the Annual Shareholders’ Meeting on June 8, 2017.

**Proposal to Distribute 2016 Earnings**

<table>
<thead>
<tr>
<th>Item</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Dividends to Common Shareholders (NT$ per share)</td>
<td>NT$7.00</td>
</tr>
</tbody>
</table>

4.1.12 Compensation to Directors and Profit Sharing Bonus to Employees
Based on TSMC’s Articles of Incorporation, before paying dividends or bonuses to shareholders, TSMC shall set aside not more than 0.3% of its annual profit to directors as compensation, and not less than 1% to employees as profit sharing bonus. As resolved by TSMC’s Board of Directors on February 14, 2017, a profit sharing bonus to employees was expensed based on a certain percentage of 2016 profit; compensation to directors was expensed based on the estimated amount of payment. If the actual amounts subsequently paid differ from the above estimated amounts, the differences will be recorded in the year paid as a change in accounting estimate.

2016 Directors’ Compensation and Employees’ Profit Sharing Bonus

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors’ Compensation (Cash)</td>
<td>376,432,200</td>
</tr>
<tr>
<td>Employees’ Profit Sharing Bonus (Cash)</td>
<td>22,418,339,262</td>
</tr>
<tr>
<td>Total</td>
<td>22,794,771,462</td>
</tr>
</tbody>
</table>

Note: NT$22,418,339,262 employees’ cash bonus has already been distributed following each quarter of 2016. The above employees’ profit sharing bonus will be distributed in the third quarter of 2017.

2015 Directors’ Compensation and Employees’ Profit Sharing Bonus

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors’ Compensation (Cash)</td>
<td>356,186,472</td>
</tr>
<tr>
<td>Employees’ Profit Sharing Bonus (Cash)</td>
<td>20,556,887,786</td>
</tr>
<tr>
<td>Total</td>
<td>20,913,074,258</td>
</tr>
</tbody>
</table>

Note: The above Directors’ Compensation and Employees’ Profit Sharing Bonus were expensed under the Company’s 2015 statement of comprehensive income and the same amounts were approved by the Board of Directors at its meeting on February 2, 2016.

4.1.13 Impact to 2017 Business Performance and EPS Resulting from Stock Dividend Distribution: Not applicable.

4.1.14 Buyback of Common Stock: None.
### 4.2 Issuance of Corporate Bonds

#### 4.2.1 Corporate Bonds

<table>
<thead>
<tr>
<th>NTD Corporate Bonds</th>
<th>As of 02/28/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issuer</strong></td>
<td>Senior Unsecured Notes</td>
</tr>
<tr>
<td><strong>Securities</strong></td>
<td>Domestic Unsecured Bond (100-1)</td>
</tr>
<tr>
<td><strong>Issue Date</strong></td>
<td>01/11/2013</td>
</tr>
<tr>
<td><strong>Denomination</strong></td>
<td>USD 1,700,000,000</td>
</tr>
<tr>
<td><strong>Rating</strong></td>
<td>twAAA (Taiwan Ratings Corporation, 06/02/2014)</td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td>NT$119,000,000</td>
</tr>
<tr>
<td><strong>Total Amount</strong></td>
<td>NT$18,000,000,000</td>
</tr>
<tr>
<td><strong>Tranche</strong></td>
<td>10 years</td>
</tr>
<tr>
<td><strong>Maturity</strong></td>
<td>09/28/2018</td>
</tr>
<tr>
<td><strong>Interest Rate</strong></td>
<td>1.40% p.a.</td>
</tr>
</tbody>
</table>

**Note:** Issued by TSMC Global Ltd., a wholly-owned subsidiary of TSMC, and unconditionally and irrevocably guaranteed by TSMC.
4.2.2 Convertible Bond: None.
4.2.3 Exchangeable Bond: None.
4.2.4 Shelf Registration: None.
4.2.5 Bond with Warrants: None.

4.3 Preferred Shares
4.3.1 Preferred Share: None.
4.3.2 Preferred Share with Warrants: None.

4.4 Issuance of American Depositary Shares

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Amount (US$)</td>
<td>594,720,000</td>
<td>184,554,440</td>
<td>35,500,000</td>
<td>296,499,641</td>
<td>158,897,089</td>
<td>379,134,599</td>
<td>224,640,000</td>
<td>1,167,873,850</td>
<td>240,999,660</td>
<td>297,649,640</td>
<td>320,600,000</td>
<td>1,001,650,000</td>
<td>160,097,914</td>
<td>908,514,880</td>
<td>1,077,000,000</td>
<td>1,402,036,500</td>
<td>2,563,200,000</td>
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<td></td>
</tr>
<tr>
<td>Offering Price Per ADS (US$)</td>
<td>24.78</td>
<td>15.26</td>
<td>17.75</td>
<td>24.516</td>
<td>28.964</td>
<td>57.79</td>
<td>56.16</td>
<td>35.75</td>
<td>20.63</td>
<td>20.63</td>
<td>16.03</td>
<td>16.75</td>
<td>8.73</td>
<td>10.40</td>
<td>10.77</td>
<td>8.60</td>
<td>10.68</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Units Issued</td>
<td>24,000,000</td>
<td>12,094,000</td>
<td>2,000,000</td>
<td>12,094,000</td>
<td>5,486,000</td>
<td>6,560,000</td>
<td>4,000,000</td>
<td>32,667,800</td>
<td>11,682,000</td>
<td>14,428,000</td>
<td>20,000,000</td>
<td>59,800,000</td>
<td>18,348,000</td>
<td>87,357,200</td>
<td>100,000,000</td>
<td>163,027,500</td>
<td>240,000,000</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common Shares Represented</td>
<td>120,000,000</td>
<td>60,470,000</td>
<td>10,000,000</td>
<td>60,470,000</td>
<td>27,430,000</td>
<td>32,800,000</td>
<td>20,000,000</td>
<td>163,339,000</td>
<td>58,410,000</td>
<td>72,140,000</td>
<td>100,000,000</td>
<td>299,000,000</td>
<td>91,740,000</td>
<td>436,786,000</td>
<td>500,000,000</td>
<td>815,137,500</td>
<td>1,200,000,000</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underlying Securities</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>Cash Offering and TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td>TSMC Common Shares from Selling Shareholders (Pursuant to ADR Conversion Sale Program)</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Note 1: Citibank, N.A. - Taipei Branch changed its name to "Citibank Taiwan Limited" in 2009.
Note 2: TSMC has in aggregate issued 813,544,500 ADSs since 1997, which, if halving into consideration stock dividends distributed over the period, would amount to 1,147,029,305 ADSs. Stock dividends distributed in 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 2009 were 45%, 23%, 28%, 40%, 10%, 8%, 14.08668%, 4.99971%, 2.99903%, 0.49991%, 0.50417% and 0.49998%, respectively. As of February 28, 2017, total number of outstanding ADSs was 1,072,193,632 after 75,641,573 were redeemed.
Note 3: All fees and expenses such as underwriting fees, legal fees, listing fees and other expenses related to issuance of ADSs were borne by the selling shareholders, while maintenance expenses such as annual listing fees and accountant fees were borne by TSMC.
Note 4: All fees and expenses such as underwriting fees, legal fees, listing fees and other expenses related to issuance of ADSs were borne proportionately by TSMC and the selling shareholders, while maintenance expenses such as annual listing fees and accountant fees were borne by TSMC.
Note 5: Adjusted for cash dividend paid in 2016.
4.5 Status of Employee Stock Option Plan
All TSMC employee stock options expired and exercise completed in 2015. TSMC did not issue employee stock options in 2016, nor as of the date of this annual report.

4.5.1 Issuance of Employee Stock Options: Not applicable.
4.5.2 Employee Stock Options Granted to Management Team and to Top 10 Employees: Not applicable.

4.6 Status of Employee Restricted Stock
TSMC did not issue employee restricted stock in 2016, nor as of the date of this annual report.

4.6.1 Status of Employee Restricted Stock: Not applicable.
4.6.2 Employee Restricted Stock Granted to Management Team and to Top 10 Employees: Not applicable.

4.7 Status of New Share Issuance in Connection with Mergers and Acquisitions
TSMC neither issued new shares in connection with mergers or acquisitions during 2016, nor as of the date of this annual report.

4.8 Financing Plans and Implementation: Not applicable.
20%

In 2016, TSMC expanded its library and silicon IP portfolio to contain more than 12,000 items, a 20% increase over 2015.
5.1 Business Activities

5.1.1 Business Scope

As the founder and leader of the dedicated semiconductor foundry segment, TSMC provides a full range of integrated semiconductor foundry services, including the most advanced process technologies, leading specialty technologies, the most comprehensive design ecosystem support, excellent manufacturing productivity and quality, advanced mask and packaging services, and so on, to fulfill an increasing variety of customer needs. The Company strives to provide the best overall value to its customers and TSMC believes its customers’ success is TSMC’s success. As a result, TSMC has won customer trust from around the world and has experienced strong growth and success.

5.1.2 Customer Applications

TSMC manufactured 9,275 different products for 449 customers in 2016. These chips were used across the entire spectrum of electronic applications, including computers and peripherals, information appliances, wired and wireless communications systems, automotive and industrial equipment, consumer electronics such as DVDs, digital TVs, game consoles, digital still cameras and many other applications.

The rapid evolution of end products drives customers to use TSMC’s innovative technologies and services, while at the same time, TSMC believes its customers’ success is TSMC’s success. As a result, TSMC has won customer trust from around the world and has experienced strong growth and success.

5.1.3 Consolidated Shipments and Net Revenue in 2016 and 2015

<table>
<thead>
<tr>
<th></th>
<th>Shipments (thousand 12-inch equivalent wafers)</th>
<th>Net Revenue (NT$ thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic (Note 1)</td>
<td>1,849</td>
<td>108,190,175</td>
</tr>
<tr>
<td>Export</td>
<td>7,717</td>
<td>702,740,811</td>
</tr>
<tr>
<td>Total</td>
<td>9,566</td>
<td>811,931,086</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Shipments (thousand 12-inch equivalent wafers)</th>
<th>Net Revenue (NT$ thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic (Note 1)</td>
<td>1,588</td>
<td>100,189,156</td>
</tr>
<tr>
<td>Export</td>
<td>7,175</td>
<td>737,773,058</td>
</tr>
<tr>
<td>Total</td>
<td>8,763</td>
<td>837,962,214</td>
</tr>
</tbody>
</table>

Note 1: Domestic means sales to Taiwan.
Note 2: Others majorly include revenue associated with mask making, design services, and royalties.

5.1.4 Production in 2016 and 2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity (12-inch equivalent wafers)</th>
<th>Output (12-inch equivalent wafers)</th>
<th>Amount (NT$ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>8.62</td>
<td>8.9</td>
<td>270,871</td>
</tr>
</tbody>
</table>

5.2 Technology Leadership

5.2.1 R&D Organization and Investment

In 2016 TSMC continued to invest in research and development, with total R&D expenditures amounting to 8% of revenue, a level that equals or exceeds the R&D investment of many other leading high-tech companies.

TSMC recognizes that the technology challenge of continuing to extend Moore’s Law, the doubling of semiconductor computing power every two years, is becoming increasingly complex and difficult. The efforts of the R&D organization are focused on enabling the Company to continuously offer its customers first-to-market, leading-edge technologies and design solutions that contribute to their product success in today’s competitive market environment. In 2016 the R&D organization met these challenges by completing the transfer to manufacturing of the industry leading 10nm technology, the 3rd generation of technology platform to make use of 3D FinFET transistors. The R&D organization continues to fuel the pipeline of technological innovation needed to maintain industry leadership. TSMC’s 7nm technology development is on track to meet the goal of production start-up in 2017. TSMC’s 5nm technology is now in the full development stage, and the definition and intensive early development efforts have been started for nodes beyond 5nm.

In addition to CMOS logic, TSMC conducts R&D on a wide range of other semiconductor technologies that provide the functionality customers require for mobile SoC and other applications. Highlights in 2016 include: the world’s first high-volume production of Integrated Fan-Out Package on Package (iFan-O) for mobile application processor packaging; successful qualification of InFO PoP Gen-2 advanced packaging technology for mobile applications and InFO wafer-level fine-pitch fan-out technology for die-partition and high-speed applications; 0.18um second generation RCD (binary-coded decimal) technology resulting in the world’s highest performance quick charger and wireless charger in 2016; successful production launch of eFlash 65nm/55nm node, NOR-based cell technologies, including 1T-1 cell and split-gate cell; completion of qualification of the 40nm node, split-gate cell technology for consumer electronics applications such as IoT and smartcards; and development and manufacturing qualification of 650V D-MISFET, 100V E-HEMT, and RF 30V D-MISFET GaN devices.

TSMC maintains a network of important external R&D partnerships and alliances with world-class research institutions, including IMEC, the highly regarded European R&D consortium, where TSMC is a core partner. TSMC also provides funding for nanotechnology research at leading universities worldwide to promote innovation and the advancement of nano-electronic technology. TSMC has established four joint research centers within Taiwan: National Taiwan University, National Chiao Tung University, National Tsing Hua University, and National Cheng Kung University. The goal of these centers is to develop greater understanding of the devices and materials used in the manufacture of advanced silicon technologies.

R&D Expenditures

5.2.2 R&D Accomplishments in 2016

<table>
<thead>
<tr>
<th>Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>10nm Technology</td>
</tr>
</tbody>
</table>
10nm technology offers substantial density improvement with better performance at same power or power reduction at the same chip performance compared to earlier technology generations and began customer product tape-out in the first quarter and production ramp-up in the fourth quarter of 2016.

| 7nm Technology |
TSMC focused on the manufacturing baseline process setup, yield learning, transistor and interconnect RC performance improvement and the reliability evaluation of 7nm technology, which offers significant density improvement with better performance at same power or lower power consumption at comparable performance vs. 10nm technology. During the
year, major customers and IP vendors completed IP design and started silicon validation. TSMC plans to complete 7nm qualification for risk production in 2017.

**5nm Technology**
Development activities in 2016 focused on test vehicle design and implementation, mask making, and pilot run. Even though the semiconductor industry is approaching the physical limits of silicon, 5nm technology still follows Moore’s Law and delivers substantial density improvement with better performance at the same power or lower power consumption at comparable performance. TSMC will focus on manufacturing baseline process setup, yield learning, transistor and interconnect R/C performance improvement and reliability evaluation and plans to continue 5nm full development in 2017 and 2018 for risk production in 2019.

**Lithography Technology**
The main focus for RD lithography in 2016 is 7nm and 5nm development. For 7nm development, the primarily focus is on continuous improvement of overlay control, defect reduction, and patterning robustness in preparation for 7nm qualification. As for 5nm development, EUV lithography will be used to reduce the complex multi-patterning process steps. In 2017, TSMC will take the delivery of newest generation of EUV scanners to meet the tightened overlay control and imaging requirement for 5nm and beyond.

In 2016, the EUV program made continuous improvement in light-source power and its stability, which has enabled faster learning rate and process development for advanced nodes. Additional progress was made with resist process, pellicle, and related mask blanks, as EUV technology moves closer to full scale R&D and manufacturing readiness.

**Mask Technology**
Mask technology is an integral part of our advanced lithography. In 2016, R&D successfully completed the development of mask technology for the 7nm node. This technology is being transferred to the mask production organization. During the same period, solid progress was made on the development of mask technology for EUV lithography, including the reduction of native defects on mask blanks and the fabrication of EUV masks for lithographic processing of 7nm and 5nm nodes.

*Integrated Interconnect and Packaging* CoWoS®, InFO and Under-Bump-Metallurgy Free Integration (UBM-free integration, UFI) are part of the generic wafer level system integration (WLSI) technology platform, which leverages TSMC’s core competency in wafer processes for heterogeneous system integration and packaging to meet the specific customer needs in performance, power, profile, cycle time and cost. InFO, UFI and CoWoS® are continuously evolving to fulfill diversified markets such as IoTs, automotive, high-performance computing and telecommunication.

**3D IC**
2016 was a landmark year for system integration, as TSMC launched the world’s first high-volume manufacturing (HVM) InFO PoP packaging for mobile applications processors. During the year, TSMC also successfully qualified InFO PoP Gen-2 advanced packaging technology for mobile applications and wafer-level fine-pitch InFO technology for die-partition and high-speed applications. Production ramp-up of fine-pitch fan-out HVM is expected in 2017. In interposer CoWoS® technology, the application was rapidly extended to 16nm starting from the FPGA (field programmable gate array) family. In addition, TSMC leads the industry by starting mass production of super high-end accelerators that integrate multiple HBIM2 (second generation high bandwidth memory) chips and GPUs, resulting in a brand new application for CoWoS® in the HPC area of artificial intelligence and deep learning.

**Advanced Package**
TSMC offers a wide variety of lead-free packaging solutions for mobile/handheld devices. 10mm FinFET Si with ultra-fine pitch copper packaging was developed and qualification was successfully completed in the fourth quarter of 2016. The low-cost and large die area up to 188mm² with highly reliable 80µm pitch copper packaging technology will be inserted into customers’ mass production from 2017 onward. In 2016, the low-cost, innovative and highly reliable fan-in WLCSP technology was completed and transferred to Fab for mass production of die size 5x5mm². Expanding its application envelope, in addition to larger die size 7x7mm², this technology also passed the reliability qualification for even larger die sizes up to 10x10mm².

**Advanced Interconnect**
Several leading interconnect technologies were optimized and implemented in the 5nm node during 2016. Both chip performance and power utilization were effectively enhanced. These state-of-the-art technologies include an innovative integrated low-cost patterning process with the extension of immersion lithography and cutting-edge EUV patterning technology, optimized metal layer stacking combinations, and a novel thin copper barrier process with prominent reliabilities. In addition TSMC deployed experienced experts and relevant resources to develop technology nodes of 3nm and beyond.

**Advanced Transistor Research**
Innovation in transistor architectures and materials has enabled increased speed and reduction of power consumption in advanced logic technologies. TSMC is at the forefront of transistor research on devices with high mobility channel materials for beyond Silicon CMOS. Complementing this research are further efforts focusing on innovative solutions to address challenges to technology performance from parasitic resistances and capacitances. TSMC research is expected to pave the way for continued density scaling while maximizing performance and minimizing power on advanced logic technologies for mobile and high-performance applications.

**Specialty Technologies**
TSMC offers a broad mix of technologies to address a wide range of applications:

- **Mixed Signal/Radio Frequency (MS/RF) Technology**
  In 2016, TSMC developed a 7nm silicon, electromagnetic simulation-based design to facilitate high-speed circuit design with layout specifications. To meet growing demand for low-power consumption and leakage current in mobile devices, TSMC also introduced 16FF RF technology, e.g. for 4G LTE applications. In order to improve performance regarding insertion loss and isolation, TSMC further reduced key parameters Ron-Coff to ~102 fs (femtoseconds) to enable cellular/Hi-Fi RF switch applications.

- **Power IC/Bipolar-CMOS-DIMOS (BCD) Technology**
  TSMC’s 0.18µm second-generation BCD technology enabled the world’s highest-performance quick charger and wireless charger in 2016. 0.18µm third-generation BCD technology is ramping up and will provide an even better solution with higher performance at lower cost. Targeting 5V and below mobile power management, newly developed asymmetric power switch in 0.18µm BCD technology will enhance efficiency per supply for mobile devices.

- **Panel Drivers**
  TSMC completed process qualification of 40nm high-voltage 6V/25V wafer scale driver technology with several customer product verifications ongoing. This technology supports Super Retina display driver ICs and touch-display driver ICs for high-end mobile phones. In addition, TSMC introduced Phase-2 with a 22% SRAM bitcell reduction as well as 8V/25-32V process technology for OLED drivers; several customers have designs in and to plan to tape out in the first quarter of 2017.

- **Micro-electromechanical Systems (MEMS) Technology**
  In 2016, TSMC’s modular MEMS technology was qualified for mass production of accelerometers and a pilot run of high-resolution pressure sensors. Future plans include the development of next-generation high-sensitivity thin microphones, MEMS Si-pillar TSV (through silicon via) technology and BioMEMS applications.

- **GaN Technology**
  In 2016, 650V D-MISFET, 100V E-HEMT, and RF 30V D-MISFET GaN devices were developed and qualified for manufacturing.

- **Complementary Metal-Oxide-Semiconductor (CMOS) Image Sensor Technology**
  In 2016, CMOS image sensor technology made the following breakthroughs: (1) high-density wafer hybrid bond technology; (2) second-generation wafer backside trench isolation for pixel; and (3) composite metal grid structure for SNR (signal-to-noise ratio) per pixel improvement. The first breakthrough achieved the world’s most advanced pitch density. The second and third breakthroughs reduced per-pixel electrical and optical cross-talk for better image quality compared to previous generations of optical structures. All three technologies passed product and process qualification and are progressing toward mass production.

- **Flash/Embedded Flash Technology**
  TSMC achieved several important milestones in embedded flash technologies in 2016. At the more mature 65nm/55nm node, NGR-based cell technologies, including 1T-cell and Split-Gate cell, were successfully put in production. At the 40nm node, split-gate cell technology completed qualification for consumer electronics applications such as IoT and smartcards, and also completed customer product qualification were put in production. This technology will be adopted for automobile electronics, the development is undergoing. Embedded flash development on the 28nm low-power and 28nm high-performance mobile computing platforms is underway for low-leakage applications in areas such as automobile electronics and micro controller units (MCU).
5.2.3 Technology Platform

TSMC provides customers with advanced technology platforms that include the comprehensive design infrastructure required to optimize design productivity and cycle time. These include: design flows for electronic design automation (EDA); silicon-proven IP building blocks, such as libraries; and simulation and verification design kits, i.e., process design kits (PDK) and technology files.

The availability of 7nm FinFET saw improvements in design infrastructure using an advanced CPU core as the vehicle to support customers’ adoption of 7nm FinFET. (EDA tool certification results can be found on TSMC-Online.) TSMC also extended its IP quality program (TSMC 9000) to allow IP audits to be performed either at TSMC or at TSMC-certified laboratories. To help customers plan new product tape-outs incorporating IP/Library from TSMC’s Open Innovation Platform® (OIP) ecosystem, the OIP ecosystem added a portal to connect customers to an ecosystem of 43 solution providers.

5.2.4 Design Enablement

TSMC’s technology platforms provide a solid foundation to facilitate the design process. Customers can design directly using the Company’s internally developed IP and tools or using those that are available from TSMC’s OIP partners.

Tech Files and PDKs

TSMC provides a broad range of process design kits (PDKs) for digital logic, mixed-signal, radio frequency (RF), high-voltage driver, CMOS image sensor (CIS) and embedded flash technologies across a range of technology nodes from 0.5µm to 7nm. In addition, the Company provides technology files for DRC (design rule checking), LVS (layout verification of schematic), RC (resistance-capacitance) extraction, automatic place and route, and a layout editor to ensure process technology information is accurately represented in EDA (electronic design automation) tools. By 2016, TSMC had provided more than 8,200 technology files and more than 270 PDKs via TSMC-Online. There are more than 100,000 customer downloads of these files every year.

Library and IP

TSMC and its alliance partners offer customers a rich portfolio of reusable IPs, which are essential building blocks for many circuit designs. In 2016, over 60% of new tape-outs at TSMC adopted one or more libraries or IP from TSMC and/or OIP partners, as the Company expanded its library and silicon IP portfolio to contain more than 12,000 items, a 20% increase over 2015.

Design Methodology and Flow

In 2016 TSMC addressed critical design challenges associated with the new 7nm FinFET technology for digital and SoC applications by announcing the readiness of reference flows through OIP collaboration that feature FinFET-specific design solutions and methodologies for performance, power and area optimization.

5.2.5 Intellectual Property

A strong portfolio of intellectual property rights strengthens TSMC’s technology leadership and supports our advanced and leading edge technologies. In 2016, TSMC received a total of 2,294 U.S. patents, which is a 30% increase from the previous year, and thus reached a historical-high ranking of #9 in terms of U.S. patent grants. Additionally, TSMC received over 1,200 issued patents in Taiwan and PRC, which is a 59% increase from the previous year, as well as patents in other various countries. TSMC’s patent portfolio now reaches over 35,000 patents worldwide (including patent applications in queue).

We continue to implement a unified strategic plan for TSMC’s intellectual capital management. Strategic considerations and close alignment with the business objectives drive the timely creation, management and use of our intellectual property.

At TSMC, we have built a process to extract value from our intellectual property by aligning our intellectual property strategy with our R&D, operations, business objectives, marketing, and corporate development strategies. Intellectual property rights protect our freedom to operate, enhance our competitive position, and give us leverage to participate in many profit-generating activities. We have worked continuously to improve the quality of our intellectual property portfolio and to reduce the costs of maintaining it. We plan to continue investing in our intellectual property portfolio and intellectual property management system to ensure that we protect our technology leadership and receive maximum business value from our intellectual property rights.

5.2.6 TSMC University Collaboration Programs

In recent years, TSMC has significantly expanded its interaction with universities in Taiwan with the collaboration of research projects at some of the nation’s most prestigious institutions. The mission of these projects is twofold: to increase the number of highly qualified students suitable for employment in semiconductor industry, and to inspire university professors to initiate research programs that focus on the frontiers of semiconductor science, including device, process and materials technology, semiconductor manufacturing and engineering science, and specialty technologies for electronic applications. Since 2013, TSMC has established four research centers at National Taiwan University, National Chiao Tung University, National Cheng Kung University and National Tsing Hua University. In 2015, TSMC started cooperation with International College of the Semiconductor Technology and continued to enhance cooperation with other schools.

Currently, several hundred high-caliber students have joined the research centers with backgrounds in the disciplines of electronics, physics, materials engineering, chemistry, engineering and mechanical engineering.

In addition, TSMC also conducts strategic research projects at top overseas universities, such as Stanford, MIT, UC Berkeley and so on. The focus is on disruptive capabilities in transistors, interconnect, patterning, modeling and special technologies.

TSMC University Shuttle Program

The TSMC University Shuttle Program was established to provide professors at leading research universities worldwide with access to the advanced silicon process technology needed to research and develop innovative circuit design concepts. This program links motivated professors and graduate students to enthusiastic managers at TSMC with the goals of promoting excellence in the development of advanced silicon design technologies and nurturing new generations of engineering talent in the semiconductor field.

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The program provides access to TSMC silicon process technologies for digital, analog/mixed-signal circuits, RF designs and micro-electromechanical system designs. Participants in the TSMC University Shuttle Program achieve “win-win” collaboration through the program, which allows graduate students to implement exciting designs and achieve silicon proof points for innovations in various end-applications.

5.2.7 Future R&D Plans

To maintain and strengthen TSMC’s technology leadership, the Company plans to continue investing heavily in R&D. In addition to 7nm and 5nm CMOS nodes already in the pipeline, the Company’s reinforced exploratory R&D work is on track to establish a solid foundation to feed into technology platforms beyond the 5nm node. The Company’s exploratory work focuses on new transistors and technologies, such as 3D structures, strain-engineered CMOS, high-mobility materials and novel 3D IC devices. These studies emphasize innovation and are guided by deep understanding of the fundamental physics of nanometer CMOS transistors and related technologies. The Company also continues to collaborate with external research bodies from academia and industry consortia alike with the goal of extending Moore’s Law and paving the road to future cost-effective technologies and manufacturing solutions for its customers.

With a highly competent and dedicated R&D team and its unwavering commitment to innovation, TSMC is confident in its ability to deliver the best and most cost-effective SoC technologies to its customers and to drive future business growth and profitability for years to come.

Summary of TSMC’s Major Future R&D Projects

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Description</th>
<th>Test Production (Estimated Target Schedule)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next logic platform and applications</td>
<td>Next-generation TSMC CMOS platform technology for SoC</td>
<td>2017</td>
</tr>
<tr>
<td>Next logic platform and applications</td>
<td>Next-generation TSMC CMOS platform technology for SoC</td>
<td>2018</td>
</tr>
<tr>
<td>3D TDI</td>
<td>Cost-effective solution with better form factor and performance for System-in-Package (SiP)</td>
<td>2016 – 2017</td>
</tr>
<tr>
<td>Next generation lithography</td>
<td>Next generation lithography and related patterning technology to extend Moore’s law</td>
<td>2016 – 2018</td>
</tr>
<tr>
<td>Long-term research</td>
<td>Specialty InSb, metal indium (InAs, InP, InN) analog and transition for major machine and equipment</td>
<td>2015 – 2019</td>
</tr>
</tbody>
</table>

The projects above account for roughly 75% of the total R&D budget for 2017, estimated to be around NT$37.7 billion. |
5.3 Manufacturing Excellence

5.3.1 GIGAFAB® Facilities

Maintaining dependable capacity is a key part of TSMC’s manufacturing strategy. The Company currently operates three 12-inch GIGAFAB® facilities – Fab 12, Fab 14, and Fab 15. The manufacturing strategy. The Company currently operates three
Maintaining dependable capacity is a key part of TSMC's
highly efficient and effective production, the Company has

5.3.2 Engineering Performance Optimization

As advanced technology continues to evolve, the geometry keeps shrinking and the need for tighter process control have become extremely challenging for manufacturing. TSMC’s unique manufacturing infrastructure is tailored with tightened process control and diversified product portfolio to fulfill higher product performance requirements. To achieve overall optimization of equipment, process and yield, the process control and analysis systems have been integrated with many intelligent functions to perform self-diagnosis and self-reacting, which have remarkable results in yield enhancement, workflow improvement, fault detection, cost reduction and R&D cycle decrement.

TSMC has developed Precision Fault Detection and Classification system, Intelligent Advanced Equipment Control and Intelligent Advanced Process Control to monitor the manufacturing process in a timely manner and adjust conditions precisely. To satisfy advanced and accurate process control and ensure highly efficient and effective production, the Company has

5.3.3 Agile and Intelligent Operations

TSMC continues to drive manufacturing excellence through agile and intelligent operations. The Company’s sophisticated agile operation system has integrated demand and capacity modeling, lean WIP (Work in Process) line management, and lot dispatching and scheduling, and on time delivery system to provide short cycle time, stable manufacturing and on-time delivery. The system also provides great flexibility to quickly support customers’ urgent pull-in requests when needed.

TSMC has also introduced new applications such as IoT devices, intelligent mobile devices, and mobile robots that help to consolidate data collection, yield traceability, workflow efficiency, and material transportation to continuously enhance fab operating efficiency.

Following its commitment to manufacturing excellence, TSMC has integrated the technology of advanced data analysis, smart diagnostics, self-precise forecasting and operational knowledge to revolutionize the fab operating mode from “Auto” to “Intelligent,” to optimize efficiency, flexibility and quality while maximizing cost effectiveness and accelerating overall innovation.

5.3.4 Raw Materials and Supply Chain Management

In 2016, TSMC continued to hold review meetings periodically with teams from operations, quality control and business to proactively identify and manage the risks of insufficient supply capacity, quality issues and supply chain interruption. TSMC also worked with suppliers to enhance performance, quality, delivery and sustainability, as well as to support green procurement, environmental protection and safety.

<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Major Suppliers</th>
<th>Market Status</th>
<th>Procurement Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wafers</td>
<td>SUMCO</td>
<td>These nine companies are the major worldwide suppliers of silicon wafers.</td>
<td>TSMC’s suppliers of silicon wafers are required to pass stringent quality certification procedures.</td>
</tr>
<tr>
<td></td>
<td>GlobalWafers</td>
<td>These nine companies are the major worldwide suppliers of silicon wafers.</td>
<td>TSMC procures wafers from multiple sources to ensure adequate supplies for volume manufacturing and to appropriately manage supply risk.</td>
</tr>
<tr>
<td></td>
<td>SiCera</td>
<td>These nine companies are the major worldwide suppliers of silicon wafers.</td>
<td>TSMC regularly reviews the quality, delivery, cost, sustainability and service performance of its wafer suppliers. The results of these reviews are incorporated into TSMC’s subsequent purchasing decisions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemicals</td>
<td>Air Products</td>
<td>These eight companies are the major worldwide suppliers of chemicals.</td>
<td>TSMC works with its suppliers to develop new materials that meet all application and cost requirements.</td>
</tr>
<tr>
<td></td>
<td>Entegris</td>
<td>These eight companies are the major worldwide suppliers of chemicals.</td>
<td>TSMC’s and suppliers periodically conduct programs to improve their quality, delivery, sustainability and green policy, and to ensure continuous progress of TSMC’s supply chain.</td>
</tr>
<tr>
<td></td>
<td>T.O.K.</td>
<td>These eight companies are the major worldwide suppliers of chemicals.</td>
<td>Some major suppliers have relocated or plan to replicate their manufacturing sites closer to TSMC’s major manufacturing facilities, thereby significantly improving procurement logistics and reducing supply risks.</td>
</tr>
<tr>
<td>Lithographic Materials</td>
<td>NTT Electronics</td>
<td>These seven companies are the major worldwide suppliers of lithographic materials.</td>
<td>TSMC works closely with its suppliers to develop new materials that meet all application and cost requirements.</td>
</tr>
<tr>
<td></td>
<td>Sumitomo</td>
<td>These seven companies are the major worldwide suppliers of lithographic materials.</td>
<td>TSMC and suppliers periodically conduct programs to improve their quality, delivery, sustainability and green policy, and to ensure continuous progress of TSMC’s supply chain.</td>
</tr>
<tr>
<td></td>
<td>Kinik</td>
<td>These seven companies are the major worldwide suppliers of lithographic materials.</td>
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</tr>
<tr>
<td></td>
<td>F.S.T.</td>
<td>These seven companies are the major worldwide suppliers of lithographic materials.</td>
<td>TSMC works closely with its suppliers to develop materials that meet all application and cost requirements.</td>
</tr>
<tr>
<td>Gases</td>
<td>Air Products</td>
<td>These seven companies are the major worldwide suppliers of gases.</td>
<td>TSMC works closely with its suppliers to develop new materials that meet all application and cost requirements.</td>
</tr>
<tr>
<td></td>
<td>Entegris</td>
<td>These seven companies are the major worldwide suppliers of gases.</td>
<td>TSMC conducts periodic audits to ensure that its suppliers meet TSMC’s standards.</td>
</tr>
<tr>
<td></td>
<td>T.O.K.</td>
<td>These seven companies are the major worldwide suppliers of gases.</td>
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<td></td>
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<tr>
<td>Sunny, Key, DMI</td>
<td>AMERICAN</td>
<td>These four companies are the major worldwide suppliers of DUV (Deep Ultraviolet) materials.</td>
<td>TSMC works closely with its suppliers to develop new materials that meet all application and cost requirements.</td>
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These seven companies are the major worldwide suppliers of gases.

These eight companies are the major worldwide suppliers of chemicals.

These seven companies are the major worldwide suppliers of lithographic materials.

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continue the development of employees’ capabilities by using new methodology to enhance TSMC competitiveness.

SPC (Statistical Process Control) and metrology in 2016 including the promotion and training of Deep/Machine Learning. Q&R will hold several company-wide symposiums and training programs such as TQE (Total Quality Excellence), DOE (Design of Experiment), To enhance employees’ problem solving capabilities and develop associated quality system and methodology, Q&R continued to develop a comprehensive tool and process defense system to early detect and contain issues within Fab and thus improve overall customer satisfaction.

With fast growing demand and increasing challenge in specialty technology, Q&R and Fab has worked together to ensure robust development and implemented 6 new quality systems and also inquired material suppliers to participate in the “National Quality Control Circle Competition” to enhance their self-improvement capabilities. For outgoing quality control, Q&R implemented auto-packing machine to eliminate manual handling and enhance InFO package quality assurance.

Failure analysis and material and chemical studies play important roles in TSMC’s quality control. These capabilities are applied from the early stages of process development through assembly and packaging, including analysis of incoming materials, airborne molecular contaminants, in-depth materials characterization, and failure analysis for process development and failure analysis of customer returns. In 2016, TSMC invested aggressively in automation for transmission electron microscopy (TEM) sample preparation and imaging, which resulted in further improvement in TSMC world-class cycle times and capacity in the area. The Company also strengthened its ties with the nearby National Synchrotron Radiation Research Center to analyze advanced materials. In collaboration with customers and suppliers, TSMC continued to make significant progress in fault isolation. In particular, TSMC added the ability to remove material layer by layer for failure analysis with nanometer level accuracy. Given the changing needs of our customers and the importance of ensuring the quality of incoming chemicals and materials, in 2016, TSMC launched a laboratory to analyze precursor gases used in atomic layer deposition (ALD). With a growing presence in the IC packaging area, Q&R also bolstered failure analysis capabilities for multi-chip packages including InFO packages. These efforts will continue in 2017.

Q&R is also responsible for leading the Company toward the ultimate goal of zero-defect production through the use of continuous improvement programs. Periodic customer feedback indicates that products shipped from TSMC have consistently met or exceeded their field quality and reliability requirements. In 2016, a third-party audit verified the effectiveness of TSMC quality management systems in compliance with ISO/TS 16949: 2009 and IECQ QC 080000: 2012 certificates requirements.

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Complementary to the survey, quarterly business reviews (QBRs) are also conducted by the customer service team so that customers can give feedback to TSMC on a regular basis. Through surveys, feedback reviews and intensive interaction with customers, TSMC is able to maintain close touch for better service and collaboration.

Customer feedback is routinely reviewed, analyzed and then used to develop appropriate improvement plans, all in all becoming an integral part of the customer satisfaction process with a complete closed loop. TSMC uses data derived from the survey as a base to identify future focus areas. TSMC acts on the belief that customer satisfaction leads to loyalty, and customer loyalty leads to higher levels of retention and expansion.

Customers that Accounted for at Least 10% of Annual Consolidated Net Revenue

<table>
<thead>
<tr>
<th>Customer</th>
<th>Net Revenue 2016</th>
<th>As % of 2016 Total Net Revenue</th>
<th>Relation to TSMC</th>
<th>Net Revenue 2015</th>
<th>As % of 2015 Total Net Revenue</th>
<th>Relation to TSMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer A</td>
<td>157,185,410</td>
<td>17%</td>
<td>None</td>
<td>141,117,248</td>
<td>18%</td>
<td>None</td>
</tr>
<tr>
<td>Customer B</td>
<td>170,083,232</td>
<td>19%</td>
<td>None</td>
<td>161,783,472</td>
<td>19%</td>
<td>None</td>
</tr>
<tr>
<td>Others</td>
<td>348,099,067</td>
<td>39%</td>
<td>None</td>
<td>325,345,369</td>
<td>40%</td>
<td>None</td>
</tr>
<tr>
<td>Total Net Revenue</td>
<td>675,367,719</td>
<td>100%</td>
<td></td>
<td>538,245,093</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

5.4.2 Open Innovation Platform® (OIP) Initiative

Innovation has always been both an exciting proposition and a challenge. Competition among semiconductor companies is growing more intense in the face of increasing customer consolidation and the commoditization of technology at more mature, conventional levels. Companies must find ways to continue innovating in order to survive and prosper. One way to accelerate innovation is through active collaboration with external partners. At TSMC this is known as the “Open Innovation®” approach. It is an “outside in” approach to complement traditional “inside out” methods. TSMC has adopted this path to innovate via its Open Innovation Platform® (OIP) initiative, which is a key part of the TSMC Grand Alliance.

The OIP initiative is a comprehensive design technology infrastructure that encompasses all critical IC implementation areas to reduce design barriers and improve first-time silicon success. OIP promotes the speedy implementation of innovation amongst the semiconductor design community and its ecosystem partners with TSMC’s IP, design implementation and DFM (design for manufacturability) capabilities, process technology and backend services.

Crucial to OIP are ecosystem interfaces and collaborative components initiated and supported by TSMC that more efficiently empower innovation throughout the supply chain and, in turn, drive the creation and sharing of new revenue and profits. TSMC’s active accuracy assurance (AAA) initiative is key to OIP, providing the accuracy and quality required by the ecosystem interfaces and collaborative components.

TSMC’s Open Innovation® model brings together the creative thinking of customers and partners under the common goal of shortening each of the following: design time, time-to-volume, time-to-market and, ultimately, time-to-revenue. The model features:

- The foundry segment’s earliest and most comprehensive EDA (electronic design automation) certification program, delivering timely design tool enhancement required by new process technologies;
- The foundry segment’s largest, most comprehensive and robust silicon-proven IP (intellectual properties) and library portfolio; and
- Comprehensive design ecosystem alliance programs covering market-leading EDA, library, IPs, and design service partners.

TSMC’s OIP alliance consists of 23 EDA partners, 43 IP partners, and 25 design service partners. TSMC and its partners work together proactively and engage much earlier and deeper than before in order to address mounting design challenges at advanced technology nodes. Through this early and intensive collaboration effort, TSMC’s OIP is able to deliver the needed design infrastructure with timely enhancement of EDA tools, early availability of critical IPs and quality design services when customers need them. Taking full advantage of the process technologies once they reach production-ready maturity is critical to customers’ success.

In September 2016, TSMC hosted an OIP ecosystem forum at the San Jose Convention Center in California, and another in October in Beijing, with keynote addresses from OIP ecosystem partners as well as TSMC executives. The forum was well attended by both customers and ecosystem partners and demonstrated the value of collaboration through OIP to nurture innovation.

TSMC’s OIP partner management portal facilitates communication with our ecosystem partners for efficient business productivity. Designed with a highly intuitive interface, this portal can be accessed via a direct link from TSMC Online.

5.5 Human Capital

Human capital is one of TSMC’s most important assets.

The Company is committed to providing quality jobs with good compensation, meaningful work, and a safe work environment for its employees. Moreover, TSMC is dedicated to fostering a dynamic, effective work environment.

Based on the commitment to employees, TSMC believes that all employees should be treated with dignity and respect. In the aspect of upholding international proclaimed human rights, TSMC has initiated and implemented “TSMC Human Rights Policy” based on “A Guide for Business – How to Develop a Human Rights Policy” and is also compliance with “the International Bill of Human Rights,” “The International Labour Organization’s (ILO) Declaration on Fundamental Principles and Rights at Work” and “the United Nations Global Compact’s Ten Principles”. In addition, TSMC participates in the Electronic Industry Citizenship Coalition (EICC) as a full member.

5.5.1 Workforce Structure

At the end of 2016, TSMC had over 46,968 employees worldwide, including 4,909 managers, 20,219 professionals, 3,934 assistants, and 17,406 technicians. The following table summarizes TSMC’s workforce as of the end of February, 2017:

<table>
<thead>
<tr>
<th>Job</th>
<th>2015/12/31 (Note)</th>
<th>2016/12/31</th>
<th>2017/02/28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>4,658</td>
<td>4,669</td>
<td>4,666</td>
</tr>
<tr>
<td>Professionals</td>
<td>19,645</td>
<td>20,219</td>
<td>20,703</td>
</tr>
<tr>
<td>Assistant</td>
<td>3,768</td>
<td>3,844</td>
<td>3,899</td>
</tr>
<tr>
<td>Engineer/Clerical</td>
<td>3,768</td>
<td>3,844</td>
<td>3,899</td>
</tr>
<tr>
<td>Technician</td>
<td>11,168</td>
<td>11,406</td>
<td>11,499</td>
</tr>
<tr>
<td>Total</td>
<td>54,222</td>
<td>54,464</td>
<td>54,340</td>
</tr>
</tbody>
</table>

5.5.2 Recruitment

TSMC’s growth depends on the continued contributions of its dedicated employees. In order to strengthen growth momentum, the Company is dedicated to recruiting top-notch professionals for all positions available. TSMC is an equal employment opportunity employer and operates on the principles of open-and-fair recruitment. The Company evaluates all candidates according to their qualifications as related to the requirement of each position without regard to race, gender, age, religion, nationality or political affiliation.

TSMC’s continuous growth requires constant talent sourcing and recruitment activities to support its business. The Company recruited over 3,400 employees in 2016, including over 2,300 managers and professionals, as well as over 1,100 assistants and technicians.
5.5.3 People Development

Employee development is an integral and critical factor for the growth of a company and should be goal-oriented, disciplined and planned. TSMC is committed to cultivating a consistent and diverse learning environment. To this end, the Company has initiated the “TSMC Employee Training and Education Procedure” to ensure the Company’s and the individuals’ development objectives can be achieved through the integration of internal and external training resources.

An individual development plan (IDP) is drawn up based on the nature of the individual’s job, work performance and career development path. At the same time, TSMC also actively develops talent and creates a high-performance work environment through development programs based on business objectives. The Company not only provides employees a diverse network of learning resources, including on-job training, classroom training, e-learning, coaching, mentoring and job rotation, but also creates a learning atmosphere through learning enablement activities in response to organization development requirements and employee capability enhancement needs.

The Company provides employees with a wide range of on-site general, professional and management training programs systematically. In addition to engaging external experts as trainers, hundreds of TSMC employees are trained to be qualified instructors to deliver their valuable knowhow in internal training courses.

TSMC’s training programs include:

- Professional/functional training: technical and professional training required by different functions within the Company. TSMC offers training courses on equipment engineering, process engineering, accounting, information technology, and so forth.
- Management training: programs are tailored to the needs of managers at all levels, including new, experienced, and senior managers; optional courses are also available.
- Direct labor training: enables production line employees to acquire the knowledge, skills and attitudes they need to perform their jobs well and to pass the certification for operating equipment. Includes direct labor skill training, technician “Train the Trainer” training, and manufacturing leader training.
- Customized training: programs are tailored to the needs of the organization and/or the people development plan.

In 2016, TSMC conducted 1,228 internal training sessions, which translated to a companywide total of 623,711 training hours with the participation of 450,756 attendees. Employees on average attended over 13 hours of training with total training expenses reaching NT$75,401,157.

Apart from internal training resources, our employees are also subsidized when pursuing external short-term courses, for-credit courses and degrees.

5.5.4 Compensation

TSMC provides a diversified compensation program that is competitive externally, far internally, and adapted locally. TSMC adheres to the philosophy of sharing wealth with employees in order to attract, retain, develop, motivate and reward talented employees. With excellent operating performance, employment at TSMC entitles employees to a comprehensive compensation and benefits program above the industry average.

TSMC’s compensation program includes a monthly salary, employees’ cash bonus based on quarterly business results, and an employee profit sharing bonus based on annual profit.

The purpose of the employee cash bonus and profit sharing bonus programs is to reward employee contributions appropriately, to encourage employees to work consistently toward ensuring the success of TSMC, and to align employees’ interests with those of TSMC’s shareholders. The Company determines the amount of the cash bonus and employees’ compensation based on operating results and industry practice in the Republic of China. The amount and form of the employee cash bonus and employees’ profit sharing bonus are recommended by the compensation committee to the board. In addition, the profit sharing bonus is distributed upon the approval of the board of directors. Individual awards are based on each employee’s job responsibility, contribution and performance.

In addition to providing employees of TSMC’s overseas subsidiaries with a locally competitive base salary, the Company grants annual bonuses as a part of total compensation. The annual bonuses are granted in line with local regulations, market practices, and the overall operating performance of each subsidiary, to encourage employee commitment and development within the Company.

5.5.5 Employee Engagement

Both local labor laws in each operation location and the fundamental conventions of International Labour Organization prohibit all forms of forced or compulsory labor. TSMC stands firmly with these protocols and has never forced labor from involuntary persons or menaced them with any penalty. The Company encourages employees to maintain a healthy and well-balanced life while accomplishing their missions effectively. TSMC continuously implements programs to enhance employee communication, well-being, benefit, rewards and recognition. The various initiatives include the following programs:

Employee Communication

TSMC values two-way communication and is committed to keeping communication channels among management levels, subordinates and peers open and transparent. To ensure that employees’ opinions and voices are heard and their issues are addressed effectively, impartial submission mechanisms, including quarterly labor-management communication meetings, are in place to provide timely support. TSMC makes continuous efforts to facilitate mutual and timely employee communication, based on multiple channels and platforms, which in turn fosters harmonious labor relations and creates a win-win situation for the Company and employees.

A host of two-way communication channels are constructed to maintain the free flow of information between managers and employees, including:

- Communication meetings for various levels of managers and employees.
- Periodic employee satisfaction surveys, with follow-up actions based on the survey findings.
- The employee portal, myTSMC, an internal website featuring the Chairman’s talk, corporate messages, executive interviews, and other activities of interest to employees.
- Silicon Garden, a website hosting TSMC’s internal electronic publications providing real-time updates on major activities of the Company, as well as inspirational content featuring outstanding teams and individuals.
- The Whistleblower Reporting System owned by Audit Committee and the Ombudsman system led by an appointed vice president – two distinct channels, each with a strict confidentiality – to handle complaints regarding major management, financial, auditing, ethics and business conduct issues.
- The employee opinion box provides an opportunity for employees to submit suggestions or opinions regarding their work and the overall work environment.
- The Fab Caring Circle in each fab addresses the issues related to employees’ work and personal life; the system is dedicated mainly to the Company’s direct labor workers.
Core values are the foundation of the Company. As part of our practice on “Integrity,” means, among other things, that TSMC abides by the law and goes above and beyond to act in accordance with the spirit of the law. “Commitment” entails providing employees with meaningful jobs, a safe working environment and competitive compensation and benefits. Under this premise, TSMC respects employees’ rights entitled by global labor standards and local regulations, including the UN Global Compact's Ten Principles and Taiwan's Labor Union Act. In addition, as a member of the Electronic Industry Citizenship Coalition (EICC), TSMC adopts the EICC Code of Conduct (http://www.tsmc.com/english/csr/eicc_membership.htm) and does not impede employees’ freedom of association. The principle and regulation above not only align with TSMC’s goal, but also provide practical standards and measurement of implementation, which support the Company’s continuous enhancement.

The relationship between TSMC management and employees has been harmonious over the years; internal communication channels are transparent and effective. The Company respects employees’ right of forming a labor union, however, no employees have pursued this avenue or issued a request to form one so far. Channels are transparent and effective. The Company respects employees’ right of forming a labor union, however, no employees have pursued this avenue or issued a request to form one so far.

Free-to-Face Meeting
- Functional/ Work Unit/ Level Meeting
- Enactment Meeting
- Multi-Functional Activity
- For example: Labor-Management Meeting, Chairman’s Executive Communication Meeting, Functional/ Monthly Meeting, etc.

Employee Portal
- Employee Service Team
- Communication Meeting
- Premium Garden Announcement
- Company Wide Activity

Employee Voice Channels
- Ombudsman System
- Internal Audit Committee
- Internal Investigation Committee
- Employee Opinion Box
- Club/Caring Circle

System / Committee Chair

Board of Directors and Management Team

Corporate Strategy and Executive Team

Managers of All Levels

Core values are the foundation of the Company. As part of our practice on “Integrity,” means, among other things, that TSMC abides by the law and goes above and beyond to act in accordance with the spirit of the law. “Commitment” entails providing employees with meaningful jobs, a safe working environment and competitive compensation and benefits. Under this premise, TSMC respects employees’ rights entitled by global labor standards and local regulations, including the UN Global Compact’s Ten Principles and Taiwan’s Labor Union Act. In addition, as a member of the Electronic Industry Citizenship Coalition (EICC), TSMC adopts the EICC Code of Conduct (http://www.tsmc.com/english/csr/eicc_membership.htm) and does not impede employees’ freedom of association. The principle and regulation above not only align with TSMC’s goal, but also provide practical standards and measurement of implementation, which support the Company’s continuous enhancement.

The relationship between TSMC management and employees has been harmonious over the years; internal communication channels are transparent and effective. The Company respects employees’ right of forming a labor union, however, no employees have pursued this avenue or issued a request to form one so far.

In 2016 and as of the date of this annual report, there have been no losses resulting from labor disputes.

Employee Benefit Programs
- Convenient onsite services: cafeterias, laundry services, convenience stores, travel, banking, and commuting assistance are accessible for employees in the fabs.
- Comprehensive health enhancement and management programs: health enhancement programs include weight control, in-fab clinic and dentist services, smoking cessation, massage service, cancer screening activity, blood donation, as well as monthly exercise sessions conducted by professional instructors to improve employee wellness.
- Flexible preschool service: childcare service, operated to meet employees’ work schedules, is available in three fabs in Hsinchu and Taipan.

Employee Recognition
TSMC sponsors various internal award programs to recognize outstanding achievements by employees, both individual and at a team level. With these award programs, TSMC aims to encourage continued employee development, which, in turn, adds to the Company’s competitive advantage.

TSMC’s award programs include:
- Medal of Honor: recognizes those who contribute significantly to the Company’s business performance.
- TSMC Academy: recognizes outstanding TSMC scientists and engineers whose individual technical capabilities make significant contributions to the Company.
- TSMC Excellent Labor Award: recognizes excellent TSMC technicians and group leaders whose outstanding performance make significant contributions to the Company.
- Total Quality Excellence Award for each fab: recognize employees’ continuous efforts in creating value for the Company.
- Service Award and TSMC’s appreciation of senior employees: recognize senior employees’ long-term commitment and dedication to the Company.
- Excellent Instructor Award: praises the outstanding performance and contribution of the Company’s internal instructors in training courses for employees.
- Function-wide awards dedicated to innovation, such as the Idea Forum and TGE Awards, which recognize employees’ initiative and continuous implementation of innovative practices.

Apart from corporate-wide awards, TSMC recommended employees to participate several external talent awards. In 2016, diversified TSMC employees continued to be recognized through a host of national awards, including Outstanding Young Engineer Award, National Manager Excellence Award and National Industrial Innovation Award.

5.5.6 Retention
Continuous growth is a major component of TSMC’s commitment to its stockholders and employees, and the retention of outstanding employees is crucial in fulfilling this commitment. From employee’s initial orientation and adaptation to professional and career development, TSMC works proactively to provide employees with good compensation, innovative, and meaningful work, as well as a safe work environment.

Employees’ overall satisfaction with the Company’s efforts are reflected in the 2016 TSMC Core Values Survey, of which 97% of participants agreed that they are willing to commit fully in their work to make TSMC an even more successful company; while 95% of them concurred with the statement that they are willing to contribute their talents to TSMC and grow together with the Company for the next five years.

In 2016, the Company recorded a manageable turnover rate of 4.1%.

5.5.7 Retirement Policy
TSMC’s retirement policy is set according to the Labor Standards Act and Labor Pension Act of the Republic of China. With the Company’s sound financial system, TSMC ensures employees a solid pension contribution and payments, which encourages employees to set long-term career plans and further deepens their commitment to TSMC.

5.6 Material Contracts
Research and Development Funding Agreement
Term of Agreement:
10/31/2012 - 12/31/2017
Contracting Party:
ASML Holding N.V. (ASML)
Summary:
TSMC shall provide EUR276 million to ASML’s research and development programs from 2013 to 2017.
Note: TSMC is not currently party to any other material contract, other than contracts entered into in the ordinary course of our business. The Company’s “Significant Contingent Liabilities and Unrecognized Commitments” are disclosed in Annual Report section (II), Financial Statements, page 75-76.
12.4%

2016 Consolidated Revenue totaled NT$947.94 billion, an increase of 12.4 percent over NT$843.50 billion in 2015.
### 6.1 Financial Highlights

#### 6.1.1 Condensed Balance Sheet

**Condensed Balance Sheet from 2012 to 2016 (Consolidated) (Note 1)**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td>250,325,436</td>
<td>258,468,654</td>
<td>620,563,630</td>
<td>746,743,991</td>
<td>817,729,126</td>
</tr>
<tr>
<td>Long-term Investments (Note 2)</td>
<td>85,317,346</td>
<td>88,163,010</td>
<td>63,595,779</td>
<td>34,892,583</td>
<td>46,153,510</td>
</tr>
<tr>
<td>Property, Plant and Equipment</td>
<td>617,562,188</td>
<td>792,665,913</td>
<td>818,198,801</td>
<td>853,470,392</td>
<td>997,777,687</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>10,959,569</td>
<td>11,490,383</td>
<td>13,531,510</td>
<td>14,065,880</td>
<td>14,614,846</td>
</tr>
<tr>
<td>Other Assets (Note 3)</td>
<td>16,790,075</td>
<td>11,228,217</td>
<td>6,696,857</td>
<td>8,244,452</td>
<td>10,179,727</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>961,354,508</td>
<td>1,263,054,977</td>
<td>1,495,049,086</td>
<td>1,657,518,298</td>
<td>1,886,455,302</td>
</tr>
<tr>
<td><strong>Current Liabilities</strong></td>
<td>148,473,947</td>
<td>189,777,934</td>
<td>201,013,629</td>
<td>212,228,594</td>
<td>318,239,273</td>
</tr>
<tr>
<td>Noncurrent Liabilities</td>
<td>89,786,655</td>
<td>225,501,958</td>
<td>247,707,125</td>
<td>222,655,225</td>
<td>178,164,903</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>238,260,602</td>
<td>415,279,892</td>
<td>448,720,754</td>
<td>434,883,819</td>
<td>496,404,176</td>
</tr>
<tr>
<td><strong>Equity Attributable to Shareholders of the Parent</strong></td>
<td>720,550,680</td>
<td>847,508,255</td>
<td>1,046,201,111</td>
<td>1,221,671,719</td>
<td>1,389,248,261</td>
</tr>
<tr>
<td>Noncontrolling Interests</td>
<td>2,543,226</td>
<td>266,830</td>
<td>127,221</td>
<td>962,760</td>
<td>802,865</td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td>723,093,906</td>
<td>847,775,085</td>
<td>1,046,328,332</td>
<td>1,222,634,479</td>
<td>1,390,051,126</td>
</tr>
</tbody>
</table>

**Note 1:** 2012-2013 financial statements were prepared in accordance with 2010 Taiwan-IFRSs version, 2014-2016 financial statements were prepared in accordance with 2013 Taiwan-IFRSs version. Financial statements of 2014 were adjusted to retrospectively apply newly effected GAAP. Adjustments include a decrease of NT$84,759 thousand in total assets, a decrease of NT$737,344 thousand in total liabilities before distribution and an increase of NT$652,585 thousand in total equity before distribution.

**Note 2:** Long-term investments consist of noncurrent available-for-sale financial assets, held-to-maturity financial assets, financial assets carried at cost and investments accounted for using equity method.

**Note 3:** Other assets consist of deferred income tax assets, refundable deposits, and other noncurrent assets.

**Note 4:** Pending for shareholders’ approval.

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### Condensed Balance Sheet from 2012 to 2016 (Unconsolidated) (Note 1)

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td>205,249,436</td>
<td>257,623,763</td>
<td>370,949,497</td>
<td>426,913,080</td>
<td>443,781,164</td>
</tr>
<tr>
<td>Long-term Investments (Note 2)</td>
<td>139,634,200</td>
<td>165,545,159</td>
<td>242,381,592</td>
<td>326,228,727</td>
<td>397,280,700</td>
</tr>
<tr>
<td>Property, Plant and Equipment</td>
<td>580,683,078</td>
<td>770,443,944</td>
<td>800,084,881</td>
<td>851,784,912</td>
<td>979,881,707</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>6,494,807</td>
<td>7,084,684</td>
<td>6,084,328</td>
<td>9,290,416</td>
<td>10,634,591</td>
</tr>
<tr>
<td>Other Assets (Note 3)</td>
<td>16,756,316</td>
<td>17,536,177</td>
<td>9,095,388</td>
<td>3,295,618</td>
<td>6,016,675</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>951,753,812</td>
<td>1,208,736,708</td>
<td>1,462,912,833</td>
<td>1,598,695,515</td>
<td>1,817,335,144</td>
</tr>
<tr>
<td><strong>Current Liabilities</strong></td>
<td>146,528,616</td>
<td>187,159,198</td>
<td>170,261,992</td>
<td>194,208,278</td>
<td>358,177,214</td>
</tr>
<tr>
<td>Noncurrent Liabilities</td>
<td>87,528,437</td>
<td>111,870,854</td>
<td>180,949,905</td>
<td>182,714,518</td>
<td>139,512,408</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>234,057,053</td>
<td>300,030,052</td>
<td>351,211,901</td>
<td>377,122,793</td>
<td>544,692,222</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td>737,696,759</td>
<td>907,746,651</td>
<td>1,111,750,935</td>
<td>1,221,572,726</td>
<td>1,272,642,922</td>
</tr>
<tr>
<td>Noncontrolling Interests</td>
<td>2,543,226</td>
<td>266,830</td>
<td>127,221</td>
<td>962,760</td>
<td>802,865</td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td>740,240,985</td>
<td>910,513,481</td>
<td>1,112,878,156</td>
<td>1,318,835,486</td>
<td>1,282,445,787</td>
</tr>
</tbody>
</table>

**Note 1:** 2012-2013 financial statements were prepared in accordance with 2010 Taiwan-IFRSs version, 2014-2016 financial statements were prepared in accordance with 2013 Taiwan-IFRSs version. Financial statements of 2014 were adjusted to retrospectively apply newly effected GAAP. Adjustments include a decrease of NT$82,771 thousand in total assets, a decrease of NT$735,381 thousand in total liabilities before distribution and an increase of NT$652,610 thousand in total equity before distribution.

**Note 2:** Long-term investments consist of held-to-maturity financial assets, financial assets carried at cost and investments accounted for using equity method.

**Note 3:** Other assets consist of deferred income tax assets, refundable deposits, and other noncurrent assets.

**Note 4:** Pending for shareholders’ approval.
6.1.2 Condensed Statement of Comprehensive Income

Condensed Statement of Comprehensive Income from 2012 to 2016 (Consolidated) (Note 1)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>506,791,234</td>
<td>597,434,177</td>
<td>762,850,406</td>
<td>843,851,206</td>
<td>947,559,346</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>204,117,171</td>
<td>260,870,507</td>
<td>317,132,818</td>
<td>410,994,890</td>
<td>474,602,098</td>
</tr>
<tr>
<td>Income before Operations</td>
<td>801,716,888</td>
<td>760,418,380</td>
<td>850,070,906</td>
<td>1,057,269,719</td>
<td>1,277,957,779</td>
</tr>
<tr>
<td>Non-operating income and Expenses</td>
<td>409,086</td>
<td>6,672,759</td>
<td>6,628,686</td>
<td>30,881,188</td>
<td>8,081,657</td>
</tr>
<tr>
<td>Income before Income Tax</td>
<td>901,716,884</td>
<td>847,091,131</td>
<td>916,703,593</td>
<td>1,388,150,897</td>
<td>1,386,039,246</td>
</tr>
<tr>
<td>Net Income</td>
<td>898,181,583</td>
<td>880,918,937</td>
<td>933,785,966</td>
<td>1,382,950,936</td>
<td>1,382,245,850</td>
</tr>
<tr>
<td>Other Comprehensive Income for the Year, Net of Income Tax</td>
<td>4,252,632</td>
<td>16,352,248</td>
<td>11,805,021</td>
<td>(14,714,182)</td>
<td>(11,067,189)</td>
</tr>
<tr>
<td>Total Comprehensive Income for the Year</td>
<td>902,434,215</td>
<td>1,017,271,185</td>
<td>1,045,590,987</td>
<td>1,248,236,754</td>
<td>1,271,208,731</td>
</tr>
<tr>
<td>Note 1: Condensed Statement of Comprehensive Income from 2012 to 2016 (Consolidated) (Note 1)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

6.1.3 Financial Analysis

Financial Analysis from 2012 to 2016 (Consolidated) (Note 1)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td>506,389,325</td>
<td>391,801,605</td>
<td>731,133,200</td>
<td>827,049,898</td>
<td>938,287,241</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>239,801,911</td>
<td>371,649,860</td>
<td>366,809,128</td>
<td>397,150,819</td>
<td>461,886,736</td>
</tr>
<tr>
<td>Non-operating income and Expenses</td>
<td>59,632,246</td>
<td>11,959,925</td>
<td>15,285,025</td>
<td>14,574,925</td>
<td>17,064,990</td>
</tr>
<tr>
<td>Income before Income Tax</td>
<td>820,503,660</td>
<td>483,390,397</td>
<td>255,355,577</td>
<td>846,071,823</td>
<td>915,780,143</td>
</tr>
<tr>
<td>Net Income</td>
<td>898,181,583</td>
<td>880,918,937</td>
<td>933,785,966</td>
<td>1,382,950,936</td>
<td>1,382,245,850</td>
</tr>
<tr>
<td>Other Comprehensive Income for the Year, Net of Income Tax</td>
<td>4,252,632</td>
<td>16,352,248</td>
<td>11,805,021</td>
<td>(14,714,182)</td>
<td>(11,067,189)</td>
</tr>
<tr>
<td>Total Comprehensive Income for the Year</td>
<td>902,434,215</td>
<td>1,017,271,185</td>
<td>1,045,590,987</td>
<td>1,248,236,754</td>
<td>1,271,208,731</td>
</tr>
<tr>
<td>Note 2: Condensed Statement of Comprehensive Income from 2012 to 2016 (Consolidated) (Note 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Financial Analysis from 2012 to 2016 (Unconsolidated) (Note)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Debt Ratio (%)</td>
<td>24.32</td>
<td>29.83</td>
<td>26.65</td>
<td>23.54</td>
<td>24.39</td>
</tr>
<tr>
<td>Long-term Fund to Property, Plant and Equipment Ratio (%)</td>
<td>127.27</td>
<td>102.57</td>
<td>126.24</td>
<td>156.96</td>
<td>158.11</td>
</tr>
<tr>
<td>Current Ratio (%)</td>
<td>142.41</td>
<td>137.82</td>
<td>208.85</td>
<td>219.73</td>
<td>144.00</td>
</tr>
<tr>
<td>Times Interest Earned (Times)</td>
<td>119.59</td>
<td>189.13</td>
<td>172.13</td>
<td>146.04</td>
<td>119.49</td>
</tr>
<tr>
<td>Times Interest Earned (Times)</td>
<td>195.42</td>
<td>104.12</td>
<td>122.82</td>
<td>144.44</td>
<td>118.75</td>
</tr>
</tbody>
</table>

## Liquidity Analysis

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Collection Turnover (Times)</td>
<td>9.97</td>
<td>9.81</td>
<td>10.52</td>
<td>11.25</td>
<td>10.74</td>
</tr>
<tr>
<td>Days Sales Outstanding</td>
<td>30.58</td>
<td>30.94</td>
<td>40.82</td>
<td>42.54</td>
<td>41.07</td>
</tr>
<tr>
<td>Average Inventory Turnover (Times)</td>
<td>9.10</td>
<td>9.66</td>
<td>7.94</td>
<td>8.31</td>
<td>9.19</td>
</tr>
<tr>
<td>Average Inventory Turnover (Days)</td>
<td>29.97</td>
<td>60.30</td>
<td>46.10</td>
<td>53.11</td>
<td>42.93</td>
</tr>
<tr>
<td>Average Payable Turnover (Times)</td>
<td>10.22</td>
<td>18.55</td>
<td>18.84</td>
<td>19.72</td>
<td>19.06</td>
</tr>
<tr>
<td>Payable/Net and Equipment Turnover (Times)</td>
<td>0.98</td>
<td>0.87</td>
<td>0.87</td>
<td>0.83</td>
<td>0.84</td>
</tr>
<tr>
<td>Total Assets Turnover (Times)</td>
<td>0.18</td>
<td>0.35</td>
<td>0.32</td>
<td>0.32</td>
<td>0.32</td>
</tr>
</tbody>
</table>

## Profitability Analysis

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Ratio (%)</td>
<td>19.45</td>
<td>17.58</td>
<td>20.22</td>
<td>20.32</td>
</tr>
<tr>
<td>Times Interest Earned (Times)</td>
<td>21.68</td>
<td>24.89</td>
<td>27.80</td>
<td>27.00</td>
</tr>
<tr>
<td>Operating Income to Fixed Capital Ratio (%)</td>
<td>85.21</td>
<td>16.87</td>
<td>87.22</td>
<td>86.70</td>
</tr>
<tr>
<td>Profitability Ratio to Fixed Capital Ratio (%)</td>
<td>75.58</td>
<td>8.25</td>
<td>77.36</td>
<td>76.75</td>
</tr>
<tr>
<td>Net Margin (%)</td>
<td>31.20</td>
<td>31.81</td>
<td>34.90</td>
<td>36.92</td>
</tr>
<tr>
<td>Basic Earnings Per Share (NT$)</td>
<td>6.42</td>
<td>7.26</td>
<td>10.16</td>
<td>11.85</td>
</tr>
<tr>
<td>Diluted Earnings Per Share (NT$)</td>
<td>6.46</td>
<td>7.26</td>
<td>10.16</td>
<td>11.85</td>
</tr>
<tr>
<td>Earnings Per Share</td>
<td>1.97</td>
<td>1.81</td>
<td>1.81</td>
<td>1.81</td>
</tr>
</tbody>
</table>

## Analysis of Results

- Analysis of 2016 of 2015, 2015 over 2014
- The operating performance analysis is increased
- The liquidity analysis is increased
- The profitability analysis is increased
- The capital structure analysis is increased

### Note

- Starting in 2016, the new auditing standard of the Republic of China require "An Unqualified Opinion" be replaced by "An Unmodified Opinion".
## 6.2 Financial Status and Operating Results

### 6.2.1 Financial Status

#### Consolidated

**Unit: NT$ thousands**

<table>
<thead>
<tr>
<th>Item</th>
<th>2016</th>
<th>2015</th>
<th>Difference</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td>817,729,126</td>
<td>746,743,991</td>
<td>70,985,135</td>
<td>10%</td>
</tr>
<tr>
<td>Long-term Investments (Note 1)</td>
<td>46,153,916</td>
<td>34,993,583</td>
<td>11,160,333</td>
<td>32%</td>
</tr>
<tr>
<td>Property, Plant and Equipment</td>
<td>997,777,687</td>
<td>853,470,392</td>
<td>144,307,295</td>
<td>17%</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>14,614,846</td>
<td>14,065,880</td>
<td>548,966</td>
<td>4%</td>
</tr>
<tr>
<td>Other Assets (Note 2)</td>
<td>10,178,717</td>
<td>7,849,452</td>
<td>2,329,265</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>1,886,455,302</td>
<td>1,657,518,298</td>
<td>228,937,004</td>
<td>14%</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>318,239,273</td>
<td>212,228,594</td>
<td>106,010,679</td>
<td>50%</td>
</tr>
<tr>
<td>Noncurrent Liabilities</td>
<td>178,164,903</td>
<td>222,655,225</td>
<td>(44,490,322)</td>
<td>-20%</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>496,404,176</td>
<td>434,883,819</td>
<td>61,520,357</td>
<td>14%</td>
</tr>
<tr>
<td>Capital Stock</td>
<td>259,303,805</td>
<td>259,303,805</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Capital Surplus</td>
<td>56,272,304</td>
<td>56,300,215</td>
<td>(27,911)</td>
<td>0%</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>1,072,008,169</td>
<td>894,293,586</td>
<td>177,714,583</td>
<td>20%</td>
</tr>
<tr>
<td>Others</td>
<td>1,663,983</td>
<td>11,774,113</td>
<td>(10,110,130)</td>
<td>-86%</td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td>1,389,248,261</td>
<td>1,221,671,719</td>
<td>167,576,542</td>
<td>14%</td>
</tr>
</tbody>
</table>

**Note 1:** Long-term investments consist of noncurrent available-for-sale financial assets, held-to-maturity financial assets, financial assets carried at cost and investments accounted for using equity method.  
**Note 2:** Other assets consist of deferred income tax assets, refundable deposits, and other noncurrent assets.

#### Analysis of Deviation over 20%

- Increase in long-term investments: The increase was mainly due to increase in held-to-maturity financial assets.  
- Increase in other assets: The increase was mainly due to increase in deferred income tax assets.  
- Increase in current liabilities: The increase was mainly due to increase in payables to contractors and equipment suppliers and short-term loans.  
- Decrease in noncurrent liabilities: The decrease was mainly due to reclassification of bonds payable due in 1 year to current liabilities and decrease in guarantee deposits.  
- Increase in retained earnings: The increase was mainly due to net income of 2016, partially offset by distribution of 2015 earnings.  
- Decrease in others: The decrease was mainly due to decrease in currency exchange differences arising from translation of foreign operations in 2016.

#### Major Impact on Financial Position

- The above deviations had no major impact on TSMC's financial position.

#### Future Plan on Financial Position

- Not applicable.

#### Unconsolidated

**Unit: NT$ thousands**

<table>
<thead>
<tr>
<th>Item</th>
<th>2016</th>
<th>2015</th>
<th>Difference</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td>443,781,164</td>
<td>426,913,080</td>
<td>16,868,084</td>
<td>4%</td>
</tr>
<tr>
<td>Long-term Investments (Note 1)</td>
<td>397,290,976</td>
<td>326,330,737</td>
<td>70,960,239</td>
<td>22%</td>
</tr>
<tr>
<td>Property, Plant and Equipment</td>
<td>979,401,337</td>
<td>831,784,912</td>
<td>147,616,425</td>
<td>18%</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>10,047,991</td>
<td>9,391,418</td>
<td>656,573</td>
<td>7%</td>
</tr>
<tr>
<td>Other Assets (Note 2)</td>
<td>6,816,676</td>
<td>5,265,368</td>
<td>1,551,308</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>1,837,338,144</td>
<td>1,599,685,515</td>
<td>237,652,629</td>
<td>15%</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>308,177,214</td>
<td>194,299,278</td>
<td>113,877,936</td>
<td>59%</td>
</tr>
<tr>
<td>Noncurrent Liabilities</td>
<td>139,912,669</td>
<td>183,714,518</td>
<td>(43,801,849)</td>
<td>-24%</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>448,089,883</td>
<td>378,013,796</td>
<td>70,076,087</td>
<td>19%</td>
</tr>
<tr>
<td>Capital Stock</td>
<td>259,303,805</td>
<td>259,303,805</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Capital Surplus</td>
<td>56,272,304</td>
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<tr>
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<td>20%</td>
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<tr>
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<td>1,663,983</td>
<td>11,774,113</td>
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<td>-86%</td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td>1,389,248,261</td>
<td>1,221,671,719</td>
<td>167,576,542</td>
<td>14%</td>
</tr>
</tbody>
</table>

**Note 1:** Long-term investments consist of held-to-maturity financial assets, financial assets carried at cost and investments accounted for using equity method.  
**Note 2:** Other assets consist of deferred income tax assets, refundable deposits, and other noncurrent assets.

#### Analysis of Deviation over 20%

- Increase in long-term investments: The increase was mainly due to increase in investments accounted for using equity method in 2016.  
- Increase in other assets: The increase was mainly due to increase in deferred income tax assets.  
- Increase in current liabilities: The increase was mainly due to increase in payables to contractors and equipment suppliers and short-term loans.  
- Decrease in noncurrent liabilities: The decrease was mainly due to reclassification of bonds payable due in 1 year to current liabilities and decrease in guarantee deposits.  
- Increase in retained earnings: The increase was mainly due to net income of 2016, partially offset by distribution of 2015 earnings.  
- Decrease in others: The decrease was mainly due to decrease in currency exchange differences arising from translation of foreign operations in 2016.

#### Major Impact on Financial Position

- The above deviations had no major impact on TSMC's financial position.

#### Future Plan on Financial Position

- Not applicable.
## 6.2.2 Financial Performance

### Consolidated

**Unit: NT$ thousands**

<table>
<thead>
<tr>
<th>Item</th>
<th>2016</th>
<th>2015</th>
<th>Difference</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>947,938,344</td>
<td>843,497,368</td>
<td>104,440,976</td>
<td>12%</td>
</tr>
<tr>
<td>Cost of Revenue</td>
<td>473,077,173</td>
<td>433,117,601</td>
<td>39,959,572</td>
<td>9%</td>
</tr>
<tr>
<td>Gross Profit before Realized (Unrealized) Gross Profit on Sales to Associates</td>
<td>474,861,171</td>
<td>410,379,767</td>
<td>64,481,404</td>
<td>16%</td>
</tr>
<tr>
<td>Realized (Unrealized) Gross Profit on Sales to Associates</td>
<td>(29,073)</td>
<td>15,126</td>
<td>(44,199)</td>
<td>-292%</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>474,832,098</td>
<td>410,394,893</td>
<td>64,437,205</td>
<td>16%</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>96,904,133</td>
<td>88,466,500</td>
<td>8,437,633</td>
<td>10%</td>
</tr>
<tr>
<td>Other Operating Income and Expenses, Net</td>
<td>29,813</td>
<td>(1,880,618)</td>
<td>1,910,431</td>
<td>NM</td>
</tr>
<tr>
<td>Income from Operations</td>
<td>377,957,778</td>
<td>320,047,775</td>
<td>57,910,003</td>
<td>18%</td>
</tr>
<tr>
<td>Non-operating Income and Expenses</td>
<td>8,001,602</td>
<td>30,381,136</td>
<td>(22,379,534)</td>
<td>-74%</td>
</tr>
<tr>
<td>Income before Income Tax</td>
<td>385,959,380</td>
<td>350,428,911</td>
<td>35,530,469</td>
<td>10%</td>
</tr>
<tr>
<td>Income Tax Expenses</td>
<td>51,621,144</td>
<td>43,872,744</td>
<td>7,748,400</td>
<td>18%</td>
</tr>
<tr>
<td>Net Income</td>
<td>334,338,236</td>
<td>306,556,167</td>
<td>27,782,069</td>
<td>9%</td>
</tr>
<tr>
<td>Other Comprehensive Income, Net of Income Tax</td>
<td>(11,067,189)</td>
<td>(14,714,182)</td>
<td>3,646,993</td>
<td>25%</td>
</tr>
<tr>
<td>Total Comprehensive Income for the Year</td>
<td>323,271,047</td>
<td>291,841,985</td>
<td>31,429,062</td>
<td>11%</td>
</tr>
<tr>
<td>Total Net Income Attributable to Shareholders of the Parent</td>
<td>334,247,180</td>
<td>306,573,837</td>
<td>27,673,343</td>
<td>9%</td>
</tr>
</tbody>
</table>

### Analysis of Deviation over 20%

- **Decrease in realized (unrealized) gross profit on sales to associates:** The decrease was mainly due to higher sales to associates and defer recognition of gain in the fourth quarter of 2016.
- **Decrease in non-operating income and expenses:** The decrease was mainly due to lower gain on disposal of available-for-sale financial assets.
- **Increase in other comprehensive income, net of income tax:** The increase was mainly due to unrealized gain from available-for-sale financial assets was realized to profit or loss upon disposal in 2015, partially offset by decrease in currency exchange differences arising from translation of foreign operations in 2016.

### Sales Volume Forecast and Related Information

For additional details, please refer to "1. Letter to Shareholders" on pages 8-11 of this Annual Report.

### Major Impact on Financial Performance

The above deviations had no major impact on TSMC's financial performance.

### Future Plan on Financial Performance:

Not applicable.

### Unconsolidated

**Unit: NT$ thousands**

<table>
<thead>
<tr>
<th>Item</th>
<th>2016</th>
<th>2015</th>
<th>Difference</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>936,387,291</td>
<td>837,046,888</td>
<td>99,340,403</td>
<td>12%</td>
</tr>
<tr>
<td>Cost of Revenue</td>
<td>474,552,913</td>
<td>439,356,165</td>
<td>35,196,748</td>
<td>8%</td>
</tr>
<tr>
<td>Gross Profit before Realized (Unrealized) Gross Profit on Sales to Subsidiaries and Associates</td>
<td>461,834,378</td>
<td>397,690,723</td>
<td>64,143,655</td>
<td>16%</td>
</tr>
<tr>
<td>Realized (Unrealized) Gross Profit on Sales to Subsidiaries and Associates</td>
<td>(26,082)</td>
<td>18,117</td>
<td>(44,199)</td>
<td>-244%</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>461,808,296</td>
<td>397,708,840</td>
<td>64,199,456</td>
<td>16%</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>92,161,728</td>
<td>83,953,035</td>
<td>8,208,693</td>
<td>10%</td>
</tr>
<tr>
<td>Other Operating Income and Expenses, Net</td>
<td>83,965</td>
<td>(347,107)</td>
<td>431,072</td>
<td>NM</td>
</tr>
<tr>
<td>Income from Operations</td>
<td>369,730,533</td>
<td>313,408,698</td>
<td>56,321,835</td>
<td>18%</td>
</tr>
<tr>
<td>Non-operating Income and Expenses</td>
<td>15,458,427</td>
<td>36,579,970</td>
<td>(21,121,543)</td>
<td>-58%</td>
</tr>
<tr>
<td>Income before Income Tax</td>
<td>385,188,960</td>
<td>349,988,668</td>
<td>35,200,292</td>
<td>10%</td>
</tr>
<tr>
<td>Income before Income Tax</td>
<td>385,188,960</td>
<td>349,988,668</td>
<td>35,200,292</td>
<td>10%</td>
</tr>
<tr>
<td>Income Tax Expenses</td>
<td>50,941,780</td>
<td>43,414,831</td>
<td>7,526,949</td>
<td>17%</td>
</tr>
<tr>
<td>Net Income</td>
<td>334,247,180</td>
<td>306,573,837</td>
<td>27,673,343</td>
<td>9%</td>
</tr>
<tr>
<td>Other Comprehensive Income, Net of Income Tax</td>
<td>(11,060,444)</td>
<td>(14,706,080)</td>
<td>3,645,636</td>
<td>25%</td>
</tr>
<tr>
<td>Total Comprehensive Income for the Year</td>
<td>323,186,736</td>
<td>291,867,757</td>
<td>31,318,979</td>
<td>11%</td>
</tr>
</tbody>
</table>

### Analysis of Deviation over 20%

- **Decrease in realized (unrealized) gross profit on sales to subsidiaries and associates:** The decrease was mainly due to higher sales to subsidiaries and associates and defer recognition of gain in the fourth quarter of 2016.
- **Decrease in non-operating income and expenses:** The decrease was mainly due to lower share of profits of subsidiaries and associates in 2016.
- **Increase in other comprehensive income, net of income tax:** The increase was mainly due to unrealized gain from available-for-sale financial assets of the subsidiary was realized to profit or loss upon disposal in 2015, partially offset by decrease in currency exchange differences arising from translation of foreign operations in 2016.

### Sales Volume Forecast and Related Information

For additional details, please refer to "1. Letter to Shareholders" on pages 8-11 of this Annual Report.

### Major Impact on Financial Performance

The above deviations had no major impact on TSMC’s financial performance.

### Future Plan on Financial Performance:

Not applicable.
6.2.3 Cash Flow

Consolidated

<table>
<thead>
<tr>
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<tr>
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<td></td>
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<td></td>
<td>Investment Plan</td>
</tr>
<tr>
<td></td>
<td>342,666,560</td>
<td>358,324,976</td>
<td>331,209,808</td>
<td>341,292,693</td>
<td>None</td>
</tr>
</tbody>
</table>

● Analysis of Cash Flow
NTS$339.8 billion net cash generated by operating activities: mainly from net income and depreciation and amortization expenses.
NTS$395.4 billion net cash used in investing activities: primarily for capital expenditures and net purchase of marketable financial instruments.

NTS$165.6 billion net cash used in financing activities: primarily for cash dividend payment and repayment of corporate bonds; partially offset by the increase in short-term loans.

● Remedial Actions for Liquidity Shortfall: As a result of positive operating cash flows and cash on-hand, remedial actions are not required.

● Cash Flow Projection for Next Year: Not applicable.

Unconsolidated

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<tr>
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<td></td>
<td>244,456,583</td>
<td>312,947,798</td>
<td>347,162,806</td>
<td>249,676,583</td>
<td>None</td>
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</tbody>
</table>

● Analysis of Cash Flow
NTS$325.2 billion net cash generated by operating activities: mainly from net income and depreciation and amortization expenses.
NTS$321.9 billion net cash used in investing activities: primarily for capital expenditures.
NTS$225.2 billion net cash used in financing activities: primarily for cash dividend payment and capital injection in subsidiaries.

● Remedial Actions for Liquidity Shortfall: As a result of positive operating cash flows and cash on-hand, remedial actions are not required.

● Cash Flow Projection for Next Year: Not applicable.

6.2.4 Recent Years Major Capital Expenditures and Impact on Financial and Business

<table>
<thead>
<tr>
<th>Plan</th>
<th>Actual or Planned Source of Capital</th>
<th>Total Amount for 2016 and 2015</th>
<th>Actual Use of Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
<td>2015</td>
</tr>
<tr>
<td>Production Facilities, 12&quot; and Production Equipment</td>
<td>Cash flow generated from operations</td>
<td>578,735,188</td>
<td>325,671,807</td>
</tr>
<tr>
<td>Others</td>
<td>Cash flow generated from operations</td>
<td>6,782,560</td>
<td>2,974,626</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>581,517,748</td>
<td>328,646,433</td>
</tr>
</tbody>
</table>

Based on capital expenditures listed above, TSMC’s annual production capacity increased by approximately 1 million 12-inch equivalent wafers in 2016.

6.2.5 Long-term Investment Policy and Results

TSMC’s long-term investments, accounted for under the equity method, were all made for strategic purposes. However, when an investment is no longer of strategic value, it may be considered a financial investment. In 2016, the investment gain from these investments amounted to NTS$14,941,372 thousand (NTS$14,956,600 thousand on a consolidated basis), decreasing from previous year mainly due to the disposal gain of ASML shares recognized in 2015. For future investments, TSMC will continue to focus on strategic purposes through prudent assessments.

6.3 Risk Management

The board of directors plays a key role in helping the Company identify and manage economic risks. The risk management organization periodically briefs the audit committee on the ever-changing risk environment facing TSMC, the focus of the Company’s enterprise risk management, and risk assessment and mitigation efforts. The audit committee’s chairperson also briefs the board on the risk environment and risk mitigation actions to be taken.

TSMC and its subsidiaries are committed to proactively and cost effectively integrating and managing strategic, operational, financial and hazardous risks together with potential consequences to operations and financial results. TSMC operates an enterprise risk management (ERM) program based on both its corporate vision and its long-term sustainability, as well as on its responsibility to both industry and society. ERM seeks to provide the appropriate management of risks by TSMC on behalf of all stakeholders. A risk MAP that considers likelihood and impact severity is used to identify and prioritize corporate risks. Various risk treatment strategies are also adopted in response to identified corporate risks. The Company’s risk management focuses on strategic risks, operational risks, financial risks, hazardous risks, and risks associated with climate change and non-compliance with environmental and climate related laws and regulations, and other international laws, regulations and accords, etc.

To mitigate the operational impacts of crisis events, for critical crisis scenarios, ERM conducts pre-crisis risk assessment and identifies feasible strategies for crisis prevention. Corresponding to different scenarios, response procedures and recovery plans have been compiled. For specific severe crisis events involving multiple TSMC’s manufacturing sites, the cross-functional central crisis command center composed of operations and support functions is responsible for internal coordination to speed up response time and proactively communicate with related stakeholders. To increase risk awareness and strengthen a risk management culture in TSMC, top management completed a series of crisis management workshops in 2016. The scenario-based crisis response drills involving cross-functional crisis management teams also started in 2016. In order to continuously mitigate corporate risks, drills are used to examine the integrity and risk-control effectiveness of ERM.

To reduce supply chain risks, TSMC created a cross-functional taskforce comprised of members from fab operations, material management, risk management and quality system management to work with suppliers to develop business continuity plans and enhance supply chain resilience to effectively manage the risks faced by its suppliers. Partly as a result of these efforts, there was no interruption in TSMC’s supply chain in 2016.

As TSMC continued to expand production capacity with advanced technology in 2016, seismic protection engineering design, risk treatment practices and green factory projects were initiated and implemented, beginning in the design phase for all new fabs.

6.3.1 Risk Management (RM) Organization Chart

RM Executive Council
RM Steering Committee
Board of Directors/ Audit Committee

Organization Functions

RM steering committee
Consists of functional heads (with internal audit head sitting as an observer)
Reports to audit committee
Reviews risk control progress
Identifies and approves the prioritized risk lists

RM executive council
Consists of representatives from each function
Identifies and assesses risks
Implements risk control program and ensures effectiveness
Improves transparency and how risks are managed
to innovate new technologies that meet the demands of its intensified by the shift of the global technology market to or services are brought to the market. If TSMC is unable to have significantly decreased the time in which their products services on competitive terms. In addition, TSMC’s customers products with more functions. TSMC also competes by using increasingly advanced nodes and by manufacturing semiconductor industries could lead to reduced demand for downturn and overcapacity in the general electronics and industries have experienced significant, occasionally prolonged periods of downturn and overcapacity. Because TSMC is, and will continue to be, dependent on the requirements of electronics and semiconductor companies, periods of downturn and overcapacity in the general electronics and semiconductor industries could lead to reduced demand for semiconductor foundry services, including TSMC’s services. If TSMC cannot take aggressive actions such as reducing its costs to sufficiently offset declines in demand, the Company’s revenue, margins, and earnings will likely suffer during these periods.

Changes in Technology

The semiconductor industry and its technologies are constantly evolving. TSMC competes by developing process technologies using increasingly advanced nodes and by manufacturing products with more functions. TSMC also competes by developing new derivative technologies. If TSMC does not anticipate the changes in technologies and rapidly develop new and innovative technologies, or if the Company’s competitors unexpectedly gain sudden access to additional technologies, TSMC may not be able to provide foundry services on competitive terms. In addition, TSMC’s customers have significantly decreased the time in which their products or services are brought to the market. If TSMC is unable to meet the requirement for shorter product time-to-market, it risks losing customers. These factors have also been intensified by the shift of the global technology market to consumer-driven products such as mobile devices, and the increasing concentration of customers and competition (all further discussed among these risk factors). If TSMC is unable to innovate new technologies that meet the demands of its customers or overcome the above factors, its revenue may decline significantly. Although TSMC has concentrated on maintaining a competitive edge in research and development, if TSMC fails to achieve advances in technologies or processes, it may become less competitive.

Regarding the response measures for the above-mentioned risks, please refer to “2.2.4 TSMC Position, Differentiation and Strategy” on page 18-19 of this annual report.

Risks Associated with Increase in Cost and Average Selling Price

A vast majority of the Company’s revenue is derived from customers who use TSMC’s services in communication devices, personal computers, consumer electronics products and industrial/standard products. Any decrease in the demand for any one of these products may decrease the demand for overall global semiconductor foundry services, including TSMC’s services, and may adversely affect the Company’s revenues. Further, semiconductor manufacturing facilities require substantial investment to construct and are largely fixed cost assets once they are in operation. Because the Company owns most of its manufacturing capacities, a significant portion of TSMC’s operating costs is fixed. In general, these costs do not decline when customer demand or TSMC’s capacity utilization rates drop, and thus declines in customer demand, among other factors, may significantly decrease margins. Conversely, as product demand rises and factory utilization increases, the fixed costs are spread over increased output, which can improve TSMC’s margins. In addition, the historical and current trend of declining average selling prices (“ASP”) of end use applications places downward pressure on the prices of the components that go into such applications. If the ASP of end use applications continues decreasing, the pricing pressure on components produced by the Company may lead to a reduction of TSMC’s revenue, margin and earnings.

Risks Associated with Competition

The markets for TSMC’s foundry services are highly competitive. TSMC competes with other foundry service providers, as well as integrated device manufacturers who devote a significant portion of their manufacturing capacity to foundry operations. Some of these companies may have access to more advanced technologies and greater financial resources than TSMC, including the possibility of receiving direct or indirect government aid, economic stimulus funds, or other incentives that may be unavailable to TSMC. For example, China companies are expected to be the key drivers of new semiconductor fab development and fab equipment spending through 2020. In 2016 alone, it was reported that over twenty new semiconductor fab projects have been announced or being developed within China due to various incentives provided by China government.

Further, the Company’s competition may, from time to time, also decide to undertake aggressive pricing initiatives in one or several technology nodes. Increases in these competitive activities may reduce TSMC’s customer base, its ASP (average selling price), or both. If TSMC is unable to compete with these new competitors with better technologies and manufacturing capacity and capabilities for customer satisfaction, it risks losing customers to these new contenders.

Risks Associated with Changes in the Government Policies and Regulatory Environment

TSMC management closely monitors all domestic and foreign governmental policies and regulations that might impact TSMC’s business and financial operations. As of February 28, 2017, the following changes or developments in governmental policies and regulations may influence the Company’s business operations:

To comply with the Labor Standards Act amended on December 21, 2016, TSMC made certain changes to its relevant internal rules, including adjusting overtime pay for work on days of rest as well as increasing employees’ annual leave entitlements. These changes will increase the operating costs of the Company.

With respect to environmental laws, the “Greenhouse Gas Reduction and Management Act” was published in July 2015 in Taiwan in response to climate change, and some of the related regulations have been published. In 2016, among others, the “Greenhouse Gases Inventory Verification and Registration Regulations” was published and TSMC has taken proper measures in compliance with the requirements. We will keep track of regulatory updates to ensure our compliance with these laws and regulations. In addition, the amendment to “Waste Disposal Act” became effective in January 2017. The key changes define and broaden the scope of “waste” and increase the responsibilities of waste generating companies. TSMC has spent great effort on waste management. We will continue our emphasis on this topic to ensure compliance with the law.

Other than the above laws and regulations, it is not expected that other governmental policies or regulatory changes would materially impact TSMC’s operations and financial condition.

6.3.3 Operational Risks

Risks Associated with Capacity Expansion

TSMC performs long-term market demand forecast for its products and services to manage its overall capacity. Because market conditions are dynamic, its market demand forecast may change significantly at any time. During periods of decreased demand, certain manufacturing lines or tools in some of its manufacturing facilities may be suspended or shut down temporarily. However, if subsequent demand increases rapidly in a short period of time, TSMC may not be able to restore the capacity in a timely manner.

Recently, according to the market demand forecast, TSMC has been adding capacity in its 300mm wafer fabs to fulfill market needs for its products and services. Expansion of the Company’s capacity will increase its costs. For example, the Company will need to purchase additional equipment, hire additional personnel and train personnel to operate the new equipment. If TSMC does not increase its net revenue accordingly, TSMC’s financial performance may be adversely affected by these increased costs.

In order to mitigate the risk associated with capacity expansion, TSMC continuously watches for changes in market conditions and works closely with its customers. When market demand is not as expected, the Company will adjust its capacity plans in a timely manner to reduce the impact on its financial performance.

Risks Associated with Sales Concentration

Over the years, TSMC’s customer profile and the nature of its customers’ businesses have changed dramatically. While it generates revenue from hundreds of customers worldwide, TSMC’s ten largest customers accounted for approximately 63% and 69% of net revenue in 2015 and 2016, respectively. The Company’s largest customer accounted for approximately 16% and 17% of net revenue in 2015 and 2016, respectively. The Company’s second largest customer accounted for approximately 16% and 11% of net revenue in 2015 and 2016, respectively.

A more concentrated customer base will subject our revenue to seasonal demand fluctuations from our large customers, and cause different seasonal patterns of our business. This customer concentration results in part from the changing dynamics of the electronics industry with the structural shift to mobile devices and applications and software that provide the content for such devices. Only a limited number of customers are successfully exploiting this new business model paradigm.
In order to respond to the new paradigm, TSMC has seen the change of nature in its customers’ business models. For example, there is a growing trend toward more system houses that operate in a manner that makes their products and services more marketable in a changing consumer market. Also, since the global semiconductor industry is becoming increasingly competitive, some customers have engaged in industry consolidations in order to remain competitive. Such consolidations have taken the form of mergers and acquisitions. If more of major customers consolidate, this will further decrease the overall number of the customer pool. TSMC’s operating results and financial condition could be adversely affected by the loss of, or significant curtailment of, purchases by one or more of the Company’s top customers, including curtailment due to increased competitive pressures, industry consolidation, a change in their designs, or change in their manufacturing sourcing policies, or practices of these customers, or the timing of customer or distributor inventory adjustments, or change in its major customers’ business models.

TSMC maintains a close watch on these trends and works closely with its customers to respond to these changes and to strengthen the Company’s market position.

Risks Associated with Purchase Concentration

Raw Materials

TSMC’s production operations require that TSMC obtain adequate supplies of raw materials, such as silicon wafers, gases, chemicals and photoresists, on a timely basis and at commercially reasonable prices. In the past, shortages in the supply of some materials, whether by specific vendors or by the semiconductor industry generally, has resulted in occasional industry-wide price adjustments and delivery delays. For example, the recent increase in silicon wafer prices due to increased demand for such wafers across industry is expected to negatively impact our gross margin in 2017. In addition, major natural disasters, political or economic turmoil occurring within the country of origin of such raw materials may also significantly disrupt the availability of such raw materials or increase their prices. Also, since TSMC procures some raw materials from sole-source suppliers, there is a risk that the need for such raw materials may not be met or that back-up supplies may not be readily available. TSMC’s revenue and earnings could decline if the Company is unable to obtain adequate supplies of the necessary raw materials in a timely manner or if there are increases in the costs of raw materials that the Company cannot pass on to customers. To reduce the supply chain risk and to manage the cost actively, TSMC is committing resources toward developing new supply sources. In addition, the Company continually encourages its suppliers to reduce their supply chain risk by decentering production plants and to improve their cost competitiveness by moving their production facilities to Taiwan from higher-cost areas.

In the meantime, aware of the risk posed by fewer back-up suppliers, TSMC is engaging early and deeply with primary suppliers on managing quality and capacity issues to be prepared for any unexpected need to ramp up production, which could leave the Company with insufficient time to re-tune its product capacity. For leading the intellectual property rights of such nodes, TSMC uses world-class processes at world-class facilities but also requires world-class material quality. To streamline supply chain risk management, the Company intensifies supplier site audits and extends supply chain best practices to suppliers to mitigate capacity and quality risks. Moreover, TSMC continually reﬁnes its planning system and enhances demand forecast alignments with critical suppliers for more accurate supply capacity planning, especially for steep ramping up of new nodes. The Company has developed a supply chain risk assessment for critical suppliers that fulfills requirements on labor and ethics, ESH (environmental, safety and health) and single supply risk management. To ultimately empower them to take responsibility for their supply chain, on-site audits are regularly conducted. Any regulatory violations or any adverse environmental impact event, as well as a failure to meet TSMC’s expectations in sustainability requirements, may result in business reduction or termination.

Equipment

The Company’s operations and ongoing expansion plans depend on its ability to obtain an appropriate amount of equipment and related services from a limited number of suppliers, both on a timely and cost basis. Historically, the supply of equipment has been the single most important factor in determining the level of production, and any delay in the receipt of such equipment could delay the timely availability of the equipment and parts needed to expand the Company’s manufacturing capacity, and also increase the market price for such equipment and parts if TSMC is unable to obtain equipment in a timely manner to fulfill its customers’ demands on technology and production capacity, or at a reasonable cost, its financial condition and results of operations could be negatively impacted.

Risks Associated with Intellectual Property Rights

The Company’s ability to compete successfully and to achieve future growth will depend in part on the continued strength of its intellectual property portfolio. While TSMC actively enforces and protects its intellectual property rights, there can be no assurance that its efforts will be adequate to prevent the misappropriation or improper use of its proprietary technologies, software, trade secrets or know-how. Also, the Company cannot assure that, as its business or business models expand into new areas, it will be able to develop independently the technologies, patents, software, trade secrets or know-how necessary to conduct its business or that it can do so without undue interference from other companies. As a result, TSMC may have to rely on, to a certain degree, licensed technologies and patent licenses from others. To the extent that the Company relies on licenses from others, there can be no assurance that it will be able to obtain any or all of the necessary licenses in the future on terms it considers reasonable or at all. The lack of necessary licenses could expose TSMC to claims for damages and/or injunctions from third parties, as well as claims for indemnification by its customers in instances where it has contractedly agreed to indemnify its customers against damages resulting from infringement claims.

TSMC has received, from time-to-time, communications from third parties asserting that TSMC’s technologies, its manufacturing processes, or the design of the semiconductors made by TSMC or the use of those semiconductors by its customers may infringe their patents or other intellectual property rights. Because of the nature of the industry, the Company may continue to receive such communications in the future. These assertions have at times resulted in litigation by or against the Company and settlement payments by the Company. Irrespective of the validity of these claims, TSMC could incur significant costs in the defense thereof or could suffer adverse effects on its operations.

In June 2010, Keranos, LLC. filed a complaint in the U.S. District Court for the Eastern District of Texas alleging that TSMC, TSMC North America, and several other leading technology companies infringe three expired U.S. patents. In response, TSMC, TSMC North America and its co-defendants in the Texas case filed a lawsuit against Keranos in the U.S. District Court for the Northern District of California in November 2010, seeking a judgment declaring that they did not infringe the asserted patents, and that those patents were invalid. These two litigations have been consolidated into a single lawsuit in the U.S. District Court for the Eastern District of Texas. In February 2014, the Court entered a final judgment in favor of TSMC and TSMC North America, dismissing all of Keranos’ claims against TSMC, TSMC North America, and TSMC North America with prejudice. Keranos appealed the final judgment to the U.S. Court of Appeals for the Federal Circuit, and in August 2015, the Federal Circuit remanded the case back to the Texas court for further proceedings. In January 2017, the Texas court dismissed all of Keranos’ claims against TSMC and TSMC North America with prejudice, and dismissed TSMC’s and TSMC North America’s counterclaims without prejudice. The case is over as to TSMC and TSMC North America.
ensure that TSMC will always be able to fulfill its personnel requirements in a timely manner.

Future R&D Plans and Expected R&D Spending
For additional details, please refer to “5.2.7 Future R&D Plans” on page 81 of this Annual Report.

Changes in Corporate Reputation and Impact on TSMC's Crisis Management
TSMC has established an excellent corporate reputation around the world based on its core values of integrity, commitment, innovation and customer trust, as well as its outstanding operations, rigorous corporate governance, and dedication to social responsibility by serving as a good corporate citizen and continuing to pursue innovation in the economic, environmental and social dimensions of CSR.

In 2016, TSMC was honored with awards for achievements in operations, corporate governance, innovation, profit growth, investor relations, environmental protection and in other fields as well. These included the R.O.C. Presidential Innovation Award; the Taiwan Institute for Sustainable Energy 2016 Taiwan Corporate Sustainability Awards No. 1 for Domestic Corporates, Gold Medal For Sustainability Report, Sustainable Water Management Award, and Climate Leader Award; the R.O.C. Ministry of Economic Affairs Bureau of Foreign Trade Outstanding Trade Contribution Award; ranked top 5% in the Taiwan Stock Exchange Corporate Governance Evaluation; ranked No. 1 in profit for the China Credit Information Services’ ranking of large Taiwanese companies; the R.O.C. Ministry of Economic Affairs Industrial Development Bureau “Green Factory Label”; the R.O.C. Environmental Protection Administration “National Environmental Education Award” and “Enterprise Green Procurement Award”; the R.O.C. Ministry of Economic Affairs’ “Excellence in Water Conservation Award” and “Excellence in Energy Conservation Award”; ranked No. 1 in Taiwan by PriceWaterhouseCoopers 2016 Global Innovation 1000 Study; ranked No. 1 in “Green Magazine’s “Most Admired Companies for the New Generation”; named CommonWealth Magazine’s “Most Admired Company in Taiwan”; and the CSR Model Award for the Global Views Magazine Annual Corporate Social Responsibility Survey. In addition, TSMC was selected as a component of the Dow Jones Sustainability Indices for the 16th consecutive year, further strengthening the Company’s reputation.

As an important member of the technology industry, TSMC has always endeavored to act as a positive force in society. The Company maintains departments including legal, customer service, materials management, quality & reliability, R&D, risk management, finance, investor relations, operations, ESH (environment, safety and health), human resources, the TSMC Foundation, the TSMC Volunteer Association, and public relations to coordinate the Company’s resources and further enhance TSMC’s positive corporate reputation.

To address potential events that may affect the Company’s public reputation, including fires and workplace accidents, TSMC maintains an emergency response procedure manual, and internal and external staff are trained to carry out the plan. In addition, the TSMC Emergency Response Team holds regular drills and continuously improve their emergency response and notification procedures. At the same time, TSMC has established communications criteria for all types of stakeholders, and the public relations department is responsible for external communications. In the event of the above emergencies, all departments immediately deploy emergency response teams to reduce casualties and minimize the impact on the surrounding environment, Company property and manufacturing operations. Responders also alert the public relations department at the first stage of response to ensure smooth channels of communications as well as clear and consistent disclosure regarding the situation to maintain the Company’s reputation.

Risk Associated with Change in Management
During 2016 and as of the date of this annual report, there were no such risks for TSMC.

Risks Associated with Mergers and Acquisitions
During 2016 and as of the date of this annual report, there were no such risks for TSMC.

Risks Associated with Recruiting Qualified Personnel
The Company relies on the continued services and contributions of its executives, officers and skilled technical and other personnel. TSMC’s business could suffer if the Company lost, for whatever reasons, the services and contributions of some of these personnel and could not adequately replace them. TSMC may be required to increase or reduce the number of employees in connection with any business expansion or contraction, in accordance with market demand for the Company’s products and services. Since there is intense competition for the recruitment of these personnel, it cannot

6.3.4 Financial Risks

Economic Risks

Interest Rate Fluctuation
TSMC is exposed to interest rate risks primarily related to its outstanding debt issuances and investment portfolio. TSMC’s interest income and expenses are more sensitive to fluctuations in R.O.C. and U.S. interest rates. Changes in R.O.C. and U.S. interest rates affect the interest earned on the Company’s cash, cash equivalents, marketable securities and the fair value of those securities, as well as interest paid on and the fair value of its outstanding debt.

TSMC’s investment policy is to achieve a return that will allow the Company to preserve capital and maintain liquidity requirements. Such policy requires the Company’s investments generally made in investment grade securities, with the primary objective of minimizing the potential risk of principal loss. TSMC uses a combination of internal and external management to execute its investment strategy. TSMC typically invests in investment grade fixed income securities across various sectors, and limits the amount of credit exposure to any one issuer. The Company’s investments in both fixed rate and floating rate interest earning securities carry a degree of interest rate risk. Majority of the Company’s fixed rate securities are classified as available-for-sale, and may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than predicted if interest rates fall. TSMC has entered, and may enter in the future, into interest rate futures to partially hedge the interest rate risk on its fixed income investments. These hedges may reduce only a portion of, but do not eliminate, the financial impact from movements in interest rates.

Foreign Exchange Volatility
Over one-half of TSMC’s capital expenditures and manufacturing costs are denominated in currencies other than NT dollars, primarily in US dollars, Japanese yen and Euros. In 2016, more than 90% of the Company’s revenue was denominated in US dollars and currencies other than NT dollars. Therefore, any significant fluctuation to its disadvantage in such exchange rates would have an adverse effect on TSMC’s financial condition. For example, because TSMC’s functional currency is denominated in NT dollars, every 1 percent depreciation of the US dollar against the NT dollar may result in approximately 0.4 percentage point decrease in TSMC’s operating margin based on TSMC’s 2016 results.

Conversely, if the US dollar appreciates significantly versus other major currencies, the demand for the products and services of TSMC’s customers and for its goods and services will likely decrease, which will negatively affect the Company’s revenue.

TSMC utilizes short-term debt denominated in foreign currencies and derivative financial instruments, including currency forward contracts and cross-currency swaps, to partially hedge its currency exposure.

Fluctuations in the exchange rate between the US dollar and the NT dollar may affect the US dollar value of the Company’s common shares and the market price of the Company’s American Depositary Shares (ADSs) and of any cash dividends paid in NT dollars to TSMC’s common shares represented by ADSs.

Inflation, Deflation and Resulting Market Volatility
The global economy is becoming more vulnerable to sudden unexpected fluctuations in inflationary and deflationary expectations and conditions. Expectations of high inflation and deflation each adversely affects the economy, at both macro and micro levels, by reducing economic efficiency and disrupting investment decisions. Recently, political
uncertainty and negative interest rate policies adopted by some major world economies have exacerbated global fluctuations in inflationary and deflationary expectations. These macro-economic changes have also resulted in market volatility. Such fluctuations and volatility may negatively affect the costs of TSMC’s operations and the business operations of its customers who may be forced to plan their purchases of TSMC’s goods and services within an uncertain economy. Therefore, the demand for TSMC’s products and services could unexpectedly fluctuate severely in accordance with expectations of inflation or deflation as affected by market volatility.

Risks Associated with External Financing
In times of market instability, sufficient external financing may not be available to the Company on a timely basis, on reasonable market terms, or at all. If sufficient external financing is not available, when TSMC needs such financing to meet its capital requirements, TSMC may be forced to curtail its expansion and modification plans or delay the deployment of new or expanded services until it obtains such financing.

Risks Associated with High-Risk/Highly Leveraged Investments; Lending, Endorsements, and Guarantees for Other Parties; and Financial Derivative Transactions
TSMC did not make high-risk or highly leveraged financial investments in 2016 nor up to the date of this annual report. TSMC provided a guarantee to TSMC Global, a wholly-owned subsidiary of TSMC, for its issuance of US dollar-denominated senior unsecured corporate bonds in April 2013. As of February 28, 2017, TSMC had an intercompany loan of RMB980 million arranged among the Company’s subsidiaries, which was in compliance with relevant rules and regulations.

In 2016, the financial transactions of a derivative nature that TSMC entered into were strictly for hedging and not for any trading or speculative purposes. For more information, please refer to page 36 of the annual report section (iii), Financial Statements. The fair market value of TSMC’s trading and refer to 21. TSMC’s investments, tangible and intangible assets for impairment whenever triggering events or changes in circumstances indicate that the asset may be impaired. If certain criteria are met, TSMC is required to record an impairment charge. TSMC is also required under Taiwan-IFRSs to evaluate goodwill for impairment at least on an annual basis or more frequently whenever triggering events or changes in circumstances indicate that goodwill may be impaired and the carrying value may not be recoverable. TSMC holds investments in certain publicly listed and private companies, some of which have incurred certain impairment charges disclosed in Annual Report section (iii), Financial Statements.

The determination of an impairment charge at any given time is based significantly on the projected results of the Company’s operations over a number of years subsequent to that time. Consequently, an impairment charge is more likely to occur during a period when the Company’s operating results are otherwise already depressed.

TSMC has established the process and system to closely monitor and assess the risk of any impairment charge. However, the management is unable to estimate the amount or timing of any impairment charge for future years, or whether such impairment charge required may have a material adverse effect on the Company’s net income.

6.3.5 Hazardous Risks
TSMC maintains a comprehensive risk management system dedicated to the safety of people, the conservation of natural resources, and the protection of property. In order to effectively handle emergencies and natural disasters, at each facility management has developed comprehensive plans and procedures that focus on risk prevention, emergency response, crisis management and business continuity. The Company has adopted local and international standards for environmental, safety and health (ESH) management. All TSMC manufacturing fabs have been ISO 14001 certified (Environmental Management System), OHSAS 18001 certified (Occupational Health and Safety Management System), and Q1 certified (Hazardous Substance Process Management System). All manufacturing fabs in Taiwan have also been TOS-EMS (Taiwan Occupational Safety and Health Management System) certified. The new fabs will also acquire the above certificates within 18 months of the start of volume production.

The Company pays special attention to preparedness for emergencies or disasters, such as typhoons, floods, droughts caused by climate change, earthquakes, environmental contamination, large-scale product returns, service disruption of IT systems, strikes, pandemics (such as H1N1 influenza), and sudden, unexpected disruptions to the supply of raw materials, water, electricity and other public utilities. TSMC has established a company-wide taskforce dedicated to managing the risk of a water shortage that might arise due to climate change. This taskforce monitors the external supply and internal demand for water. Cross-company consolidations and external collaborations with public agencies are also ongoing in industrial parks to ensure and sustain a stable water supply.

TSMC has further strengthened its business continuity plans, which include periodic risk assessment, risk mitigation, and improvement. The establishment of emergency taskforces when necessary, combined with the preparation of a thorough analysis of the emergency, its impact, alternative actions, and solutions for each possible scenario together with appropriate precautionary and/or recovery measures. Each taskforce is given the responsibility of ensuring TSMC’s ability to conduct business while minimizing personal injury, business disruption and financial impact under the circumstances. TSMC’s business continuity plan is periodically reviewed according to the results of test scenarios or practical implementation for ensuring effective and successful business continuity. Customers are informed of TSMC’s strong business continuity capability in order to establish resilience and flexibility in both their supply chain and insurance needs.

In response to the impact of the earthquake that occurred in southern Taiwan on February 6, 2016, TSMC conducted a continuous improvement project, including enhancing earthquake emergency response, enhancing tool anchorage and seismic isolation facilities, preparedness for speeding up tool salvage and production recovery, and improved TSMC procedures with reference to ISO 22301 business continuity management.

TSMC and many of its suppliers use combustible and toxic materials in their manufacturing processes and are therefore subject to the risk of loss arising from explosion, fire, or environmental influences that cannot be completely eliminated. Although the Company maintains many overlapping risk prevention and protection systems, as well as fire and casualty insurance, TSMC’s risk management and insurance coverage may not always be sufficient to cover all of the Company’s potential losses. If any of TSMC’s fabs or vendor facilities were to be damaged, or cease operations as a result of an explosion, fire or environmental causes, it could reduce the Company’s manufacturing capacity and may lead to the loss of important customers, thereby having a potentially adverse material impact on TSMC’s financial performance. In addition to periodic fire-protection inspections and firefighting drills, the Company has also carried out a corporate-wide fire risk mitigation project focused on managerial and hardware improvements.

6.3.6 Risks Associated with Non-Compliance with Environmental and Climate Related Laws and Regulations, and Other International Laws, Regulations and Accords
Because TSMC engages in manufacturing activities in multiple jurisdictions and conduct business with its customers located worldwide, such activities are subject to a myriad of governmental regulations. For example, the manufacturing, assembling and testing of TSMC’s products require the use of metals, chemicals and materials that are subject to environmental, climate-related, health and safety, and humanitarian conflict-free sourcing laws, regulations and guidelines issued worldwide.

Although TSMC may be eligible for various exemptions and/or extensions of time for compliance, the Company’s failure to comply with any applicable laws or regulations that materially affect our business and operations could result in:

- significant penalties and legal liabilities, such as the denial of import permits or third party private lawsuits, criminal or administrative proceedings;
- the temporary or permanent suspension of production of the affected products;
- unfavorable alterations in TSMC manufacturing, fabrication and assembly and test processes;
challenges from customers that place TSMC at a significant competitive disadvantage, such as the loss of actual or potential sales contracts in case the Company is unable to satisfy applicable legal standard or customer requirement; (b) restrictions on TSMC operations or sales; (c) loss of tax benefits, including termination of current tax incentives, disqualification of tax credit application and repayment of the tax benefits that we are not entitled to; and (d) damages to TSMC goodwill and reputation.

Complying with applicable laws and regulations, such as environmental and climate related laws and regulations, could also require us, among other things, to do the following: (a) purchase, use or install remedial equipments; (b) implement remedial programs such as climate change mitigation programs; (c) modify our product designs and manufacturing processes, or incur other significant expenses such as obtaining substitute raw materials or chemicals that may cost more or be less available for our operations.

Our inability to timely obtain approvals necessary for the conduct of our business could impair our operational and financial results. For example, if we are unable to timely obtain environmental related approvals needed to undertake the development and construction of a new fab or expansion project, then such inability may delay, limit, or increase the cost of our expansion plans that could also in turn adversely affect our business and operational results. In light of increased public interest in environmental issues, our operations and expansion plans may be adversely affected or delayed responding to public concern and social environmental pressures even if we comply with all applicable laws and regulations.

TSMC believes that climate change should be regarded as a significant corporate risk that must be controlled to improve our competitiveness. Climate change has the potential to create legal, physical and other risks. TSMC’s control measures are as follows:

Climate regulatory risks
Greenhouse gas (GHG) control regulations and agreements in countries around the world are becoming increasingly stringent. Enterprises are legally required to regularly disclose GHG-related information as well as limit GHG emissions. Future legal requirements, such as carbon or energy taxes and carbon emission cap-and-trade may drive up production costs, and governments and associations to set reasonable and feasible legal requirements.

Conflict minerals risks
For additional details, please refer to the Supplier and Contractor Management section under 7.2.3 Safety and Health on pages 129-130 of this annual report.

Climate disaster risks
Abnormal climate caused by the greenhouse effect has increased the frequency and severity of climate disasters – storms, floods, drought, and water shortages – causing considerable impacts on business operations and supply chains. TSMC believes that climate change control should take into account both mitigation and adaptation, and this requires cooperation among government, society and industry to reduce risk. To ensure electricity and raw water supplies, therefore, in addition to water-saving measures at the Company’s own facilities and those of upstream and downstream partners, TSMC participates in the Taiwan Science Park Industrial Union Experts Committee platform, and is actively involved in regular meetings with Taipower Company and the Taiwan Water Corporation to discuss supply and allocation for response issues.

Other climate risks
Climate change is a concern to the global supply chain, necessitating energy conservation, carbon reduction, and climate prevention. For example, The Electronic Industry Citizenship Coalition (EICC) has also required members’ suppliers to disclose GHG emissions information. TSMC not only discloses its own GHG emissions information each year, but it also assists and requires its suppliers to establish a GHG inventory system and conduct reduction programs. TSMC’s suppliers are required by TSMC to submit GHG emissions and reduction information as an important index of sustainability scoring in its procurement strategy.

To mitigate risks resulting from climate change, TSMC continues to actively carry out energy conservation measures, participate in voluntary emission reduction projects for perfluorinated compounds (PFC), and conduct GHG inventory and verification on an annual basis. TSMC has publicly disclosed climate change information annually through the following channels: (a) TSMC has disclosed GHG emissions and reduction-related information for evaluation by the Dow Jones Sustainability Index every year since 2001.

TSMC’s GHG-related information has been disclosed in its CSR report on the Company website annually since 2005. TSMC also provides information to customers and investors upon request.

TSMC has been participating in an annual survey held by the nonprofit Carbon Disclosure Project (CDP) since 2005, which includes GHG emission and reduction information for all TSMC fabs and subsidiaries.

TSMC has followed the ISO 14064-1 standard to conduct a GHG inventory and acquire verification by an accrediting agency since 2006. TSMC also reports GHG inventory data to the Taiwan Environmental Protection Administration (EPA) and the Taiwan Semiconductor Industry Association (TSSIA).

6.3.7 Other Risks
Potential Impact and Risks Associated with Sales of Significant Numbers of Shares by TSMC’s Directors, and/or Major Shareholders Who Own 10% or more of TSMC’s Total Outstanding Shares
The value of TSMC shareholders’ investment may be reduced by possible future sales of TSMC shares owned by major shareholders.

One or more of our existing shareholders may, from time to time, dispose of significant numbers of our common shares or ADSs. For example, the National Development Fund, which owned 6.38% of TSMC’s outstanding shares as of February 28, 2017, has from time to time in the past sold TSMC shares in the form of ADSs in several transactions.

As of the date of this annual report, no shareholder owns 10% or more of TSMC’s total outstanding shares.

Risks Associated with Cyber Attacks
Even though TSMC has established a comprehensive internet and computing security network, it cannot guarantee that the Company’s computing systems which control or maintain vital corporate functions like its manufacturing operations and enterprise accounting would be completely immune to crippling cyber viral attacks launched by third party to gain unauthorized access to its internal network systems to sabotage its operations and goodwill. In the event of a serious cyber attack, TSMC’s systems may lose important corporate data and its production lines may be shutdown indefinitely pending the resolution of such attack. These cyber attacks may also attempt to steal TSMC’s trade secrets and other intellectual properties and other sensitive information, such as proprietary information of the Company’s customers and other stakeholders and personal information of the Company’s employees. Malicious hackers may also try to introduce computer viruses, corrupted software or ransomware into the Company’s network systems to disrupt its operations, blackmailed it for regaining control of its computing systems or spy for sensitive information. These attacks may result in TSMC having to pay damages for its delayed or disrupted orders or incur significant expenses in attempting to re-establish control over the Company’s network. If TSMC is not able to timely resolve the technical difficulties caused by such cyber attacks, or ensure the integrity and availability of its data or control of its computing systems, the Company’s financial results as well as commitments to its customers and other stakeholders may be materially impaired.

Other Material Risks
During 2016 and as of the date of this Annual Report, TSMC’s management is not aware of any other risk event that could impede a potentially material impact on the financial status of the Company.
16 consecutive years

TSMC was selected as a component of the Dow Jones Sustainability Indices for a 16th consecutive year, reflecting our ongoing commitment to sustainability and corporate social responsibility.
Corporate Social Responsibility

7.1 Overview

TSMC believes a company’s corporate social responsibility is to uplift society. As a result, in addition to actively strengthening TSMC’s competitiveness in its core business of dedicated IC foundries, the Company is also continuously active in the economic, environmental and social dimensions of corporate responsibility and attends to the rights of all stakeholders including employees, shareholders/investors, customers, suppliers, and local communities to serve as a positive force in society.

The Scope of Corporate Social Responsibility

TSMC has declared “Uplifting Society” as the Company vision and identified three primary missions: “Acting with Integrity,” “Strengthening Environmental Protection,” and “Caring for the Disadvantaged” in its Corporate Social Responsibility Policy. The CSR matrix below, set by Chairman Dr. Morris Chang, clearly defines the scope of that responsibility. The horizontal axis shows the seven areas where TSMC aims to set an example: morality, business ethics, economy, rule of law, sustainability, work/life balance and happiness, and philanthropy. On the vertical axis are actions that TSMC has taken to fulfill its responsibilities.

<table>
<thead>
<tr>
<th>TSMC CSR Matrix</th>
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<tbody>
<tr>
<td><strong>Society</strong></td>
</tr>
<tr>
<td>Integrity</td>
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<tr>
<td>Law Compliance</td>
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<tr>
<td>Anti-Corruption</td>
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<tr>
<td>Anti-Bribery</td>
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<tr>
<td>Environmental Protection</td>
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<tr>
<td>Climate Control</td>
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<tr>
<td>Energy Conservation</td>
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<tr>
<td>Corporate Governance</td>
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<tr>
<td>Board Meeting</td>
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<tr>
<td>Board of Directors</td>
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<tr>
<td>Employees’ Work/Life Balance</td>
</tr>
<tr>
<td>Health and Safety</td>
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<tr>
<td>Traffic Safety</td>
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<tr>
<td>Volunteer Organization</td>
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<tr>
<td>Education and Culture Foundation</td>
</tr>
</tbody>
</table>

CSR Management

As the TSMC's top-level group for corporate social responsibility, the CSR committee acts as a center for decision-making and platform for coordination throughout the Company. TSMC’s CFO (Chief Financial Officer) serves as chairperson of the CSR committee, which is comprised of representatives from each functional organization. The committee meets each quarter to discuss developments and future directions of CSR operations. It also coordinates across all organizations based on the type and nature of issues addressed and monitors the progress and effectiveness of CSR projects.

Functions related to CSR include legal, customer service, materials management, quality and reliability, research and development, risk management, finance, investor relations, operations, human resources, the TSMC Foundation, the TSMC Volunteer Program, public relations and communication, health, and safety. These functions are responsible for addressing CSR issues of interest to employees, shareholders/investors, customers, suppliers, governments, communities, and other stakeholders to systematically and effectively fulfill the Company’s corporate social responsibilities. The CSR committee chairperson leads committee to jointly set the Company’s CSR strategy, identify key issues for the year and monitor the execution of related projects and budgets by each organization to ensure they are effectively carried out. The CSR committee chairperson also annually reports the current year’s results and submits plans for the upcoming year to the board of directors.

Stakeholder Engagement

TSMC’s approach to stakeholder relations is divided into four stages: identification, analysis, planning and engagement. In order to pursue sustainable operations, TSMC not only performs direct communications with each of its stakeholders through multiple channels established by CSR-related units but also maintains a “Stakeholder Engagement” section on the corporate website, as well as a CSR mailbox to gather a broad range of views from the public. The CSR mailbox, set up in 2011, is managed by dedicated public relations staff, and submissions are sent to relevant departments according to the nature and range of issues addressed. In 2016, the TSMC CSR mailbox received 472 submissions, including requests for surveys, studies and visits, inquiries about daily operations, recruiting and CSR-related experience sharing, suggestions and complaints from the public, and requests for endorsement, donation and collaboration as well as event invitations. All received timely responses from the Company’s dedicated personnel.

Stakeholders and Communication Channels in 2016

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Communication Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>- Corporate intranet, employee portal, and other announcement channels (such as promotion posters at facility) - Employee suggestion box - CSR-related announcements on the Company’s website</td>
</tr>
<tr>
<td>Shareholders &amp; Investors</td>
<td>- Annual shareholders’ meeting - Quarterly earnings conference call - Annual and interim communications meetings - Telephone and email responses to investors’ questions and feedback collection - Annual reports, 20-F filings to US SEC, material announcements to Taiwan Stock Exchange, and corporate news on the Company’s website</td>
</tr>
<tr>
<td>Customers</td>
<td>- Annual customer satisfaction survey - Customer quarterly business review meetings - Customer ethics code awareness training</td>
</tr>
<tr>
<td>Suppliers</td>
<td>- Supplier quality, business review meetings - Supplier contract reviews - Supplier ethics code awareness training - Supplier questionnaire survey - Supplier onsite audits - Annual supply chain management forum - Supplier ethics code awareness training</td>
</tr>
<tr>
<td>Government</td>
<td>- Supplier ethics code awareness training - Meetings (such as communication meetings or public hearings) - Communication with government authorities through industry associations, including the Association of Science Park Industries, Taiwan Semiconductor Industry Association, and Chinese National Federation of Industries</td>
</tr>
<tr>
<td>Society</td>
<td>- Arts events in the communities - Sponsorship of non-profit organizations for support educational projects - Support for non-profit organizations and groups for special events, such as those benefiting social services, such as the poor or aged, and promoting social welfare, such as aid for the poor</td>
</tr>
</tbody>
</table>

In April 2016, the Company launched its first Facebook fan page, a newly established two-way communication channel to introduce a variety of CSR activities provided by the TSMC Education and Culture Foundation, TSMC Volunteer Program and 17 fabdivision volunteer initiatives on a weekly basis. This enables further understanding of the Company’s social contribution to society.

TSMC believes that maintaining good communication with stakeholders not only helps the Company better understand economic, social and environmental challenges, but also creates value for the Company and society and promotes sustainable growth.
As the only semiconductor company chosen for the Dow Jones Sustainability World Indices for the past 16 consecutive years, TSMC believes that integrity is fundamental to any company’s sustainability. From a CSR perspective, TSMC also believes that customer trust is enhanced if the Company follows the law, insists on transparency and shows good corporate governance. These practices, along with outstanding business results, mean investors will be more willing to invest in the Company over the long term and employees will be more likely to make a mutual commitment to the Company to fulfill its core values, leading to stronger coherence within the Company. At TSMC’s urging, suppliers – both upstream and downstream – have been working together to strengthen environmental protection by building a green supply chain. With the engagement of all stakeholders, the Company’s resources can be amplified to create even more value for society. In summary, carrying out TSMC’s social responsibilities gives the Company greater competitive advantage and benefits all stakeholders.

Responsibilities of TSMC CSR Committee Members

<table>
<thead>
<tr>
<th>Committee Members</th>
<th>Responsibilities</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal</td>
<td>Corporate Governance, Code of Conduct, Legal Compliance, Intellectual Property, Protection of Confidential Information</td>
<td>Government Employees, Society</td>
</tr>
<tr>
<td>Customer Service</td>
<td>Customer Service and Satisfaction, Customer Care, Customer Confidentiality</td>
<td>Customers</td>
</tr>
<tr>
<td>Materials Management</td>
<td>Materials and Supply Chain Risk Management, Supplier Management, Conflict Minerals, EICC</td>
<td>Suppliers</td>
</tr>
<tr>
<td>Quality and Reliability</td>
<td>Product Quality and Reliability, Product Recall Mechanism</td>
<td>Customers</td>
</tr>
<tr>
<td>Research and Development</td>
<td>Innovation Management, Green Products</td>
<td>Employees, Customers</td>
</tr>
</tbody>
</table>

2016 CSR Awards and Recognitions

<table>
<thead>
<tr>
<th>Category</th>
<th>Organization</th>
<th>Awards and Recognitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall CSR</td>
<td>Dow Jones Sustainability Indices (US)</td>
<td>*Membership in Dow Jones Sustainability World Index for the 10th consecutive year</td>
</tr>
<tr>
<td></td>
<td>MSCI Global Sustainability Indices</td>
<td>*Selected on MSCI Global Sustainability indices component</td>
</tr>
<tr>
<td></td>
<td>STOX 60 (CH)</td>
<td>*Selected in STOXX Emerging Europe index component</td>
</tr>
<tr>
<td></td>
<td>Global News Alliance, Global Corporate Governance</td>
<td>*Recognized in Global Equity Value Report, which recognizes global industry leaders</td>
</tr>
<tr>
<td></td>
<td>TSMC CSR Committee</td>
<td>*Taiwan Top 5 CSR Corporate Responsibility Report Awards – Electronics Industry – Gold Class</td>
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<tr>
<td></td>
<td>TSMC CSR Committee</td>
<td>*Sustainable Water Management Award</td>
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<tr>
<td></td>
<td>TSMC CSR Committee</td>
<td>*Climate under Award</td>
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<tr>
<td></td>
<td>TSMC CSR Committee</td>
<td>*Recognized as one of the World’s Most Admired Companies</td>
</tr>
<tr>
<td></td>
<td>TSMC CSR Committee</td>
<td>*Selected as one of the most sustainable corporations in Chemical Nexus, Sustainability Ranking</td>
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<tr>
<td></td>
<td>CommonWealth Magazine</td>
<td>*Corporate Social Responsibility Award – Large &amp; Public Place</td>
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<tr>
<td></td>
<td>Cheers Magazine</td>
<td>*Best Managed Company for the New Generation</td>
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<td></td>
<td>FORTUNE</td>
<td>*Ranked No. 1 in Top 100 Parent Firms</td>
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<tr>
<td></td>
<td>FinanceAsia</td>
<td>*Best Analyst Days (Technology/Semiconductor) - 1st Place (sell-side) - All-Asia</td>
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<tr>
<td></td>
<td>Institutional Investor Magazine</td>
<td>*Best Investor Relations (Technology/Semiconductor) - 1st Place (sell-side) - All-Asia</td>
</tr>
<tr>
<td></td>
<td>RobecoSAM</td>
<td>*RobecoSAM Sustainability Award – Gold Class</td>
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</tbody>
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(Continued)
computing data center. As of 2016, TSMC has three fabs – Fab 12 Phase 4/5/6, Fab 14 Phase 3/4 and Fab 15 – that earned ISO conservation. TSMC’s Fab 12 Phase 4 data center is Taiwan’s first facility to earn the ISO 50001 certification for a high-density Since 2011, TSMC has adopted the ISO 50001 Energy Management System for the continuous improvement of energy Evaluation, Authorization and Restriction of Chemicals (REACH),” the “Montreal Protocol on Substances that Deplete the Ozone TSMC strives for continuous improvement and actively seeks to enhance climate-change management, pollution prevention, manage ESH risks, instill an ESH culture, establish a green supply chain, and fulfill its related corporate social responsibilities. All TSMC manufacturing facilities have received ISO 14001: 2004 certification for environmental management systems and OHSAS 18001: 2007 certification for occupational safety and health management systems and transferred environmental management system certificate to ISO 14001: 2015 in 2016. All fabs in Taiwan have also been TOSIKMS (Taiwan Occupational Safety and Health Management System) certified since 2009. TSMC regularly communicates with suppliers and contractors regarding environmental, safety and health issues and encourages them to improve their ESH performance. In line with this policy, TSMC uses priority work management and self-management to govern work performed by contractors. TSMC requires contractors performing level-one high-risk operations to complete certification for technicians and to establish their own OHSAS 18001 safety and health management system. This promotion of self-management is aimed at increasing the sense of responsibility of TSMC’s contractors, with the goal of promoting safety awareness and technical improvement for all contractors in the industry. TSMC collaborates with suppliers to improve the sustainability of the Company’s supply chain regarding ESH-related issues, such as environmental protection, safety and hygiene code compliance, daily management, fire protection, and conflict mineral management. TSMC not only performs ESH audits at its suppliers’ manufacturing sites but also proactively assists them with improving ESH performance. Besides the requirement of ESH code compliance, energy/water saving and carbon management of TSMC’s supply chain are essential to the Company’s green supply chain ideals. Since 2009, TSMC has required suppliers to establish carbon inventory procedures. In 2015, TSMC calculated its carbon footprint and water footprint, which were certified by a third party for ISO 14067 and ISO 14046, respectively. TSMC not only provides such information to customers but also continue to promote carbon reduction and water conservation at TSMC and in the supply chain from a life-cycle point of view. TSMC also monitors potential climate-change related risks in the supply chain, investigates the supply chain’s carbon emissions, electricity usage and water usage, and encourages suppliers to implement measures to save energy, reduce carbon emissions and water and reduce waste. The ESM management programs of TSMC suppliers are tied to a sustainability index that includes three components: the Green Index, the Social Index and the Risk Index. The Green Index includes environmental management systems, regulatory compliance, hazardous substance management, conflict mineral investigation, greenhouse gas inventory and other green activities. The Social Index includes labor and ethical conduct. Both the Green and Social indices are consistent with the Electronic Industry Citizenship Coalition (EICC) Code of Conduct. The Risk Index includes safety and health management, fire prevention, natural disaster mitigation, environmental protection, safety and hygiene code compliance, daily management, fire protection, and conflict mineral management. This policy with this index is applied to TSMC’s critical suppliers. 7.2 Environmental, Safety and Health (ESH) Management TSMC believes its environmental, safety and health practices must not only meet legal requirements, but should also measure up to or exceed recognized international best practices. TSMC’s ESH policies aim to reach the goals of “zero incident” and “sustainable development,” and to make TSMC a world-class company in environmental, safety and health management. The Company’s strategies for reaching these goals are to comply with regulations, promote safety and health, strengthen recycling and pollution prevention, manage ESH risks, instill an ESH culture, establish a green supply chain, and fulfill its related corporate social responsibilities. In 2006, in order to meet regulatory and customer needs for the management of hazardous materials, TSMC began to adopt the IECC QC 080000 Hazardous Substance Process Management (HSPM) System. All TSMC manufacturing facilities have been QC 080000 certified since 2007. By practicing QC 080000, TSMC ensures that its products comply with regulatory and customer requirements, including the European Union’s “Restriction of Hazardous Substances (RoHS) Directive,” the EU’s “Registration, Evaluation, Authorization and Restriction of Chemicals (REACH),” the “Montréal Protocol on Substances that Deplete the Ozone Layer” (the halogen free in electronic products initiative), and Perfluorocarboxyl Sulfonates (PFOS) restriction standards. Since 2011, TSMC has adopted the ISO 50001 Energy Management System for the continuous improvement of energy conservation. TSMC’s Fab 12 Phase 4 data center is Taiwan’s first facility to earn the ISO 50001 certification for a high-density computing data center. As of 2016, TSMC has three fabs – Fab 12 Phase 4/5/6, Fab 14 Phase 3/4 and Fab 15 – that earned ISO 50001 certifications. Other TSMC fabs also implement energy management measures consistent with ISO 50001. 7.2.1 Environmental Protection Greenhouse Gas (GHG) Emission Reduction TSMC is an active participant in international environmental regulatory and protection programs. The Company has taken many measures to reduce its emission of GHGs. For example, TSMC endorsed a memorandum of understanding with the Taiwan Semiconductor Industry Association (TSIA), the Taiwan Environmental Protection Administration (EPA), and the World Semiconductor Council (WSC) to establish the corporate PFC emission reduction policy and action plans proactively, whereby the Company committed to reducing PFC emissions to 10% below the average of 1997 and 1999 by 2010, a commitment that it was proud to make and achieve. The “Greenhouse Reduction and Management Act” established by Taiwan EPA has been in effect since July 1, 2015. The related sub-regulations will be established and announced soon, and TSMC is preparing to take action. In 2005, TSMC was the semiconductor industry company to complete the GHG inventory program and take a complete inventory of its GHG emissions and to gain ISO 14064 certification. The purpose of the inventory is to serve as a baseline reference for TSMC’s strategy to reduce GHG emissions, to meet domestic regulatory requirements, and to prepare for carbon trading and corporate carbon asset management. All TSMC facilities conduct an annual GHG inventory. The inventory shows that the major direct GHG emissions are perfluorinated compounds (PFCs), which are used in the semiconductor manufacturing process. The primary indirect GHG emission is electricity consumption. Thermal power generators, the major source of electricity in Taiwan, emit larger amounts of carbon dioxide (CO2) than any other power generators. Because 70% of GHG emission comes from electricity consumption, TSMC emphasizes energy saving and carbon reduction initiatives. TSMC has not only adopted energy-conserving designs in its manufacturing fabs

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<tr>
<th>Category</th>
<th>Organization</th>
<th>Awards and Recognitions</th>
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<tbody>
<tr>
<td>Environment, Safety and Health</td>
<td>TSMC’s Green Building Council</td>
<td>Leading energy efficient buildings in Taiwan, launches the Green Building Council</td>
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<td></td>
<td>Council</td>
<td>Program (GCC)</td>
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and offices, but has also continuously improved the energy efficiency of its facilities during operation. These efforts simultaneously reduce both carbon dioxide gas emissions and costs.

Since 2015, TSMC has actively participated in the R.O.C. Ministry of Economic Affairs’ voluntary “Green Power Purchasing Program”. In 2016, TSMC purchased 200 million kWh of green power that made up nearly 20% of the Taiwan Power Company’s total green power available for purchase under the program in that year. Since green power is generated with zero carbon emissions, the purchase of 200 million kWh of green power will eliminate over 100 million kilograms of CO2 emissions, equivalent to the carbon absorption by 10 million trees in one year. TSMC hopes that by supporting Taiwan’s renewable energy efforts, it can continue to pursue sustainability, promote a low-carbon environment, and reduce the impact of global warming.

Air and Water Pollution Control
The Company has installed effective air and water pollution control equipment in each wafer fab to meet regulatory emissions standards. In addition, TSMC maintains backup pollution control systems, including emergency power supplies, to lower the risk of pollutant emission in the event of equipment failure. TSMC centrally monitors the operations of its air and water pollution control equipment around the clock and treats system effectiveness as an important tracking item to ensure the quality of emitted air and discharged water.

To make the most effective use of Taiwan’s limited water resources, all TSMC fabs strive to increase water reclamation rates by adjusting the water usage of manufacturing equipment and improving wastewater reclamation systems. All fabs meet or exceed the process water reclamation rate standard of the Science Park Administration. New fabs are able to reclaim more than 80% of process water, and outperforming most semiconductor fabs around the world. TSMC also makes every effort to reduce non-manufacturing-related water consumption, including water used in air conditioning systems, sanitary facilities, cleaning and landscaping activities and kitchens. TSMC uses an intranet website to collect and measure water recycling volumes company-wide.

Since water resources are inherently local, TSMC shares its water saving experiences with other semiconductor companies through the Association of Science-Based Industrial Park to promote water conservation in order to achieve the Science Park’s goals and ensure a long-term balance of supply and demand.

Waste Management and Recycling
The Company has a designated unit responsible for waste recycling and disposal. To meet the goal of sustainable resource utilization, TSMC’s priorities are: (1) reduce process waste, (2) increase onsite reuse, and (3) increase offsite recycling. The last option consists of treatment or disposal. To achieve raw material reduction, resource recycling and the goal of zero waste, TSMC built an in-house waste sulfuric acid pre-treatment system as electronic grade sulfuric acid can be used as waste water treatment agents after the wafer fabrication process. In order to track waste flow and ensure that all waste is treated or recycled legally and properly, TSMC carefully selects waste disposal and recycling contractors and performs annual audits of certification documents and site operations. TSMC also takes proactive steps to strengthen vendor auditing effectiveness. For example, all waste transportation contractors were asked and agreed to join the “GPS Satellite Fleet” so that all the cleanup transportation routes and normal routes for all trucks can be traced. In addition, all waste recycling and treatment vendors have installed closed-circuit TV systems at operating sites to monitor and audit the waste handling. Meanwhile, TSMC also conducts an ongoing survey of recycling product tracking. These actions were taken to ensure lawful and proper waste recycling and treatment, and in 2016 TSMC’s fabs in Taiwan achieved a 95% waste recycling rate, with a landfill rate below 1% for the seventh consecutive year.

Environmental Accounting
The purpose of TSMC’s environmental accounting system is to identify and calculate environmental costs for internal management. At the same time, the Company can also evaluate the savings or economic benefits of environmental protection programs so as to promote cost-effective programs. While environmental expenses are expected to continue growing, environmental accounting can help TSMC manage these costs more effectively. TSMC’s environmental accounting measures various environmental costs, establishes independent environmental account codes, and provides these to all units for use in annual budgeting. The Company’s economic benefit evaluation calculates cost savings for reduction of energy, water or waste and benefits from waste recycling in accordance with its environmental protection programs.

The environmental benefits disclosed in this report include real income from projects such as waste recycling and savings from major environmental projects. In 2016, 184 environmental projects of TSMC fabs were completed and the total benefits, including waste recycling, were more than NT$11,168 million.

Green Building and Green Factory
Since 2006 TSMC has adopted standards from both the Taiwan “Green Building” and the evaluation of the U.S. Green Building Council - Leadership in Energy and Environmental Design (LEED) for new fab and office building designs to achieve better energy and resource efficiency than conventional designs. During this time, TSMC has also continued to upgrade existing office buildings to comply with the LEED standard each year. From 2008 to 2016, 21 of TSMC’s fabs and office buildings have achieved LEED certifications (three platinum-class and 18 gold-class). Meanwhile, TSMC also received three Taiwan Intelligent Building diamond class certifications and 15 Taiwan EEEH (Ecology, Energy Saving, Waste Reduction and Health) diamond class certifications.

TSMC believes that more manufacturing companies should convert their facilities into green factories to improve the environment and lower construction costs. Therefore, the Company freely shares its practical experience with industry, government and academia. As of the end of 2016, 10,245 visitors from 269 different industry, government, academic and general community groups had contacted TSMC’s office to learn about the Company’s green factory practices. Since 2009, TSMC has led the industry in support of the Taiwan government’s “Green Factory Labeling System,” a system that includes “Clean Production Evaluation” and “Green Factory Evaluation”. TSMC received Taiwan’s first “Green Factory Label” and seven labels in total for Fab 12 Phase 4, Fab 14 Phase 3 and Phase 4, Fab 12 Phase 5 and Phase 6, Fab 15 Phase 1 and Phase 2 and Fab 15 Phase 3 and Phase 4.

7.2.2 Green Products
TSMC collaborates with its upstream material and equipment suppliers, design ecosystem partners and downstream assembly and testing service providers to minimize environmental impact. We reduce the resources and energy consumed for each unit of production and are able to provide more advanced, power efficient and ecologically sound products, such as lower-power-consumption chips for mobile devices, high-efficiency LED driver chips for flat panel display backlighting, indoor/outdoor solid state LED lighting, “Energy Star” certified low standby AC-DC adaptors chips, and high-efficiency DC brushless motor chips, etc. By leveraging TSMC’s superior energy-efficient technologies, these chips support sustainable city infrastructure, greener vehicles, smart

### 2016 Environmental Cost of TSMC Fabs in Taiwan

<table>
<thead>
<tr>
<th>Description</th>
<th>Investment Expense</th>
<th>Operational Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Costs for Reducing Environmental Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Pollution Control Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fees for air pollution control, water pollution, and others</td>
<td>7,087,027</td>
<td>3,001,017</td>
</tr>
<tr>
<td>(2) Resource Conservation Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs for resource (e.g. water conservation)</td>
<td>1,048,000</td>
<td></td>
</tr>
<tr>
<td>(3) Indirect Waste Disposal and Recycling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs for waste treatment (including recycling, incremental wastewater)</td>
<td>1,201,369</td>
<td></td>
</tr>
<tr>
<td>Indirect Costs for Reducing Environmental Impact (Environmental Managerial Cost)</td>
<td>94,140</td>
<td>242,518</td>
</tr>
<tr>
<td>(1) Cost for managing environmental programs and certification expenditures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Environmental impact measurement and monitoring fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Environmental pollution control product costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Environmental pollution control organization fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Other Environmental Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Costs for decommission and remediation (Environmental damage avoidance fees and environmental tax and expenses)</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9,165,583</td>
<td>5,871,023</td>
</tr>
</tbody>
</table>

### 2016 Environmental Efficiency of TSMC Fabs in Taiwan

<table>
<thead>
<tr>
<th>Description</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cost Savings of Environmental Protection Project</td>
<td>227,000</td>
</tr>
<tr>
<td>Waste savings: completed 88 projects</td>
<td>16,079</td>
</tr>
<tr>
<td>Waste reduction completed 35 projects</td>
<td>163,000</td>
</tr>
<tr>
<td>2. Final Income from Industrial Waste Recycling</td>
<td>420,000</td>
</tr>
<tr>
<td>Recycling of used material, water, targets, bulks, lamps, packaging materials, paper waste, metal, plastics, and other waste</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,186,037</td>
</tr>
</tbody>
</table>
gards, and so on. In addition to helping customers design low-power, high-performance products to reduce resource consumption over the product’s life cycle, TSMC’s green manufacturing practices provide additional “Green Value” to customers and other stakeholders.

TSMC-manufactured ICs are used in a broad variety of applications covering various segments of the computer, communications, consumer, industrial and other electronics markets. Through TSMC’s manufacturing technologies, customers’ designs are realized and their products are incorporated into people’s lives. These chips, therefore, make significant contributions to the progress of modern society. TSMC works hard to achieve profitable growth while providing products that add environmental and social value. Listed below are several examples of how TSMC-manufactured products significantly contribute to the environment and society.

Environmental Contribution by TSMC Foundry Services

1. Continue to Drive Technology to Lower Power Consumption and Save Resources
   - TSMC continues to drive the development of advanced semiconductor process technologies to support customer designs that result in the most advanced, energy-saving and environmentally friendly products to improve sustainability. In each new technology generation, circuitry line widths shrink, making transistors smaller and reducing product power consumption.
   - TSMC has quickly ramped up its 28nm and beyond technologies. Wafer revenue contribution from 28nm and below technologies grew significantly from 12% in 2012 to 54% in 2016. TSMC’s objective is to continue R&D efforts in 28nm and beyond technologies and to increase the wafer revenue contribution from 28nm and beyond technologies, helping the Company achieve both profitable growth and energy savings.

2. Provide Customers Leading Power Management IC Process with the Highest Efficiency
   - TSMC’s leading manufacturing technology helps customers design and produce green products. Power management ICs, the key components that regulate and supply power to all other IC components, are the most notable green IC products. TSMC helps customers produce industry-leading power management chips with more stable and efficient power supplies and lower energy consumption.
   - In 2016, TSMC’s Hi/Power technologies collectively shipped more than 2.1 million 8-inch equivalent wafers to customers. In total, power management ICs manufactured by TSMC accounted for more than one-third of global computer, communication and consumer systems.

3. Green Manufacturing that Lowers Energy Consumption
   - TSMC continues to develop more advanced and efficient technologies to reduce energy/resource consumption and pollution per unit during the manufacturing process as well as power consumption and pollution during product use. In each new technology generation, circuitry line widths shrink, making circuits smaller and lowering the energy and raw materials consumed for per unit of manufacturing. In addition, the Company continuously provides process simplification and new design methodology based on its manufacturing excellence to help customers reduce design and process waste so as to produce more advanced, energy-saving and environmentally-friendly products. To see the total energy savings and benefits realized in 2016 through TSMC’s green manufacturing, please refer to Environmental Accounting on pages 124-125 in this annual report.

Social Contribution by TSMC Foundry Services

1. Unleash Customers’ Mobile and Wireless Chip Innovations that Enable Mobility and Convenience
   - The rapid growth of smartphones and tablets in recent years reflects strong demand for mobile devices, which, in turn, offer remarkable convenience. TSMC contributes significant value to these devices, including: (1) new TSMC process technology helps chips achieve faster computing speeds in a smaller die area, leading to smaller form factors for these electronic devices. In addition, TSMC SoC technology integrates more functions into one chip, reducing the total number of chips in electronic devices, again resulting in a smaller system form factor; (2) new TSMC process technology also helps chips consume less energy. People can therefore use mobile devices for a longer period of time; and (3) TSMC helps spread the growth of more convenient wireless connectivity such as 3G/4G and WLAN/Bluetooth, meaning people can communicate more efficiently and “work anytime and anywhere,” significantly improving the mobility of modern society.
   - Mobile computing related products, such as baseband, RF transceivers, application processors (AP), wireless local area networks (WLAN), imaging sensors, near field communication (NFC), Bluetooth, and global positioning systems (GPS) among others, represented 52% of TSMC wafer revenue in 2016.
   - TSMC Wafer Revenue Contribution from Mobile Computing Related Products

2. Unleash Customers’ CIS (CMOS image sensor) and MEMS (micro electro mechanical systems) Innovations that Enhance Human Health and Safety
   - In addition to smartphones, tablets and many other consumer electronic devices, TSMC-manufactured CIS and MEMS chips are widely used in medical treatment and health care applications. By leveraging the Company’s advanced technologies, more and more chips for these applications are introduced to the market, providing major contributions to modern medicine. Customers’ CIS and MEMS products are used in a number of advanced medical treatments as well as in preventative health care applications. Examples include early warning systems to minimize the injury from falls for the elderly, systems to detect physiological changes, car safety systems and other applications that greatly enhance human health and safety.

7.2.3 Safety and Health

Safety and Health Management

TSMC’s safety and health management is built on the framework of the OHSAS 18001 system and adheres to the management principle of “Plan, Do, Check, Act” to prevent accidents, promote employee safety and health and protect Company assets. All TSMC fabs in Taiwan have also received TOSHIBA (Taiwan Occupational Safety and Health Management System) certification.

Besides accident prevention, TSMC has established emergency response procedures to protect employees and contractors if a disaster should occur, as well as to prevent and/or reduce the negative impact on society and the environment. TSMC continually communicates with its suppliers to ensure that potential risk in the operation of production equipment is minimized, and rigorously follows safety control procedures when installing production equipment. The Company places stringent controls on high-risk operations and also evaluates the seismic tolerance of its facilities and equipment to reduce the risk of earthquake damage.
For epidemics, TSMC has established company-level prevention committees and procedures for emergency response to outbreaks of infectious diseases.

Working Environment and Employee Safety and Health Protection

TSMC’s ESH policy is focused on establishing a safe working environment, preventing occupational injury and illness, keeping employees healthy, enhancing every employee’s awareness and sense of accountability to ESH, and building an ESH culture. TSMC safety and health management operations apply to:

- **Equipment Safety and Health Management**
  In addition to meeting regulatory requirements and internal standards, as well as mitigating ESH-related risks when building or upgrading facilities, TSMC also maintains procedures governing new equipment, enhancing every employee’s awareness and sense of accountability to ESH, and building an ESH culture. TSMC safety and health management operations apply to:

  - **General Safety Management, Training and Audit**
    - **All TSMC manufacturing facilities hold environmental, safety and health committee meetings on a monthly basis. TSMC operates many diversified process tools and introduces new chemicals in the R&D stage. Before using those new tools and new chemicals, they are reviewed carefully by the “New Chemicals and New Chemical Substances” committee.**
    - **TSMC requires that all new tools meet SEMI-S8 requirements and that appropriate supplementary control measures be taken to reduce ergonomic risk.** Moreover, TSMC endeavors to automate 300mm front-opening unified pod (FOUP) transportation to prevent accumulative physical damage caused by repetitive manual handling of 300mm FOUPs. TSMC 300mm fabs have completed automatic transportation control.

- **Equipment Safety and Health Management**
  - **In addition to meeting regulatory requirements and internal standards, as well as mitigating ESH-related risks when building or upgrading facilities, TSMC also maintains procedures governing new equipment, enhancing every employee’s awareness and sense of accountability to ESH, and building an ESH culture. TSMC safety and health management operations apply to:**

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- **Environmental, Safety and Health Evaluation of New Tools and New Chemical Substances**
  - **As a technology leader in the global semiconductor industry, TSMC operates many diversified process tools and introduces new chemicals in the R&D stage. Before using those new tools and new chemicals, they are reviewed carefully by the “New Tools and New Chemical Review Committee”. The purpose is to ensure that new tools are compliant with the semiconductor industry’s safety standards (such as SEMI S2) and that new chemicals’ environmental, safety and health concerns can be well controlled, including engineering controls, application of personal protective equipment, and operational safety training during storage, transportation, usage and disposal.**

- **Employee Physical and Mental Health Enhancement**
  - **To protect and promote employee physical and mental health, TSMC fosters collaboration among the onsite industrial safety and environmental protection department, onsite medical personnel of the health center, and physicians of occupational medicine. TSMC strives to reduce cardiovascular disease that might be induced or aggravated by overwork, night work or shift work, and conducts maternal health protection programs as well. TSMC devotes significant resources to mental health awareness and related activities, which not only protect employees from hazards at work but also proactively promote employee health in general. In 2016, through planned personal health management, 45.6% of personnel diagnosed at high risk for cardiovascular disease shifted to low risk. 801 female employees participated in the maternal health program. For five consecutive years TSMC has held a series of physical and mental health activities. 691 employees have joined the weight-loss program, losing a total of 1,942 kilograms collectively. For smoking cessation, 115 employees participated with a success rate of 67% during a three-month period, exceeding the 32% goal set by the promotion administration. 781 employees completed the sleep quality improvement program, which included one-on-one medical consultation to improve life quality.

- **Supplier and Contractor Management**
  - **Supplier Management**
    - **As a means of enhancing its supply chain management, TSMC is committed to communicating with and encouraging its contractors and suppliers to improve their quality, cost effectiveness, delivery performance and sustainability on environmental protection, safety and health. Through regular communication with senior managers, site audits and experience sharing, TSMC collaborates with major suppliers and contractors to enhance cooperation and ensure continual improvement for better performance and increased joint contributions to society. As noted above, contractors performing high-risk activities must lay out clearly defined safety precautions and preventative measures. In addition, contractors working on high-risk engineering projects must establish OSHAS 18001 systems and the workers must successfully complete work skill training.**

- **General Safety Management, Training and Audit**
  - **All TSMC manufacturing facilities hold environmental, safety and health committee meetings on a monthly basis. TSMC adopts multiple preventive measures such as controls on high-risk work, contractor management, chemical safety management, personal protective equipment requirements, and safety audit management. In addition, TSMC maintains detailed disaster response procedures and performs regular drills designed to minimize harm to employees and property, as well as the impact on society and the environment in the event of a disaster.**

- **Working Environment Hazards Factors Management**
  - **TSMC conducts workplace hazard assessments and interventions to provide a comfortable and safe workplace to employees. TSMC also requires employees to use personal protective equipment (PPE) to prevent hazardous exposures. TSMC performs semi-annual workplace environment assessments of physical and chemical hazards, including CO2 concentration, illumination, noise, and hazardous chemical substances regulated by local laws. The Company performs exposure assessments and uses hierarchy management control for chemicals with potential health hazards since 2015. If abnormal measurements or events happen or an exposure assessment indicates there is an adverse health effect for employees, ESH professionals immediately conduct onsite observation and interventions to reduce the exposure to acceptable levels.**

- **Emergency Response**
  - **The planning and execution of an effective emergency response should identify high-risk events from risk assessment and be prepared for various scenarios. It should focus on continuous improvement and practice drills covering all potentially severe events. TSMC’s emergency response plans include procedures for rapid-response crisis management and disaster recovery to potential incidents.**

- **Employee Physical and Mental Health Enhancement**
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- **Supply Chain Sustainability**
  - **TSMC works with its suppliers in several fields of sustainable development, such as greening the supply chain, carbon management for climate change, mitigation of fire risk, ESH management and business continuity plans for natural disasters.**

Since becoming a full member of the Electronic Industry Citizenship Coalition (EICC) in 2015, TSMC has completed the adoption of the EICC Code of Conduct across the Company by performing self-assessments at its facilities worldwide and reviewing policies and procedures in the areas of labor, health and safety, environment, ethics, and management systems.

To enhance supply chain sustainability and streamline risk management, TSMC is committed to collaborating with its suppliers to maintain full compliance with Taiwan’s environmental, safety, health and fire regulations, and to establish the necessary management capability as well as continuous enhancement.

TSMC is subject to the U.S. Securities & Exchange Commission (SEC) disclosure rule on conflict minerals released under Rule 13p-1 of the U.S. Securities Exchange Act of 1934. As a recognized global leader in the high-tech supply chain, the Company acknowledges its corporate social responsibility to strive to procure conflict-free minerals in an effort to recognize humanitarian and ethical social principles that protect the dignity of all people. To this end, TSMC has implemented a series of compliance safeguards in accordance with leading industry practices such as adopting the due diligence framework in the OECD’s Model Supply Chain Policy for a Responsible Global Supply Chain of Minerals from Conflict-Affected and High Risk Areas issued in 2011.

TSMC is one of the strongest supporters of the Electronic Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI), and this will help the Company’s suppliers source conflict-free minerals through...
240,000 children have been helped with more than 210,000 100 good books to 200 high schools and primary schools in the CommonWealth Foundation, which each year donates with rural regions. Cooperating with several social groups, widens the cultural, educational and digital-resource gap growth and development in cities and urban areas, which Industrialization, informatization and globalization are spurring.

Corporate Contributions to Bridge the Urban-Rural Gap

In 1998 to make CSR contributions. In 2016, the TSMC Foundation contributed over NT$75.81 million to various in top universities, the TSMC Foundation sponsors the “Rising Sun Plan” of National Tsing Hua University and the “Sunflower Plan” of National Central University. In 2016, the TSMC Foundation provided 19 students with NT$1.62 million in scholarships and launched textbook donations to lighten their community reading platforms.

Building Educational Platforms

Fostering Multi-Competence Talents and Helping Youth Reach Their Dreams

To enhance student interests in the sciences and humanities, the TSMC Foundation organizes national science contests, science camps and humanities activities. These events build a stage for the youth, giving them the opportunity not only to showcase their talents but also to discover themselves and to consider their future.

To encourage those in the younger generation to chase their dreams, the TSMC Foundation launched the first “TSMC Dream Builders of Youth Project”. More than 166 teams composed of 500 college students from Taoyuan, Hsinchu and Miaoli, applied for the project. Before these build a stage for the youth, giving them the opportunity not only to showcase their talents but also to discover themselves and to consider their future.

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7.4 TSMC Volunteer Program

TSMC Volunteer Program

TSMC Volunteer Program: TSMC is devoted to the protection of the environment. The Company values land for ecological projects at every new fab, and applies multilevel ecological engineering methods, which include planting native tree species and bird-attracting-attracting plants, providing habitats and foraging places for animals. These are aimed at creating a biodiversity environment and protecting the environment around the fab. Service locations: Hsinchu Fab 12B, Taichung Fab 15, Tainan Jacana Ecology Education Park.

TSMC Fab/Division Volunteer Program: Exercising corporate social responsibility is always an extremely important part of returns and services provided by TSMC to the public. With support of executive officers and the enthusiastic response of employees, the fab/division volunteer program was created in 2013. It has shaped CSR culture inside the Company and "Do good" becomes popular among the fab. The warm and strong figures of TSMC volunteers are everywhere—activities include: environmental protection, promotion of energy conservation, caring for the disadvantaged, promotion of education, help for farmers and workers, and charitable donations to protect Taiwan identity.

7.5 TSMC i-Charity

"TSMC-iCharity" is an interactive online platform launched in 2014 for employees to proactively take part in philanthropic activities and give back to society. The intranet opens a channel for TSMC employees to propose caring projects, share results, suggest new ideas and participate in philanthropic events directly and in a timely manner.

In 2016, 6,826 attendees participated in the following projects, as over NT$12 million in contributions were received:
- Light up the Tribe with Love—Construction for Hualien Xiu-Lin School
- Caring for Disadvantaged Children—Call for Hualien Volunteer
- TSMC Bookcase—Caring for Disadvantaged Children with Knowledge and Love
- Taichung St. Mary Hospital Reconstruction
- School Building, Repairing and Construction for Tainan Hsin-Sheng Elementary School
- Jun-Yi Academy Platform
- Teach for Taiwan
- School Building Repair Construction for National Taitung Jr. College
- Build up the Dreams with Love—Yuan-Dong Junior High School
- Healthy program for west Taiwan—Early lung cancer detection with Low-Dose Computed Tomography

With this interactive platform, TSMC hopes to maintain its commitment to society and encourage employees to join in efforts to care for and give back to society in all ways.

7.6 Social Responsibility Implementation Status as Required by the Taiwan Financial Supervisory Commission

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Implementation Status</th>
<th>Non-implementation and its Reason(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Implementation of Corporate Governance (1) Does the company have a corporate social responsibility policy and evaluate its implementation?</td>
<td>X</td>
<td>(1) Please refer to &quot;T. Corporate Social Responsibility&quot; on pages 118-123 of this Annual Report.</td>
</tr>
<tr>
<td>(1) Does the company review CSR training?</td>
<td>X</td>
<td>(2) Please refer to &quot;7.5 Code of Ethics and Business Conduct&quot; on pages 143-146 of this Annual Report.</td>
</tr>
<tr>
<td>(1) Does the company have a dedicated CSR organization?</td>
<td>X</td>
<td>(3) Please refer to &quot;T. Corporate Social Responsibility&quot; on pages 118-123 of this Annual Report.</td>
</tr>
<tr>
<td>(1) Does the company make a self-assessment report of CSR practices?</td>
<td>X</td>
<td>(4) Social responsibility is regarded as an integral part of corporate governance. This &quot;TSMC&quot; has self-assessment policy in line with the requirement of the Code of the Company’s corporate governance and operates; corporate social responsibility evaluation conducted. Please refer to &quot;T. Corporate Social Responsibility&quot; on pages 118-123 of this Annual Report.</td>
</tr>
<tr>
<td>2. Environmental and Sustainable Development (1) Does the company evaluate environmental performance to improve the use of renewable materials and low environmental impact?</td>
<td>X</td>
<td>(1) Please refer to &quot;7.2.1 Environmental Protection&quot; on pages 123-125 of this Annual Report.</td>
</tr>
<tr>
<td>(2) Does the company participate in the Environmental Management System?</td>
<td>X</td>
<td>(2) Environmental Management System is designed to reduce biomass and greenhouse gas emission.</td>
</tr>
<tr>
<td>(3) Does the company evaluate the climate change on operations, energy and greenhouse gas inventories, and energy conservation and greenhouse gas reduction strategy?</td>
<td>X</td>
<td>(3) Exit of greenhouse gas inventories and energy conservation and greenhouse gas reduction strategy.</td>
</tr>
<tr>
<td>3. Promotion of Social Welfare (1) Does the company encourage employees to propose caring projects, share results, suggest new ideas and participate in philanthropic events directly and in a timely manner?</td>
<td>X</td>
<td>(4) None.</td>
</tr>
<tr>
<td>(2) Does the company evaluate its implementation?</td>
<td>X</td>
<td>(5) None.</td>
</tr>
<tr>
<td>(3) Does the company evaluate its implementation?</td>
<td>X</td>
<td>(6) None.</td>
</tr>
<tr>
<td>(2) Does the company develop, implement and maintain an employee grievance procedure?</td>
<td>X</td>
<td>(2) Please refer to &quot;T. Human Capital&quot; on page 79-81 of this Annual Report.</td>
</tr>
<tr>
<td>(3) Does the company develop, implement and maintain an employee grievance procedure?</td>
<td>X</td>
<td>(3) Please refer to &quot;T. Human Capital&quot; on page 79-81 of this Annual Report.</td>
</tr>
<tr>
<td>(4) Does the company develop, implement and maintain an employee grievance procedure?</td>
<td>X</td>
<td>(4) Please refer to &quot;T. Human Capital&quot; on page 79-81 of this Annual Report.</td>
</tr>
<tr>
<td>(5) Does the company develop, implement and maintain an employee grievance procedure?</td>
<td>X</td>
<td>(5) Please refer to &quot;T. Human Capital&quot; on page 79-81 of this Annual Report.</td>
</tr>
<tr>
<td>(6) Does the company develop, implement and maintain an employee grievance procedure?</td>
<td>X</td>
<td>(6) None.</td>
</tr>
<tr>
<td>5. Environment (1) Does the company evaluate its environmental performance?</td>
<td>X</td>
<td>(1) Please refer to &quot;T. Corporate Social Responsibility&quot; on pages 118-123 of this Annual Report.</td>
</tr>
<tr>
<td>(2) Does the company review its environmental performance?</td>
<td>X</td>
<td>(2) Please refer to &quot;T. Corporate Social Responsibility&quot; on pages 118-123 of this Annual Report.</td>
</tr>
<tr>
<td>(3) Does the company review its environmental performance?</td>
<td>X</td>
<td>(3) Please refer to &quot;T. Corporate Social Responsibility&quot; on pages 118-123 of this Annual Report.</td>
</tr>
<tr>
<td>6. Operational Risks (1) Does the company establish its corporate social responsibility code of practice according to &quot;Listed Companies Corporate Social Responsibility Code of Practice&quot;?</td>
<td>X</td>
<td>(1) None.</td>
</tr>
<tr>
<td>(2) Does the company evaluate its environmental performance to improve the use of renewable materials and low environmental impact?</td>
<td>X</td>
<td>(2) None.</td>
</tr>
<tr>
<td>(3) Does the company evaluate its implementation?</td>
<td>X</td>
<td>(3) None.</td>
</tr>
</tbody>
</table>

Note: None
TSMC Nanjing Company Limited

TSMC Nanjing Company Limited was established in May 2016 to provide 12-inch wafer capacity, and is scheduled to commence production of 16-nanometer process technology in the second half of 2018.
8. Subsidiary Information and Other Special Notes

8.1 Subsidiaries

8.1.1 TSMC Subsidiaries Chart

As of 12/31/2016

8.1.2 Business Scope of TSMC and Its Subsidiaries

TSMC and its subsidiaries strive to provide the best foundry services in the industry. Subsidiaries in North America, Europe, Japan, China and South Korea are dedicated to serving TSMC customers worldwide. WaferTech in the United States and TSMC China provide additional 8-inch wafer capacity. TSMC Nanjing will begin to provide additional 12-inch wafer capacity in 2018. Other subsidiaries support the Company’s core foundry business with related services such as design service and investment in start-up companies involved in design, manufacturing, and other related businesses in the semiconductor industry.

8.1.3 TSMC Subsidiaries

In thousands of NT$ (US$), EUR, JPY, BRL, RMB, CAD, JPY

As of 12/31/2016

Note 1: TSMC Nanjing Company Limited was established in May 2016.
Note 2: To simplify investment structure, VisEra Technologies Company Ltd. owned by VisEra Holding Company was transferred to TSMC in August 2016. In October 2016, VisEra Holding Company was incorporated into TSMC Partners, Ltd., the subsidiary of TSMC.
Note 3: InveStar Semiconductor Development Fund, Inc and InveStar Semiconductor Development Fund, Inc. (II) LDC. have started the liquidation procedures.
Note 4: VisEra Technologies Company Ltd. (Note 4) Dec. 01, 2003 Hsinchu, Taiwan NT$ 2,911,531 Engaged in manufacturing electronic spare parts and in the testing of RFID devices

Note 7: TSMC North America Shareholding: 100%

Note 8: TSMC Europe B.V. Shareholding: 100%

Note 9: TSMC Korea Limited Shareholding: 100%

Note 10: TSMC China Company Limited Shareholding: 100%

Note 11: TSMC Nanjing Company Limited (Note 1) Shareholding: 100%

Note 12: InterStar Semiconductor Development Fund, Inc., (Note 3) Shareholding: 97.39%

Note 13: InterStar Semiconductor Development Fund, Inc. (3) LOC. (Note 3) Shareholding: 97.20%

Note 14: TSMC Technology, Inc. Shareholding: 100%

Note 15: TSMC Development, Inc. Shareholding: 100%

Note 16: WallerTech, LLC Shareholding: 100%

Note 17: TSMC Solar Europe GmbH Shareholding: 100%
### 8.1.4 Shareholders in Common of TSMC and Its Subsidiaries with Deemed Control and Subordination: None.

### 8.1.5 Rosters of Directors, Supervisors, and Presidents of TSMC’s Subsidiaries

<table>
<thead>
<tr>
<th>Company Title Name</th>
<th>Shareholding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company</strong> Title Name</td>
<td>Shareholding</td>
</tr>
<tr>
<td><strong>TSMC North America</strong></td>
<td></td>
</tr>
<tr>
<td>Director Sylvia Fang</td>
<td>-</td>
</tr>
<tr>
<td>Director Rick Cassidy</td>
<td>-</td>
</tr>
<tr>
<td>President Rick Cassidy</td>
<td>-</td>
</tr>
<tr>
<td><strong>TSMC Europe B.V.</strong></td>
<td></td>
</tr>
<tr>
<td>Director Mark Indeau</td>
<td>-</td>
</tr>
<tr>
<td>Director Maleko Charides</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor Lora Ho</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor Sylvia Fang</td>
<td>-</td>
</tr>
<tr>
<td>President Rick Cassidy</td>
<td>-</td>
</tr>
<tr>
<td><strong>TSMC Japan Limited</strong></td>
<td></td>
</tr>
<tr>
<td>Director Chih-Chun Tsai</td>
<td>-</td>
</tr>
<tr>
<td>Director Makoto Onodera</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor Lora Ho</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor Makoto Onodera</td>
<td>-</td>
</tr>
<tr>
<td>President Makoto Onodera</td>
<td>-</td>
</tr>
<tr>
<td><strong>TSMC Korea Limited</strong></td>
<td></td>
</tr>
<tr>
<td>Director Shing-Wha Lin</td>
<td>-</td>
</tr>
<tr>
<td>Director Chih-Chun Tsai</td>
<td>-</td>
</tr>
<tr>
<td>Director Wendell Huang</td>
<td>-</td>
</tr>
<tr>
<td><strong>TSMC China Company Limited</strong></td>
<td></td>
</tr>
<tr>
<td>Chairman F.C. Tseng</td>
<td>-</td>
</tr>
<tr>
<td>Director M.C. Tzeng</td>
<td>-</td>
</tr>
<tr>
<td>Director L.C. Tu</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor Lora Ho</td>
<td>-</td>
</tr>
<tr>
<td>President L.C. Tu</td>
<td>-</td>
</tr>
<tr>
<td><strong>TSMC Nanjing Company Limited</strong></td>
<td></td>
</tr>
<tr>
<td>Chairman C.C. Wei</td>
<td>-</td>
</tr>
<tr>
<td>Director J.K.Wang</td>
<td>-</td>
</tr>
<tr>
<td>Director Cliff Hou</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor Lora Ho</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor Sylvia Fang</td>
<td>-</td>
</tr>
<tr>
<td>President Roger Luo</td>
<td>-</td>
</tr>
<tr>
<td><strong>TSMC Technology, Inc.</strong></td>
<td></td>
</tr>
<tr>
<td>Chairman Lora Ho</td>
<td>-</td>
</tr>
<tr>
<td>Director Sylvia Fang</td>
<td>-</td>
</tr>
<tr>
<td>President Lora Ho</td>
<td>-</td>
</tr>
<tr>
<td><strong>InveStar Semiconductor Development Fund, Inc.</strong></td>
<td></td>
</tr>
<tr>
<td>Director M.C. Tzeng</td>
<td>-</td>
</tr>
<tr>
<td>Director Steve Tso</td>
<td>-</td>
</tr>
<tr>
<td>President Tsung-Chia Kuo</td>
<td>-</td>
</tr>
<tr>
<td><strong>TSMC Development, Inc.</strong></td>
<td></td>
</tr>
<tr>
<td>Chairman Hsu-Tung Chen</td>
<td>1,107,010 shares</td>
</tr>
<tr>
<td>Director Lewis Hwang</td>
<td>2,508,000 shares</td>
</tr>
<tr>
<td>Director Representative of VentureTech Alliance Fund III, L.P.: Juine-Kai Tseng</td>
<td>15,643,347 shares</td>
</tr>
<tr>
<td>Supervisor Wei-Pong Lin</td>
<td>30,000 shares</td>
</tr>
<tr>
<td>President Lewis Hwang</td>
<td>2,508,000 shares</td>
</tr>
<tr>
<td><strong>TSMC Global Ltd.</strong></td>
<td></td>
</tr>
<tr>
<td>Director Sylvia Fang</td>
<td>-</td>
</tr>
<tr>
<td>President Sylvia Fang</td>
<td>-</td>
</tr>
<tr>
<td><strong>TSMC Technology Canada Inc.</strong></td>
<td></td>
</tr>
<tr>
<td>Director Cyril Hau</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note 1: TSMC Nanjing Company Limited was established in May 2016.*

*Note 2: InveStar Semiconductor Development Fund, Inc. and InveStar Semiconductor Development Fund, Inc. (II) LDC have started the liquidation procedures.*

*Note 3: The dissolution procedures of TSMC Solar Europe GmbH will be completed by the end of June 2017.*

*Note 4: Pursuant to TSMC Board’s approval on August 2, 2016, TSMC acquired 86.94% shareholding in VisEra Technologies Company Ltd. from VisEra Holding Company, a wholly-owned subsidiary of TSMC. In August 2016, to streamline investment structure, VisEra Holding Company was merged into TSMC Partners, Ltd., the subsidiary of TSMC, in October 2016.*
### 8.1.6 Operational Highlights of TSMC Subsidiaries (Note)

<table>
<thead>
<tr>
<th>Company</th>
<th>Capital Stock</th>
<th>Assets</th>
<th>Liabilities</th>
<th>Net Worth</th>
<th>Net Revenues</th>
<th>Income (Loss) from Operation</th>
<th>Net Income (Loss)</th>
<th>Basic Earning (Loss) Per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC North America</td>
<td>341,189</td>
<td>96,698,409</td>
<td>92,295,121</td>
<td>4,399,285</td>
<td>621,278,423</td>
<td>126,097</td>
<td>156,573</td>
<td>17.74</td>
</tr>
<tr>
<td>TSMC Europe B.V.</td>
<td>1,420</td>
<td>802,807</td>
<td>130,192</td>
<td>672,615</td>
<td>672,615</td>
<td>19,524</td>
<td>48,975</td>
<td>321,250.00</td>
</tr>
<tr>
<td>TSMC Japan Limited</td>
<td>92,350</td>
<td>147,273</td>
<td>84,247</td>
<td>63,026</td>
<td>254,362</td>
<td>10,584</td>
<td>3,461</td>
<td>64.50</td>
</tr>
<tr>
<td>TSMC Korea limited</td>
<td>14,782</td>
<td>18,380</td>
<td>2,896</td>
<td>15,484</td>
<td>24,766</td>
<td>2,251</td>
<td>2,076</td>
<td>22.45</td>
</tr>
<tr>
<td>TSMC China Company Limited</td>
<td>26,884,467</td>
<td>33,717,208</td>
<td>11,234,504</td>
<td>22,482,704</td>
<td>33,717,208</td>
<td>4,871</td>
<td>41,814</td>
<td>NA</td>
</tr>
<tr>
<td>TSMC Singapore Company Limited</td>
<td>6,336,229</td>
<td>7,168,813</td>
<td>643,195</td>
<td>6,525,618</td>
<td>6,525,618</td>
<td>2,756</td>
<td>9,175</td>
<td>871,801.68</td>
</tr>
<tr>
<td>TSMC FinTech, Inc.</td>
<td>0</td>
<td>905,405</td>
<td>905,405</td>
<td>0</td>
<td>905,405</td>
<td>905,405</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>InveStar Semiconductor Development Fund, Inc.</td>
<td>0</td>
<td>15,744</td>
<td>15,744</td>
<td>0</td>
<td>0</td>
<td>(69)</td>
<td>(69)</td>
<td>0.04</td>
</tr>
<tr>
<td>InveStar Semiconductor Development Fund, Inc. (II)</td>
<td>0</td>
<td>172,241</td>
<td>172,241</td>
<td>0</td>
<td>0</td>
<td>2,925</td>
<td>2,925</td>
<td>0.31</td>
</tr>
<tr>
<td>TSMC Development, Inc.</td>
<td>0</td>
<td>22,404,794</td>
<td>0</td>
<td>22,404,794</td>
<td>22,404,794</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>TSMC Global Technology Canada Inc.</td>
<td>22,404,794</td>
<td>22,404,794</td>
<td>0</td>
<td>22,404,794</td>
<td>22,404,794</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>TSMC Global Limited</td>
<td>234,537,516</td>
<td>302,832,007</td>
<td>67,197,279</td>
<td>235,634,729</td>
<td>235,634,729</td>
<td>2,818,659</td>
<td>497,904.06</td>
<td>0.00</td>
</tr>
<tr>
<td>Mutual FTE Technology Co., Ltd.</td>
<td>248,189</td>
<td>248,189</td>
<td>0</td>
<td>248,189</td>
<td>248,189</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>VanirTech Alliance Fund I, Ltd.</td>
<td>468,127</td>
<td>468,127</td>
<td>0</td>
<td>468,127</td>
<td>468,127</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>VanirTech Alliance Fund II, Ltd.</td>
<td>3,167,486</td>
<td>3,167,486</td>
<td>0</td>
<td>3,167,486</td>
<td>3,167,486</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Growth Fund Limited</td>
<td>47,067</td>
<td>24,966</td>
<td>0</td>
<td>24,966</td>
<td>24,966</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>VanirTech Alliance Holding, Inc.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>TSMC Sales Europe GmbH</td>
<td>10,781</td>
<td>10,781</td>
<td>0</td>
<td>10,781</td>
<td>10,781</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Polysil Technologies Company Ltd.</td>
<td>2,811,121</td>
<td>2,811,121</td>
<td>0</td>
<td>2,811,121</td>
<td>2,811,121</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Note:** Foreign exchange rates for balance sheet amounts are as follows:
- $1 USD = $32.199 NT, $1 EUR = $34.30 NT, $1 JPY = $0.2775 NT, $1 RMB = $4.63 NT, $1 KRW = $0.0268 NT, $1 CAD = $23.92 NT
- Foreign exchange rates for income statement amounts are as follows:
- $1 USD = $32.274 NT, $1 EUR = $35.92 NT, $1 JPY = $0.2987 NT, $1 RMB = $4.86 NT, $1 KRW = $0.0280 NT, $1 CAD = $24.44 NT

### 8.2 Status of TSMC Common Shares and ADRs Acquired, Disposed of, and Held by Subsidiaries: None.

### 8.3 Special Notes

#### 8.3.1 Private Placement Securities in 2016 and as of the Date of this Annual Report: None.

#### 8.3.2 Regulatory Authorities’ Legal Penalties to the Company or its Employees, and the Company’s Resulting Punishment on its Employees for Violations of Internal Control System Provisions, Principal Deficiencies, and the State of Any Efforts to Make Improvements in 2016 and as of the Date of this Annual Report

In 2016 and as of the Date of this Annual Report, the Company complied with the Taiwan Company Law, Securities Trading Act and relevant labor laws and regulations. The competent authorities levied fines totaling NT$168,000 for three violations of environmental and safety laws: (1) After the magnitude 6.4 earthquake which struck southern Taiwan on February 6, 2016, one of our employees was injured during the assessment of the damage caused. The Company has further strengthened relevant safety measures, and revised the internal rule to enhance environmental checks conducted after earthquakes; (2) Our vendors did not take effective measures to suppress dust at our construction site. The vendors have taken corrective action measures and increased relevant supervisory and execution professionals per our request. We also increased our own supervision over this site; (3) The Company did not appropriately report the non-production of a specific type of non-hazardous waste. We submitted our report immediately upon notification from the competent authority and enhanced the inspection process for future reporting.

#### 8.3.3 Any Events in 2016 and as of the Date of this Annual Report that Had Significant Impacts on Shareholders’ Right or Security Prices as Stated in Item 3 Paragraph 2 of Article 36 of Securities and Exchange Law of Taiwan:

None.

#### 8.3.4 Other Necessary Supplement: None.
Contact Information

Corporate Headquarters & Fab 12A
8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu 30078, Taiwan, R.O.C.
Tel: +886-3-5636688 Fax: +886-3-5637000

R&D Center & Fab 12B
168, Park Ave. II, Hsinchu Science Park, Hsinchu 30075, Taiwan, R.O.C.
Tel: +886-3-5636688 Fax: +886-3-6687827

Fab 2, Fab 5
121, Park Ave. 3, Hsinchu Science Park, Hsinchu 30077, Taiwan, R.O.C.
Tel: +886-3-5636688 Fax: +886-3-5781546

Fab 3
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Fab 6
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Tel: +886-6-5056688 Fax: +886-6-5052057

Fab 8
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Tel: +886-3-5636688 Fax: +886-3-5662051

Fab 14A
1-1, Nan-Ke North Rd., Tainan Science Park, Tainan 74144, Taiwan, R.O.C.
Tel: +886-6-5056688 Fax: +886-6-5051262

Fab 14B
17, Nan-Ke 9th Rd., Tainan Science Park, Tainan 74144, Taiwan, R.O.C.
Tel: +886-6-5056688 Fax: +886-6-5055217

Fab 15A
1, Keya Rd. 6, Central Taiwan Science Park, Taichung 42882, Taiwan, R.O.C.
Tel: +886-4-27026688 Fax: +886-4-25607548

Fab 15B
1, Xinke Rd., Central Taiwan Science Park, Taichung 40763, Taiwan, R.O.C.
Tel: +886-4-27026688 Fax: +886-4-24630372

TSMC North America
2851 Junction Avenue, San Jose, CA 95134, U.S.A.
Tel: +1-408-3828000 Fax: +1-408-3828008

TSMC Europe B.V.
World Trade Center, Zuidplein 60, 1077 XV Amsterdam
The Netherlands
Tel: +31-20-3059900 Fax: +31-20-3059911

TSMC Japan Limited
21F, Queen’s Tower C, 2-3-5, Minatomirai, Nishi-ku, Yokohama
Kanagawa, 220-6221, Japan
Tel: +81-45-6820470 Fax: +81-45-6820673

TSMC China Company Limited
4000, Wen Xiang Road, Songjiang, Shanghai, China
Postcode: 201616
Tel: +86-21-57768000 Fax: +86-21-57762525

TSMC Nanjing Company Limited
16, Zifeng Road, Pukou Economic Development Zone, Nanjing
Jiangsu Province, China
Postcode: 211806
Tel: +86-25-57668000 Fax: +86-25-57712395

TSMC Korea Limited
15F, Annjay Tower, 208, Teheran-ro, Gangnam-gu, Seoul 06220, Korea
Tel: +82-2-20511688 Fax: +82-2-20511669

TSMC Design Technology Canada Inc.
535 Legget Dr., Suite 600, Kanata, ON K2K 388, Canada
Tel: +613-576-1990 Fax: +613-576-1999

TSMC Spokesperson
Name: Lora Ho
Title: Senior Vice President & CFO
Tel: +886-3-5054602 Fax: +886-3-5637000
Email: cyhsu@tsmc.com

TSMC Deputy Spokesperson/Corporate Communications
Name: Elizabeth Sun
Title: Senior Director, TSMC Corporate Communication Division
Tel: +886-3-5682085 Fax: +886-3-5637000
Email: elizabeth_sun@tsmc.com

Auditors
Company: Deloitte & Touche
Auditors: Yih-Hsin Kao , Yu-Feng Huang
Address: 12F, 156, Sec. 3, Min-Sheng E. Rd., Taipei 10596, Taiwan, R.O.C.
Tel: +886-2-25459988 Fax: +886-2-25459966
Website: http://www.deloitte.com.tw

Common Share Transfer Agent and Registrar
Company: The Transfer Agency Department of CTBC Bank
Address: 5F, 83, Sec. 1, Chung-Ching S. Rd., Taipei 10008, Taiwan, R.O.C.
Tel: +886-2-66365566 Fax: +886-2-23116723
Website: http://www.ctbcbank.com

ADR Depositary Bank
Company: Citibank, N.A.
Depositary Receipts Services
Address: 388 Greenwich Street, New York, NY 10013, U.S.A.
Website: http://www.citi.com/dr
Tel: +1-877-2484237 (toll free)
Tel: +1-781-5754555 (out of US)
Fax: +1-201-3243284
E-mail: citibank@shareholders-online.com

TSMC’s depositary receipts of the common shares are listed on New York Stock Exchange (NYSE) under the symbol TSM. The information relating to TSM is available at http://www.nyse.com and http://mops.twse.com.tw

“TSMC”, “tsmc”, “Open Innovation Platform”, “Open Innovation”, “GIGAFAB” and “CoWoS” are some of our registered trademarks used by us in various jurisdictions, including Taiwan. All rights reserved.
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Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

Consolidated Financial Statements for the Years Ended December 31, 2016 and 2015 and Independent Auditors’ Report
REPRESENTATION LETTER

The entities that are required to be included in the combined financial statements of Taiwan Semiconductor Manufacturing Company Limited as of and for the year ended December 31, 2016, under the Criteria Governing the Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises are the same as those included in the consolidated financial statements prepared in conformity with the International Financial Reporting Standard 10, “Consolidated Financial Statements.” In addition, the information required to be disclosed in the combined financial statements is included in the consolidated financial statements. Consequently, Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries do not prepare a separate set of combined financial statements.

Very truly yours,

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED

By

MORRIS CHANG
Chairman

February 14, 2017
INDEPENDENT AUDITORS’ REPORT

The Board of Directors and Shareholders
Taiwan Semiconductor Manufacturing Company Limited

Opinion

We have audited the accompanying consolidated financial statements of Taiwan Semiconductor Manufacturing Company Limited and subsidiaries (the “Company”), which comprise the consolidated balance sheets as of December 31, 2016 and 2015, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2016 and 2015, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors’ Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Company in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2016. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters for the Company’s consolidated financial statements for the year ended December 31, 2016 are stated as follows:

Provision of sales returns and allowances

In consideration of business volume and market conditions, the Company provides a variety of business incentives to specific customers or products. The provision of sales returns and allowance is based on historical experience and the varying contractual terms by management’s judgment. Please refer to Notes 4, 5 and 19 to the consolidated financial statements for the details of the information about provision of sales returns and allowances. Since the provision of sales returns and allowances is subject to management’s judgment,
which has significant uncertainty, and the result could also affect the net revenue in the consolidated financial statements, it has been identified as a key audit matter.

Our key audit procedures performed in respect of the above area included the following:

1. Understood and tested the design and operating effectiveness of the key controls over provision of sales returns and allowances;

2. Understood and assessed the reasonableness of management’s assumptions made and methodology used in estimating provision of sales returns and allowances;

3. Sampled and inspected the Company’s sales contracts of main products by agreeing the contractual terms and performed an analysis to challenge management’s estimation on possibility that specific products could meet business incentives condition to verify the reasonableness of the accrual of the provision;

4. Performed a retrospective review to comparatively analyze the historical accuracy of judgments with reference to actual sales allowance paid.

Timing to commence depreciation of property, plant and equipment (PP&E)

The Company continues to invest in capital expenditures to develop and build capacity in leading-edge technologies to meet customers’ demand. Please refer to Notes 4 and 15 to the consolidated financial statements for the details of the information and accounting policy about the depreciation of PP&E. According to IAS 16, depreciation of PP&E should commence when the assets are available for their intended use. Due to the significant capital expenditures incurred by the Company, the appropriateness of the timing to commence depreciation of PP&E could have a material impact on its financial performance. Consequently, the validity of the timing to commence depreciation of PP&E is identified as a key audit matter.

Our key audit procedures performed in respect of the above area included the following:

1. Understood and tested the design and operating effectiveness of the key controls over the timing to commence depreciation of PP&E;

2. Understood the criteria the assets are defined as available for use intended by management and the corresponding accounting treatments;

3. Sampled and reviewed the appropriateness of the timing for commencing depreciation after the assets met the criteria of available for use in current year;

4. Performed an observation on the physical count of equipment under installation and construction in progress; sampled and inspected the supporting documentation to verify that the status of equipment under installation and construction in progress are not available for use;

5. Sampled equipment under installation and construction in progress which met the criteria of available for use and were transferred in the subsequent period to evaluate the reasonableness of the timing for commencing depreciation;

6. Sampled and reviewed the appropriateness of the equipment under installation and construction in progress which are not available for their intended use.
Other Matter

We have also audited the parent company only financial statements of Taiwan Semiconductor Manufacturing Company Limited as of and for the years ended December 31, 2016 and 2015 on which we have issued an unmodified opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRS, IAS, IFRIC, and SIC endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance (including members of the Audit Committee) are responsible for overseeing the Company’s financial reporting process.

Auditors’ Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors’ report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors’ report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our
conclusions are based on the audit evidence obtained up to the date of our auditors’ report. However, future events or conditions may cause the Company to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2016 and are therefore the key audit matters. We describe these matters in our auditors’ report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors’ report are Yih-Shin Kao and Yu Feng Huang.

Deloitte & Touche
Taipei, Taiwan
The Republic of China

February 14, 2017

Notice to Readers

The accompanying consolidated financial statements are intended only to present the consolidated financial position, financial performance and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to audit such consolidated financial statements are those generally applied in the Republic of China.

For the convenience of readers, the independent auditors’ report and the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors’ report and consolidated financial statements shall prevail.
# CONSOLIDATED BALANCE SHEETS

(Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries)

## ASSETS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>%</th>
<th>December 31, 2015</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents (Note 6)</td>
<td>$ 541,253,833</td>
<td>29</td>
<td>$ 562,688,930</td>
<td>34</td>
</tr>
<tr>
<td>Financial assets at fair value through profit or loss (Note 7)</td>
<td>6,451,112</td>
<td>-</td>
<td>6,026</td>
<td>-</td>
</tr>
<tr>
<td>Available-for-sale financial assets (Notes 8 and 14)</td>
<td>67,788,767</td>
<td>4</td>
<td>14,299,361</td>
<td>1</td>
</tr>
<tr>
<td>Held-to-maturity financial assets (Note 9)</td>
<td>16,610,116</td>
<td>1</td>
<td>9,166,523</td>
<td>1</td>
</tr>
<tr>
<td>Hedging derivative financial assets (Note 10)</td>
<td>5,550</td>
<td>-</td>
<td>1,739</td>
<td>-</td>
</tr>
<tr>
<td>Notes and accounts receivable, net (Note 11)</td>
<td>128,335,271</td>
<td>7</td>
<td>85,059,675</td>
<td>5</td>
</tr>
<tr>
<td>Receivables from related parties (Note 37)</td>
<td>969,559</td>
<td>-</td>
<td>505,722</td>
<td>-</td>
</tr>
<tr>
<td>Other receivables from related parties (Note 37)</td>
<td>446,788</td>
<td>-</td>
<td>125,018</td>
<td>-</td>
</tr>
<tr>
<td>Inventories (Notes 5, 12 and 41)</td>
<td>4,882,233</td>
<td>3</td>
<td>67,052,270</td>
<td>4</td>
</tr>
<tr>
<td>Other financial assets (Notes 38 and 41)</td>
<td>4,100,475</td>
<td>-</td>
<td>4,305,358</td>
<td>-</td>
</tr>
<tr>
<td>Other current assets (Note 17)</td>
<td>3,385,423</td>
<td>-</td>
<td>3,533,369</td>
<td>-</td>
</tr>
<tr>
<td>Total current assets</td>
<td>817,729,126</td>
<td>44</td>
<td>746,743,991</td>
<td>45</td>
</tr>
<tr>
<td><strong>NONCURRENT ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held-to-maturity financial assets (Note 9)</td>
<td>22,307,561</td>
<td>1</td>
<td>6,910,873</td>
<td>-</td>
</tr>
<tr>
<td>Financial assets carried at cost (Note 13)</td>
<td>4,102,467</td>
<td>-</td>
<td>3,990,882</td>
<td>-</td>
</tr>
<tr>
<td>Investments accounted for using equity method (Notes 5 and 14)</td>
<td>19,743,888</td>
<td>1</td>
<td>24,091,828</td>
<td>2</td>
</tr>
<tr>
<td>Property, plant and equipment (Notes 5 and 15)</td>
<td>997,777,687</td>
<td>53</td>
<td>853,470,392</td>
<td>52</td>
</tr>
<tr>
<td>Intangible assets (Notes 5, 16 and 33)</td>
<td>14,614,846</td>
<td>1</td>
<td>14,065,800</td>
<td>1</td>
</tr>
<tr>
<td>Deferred income tax assets (Notes 5 and 30)</td>
<td>8,271,421</td>
<td>-</td>
<td>6,384,974</td>
<td>-</td>
</tr>
<tr>
<td>Refundable deposits</td>
<td>407,874</td>
<td>-</td>
<td>430,802</td>
<td>-</td>
</tr>
<tr>
<td>Other noncurrent assets (Note 17)</td>
<td>1,500,432</td>
<td>-</td>
<td>1,428,676</td>
<td>-</td>
</tr>
<tr>
<td>Total noncurrent assets</td>
<td>1,608,726,176</td>
<td>56</td>
<td>910,774,307</td>
<td>55</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$ 1,886,455,302</td>
<td>100</td>
<td>$ 1,657,518,298</td>
<td>100</td>
</tr>
</tbody>
</table>

## LIABILITIES AND EQUITY

### CURRENT LIABILITIES

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>%</th>
<th>December 31, 2015</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term loans (Note 18)</td>
<td>$ 57,958,200</td>
<td>3</td>
<td>$ 39,474,000</td>
<td>2</td>
</tr>
<tr>
<td>Financial liabilities at fair value through profit or loss (Note 7)</td>
<td>191,135</td>
<td>-</td>
<td>72,610</td>
<td>-</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>26,662,351</td>
<td>2</td>
<td>18,575,286</td>
<td>1</td>
</tr>
<tr>
<td>Payables to related parties (Note 37)</td>
<td>1,262,174</td>
<td>-</td>
<td>1,149,988</td>
<td>-</td>
</tr>
<tr>
<td>Salary and bonus payable</td>
<td>13,681,817</td>
<td>1</td>
<td>11,702,042</td>
<td>1</td>
</tr>
<tr>
<td>Accrued profit sharing bonus to employees and compensation to directors and supervisors (Notes 23 and 32)</td>
<td>22,894,006</td>
<td>1</td>
<td>20,958,893</td>
<td>1</td>
</tr>
<tr>
<td>Payables to contractors and equipment suppliers</td>
<td>63,154,514</td>
<td>3</td>
<td>26,612,192</td>
<td>2</td>
</tr>
<tr>
<td>Income tax payable (Notes 5 and 30)</td>
<td>40,306,054</td>
<td>2</td>
<td>32,901,106</td>
<td>2</td>
</tr>
<tr>
<td>Provisions (Notes 5 and 19)</td>
<td>18,037,789</td>
<td>1</td>
<td>10,163,536</td>
<td>1</td>
</tr>
<tr>
<td>Long-term liabilities - current portion (Note 20)</td>
<td>38,109,680</td>
<td>2</td>
<td>23,517,612</td>
<td>1</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities (Note 22)</td>
<td>36,581,553</td>
<td>2</td>
<td>27,701,329</td>
<td>2</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>318,239,273</td>
<td>17</td>
<td>212,228,594</td>
<td>13</td>
</tr>
</tbody>
</table>

### NONCURRENT LIABILITIES

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>%</th>
<th>December 31, 2015</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds payable (Note 20)</td>
<td>153,093,557</td>
<td>8</td>
<td>191,965,082</td>
<td>12</td>
</tr>
<tr>
<td>Long-term bank loans</td>
<td>21,780</td>
<td>-</td>
<td>32,500</td>
<td>-</td>
</tr>
<tr>
<td>Deferred income tax liabilities (Notes 5 and 30)</td>
<td>141,183</td>
<td>-</td>
<td>31,271</td>
<td>-</td>
</tr>
<tr>
<td>Net defined benefit liability (Notes 5 and 21)</td>
<td>8,551,408</td>
<td>-</td>
<td>7,448,026</td>
<td>-</td>
</tr>
<tr>
<td>Guarantee deposits (Note 22)</td>
<td>14,670,433</td>
<td>1</td>
<td>21,564,801</td>
<td>1</td>
</tr>
<tr>
<td>Others (Note 19)</td>
<td>1,686,542</td>
<td>-</td>
<td>1,613,545</td>
<td>-</td>
</tr>
<tr>
<td>Total noncurrent liabilities</td>
<td>178,164,903</td>
<td>9</td>
<td>222,655,225</td>
<td>13</td>
</tr>
</tbody>
</table>

Total liabilities | 496,404,176 | 26  | 434,883,819 | 26  |

### EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>%</th>
<th>December 31, 2015</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital stock (Note 23)</td>
<td>259,303,805</td>
<td>14</td>
<td>259,303,805</td>
<td>16</td>
</tr>
<tr>
<td>Capital surplus (Note 23)</td>
<td>56,272,304</td>
<td>3</td>
<td>56,300,215</td>
<td>3</td>
</tr>
<tr>
<td>Retained earnings (Note 23)</td>
<td>208,297,945</td>
<td>11</td>
<td>177,640,561</td>
<td>11</td>
</tr>
<tr>
<td>Appropriated as legal capital reserve</td>
<td>863,710,224</td>
<td>46</td>
<td>716,635,025</td>
<td>43</td>
</tr>
<tr>
<td>Unappropriated earnings</td>
<td>1,072,008,169</td>
<td>57</td>
<td>894,293,586</td>
<td>54</td>
</tr>
<tr>
<td>Others (Note 23)</td>
<td>1,663,983</td>
<td>-</td>
<td>1,174,313</td>
<td>-</td>
</tr>
<tr>
<td>Equity attributable to shareholders of the parent</td>
<td>1,389,248,261</td>
<td>74</td>
<td>1,221,671,719</td>
<td>74</td>
</tr>
</tbody>
</table>

### NONCONTROLLING INTERESTS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>%</th>
<th>December 31, 2015</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total equity</td>
<td>1,390,051,126</td>
<td>74</td>
<td>1,222,634,479</td>
<td>74</td>
</tr>
</tbody>
</table>

**TOTAL** | $ 1,886,455,302 | 100 | $ 1,657,518,298 | 100 |

The accompanying notes are an integral part of the consolidated financial statements.
Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th></th>
<th>2015</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
<td>%</td>
</tr>
<tr>
<td><strong>NET REVENUE (Notes 5, 25, 37 and 43)</strong></td>
<td>$947,938,344</td>
<td>100</td>
<td>$843,497,368</td>
<td>100</td>
</tr>
<tr>
<td><strong>COST OF REVENUE (Notes 5, 12, 32, 37 and 41)</strong></td>
<td>473,077,173</td>
<td>50</td>
<td>433,117,601</td>
<td>51</td>
</tr>
<tr>
<td><strong>GROSS PROFIT BEFORE REALIZED (UNREALIZED)</strong></td>
<td>474,861,171</td>
<td>50</td>
<td>410,379,767</td>
<td>49</td>
</tr>
<tr>
<td><strong>GROSS PROFIT ON SALES TO ASSOCIATES</strong></td>
<td>(29,073)</td>
<td>-</td>
<td>15,126</td>
<td>-</td>
</tr>
<tr>
<td><strong>GROSS PROFIT</strong></td>
<td>474,832,098</td>
<td>50</td>
<td>410,394,893</td>
<td>49</td>
</tr>
<tr>
<td><strong>OPERATING EXPENSES (Notes 5, 32 and 37)</strong></td>
<td>96,904,133</td>
<td>10</td>
<td>88,466,500</td>
<td>11</td>
</tr>
<tr>
<td>Research and development</td>
<td>71,207,703</td>
<td>7</td>
<td>65,544,579</td>
<td>8</td>
</tr>
<tr>
<td>General and administrative</td>
<td>19,795,593</td>
<td>2</td>
<td>17,257,237</td>
<td>2</td>
</tr>
<tr>
<td>Marketing</td>
<td>5,900,837</td>
<td>1</td>
<td>5,664,684</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>96,904,133</td>
<td>10</td>
<td>88,466,500</td>
<td>11</td>
</tr>
<tr>
<td><strong>OTHER OPERATING INCOME AND EXPENSES, NET (Notes 15, 16, 26 and 32)</strong></td>
<td>29,813</td>
<td>-</td>
<td>(1,880,618)</td>
<td>-</td>
</tr>
<tr>
<td><strong>INCOME FROM OPERATIONS (Note 43)</strong></td>
<td>377,957,778</td>
<td>40</td>
<td>320,047,775</td>
<td>38</td>
</tr>
<tr>
<td><strong>NON-OPERATING INCOME AND EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of profits of associates and joint venture (Notes 14 and 43)</td>
<td>3,495,600</td>
<td>-</td>
<td>4,132,128</td>
<td>-</td>
</tr>
<tr>
<td>Other income (Note 27)</td>
<td>6,454,901</td>
<td>1</td>
<td>4,750,829</td>
<td>1</td>
</tr>
<tr>
<td>Foreign exchange gain, net (Note 42)</td>
<td>1,161,322</td>
<td>-</td>
<td>2,481,446</td>
<td>-</td>
</tr>
<tr>
<td>Finance costs (Note 28)</td>
<td>(3,306,153)</td>
<td>-</td>
<td>(3,190,331)</td>
<td>-</td>
</tr>
<tr>
<td>Other gains and losses (Note 29)</td>
<td>195,932</td>
<td>-</td>
<td>22,207,064</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total non-operating income and expenses</strong></td>
<td>8,001,602</td>
<td>1</td>
<td>30,381,136</td>
<td>4</td>
</tr>
<tr>
<td><strong>INCOME BEFORE INCOME TAX</strong></td>
<td>385,959,380</td>
<td>41</td>
<td>350,428,911</td>
<td>42</td>
</tr>
<tr>
<td><strong>INCOME TAX EXPENSE (Notes 5, 30 and 43)</strong></td>
<td>51,621,144</td>
<td>6</td>
<td>43,872,744</td>
<td>6</td>
</tr>
<tr>
<td><strong>NET INCOME</strong></td>
<td>334,338,236</td>
<td>35</td>
<td>306,556,167</td>
<td>36</td>
</tr>
<tr>
<td><strong>OTHER COMPREHENSIVE INCOME (LOSS) (Notes 14, 21, 23 and 30)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items that will not be reclassified subsequently to profit or loss:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remeasurement of defined benefit obligation</td>
<td>(1,057,220)</td>
<td>-</td>
<td>(827,703)</td>
<td>-</td>
</tr>
<tr>
<td>Share of other comprehensive loss of associates and joint venture</td>
<td>(19,961)</td>
<td>-</td>
<td>(2,546)</td>
<td>-</td>
</tr>
<tr>
<td>Income tax benefit related to items that will not be reclassified subsequently</td>
<td>126,867</td>
<td>-</td>
<td>99,326</td>
<td>-</td>
</tr>
<tr>
<td><strong>(950,314)</strong></td>
<td>-</td>
<td>(Continued)</td>
<td>(730,923)</td>
<td>-</td>
</tr>
</tbody>
</table>
Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

<table>
<thead>
<tr>
<th>Items that may be reclassified subsequently to profit or loss:</th>
<th>2016</th>
<th>%</th>
<th>2015</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange differences arising on translation of foreign operations</td>
<td>$(9,379,477)</td>
<td>(1)</td>
<td>$6,604,768</td>
<td>1</td>
</tr>
<tr>
<td>Changes in fair value of available-for-sale financial assets</td>
<td>(692,523)</td>
<td>-</td>
<td>(20,489,015)</td>
<td>(2)</td>
</tr>
<tr>
<td>Share of other comprehensive income (loss) of associates and joint venture</td>
<td>16,301</td>
<td>-</td>
<td>(83,021)</td>
<td>-</td>
</tr>
<tr>
<td>Income tax expense related to items that may be reclassified subsequently</td>
<td>(61,176)</td>
<td>-</td>
<td>(15,991)</td>
<td>-</td>
</tr>
</tbody>
</table>

| Other comprehensive loss for the year, net of income tax | (10,116,875) | (1) | (13,983,259) | (1) |

TOTAL COMPREHENSIVE INCOME FOR THE YEAR | $323,271,047 | 34 | $291,841,985 | 35 |

NET INCOME (LOSS) ATTRIBUTABLE TO:
| Shareholders of the parent | $334,247,180 | 35 | $306,573,837 | 36 |
| Noncontrolling interests | 91,056 | - | (17,670) | - |

TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO:
| Shareholders of the parent | $323,186,736 | 34 | $291,867,757 | 35 |
| Noncontrolling interests | 84,311 | - | (25,772) | - |

<table>
<thead>
<tr>
<th>2016</th>
<th>Income Attributable to Shareholders of the Parent</th>
<th>2015</th>
<th>Income Attributable to Shareholders of the Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic earnings per share</td>
<td>$12.89</td>
<td>$11.82</td>
<td></td>
</tr>
<tr>
<td>Diluted earnings per share</td>
<td>$12.89</td>
<td>$11.82</td>
<td></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the consolidated financial statements. (Concluded)
<table>
<thead>
<tr>
<th>Shares (In Thousands)</th>
<th>Amount</th>
<th>Capital Stock - Common Stock</th>
<th>Capital Surplus</th>
<th>Legal Capital Reserve</th>
<th>Unappropriated Earnings</th>
<th>Unrealized Gains/Loss from Available-for-Sale Financial Assets</th>
<th>Total</th>
<th>Noncontrolling Interests</th>
<th>Total Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BALANCE, JANUARY 1, 2015</td>
<td></td>
<td>25,929,662</td>
<td>259,296,624</td>
<td>55,989,922</td>
<td>151,290,682</td>
<td>5,530,194,922</td>
<td>$ 705,665,274</td>
<td>(305)</td>
<td>$ 21,247,483</td>
</tr>
<tr>
<td>Appropriations of prior year’s earnings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal capital reserve</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash dividends to shareholders - NT$4.5 per share</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BALANCE, DECEMBER 31, 2015</td>
<td></td>
<td>259,303,805</td>
<td>259,303,805</td>
<td>36,301,215</td>
<td>17,648,561</td>
<td>389,595,566</td>
<td>11,039,949</td>
<td>714,771</td>
<td></td>
</tr>
<tr>
<td>Appropriations of prior year’s earnings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal capital reserve</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash dividends to shareholders - NT$5 per share</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BALANCE, DECEMBER 31, 2016</td>
<td></td>
<td>259,303,805</td>
<td>259,303,805</td>
<td>36,301,215</td>
<td>17,648,561</td>
<td>389,595,566</td>
<td>11,039,949</td>
<td>714,771</td>
<td></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the consolidated financial statements.
Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASH FLOWS FROM OPERATING ACTIVITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income before income tax</td>
<td>$ 385,959,380</td>
<td>$ 350,428,911</td>
</tr>
<tr>
<td>Adjustments for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>220,084,998</td>
<td>219,303,369</td>
</tr>
<tr>
<td>Amortization expense</td>
<td>3,743,406</td>
<td>3,202,200</td>
</tr>
<tr>
<td>Finance costs</td>
<td>3,306,153</td>
<td>3,190,331</td>
</tr>
<tr>
<td>Share of profits of associates and joint venture</td>
<td>(3,495,600)</td>
<td>(4,132,128)</td>
</tr>
<tr>
<td>Interest income</td>
<td>(6,317,500)</td>
<td>(4,129,316)</td>
</tr>
<tr>
<td>Gain on disposal of property, plant and equipment, net</td>
<td>(46,548)</td>
<td>(433,559)</td>
</tr>
<tr>
<td>Impairment loss on property, plant and equipment</td>
<td>-</td>
<td>2,545,584</td>
</tr>
<tr>
<td>Impairment loss on intangible assets</td>
<td>-</td>
<td>58,514</td>
</tr>
<tr>
<td>Impairment loss on financial assets</td>
<td>122,240</td>
<td>154,721</td>
</tr>
<tr>
<td>Loss (gain) on disposal of available-for-sale financial assets, net</td>
<td>4,014</td>
<td>(22,070,736)</td>
</tr>
<tr>
<td>Gain on disposal of financial assets carried at cost, net</td>
<td>(37,241)</td>
<td>(87,193)</td>
</tr>
<tr>
<td>Loss (gain) on disposal of investments accounted for using equity method, net</td>
<td>259,960</td>
<td>(2,507,707)</td>
</tr>
<tr>
<td>Loss from liquidation of subsidiaries</td>
<td>36,105</td>
<td>138,243</td>
</tr>
<tr>
<td>Unrealized (realized) gross profit on sales to associates</td>
<td>29,073</td>
<td>(15,126)</td>
</tr>
<tr>
<td>Loss (gain) on foreign exchange, net</td>
<td>(2,656,406)</td>
<td>2,563,439</td>
</tr>
<tr>
<td>Dividend income</td>
<td>(137,401)</td>
<td>(621,513)</td>
</tr>
<tr>
<td>Loss (gain) from hedging instruments</td>
<td>(12,725)</td>
<td>134,112</td>
</tr>
<tr>
<td>Loss (gain) arising from changes in fair value of available-for-sale financial assets in hedge effective portion</td>
<td>(4,248)</td>
<td>305,619</td>
</tr>
<tr>
<td>Gain from lease agreement modification</td>
<td>-</td>
<td>(430,041)</td>
</tr>
<tr>
<td>Changes in operating assets and liabilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial instruments at fair value through profit or loss</td>
<td>(6,326,561)</td>
<td>(228,560)</td>
</tr>
<tr>
<td>Notes and accounts receivable, net</td>
<td>(49,342,698)</td>
<td>26,630,123</td>
</tr>
<tr>
<td>Receivables from related parties</td>
<td>(463,837)</td>
<td>(192,767)</td>
</tr>
<tr>
<td>Other receivables from related parties</td>
<td>(21,770)</td>
<td>53,607</td>
</tr>
<tr>
<td>Inventories</td>
<td>18,370,037</td>
<td>(655,249)</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>(41,554)</td>
<td>720,301</td>
</tr>
<tr>
<td>Other current assets</td>
<td>94,512</td>
<td>263,384</td>
</tr>
<tr>
<td>Other noncurrent assets</td>
<td>(349,771)</td>
<td>-</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>7,295,491</td>
<td>(2,693,338)</td>
</tr>
<tr>
<td>Payables to related parties</td>
<td>139,818</td>
<td>(369,134)</td>
</tr>
<tr>
<td>Salary and bonus payable</td>
<td>1,979,775</td>
<td>945,030</td>
</tr>
<tr>
<td>Accrued profit sharing bonus to employees and compensation to directors and supervisors</td>
<td>1,935,113</td>
<td>2,860,250</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>3,693,638</td>
<td>(3,778,322)</td>
</tr>
<tr>
<td>Provisions</td>
<td>7,931,877</td>
<td>(382,774)</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>46,163</td>
<td>52,540</td>
</tr>
<tr>
<td>Cash generated from operations</td>
<td>585,777,893</td>
<td>570,822,795</td>
</tr>
<tr>
<td>Income taxes paid</td>
<td>(45,943,301)</td>
<td>(40,943,357)</td>
</tr>
</tbody>
</table>

Net cash generated by operating activities

539,834,592

(Continued)
Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASH FLOWS FROM INVESTING ACTIVITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisitions of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>$(83,275,573)</td>
<td>$(13,392,330)</td>
</tr>
<tr>
<td>Held-to-maturity financial assets</td>
<td>(33,625,353)</td>
<td>(28,181,915)</td>
</tr>
<tr>
<td>Financial assets carried at cost</td>
<td>(533,745)</td>
<td>(2,586,169)</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>(328,045,270)</td>
<td>(257,516,835)</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>(4,243,087)</td>
<td>(4,283,870)</td>
</tr>
<tr>
<td>Land use right</td>
<td>(805,318)</td>
<td>-</td>
</tr>
<tr>
<td>Proceeds from disposal or redemption of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>29,967,979</td>
<td>57,493,051</td>
</tr>
<tr>
<td>Held-to-maturity financial assets</td>
<td>10,550,000</td>
<td>16,800,000</td>
</tr>
<tr>
<td>Financial assets carried at cost</td>
<td>160,498</td>
<td>368,778</td>
</tr>
<tr>
<td>Investments accounted for using equity method</td>
<td>-</td>
<td>5,171,962</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>98,069</td>
<td>816,852</td>
</tr>
<tr>
<td>Proceeds from return of capital of financial assets carried at cost</td>
<td>65,087</td>
<td>-</td>
</tr>
<tr>
<td>Derecognition of hedging derivative financial instruments</td>
<td>8,868</td>
<td>2,659</td>
</tr>
<tr>
<td>Costs from entering into hedging transactions</td>
<td>-</td>
<td>(495,348)</td>
</tr>
<tr>
<td>Interest received</td>
<td>6,353,195</td>
<td>3,641,920</td>
</tr>
<tr>
<td>Proceeds from government grants - land use right and others</td>
<td>798,469</td>
<td>-</td>
</tr>
<tr>
<td>Proceeds from government grants - property, plant and equipment</td>
<td>738,643</td>
<td>-</td>
</tr>
<tr>
<td>Net cash outflow from acquisition of subsidiary (Note 33)</td>
<td>-</td>
<td>(51,601)</td>
</tr>
<tr>
<td>Net cash inflow from disposal of subsidiary (Note 34)</td>
<td>-</td>
<td>601,047</td>
</tr>
<tr>
<td>Other dividends received</td>
<td>137,420</td>
<td>616,675</td>
</tr>
<tr>
<td>Dividends received from investments accounted for using equity method</td>
<td>5,478,790</td>
<td>3,407,126</td>
</tr>
<tr>
<td>Refundable deposits paid</td>
<td>(144,982)</td>
<td>(404,458)</td>
</tr>
<tr>
<td>Refundable deposits refunded</td>
<td>169,912</td>
<td>348,434</td>
</tr>
<tr>
<td>Decrease in receivables for temporary payments</td>
<td>706,718</td>
<td>398,185</td>
</tr>
<tr>
<td><strong>Net cash used in investing activities</strong></td>
<td>$(395,439,680)</td>
<td>(217,245,837)</td>
</tr>
</tbody>
</table>

CASH FLOWS FROM FINANCING ACTIVITIES

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in short-term loans</td>
<td>18,968,936</td>
<td>3,138,680</td>
</tr>
<tr>
<td>Repayment of bonds</td>
<td>(23,471,600)</td>
<td>-</td>
</tr>
<tr>
<td>Repayment of long-term bank loans</td>
<td>(8,540)</td>
<td>-</td>
</tr>
<tr>
<td>Interest paid</td>
<td>(3,302,420)</td>
<td>(3,156,218)</td>
</tr>
<tr>
<td>Decrease in obligations under finance leases</td>
<td>-</td>
<td>(29,098)</td>
</tr>
<tr>
<td>Guarantee deposits received</td>
<td>6,354,677</td>
<td>754,873</td>
</tr>
<tr>
<td>Guarantee deposits refunded</td>
<td>(523,234)</td>
<td>(742,458)</td>
</tr>
<tr>
<td>Cash dividends</td>
<td>(155,582,283)</td>
<td>(116,683,481)</td>
</tr>
<tr>
<td>Proceeds from exercise of employee stock options</td>
<td>-</td>
<td>33,891</td>
</tr>
<tr>
<td>Decrease in noncontrolling interests</td>
<td>(235,733)</td>
<td>(50,218)</td>
</tr>
<tr>
<td><strong>Net cash used in financing activities</strong></td>
<td>$(157,800,197)</td>
<td>$(116,734,029)</td>
</tr>
</tbody>
</table>

(Continued)
Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS</td>
<td>$(8,029,812)</td>
<td>$8,258,851</td>
</tr>
<tr>
<td>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</td>
<td>(21,435,097)</td>
<td>204,158,423</td>
</tr>
<tr>
<td>CASH AND CASH EQUIVALENTS INCLUDED IN NONCURRENT ASSETS HELD FOR SALE, BEGINNING OF YEAR</td>
<td>-</td>
<td>81,478</td>
</tr>
<tr>
<td>CASH AND CASH EQUIVALENT ON CONSOLIDATED BALANCE SHEET, BEGINNING OF YEAR</td>
<td>562,688,930</td>
<td>358,449,029</td>
</tr>
<tr>
<td>CASH AND CASH EQUIVALENTS, END OF YEAR</td>
<td>$541,253,833</td>
<td>$562,688,930</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the consolidated financial statements. (Concluded)
Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

1. GENERAL

Taiwan Semiconductor Manufacturing Company Limited (TSMC), a Republic of China (R.O.C.) corporation, was incorporated on February 21, 1987. TSMC is a dedicated foundry in the semiconductor industry which engages mainly in the manufacturing, selling, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing of masks.

On September 5, 1994, TSMC’s shares were listed on the Taiwan Stock Exchange (TWSE). On October 8, 1997, TSMC listed some of its shares of stock on the New York Stock Exchange (NYSE) in the form of American Depositary Shares (ADSs).

The address of its registered office and principal place of business is No. 8, Li-Hsin Rd. 6, Hsinchu Science Park, Taiwan. The principal operating activities of TSMC’s subsidiaries are described in Note 4.

2. THE AUTHORIZATION OF FINANCIAL STATEMENTS

The accompanying consolidated financial statements were approved and authorized for issue by the Board of Directors on February 14, 2017.

3. APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS

As of the date that the accompanying consolidated financial statements were authorized for issue, TSMC and its subsidiaries (collectively as the “Company”) have not applied the following amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) issued by the International Accounting Standards Board (IASB) (collectively, “IFRSs”).

a. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers

Rule No. 1050050021 issued by Financial Supervisory Commission (FSC) stipulated that starting January 1, 2017, the Company should apply the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

The amendments include additions of several accounting items and requirements for disclosures of impairment of non-financial assets as a consequence of the IFRSs endorsed by the FSC for application starting from 2017. In addition, as a result of the post implementation review of IFRSs in Taiwan, the amendments also include emphasis on certain recognition and measurement considerations and add requirements for disclosures of related party transactions and goodwill.

The amendments stipulate that other companies or institutions of which the chairman of the board of directors or president serves as the chairman of the board of directors or the president, or is the spouse or second immediate family of the chairman of the board of directors or president of the Company are deemed to have a substantive related party relationship, unless it can be demonstrated that no control, joint control, or significant influence exists. Furthermore, the amendments require the disclosure of the names of the related parties and the relationship with whom the Company has significant transaction.
If the transaction or balance with a specific related party is 10% or more of the Company’s respective total transaction or balance, such transaction should be separately disclosed by the name of each related party.

The amendments also require additional disclosure if there is a significant difference between the actual operation after business combination and the expected benefits on acquisition date.

The disclosures of related party transactions and impairment of goodwill will be enhanced when the above amendments are retrospectively applied in 2017.

Except for the aforementioned impact, as of the date that the accompanying consolidated financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers. The related impact will be disclosed when the Company completes the evaluation.

b. The IFRSs in issue and endorsed by FSC with effective date starting 2017

According to Rule No. 1050026834 issued by the FSC, the following IFRSs issued by the IASB and endorsed by the FSC should be adopted by the Company starting 2017.

<table>
<thead>
<tr>
<th>New, Revised or Amended Standards and Interpretations</th>
<th>Effective Date Issued by IASB (Note 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Improvements to IFRSs 2010 - 2012 Cycle</td>
<td>July 1, 2014 or transactions on or after July 1, 2014</td>
</tr>
<tr>
<td>Annual Improvements to IFRSs 2011 - 2013 Cycle</td>
<td>July 1, 2014</td>
</tr>
<tr>
<td>Annual Improvements to IFRSs 2012 - 2014 Cycle</td>
<td>January 1, 2016 (Note 2)</td>
</tr>
<tr>
<td>Amendments to IFRS 10, IFRS 12 and IAS 28 “Investment Entities: Applying the Consolidation Exception”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendment to IFRS 11 “Accounting for Acquisitions of Interests in Joint Operations”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendment to IAS 1 “Disclosure Initiative”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendments to IAS 16 and IAS 38 “Clarification of Acceptable Methods of Depreciation and Amortization”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendment to IAS 19 “Defined Benefit Plans: Employee Contributions”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendment to IAS 27 “Equity Method in Separate Financial Statements”</td>
<td>January 1, 2014</td>
</tr>
<tr>
<td>Amendment to IAS 36 “Recoverable Amount Disclosures for Non-Financial Assets”</td>
<td>January 1, 2014</td>
</tr>
<tr>
<td>Amendment to IAS 39 “Novation of Derivatives and Continuation of Hedge Accounting”</td>
<td>January 1, 2014</td>
</tr>
</tbody>
</table>

Note 1: The aforementioned new, revised or amended standards or interpretations are effective after fiscal year beginning on or after the effective dates, unless specified otherwise.

Note 2: The amendment to IFRS 5 is applied prospectively to changes in a method of disposal that occur in annual periods beginning on or after January 1, 2016; the remaining amendments are effective for annual periods beginning on or after January 1, 2016.
Except for the following, the Company believes that the adoption of aforementioned IFRSs with effective date starting 2017 will not have a significant effect on the Company’s accounting policies:

1) Amendments to IAS 36, “Recoverable Amount Disclosures for Non-Financial Assets”

The amendments to IAS 36 clarify that the Company is required to disclose the recoverable amount of an asset or a cash-generating unit only when an impairment loss on the asset has been recognized or reversed during the period. Furthermore, if the recoverable amount for which impairment loss has been recognized or reversed is fair value less costs of disposal, the Company is required to disclose the fair value hierarchy. If the fair value measurements are categorized within Level 2 or Level 3, the valuation technique and key assumptions used to measure the fair value are disclosed. The discount rate used is disclosed if such fair value less costs of disposal is measured by using present value technique. The Company expects the aforementioned amendments will result in a broader disclosure of recoverable amount for non-financial assets.

Except for the aforementioned impact, as of the date that the accompanying consolidated financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of IFRSs with effective date starting 2017. The related impact will be disclosed when the Company completes the evaluation.

c. The IFRSs issued by IASB but not yet endorsed by FSC

The Company has not applied the following IFRSs issued by the IASB but not endorsed by the FSC. The FSC announced that the Company should apply IFRS 9 and IFRS 15 starting January 1, 2018. As of the date the consolidated financial statements were authorized for issue, the FSC has not announced the effective dates of other new IFRSs.

<table>
<thead>
<tr>
<th>New, Revised or Amended Standards and Interpretations</th>
<th>Effective Date Issued by IASB (Note 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Improvements to IFRSs 2014-2016 Cycle</td>
<td>Note 4</td>
</tr>
<tr>
<td>Amendment to IFRS 2 “Classification and Measurement of Share-based Payment Transactions”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>IFRS 9 “Financial Instruments”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>Amendments to IFRS 9 and IFRS 7 “Mandatory Effective Date of IFRS 9 and Transition Disclosure”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”</td>
<td>To be determined by IASB</td>
</tr>
<tr>
<td>IFRS 15 “Revenue from Contracts with Customers”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>Amendment to IFRS 15 “Clarifications to IFRS 15”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>IFRS 16 “Leases”</td>
<td>January 1, 2019</td>
</tr>
<tr>
<td>Amendment to IAS 7 “Disclosure Initiative”</td>
<td>January 1, 2017</td>
</tr>
<tr>
<td>Amendment to IAS 12 “Recognition of Deferred Tax Assets for Unrealized Losses”</td>
<td>January 1, 2017</td>
</tr>
<tr>
<td>IFRIC 22 “Foreign Currency Transactions and Advance Consideration”</td>
<td>January 1, 2018</td>
</tr>
</tbody>
</table>

Note 3: The aforementioned new, revised or amended standards or interpretations are effective after fiscal year beginning on or after the effective dates, unless specified otherwise.

Note 4: The amendment to IFRS 12 is retrospectively applied for annual periods beginning on or after January 1, 2017; the amendment to IAS 28 is retrospectively applied for annual periods beginning on or after January 1, 2018.
Except for the following items, the Company believes that the adoption of aforementioned standards or interpretations will not have a significant effect on the Company’s accounting policies.

1) IFRS 9, “Financial Instruments”

All recognized financial assets currently in the scope of IAS 39, “Financial Instruments: Recognition and Measurement,” will be subsequently measured at either the amortized cost or the fair value. The classification and measurement requirements in IFRS 9 are stated as follows:

For the debt instruments invested by the Company, if the contractual cash flows that are solely for payments of principal and interest on the principal amount outstanding, the classification and measurement requirements are stated as follows:

a) If the objective of the Company’s business model is to hold the financial asset to collect the contractual cash flows, such assets are measured at the amortized cost. Interest revenue should be recognized in profit or loss by using the effective interest method, continuously assessed for impairment and the impairment loss or reversal of impairment loss should be recognized in profit and loss.

b) If the objective of the Company’s business model is to hold the financial asset both to collect the contractual cash flows and to sell the financial assets, such assets are measured at fair value through other comprehensive income and are continuously assessed for impairment. Interest revenue should be recognized in profit or loss by using the effective interest method. A gain or loss on a financial asset measured at fair value through other comprehensive income should be recognized in other comprehensive income, except for impairment gains or losses and foreign exchange gains and losses. When such financial asset is derecognized or reclassified, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss.

The other financial assets which do not meet the aforementioned criteria should be measured at the fair value through profit or loss. However, the Company may irrevocably designate an investment in equity instruments that is not held for trading as measured at fair value through other comprehensive income. All relevant gains and losses shall be recognized in other comprehensive income, except for dividends which are recognized in profit or loss. No subsequent impairment assessment is required, and the cumulative gain or loss previously recognized in other comprehensive income cannot be reclassified from equity to profit or loss.

IFRS 9 adds a new expected loss impairment model to measure the impairment of financial assets. A loss allowance for expected credit losses should be recognized on financial assets measured at amortized cost and financial assets mandatorily measured at fair value through other comprehensive income. If the credit risk on a financial instrument has not increased significantly since initial recognition, the Company should measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on a financial instrument has increased significantly since initial recognition and is not deemed to be a low credit risk, the Company should measure the loss allowance for that financial instrument at an amount equal to the lifetime expected credit losses. The Company should always measure the loss allowance at an amount equal to lifetime expected credit losses for trade receivables.

The main changes in hedge accounting amended the application requirements for hedge accounting to better reflect the entity’s risk management activities. Compared with IAS 39, the main changes include: (1) enhancing types of transactions eligible for hedge accounting, specifically broadening the risks eligible for hedge accounting of non-financial items; (2) changing the way hedging derivative instruments are accounted for to reduce profit or loss volatility; and (3) replacing retrospective effectiveness assessment with the principle of economic relationship between the hedging instrument and the hedged item.
2) IFRS 15, “Revenue from Contracts with Customers” and related amendment

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and will supersede IAS 18, “Revenue,” IAS 11, “Construction Contracts,” and a number of revenue-related interpretations.

When applying IFRS 15, the Company shall recognize revenue by applying the following steps:

- Identify the contract with the customer;
- Identify the performance obligations in the contract;
- Determine the transaction price;
- Allocate the transaction price to the performance obligations in the contracts; and
- Recognize revenue when the entity satisfies a performance obligation.

When IFRS 15 and related amendment are effective, the Company may elect to apply this Standard either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this Standard recognized at the date of initial application.

3) IFRS 16, “Leases”

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

Under IFRS 16, if the Company is a lessee, it shall recognize right-of-use assets and lease liabilities for all leases on the consolidated balance sheets except for low-value and short-term leases. The Company may elect to apply the accounting method similar to the accounting for operating lease under IAS 17 to the low-value and short-term leases. On the consolidated statements of comprehensive income, the Company should present the depreciation expense charged on the right-of-use asset separately from interest expense accrued on the lease liability; interest is computed by using effective interest method. On the consolidated statements of cash flows, cash payments for both the principal and interest portion of the lease liability are classified within financing activities.

When IFRS 16 becomes effective, the Company may elect to apply this Standard either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of the initial application of this Standard recognized at the date of initial application.

Except for the aforementioned impact, as of the date that the accompanying consolidated financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of the initial adoption of the other standards or interpretations. The related impact will be disclosed when the Company completes the evaluation.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

For the convenience of readers, the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the R.O.C. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language consolidated financial statements shall prevail.
**Statement of Compliance**

The accompanying consolidated financial statements have been prepared in conformity with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed by the FSC with the effective dates (collectively, “Taiwan-IFRSs”).

**Basis of Preparation**

The accompanying consolidated financial statements have been prepared on the historical cost basis except for financial instruments that are measured at fair values, as explained in the accounting policies below. Historical cost is generally based on the fair value of the consideration given in exchange for the assets.

**Basis of Consolidation**

The basis for the consolidated financial statements

The consolidated financial statements incorporate the financial statements of TSMC and entities controlled by TSMC (its subsidiaries).

Income and expenses of subsidiaries acquired or disposed of are included in the consolidated statement of comprehensive income from the effective date of acquisition and up to the effective date of disposal, as appropriate. Total comprehensive income of subsidiaries is attributed to the shareholders of the parent and to the noncontrolling interests even if this results in the noncontrolling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Company.

All intra-group transactions, balances, income and expenses are eliminated in full on consolidation.

Changes in the Company’s ownership interests in subsidiaries that do not result in the Company losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Company’s interests and the noncontrolling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the noncontrolling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to shareholders of the parent.

When the Company loses control of a subsidiary, a gain or loss is recognized in profit or loss and is calculated as the difference between:

a. the aggregate of the fair value of consideration received and the fair value of any retained interest at the date when control is lost; and

b. the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any noncontrolling interest.

The Company shall account for all amounts recognized in other comprehensive income in relation to the subsidiary on the same basis as would be required if the Company had directly disposed of the related assets and liabilities.

The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the cost on initial recognition of an investment in an associate.
The subsidiaries in the consolidated financial statements:

The detail information of the subsidiaries at the end of reporting period was as follows:

<table>
<thead>
<tr>
<th>Name of Investor</th>
<th>Name of Investee</th>
<th>Main Businesses and Products</th>
<th>Establishment and Operating Location</th>
<th>Percentage of Ownership</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC</td>
<td>TSMC North America</td>
<td>Selling and marketing of integrated circuits and semiconductor devices</td>
<td>San Jose, California, U.S.A.</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSMC Japan Limited (TSMC Japan)</td>
<td>Marketing activities</td>
<td>Yokohama, Japan</td>
<td>100%</td>
<td>a)</td>
</tr>
<tr>
<td></td>
<td>TSMC Partners, Ltd. (TSMC Partners)</td>
<td>Investing in companies involved in the design, manufacture, and other related business in the semiconductor industry</td>
<td>Tortola, British Virgin Islands</td>
<td>100%</td>
<td>a)</td>
</tr>
<tr>
<td></td>
<td>TSMC Korea Limited (TSMC Korea)</td>
<td>Customer service and technical supporting activities</td>
<td>Seoul, Korea</td>
<td>100%</td>
<td>a)</td>
</tr>
<tr>
<td></td>
<td>TSMC Europe B.V. (TSMC Europe)</td>
<td>Marketing and engineering supporting activities</td>
<td>Amsterdam, the Netherlands</td>
<td>100%</td>
<td>a)</td>
</tr>
<tr>
<td></td>
<td>TSMC Global, Ltd. (TSMC Global)</td>
<td>Investment activities</td>
<td>Tortola, British Virgin Islands</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSMC China Company Limited (TSMC China)</td>
<td>Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers</td>
<td>Shanghai, China</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSMC Nanjing Company Limited (TSMC Nanjing)</td>
<td>Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers</td>
<td>Nanjing, China</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>VentureTech Alliance Fund III, L.P. (VTAF III)</td>
<td>Investing in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>98%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>VentureTech Alliance Fund II, L.P. (VTAF II)</td>
<td>Investing in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>98%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>Emerging Alliance Fund, L.P. (Emerging Alliance)</td>
<td>Investing in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>99.5%</td>
<td>a), c)</td>
</tr>
<tr>
<td></td>
<td>TSMC Solar Europe GmbH</td>
<td>Selling of solar related products and providing customer service</td>
<td>Hamburg, Germany</td>
<td>100%</td>
<td>a), d)</td>
</tr>
<tr>
<td></td>
<td>Chi Cheng Investment Co., Ltd. (Chi Cheng)</td>
<td>Investment activities</td>
<td>Taipei, Taiwan</td>
<td>100%</td>
<td>e), f)</td>
</tr>
<tr>
<td></td>
<td>VisEra Technologies Company Ltd. (VisEra Tech)</td>
<td>Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter</td>
<td>Hsin-Chu, Taiwan</td>
<td>87%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSMC Partners</td>
<td>Engineering support activities</td>
<td>Ontario, Canada</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>TSMC Design Technology Canada Inc. (TSMC Canada)</td>
<td>Engineering support activities</td>
<td>Delaware, U.S.A.</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>TSMC Technology, Inc. (TSMC Technology)</td>
<td>Investment activities</td>
<td>Delaware, U.S.A.</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>TSMC Development, Inc. (TSMC Development)</td>
<td>Investment in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td>Invista Semiconductor Development Fund, Inc. (ISDF)</td>
<td>Investment in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td>Invista Semiconductor Development Fund, Inc. (ISDF)</td>
<td>Investment in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td>VisEra Holding Company (VisEra Holding)</td>
<td>Investment in companies involved in the design, manufacturing and other related businesses in the semiconductor industry</td>
<td>Cayman Islands</td>
<td>98%</td>
<td>a), e), g)</td>
</tr>
<tr>
<td></td>
<td>TSMC Development</td>
<td>Manufacturing, selling, testing and computer-aided designing of integrated circuits and other semiconductor devices</td>
<td>Washington, U.S.A.</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>WaferTech, LLC (WaferTech)</td>
<td>Manufacturing of electronic parts, wholesaling and retailing of electronic materials, and researching, developing and testing of RFID</td>
<td>New Taipei, Taiwan</td>
<td>58%</td>
<td>58%</td>
</tr>
<tr>
<td></td>
<td>VTAF III</td>
<td>Manufacturing and other related businesses in the semiconductor industry</td>
<td>New Taipei, Taiwan</td>
<td>58%</td>
<td>- a)</td>
</tr>
<tr>
<td></td>
<td>Mutual-Pak Technology Co., Ltd. (Mutual-Pak)</td>
<td>Manufacturing of electronic parts, wholesaling and retailing of electronic materials, and researching, developing and testing of RFID</td>
<td>New Taipei, Taiwan</td>
<td>58%</td>
<td>- a)</td>
</tr>
<tr>
<td></td>
<td>Growth Fund Limited (Growth Fund)</td>
<td>Investing in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>VentureTech Alliance Holdings, LLC (VTA Holdings)</td>
<td>Investing in new start-up technology companies</td>
<td>Delaware, U.S.A.</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>VTAF III, VTAF II and Emerging Alliance</td>
<td>Investing in new start-up technology companies</td>
<td>Delaware, U.S.A.</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>VisEra Holding</td>
<td>Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter</td>
<td>Hsin-Chu, Taiwan</td>
<td>87%</td>
<td>e), g)</td>
</tr>
</tbody>
</table>

Note a: This is an immaterial subsidiary for which the consolidated financial statements are not audited by the Company's independent accountants.

Note b: Under the investment agreement entered into with the municipal government of Nanjing, China on March 28, 2016, the Company will make an investment in Nanjing in the amount of approximately US$3 billion to establish a subsidiary managing a 300㎜ wafer fab with the capacity of 20,000 12-inch wafers per month, and a design service center. TSMC Nanjing was established in May 2016.

Note c: Due to the expiration of the investment agreement between Emerging Alliance and TSMC, Emerging Alliance completed the liquidation procedures in April 2016. Emerging Alliance’s ownership in VTA Holdings is held directly by TSMC.

Note d: In August 2015, TSMC Solar Ltd. (TSMC Solar) ceased its manufacturing operations. TSMC Solar and TSMC Guang Neng Investment, Ltd. (TSMC GN) were incorporated into TSMC in December 2015. After the incorporation, TSMC Solar Europe GmbH, the subsidiary of TSMC Solar, is held directly by TSMC. TSMC Solar and TSMC Solar Europe GmbH has started the liquidation procedures. TSMC Solar North America, Inc. (TSMC Solar NA), the subsidiary of TSMC Solar, completed the liquidation procedures in December 2015.

Note e: The Company acquired OmniVision Technologies, Inc.’s (OVT’s) 49.1% ownership in VisEra Holding and 100% ownership in Taiwan OmniVision Investment Holding Co. (OVT Taiwan) on November 20, 2015. As a result, the Company has obtained controls of VisEra Holding and OVT Taiwan; therefore the Company has consolidated VisEra Holding, OVT Taiwan and VisEra Tech, held directly by TSMC, since November 20, 2015. Please refer to Note 33.

Note f: OVT Taiwan that originally acquired by the Company was renamed as Chi Cheng in December 2015. Chi Cheng was incorporated into TSMC in December 2016.

Note g: To simplify investment structure, VisEra Tech owned by VisEra Holding was transferred to TSMC in the third quarter of 2016. In October 2016, VisEra Holding was incorporated into TSMC Partners, the subsidiary of TSMC.
Note h: ISDF and ISDF II have started the liquidation procedures.

**Foreign Currencies**

The financial statements of each individual consolidated entity were expressed in the currency which reflected its primary economic environment (functional currency). The functional currency of TSMC and presentation currency of the consolidated financial statements are both New Taiwan Dollars (NT$). In preparing the consolidated financial statements, the operating results and financial positions of each consolidated entity are translated into NT$.

In preparing the financial statements of each individual consolidated entity, transactions in currencies other than the entity’s functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Such exchange differences are recognized in profit or loss in the year in which they arise. Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising on the retranslation of non-monetary items are included in profit or loss for the year except for exchange differences arising on the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which case, the exchange differences are also recognized directly in other comprehensive income. Non-monetary items that are measured in terms of historical cost in foreign currencies are not retranslated.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Company’s foreign operations are translated into NT$ using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to noncontrolling interests as appropriate).

**Classification of Current and Noncurrent Assets and Liabilities**

Current assets are assets held for trading purposes and assets expected to be converted to cash, sold or consumed within one year from the end of the reporting period. Current liabilities are obligations incurred for trading purposes and obligations expected to be settled within one year from the end of the reporting period. Assets and liabilities that are not classified as current are noncurrent assets and liabilities, respectively.

**Cash Equivalents**

Cash equivalents, for the purpose of meeting short-term cash commitments, consist of highly liquid time deposits and investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

**Financial Instruments**

Financial assets and liabilities shall be recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and liabilities are initially recognized at fair values. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.
Financial Assets

Financial assets are classified into the following specified categories: Financial assets “at fair value through profit or loss” (FVTPL), “held-to-maturity” financial assets, “available-for-sale” financial assets and “loans and receivables”. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. Regular way purchases or sales of financial assets are recognized and derecognized on a trade date or settlement date basis for which financial assets were classified in the same way, respectively. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

Financial assets at fair value through profit or loss

Financial assets are classified as at fair value through profit or loss when the financial asset is either held for trading or it is designated as at fair value through profit or loss.

Financial assets at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

Held-to-maturity financial assets

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity dates that the Company has the positive intent and ability to hold to maturity. Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest method less any impairment.

Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are either designated as available-for-sale or are not classified as (a) loans and receivables, (b) held-to-maturity financial assets or (c) financial assets at fair value through profit or loss.

Available-for-sale financial assets are measured at fair value. Interest income from available-for-sale monetary financial assets and dividends on available-for-sale equity investments are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to profit or loss.

Dividends on available-for-sale equity instruments are recognized in profit or loss when the Company’s right to receive the dividends is established.

Available-for-sale equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost less any identified impairment losses at the end of each reporting period. Such equity instruments are subsequently remeasured at fair value when their fair value can be reliably measured, and the difference between the carrying amount and fair value is recognized in profit or loss or other comprehensive income.

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables including cash and cash equivalents, notes and accounts receivable and other receivables are measured at amortized cost using the effective interest method, less any impairment, except for those loans and receivables with immaterial discounted effect.
**Impairment of financial assets**

Financial assets, other than those carried at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Those financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial assets, their estimated future cash flows have been affected.

For financial assets carried at amortized cost, such as trade receivables, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. The Company assesses the collectability of receivables by performing the account aging analysis and examining current trends in the credit quality of its customers.

For financial assets carried at amortized cost, the amount of the impairment loss is the difference between the asset’s carrying amount and the present value of estimated future cash flows, discounted at the financial asset’s original effective interest rate.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment loss was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the financial assets at the date the impairment loss is reversed does not exceed what the amortized cost would have been had the impairment loss not been recognized.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the year.

In respect of available-for-sale equity instruments, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to the recognition of an impairment loss is recognized in other comprehensive income and accumulated under the heading of unrealized gains or losses from available-for-sale financial assets.

For financial assets carried at cost, the amount of the impairment loss is measured as the difference between the asset’s carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account.

**Derecognition of financial assets**

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the financial asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the financial asset to another entity.

On derecognition of a financial asset in its entirety, the difference between the financial asset’s carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income and accumulated in equity is recognized in profit or loss.
Financial Liabilities and Equity Instruments

Classification as debt or equity

Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Financial liabilities

Financial liabilities are subsequently measured either at amortized cost using effective interest method or at FVTPL.

Financial liabilities are classified as at fair value through profit or loss when the financial liability is either held for trading or is designated as at fair value through profit or loss.

Financial liabilities at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

Financial liabilities other than those held for trading purposes and designated as at FVTPL are subsequently measured at amortized cost at the end of each reporting period.

Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company’s obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

Derivative Financial Instruments

Derivative financial instruments are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative financial instrument is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

Financial Instruments Designated as at Fair Value through Profit or Loss

A financial instrument may be designated as at fair value through profit or loss (FVTPL) upon initial recognition. The financial instrument forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company’s documented risk management or investment strategy, and information about the grouping is provided internally on that basis.

Hedge Accounting

The Company designates certain hedging instruments, which include stock forward contracts and interest rate futures contracts in respect of foreign currency risk, as fair value hedge. Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in profit or loss immediately. Hedge accounting is discontinued prospectively when the Company revokes the designated hedging
relationship, or when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer meets the criteria for hedge accounting.

The effective portion of changes in the fair value of derivative financial instruments that are designated and qualify as cash flow hedges is recognized in other comprehensive income and accumulated under the heading of cash flow hedges reserve. Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the period when the hedged item is recognized in profit or loss.

**Inventories**

Inventories are stated at the lower of cost or net realizable value. Inventories are recorded at standard cost and adjusted to approximate weighted-average cost at the end of the reporting period. Net realizable value represents the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale.

**Noncurrent Assets Held for Sale**

Noncurrent assets or disposal groups are classified as noncurrent assets held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the noncurrent asset held for sale is available for immediate sale in its present condition. To meet the criteria for the sale being highly probable, the appropriate level of management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the committed sale plan involves loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale, regardless of whether a noncontrolling interest in its former subsidiary is retained after the sale.

Noncurrent assets classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell. Recognition of depreciation would cease.

**Investments Accounted for Using Equity Method**

Investments accounted for using the equity method include investments in associates and interests in joint venture.

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

A joint venture is a joint arrangement whereby the Company and other parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The operating results and assets and liabilities of associates and joint venture are incorporated in these consolidated financial statements using the equity method of accounting. Under the equity method, an investment in an associate or a joint venture is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Company’s share of profit or loss and other comprehensive income of the associate and joint venture as well as the distribution received. The Company also recognizes its share in the changes in the equities of associates and joint venture.
Any excess of the cost of acquisition over the Company’s share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate or a joint venture recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Company’s share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Company discontinues the use of the equity method from the date when the Company ceases to have significant influence over an associate. When the Company retains an interest in the former associate, the Company measures the retained interest at fair value at that date. The difference between the carrying amount of the associate at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate is included in the determination of the gain or loss on disposal of the associate. In addition, the Company shall account for all amounts recognized in other comprehensive income in relation to that associate on the same basis as would be required if the associate had directly disposed of the related assets or liabilities. If the Company’s ownership interest in an associate is reduced as a result of disposal, but the investment continues to be an associate, the Company should reclassify to profit or loss only a proportionate amount of the gain or loss previously recognized in other comprehensive income.

When the Company subscribes to additional shares in an associate or a joint venture at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company’s proportionate interest in the net assets of the associate or joint venture. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus. If the Company’s ownership interest is reduced due to the additional subscription to the shares of associate or joint venture by other investors, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate or joint venture shall be reclassified to profit or loss on the same basis as would be required if the associate or joint venture had directly disposed of the related assets or liabilities.

When a consolidated entity transacts with an associate or a joint venture, profits and losses resulting from the transactions with the associate or joint venture are recognized in the Company’s consolidated financial statements only to the extent of interests in the associate or joint venture that are not owned by the Company.

Property, Plant and Equipment

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment. Costs include any incremental costs that are directly attributable to the construction or acquisition of the item of property, plant and equipment.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Such properties are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Depreciation is recognized so as to write off the cost of the assets less their residual values over their useful lives, and it is computed using the straight-line method over the following estimated useful lives: land improvements - 20 years; buildings - 5 to 20 years; machinery and equipment - 2 to 5 years; office equipment - 3 to 15 years; and leased assets - 20 years. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis. Land is not depreciated.
Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the assets. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

**Leases**

Leases are classified as finance lease whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

**The Company as lessor**

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease.

**The Company as lessee**

Assets held under finance lease are initially recognized as assets of the Company at the fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated balance sheet as an obligation under finance lease.

Lease payments are apportioned between finance expense and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability.

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

**Intangible Assets**

**Goodwill**

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment losses, if any.

**Other intangible assets**

Other separately acquired intangible assets with finite useful lives are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized using the straight-line method over the following estimated useful lives: Technology license fees - the estimated life of the technology or the term of the technology transfer contract; software and system design costs - 3 years or contract period; patent and others - the economic life or contract period. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

**Impairment of Tangible and Intangible Assets**

**Goodwill**

Goodwill is not amortized and instead is tested for impairment annually, or more frequently when there is an indication that the cash generating unit may be impaired. For the purpose of impairment testing, goodwill is allocated to each of the Company’s cash-generating units or groups of cash-generating units
that are expected to benefit from the synergies of the combination. If the recoverable amount of a cash-generating unit is less than its carrying amount, the difference is allocated first to reduce the carrying amount of any goodwill allocated to such cash generating unit and then to the other assets of the cash generating unit pro rata based on the carrying amount of each asset in the cash generating unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

Other tangible and intangible assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset or a cash-generating unit is increased to the revised estimate of its recoverable amount, but the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

Provision

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

Guarantee Deposit

Guarantee deposit mainly consists of cash received under deposit agreements with customers to ensure they have access to the Company’s specified capacity; and as guarantee of accounts receivable to ensure payment from customers. Cash received from customers is recorded as guarantee deposit upon receipt. Guarantee deposits are refunded to customers when terms and conditions set forth in the deposit agreements have been satisfied.

Revenue Recognition

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.
Sale of goods

Revenue from the sale of goods is recognized when the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- It is probable that the economic benefits associated with the transaction will flow to the Company; and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

In principle, payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued. Due to the short term nature of the receivables from sale of goods with the immaterial discounted effect, the Company measures them at the original invoice amounts without discounting.

Royalties, dividend and interest income

Revenue from royalties is recognized on an accrual basis in accordance with the substance of the relevant agreement, provided that it is probable that the economic benefits will flow to the Company and the amount of revenue can be measured reliably.

Dividend income from investments is recognized when the shareholder’s right to receive payment has been established, provided that it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

Employee Benefits

Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for service rendered by employees.

Retirement benefits

For defined contribution retirement benefit plans, payments to the benefit plan are recognized as an expense when the employees have rendered service entitling them to the contribution. For defined benefit retirement benefit plans, the cost of providing benefit is recognized based on actuarial calculations.

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the Projected Unit Credit Method. Service cost (including current service cost), and net interest on the net defined benefit liability (asset) are recognized as employee benefits expense in the period they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liability represents the actual deficit in the Company’s defined benefit plan.
Share-based Payment Arrangements

The Company elected to take the optional exemption under IFRS 1 for the share-based payment transactions granted and vested before January 1, 2012, the date of transition to Taiwan-IFRSs. There were no stock options granted prior to but unvested at the date of transition.

The compensation costs of employee stock options that were granted after January 1, 2012 are measured at the fair value of the stock options at the grant date. The fair value of the stock option granted determined at the grant date of the stock options is expensed on a straight-line basis over the vesting period, based on the Company’s estimate of the number of stock options that will eventually vest, with a corresponding increase in capital surplus - employee stock option. The estimate is revised if subsequent information indicates that the number of stock options expected to vest differs from original estimates.

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

Current tax

Income tax on unappropriated earnings (excluding earnings from foreign consolidated subsidiaries) at a rate of 10% is expensed in the year the shareholders approved the appropriation of earnings which is the year subsequent to the year the earnings are generated.

Adjustments of prior years’ tax liabilities are added to or deducted from the current year’s tax provision.

Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, net operating loss carryforwards and unused tax credits to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint venture, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered. The deferred tax assets which originally not recognized is also reviewed at the end of each reporting period and recognized to the extent that it is probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the year in which the liability is settled or the asset is realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.
Current and deferred tax for the year

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity, respectively.

Business Combinations

Acquisitions of businesses are accounted for using the acquisition method. Acquisition-related costs are generally recognized in profit or loss as incurred.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any noncontrolling interests in the acquiree, and the fair value of the acquirer’s previously held equity interest in the acquiree over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

Noncontrolling interests are initially measured at the noncontrolling interests’ proportionate share of the fair value of the acquiree’s identifiable net assets.

When a business combination is achieved in stages, the Company’s previously held equity interest in the acquiree is remeasured to fair value at the acquisition date, and the resulting gain or loss is recognized in profit or loss.

Insurance Claim

The Company recognizes insurance claim reimbursement for losses incurred related to disaster damages. Insurance claim reimbursements are recorded, net of any deductible amounts, at the time while there is evidence that the claim reimbursement is virtually certain to be received.

Government Grants

Government grants are not recognized until there is reasonable assurance that the Company will comply with the conditions attaching to them and that the grants will be received.

Government grants whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets (mainly including land use right and depreciable assets) are recognized as a deduction from the carrying amount of the related assets and recognized as a reduced depreciation or amortization charge in profit or loss over the contract period or useful lives of the related assets. Government grants that are receivables as compensation for expenses already incurred are deducted from incurred expenses in the period in which they become receivables.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION AND UNCERTAINTY

In the application of the aforementioned Company’s accounting policies, the directors are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimate is revised if the revision affects only that year, or in the year of the revision and future years if the revision affects both current and future years.
The following are the critical judgments, apart from those involving estimations, that the directors have made in the process of applying the Company’s accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements.

Revenue Recognition

The Company recognizes revenue when the conditions described in Note 4 are satisfied. The Company also records a provision for estimated future returns and other allowances in the same period the related revenue is recorded. Provision for estimated sales returns and other allowances is generally made and adjusted based on historical experience and the consideration of varying contractual terms, and our management periodically reviews the adequacy of the estimation used.

Impairment of Tangible and Intangible Assets Other than Goodwill

In the process of evaluating the potential impairment of tangible and intangible assets other than goodwill, the Company is required to make subjective judgments in determining the independent cash flows, useful lives, expected future revenue and expenses related to the specific asset groups with the consideration of the nature of semiconductor industry. Any changes in these estimates based on changed economic conditions or business strategies could result in significant impairment charges or reversal in future years.

Impairment of Goodwill

The assessment of impairment of goodwill requires the Company to make subjective judgment to determine the identified cash-generating units, allocate the goodwill to relevant cash-generating units and estimate the recoverable amount of relevant cash-generating units.

Impairment Assessment on Investment Using Equity Method

The Company assesses the impairment of investments accounted for using the equity method whenever triggering events or changes in circumstances indicate that an investment may be impaired and carrying value may not be recoverable. The Company measures the impairment based on a projected future cash flow of the investees, including the underlying assumptions of sales growth rate and capacity utilization rate formulated by such investees’ internal management team. The Company also takes into account market conditions and the relevant industry trends to ensure the reasonableness of such assumptions.

Realization of Deferred Income Tax Assets

Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which those deferred tax assets can be utilized. Assessment of the realization of the deferred tax assets requires the Company’s subjective judgment and estimate, including the future revenue growth and profitability, tax holidays, the amount of tax credits can be utilized and feasible tax planning strategies. Any changes in the global economic environment, the industry trends and relevant laws and regulations could result in significant adjustments to the deferred tax assets.

Valuation of Inventory

Inventories are stated at the lower of cost or net realizable value, and the Company uses judgment and estimate to determine the net realizable value of inventory at the end of each reporting period.

Due to the rapid technological changes, the Company estimates the net realizable value of inventory for obsolescence and unmarketable items at the end of reporting period and then writes down the cost of inventories to net realizable value. The net realizable value of the inventory is mainly determined based on assumptions of future demand within a specific time horizon.
Recognition and Measurement of Defined Benefit Plans

Net defined benefit liability and the resulting defined benefit costs under defined benefit pension plans are calculated using the Projected Unit Credit Method. Actuarial assumptions comprise the discount rate, rate of employee turnover, and future salary increase rate. Changes in economic circumstances and market conditions will affect these assumptions and may have a material impact on the amount of the expense and the liability.

6. CASH AND CASH EQUIVALENTS

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and deposits in banks</td>
<td>$ 536,895,344</td>
</tr>
<tr>
<td>Repurchase agreements collateralized by corporate bonds</td>
<td>2,361,250</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>1,997,239</td>
</tr>
<tr>
<td>Repurchase agreements collateralized by government bonds</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 541,253,833</td>
</tr>
</tbody>
</table>

Deposits in banks consisted of highly liquid time deposits that were readily convertible to known amounts of cash and were subject to an insignificant risk of changes in value.

7. FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial assets</td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ 142,406</td>
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<tr>
<td>Cross currency swap contracts</td>
<td>10,976</td>
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<tr>
<td><strong>Total Held for trading</strong></td>
<td>153,382</td>
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<tr>
<td>Designated as at FVTPL</td>
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</tr>
<tr>
<td>Time deposit</td>
<td>6,297,708</td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total Designated as at FVTPL</strong></td>
<td>6,297,730</td>
</tr>
<tr>
<td><strong>Total Financial assets</strong></td>
<td>$ 6,451,112</td>
</tr>
</tbody>
</table>

Financial liabilities

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Held for trading</td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ 91,585</td>
</tr>
<tr>
<td>Designated as at FVTPL</td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>99,550</td>
</tr>
<tr>
<td><strong>Total Held for trading</strong></td>
<td>$ 191,135</td>
</tr>
</tbody>
</table>
The Company entered into derivative contracts to manage exposures due to fluctuations of foreign exchange rates. The derivative contracts entered into by the Company did not meet the criteria for hedge accounting. Therefore, the Company did not apply hedge accounting treatment for derivative contracts.

Outstanding forward exchange contracts consisted of the following:

<table>
<thead>
<tr>
<th>Contract Amount (In Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity Date</td>
</tr>
<tr>
<td><strong>December 31, 2016</strong></td>
</tr>
<tr>
<td>Sell NT$/Buy EUR</td>
</tr>
<tr>
<td>Sell NT$/Buy JPY</td>
</tr>
<tr>
<td>Sell US$/Buy EUR</td>
</tr>
<tr>
<td>Sell US$/Buy JPY</td>
</tr>
<tr>
<td>Sell US$/Buy NT$</td>
</tr>
<tr>
<td>Sell US$/Buy RMB</td>
</tr>
<tr>
<td><strong>December 31, 2015</strong></td>
</tr>
<tr>
<td>Sell US$/Buy RMB</td>
</tr>
<tr>
<td>Sell US$/Buy NT$</td>
</tr>
</tbody>
</table>

Outstanding cross currency swap contracts consisted of the following:

<table>
<thead>
<tr>
<th>Range of Interest Rates Received</th>
<th>Range of Interest Rates Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity Date</td>
<td>Contract Amount (In Thousands)</td>
</tr>
<tr>
<td><strong>December 31, 2016</strong></td>
<td></td>
</tr>
<tr>
<td>January 2017</td>
<td>US$170,000/NT$5,487,600</td>
</tr>
</tbody>
</table>

8. AVAILABLE-FOR-SALE FINANCIAL ASSETS

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate bonds</td>
<td>$ 29,999,508</td>
</tr>
<tr>
<td>Agency bonds</td>
<td>14,880,482</td>
</tr>
<tr>
<td>Corporate issued asset-backed securities</td>
<td>11,254,757</td>
</tr>
<tr>
<td>Government bonds</td>
<td>8,457,362</td>
</tr>
<tr>
<td>Publicly traded stocks</td>
<td>3,196,658</td>
</tr>
<tr>
<td>$ 67,788,767</td>
<td>$ 14,299,361</td>
</tr>
</tbody>
</table>
9. HELD-TO-MATURITY FINANCIAL ASSETS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate bonds/Bank debentures</td>
<td>$ 23,849,701</td>
<td>$ 8,143,146</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>8,628,176</td>
<td>-</td>
</tr>
<tr>
<td>Negotiable certificate of deposit</td>
<td>4,829,850</td>
<td>4,934,250</td>
</tr>
<tr>
<td>Structured product</td>
<td>1,609,950</td>
<td>3,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 38,917,677</strong></td>
<td><strong>$ 16,077,396</strong></td>
</tr>
<tr>
<td>Current portion</td>
<td>$ 16,610,116</td>
<td>$ 9,166,523</td>
</tr>
<tr>
<td>Noncurrent portion</td>
<td>22,307,561</td>
<td>6,910,873</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 38,917,677</strong></td>
<td><strong>$ 16,077,396</strong></td>
</tr>
</tbody>
</table>

10. HEDGING DERIVATIVE FINANCIAL INSTRUMENTS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial assets- current</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair value hedges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate futures contracts</td>
<td><strong>$ 5,550</strong></td>
<td><strong>$ 1,739</strong></td>
</tr>
</tbody>
</table>

The Company entered into interest rate futures contracts, which are used to hedge against price risk caused by changes in interest rates in the Company’s investments in fixed income securities.

The outstanding interest rate futures contracts consisted of the following:

<table>
<thead>
<tr>
<th>Maturity Period</th>
<th>Contract Amount (US$ in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2016</td>
<td></td>
</tr>
<tr>
<td>March 2017</td>
<td>US$ 53,600</td>
</tr>
<tr>
<td>December 31, 2015</td>
<td></td>
</tr>
<tr>
<td>March 2016</td>
<td>US$ 13,800</td>
</tr>
</tbody>
</table>

11. NOTES AND ACCOUNTS RECEIVABLE, NET

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes and accounts receivable</td>
<td>$ 128,815,389</td>
<td>$ 85,547,926</td>
</tr>
<tr>
<td>Allowance for doubtful receivables</td>
<td>(480,118)</td>
<td>(488,251)</td>
</tr>
<tr>
<td>Notes and accounts receivable, net</td>
<td><strong>$ 128,335,271</strong></td>
<td><strong>$ 85,059,675</strong></td>
</tr>
</tbody>
</table>
In principle, the payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued. The allowance for doubtful receivables is assessed by reference to the collectability of receivables by performing the account aging analysis, historical experience and current financial condition of customers.

Except for those impaired, for the rest of the notes and accounts receivable, the account aging analysis at the end of the reporting period is summarized in the following table. Notes and accounts receivable include amounts that are past due but for which the Company has not recognized a specific allowance for doubtful receivables after the assessment since there has not been a significant change in the credit quality of its customers and the amounts are still considered recoverable. In addition, the Company has obtained guarantee to certain receivables.

**Aging analysis of notes and accounts receivable, net**

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither past due nor impaired</td>
<td>$ 108,411,408</td>
<td>$ 71,482,666</td>
</tr>
<tr>
<td>Past due but not impaired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past due within 30 days</td>
<td>15,017,824</td>
<td>13,577,009</td>
</tr>
<tr>
<td>Past due 31-60 days</td>
<td>1,844,726</td>
<td>-</td>
</tr>
<tr>
<td>Past due 61-120 days</td>
<td>3,061,313</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 128,335,271</strong></td>
<td><strong>$ 85,059,675</strong></td>
</tr>
</tbody>
</table>

**Movements of the allowance for doubtful receivables**

<table>
<thead>
<tr>
<th></th>
<th>Individually Assessed for Impairment</th>
<th>Collectively Assessed for Impairment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2016</td>
<td>$ 10,241</td>
<td>$ 478,010</td>
<td>$ 488,251</td>
</tr>
<tr>
<td>Provision</td>
<td>-</td>
<td>321</td>
<td>321</td>
</tr>
<tr>
<td>Reversal/Write-off</td>
<td>(8,393)</td>
<td>-</td>
<td>(8,393)</td>
</tr>
<tr>
<td>Effect of exchange rate changes</td>
<td>-</td>
<td>(61)</td>
<td>(61)</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2016</strong></td>
<td><strong>$ 1,848</strong></td>
<td><strong>$ 478,270</strong></td>
<td><strong>$ 480,118</strong></td>
</tr>
<tr>
<td>Balance at January 1, 2015</td>
<td>$ 8,093</td>
<td>$ 478,637</td>
<td>$ 486,730</td>
</tr>
<tr>
<td>Provision</td>
<td>28,593</td>
<td>4,814</td>
<td>33,407</td>
</tr>
<tr>
<td>Reversal/Write-off</td>
<td>(29,065)</td>
<td>(4,737)</td>
<td>(33,802)</td>
</tr>
<tr>
<td>Effect of acquisition of subsidiary</td>
<td>1,847</td>
<td>-</td>
<td>1,847</td>
</tr>
<tr>
<td>Effect of exchange rate changes</td>
<td>773</td>
<td>(704)</td>
<td>69</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2015</strong></td>
<td><strong>$ 10,241</strong></td>
<td><strong>$ 478,010</strong></td>
<td><strong>$ 488,251</strong></td>
</tr>
</tbody>
</table>

**Aging analysis of accounts receivable that is individually determined as impaired**

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past due over 121 days</td>
<td>$ 1,848</td>
<td>$ 10,241</td>
</tr>
</tbody>
</table>
12. INVENTORIES

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished goods</td>
<td>$ 8,521,873</td>
<td>$ 7,974,902</td>
</tr>
<tr>
<td>Work in process</td>
<td>33,330,870</td>
<td>53,632,056</td>
</tr>
<tr>
<td>Raw materials</td>
<td>4,012,190</td>
<td>3,038,756</td>
</tr>
<tr>
<td>Supplies and spare parts</td>
<td>2,817,300</td>
<td>2,406,556</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 48,682,233</td>
<td>$ 67,052,270</td>
</tr>
</tbody>
</table>

Write-down of inventories to net realizable value (excluding earthquake losses) in the amount of NT$1,542,779 thousand and NT$464,361 thousand, respectively, were included in the cost of revenue for the years ended December 31, 2016 and 2015. Please refer to related earthquake losses in Note 41.

13. FINANCIAL ASSETS CARRIED AT COST

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-publicly traded stocks</td>
<td>$ 2,944,859</td>
<td>$ 3,268,100</td>
</tr>
<tr>
<td>Mutual funds</td>
<td>1,157,608</td>
<td>722,782</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 4,102,467</td>
<td>$ 3,990,882</td>
</tr>
</tbody>
</table>

Since there is a wide range of estimated fair values of the Company’s investments in non-publicly traded stocks, the Company concludes that the fair value cannot be reliably measured and therefore should be measured at the cost less any impairment.

The stocks of Impinj, Inc. and Richwave Technology Corp. were listed in July 2016 and November 2015, respectively. Accordingly, the Company reclassified the aforementioned investments from financial assets carried at cost to available-for-sale financial assets.

14. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

a. Investments in associates

Associates consisted of the following:

<table>
<thead>
<tr>
<th>Name of Associate</th>
<th>Place of Incorporation and Operation</th>
<th>Carrying Amount</th>
<th>% of Ownership and Voting Rights Held by the Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanguard International Semiconductor Corporation (VIS)</td>
<td>Research, design, development, manufacture, packaging, testing and sale of memory integrated circuits, LSI, VLSI and related parts</td>
<td>Hsinchu, Taiwan</td>
<td>$ 8,806,384</td>
</tr>
<tr>
<td>Systems on Silicon Manufacturing Company Pte Ltd. (SSMC)</td>
<td>Fabrication and supply of integrated circuits</td>
<td>Singapore</td>
<td>7,163,516</td>
</tr>
<tr>
<td>Xintec Inc. (Xintec)</td>
<td>Wafer level chip size packaging service</td>
<td>Taoyuan, Taiwan</td>
<td>2,599,807</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Name of Associate</th>
<th>Principal Activities</th>
<th>Place of Incorporation and Operation</th>
<th>Carrying Amount</th>
<th>% of Ownership and Voting Rights Held by the Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Unichip Corporation (GUC)</td>
<td>Researching, developing, manufacturing, testing and marketing of integrated circuits</td>
<td>Hsinchu, Taiwan</td>
<td>$ 1,174,181</td>
<td>35%</td>
</tr>
<tr>
<td>Motech Industries, Inc. (Motech)</td>
<td>Manufacturing and sales of solar cells, crystalline silicon solar cell, and test and measurement instruments and design and construction of solar power systems</td>
<td>New Taipei, Taiwan</td>
<td>-</td>
<td>12%</td>
</tr>
</tbody>
</table>

(Concluded)

Starting June 2016, the Company has no longer served as Motech’s board of director. As a result, the Company exercises no significant influence over Motech. Therefore, Motech is no longer accounted for using the equity method. Further, such investment was reclassified to available-for-sale financial assets and the Company recognized a disposal loss of NT$259,960 thousand.

In June 2015, Motech merged with Topcell Solar International Co., Ltd with exchange of shares. As a result, the Company’s percentage of ownership over Motech decreased to 18.0%. In the fourth quarter of 2015, the Company sold 29,160 thousand common shares of Motech and recognized a disposal gain of NT$202,384 thousand. After the sale, the Company’s percentage of ownership over Motech decreased to 12.0%. Motech continued to be accounted for using equity method as the Company still retained significant influence over Motech.

The Company acquired OVT’s 49.1% ownership in VisEra Holding on November 20, 2015. As a result, the Company has obtained control of VisEra Holding and consolidated VisEra Holding since November 20, 2015. The Company included the Xintec shares held by VisEra Holding and total percentage of ownership over Xintec increased to 41.4%. To simplify investment structure, Xintec owned by VisEra Holding was transferred to TSMC in the third quarter of 2016.

In March 2015, Xintec listed its shares on the R.O.C. Over-the-Counter (Taipei Exchange). Consequently, the Company’s percentage of ownership over Xintec was diluted to approximately 35.4%. In April 2015, the Company sold 2,172 thousand common shares of Xintec and recognized a disposal gain of NT$43,017 thousand.

In the second quarter of 2015, the Company sold 82,000 thousand common shares of VIS and recognized a disposal gain of NT$2,263,539 thousand. After the sale, the Company owned approximately 28.3% of the equity interest in VIS.

The summarized financial information in respect of each of the Company’s material associates is set out below. The summarized financial information below represents amounts shown in the associate’s financial statements prepared in accordance with Taiwan-IFRSs adjusted by the Company using the equity method of accounting.

1) VIS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>$ 25,662,921</td>
<td>$ 24,800,749</td>
</tr>
<tr>
<td>Noncurrent assets</td>
<td>$ 9,501,442</td>
<td>$ 7,785,093</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>$ 5,476,672</td>
<td>$ 4,262,001</td>
</tr>
<tr>
<td>Noncurrent liabilities</td>
<td>$ 804,107</td>
<td>$ 712,611</td>
</tr>
</tbody>
</table>
Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the consolidated balance sheets was as follows:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net assets</td>
<td>$ 28,883,584</td>
</tr>
<tr>
<td>Percentage of ownership</td>
<td>28%</td>
</tr>
<tr>
<td>The Company’s share of net assets of the associate</td>
<td>$ 8,179,830</td>
</tr>
<tr>
<td>Goodwill</td>
<td>626,554</td>
</tr>
<tr>
<td>Carrying amount of the investment</td>
<td>$ 8,806,384</td>
</tr>
</tbody>
</table>

2) SSMC

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>$ 14,585,150</td>
</tr>
<tr>
<td>Noncurrent assets</td>
<td>$ 5,360,076</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>$ 1,746,602</td>
</tr>
<tr>
<td>Noncurrent liabilities</td>
<td>$ 286,340</td>
</tr>
</tbody>
</table>

Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the consolidated balance sheets was as follows:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net assets</td>
<td>$ 17,912,284</td>
</tr>
<tr>
<td>Percentage of ownership</td>
<td>39%</td>
</tr>
<tr>
<td>The Company’s share of net assets of the associate</td>
<td>$ 6,948,175</td>
</tr>
<tr>
<td>Goodwill</td>
<td>213,984</td>
</tr>
<tr>
<td>Other adjustments</td>
<td>1,357</td>
</tr>
<tr>
<td>Carrying amount of the investment</td>
<td>$ 7,163,516</td>
</tr>
</tbody>
</table>

- 40 -
Aggregate information of associates that are not individually material was summarized as follows:

<table>
<thead>
<tr>
<th>Name of Associate</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIS</td>
<td>$ 26,089,360</td>
<td>$ 19,868,766</td>
</tr>
<tr>
<td>GUC</td>
<td>$ 3,664,997</td>
<td>$ 3,081,399</td>
</tr>
<tr>
<td>Xintec</td>
<td>$ 3,622,227</td>
<td>$ 3,605,534</td>
</tr>
<tr>
<td>Motech</td>
<td>$ 2,636,054</td>
<td>$ 2,636,054</td>
</tr>
</tbody>
</table>

b. Investments in joint venture

The Company and OVT entered into a joint agreement to invest in VisEra Holding. The Company acquired OVT’s 49.1% ownership in VisEra Holding on November 20, 2015. As a result, the Company has obtained control of VisEra Holding and consolidated VisEra Holding since November 20, 2015. Please refer to Note 33 for related disclosures.

15. PROPERTY, PLANT AND EQUIPMENT

<table>
<thead>
<tr>
<th>Year</th>
<th>Land and Land Improvements</th>
<th>Buildings</th>
<th>Machinery and Equipment</th>
<th>Office Equipment</th>
<th>Assets under Finance Leases</th>
<th>Equipment under Installation and Construction in Progress</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$ 4,067,391</td>
<td>$ 290,801,864</td>
<td>$ 1,853,480,604</td>
<td>$ 30,700,489</td>
<td>$ 7,113</td>
<td>$ 192,113,548</td>
<td>$ 2,417,177,569</td>
</tr>
<tr>
<td>2015</td>
<td>$ 4,036,785</td>
<td>$ 290,801,864</td>
<td>$ 1,853,480,604</td>
<td>$ 30,700,489</td>
<td>$ 7,113</td>
<td>$ 192,113,548</td>
<td>$ 2,417,177,569</td>
</tr>
</tbody>
</table>

The market prices of the investments accounted for using the equity method in publicly traded stocks calculated by the closing price at the end of the reporting period are summarized as follows. The closing price represents the quoted price in active markets, the level 1 fair value measurement.
The significant part of the Company’s buildings includes main plants, mechanical and electrical power equipment and clean rooms, and the related depreciation is calculated using the estimated useful lives of 20 years, 10 years and 10 years, respectively.

For the year ended December 31, 2015, the Company recognized an impairment loss of NT$259,568 thousand under foundry segment since the carrying amount of some of property, plant and equipment was expected to be unrecoverable. Such impairment loss was included in other operating income and expenses.

In August 2015, TSMC Solar ceased its manufacturing operations. In the third quarter of 2015, the Company recognized an impairment loss of NT$2,286,016 thousand since the carrying amounts of certain machinery and equipment, office equipment and mechanical and electrical power equipment were not expected to be recoverable. Such impairment loss was included in other operating income and expenses.

The Company had a building lease agreement with leasing terms from December 2003 to November 2018 and such lease was accounted for as a finance lease. In August 2015, the lease was determined to be an operating lease due to a modification on lease conditions; as such, the Company recognized a gain of NT$430,041 thousand from the modification. Such gain was included in other operating income and expenses.

16. INTANGIBLE ASSETS

<table>
<thead>
<tr>
<th>Goodwill</th>
<th>Technology License Fees</th>
<th>Software and System Design Costs</th>
<th>Patent and Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at January 1, 2016</td>
<td>$ 6,104,784</td>
<td>$ 8,454,304</td>
<td>$ 19,474,428</td>
<td>$ 4,879,026</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>1,091,261</td>
<td>2,788,512</td>
<td>519,289</td>
</tr>
<tr>
<td>Retirements</td>
<td>-</td>
<td>-</td>
<td>(5,273)</td>
<td>-</td>
</tr>
<tr>
<td>Effect of exchange rate changes</td>
<td>(96,809)</td>
<td>442</td>
<td>(14,072)</td>
<td>(11,880)</td>
</tr>
<tr>
<td>Balance at December 31, 2016</td>
<td>$ 6,007,975</td>
<td>$ 9,546,007</td>
<td>$ 22,243,595</td>
<td>$ 5,386,435</td>
</tr>
<tr>
<td>Accumulated amortization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at January 1, 2016</td>
<td>$ -</td>
<td>$ 4,779,388</td>
<td>$ 16,431,666</td>
<td>$ 3,635,608</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>1,367,370</td>
<td>1,730,834</td>
<td>645,202</td>
</tr>
<tr>
<td>Retirements</td>
<td>-</td>
<td>-</td>
<td>(5,273)</td>
<td>-</td>
</tr>
<tr>
<td>Effect of exchange rate changes</td>
<td>-</td>
<td>442</td>
<td>(12,799)</td>
<td>(3,272)</td>
</tr>
<tr>
<td>Balance at December 31, 2016</td>
<td>$ -</td>
<td>$ 6,147,200</td>
<td>$ 18,144,428</td>
<td>$ 4,277,538</td>
</tr>
<tr>
<td>Carrying amounts at December 31, 2016</td>
<td>$ 6,007,975</td>
<td>$ 3,398,807</td>
<td>$ 4,099,167</td>
<td>$ 1,108,897</td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at January 1, 2015</td>
<td>$ 5,888,813</td>
<td>$ 6,350,253</td>
<td>$ 18,697,098</td>
<td>$ 4,292,555</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>2,112,572</td>
<td>867,774</td>
<td>587,754</td>
</tr>
<tr>
<td>Retirements</td>
<td>-</td>
<td>-</td>
<td>(101,377)</td>
<td>-</td>
</tr>
<tr>
<td>Effect of acquisition of subsidiary</td>
<td>52,669</td>
<td>-</td>
<td>12,111</td>
<td>-</td>
</tr>
<tr>
<td>Effect of exchange rate changes</td>
<td>163,302</td>
<td>(8,521)</td>
<td>(1,178)</td>
<td>(1,285)</td>
</tr>
<tr>
<td>Balance at December 31, 2015</td>
<td>$ 6,104,784</td>
<td>$ 8,454,304</td>
<td>$ 19,474,428</td>
<td>$ 4,879,026</td>
</tr>
<tr>
<td>Accumulated amortization and impairment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at January 1, 2015</td>
<td>$ -</td>
<td>$ 3,778,912</td>
<td>$ 14,861,146</td>
<td>$ 3,057,151</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>950,867</td>
<td>1,672,627</td>
<td>578,706</td>
</tr>
<tr>
<td>Retirements</td>
<td>-</td>
<td>-</td>
<td>(101,377)</td>
<td>-</td>
</tr>
<tr>
<td>Impairment</td>
<td>-</td>
<td>58,130</td>
<td>384</td>
<td>-</td>
</tr>
<tr>
<td>Effect of exchange rate changes</td>
<td>(8,521)</td>
<td>(1,114)</td>
<td>(249)</td>
<td>(9,884)</td>
</tr>
<tr>
<td>Balance at December 31, 2015</td>
<td>$ -</td>
<td>$ 4,779,388</td>
<td>$ 16,431,666</td>
<td>$ 3,635,608</td>
</tr>
<tr>
<td>Carrying amounts at December 31, 2015</td>
<td>$ 6,104,784</td>
<td>$ 3,674,916</td>
<td>$ 3,042,762</td>
<td>$ 1,108,897</td>
</tr>
</tbody>
</table>
The Company’s goodwill has been tested for impairment at the end of the annual reporting period and the recoverable amount is determined based on the value in use. The value in use was calculated based on the cash flow forecast from the financial budgets covering the future five-year period, and the Company used annual discount rate of 8.40% in its test of impairment for both December 31, 2016 and 2015 to reflect the relevant specific risk in the cash-generating unit.

For the years ended December 31, 2016 and 2015, the Company did not recognize any impairment loss on goodwill.

In August 2015, TSMC Solar ceased its manufacturing operation and the Company recognized an impairment loss of NT$58,514 thousand in the third quarter of 2015 since the carrying amounts of technology license fees, software and system design costs were expected to be unrecoverable. Such impairment loss was included in other operating income and expenses.

17. OTHER ASSETS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax receivable</td>
<td>$ 2,325,825</td>
<td>$ 2,026,509</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>1,007,026</td>
<td>1,457,044</td>
</tr>
<tr>
<td>Net Input VAT</td>
<td>333,140</td>
<td>-</td>
</tr>
<tr>
<td>Long-term receivable</td>
<td>-</td>
<td>360,000</td>
</tr>
<tr>
<td>Others</td>
<td>1,219,863</td>
<td>1,118,492</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 4,885,854</strong></td>
<td><strong>$ 4,962,045</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Current portion</th>
<th>Noncurrent portion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 3,385,422</td>
<td>1,500,432</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 4,885,854</td>
<td>$ 4,962,045</td>
</tr>
</tbody>
</table>

18. SHORT-TERM LOANS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsecured loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>$ 57,958,200</td>
<td>$ 39,474,000</td>
</tr>
<tr>
<td>Original loan content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US$ (in thousands)</td>
<td>$ 1,800,000</td>
<td>$ 1,200,000</td>
</tr>
<tr>
<td>Annual interest rate</td>
<td>0.87%-1.07%</td>
<td>0.50%-0.77%</td>
</tr>
<tr>
<td>Maturity date</td>
<td>Due by January 2017</td>
<td>Due by February 2016</td>
</tr>
</tbody>
</table>

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19. PROVISIONS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales returns and allowances</td>
<td>$ 18,037,789</td>
<td>$ 10,163,536</td>
</tr>
<tr>
<td>Warranties</td>
<td>28,187</td>
<td>46,304</td>
</tr>
<tr>
<td></td>
<td>$ 18,065,976</td>
<td>$ 10,209,840</td>
</tr>
<tr>
<td>Current portion</td>
<td>$ 18,037,789</td>
<td>$ 10,163,536</td>
</tr>
<tr>
<td>Noncurrent portion</td>
<td>28,187</td>
<td>46,304</td>
</tr>
<tr>
<td></td>
<td>$ 18,065,976</td>
<td>$ 10,209,840</td>
</tr>
<tr>
<td>Sales Returns and Allowances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warranties</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year ended December 31, 2016

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$ 10,163,536</td>
<td>$ 10,209,840</td>
</tr>
<tr>
<td>Provision (Reversal)</td>
<td>36,519,312</td>
<td>36,505,683</td>
</tr>
<tr>
<td>Payment</td>
<td>(28,569,318)</td>
<td>(28,573,806)</td>
</tr>
<tr>
<td>Effect of exchange rate changes</td>
<td>(75,741)</td>
<td></td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 18,037,789</td>
<td>$ 18,065,976</td>
</tr>
</tbody>
</table>

Year ended December 31, 2015

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$ 10,445,452</td>
<td>$ 10,465,280</td>
</tr>
<tr>
<td>Provision</td>
<td>17,723,154</td>
<td>17,764,985</td>
</tr>
<tr>
<td>Payment</td>
<td>(18,133,061)</td>
<td>(18,147,759)</td>
</tr>
<tr>
<td>Effect of acquisition of subsidiary</td>
<td>126,049</td>
<td>126,049</td>
</tr>
<tr>
<td>Effect of exchange rate changes</td>
<td>1,942</td>
<td>(657)</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 10,163,536</td>
<td>$ 10,209,840</td>
</tr>
</tbody>
</table>

Provisions for sales returns and allowances are estimated based on historical experience, management judgment, and any known factors that would significantly affect the returns and allowances, and are recognized as a reduction of revenue in the same year of the related product sales.

The provision for warranties represents the present value of the Company’s best estimate of the future outflow of the economic benefits that will be required under the Company’s obligations for warranties. The best estimate has been made on the basis of historical warranty trends of business.

20. BONDS PAYABLE

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic unsecured bonds</td>
<td>$ 154,200,000</td>
<td>$ 166,200,000</td>
</tr>
<tr>
<td>Overseas unsecured bonds</td>
<td>37,028,850</td>
<td>49,342,500</td>
</tr>
<tr>
<td></td>
<td>191,228,850</td>
<td>215,542,500</td>
</tr>
<tr>
<td>Less: Discounts on bonds payable</td>
<td>(35,293)</td>
<td>(67,306)</td>
</tr>
<tr>
<td>Less: Current portion</td>
<td>(38,100,000)</td>
<td>(23,510,112)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 153,093,557</td>
<td>$ 191,965,082</td>
</tr>
</tbody>
</table>

- 44 -
The major terms of domestic unsecured bonds are as follows:

<table>
<thead>
<tr>
<th>Issuance</th>
<th>Tranche</th>
<th>Issuance Period</th>
<th>Total Amount</th>
<th>Coupon Rate</th>
<th>Repayment and Interest Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-1</td>
<td>A</td>
<td>September 2011 to September 2016</td>
<td>$ 10,500,000</td>
<td>1.40%</td>
<td>Bullet repayment; interest payable annually</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>September 2011 to September 2018</td>
<td>7,500,000</td>
<td>1.63%</td>
<td>The same as above</td>
</tr>
<tr>
<td>100-2</td>
<td>A</td>
<td>January 2012 to January 2017</td>
<td>10,000,000</td>
<td>1.29%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>January 2012 to January 2019</td>
<td>7,000,000</td>
<td>1.46%</td>
<td>The same as above</td>
</tr>
<tr>
<td>101-1</td>
<td>A</td>
<td>August 2012 to August 2017</td>
<td>9,900,000</td>
<td>1.28%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>August 2012 to August 2019</td>
<td>9,000,000</td>
<td>1.40%</td>
<td>The same as above</td>
</tr>
<tr>
<td>101-2</td>
<td>A</td>
<td>September 2012 to September 2017</td>
<td>12,700,000</td>
<td>1.28%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>September 2012 to September 2019</td>
<td>9,000,000</td>
<td>1.39%</td>
<td>The same as above</td>
</tr>
<tr>
<td>101-3</td>
<td></td>
<td>October 2012 to October 2022</td>
<td>4,400,000</td>
<td>1.53%</td>
<td>The same as above</td>
</tr>
<tr>
<td>101-4</td>
<td>A</td>
<td>January 2013 to January 2018</td>
<td>10,600,000</td>
<td>1.23%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>January 2013 to January 2020</td>
<td>10,000,000</td>
<td>1.35%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>January 2013 to January 2023</td>
<td>3,000,000</td>
<td>1.49%</td>
<td>The same as above</td>
</tr>
<tr>
<td>102-1</td>
<td>A</td>
<td>February 2013 to February 2018</td>
<td>6,200,000</td>
<td>1.23%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>February 2013 to February 2020</td>
<td>11,600,000</td>
<td>1.38%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>February 2013 to February 2023</td>
<td>3,600,000</td>
<td>1.50%</td>
<td>The same as above</td>
</tr>
<tr>
<td>102-2</td>
<td>A</td>
<td>July 2013 to July 2020</td>
<td>10,200,000</td>
<td>1.50%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>July 2013 to July 2023</td>
<td>3,500,000</td>
<td>1.70%</td>
<td>The same as above</td>
</tr>
<tr>
<td>102-3</td>
<td>A</td>
<td>August 2013 to August 2017</td>
<td>4,000,000</td>
<td>1.34%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>August 2013 to August 2019</td>
<td>8,500,000</td>
<td>1.52%</td>
<td>The same as above</td>
</tr>
<tr>
<td>102-4</td>
<td>A</td>
<td>September 2013 to September 2016</td>
<td>1,500,000</td>
<td>1.35%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>September 2013 to September 2017</td>
<td>1,500,000</td>
<td>1.45%</td>
<td>The same as above</td>
</tr>
</tbody>
</table>

(Continued)
### Issuance

<table>
<thead>
<tr>
<th>Issuance</th>
<th>Tranche</th>
<th>Issuance Period</th>
<th>Total Amount</th>
<th>Coupon Rate</th>
<th>Repayment and Interest Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-4</td>
<td>C</td>
<td>September 2013 to March 2019</td>
<td>$1,400,000</td>
<td>1.60%</td>
<td>Bullet repayment; interest payable annually (interest for the six months prior to maturity will accrue on the basis of actual days and be repayable at maturity)</td>
</tr>
<tr>
<td>D</td>
<td>September 2013 to March 2021</td>
<td>2,600,000</td>
<td>1.85%</td>
<td>The same as above</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>September 2013 to March 2023</td>
<td>5,400,000</td>
<td>2.05%</td>
<td>The same as above</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>September 2013 to September 2023</td>
<td>2,600,000</td>
<td>2.10%</td>
<td>Bullet repayment; interest payable annually</td>
<td></td>
</tr>
</tbody>
</table>

The major terms of overseas unsecured bonds are as follows:

<table>
<thead>
<tr>
<th>Issuance Period</th>
<th>Total Amount (US$ in Thousands)</th>
<th>Coupon Rate</th>
<th>Repayment and Interest Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2013 to April 2016</td>
<td>$350,000</td>
<td>0.95%</td>
<td>Bullet repayment; interest payable semi-annually</td>
</tr>
<tr>
<td>April 2013 to April 2018</td>
<td>$1,150,000</td>
<td>1.625%</td>
<td>The same as above</td>
</tr>
</tbody>
</table>

### 21. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The plan under the R.O.C. Labor Pension Act (the “Act”) is deemed a defined contribution plan. Pursuant to the Act, TSMC, Mutual-Pak, TSMC Solar and VisEra Tech have made monthly contributions equal to 6% of each employee’s monthly salary to employees’ pension accounts. Furthermore, TSMC North America, TSMC China, TSMC Nanjing, TSMC Europe, TSMC Canada, TSMC Technology, TSMC Solar NA and TSMC Solar Europe GmbH also make monthly contributions at certain percentages of the basic salary of their employees. Accordingly, the Company recognized expenses of NT$2,164,900 thousand and NT$2,003,534 thousand in the consolidated statements of comprehensive income for the years ended December 31, 2016 and 2015, respectively.

b. Defined benefit plans

TSMC and TSMC Solar have defined benefit plans under the R.O.C. Labor Standards Law that provide benefits based on an employee’s length of service and average monthly salary for the six-month period prior to retirement. The aforementioned companies contribute an amount equal to 2% of salaries paid each month to their respective pension funds (the Funds), which are administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the Committee’s name in the Bank of Taiwan. Before the end of each year, the Company assesses the balance in the Funds. If the amount of the balance in the Funds is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one
appropriation that should be made before the end of March of the next year. The Funds are operated and managed by the government’s designated authorities; as such, the Company does not have any right to intervene in the investments of the Funds.

Amounts recognized in the consolidated statements of comprehensive income in respect of these defined benefit plans were as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current service cost</td>
<td>$132,786</td>
<td>$134,541</td>
</tr>
<tr>
<td>Net interest expense</td>
<td>139,355</td>
<td>144,389</td>
</tr>
<tr>
<td>Components of defined benefit costs recognized in profit or loss</td>
<td>272,141</td>
<td>278,930</td>
</tr>
<tr>
<td>Remeasurement on the net defined benefit liability:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on plan assets (excluding amounts included in net interest expense)</td>
<td>45,721</td>
<td>(13,707)</td>
</tr>
<tr>
<td>Actuarial loss arising from experience adjustments</td>
<td>38,195</td>
<td>297,077</td>
</tr>
<tr>
<td>Actuarial loss arising from changes in financial assumptions</td>
<td>694,632</td>
<td>544,333</td>
</tr>
<tr>
<td>Actuarial loss arising from changes in demographic assumptions</td>
<td></td>
<td>278,672</td>
</tr>
<tr>
<td>Components of defined benefit costs recognized in other comprehensive income</td>
<td></td>
<td>1,057,220</td>
</tr>
<tr>
<td>Total</td>
<td>$1,329,361</td>
<td>$1,106,633</td>
</tr>
</tbody>
</table>

The pension costs of the aforementioned defined benefit plans were recognized in profit or loss by the following categories:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of revenue</td>
<td>$176,977</td>
<td>$189,523</td>
</tr>
<tr>
<td>Research and development expenses</td>
<td>73,395</td>
<td>81,333</td>
</tr>
<tr>
<td>General and administrative expenses</td>
<td>17,367</td>
<td>3,102</td>
</tr>
<tr>
<td>Marketing expenses</td>
<td>4,402</td>
<td>4,972</td>
</tr>
<tr>
<td>Total</td>
<td>$272,141</td>
<td>$278,930</td>
</tr>
</tbody>
</table>

The amounts arising from the defined benefit obligation of the Company in the consolidated balance sheets were as follows:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value of defined benefit obligation</td>
<td>$12,480,480</td>
</tr>
<tr>
<td>Fair value of plan assets</td>
<td>(3,929,072)</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>$8,551,408</td>
</tr>
</tbody>
</table>
Movements in the present value of the defined benefit obligation were as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$11,318,174</td>
<td>$10,265,284</td>
</tr>
<tr>
<td>Current service cost</td>
<td>132,786</td>
<td>134,541</td>
</tr>
<tr>
<td>Interest expense</td>
<td>212,909</td>
<td>228,444</td>
</tr>
<tr>
<td>Remeasurement losses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actuarial loss arising from experience adjustments</td>
<td>38,195</td>
<td>297,077</td>
</tr>
<tr>
<td>Actuarial loss arising from changes in financial assumptions</td>
<td>694,632</td>
<td>544,333</td>
</tr>
<tr>
<td>Actuarial loss arising from changes in demographic assumptions</td>
<td>278,672</td>
<td>-</td>
</tr>
<tr>
<td>Benefits paid from plan assets</td>
<td>(194,888)</td>
<td>(146,136)</td>
</tr>
<tr>
<td>Benefits paid directly by the Company</td>
<td>-</td>
<td>(5,369)</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$12,480,480</td>
<td>$11,318,174</td>
</tr>
</tbody>
</table>

Movements in the fair value of the plan assets were as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$3,870,148</td>
<td>$3,697,502</td>
</tr>
<tr>
<td>Interest income</td>
<td>73,554</td>
<td>84,055</td>
</tr>
<tr>
<td>Remeasurement gains (losses):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on plan assets (excluding amounts included in net interest expense)</td>
<td>(45,721)</td>
<td>13,707</td>
</tr>
<tr>
<td>Contributions from employer</td>
<td>225,979</td>
<td>221,020</td>
</tr>
<tr>
<td>Benefits paid from plan assets</td>
<td>(194,888)</td>
<td>(146,136)</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$3,929,072</td>
<td>$3,870,148</td>
</tr>
</tbody>
</table>

The fair value of the plan assets by major categories at the end of reporting period was as follows:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$818,426</td>
</tr>
<tr>
<td>Equity instruments</td>
<td>1,852,950</td>
</tr>
<tr>
<td>Debt instruments</td>
<td>1,257,696</td>
</tr>
<tr>
<td></td>
<td>$3,929,072</td>
</tr>
</tbody>
</table>

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The principal assumptions of the actuarial valuation were as follows:

<table>
<thead>
<tr>
<th>Measurement Date</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount rate</td>
<td>1.50%</td>
<td>1.90%</td>
</tr>
<tr>
<td>Future salary increase rate</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
</tbody>
</table>
Through the defined benefit plans under the R.O.C. Labor Standards Law, the Company is exposed to the following risks:

1) Investment risk: The pension funds are invested in equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the government’s designated authorities or under the mandated management. However, under the R.O.C. Labor Standards Law, the rate of return on assets shall not be less than the average interest rate on a two-year time deposit published by the local banks and the government is responsible for any shortfall in the event that the rate of return is less than the required rate of return.

2) Interest risk: A decrease in the government bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the debt investments of the plan assets.

Assuming a hypothetical decrease in interest rate at the end of the reporting period contributed to a decrease of 0.5% in the discount rate and all other assumptions were held constant, the present value of the defined benefit obligation would increase by NT$970,282 thousand and NT$844,058 thousand as of December 31, 2016 and 2015, respectively.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

Assuming the expected salary rate increases by 0.5% at the end of the reporting period and all other assumptions were held constant, the present value of the defined benefit obligation would increase by NT$951,424 thousand and NT$830,699 thousand as of December 31, 2016 and 2015, respectively.

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation liability recognized in the consolidated balance sheets.

The Company expects to make contributions of NT$232,759 thousand to the defined benefit plans in the next year starting from December 31, 2016. The weighted average duration of the defined benefit obligation is 14 years.

22. GUARANTEE DEPOSITS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity guarantee</td>
<td>$ 20,929,350</td>
<td>$ 27,549,563</td>
</tr>
<tr>
<td>Receivables guarantee</td>
<td>5,559,960</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>181,312</td>
<td>183,051</td>
</tr>
<tr>
<td></td>
<td>$ 26,670,622</td>
<td>$ 27,732,614</td>
</tr>
</tbody>
</table>

(Continued)
Current portion (classified under accrued expenses and other current liabilities)  
$ 12,000,189  
$ 6,167,813  
Noncurrent portion  
14,670,433  
21,564,801  
$ 26,670,622  
$ 27,732,614  
(Concluded)

Some of guarantee deposits were refunded to customers by offsetting related accounts receivable.

23. EQUITY

a. Capital stock

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorized shares (in thousands)</td>
<td>28,050,000</td>
</tr>
<tr>
<td>Authorized capital</td>
<td>$ 280,500,000</td>
</tr>
<tr>
<td>Issued and paid shares (in thousands)</td>
<td>25,930,380</td>
</tr>
<tr>
<td>Issued capital</td>
<td>$ 259,303,805</td>
</tr>
</tbody>
</table>

A holder of issued common shares with par value of NT$10 per share is entitled to vote and to receive dividends.

The authorized shares include 500,000 thousand shares allocated for the exercise of employee stock options.

As of December 31, 2016, 1,072,194 thousand ADSs of TSMC were traded on the NYSE. The number of common shares represented by the ADSs was 5,360,968 thousand shares (one ADS represents five common shares).

b. Capital surplus

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional paid-in capital</td>
<td>$ 24,184,939</td>
</tr>
<tr>
<td>From merger</td>
<td>22,804,510</td>
</tr>
<tr>
<td>From convertible bonds</td>
<td>8,892,847</td>
</tr>
<tr>
<td>From share of changes in equities of subsidiaries</td>
<td>107,798</td>
</tr>
<tr>
<td>From share of changes in equities of associates and joint venture</td>
<td>282,155</td>
</tr>
<tr>
<td>Donations</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>$ 56,272,304</td>
</tr>
</tbody>
</table>

Under the relevant laws, the capital surplus generated from donations and the excess of the issuance price over the par value of capital stock (including the stock issued for new capital, mergers and convertible bonds) may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or stock dividends up to a certain percentage of TSMC’s paid-in capital. The capital surplus from share of changes in equities of subsidiaries, associates and joint venture may be used to offset a deficit.
c. Retained earnings and dividend policy

In accordance with the amendments to the R.O.C. Company Act in May 2015, the recipients of dividends and bonuses are limited to shareholders and do not include employees. The amendments to TSMC’s Articles of Incorporation on profits distribution policy had been approved by TSMC’s shareholders in its meeting held on June 7, 2016. For policy about the profit sharing bonus to employees, please refer to Note 32.

TSMC’s amended Articles of Incorporation provide that, when allocating the net profits for each fiscal year, TSMC shall first offset its losses in previous years and then set aside the following items accordingly:

1) Legal capital reserve at 10% of the profits left over, until the accumulated legal capital reserve equals TSMC’s paid-in capital;

2) Special capital reserve in accordance with relevant laws or regulations or as requested by the authorities in charge;

3) Any balance left over shall be allocated according to the resolution of the shareholders’ meeting.

TSMC’s Articles of Incorporation also provide that profits of TSMC may be distributed by way of cash dividend and/or stock dividend. However, distribution of profits shall be made preferably by way of cash dividend. Distribution of profits may also be made by way of stock dividend; provided that the ratio for stock dividend shall not exceed 50% of the total distribution.

Any appropriations of the profits are subject to shareholders’ approval in the following year.

The appropriation for legal capital reserve shall be made until the reserve equals the Company’s paid-in capital. The reserve may be used to offset a deficit, or be distributed as dividends in cash or stocks for the portion in excess of 25% of the paid-in capital if the Company incurs no loss.

Pursuant to existing regulations, the Company is required to set aside additional special capital reserve equivalent to the net debit balance of the other components of stockholders’ equity, such as the accumulated balance of foreign currency translation reserve, unrealized valuation gain/loss from available-for-sale financial assets, gain/loss from changes in fair value of hedging instruments in cash flow hedges, etc. For the subsequent decrease in the deduction amount to stockholders’ equity, any special reserve appropriated may be reversed to the extent that the net debit balance reverses.

The appropriations of 2015 and 2014 earnings have been approved by TSMC’s shareholders in its meetings held on June 7, 2016 and on June 9, 2015, respectively. The appropriations and dividends per share were as follows:

<table>
<thead>
<tr>
<th>Appropriation of Earnings</th>
<th>Dividends Per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For Fiscal Year 2015</td>
</tr>
<tr>
<td>Legal capital reserve</td>
<td>$30,657,384</td>
</tr>
<tr>
<td>Cash dividends to shareholders</td>
<td>155,582,283</td>
</tr>
<tr>
<td></td>
<td>$186,239,667</td>
</tr>
</tbody>
</table>
TSMC’s appropriations of earnings for 2016 had been approved in the meeting of the Board of Directors held on February 14, 2017. The appropriations and dividends per share were as follows:

<table>
<thead>
<tr>
<th>Appropriation of Earnings</th>
<th>Dividends Per Share (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Fiscal Year 2016</td>
<td>For Fiscal Year 2016</td>
</tr>
<tr>
<td>Legal capital reserve</td>
<td>$ 33,424,718</td>
</tr>
<tr>
<td>Cash dividends to shareholders</td>
<td>181,512,663</td>
</tr>
<tr>
<td></td>
<td>$ 214,937,381</td>
</tr>
</tbody>
</table>

The appropriations of earnings for 2016 are to be presented for approval in the TSMC’s shareholders’ meeting to be held on June 8, 2017 (expected).

Under the Integrated Income Tax System that became effective on January 1, 1998, the R.O.C. resident shareholders are allowed a tax credit for their proportionate share of the income tax paid by TSMC on earnings generated since January 1, 1998.

d. Others

Changes in others were as follows:

<table>
<thead>
<tr>
<th>Year Ended December 31, 2016</th>
<th>Foreign Currency Translation Reserve</th>
<th>Unrealized Gain/Loss from Available-for-sale Financial Assets</th>
<th>Cash Flow Hedges Reserve</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$ 11,039,949</td>
<td>$ 734,771</td>
<td>$ (607)</td>
<td>$ 11,774,113</td>
</tr>
<tr>
<td>Exchange differences arising on translation of foreign operations</td>
<td>(9,409,190)</td>
<td>-</td>
<td>-</td>
<td>(9,409,190)</td>
</tr>
<tr>
<td>Other comprehensive income reclassified to profit or loss upon liquidation of subsidiaries</td>
<td>36,105</td>
<td>-</td>
<td>-</td>
<td>36,105</td>
</tr>
<tr>
<td>Changes in fair value of available-for-sale financial assets</td>
<td>-</td>
<td>(696,240)</td>
<td>-</td>
<td>(696,240)</td>
</tr>
<tr>
<td>Cumulative (gain)/loss reclassified to profit or loss upon disposal of available-for-sale financial assets</td>
<td>-</td>
<td>4,071</td>
<td>-</td>
<td>4,071</td>
</tr>
<tr>
<td>Share of other comprehensive income (loss) of associates and joint venture</td>
<td>(915)</td>
<td>24,684</td>
<td>712</td>
<td>24,481</td>
</tr>
<tr>
<td>Other comprehensive loss reclassified to profit or loss upon disposal of associates</td>
<td>(4,712)</td>
<td>(3,469)</td>
<td>-</td>
<td>(8,181)</td>
</tr>
<tr>
<td>Income tax effect</td>
<td>-</td>
<td>(61,176)</td>
<td>-</td>
<td>(61,176)</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 1,661,237</td>
<td>$ 2,641</td>
<td>$ 105</td>
<td>$ 1,663,983</td>
</tr>
<tr>
<td></td>
<td>Year Ended December 31, 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign Currency Translation Reserve</td>
<td>Unrealized Gain/Loss from Available-for-sale Financial Assets</td>
<td>Cash Flow Hedges Reserve</td>
<td>Total</td>
</tr>
<tr>
<td>Balance, beginning of year</td>
<td>$ 4,502,113</td>
<td>$ 21,247,483</td>
<td>$ (305)</td>
<td>$ 25,749,291</td>
</tr>
<tr>
<td>Exchange differences arising on translation of foreign operations</td>
<td>8,061,882</td>
<td>-</td>
<td>-</td>
<td>8,061,882</td>
</tr>
<tr>
<td>Other comprehensive income/losses reclassified to profit or loss upon liquidation of subsidiaries</td>
<td>138,087</td>
<td>-</td>
<td>-</td>
<td>138,087</td>
</tr>
<tr>
<td>Changes in fair value of available-for-sale financial assets</td>
<td>-</td>
<td>(5,543)</td>
<td>-</td>
<td>(5,543)</td>
</tr>
<tr>
<td>Cumulative (gain)/loss reclassified to profit or loss upon disposal of available-for-sale financial assets</td>
<td>(1,595,413)</td>
<td>(20,475,233)</td>
<td>-</td>
<td>(22,070,646)</td>
</tr>
<tr>
<td>Share of other comprehensive income of associates and joint venture</td>
<td>(60,642)</td>
<td>(17,996)</td>
<td>(313)</td>
<td>(78,951)</td>
</tr>
<tr>
<td>The proportionate share of other comprehensive income/losses reclassified to profit or loss upon partial disposal of associates</td>
<td>(6,078)</td>
<td>2,051</td>
<td>11</td>
<td>(4,016)</td>
</tr>
<tr>
<td>Income tax effect</td>
<td>-</td>
<td>(15,991)</td>
<td>-</td>
<td>(15,991)</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 11,039,949</td>
<td>$ 734,771</td>
<td>$ (607)</td>
<td>$ 11,774,113</td>
</tr>
</tbody>
</table>

The exchange differences arising on translation of foreign operation’s net assets from its functional currency to TSMC’s presentation currency are recognized directly in other comprehensive income and also accumulated in the foreign currency translation reserve.

Unrealized gain/loss on available-for-sale financial assets represents the cumulative gains or losses arising from the fair value measurement on available-for-sale financial assets that are recognized in other comprehensive income, excluding the amounts recognized in profit or loss for the effective portion from changes in fair value of the hedging instruments. When those available-for-sale financial assets have been disposed of or are determined to be impaired subsequently, the related cumulative gains or losses in other comprehensive income are reclassified to profit or loss.

The cash flow hedges reserve represents the cumulative effective portion of gains or losses arising on changes in fair value of the hedging instruments entered into as cash flow hedges. The cumulative gains or losses arising on changes in fair value of the hedging instruments that are recognized and accumulated in cash flow hedges reserve will be reclassified to profit or loss only when the hedge transaction affects profit or loss.
24. SHARE-BASED PAYMENT

TSMC’s Employee Stock Option Plans, consisting of the TSMC 2004 Plan, TSMC 2003 Plan and TSMC 2002 Plan, were approved by the Securities and Futures Bureau on January 6, 2005, October 29, 2003 and June 25, 2002, respectively. The maximum number of stock options authorized to be granted under the TSMC 2004 Plan, TSMC 2003 Plan and TSMC 2002 Plan was 11,000 thousand, 120,000 thousand and 100,000 thousand, respectively, with each stock option eligible to subscribe for one common share of TSMC when exercised. The stock options may be granted to qualified employees of TSMC or any of its domestic or foreign subsidiaries, in which TSMC’s shareholding with voting rights, directly or indirectly, is more than fifty percent (50%). The stock options of all the plans are valid for ten years and exercisable at certain percentages subsequent to the second anniversary of the grant date. Under the terms of the plans, the stock options are granted at an exercise price equal to the closing price of TSMC’s common shares quoted on the TWSE on the grant date.

The Company did not issue employee stock option plans for years ended December 31, 2016 and 2015. Information about the TSMC’s outstanding employee stock options is described as follows:

<table>
<thead>
<tr>
<th>Number of Stock Options (In Thousands)</th>
<th>Weighted-average Exercise Price (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>718</td>
</tr>
<tr>
<td>Options exercised</td>
<td>(718)</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>-</td>
</tr>
<tr>
<td>Balance exercisable, end of year</td>
<td>-</td>
</tr>
</tbody>
</table>

The numbers of outstanding stock options and exercise prices have been adjusted to reflect the distribution of earnings by TSMC in accordance with the plans.

The employee stock options have been fully exercised in the second quarter of 2015.

25. NET REVENUE

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Net revenue from sale of goods</td>
</tr>
<tr>
<td>Net revenue from royalties</td>
</tr>
<tr>
<td>$ 947,938,344</td>
</tr>
</tbody>
</table>

26. OTHER OPERATING INCOME AND EXPENSES, NET

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Gain on disposal of property, plant and equipment</td>
</tr>
<tr>
<td>Impairment loss on property, plant and equipment</td>
</tr>
<tr>
<td>Gain from lease agreement modification</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td>$ 29,813</td>
</tr>
</tbody>
</table>
### 27. OTHER INCOME

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank deposits</td>
<td>$4,892,652</td>
<td>$3,928,030</td>
<td></td>
</tr>
<tr>
<td>Available-for-sale</td>
<td>816,185</td>
<td>35,811</td>
<td></td>
</tr>
<tr>
<td>financial assets</td>
<td>383,261</td>
<td>76,818</td>
<td></td>
</tr>
<tr>
<td>Held-to-maturity</td>
<td>225,402</td>
<td>88,657</td>
<td></td>
</tr>
<tr>
<td>financial assets</td>
<td>6,317,500</td>
<td>4,129,316</td>
<td></td>
</tr>
<tr>
<td>Structured product</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend income</td>
<td>137,401</td>
<td>621,513</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$6,454,901</td>
<td>$4,750,829</td>
<td></td>
</tr>
</tbody>
</table>

### 28. FINANCE COSTS

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>$3,014,753</td>
<td>$3,103,702</td>
<td></td>
</tr>
<tr>
<td>Bank loans</td>
<td>291,178</td>
<td>74,664</td>
<td></td>
</tr>
<tr>
<td>Finance leases</td>
<td>-</td>
<td>11,666</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>222</td>
<td>299</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$3,306,153</td>
<td>$3,190,331</td>
<td></td>
</tr>
</tbody>
</table>

### 29. OTHER GAINS AND LOSSES

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>Gain (loss) on disposal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of financial assets,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>net</td>
<td>$ (4,014)</td>
<td>$22,070,736</td>
<td></td>
</tr>
<tr>
<td>Available-for-sale</td>
<td>37,241</td>
<td>87,193</td>
<td></td>
</tr>
<tr>
<td>financial assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial assets carried</td>
<td>(259,960)</td>
<td>2,507,707</td>
<td></td>
</tr>
<tr>
<td>at cost</td>
<td>176,734</td>
<td>189,330</td>
<td></td>
</tr>
<tr>
<td>Gain (loss) on disposal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of investments accounted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for using equity method</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>net</td>
<td>(37,369)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Other gains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net gain (loss) on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>financial instruments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at FVTPL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td>467,051</td>
<td>(1,769,253)</td>
<td></td>
</tr>
<tr>
<td>Designated as at</td>
<td>(37,369)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>FVTPL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair value hedges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain (loss) from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hedging instruments</td>
<td>12,725</td>
<td>(134,112)</td>
<td></td>
</tr>
<tr>
<td>Gain (loss) arising from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>changes in fair value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of available-for-sale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>financial assets in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hedge effective portion</td>
<td>4,248</td>
<td>(305,619)</td>
<td></td>
</tr>
<tr>
<td>Impairment loss of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>financial assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial assets carried</td>
<td>(122,240)</td>
<td>(154,721)</td>
<td></td>
</tr>
<tr>
<td>at cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss from liquidation</td>
<td>(36,105)</td>
<td>(138,243)</td>
<td></td>
</tr>
<tr>
<td>of subsidiaries</td>
<td>(42,379)</td>
<td>(145,954)</td>
<td></td>
</tr>
<tr>
<td>Other losses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$195,932</td>
<td>$22,207,064</td>
<td></td>
</tr>
</tbody>
</table>
30. INCOME TAX

a. Income tax expense recognized in profit or loss

Income tax expense consisted of the following:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current income tax expense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current tax expense recognized in the current year</td>
<td>$54,315,433</td>
<td>$45,857,504</td>
</tr>
<tr>
<td>Income tax adjustments on prior years</td>
<td>(1,041,762)</td>
<td>(992,995)</td>
</tr>
<tr>
<td>Other income tax adjustments</td>
<td>122,461</td>
<td>247,835</td>
</tr>
<tr>
<td></td>
<td>$53,396,132</td>
<td>45,112,344</td>
</tr>
<tr>
<td>Deferred income tax expense (benefit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The origination and reversal of temporary differences</td>
<td>(1,775,023)</td>
<td>(1,542,786)</td>
</tr>
<tr>
<td>Investment tax credits and operating loss carryforward</td>
<td>35</td>
<td>303,186</td>
</tr>
<tr>
<td></td>
<td>(1,774,988)</td>
<td>(1,239,600)</td>
</tr>
<tr>
<td>Income tax expense recognized in profit or loss</td>
<td>$51,621,144</td>
<td>$43,872,744</td>
</tr>
</tbody>
</table>

A reconciliation of income before income tax and income tax expense recognized in profit or loss was as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income before tax</td>
<td>$385,959,380</td>
<td>$350,428,911</td>
</tr>
<tr>
<td>Income tax expense at the statutory rate</td>
<td>$66,945,088</td>
<td>$60,666,157</td>
</tr>
<tr>
<td>Tax effect of adjusting items:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deductible items in determining taxable income</td>
<td>(51,324)</td>
<td>(6,332,097)</td>
</tr>
<tr>
<td>Tax-exempt income</td>
<td>(19,594,962)</td>
<td>(22,144,303)</td>
</tr>
<tr>
<td>Additional income tax under the Alternative Minimum Tax Act</td>
<td>-</td>
<td>6,041,603</td>
</tr>
<tr>
<td>Additional income tax on unappropriated earnings</td>
<td>11,957,213</td>
<td>12,103,356</td>
</tr>
<tr>
<td>The origination and reversal of temporary differences</td>
<td>(1,775,023)</td>
<td>(1,542,786)</td>
</tr>
<tr>
<td>Income tax credits</td>
<td>(4,940,147)</td>
<td>(4,243,661)</td>
</tr>
<tr>
<td>Remeasurement of operating loss carryforward</td>
<td>(400)</td>
<td>69,635</td>
</tr>
<tr>
<td></td>
<td>52,540,445</td>
<td>44,617,904</td>
</tr>
<tr>
<td>Income tax adjustments on prior years</td>
<td>(1,041,762)</td>
<td>(992,995)</td>
</tr>
<tr>
<td>Other income tax adjustments</td>
<td>122,461</td>
<td>247,835</td>
</tr>
<tr>
<td>Income tax expense recognized in profit or loss</td>
<td>$51,621,144</td>
<td>$43,872,744</td>
</tr>
</tbody>
</table>

For the years ended December 31, 2016 and 2015, the Company applied a tax rate of 17% for entities subject to the R.O.C. Income Tax Law; for other jurisdictions, the Company measures taxes by using the applicable tax rate for each individual jurisdiction.
b. Income tax expense recognized in other comprehensive income

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Deferred income tax benefit (expense)</td>
<td></td>
</tr>
<tr>
<td>Related to remeasurement of defined benefit obligation</td>
<td>$126,867</td>
</tr>
<tr>
<td>Related to unrealized gain/loss on available-for-sale financial assets</td>
<td>$(61,176)</td>
</tr>
<tr>
<td></td>
<td>$  65,691</td>
</tr>
</tbody>
</table>

c. Deferred income tax balance

The analysis of deferred income tax assets and liabilities in the consolidated balance sheets was as follows:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred income tax assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary differences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>$4,244,214</td>
<td>$2,852,961</td>
</tr>
<tr>
<td>Provision for sales returns and allowance</td>
<td>1,512,061</td>
<td>1,141,511</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>939,543</td>
<td>895,486</td>
</tr>
<tr>
<td>Unrealized loss on inventories</td>
<td>737,247</td>
<td>622,741</td>
</tr>
<tr>
<td>Deferred compensation cost</td>
<td>378,740</td>
<td>316,283</td>
</tr>
<tr>
<td>Goodwill from business combination</td>
<td>-</td>
<td>10,025</td>
</tr>
<tr>
<td>Others</td>
<td>445,133</td>
<td>531,449</td>
</tr>
<tr>
<td>Operating loss carryforward</td>
<td>14,483</td>
<td>14,518</td>
</tr>
<tr>
<td></td>
<td>$8,271,421</td>
<td>$6,384,974</td>
</tr>
</tbody>
</table>

Deferred income tax liabilities

|                                    |                   |                   |
| Temporary differences              |                   |                   |
| Available-for-sale financial assets | $(92,447)       | $(31,271)         |
| Unrealized exchange gains          | $(48,736)         | -                 |
|                                    | $(141,183)        | $(31,271)         |

<table>
<thead>
<tr>
<th>Balance, Beginning of Year</th>
<th>Profit or Loss</th>
<th>Other Comprehensive Income</th>
<th>Effect of Exchange Rate Changes</th>
<th>Balance, End of Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred income tax assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary differences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>$2,852,961</td>
<td>$1,437,648</td>
<td>$-</td>
<td>$(46,395)</td>
</tr>
<tr>
<td>Provision for sales returns and allowance</td>
<td>1,141,511</td>
<td>371,410</td>
<td>-</td>
<td>(860)</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>895,486</td>
<td>(82,810)</td>
<td>126,867</td>
<td>-</td>
</tr>
<tr>
<td>Unrealized loss on inventories</td>
<td>737,247</td>
<td>622,741</td>
<td>-</td>
<td>(984)</td>
</tr>
<tr>
<td>Deferred compensation cost</td>
<td>378,740</td>
<td>316,283</td>
<td>-</td>
<td>(6,854)</td>
</tr>
<tr>
<td>Goodwill from business combination</td>
<td>445,133</td>
<td>(77,454)</td>
<td>-</td>
<td>(8,862)</td>
</tr>
<tr>
<td>Others</td>
<td>14,518</td>
<td>(35)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operating loss carryforward</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$6,384,974</td>
<td>$1,823,724</td>
<td>$126,867</td>
<td>$(64,144)</td>
</tr>
</tbody>
</table>
d. The investment operating loss carryforward and deductible temporary differences for which no deferred income tax assets have been recognized in the consolidated financial statements

The information of the operating loss carryforward for which no deferred tax assets have been recognized was as follows:

<table>
<thead>
<tr>
<th>Expiry period</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 4 years</td>
<td>$ 136,703</td>
<td>$ 85,402</td>
</tr>
<tr>
<td>5 - 10 years</td>
<td>41,389</td>
<td>97,831</td>
</tr>
<tr>
<td></td>
<td>$ 178,092</td>
<td>$ 183,233</td>
</tr>
</tbody>
</table>

As of December 31, 2016 and 2015, the aggregate deductible temporary differences for which no deferred income tax assets have been recognized amounted to NT$1,919,784 thousand and NT$1,972,286 thousand, respectively.
e. Unused operating loss carryforward and tax-exemption information

As of December 31, 2016, operating loss carryforward of Mutual-Pak consisted of the following:

<table>
<thead>
<tr>
<th>Expiry period</th>
<th>Remaining Creditable Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 4 years</td>
<td>$136,703</td>
</tr>
<tr>
<td>5 - 10 years</td>
<td>126,585</td>
</tr>
<tr>
<td></td>
<td>$263,288</td>
</tr>
</tbody>
</table>

As of December 31, 2016, the profits generated from the following projects of TSMC are exempt from income tax for a five-year period:

<table>
<thead>
<tr>
<th>Tax-exemption Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction and expansion of 2007 by TSMC</td>
</tr>
<tr>
<td>Construction and expansion of 2008 by TSMC</td>
</tr>
<tr>
<td>Construction and expansion of 2009 by TSMC</td>
</tr>
</tbody>
</table>

f. The information of unrecognized deferred income tax liabilities associated with investments

As of December 31, 2016 and 2015, the aggregate taxable temporary differences associated with investments in subsidiaries not recognized as deferred income tax liabilities amounted to NT$83,181,401 thousand and NT$80,919,309 thousand, respectively.

g. Integrated income tax information

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of the Imputation Credit Account - TSMC</td>
<td>$82,072,562</td>
<td>$59,973,516</td>
</tr>
</tbody>
</table>

The estimated and actual creditable ratio for distribution of TSMC’s earnings of 2016 and 2015 were 13.94% and 12.57%, respectively; however, effective from January 1, 2015, the creditable ratio for individual shareholders residing in the R.O.C. will be half of the original creditable ratio according to the revised Article 66-6 of the R.O.C. Income Tax Law.

The imputation credit allocated to shareholders is based on its balance as of the date of the dividend distribution. The estimated creditable ratio may change when the actual distribution of the imputation credit is made.

All of TSMC’s earnings generated prior to December 31, 1997 have been appropriated.

h. Income tax examination

The tax authorities have examined income tax returns of TSMC through 2013. All investment tax credit adjustments assessed by the tax authorities have been recognized accordingly.
31. EARNINGS PER SHARE

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic EPS</td>
<td>$12.89</td>
<td>$11.82</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>$12.89</td>
<td>$11.82</td>
</tr>
</tbody>
</table>

EPS is computed as follows:

<table>
<thead>
<tr>
<th>Amounts (Numerator)</th>
<th>Number of Shares (Denominator) (In Thousands)</th>
<th>EPS (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 334,247,180</td>
<td>25,930,380</td>
<td>$12.89</td>
</tr>
</tbody>
</table>

Year ended December 31, 2016

Basic/Diluted EPS

Net income available to common shareholders of the parent

<table>
<thead>
<tr>
<th>Amounts (Numerator)</th>
<th>Number of Shares (Denominator) (In Thousands)</th>
<th>EPS (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 334,247,180</td>
<td>25,930,380</td>
<td>$12.89</td>
</tr>
</tbody>
</table>

Year ended December 31, 2015

Basic EPS

Net income available to common shareholders of the parent

<table>
<thead>
<tr>
<th>Amounts (Numerator)</th>
<th>Number of Shares (Denominator) (In Thousands)</th>
<th>EPS (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 306,573,837</td>
<td>25,930,288</td>
<td>$11.82</td>
</tr>
</tbody>
</table>

Effect of dilutive potential common shares

<table>
<thead>
<tr>
<th>Amounts (Numerator)</th>
<th>Number of Shares (Denominator) (In Thousands)</th>
<th>EPS (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td></td>
<td>92</td>
</tr>
</tbody>
</table>

Diluted EPS

Net income available to common shareholders of the parent (including effect of dilutive potential common shares)

<table>
<thead>
<tr>
<th>Amounts (Numerator)</th>
<th>Number of Shares (Denominator) (In Thousands)</th>
<th>EPS (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 306,573,837</td>
<td>25,930,380</td>
<td>$11.82</td>
</tr>
</tbody>
</table>

32. ADDITIONAL INFORMATION OF EXPENSES BY NATURE

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Depreciation of property, plant and equipment</td>
<td>$ 203,476,848</td>
<td>$ 204,126,243</td>
</tr>
<tr>
<td>Recognized in cost of revenue</td>
<td>$16,583,067</td>
<td>$15,152,174</td>
</tr>
<tr>
<td>Recognized in operating expenses</td>
<td>25,083</td>
<td>24,952</td>
</tr>
<tr>
<td>Recognized in other operating income and expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 220,084,998</td>
<td>$ 219,303,369</td>
</tr>
<tr>
<td>b. Amortization of intangible assets</td>
<td>$ 2,028,492</td>
<td>$ 1,642,051</td>
</tr>
<tr>
<td>Recognized in cost of revenue</td>
<td>1,714,914</td>
<td>1,560,149</td>
</tr>
<tr>
<td>Recognized in operating expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 3,743,406</td>
<td>$ 3,202,200</td>
</tr>
<tr>
<td>c. Research and development costs expensed as incurred</td>
<td>$ 71,207,703</td>
<td>$ 65,544,579</td>
</tr>
</tbody>
</table>
d. Employee benefits expenses

<table>
<thead>
<tr>
<th>Post-employment benefits</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined contribution plans</td>
<td>$2,164,900</td>
<td>$2,003,534</td>
</tr>
<tr>
<td>Defined benefit plans</td>
<td>$272,141</td>
<td>$278,930</td>
</tr>
<tr>
<td>Other employee benefits</td>
<td>$2,437,041</td>
<td>$2,282,464</td>
</tr>
<tr>
<td>Total employee benefits expense</td>
<td>$9,685,123</td>
<td>$9,160,540</td>
</tr>
</tbody>
</table>

Employee benefits expense summarized by function

| Recognized in cost of revenue | $58,493,500 | $52,983,173 |
| Recognized in operating expenses | $41,191,623 | $38,622,237 |
| Total employee benefits expense | $99,685,123 | $91,605,410 |

In accordance with the amendments to the R.O.C. Company Act in May 2015 and the amended TSMC’s Articles of Incorporation approved by TSMC’s shareholders in its meeting held on June 7, 2016, TSMC shall allocate compensation to directors and profit sharing bonus to employees of TSMC not more than 0.3% and not less than 1% of annual profits during the period, respectively. Prior to the amendments, TSMC’s Articles of Incorporation provided that, when allocating the net profits for each fiscal year, TSMC shall first set aside legal capital reserve and special capital reserve, then set aside not more than 0.3% of the balance as compensation to directors and not less than 1% as profit sharing bonus to employees, respectively.

TSMC accrued profit sharing bonus to employees based on a percentage of net income before income tax, profit sharing bonus to employees and compensation to directors during the period, which amounted to NT$22,418,339 thousand and NT$20,556,888 thousand for the years ended December 31, 2016 and 2015, respectively; Compensation to directors was expensed based on estimated amount payable. If there is a change in the proposed amounts after the annual consolidated financial statements are authorized for issue, the differences are recorded as a change in accounting estimate.

The Board of Directors of TSMC held on February 14, 2017 approved the profit sharing bonus to employees and compensation to directors in the amounts of NT$22,418,339 thousand and NT$376,432 thousand in cash for 2016, respectively. There is no significant difference between the aforementioned approved amounts and the amounts charged against earnings of 2016.

TSMC’s profit sharing bonus to employees and compensation to directors in the amounts of NT$20,556,888 thousand and NT$376,432 thousand in cash for 2015 had been reported to TSMC’s shareholders in its meeting held on June 7, 2016, after the amended TSMC’s Articles of Incorporation had been approved. The aforementioned approved amount has no difference with the one recognized in the consolidated financial statements for the year ended December 31, 2015.

TSMC’s profit sharing bonus to employees and compensation to directors in the amounts of NT$17,645,966 thousand and NT$406,854 thousand in cash for 2014, respectively, had been approved by the shareholders in its meetings held on June 9, 2015. The aforementioned approved amount has no difference with the one recognized in the consolidated financial statements for the year ended December 31, 2014.
The information about the appropriations of TSMC’s profit sharing bonus to employees and compensation to directors is available at the Market Observation Post System website.

33. CONSOLIDATION OF SUBSIDIARY

Due to a Chinese consortium’s acquisition of OVT, major shareholders of VisEra Holding and OVT Taiwan, the Company acquired OVT’s 49.1% ownership in VisEra Holding and 100% ownership in OVT Taiwan on November 20, 2015. The related information is as follows:

a. Subsidiaries acquired

<table>
<thead>
<tr>
<th>Principal Activity</th>
<th>Date of Acquisition</th>
<th>Proportion of Voting Equity Interests Acquired (%)</th>
<th>Consideration Transferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>VisEra Holding</td>
<td>November 20, 2015</td>
<td>49.1</td>
<td>$ 3,536,119</td>
</tr>
<tr>
<td>OVT Taiwan</td>
<td>November 20, 2015</td>
<td>100</td>
<td>$ 394,674</td>
</tr>
</tbody>
</table>

b. Considerations transferred

<table>
<thead>
<tr>
<th></th>
<th>VisEra Holding</th>
<th>OVT Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 3,536,119</td>
<td>$ 394,674</td>
</tr>
</tbody>
</table>

c. Assets acquired and liabilities assumed at the date of acquisition

<table>
<thead>
<tr>
<th></th>
<th>VisEra Holding</th>
<th>OVT Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 3,858,482</td>
<td>$ 20,710</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>511,999</td>
<td>-</td>
</tr>
<tr>
<td>Inventories</td>
<td>59,050</td>
<td>-</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>706,500</td>
<td>373,813</td>
</tr>
<tr>
<td>Other current assets</td>
<td>26,441</td>
<td>155</td>
</tr>
<tr>
<td>Noncurrent assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments accounted for using equity method</td>
<td>721,641</td>
<td>-</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>2,651,209</td>
<td>-</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>12,111</td>
<td>-</td>
</tr>
<tr>
<td>Deferred income tax assets</td>
<td>29,943</td>
<td>-</td>
</tr>
<tr>
<td>Refundable deposits</td>
<td>15,611</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>8,592,987</td>
<td>394,678</td>
</tr>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial liabilities at fair value through profit or loss</td>
<td>975</td>
<td>-</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>87,480</td>
<td>-</td>
</tr>
<tr>
<td>Salary and bonus payable</td>
<td>183,090</td>
<td>-</td>
</tr>
</tbody>
</table>

(Continued)
d. Goodwill arising on acquisition

VisEra Holding

Consideration transferred  $ 3,536,119
Fair value of investments previously owned 3,458,146
Less: Fair value of identifiable net assets acquired (7,865,279)
Noncontrolling interests 923,683
Goodwill arising on acquisition  $ 52,669

e. Net cash outflow on acquisition of subsidiaries

VisEra Holding

Consideration paid in cash  $ 3,536,119
Less: Cash and cash equivalent balances acquired (3,858,482)
$ (322,363)

f. Impact of acquisitions on the results of the Company

The results of VisEra Holding since the acquisition date included in the consolidated statements of comprehensive income for the year ended December 31, 2015 were as follows:

VisEra Holding

Net revenue $ 254,319
Net income $ 16,264

Had the business combination of VisEra Holding been in effect on January 1, 2015, the Company’s net revenue and net income for the year ended December 31, 2015 would have been NT$846,401,819 thousand and NT$306,687,674 thousand, respectively. This pro-forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Company that actually would have been achieved had the acquisition been completed on January 1, 2015, nor is it intended to be a projection of future results. The aforementioned pro-forma net revenue and net income were calculated based on the fair value of assets acquired and liabilities assumed at the date of acquisition.
34. DISPOSAL OF SUBSIDIARY

In January 2015, the Board of Directors of TSMC approved a sale of TSMC SSL common shares of 565,480 thousand held by TSMC and TSMC GN to Epistar Corporation. The transaction was completed in February 2015.

a. Consideration received from the disposal

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total consideration received</td>
<td>$ 825,000</td>
</tr>
<tr>
<td>Expenditure associated with consideration received</td>
<td>(142,475)</td>
</tr>
<tr>
<td>Net consideration received</td>
<td>$ 682,525</td>
</tr>
</tbody>
</table>

b. Analysis of assets and liabilities over which the control was lost

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 81,478</td>
</tr>
<tr>
<td>Inventories</td>
<td>28,519</td>
</tr>
<tr>
<td>Other current assets</td>
<td>91,331</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>643,699</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>47,373</td>
</tr>
<tr>
<td>Others</td>
<td>51,808</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>944,208</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Salary and bonus payable</td>
<td>38,151</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>68,132</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>35,845</td>
</tr>
<tr>
<td>Others</td>
<td>76,915</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>219,043</td>
</tr>
<tr>
<td><strong>Net assets disposed of</strong></td>
<td>$ 725,165</td>
</tr>
</tbody>
</table>

c. Gain/loss on disposal of subsidiary

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net consideration received</td>
<td>$ 682,525</td>
</tr>
<tr>
<td>Net assets disposed of</td>
<td>(725,165)</td>
</tr>
<tr>
<td>Noncontrolling interests</td>
<td>42,640</td>
</tr>
<tr>
<td><strong>Gain/loss on disposal of subsidiary</strong></td>
<td>$ -</td>
</tr>
</tbody>
</table>

d. Net cash inflow arising from disposal of subsidiary

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net consideration received</td>
<td>$ 682,525</td>
</tr>
<tr>
<td>Less: Balance of cash and cash equivalents disposed of</td>
<td>81,478</td>
</tr>
<tr>
<td><strong>Net cash inflow arising from disposal of subsidiary</strong></td>
<td>$ 601,047</td>
</tr>
</tbody>
</table>
35. CAPITAL MANAGEMENT

The Company requires significant amounts of capital to build and expand its production facilities and acquire additional equipment. In consideration of the industry dynamics, the Company manages its capital in a manner to ensure that it has sufficient and necessary financial resources to fund its working capital needs, capital asset purchases, research and development activities, dividend payments, debt service requirements and other business requirements associated with its existing operations over the next 12 months.

36. FINANCIAL INSTRUMENTS

a. Categories of financial instruments

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVTPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td>$ 153,382</td>
<td>$ 6,026</td>
</tr>
<tr>
<td>Designated as at FVTPL</td>
<td>6,297,730</td>
<td>-</td>
</tr>
<tr>
<td>Available-for-sale financial assets (Note)</td>
<td>71,891,234</td>
<td>18,290,243</td>
</tr>
<tr>
<td>Held-to-maturity financial assets</td>
<td>38,917,677</td>
<td>16,077,396</td>
</tr>
<tr>
<td>Derivative financial instruments in designated hedge accounting relationships</td>
<td>5,550</td>
<td>1,739</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>541,253,833</td>
<td>562,688,930</td>
</tr>
<tr>
<td>Notes and accounts receivable (including related parties)</td>
<td>129,304,830</td>
<td>85,565,397</td>
</tr>
<tr>
<td>Other receivables</td>
<td>2,626,401</td>
<td>4,790,376</td>
</tr>
<tr>
<td>Refundable deposits</td>
<td>407,874</td>
<td>430,802</td>
</tr>
<tr>
<td><strong>Total Financial assets</strong></td>
<td>$ 790,858,511</td>
<td>$ 687,850,909</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial liabilities</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVTPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td>$ 91,585</td>
<td>$ 72,610</td>
</tr>
<tr>
<td>Designated as at FVTPL</td>
<td>99,550</td>
<td>-</td>
</tr>
<tr>
<td>Amortized cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term loans</td>
<td>57,958,200</td>
<td>39,474,000</td>
</tr>
<tr>
<td>Accounts payable (including related parties)</td>
<td>27,324,525</td>
<td>19,725,274</td>
</tr>
<tr>
<td>Payables to contractors and equipment suppliers</td>
<td>63,154,514</td>
<td>26,012,192</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>20,713,259</td>
<td>18,900,123</td>
</tr>
<tr>
<td>Bonds payable (including long-term liabilities-current portion)</td>
<td>191,193,557</td>
<td>215,475,194</td>
</tr>
<tr>
<td>Long-term bank loans (including long-term liabilities-current portion)</td>
<td>31,460</td>
<td>40,000</td>
</tr>
<tr>
<td>Other long-term payables (classified under accrued expenses and other current liabilities)</td>
<td>31,460</td>
<td>-</td>
</tr>
<tr>
<td>Guarantee deposits (including those classified under accrued expenses and other current liabilities)</td>
<td>26,670,622</td>
<td>27,732,614</td>
</tr>
<tr>
<td><strong>Total Financial liabilities</strong></td>
<td>$ 387,237,272</td>
<td>$ 347,450,007</td>
</tr>
</tbody>
</table>

Note: Including financial assets carried at cost.
b. Financial risk management objectives

The Company seeks to ensure sufficient cost-efficient funding readily available when needed. The Company manages its exposure to foreign currency risk, interest rate risk, equity price risk, credit risk and liquidity risk with the objective to reduce the potentially adverse effects the market uncertainties may have on its financial performance.

The plans for material treasury activities are reviewed by Audit Committees and/or Board of Directors in accordance with procedures required by relevant regulations or internal controls. During the implementation of such plans, Corporate Treasury function must comply with certain treasury procedures that provide guiding principles for overall financial risk management and segregation of duties.

c. Market risk

The Company is exposed to the market risks arising from changes in foreign exchange rates, interest rates and the prices in equity investments, and utilizes some derivative financial instruments to reduce the related risks.

Foreign currency risk

Most of the Company’s operating activities are denominated in foreign currencies. Consequently, the Company is exposed to foreign currency risk. To protect against reductions in value and the volatility of future cash flows caused by changes in foreign exchange rates, the Company utilizes derivative financial instruments, including currency forward contracts and cross currency swaps, to hedge its currency exposure. These instruments help to reduce, but do not eliminate, the impact of foreign currency exchange rate movements.

The Company also holds short-term borrowings in foreign currencies in proportion to its expected future cash flows. This allows foreign-currency-denominated borrowings to be serviced with expected future cash flows and provides a partial hedge against transaction translation exposure.

The Company’s sensitivity analysis to foreign currency risk mainly focuses on the foreign currency monetary items at the end of the reporting period. Assuming an unfavorable 10% movement in the levels of foreign exchanges against the New Taiwan dollar, the net income for the years ended December 31, 2016 and 2015 would have decreased by NT$111,347 thousand and NT$902,083 thousand, respectively, after taking into consideration of the hedging contracts and the hedged items.

Interest rate risk

The Company is exposed to interest rate risk arising from borrowing at both fixed and floating interest rates and from fixed income securities. All of the Company’s long-term bonds have fixed interest rates and are measured at amortized cost. As such, changes in interest rates would not affect the future cash flows. On the other hand, because interest rates of the Company’s long-term bank loans are floating, changes in interest rates would affect the future cash flows but not the fair value.

Assuming the amount of floating interest rate bank loans at the end of the reporting period had been outstanding for the entire period and all other variables were held constant, a hypothetical increase in interest rates of 100 basis point (1%) would have resulted in an increase in the interest expense, net of tax, by approximately NT$261 thousand and NT$332 thousand for the years ended December 31, 2016 and 2015, respectively.
The Company classified fixed income securities as held-to-maturity and available-for-sale financial assets. Because held-to-maturity fixed income securities are measured at amortized cost, changes in interest rates would not affect the fair value. On the other hand, available-for-sale fixed income securities are exposed to fair value fluctuations caused by changes in interest rates. To manage its exposure to the fair value fluctuations, the Company enters into interest rate futures contract to hedge against price risk caused by changes in risk-free interest rates in the Company’s investments in available-for-sale fixed income securities.

Assuming a hypothetical increase of 100 basis point (1%) in interest rates of available-for-sale fixed income securities at the end of the reporting period, the net income for the years ended December 31, 2016 and 2015 would have been unaffected as they were classified as available-for-sale; however, the other comprehensive income for the years ended December 31, 2016 and 2015 would have decreased by NT$1,600,929 thousand and NT$271,547 thousand, respectively.

Other price risk

The Company is exposed to equity price risk arising from available-for-sale equity investments.

Assuming a hypothetical decrease of 5% in equity prices of the equity investments at the end of the reporting period, the net income for the years ended December 31, 2016 and 2015 would have been unaffected as they were classified as available-for-sale; however, the other comprehensive income for the years ended December 31, 2016 and 2015 would have decreased by NT$342,565 thousand and NT$259,996 thousand, respectively.

d. Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company is exposed to credit risk from operating activities, primarily trade receivables, and from investing activities, primarily deposits, fixed-income investments and other financial instruments with banks. Credit risk is managed separately for business related and financial related exposures. As of the end of the reporting period, the Company’s maximum credit risk exposure is mainly from the carrying amount of financial assets recognized in the consolidated balance sheet.

Business related credit risk

The Company has considerable trade receivables outstanding with its customers worldwide. A substantial majority of the Company’s outstanding trade receivables are not covered by collateral or credit insurance. While the Company has procedures to monitor and limit exposure to credit risk on trade receivables, there can be no assurance such procedures will effectively limit its credit risk and avoid losses. This risk is heightened during periods when economic conditions worsen.

As of December 31, 2016 and 2015, the Company’s ten largest customers accounted for 74% and 68% of accounts receivable, respectively. The Company believes the concentration of credit risk is insignificant for the remaining accounts receivable.

Financial credit risk

The Company regularly monitors and reviews the transaction limit applied to counterparties and adjusts the concentration limit according to market conditions and the credit standing of the counterparties. The Company mitigates its exposure by selecting counterparties with investment-grade credit ratings.
The objective of liquidity risk management is to ensure the Company has sufficient liquidity to fund its business requirements associated with existing operations over the next 12 months. The Company manages its liquidity risk by maintaining adequate cash.

The table below summarizes the maturity profile of the Company’s financial liabilities based on contractual undiscounted payments, including principal and interest.

<table>
<thead>
<tr>
<th>Less Than 1 Year</th>
<th>2-3 Years</th>
<th>4-5 Years</th>
<th>5+ Years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>December 31, 2016</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-derivative financial liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term loans</td>
<td>$57,974,562</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Accounts payable (including related parties)</td>
<td>27,324,525</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Payables to contractors and equipment suppliers</td>
<td>63,154,514</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>20,713,259</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>40,669,468</td>
<td>99,161,486</td>
<td>35,340,742</td>
<td>22,979,426</td>
</tr>
<tr>
<td>Long-term bank loans</td>
<td>10,543</td>
<td>20,116</td>
<td>2,423</td>
<td>-</td>
</tr>
<tr>
<td>Guarantee deposits (including those classified under accrued expenses and other current liabilities)</td>
<td>12,000,189</td>
<td>13,060,483</td>
<td>1,609,950</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>221,847,060</td>
<td>112,242,085</td>
<td>36,953,115</td>
<td>22,979,426</td>
</tr>
<tr>
<td><strong>Derivative financial instruments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outflows</td>
<td>40,571,841</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Inflows</td>
<td>(40,586,344)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>(14,503)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross currency swap contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outflows</td>
<td>5,478,066</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Inflows</td>
<td>(5,487,600)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>(9,534)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>221,823,023</td>
<td>112,242,085</td>
<td>36,953,115</td>
<td>22,979,426</td>
</tr>
<tr>
<td><strong>December 31, 2015</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-derivative financial liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term loans</td>
<td>$39,488,957</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Accounts payable (including related parties)</td>
<td>19,725,274</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Payables to contractors and equipment suppliers</td>
<td>26,012,192</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>18,900,123</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Long-term bank loans</td>
<td>8,800</td>
<td>21,540</td>
<td>12,741</td>
<td>-</td>
</tr>
<tr>
<td>Other long-term payables (classified under accrued expenses and other current liabilities)</td>
<td>18,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Guarantee deposits (including those classified under accrued expenses and other current liabilities)</td>
<td>6,167,813</td>
<td>13,341,051</td>
<td>8,223,750</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>136,816,149</td>
<td>117,824,962</td>
<td>76,615,278</td>
<td>25,981,316</td>
</tr>
<tr>
<td><strong>Derivative financial instruments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outflows</td>
<td>23,192,477</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Inflows</td>
<td>(23,135,579)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>56,898</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>136,873,047</td>
<td>117,824,962</td>
<td>76,615,278</td>
<td>25,981,316</td>
</tr>
</tbody>
</table>
f. Fair value of financial instruments

1) Fair value measurements recognized in the consolidated balance sheets

Fair value measurements are grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

2) Fair value of financial instruments that are measured at fair value on a recurring basis

Fair value hierarchy

The following table presents the Company’s financial assets and liabilities measured at fair value on a recurring basis:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial assets at FVTPL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ -</td>
<td>$ 142,406</td>
<td>$ -</td>
<td>$ 142,406</td>
</tr>
<tr>
<td>Cross currency swap contracts</td>
<td>-</td>
<td>10,976</td>
<td>-</td>
<td>10,976</td>
</tr>
<tr>
<td>Designated as at FVTPL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time deposit</td>
<td>-</td>
<td>6,297,708</td>
<td>-</td>
<td>6,297,708</td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>-</td>
<td>22</td>
<td>-</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ -</td>
<td>$ 6,451,112</td>
<td>$ -</td>
<td>$ 6,451,112</td>
</tr>
<tr>
<td><strong>Available-for-sale financial assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>$ 29,999,508</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 29,999,508</td>
</tr>
<tr>
<td>Agency bonds</td>
<td>14,880,482</td>
<td>-</td>
<td>-</td>
<td>14,880,482</td>
</tr>
<tr>
<td>Corporate issued asset-backed securities</td>
<td>-</td>
<td>11,254,757</td>
<td>-</td>
<td>11,254,757</td>
</tr>
<tr>
<td>Government bonds</td>
<td>8,457,362</td>
<td>-</td>
<td>-</td>
<td>8,457,362</td>
</tr>
<tr>
<td>Publicly traded stocks</td>
<td>3,196,658</td>
<td>-</td>
<td>-</td>
<td>3,196,658</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 56,534,010</td>
<td>$ 11,254,757</td>
<td>$ -</td>
<td>$ 67,788,767</td>
</tr>
<tr>
<td><strong>Hedging derivative financial assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate futures contracts</td>
<td>$ 5,550</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 5,550</td>
</tr>
<tr>
<td><strong>Financial liabilities at FVTPL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ -</td>
<td>$ 91,585</td>
<td>$ -</td>
<td>$ 91,585</td>
</tr>
<tr>
<td>Designated as at FVTPL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>-</td>
<td>99,550</td>
<td>-</td>
<td>99,550</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ -</td>
<td>$ 191,135</td>
<td>$ -</td>
<td>$ 191,135</td>
</tr>
<tr>
<td>Financial assets at FVTPL</td>
<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
<td>Total</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ -</td>
<td>$ 6,026</td>
<td>$ -</td>
<td>$ 6,026</td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>$ 6,267,768</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 6,267,768</td>
</tr>
<tr>
<td>Corporate issued asset-backed securities</td>
<td>-</td>
<td>3,154,366</td>
<td>-</td>
<td>3,154,366</td>
</tr>
<tr>
<td>Agency bonds</td>
<td>2,627,367</td>
<td>-</td>
<td>-</td>
<td>2,627,367</td>
</tr>
<tr>
<td>Publicly traded stocks</td>
<td>1,371,483</td>
<td>-</td>
<td>-</td>
<td>1,371,483</td>
</tr>
<tr>
<td>Government bonds</td>
<td>878,377</td>
<td>-</td>
<td>-</td>
<td>878,377</td>
</tr>
<tr>
<td>Total</td>
<td>$ 11,144,995</td>
<td>$ 3,154,366</td>
<td>$ -</td>
<td>$ 14,299,361</td>
</tr>
<tr>
<td>Hedging derivative financial assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate futures contracts</td>
<td>$ 1,739</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 1,739</td>
</tr>
<tr>
<td>Financial liabilities at FVTPL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ -</td>
<td>$ 72,610</td>
<td>$ -</td>
<td>$ 72,610</td>
</tr>
</tbody>
</table>

There were no transfers between Level 1 and Level 2 for the years ended December 31, 2016 and 2015, respectively.

There were no purchases and disposals for assets on Level 3 for the years ended December 31, 2016 and 2015, respectively.

Valuation techniques and assumptions used in fair value measurement

The fair values of financial assets and financial liabilities are determined as follows:

- The fair values of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices (includes interest rate futures contracts, publicly traded stocks, money market funds, government bonds, agency bonds and corporate bonds).

- Forward exchange contracts and cross currency swap contracts are measured using quoted forward exchange rates and yield curves derived from quoted interest rates matching maturities of the contracts. For investments in corporate issued asset-backed securities and time deposit, the fair value are determined using quoted market prices or the present value of future cash flows based on the observable yield curves.

3) Fair value of financial instruments that are not measured at fair value

Except as detailed in the following table, the Company considers that the carrying amounts of financial instruments that are not measured at fair value recognized in the consolidated financial statements approximate their fair values.
Financial assets

Held-to-maturity financial assets
Corporate bonds/Bank debentures  $23,849,701  $23,996,429  $ 8,143,146  $ 8,146,756
Commercial paper  8,628,176  8,630,769  -  -
Negotiable certificate of deposit  4,829,850  4,847,785  4,934,250  4,945,878
Structured product  1,609,950  1,609,738  3,000,000  2,995,731

Financial liabilities

Measured at amortized cost
Bonds payable  191,193,557  192,845,296  215,475,194  216,223,736

Fair value hierarchy

The table below sets out the balances for the Company’s assets and liabilities that are not measured at fair value but for which the fair value is disclosed:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carrying Amount</strong></td>
<td><strong>Fair Value</strong></td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Held-to-maturity securities</td>
<td></td>
</tr>
<tr>
<td>Corporate bonds/Bank debentures</td>
<td>$23,996,429</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>-</td>
</tr>
<tr>
<td>Negotiable certificate of deposit</td>
<td>-</td>
</tr>
<tr>
<td>Structured product</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$23,996,429</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Measured at amortized cost</td>
<td></td>
</tr>
<tr>
<td>Bonds payable</td>
<td>$192,845,296</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>December 31, 2015</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carrying Amount</strong></td>
<td><strong>Fair Value</strong></td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Held-to-maturity securities</td>
<td></td>
</tr>
<tr>
<td>Corporate bonds/Bank debentures</td>
<td>$8,146,756</td>
</tr>
<tr>
<td>Negotiable certificate of deposit</td>
<td>-</td>
</tr>
<tr>
<td>Structured product</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$8,146,756</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Measured at amortized cost</td>
<td></td>
</tr>
<tr>
<td>Bonds payable</td>
<td>$216,223,736</td>
</tr>
</tbody>
</table>
Fair value measurement

For investments in bonds, the fair value is determined using active market prices.

For investments in commercial paper, negotiable certificate of deposit and structured product, the fair value is determined using the present value of future cash flows based on the observable yield curves.

The fair value of the Company’s bonds payable is determined using active market prices.

37. RELATED PARTY TRANSACTIONS

Intercompany balances and transactions between TSMC and its subsidiaries, which are related parties of TSMC, have been eliminated upon consolidation; therefore those items are not disclosed in this note. The following is a summary of significant transactions between the Company and other related parties:

a. Net revenue

<table>
<thead>
<tr>
<th>Item</th>
<th>Related Party Categories</th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Net revenue from sale of goods</td>
<td>Associates</td>
<td>$ 5,929,141</td>
</tr>
<tr>
<td></td>
<td>Joint venture</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$ 5,929,141</td>
</tr>
<tr>
<td>Net revenue from royalties</td>
<td>Associates</td>
<td>$ 516,749</td>
</tr>
</tbody>
</table>

b. Purchases

<table>
<thead>
<tr>
<th>Related Party Categories</th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associates</td>
<td>$ 10,108,210</td>
</tr>
</tbody>
</table>

c. Receivables from related parties

<table>
<thead>
<tr>
<th>Item</th>
<th>Related Party Categories</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receivables from related parties</td>
<td>Associates</td>
<td>$ 969,559</td>
<td>$ 505,722</td>
</tr>
<tr>
<td>Other receivables from related</td>
<td>Associates</td>
<td>$ 146,788</td>
<td>$ 125,018</td>
</tr>
<tr>
<td>parties</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
d. Payables to related parties

<table>
<thead>
<tr>
<th>Item</th>
<th>Related Party Categories</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payables to related parties</td>
<td>Associates</td>
<td>$1,262,174</td>
<td>$1,149,988</td>
</tr>
</tbody>
</table>

e. Acquisition of property, plant and equipment

<table>
<thead>
<tr>
<th>Acquisition Price</th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Related Party Categories</td>
<td></td>
</tr>
<tr>
<td>Associates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ -</td>
</tr>
</tbody>
</table>

f. Others

<table>
<thead>
<tr>
<th>Item</th>
<th>Related Party Categories</th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Manufacturing expenses</td>
<td>Associates</td>
<td>$1,389,164</td>
</tr>
<tr>
<td></td>
<td>Joint venture</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,389,164</td>
</tr>
<tr>
<td>Research and development</td>
<td>Associates</td>
<td>$161,735</td>
</tr>
<tr>
<td>expenses</td>
<td>Joint venture</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$161,735</td>
</tr>
</tbody>
</table>

The sales prices and payment terms to related parties were not significantly different from those of sales to third parties. For other related party transactions, price and terms were determined in accordance with mutual agreements.

The Company leased machinery and equipment, factory and office from Xintec and VIS. The lease terms and prices were both determined in accordance with mutual agreements. The rental expenses were paid to Xintec and VIS quarterly or monthly; the related expenses were both classified under manufacturing expenses.

The Company deferred the disposal gain/loss derived from sales of property, plant and equipment to related parties (transactions with associates and joint venture), and then recognized such gain/loss over the depreciable lives of the disposed assets.
g. Compensation of key management personnel

The compensation to directors and other key management personnel for the years ended December 31, 2016 and 2015 were as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term employee benefits</td>
<td>$ 2,023,971</td>
<td>$ 1,883,013</td>
</tr>
<tr>
<td>Post-employment benefits</td>
<td>3,992</td>
<td>10,926</td>
</tr>
<tr>
<td></td>
<td><strong>$ 2,027,963</strong></td>
<td><strong>$ 1,893,939</strong></td>
</tr>
</tbody>
</table>

The compensation to directors and other key management personnel were determined by the Compensation Committee of TSMC in accordance with the individual performance and the market trends.

38. PLEDGED ASSETS

The Company provided certificate of deposits recorded in other financial assets as collateral mainly for building lease agreements. As of December 31, 2016 and 2015, the aforementioned other financial assets amounted to NT$185,698 thousand and NT$177,229 thousand, respectively.

39. SIGNIFICANT OPERATING LEASE ARRANGEMENTS

The Company leases several parcels of land, office premises and certain office equipment. These operating leases expire between January 2017 and June 2066 and can be renewed upon expiration.

The Company expensed the lease payments as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum lease payments</td>
<td><strong>$ 1,135,735</strong></td>
<td><strong>$ 995,983</strong></td>
</tr>
</tbody>
</table>

Future minimum lease payments under the above non-cancellable operating leases are as follows:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not later than 1 year</td>
<td>$ 1,321,546</td>
</tr>
<tr>
<td>Later than 1 year and not later than 5 years</td>
<td>3,677,432</td>
</tr>
<tr>
<td>Later than 5 years</td>
<td>6,623,957</td>
</tr>
<tr>
<td><strong>$ 11,622,935</strong></td>
<td><strong>$ 11,656,088</strong></td>
</tr>
</tbody>
</table>
40. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

Significant contingent liabilities and unrecognized commitments of the Company as of the end of the reporting period, excluding those disclosed in other notes, were as follows:

a. Under a technical cooperation agreement with Industrial Technology Research Institute, the R.O.C. Government or its designee approved by TSMC can use up to 35% of TSMC’s capacity provided TSMC’s outstanding commitments to its customers are not prejudiced. The term of this agreement is for five years beginning from January 1, 1987 and is automatically renewed for successive periods of five years unless otherwise terminated by either party with one year prior notice. As of December 31, 2016, the R.O.C. Government did not invoke such right.

b. Under a Shareholders Agreement entered into with Philips and EDB Investments Pte Ltd. on March 30, 1999, the parties formed a joint venture company, SSMC, which is an integrated circuit foundry in Singapore. TSMC’s equity interest in SSMC was 32%. Nevertheless, in September 2006, Philips spun-off its semiconductor subsidiary which was renamed as NXP B.V. Further, TSMC and NXP B.V. purchased all the SSMC shares owned by EDB Investments Pte Ltd. pro rata according to the Shareholders Agreement on November 15, 2006. After the purchase, TSMC and NXP B.V. currently own approximately 39% and 61% of the SSMC shares, respectively. TSMC and NXP B.V. are required, in the aggregate, to purchase at least 70% of SSMC’s capacity, but TSMC alone is not required to purchase more than 28% of the capacity. If any party defaults on the commitment and the capacity utilization of SSMC falls below a specific percentage of its capacity, the defaulting party is required to compensate SSMC for all related unavoidable costs. There was no default from the aforementioned commitment as of December 31, 2016.

c. In June 2010, Keranos, LLC. filed a complaint in the U.S. District Court for the Eastern District of Texas alleging that TSMC, TSMC North America, and several other leading technology companies infringe three expired U.S. patents. In response, TSMC, TSMC North America, and several co-defendants in the Texas case filed a lawsuit against Keranos in the U.S. District Court for the Northern District of California in November 2010, seeking a judgment declaring that they did not infringe the asserted patents, and that those patents were invalid. These two litigations have been consolidated into a single lawsuit in the U.S. District Court for the Eastern District of Texas. In February 2014, the Court entered a final judgment in favor of TSMC and TSMC North America, dismissing all of Keranos’s claims against TSMC and TSMC North America with prejudice. Keranos appealed the final judgment to the U.S. Court of Appeals for the Federal Circuit, and in August 2015, the Federal Circuit remanded the case back to the Texas court for further proceedings. In January 2017, the Texas court dismissed all of Keranos’s claims against TSMC and TSMC North America with prejudice, and dismissed TSMC’s and TSMC North America’s counterclaims without prejudice. The case is over as to TSMC and TSMC North America.

d. In December 2010, Ziptronix, Inc. filed a complaint in the U.S. District Court for the Northern District of California accusing TSMC, TSMC North America and one other company of infringing several U.S. patents. In September 2014, the Court granted summary judgment of noninfringement in favor of TSMC and TSMC North America. Ziptronix, Inc. can appeal the Court’s order. In August 2015, Tessera Technologies, Inc. announced it had acquired Ziptronix. In February 2017, the Court dismissed all of Ziptronix’s claims against TSMC and TSMC North America with prejudice.

e. TSMC joined the Customer Co-Investment Program of ASML and entered into the investment agreement in August 2012. The agreement includes an investment of EUR837,816 thousand by TSMC Global to acquire 5% of ASML’s equity with a lock-up period of 2.5 years. TSMC Global has acquired the aforementioned equity on October 31, 2012. The lock-up period expired on May 1, 2015 and as of October 8, 2015, all ASML shares had been disposed.

Both parties also signed the research and development funding agreement whereby TSMC shall provide EUR276,000 thousand to ASML’s research and development programs from 2013 to 2017. As of
December 31, 2016, TSMC has paid EUR228,603 thousand to ASML under the research and development funding agreement.

f. In March 2014, DSS Technology Management, Inc. (DSS) filed a complaint in the U.S. District Court for the Eastern District of Texas alleging that TSMC, TSMC North America, TSMC Development and several other companies infringe one U.S. patent. TSMC Development has subsequently been dismissed. In May 2015, the Court entered a final judgment of noninfringement in favor of TSMC and TSMC North America. DSS appealed the final judgment to the U.S. Court of Appeals for the Federal Circuit (Federal Circuit). In November 2015, the Patent Trial and Appeal Board (PTAB) determined after concluding an Inter Partes Review (IPR) that the patent claims asserted by DSS in the District Court litigation are unpatentable. DSS appealed the PTAB’s decision to the Federal Circuit in January 2016. In March 2016, the District Court’s judgment of noninfringement was affirmed by the Federal Circuit. In April 2016, the District Court litigation between the parties and the related Federal Circuit appeal were dismissed, and the appeal proceeding of the PTAB’s decision is also over as to TSMC.

g. Amounts available under unused letters of credit as of December 31, 2016 and 2015 were NT$122,356 thousand and NT$144,738 thousand, respectively.

41. SIGNIFICANT LOSS FROM DISASTER

On February 6, 2016, an earthquake struck Taiwan. The resulting damage was mostly to inventories and equipment. The Company recognized related earthquake losses of NT$2,492,138 thousand, net of insurance claim, for the year ended December 31, 2016. Such losses were primarily included in cost of revenue.

42. EXCHANGE RATE INFORMATION OF FOREIGN-CURRENCY FINANCIAL ASSETS AND LIABILITIES

The following information was summarized according to the foreign currencies other than the functional currency of the Company. The exchange rates disclosed were used to translate the foreign currencies into the functional currency. The significant financial assets and liabilities denominated in foreign currencies were as follows:

<table>
<thead>
<tr>
<th>Foreign Currencies (In Thousands)</th>
<th>Exchange Rate (Note 1)</th>
<th>Carrying Amount (In Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD</td>
<td>$ 5,042,715</td>
<td>32.199</td>
</tr>
<tr>
<td>EUR</td>
<td>19,556</td>
<td>34.30</td>
</tr>
<tr>
<td>JPY</td>
<td>37,024,347</td>
<td>0.2775</td>
</tr>
<tr>
<td>Non-monetary items</td>
<td>HKD</td>
<td>257,056</td>
</tr>
</tbody>
</table>

December 31, 2016

Financial assets

Monetary items

USD                              | $ 4,000,930            | 32.199                        | 128,825,952                     |
EUR                              | 183,922                | 34.30                         | 6,308,513                       |
JPY                              | 61,062,114             | 0.2775                        | 16,944,737 (Continued)          |
<table>
<thead>
<tr>
<th>Foreign Currencies (In Thousands)</th>
<th>Exchange Rate (Note 1)</th>
<th>Carrying Amount (In Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD</td>
<td>$ 3,089,634</td>
<td>32.895</td>
</tr>
<tr>
<td>USD</td>
<td>251,824</td>
<td>6.494 (Note 2)</td>
</tr>
<tr>
<td>EUR</td>
<td>43,933</td>
<td>36.00</td>
</tr>
<tr>
<td>JPY</td>
<td>9,717,089</td>
<td>0.2733</td>
</tr>
</tbody>
</table>

Non-monetary items

| HKD                             | 166,727                | 4.24                         | 706,924      |

Financial liabilities

| USD                             | 2,952,404              | 32.895                       | 97,119,331   |
| EUR                             | 44,174                 | 36.00                        | 1,590,264    |
| JPY                             | 26,416,113             | 0.2733                       | 7,219,524    |

(Concluded)

Note 1: Except as otherwise noted, exchange rate represents the number of N.T. dollars for which one foreign currency could be exchanged.

Note 2: The exchange rate represents the number of RMB for which one USD dollars could be exchanged.

The realized and unrealized foreign exchange gain and loss were net gains of NT$1,161,322 thousand and NT$2,481,446 thousand for the years ended December 31, 2016 and 2015, respectively. Since there were varieties of foreign currency transactions and functional currencies within the subsidiaries of the Company, the Company was unable to disclose foreign exchange gain (loss) towards each foreign currency with significant impact.

43. OPERATING SEGMENTS INFORMATION

a. Operating segments

The Company’s only reportable segment is the foundry segment. The foundry segment engages mainly in the manufacturing, selling, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing of masks. The Company also had other operating segments that did not exceed the quantitative threshold for separate reporting. These segments mainly engaged in the researching, developing, designing, manufacturing and selling of renewable energy and efficiency related technologies and products.

The Company uses the income from operations as the measurement for segment profit and the basis of performance assessment. There was no material differences between the accounting policies of the operating segment and the accounting policies described in Note 4.
b. Segment revenue and operating results

<table>
<thead>
<tr>
<th></th>
<th>Foundry</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year ended December 31, 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net revenue from external customers</td>
<td>$ 947,938,344</td>
<td>$ -</td>
<td>$ 947,938,344</td>
</tr>
<tr>
<td>Income from operations</td>
<td>377,957,778</td>
<td>-</td>
<td>377,957,778</td>
</tr>
<tr>
<td>Share of profits of associates and joint venture</td>
<td>3,495,600</td>
<td>-</td>
<td>3,495,600</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>51,621,144</td>
<td>-</td>
<td>51,621,144</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Foundry</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year ended December 31, 2015</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net revenue from external customers</td>
<td>842,690,157</td>
<td>807,211</td>
<td>843,497,368</td>
</tr>
<tr>
<td>Income (loss) from operations</td>
<td>320,833,219</td>
<td>(785,444)</td>
<td>320,047,775</td>
</tr>
<tr>
<td>Share of profits (loss) of associates and joint venture</td>
<td>4,517,699</td>
<td>(385,571)</td>
<td>4,132,128</td>
</tr>
<tr>
<td>Income tax expense (benefit)</td>
<td>43,874,515</td>
<td>(1,771)</td>
<td>43,872,744</td>
</tr>
</tbody>
</table>


c. Geographic information

<table>
<thead>
<tr>
<th></th>
<th>Net Revenue from External Customers</th>
<th>Non-current Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Years Ended December 31</td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>$ 127,062,984</td>
<td>$ 90,169,543</td>
</tr>
<tr>
<td>United States</td>
<td>610,371,107</td>
<td>566,600,178</td>
</tr>
<tr>
<td>Asia</td>
<td>146,907,470</td>
<td>123,705,876</td>
</tr>
<tr>
<td>Europe, the Middle East and Africa</td>
<td>58,042,311</td>
<td>57,064,965</td>
</tr>
<tr>
<td>Others</td>
<td>5,554,472</td>
<td>5,956,806</td>
</tr>
</tbody>
</table>

|                      | $ 947,938,344 | $ 843,497,368 | $ 1,013,892,965 | $ 868,964,948 |

The Company categorized the net revenue mainly based on the country in which the customer is headquartered. Non-current assets include property, plant and equipment, intangible assets and other noncurrent assets.

d. Production information

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2015</td>
</tr>
<tr>
<td>Wafer</td>
<td>$ 909,179,151</td>
<td>$ 802,937,969</td>
</tr>
<tr>
<td>Others</td>
<td>38,759,193</td>
<td>40,559,399</td>
</tr>
</tbody>
</table>

|                      | $ 947,938,344 | $ 843,497,368 |

e. Major customers representing at least 10% of net revenue

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2015</td>
</tr>
<tr>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
</tr>
<tr>
<td>Customer A</td>
<td>$ 157,185,418</td>
<td>17</td>
</tr>
<tr>
<td>Customer B</td>
<td>107,463,238</td>
<td>11</td>
</tr>
</tbody>
</table>
44. ADDITIONAL DISCLOSURES

Following are the additional disclosures required by the Securities and Futures Bureau for TSMC:

a. Financings provided: Please see Table 1 attached;

b. Endorsement/guarantee provided: Please see Table 2 attached;

c. Marketable securities held (excluding investments in subsidiaries, associates and joint venture): Please see Table 3 attached;

d. Marketable securities acquired and disposed of at costs or prices of at least NT$300 million or 20% of the paid-in capital: Please see Table 4 attached;

e. Acquisition of individual real estate properties at costs of at least NT$300 million or 20% of the paid-in capital: Please see Table 5 attached;

f. Disposal of individual real estate properties at prices of at least NT$300 million or 20% of the paid-in capital: None;

g. Total purchases from or sales to related parties of at least NT$100 million or 20% of the paid-in capital: Please see Table 6 attached;

h. Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital: Please see Table 7 attached;

i. Information about the derivative financial instruments transaction: Please see Notes 7 and 10;

j. Others: The business relationship between the parent and the subsidiaries and significant transactions between them: Please see Table 8 attached;

k. Names, locations, and related information of investees over which TSMC exercises significant influence (excluding information on investment in mainland China): Please see Table 9 attached;

l. Information on investment in mainland China

1) The name of the investee in mainland China, the main businesses and products, its issued capital, method of investment, information on inflow or outflow of capital, percentage of ownership, income (losses) of the investee, share of profits/losses of investee, ending balance, amount received as dividends from the investee, and the limitation on investee: Please see Table 10 attached.

2) Significant direct or indirect transactions with the investee, its prices and terms of payment, unrealized gain or loss, and other related information which is helpful to understand the impact of investment in mainland China on financial reports: Please see Table 8 attached.
### TABLE 1

#### Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

**FINANCINGS PROVIDED**

**FOR THE YEAR ENDED DECEMBER 31, 2016**

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TSMC China</td>
<td>TSMC Nanjing</td>
<td>Other receivables from related parties</td>
<td>Yes</td>
<td>$ 21,313,180 (RMB 4,600,000)</td>
<td>$ 21,313,180 (RMB 4,600,000)</td>
<td>$ 4,169,970 (RMB 900,000)</td>
<td>0.35%-1.5%</td>
<td>The need for short-term/long-term financing (Note 3)</td>
<td>$ -</td>
<td>Operating capital</td>
<td>$ -</td>
<td>-</td>
<td>$ 42,850,549 (Note 1)</td>
<td>$ 42,850,549 (Note 1)</td>
</tr>
</tbody>
</table>

**Note 1:** The total amount for lending to a company for funding for a short-term period shall not exceed ten percent (10%) of the net worth of TSMC China. In addition, the total amount lendable to any one borrower shall be no more than thirty percent (30%) of the borrower’s net worth. The above restriction does not apply to the subsidiaries whose voting shares are 100% owned, directly or indirectly, by TSMC. However, the total amount lendable to 100% owned subsidiaries by TSMC shall not exceed forty percent (40%) of the net worth of TSMC China. When there is a lending for funding needs by TSMC China to TSMC, or to the subsidiaries, which are not located in Taiwan, directly or indirectly wholly owned by TSMC, the lending will not be subject to the restriction set forth in the above paragraph of this Article. Notwithstanding the foregoing, the aggregate amount available for lending and the total amount lending limit for such borrower shall not exceed the net worth of TSMC China.

**Note 2:** The maximum balance for the period and ending balance represent the amounts approved by the Board of Directors.

**Note 3:** The restriction of the term of each loan for funding not exceeding one year shall not apply to inter-company loans for funding between offshore subsidiaries in which the Company holds, directly or indirectly, 100% of the voting shares.
### ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2016
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>TSMC</td>
<td>TSMC Global</td>
<td>Subsidiary</td>
<td>$ 347,312,065</td>
<td>$ 48,298,500 (US$ 1,500,000) 2,679,385 (US$ 83,213)</td>
<td>$ 37,028,850 (US$ 1,150,000) 2,679,385 (US$ 83,213)</td>
<td>$ 37,028,850 (US$ 1,150,000) 2,679,385 (US$ 83,213)</td>
<td>$ - 2.67%</td>
<td>$ 347,312,065</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TSMC North America</td>
<td>Subsidiary</td>
<td></td>
<td>$ 347,312,065</td>
<td>$ 2,679,385 (US$ 83,213)</td>
<td>$ 2,679,385 (US$ 83,213)</td>
<td>$ 2,679,385 (US$ 83,213)</td>
<td>$ - 0.19%</td>
<td>347,312,065</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: The total amount of the guarantee provided by TSMC to any individual entity shall not exceed ten percent (10%) of TSMC’s net worth, or the net worth of such entity. However, subsidiaries whose voting shares are 100% owned, directly or indirectly, by TSMC are not subject to the above restrictions after the approval of the Board of Directors.

Note 2: The total amount of guarantee shall not exceed twenty-five percent (25%) of TSMC’s net worth.

Note 3: The maximum balance for the period and ending balance represent the amounts approved by the Board of Directors.
<table>
<thead>
<tr>
<th>Held Company Name</th>
<th>Marketable Securities Type and Name</th>
<th>Relationship with the Company</th>
<th>Financial Statement Account</th>
<th>Shares/Units (In Thousands)</th>
<th>Carrying Value (Foreign Currencies in Thousands)</th>
<th>Percentage of Ownership (%)</th>
<th>Fair Value (Foreign Currencies in Thousands)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC</td>
<td>Corporate bond</td>
<td></td>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>$ 1,967,303</td>
<td>N/A</td>
<td>$ 1,969,240</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CPC Corporation, Taiwan</td>
<td></td>
<td></td>
<td>-</td>
<td>400,250</td>
<td>N/A</td>
<td>400,389</td>
<td></td>
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<tr>
<td></td>
<td>Hon Hai Precision Ind. Co., Ltd.</td>
<td></td>
<td></td>
<td>-</td>
<td>200,848</td>
<td>N/A</td>
<td>200,865</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taiwan Power Company</td>
<td></td>
<td></td>
<td>-</td>
<td>150,742</td>
<td>N/A</td>
<td>150,763</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nan Ya Plastics Corporation</td>
<td></td>
<td></td>
<td>-</td>
<td>100,219</td>
<td>N/A</td>
<td>100,403</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formosa Petrochemical Corporation</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commercial paper</td>
<td></td>
<td>Held-to-maturity financial assets</td>
<td>865</td>
<td>8,628,176</td>
<td>N/A</td>
<td>8,630,769</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hon Hai Precision Ind. Co., Ltd.</td>
<td></td>
<td></td>
<td>58,320</td>
<td>1,650,450</td>
<td>12</td>
<td>1,650,450</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motech</td>
<td></td>
<td>Available-for-sale financial assets</td>
<td>21,105</td>
<td>1,066,780</td>
<td>1</td>
<td>1,066,780</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Semiconductor Manufacturing Interna</td>
<td></td>
<td></td>
<td>2,206</td>
<td>126,722</td>
<td>4</td>
<td>126,722</td>
<td></td>
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<tr>
<td></td>
<td>RedWave Technology Corp.</td>
<td></td>
<td></td>
<td>21,230</td>
<td>193,280</td>
<td>10</td>
<td>193,280</td>
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<tr>
<td></td>
<td>Shin-Etsu Handotai Taiwan Co., Ltd.</td>
<td></td>
<td></td>
<td>10,500</td>
<td>105,000</td>
<td>7</td>
<td>105,000</td>
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<tr>
<td></td>
<td>Global Investment Holding Inc.</td>
<td></td>
<td></td>
<td>11,124</td>
<td>99,041</td>
<td>6</td>
<td>99,041</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W.K. Technology Fund IV</td>
<td></td>
<td></td>
<td>2,560</td>
<td>18,121</td>
<td>2</td>
<td>18,121</td>
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<tr>
<td></td>
<td>Fund</td>
<td></td>
<td>Financial assets carried at cost</td>
<td>-</td>
<td>11,259</td>
<td>12</td>
<td>11,259</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hotron Ventures Fund</td>
<td></td>
<td></td>
<td>-</td>
<td>8,263</td>
<td>1</td>
<td>8,263</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crimson Asia Capital</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TSMC Partners</td>
<td>Common stock</td>
<td></td>
<td></td>
<td>10,440</td>
<td>US$ 65,000</td>
<td>25</td>
<td>US$ 65,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tefa Innovations</td>
<td></td>
<td>Financial assets carried at cost</td>
<td>6,333</td>
<td>-</td>
<td>13</td>
<td>-</td>
<td></td>
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<tr>
<td></td>
<td>Mobile Inc.</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Fund</td>
<td></td>
<td>Financial assets carried at cost</td>
<td>-</td>
<td>US$ 7,291</td>
<td>9</td>
<td>US$ 7,291</td>
<td></td>
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<tr>
<td></td>
<td>Shanghai Walden Venture Capital L.P.</td>
<td></td>
<td></td>
<td>-</td>
<td>US$ 4,270</td>
<td>6</td>
<td>US$ 4,270</td>
<td></td>
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<tr>
<td>TSMC Global</td>
<td>Corporate bond</td>
<td></td>
<td>Available-for-sale financial assets</td>
<td>-</td>
<td>US$ 29,886</td>
<td>N/A</td>
<td>US$ 29,886</td>
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<tr>
<td></td>
<td>Bank of America Corp.</td>
<td></td>
<td></td>
<td>-</td>
<td>US$ 26,231</td>
<td>N/A</td>
<td>US$ 26,231</td>
<td></td>
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<tr>
<td></td>
<td>Morgan Stanley</td>
<td></td>
<td></td>
<td>-</td>
<td>US$ 18,769</td>
<td>N/A</td>
<td>US$ 18,769</td>
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<td></td>
<td>Goldman Sachs Group Inc.</td>
<td></td>
<td></td>
<td>-</td>
<td>US$ 17,059</td>
<td>N/A</td>
<td>US$ 17,059</td>
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<tr>
<td></td>
<td>Verizon Communications</td>
<td></td>
<td></td>
<td>-</td>
<td>US$ 16,819</td>
<td>N/A</td>
<td>US$ 16,819</td>
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<td></td>
<td>Citigroup Inc.</td>
<td></td>
<td></td>
<td>-</td>
<td>US$ 13,850</td>
<td>N/A</td>
<td>US$ 13,850</td>
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<td>Alibab Inc.</td>
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<td></td>
<td>-</td>
<td>US$ 11,850</td>
<td>N/A</td>
<td>US$ 11,850</td>
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<tr>
<td></td>
<td>AT&amp;T Inc.</td>
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<td></td>
<td>-</td>
<td>US$ 10,405</td>
<td>N/A</td>
<td>US$ 10,405</td>
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<tr>
<td></td>
<td>Capital One NA</td>
<td></td>
<td></td>
<td>-</td>
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<tr>
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<td>PNC Bank NA</td>
<td></td>
<td></td>
<td>-</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Capital One NA</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Oracle Corp.</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
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</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Held Company Name</th>
<th>Marketable Securities Type and Name</th>
<th>Relationship with the Company</th>
<th>Financial Statement Account</th>
<th>December 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Shares/Units</td>
<td>Percentage of Ownership (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(In Thousands)</td>
<td>(Foreign Currencies in Thousands)</td>
</tr>
<tr>
<td>TSMC Global</td>
<td>Svenska Handelsbanken AB</td>
<td>-</td>
<td>US$ 9,837</td>
<td>N/A</td>
</tr>
<tr>
<td>EVS Health Corp.</td>
<td>-</td>
<td>-</td>
<td>US$ 9,736</td>
<td>N/A</td>
</tr>
<tr>
<td>Westpac Banking Corp.</td>
<td></td>
<td>-</td>
<td>US$ 8,905</td>
<td>N/A</td>
</tr>
<tr>
<td>Anheuser Busch InBev Fin</td>
<td></td>
<td>-</td>
<td>US$ 8,737</td>
<td>N/A</td>
</tr>
<tr>
<td>Ford Motor Credit Co LLC</td>
<td></td>
<td>-</td>
<td>US$ 8,681</td>
<td>N/A</td>
</tr>
<tr>
<td>Analog Devices, Inc.</td>
<td></td>
<td>-</td>
<td>US$ 8,619</td>
<td>N/A</td>
</tr>
<tr>
<td>Teva Pharmaceuticals Netherlands</td>
<td></td>
<td>-</td>
<td>US$ 8,467</td>
<td>N/A</td>
</tr>
<tr>
<td>Credit Suisse New York</td>
<td></td>
<td>-</td>
<td>US$ 7,267</td>
<td>N/A</td>
</tr>
<tr>
<td>BB&amp;T Corporation</td>
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<td>-</td>
<td>US$ 7,180</td>
<td>N/A</td>
</tr>
<tr>
<td>BMW US Capital LLC</td>
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<th>Percentage of Ownership (%)</th>
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(Concluded)
### Table 4

**MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL**

**FOR THE YEAR ENDED DECEMBER 31, 2016**

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

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<td>Gilead Sciences Inc.</td>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acteva Inc.</td>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Morgan Stanley</td>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oracle Corp.</td>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Svenska Handelsbanken AB</td>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Teva Pharmaceuticals</td>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(Cont'd)
TSMC Global

Company Name

Corporate issued asset-backed
securities
Capital One Multi Asset
Execution Trust
Chase Issuance Trust
Discover Card Execution Note
Trust
Citibank Credit Card Issuance
Trust
Bank of America Credit Card
Trust
Ford Credit Floorplan Master
Owner Trust

Fnma Pool AL9128
Fnma Pool AL7191
Fnma Pool AL8430
Fnma Pool 888577
Fed Hm Ln Pc Pool G18605
Fed Hm Ln Pc Pool G60081
Fnma Pool AV5062
Fed Hm Ln Pc Pool G60344
Fnma Pool AS8074
Fed Home Ln Discount Nt.
Fnma Tba 15 Yr 2.5

Agency bond
Fed Hm Ln Pc Pool G60594

US Treasury Floating Rate Note
Treasury Inflation-Indexed N/B
US Treasury N/B
WI Treasury Securities
Treasury Bill

-

"
"

-

-

-

-

-

-

-

-

-

-

-

-

"

Available-for-sale financial
assets
"
"

Available-for-sale financial
assets
"
"
"
"
"
"
"
"
"
"
"

-

-

Government bond
US Treasury N/B
-

-

-

Available-for-sale financial
assets
"
"
"
"
"

-

-

Nature of
Relationship
-

Counter-party
-

Financial Statement
Account

Available-for-sale financial
assets
Wells Fargo & Company
"
Sysco Corporation
"
Shell International Fin.
"
Cisco Systems Inc.
"
US Bank NA Cincinnati
"
JPMorgan Chase & Co.
Held-to-maturity financial
assets
Wells Fargo & Company
"
Westpac Banking Corp.
"
Goldman Sachs Group, Inc.
"
Commonwealth Bank of Australia
"
National Australia Bank
"
Bank of Nova Scotia
"

BMW US Capital LLC

Marketable Securities
Type and Name

-

-

-

-

-

-

-

-

-

-

-

-

5,922

4,433

9,756

15,507
12,126

8,961

5,864
3,964

-

-

26,702

-

2,475
1,243
10,798

-

92 -- -92

US$

US$

US$

US$
US$

US$

US$

US$

US$

US$

US$

US$

US$

Beginning Balance
Shares/Units
Amount
(In Thousands)

-

-

-

-

-

-

-

-

-

-

-

-

11,211

US$

US$

US$

US$
US$

US$

US$
US$
US$
US$
US$
US$
US$
US$
US$
US$
US$

US$

9,465

13,019

19,801

21,462
17,060

32,785

23,724
9,855
10,171
11,995
9,855
9,954
9,975
9,385
19,967
12,496
11,998

16,185

US$ 104,729
US$ 19,492
US$ 27,040
US$ 14,698
US$ 10,486

US$ 285,949

US$ 150,008
US$ 100,000
US$ 100,000
US$ 50,000
US$ 50,000
US$ 49,978

US$
9,706
US$ 13,622
US$
9,752
US$ 13,545
US$ 12,590
US$ 143,533

US$

Acquisition
Shares/Units
Amount
(In Thousands)

-

-

-

-

-

-

-

-

-

-

-

-

Shares/Units
(In Thousands)

-

6,008
7,605
5,212
8,079
9,018
-

3,990

US$

US$

US$
US$

US$

US$
US$
US$
US$
US$
US$
US$
US$
US$
US$
US$

US$

US$
US$
US$

US$

3,459

-

6,850

5,744
6,104

1,999

9,288
2,925
516
2,292
425
439
1,309
9,351
20,007
12,504
16,006

609

74,021
12,938
14,699
10,494

-

5,967
7,496
5,234
8,007
8,985
-

3,990

US$

US$

US$
US$

US$

US$
US$
US$
US$
US$
US$
US$
US$
US$
US$
US$

US$

US$
US$
US$

US$

3,460

-

6,843

5,753
6,152

1,996

9,351
3,333
584
2,619
447
478
1,366
9,385
19,967
12,496
15,978

698

73,990
12,963
14,698
10,486

US$ 111,205

US$
US$
US$
US$
US$

US$

Carrying Value

Disposal

US$ 110,552

US$
US$
US$
US$
US$

US$

Amount

US$

US$

US$
US$

US$

US$
US$
US$
US$
US$
US$
US$
US$
US$
US$
US$

US$

US$
US$
US$

US$

US$

US$
US$
US$
US$
US$

US$

(1 )

-

7

(9 )
(48 )

3

(63 )
(408 )
(68 )
(327 )
(22 )
(39 )
(57 )
(34 )
40
8
28

(89 )

31
(25 )
1
8

(653 )

-

41
109
(22 )
72
33
-

-

Gain/Loss on
Disposal

-

-

-

-

-

-

-

-

-

-

-

-

7,180

11,944

17,465

22,585

31,276
23,076

39,626

14,067
12,533
9,462
9,281
9,177
9,173
8,457
-

15,322

30,756
19,349
13,842
-

(Continued)

US$

US$

US$

US$
US$

US$

US$
US$
US$
US$
US$
US$
US$

US$

US$
US$
US$

US$ 195,285

US$ 150,007
US$ 100,000
US$ 100,000
US$ 50,000
US$ 50,000
US$ 49,982

US$
6,127
US$
5,978
US$
5,713
US$
5,511
US$
3,568
US$ 153,147

US$

Ending Balance (Note 1)
Shares/Units
Amount
(In Thousands)


<table>
<thead>
<tr>
<th>Company Name</th>
<th>Marketable Securities Type and Name</th>
<th>Financial Statement Account</th>
<th>Counter-party</th>
<th>Nature of Relationship</th>
<th>Beginning Balance</th>
<th>Acquisition</th>
<th>Disposal</th>
<th>Ending Balance (Note 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shares/Units</td>
<td>Shares/Units</td>
<td>Shares/Units</td>
<td>Shares/Units</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(In Thousands)</td>
<td>(In Thousands)</td>
<td>(In Thousands)</td>
<td>(In Thousands)</td>
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<td></td>
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<td>Amount</td>
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<td>Amount</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shares/Units</td>
<td>Shares/Units</td>
<td>Shares/Units</td>
<td>Shares/Units</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(In Thousands)</td>
<td>(In Thousands)</td>
<td>(In Thousands)</td>
<td>(In Thousands)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Amount</td>
<td>Amount</td>
<td>Amount</td>
<td>Amount</td>
</tr>
<tr>
<td></td>
<td>Fund</td>
<td>Primavera Capital Fund II L.P.</td>
<td>Financial assets carried at cost</td>
<td>-</td>
<td>- US$</td>
<td>- US$ 11,767</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Money market fund</td>
<td>Goldman Sachs US$ Liquid Reserves Fund</td>
<td>Available-for-sale financial assets</td>
<td>-</td>
<td>- US$</td>
<td>199,144</td>
<td>199,144</td>
<td>199,144</td>
</tr>
</tbody>
</table>

Note 1: The ending balance includes the amortization of premium/discount on bonds investments, share of profits/losses of investees and other related adjustment.

Note 2: The Company restructured the organizational structure to simplify investment structure. Therefore, the acquisition amount was the carrying value of VisEra Holding’s investment in VisEra Tech and Xintec, respectively.

(Concluded)
### TABLE 5

**Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries**

**ACQUISITION OF INDIVIDUAL REAL ESTATE PROPERTIES AT COSTS OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2016**

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Types of Property</th>
<th>Transaction Date</th>
<th>Transaction Amount (Foreign Currencies in Thousands)</th>
<th>Payment Term</th>
<th>Counter-party</th>
<th>Nature of Relationships</th>
<th>Purpose of Acquisition</th>
<th>Other Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>April 15, 2015 to February 17, 2016</td>
<td>$362,111</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>Environetics Design Group Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>September 17, 2015 to January 25, 2016</td>
<td>3,201,800</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>DA CIN Construction Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>November 20, 2015 to October 26, 2016</td>
<td>329,010</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>TASA Construction Corporation</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>December 10, 2015 to April 11, 2016</td>
<td>3,167,768</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>Fu Tsu Construction Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>December 31, 2015 to January 04, 2016</td>
<td>1,250,000</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>China Steel Structure Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>January 22, 2016 to January 25, 2016</td>
<td>750,000</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>KEDGE Construction Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Nanjing</td>
<td>Land use right</td>
<td>June 16, 2016</td>
<td>RMB 160,521</td>
<td>100% payment</td>
<td>Nanjing Municipal Bureau of Land and Resources</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Nanjing</td>
<td>Fab</td>
<td>June 30, 2016</td>
<td>RMB 899,997</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>China Construction First Division Group Construction &amp; Development Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>October 17, 2016</td>
<td>RMB 408,980</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>Shanghai Baoye Group Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
TABLE 6

Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2016
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Related Party</th>
<th>Nature of Relationships</th>
<th>Transaction Details</th>
<th>Abnormal Transaction</th>
<th>Notes/Accounts Payable or Receivable</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Purchases/Sales</strong></td>
<td><strong>Amount (Foreign Currencies in Thousands)</strong></td>
<td><strong>% to Total</strong></td>
<td><strong>Payment Terms</strong></td>
</tr>
<tr>
<td>TSMC</td>
<td>TSMC North America</td>
<td>Subsidiary</td>
<td>Sales</td>
<td>$633,917,888</td>
<td>65</td>
<td>Net 30 days from invoice date (Note)</td>
</tr>
<tr>
<td>GUC</td>
<td>Associate</td>
<td>Sales</td>
<td>5,008,684</td>
<td>1</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>TSMC China</td>
<td>Subsidiary</td>
<td>Purchases</td>
<td>19,256,773</td>
<td>27</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>WaferTech</td>
<td>Indirect subsidiary</td>
<td>Purchases</td>
<td>8,531,562</td>
<td>12</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>VIS</td>
<td>Associate</td>
<td>Purchases</td>
<td>6,732,298</td>
<td>10</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>SSMC</td>
<td>Associate</td>
<td>Purchases</td>
<td>3,375,422</td>
<td>5</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>TSMC North America</td>
<td>GUC</td>
<td>Associate of TSMC</td>
<td>Sales</td>
<td>842,301 (US$ 26,098)</td>
<td>-</td>
<td>Net 30 days from invoice date</td>
</tr>
</tbody>
</table>

Note: The tenor is 30 days from TSMC’s invoice date or determined by the payment terms granted to its clients by TSMC North America.
### Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

#### RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL

**DECEMBER 31, 2016**

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Related Party</th>
<th>Nature of Relationships</th>
<th>Ending Balance (Foreign Currencies in Thousands)</th>
<th>Turnover Days (Note 1)</th>
<th>Turnover Days (Note 1)</th>
<th>Overdue</th>
<th>Action Taken</th>
<th>Amount</th>
<th>Action Taken</th>
<th>Amount</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC</td>
<td>TSMC North America</td>
<td>Subsidiary</td>
<td>$ 86,675,335</td>
<td>41</td>
<td>$ 5,767,087</td>
<td>-</td>
<td>$ 14,527,760</td>
<td>593,265</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GUC</td>
<td>Associate</td>
<td>$ 931,787</td>
<td>52</td>
<td>$ 593,265</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSMC North America</td>
<td>TSMC</td>
<td>Parent company</td>
<td>$ 200,701 (US$ 6,233)</td>
<td>Note 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSMC China</td>
<td>TSMC</td>
<td>Parent company</td>
<td>1,775,774 (RMB 383,265)</td>
<td>31</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TSMC Nanjing</td>
<td>The same parent company</td>
<td>4,190,708 (RMB 904,476)</td>
<td>Note 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSMC Technology</td>
<td>TSMC</td>
<td>Parent company</td>
<td>$ 209,112 (US$ 6,494)</td>
<td>Note 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WaferTech</td>
<td>TSMC</td>
<td>The ultimate parent of the Company</td>
<td>1,303,795 (US$ 40,492)</td>
<td>42</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TSMC Development</td>
<td>Parent company</td>
<td>$ 172,015 (US$ 5,342)</td>
<td>Note 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: The calculation of turnover days excludes other receivables from related parties.

Note 2: The ending balance is primarily consisted of other receivables, which is not applicable for the calculation of turnover days.
### TABLE 8
Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

**INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS**

FOR THE YEAR ENDED DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>No.</th>
<th>Company Name</th>
<th>Counter Party</th>
<th>Nature of Relationship (Note 1)</th>
<th>Intercompany Transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Financial Statements Item</td>
</tr>
<tr>
<td>0</td>
<td>TSMC</td>
<td>TSMC North America</td>
<td>1</td>
<td>Net revenue from sale of goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Receivables from related parties</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other receivables from related parties</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Payables to related parties</td>
</tr>
<tr>
<td></td>
<td>TSMC Japan</td>
<td></td>
<td>1</td>
<td>Marketing expenses - commission</td>
</tr>
<tr>
<td></td>
<td>TSMC Europe</td>
<td></td>
<td>1</td>
<td>Marketing expenses - commission</td>
</tr>
<tr>
<td></td>
<td>TSMC China</td>
<td></td>
<td>1</td>
<td>Purchases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Marketing expenses - commission</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Payables to related parties</td>
</tr>
<tr>
<td></td>
<td>TSMC Canada</td>
<td></td>
<td>1</td>
<td>Research and development expenses</td>
</tr>
<tr>
<td></td>
<td>TSMC Technology</td>
<td></td>
<td>1</td>
<td>Research and development expenses</td>
</tr>
<tr>
<td></td>
<td>Wafer Tech</td>
<td></td>
<td>1</td>
<td>Purchases</td>
</tr>
<tr>
<td>1</td>
<td>TSMC China</td>
<td>TSMC Nanjing</td>
<td>3</td>
<td>Other receivables from related parties</td>
</tr>
<tr>
<td>2</td>
<td>TSMC Development</td>
<td>Wafer Tech</td>
<td>3</td>
<td>Other payables from related parties</td>
</tr>
</tbody>
</table>

Note 1: No. 1 represents the transactions from parent company to subsidiary.
No. 3 represents the transactions between subsidiaries.

Note 2: The sales prices and payment terms of intercompany sales are not significantly different from those to third parties. For other intercompany transactions, prices and terms are determined in accordance with mutual agreements.
### Table 9

Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

<table>
<thead>
<tr>
<th>Investor Company</th>
<th>Investee Company</th>
<th>Location</th>
<th>Main Businesses and Products</th>
<th>Original Investment Amount</th>
<th>Balance as of December 31, 2016</th>
<th>Net Income (Losses) of the Investee (Foreign Currencies in Thousands)</th>
<th>Share of Profit/Losses of Investee (Foreign Currencies in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC Partners</td>
<td>TSMC Global</td>
<td>Tortola, British Virgin Islands</td>
<td>Investment activities</td>
<td>$ 232,207,219</td>
<td>$ 167,755,236</td>
<td>7,100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TSMC Partners</td>
<td>Tortola, British Virgin Islands</td>
<td>Investing in companies involved in the semiconductor industry</td>
<td>31,456,130</td>
<td>31,456,130</td>
<td>988,268</td>
<td>100</td>
</tr>
<tr>
<td>VIS</td>
<td>Hsin-Chu, Taiwan</td>
<td>Research, design, development, manufacture, packaging, testing and sale of semiconductor integrated circuits, LSIs, VLSIs and related parts</td>
<td>10,180,677</td>
<td>10,180,677</td>
<td>464,223</td>
<td>28</td>
<td>8,806,384</td>
</tr>
<tr>
<td>SSMC</td>
<td>Singapore</td>
<td>Fabrication and supply of integrated circuits</td>
<td>5,120,028</td>
<td>5,120,028</td>
<td>314</td>
<td>39</td>
<td>7,163,516</td>
</tr>
<tr>
<td>Vixera Tech</td>
<td>Hsin-Chu, Taiwan</td>
<td>Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter</td>
<td>5,005,171</td>
<td>253,120</td>
<td>87</td>
<td>5,234,883</td>
<td>661,562</td>
</tr>
<tr>
<td>TSMC North America</td>
<td>San Jose, California, U.S.A</td>
<td>Selling and marketing of integrated circuits and semiconductor devices</td>
<td>333,718</td>
<td>333,718</td>
<td>11,000</td>
<td>100</td>
<td>4,340,303</td>
</tr>
<tr>
<td>Xinbic</td>
<td>Taejon, Taiwan</td>
<td>Wafer level chip size packaging service</td>
<td>1,988,317</td>
<td>1,309,969</td>
<td>111,282</td>
<td>41</td>
<td>5,537,925</td>
</tr>
<tr>
<td>GUC</td>
<td>Hsin-Chu, Taiwan</td>
<td>Researching, developing, manufacturing, testing and marketing of integrated circuits</td>
<td>386,568</td>
<td>386,568</td>
<td>46,688</td>
<td>35</td>
<td>1,174,181</td>
</tr>
<tr>
<td>VTF I</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>608,562</td>
<td>608,562</td>
<td>-</td>
<td>98</td>
<td>467,171</td>
</tr>
<tr>
<td>VTF Europe</td>
<td>Amsterdam, the Netherlands</td>
<td>Marketing and engineering supporting activities</td>
<td>15,749</td>
<td>15,749</td>
<td>-</td>
<td>100</td>
<td>353,695</td>
</tr>
<tr>
<td>VTF I</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>1,355,417</td>
<td>1,499,452</td>
<td>-</td>
<td>98</td>
<td>219,350</td>
</tr>
<tr>
<td>TSMC Japan</td>
<td>Yokohama, Japan</td>
<td>Marketing activities</td>
<td>83,760</td>
<td>83,760</td>
<td>6</td>
<td>100</td>
<td>132,999</td>
</tr>
<tr>
<td>TSMC Korea</td>
<td>Seoul, Korea</td>
<td>Customer service and technical supporting activities</td>
<td>13,656</td>
<td>13,656</td>
<td>80</td>
<td>100</td>
<td>35,706</td>
</tr>
<tr>
<td>TSMC Solar Europe GmbH</td>
<td>Hamburg, Germany</td>
<td>Selling of solar related products and providing customer service</td>
<td>25,266</td>
<td>25,266</td>
<td>1</td>
<td>100</td>
<td>(6,328)</td>
</tr>
<tr>
<td>VTA Holdings</td>
<td>Delaware, U.S.A</td>
<td>Investing in new start-up technology companies</td>
<td>-</td>
<td>844,775</td>
<td>-</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>Emerging Alliance</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>Note 4</td>
<td>394,674</td>
<td>Note 4</td>
<td>Note 4</td>
<td>Note 4</td>
</tr>
<tr>
<td>Chi Cherng</td>
<td>Taipei, Taiwan</td>
<td>Investment activities</td>
<td>Note 3</td>
<td>5,221,931</td>
<td>Note 3</td>
<td>Note 3</td>
<td>Note 3</td>
</tr>
<tr>
<td>Motech</td>
<td>New Taipei, Taiwan</td>
<td>Manufacturing and sales of solar cells, crystalline silicon solar cell, and test and measurement instruments and design and construction of solar power systems</td>
<td>Note 4</td>
<td>394,674</td>
<td>Note 4</td>
<td>Note 4</td>
<td>Note 4</td>
</tr>
<tr>
<td>TSMC Partners</td>
<td>TSMC Development</td>
<td>Delaware, U.S.A</td>
<td>Investment activities</td>
<td>18,898,843</td>
<td>18,898,843</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TSMC Technology</td>
<td>Delaware, U.S.A</td>
<td>Engineering support activities</td>
<td>459,867</td>
<td>459,867</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>ISDF II</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>167,236</td>
<td>299,419</td>
<td>9,299</td>
<td>97</td>
<td>195,721</td>
</tr>
<tr>
<td>TSMC Canada</td>
<td>Ontario, Canada</td>
<td>Engineering support activities</td>
<td>74,058</td>
<td>74,058</td>
<td>2,300</td>
<td>100</td>
<td>169,346</td>
</tr>
<tr>
<td>ISDF</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>15,301</td>
<td>15,301</td>
<td>803</td>
<td>97</td>
<td>489</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Investor Company</th>
<th>Investee Company</th>
<th>Location</th>
<th>Main Businesses and Products</th>
<th>Original Investment Amount</th>
<th>Balance as of December 31, 2016</th>
<th>Net Income (Losses) of the Investee (Foreign Currencies in Thousands)</th>
<th>Share of Profits/Losses of Investee (Note 1) (Foreign Currencies in Thousands)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC Partners</td>
<td>VisEra Holding</td>
<td>Cayman Islands</td>
<td>Investing in companies involved in the design, manufacturing, and other related businesses in the semiconductor industry</td>
<td>Note 5 $4,868,630 (US$ 15,204)</td>
<td>Note 5</td>
<td>Note 5</td>
<td>Note 5 $351,135 (US$ 10,880)</td>
<td>Note 2</td>
</tr>
<tr>
<td>VTAF III</td>
<td>Growth Fund</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>$47,067 (US$ 1,462)</td>
<td>Note 5</td>
<td>100</td>
<td>$29,486 (US$ 916)</td>
<td>Note 2 Subsidiary</td>
</tr>
<tr>
<td></td>
<td>Mutual-Pak</td>
<td>New Taipei, Taiwan</td>
<td>Manufacturing of electronic parts, wholesaling and retailing of electronic materials, and researching, developing and testing of RFID</td>
<td>167,843 (US$ 5,213)</td>
<td>15,641</td>
<td>58</td>
<td>21,725 (US$ 675)</td>
<td>Note 2 Subsidiary</td>
</tr>
<tr>
<td>VTA Holdings</td>
<td>-</td>
<td>Delaware, U.S.A</td>
<td>Investing in new start-up technology companies</td>
<td>-</td>
<td>-</td>
<td>62</td>
<td>-</td>
<td>Note 2 Subsidiary</td>
</tr>
<tr>
<td>VTAF II</td>
<td>VTA Holdings</td>
<td>Delaware, U.S.A</td>
<td>Investing in new start-up technology companies</td>
<td>-</td>
<td>-</td>
<td>31</td>
<td>-</td>
<td>Note 2 Subsidiary</td>
</tr>
<tr>
<td>TSMC Development</td>
<td>WaferTech</td>
<td>Washington, U.S.A</td>
<td>Manufacturing, selling, testing and computer-aided designing of integrated circuits and other semiconductor devices</td>
<td>-</td>
<td>293,637</td>
<td>100</td>
<td>5,785,335 (US$ 179,674)</td>
<td>Note 2 Subsidiary</td>
</tr>
<tr>
<td>VisEra Holding</td>
<td>VisEra Tech</td>
<td>Hsin-Chu, Taiwan</td>
<td>Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter</td>
<td>Note 5 $3,028,916 (US$ 94,069)</td>
<td>Note 5</td>
<td>Note 5</td>
<td>661,562 (US$ 20,498)</td>
<td>Note 2</td>
</tr>
<tr>
<td>Xintec</td>
<td>Taoyuan, Taiwan</td>
<td>-</td>
<td>Wafer level chip size packaging service</td>
<td>Note 5 $19,586 (US$ 6,083)</td>
<td>Note 5</td>
<td>Note 5</td>
<td>636,819 (US$ 19,732)</td>
<td>Note 2</td>
</tr>
</tbody>
</table>

Note 1: The share of profits/losses of investee includes the effect of unrealized gross profit on intercompany transactions.

Note 2: The share of profits/losses of the investee company is not reflected herein as such amount is already included in the share of profits/losses of the investor company.

Note 3: The Company has no longer served as Motech's board of director starting June 2016. As a result, the Company exercises no significant influence over Motech. Therefore, Motech is no longer accounted for using the equity method. Further, such investment was reclassified to available-for-sale financial assets.

Note 4: Chi Cheng was incorporated into TSMC in December 2016.

Note 5: In October 2016, VisEra Holding was incorporated into TSMC Partners, the subsidiary of TSMC.
### TABLE 10

**Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries**

**INFORMATION ON INVESTMENT IN MAINLAND CHINA**

**FOR TWELVE MONTHS ENDED DECEMBER 31, 2016**

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC China</td>
<td>Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers</td>
<td>$18,939,667 (RMB 4,502,080)</td>
<td>Note 1</td>
<td>$18,939,667 (US$ 596,000)</td>
<td>$ -</td>
<td>$ -</td>
<td>$18,939,667 (US$ 596,000)</td>
<td>$6,181,335</td>
<td>100%</td>
<td>$6,094,460 (Note 2)</td>
<td>$42,618,308</td>
</tr>
<tr>
<td>TSMC Nanjing</td>
<td>Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers</td>
<td>6,435,200 (RMB 1,366,240)</td>
<td>Note 1</td>
<td>- $6,435,200 (US$ 200,000)</td>
<td>-</td>
<td>-</td>
<td>6,435,200 (US$ 200,000)</td>
<td>939</td>
<td>100%</td>
<td>939 (Note 2)</td>
<td>6,331,094</td>
</tr>
</tbody>
</table>

**Accumulated Investment in Mainland China as of December 31, 2016**

<table>
<thead>
<tr>
<th>(US$ in Thousands)</th>
<th>Investment Amounts Authorized by Investment Commission, MOEA (US$ in Thousands)</th>
<th>Upper Limit on Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25,374,867 (US$ 796,000)</td>
<td>$119,412,667 (US$3,596,000)</td>
<td>Note 3</td>
</tr>
</tbody>
</table>

**Note 1:** TSMC directly invested US$596,000 thousand in TSMC China and US$200,000 thousands in TSMC Nanjing.

**Note 2:** Amount was recognized based on the audited financial statements.

**Note 3:** As the Company has obtained the certificate of being qualified for operating headquarters issued by Industrial Development Bureau, MOEA on August 2016, the upper limit on investment in mainland China pursuant to “Principle of Investment or Technical Cooperation in Mainland China” is not applicable.
Taiwan Semiconductor Manufacturing Company Limited

Parent Company Only Financial Statements for the Years Ended December 31, 2016 and 2015 and Independent Auditors’ Report
INDEPENDENT AUDITORS’ REPORT

The Board of Directors and Shareholders
Taiwan Semiconductor Manufacturing Company Limited

Opinion

We have audited the accompanying parent company only financial statements of Taiwan Semiconductor Manufacturing Company Limited (the “Company”), which comprise the parent company only balance sheets as of December 31, 2016 and 2015, and the parent company only statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the parent company only financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying parent company only financial statements present fairly, in all material respects, the parent company only financial position of the Company as of December 31, 2016 and 2015, and its parent company only financial performance and its parent company only cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors’ Responsibilities for the Audit of Parent Company Only Financial Statements section of our report. We are independent of the Company in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the parent company only financial statements for the year ended December 31, 2016. These matters were addressed in the context of our audit of the parent company only financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters for the Company’s parent company only financial statements for the year ended December 31, 2016 are stated as follows:

Provision of sales returns and allowances

In consideration of business volume and market conditions, the Company provides a variety of business incentives to specific customers or products. The provision of sales returns and allowance is based on historical experience and the varying contractual terms by management’s judgment. Please refer to Notes 4, 5 and 16 to the parent company only financial statements for the details of the information about provision of sales returns and allowances. Since the provision of sales returns and allowances is subject to management’s judgment, which has significant uncertainty, and the result could also affect the net revenue in the parent company only financial statements, it has been identified as a key audit matter.
Our key audit procedures performed in respect of the above area included the following:

1. Understood and tested the design and operating effectiveness of the key controls over provision of sales returns and allowances;

2. Understood and assessed the reasonableness of management’s assumptions made and methodology used in estimating provision of sales returns and allowances;

3. Sampled and inspected the Company’s sales contracts of main products by agreeing the contractual terms and performed an analysis to challenge management’s estimation on possibility that specific products could meet business incentives condition to verify the reasonableness of the accrual of the provision;

4. Performed a retrospective review to comparatively analyze the historical accuracy of judgments with reference to actual sales allowance paid.

**Timing to commence depreciation of property, plant and equipment (PP&E)**

The Company continues to invest in capital expenditures to develop and build capacity in leading-edge technologies to meet customers’ demand. Please refer to Notes 4 and 12 to the parent company only financial statements for the details of the information and accounting policy about the depreciation of PP&E. According to International Accounting Standards 16, depreciation of PP&E should commence when the assets are available for their intended use. Due to the significant capital expenditures incurred by the Company, the appropriateness of the timing to commence depreciation of PP&E could have a material impact on its financial performance. Consequently, the validity of the timing to commence depreciation of PP&E is identified as a key audit matter.

Our key audit procedures performed in respect of the above area included the following:

1. Understood and tested the design and operating effectiveness of the key controls over the timing to commence depreciation of PP&E;

2. Understood the criteria the assets are defined as available for use intended by management and the corresponding accounting treatments;

3. Sampled and reviewed the appropriateness of the timing for commencing depreciation after the assets met the criteria of available for use in current year;

4. Performed an observation on the physical count of equipment under installation and construction in progress; sampled and inspected the supporting documentation to verify that the status of equipment under installation and construction in progress are not available for use;

5. Sampled equipment under installation and construction in progress which met the criteria of available for use and were transferred in the subsequent period to evaluate the reasonableness of the timing for commencing depreciation;

6. Sampled and reviewed the appropriateness of the equipment under installation and construction in progress which are not available for their intended use.

**Responsibilities of Management and Those Charged with Governance for the Parent Company Only Financial Statements**

Management is responsible for the preparation and fair presentation of the parent company only financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and for such internal control as management determines is necessary to enable the preparation of parent company only financial statements that are free from material misstatement, whether due to fraud or error.
In preparing the parent company only financial statements, management is responsible for assessing the Company’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance (including members of the Audit Committee) are responsible for overseeing the Company’s financial reporting process.

Auditors’ Responsibilities for the Audit of the Parent Company Only Financial Statements

Our objectives are to obtain reasonable assurance about whether the parent company only financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors’ report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these parent company only financial statements.

As part of an audit in accordance with the auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the parent company only financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors’ report to the related disclosures in the parent company only financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors’ report. However, future events or conditions may cause the Company to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the parent company only financial statements, including the disclosures, and whether the parent company only financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the parent company only financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the parent company only financial statements for the year ended December 31, 2016 and are therefore the key audit matters. We describe these matters in our auditors’ report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors’ report are Yih-Shin Kao and Yu Feng Huang.

Deloitte & Touche
Taipei, Taiwan
The Republic of China

February 14, 2017

Notice to Readers

The accompanying financial statements are intended only to present the financial position, financial performance and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to audit such financial statements are those generally applied in the Republic of China.

For the convenience of readers, the independent auditors’ report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors’ report and financial statements shall prevail.
Taiwan Semiconductor Manufacturing Company Limited

PARENT COMPANY ONLY BALANCE SHEETS
(In Thousands of New Taiwan Dollars)

December 31, 2016

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>Amount</th>
<th>%</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT ASSETS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents (Note 6)</td>
<td>$249,878,563</td>
<td>14</td>
<td>$264,493,583</td>
<td>16</td>
</tr>
<tr>
<td>Financial assets at fair value through profit or loss (Note 7)</td>
<td>151,070</td>
<td>-</td>
<td>6,026</td>
<td>-</td>
</tr>
<tr>
<td>Available-for-sale financial assets (Note 8)</td>
<td>2,843,952</td>
<td>-</td>
<td>706,924</td>
<td>-</td>
</tr>
<tr>
<td>Held-to-maturity financial assets (Note 9)</td>
<td>11,447,538</td>
<td>1</td>
<td>9,166,523</td>
<td>1</td>
</tr>
<tr>
<td>Notes and accounts receivable, net (Note 9)</td>
<td>40,017,297</td>
<td>2</td>
<td>25,636,123</td>
<td>2</td>
</tr>
<tr>
<td>Receivables from related parties (Note 31)</td>
<td>86,845,570</td>
<td>5</td>
<td>57,282,682</td>
<td>4</td>
</tr>
<tr>
<td>Other receivables from related parties (Note 31)</td>
<td>948,800</td>
<td>-</td>
<td>455,277</td>
<td>-</td>
</tr>
<tr>
<td>Inventories (Notes 5, 10 and 34)</td>
<td>46,504,346</td>
<td>2</td>
<td>64,338,188</td>
<td>4</td>
</tr>
<tr>
<td>Other financial assets (Notes 34)</td>
<td>2,139,366</td>
<td>-</td>
<td>1,766,573</td>
<td>-</td>
</tr>
<tr>
<td>Other current assets (Note 14)</td>
<td>3,004,662</td>
<td>-</td>
<td>3,061,131</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>$443,781,164</td>
<td>24</td>
<td>$426,913,080</td>
<td>27</td>
</tr>
</tbody>
</table>

| NONCURRENT ASSETS | | | | |
| Hold-to-maturity financial assets (Note 8) | - | - | 1,621,424 | - |
| Financial assets carried at cost | 435,268 | - | 343,721 | - |
| Investments accounted for using equity method (Notes 5 and 11) | 396,855,708 | 22 | 324,365,592 | 20 |
| Property, plant and equipment (Notes 5 and 12) | 979,401,337 | 53 | 831,784,912 | 52 |
| Intangible assets (Notes 5 and 13) | 10,047,991 | 1 | 9,391,418 | 1 |
| Deferred income tax assets (Notes 5 and 26) | 6,446,781 | - | 4,506,675 | - |
| Refundable deposits | 369,895 | - | 398,693 | - |
| Other noncurrent assets (Note 14) | - | - | 360,000 | - |
| **Total noncurrent assets** | $1,393,556,980 | 76 | $1,172,772,435 | 73 |
| **TOTAL** | $1,837,338,144 | 100 | $1,599,685,515 | 100 |

LIABILITIES AND EQUITY

CURRENT LIABILITIES

Short-term loans (Note 15) | $57,958,200 | 3 | $39,474,000 | 2 |
| Financial liabilities at fair value through profit or loss (Note 7) | 62,441 | - | 45,254 | - |
| Accounts payable | 24,533,924 | 1 | 16,702,970 | 1 |
| Payables to related parties (Note 31) | 4,840,001 | 1 | 3,759,631 | 1 |
| Salary and bonus payable | 11,570,505 | 1 | 9,603,908 | 1 |
| Accrued profit sharing bonus to employees and compensation to directors (Notes 20 and 28) | 22,794,771 | 1 | 20,913,074 | 1 |
| Payables to contractors and equipment suppliers | 62,449,143 | 4 | 25,346,206 | 2 |
| Income tax payable (Notes 5 and 26) | 40,256,148 | 2 | 32,975,435 | 2 |
| Provisions (Notes 5 and 16) | 16,991,612 | 1 | 9,011,863 | 1 |
| Long-term liabilities - current portion (Note 17) | 38,100,000 | 2 | 12,000,000 | 1 |
| Accrued expenses and other current liabilities (Note 19) | 28,620,469 | 2 | 24,466,937 | 2 |
| **Total current liabilities** | 308,177,214 | 17 | 194,299,278 | 13 |

NONCURRENT LIABILITIES

Bonds payable (Note 17) | 116,100,000 | 6 | 154,200,000 | 10 |
| Deferred income tax liabilities (Notes 5 and 26) | 141,183 | - | 31,271 | - |
| Net defined benefit liability (Notes 5 and 18) | 8,551,408 | - | 7,448,026 | - |
| Guarantee deposits (Note 19) | 14,666,542 | 1 | 21,554,374 | 1 |
| Others (Note 16) | 453,536 | - | 480,847 | - |
| **Total noncurrent liabilities** | 139,912,669 | 7 | 183,714,518 | 11 |
| **Total liabilities** | 448,089,883 | 24 | 378,013,796 | 24 |

EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT

Capital stock (Note 20) | 259,303,805 | 14 | 259,303,805 | 16 |
| Capital surplus (Note 20) | 56,272,304 | 3 | 56,300,315 | 3 |
| Retained earnings (Note 20) | 208,297,945 | 12 | 177,640,561 | 11 |
| Appropriated as legal capital reserve | 863,710,224 | 47 | 716,653,025 | 45 |
| Unappropriated earnings | 1,072,008,169 | 59 | 894,293,586 | 56 |
| Others (Note 20) | 1,663,983 | - | 11,774,113 | - |
| **Total equity** | 1,389,248,261 | 76 | 1,221,671,719 | 76 |
| **TOTAL** | $1,837,338,144 | 100 | $1,599,685,515 | 100 |

The accompanying notes are an integral part of the parent company only financial statements.
Taiwan Semiconductor Manufacturing Company Limited

PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
</tr>
<tr>
<td>NET REVENUE (Notes 5, 22 and 31)</td>
<td>$ 936,387,291</td>
<td>100</td>
</tr>
<tr>
<td>COST OF REVENUE (Notes 5, 10, 28, 31 and 34)</td>
<td>474,552,913</td>
<td>51</td>
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<tr>
<td>GROSS PROFIT BEFORE REALIZED (UNREALIZED) GROSS PROFIT ON SALES TO SUBSIDIARIES AND ASSOCIATES</td>
<td>461,834,378</td>
<td>49</td>
</tr>
<tr>
<td>REALIZED (UNREALIZED) GROSS PROFIT ON SALES TO SUBSIDIARIES AND ASSOCIATES</td>
<td>(26,082)</td>
<td>-</td>
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<tr>
<td>GROSS PROFIT</td>
<td>461,808,296</td>
<td>49</td>
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<tr>
<td>OPERATING EXPENSES (Notes 5, 28 and 31)</td>
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<td></td>
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<tr>
<td>Research and development</td>
<td>70,366,179</td>
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<tr>
<td>General and administrative</td>
<td>18,697,463</td>
<td>2</td>
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<tr>
<td>Marketing</td>
<td>3,098,086</td>
<td>-</td>
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<tr>
<td>Total operating expenses</td>
<td>92,161,728</td>
<td>10</td>
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<tr>
<td>OTHER OPERATING INCOME AND EXPENSES, NET (Notes 12 and 28)</td>
<td>83,965</td>
<td>-</td>
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<tr>
<td>INCOME FROM OPERATIONS</td>
<td>369,730,533</td>
<td>39</td>
</tr>
<tr>
<td>NON-OPERATING INCOME AND EXPENSES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of profits of subsidiaries and associates (Note 11)</td>
<td>14,941,372</td>
<td>2</td>
</tr>
<tr>
<td>Other income (Note 23)</td>
<td>1,816,803</td>
<td>-</td>
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<tr>
<td>Foreign exchange gain, net (Note 35)</td>
<td>609,345</td>
<td>-</td>
</tr>
<tr>
<td>Finance costs (Note 24)</td>
<td>(2,643,193)</td>
<td>-</td>
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<tr>
<td>Other gains and losses (Note 25)</td>
<td>734,100</td>
<td>-</td>
</tr>
<tr>
<td>Total non-operating income and expenses</td>
<td>15,458,427</td>
<td>2</td>
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<tr>
<td>INCOME BEFORE INCOME TAX</td>
<td>385,188,960</td>
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<td>INCOME TAX EXPENSE (Notes 5 and 26)</td>
<td>50,941,780</td>
<td>5</td>
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<tr>
<td>NET INCOME</td>
<td>334,247,180</td>
<td>36</td>
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(Continued)
Taiwan Semiconductor Manufacturing Company Limited

PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>%</th>
<th>2015</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTHER COMPREHENSIVE INCOME (LOSS) (Notes 11, 18, 20 and 26)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items that will not be reclassified subsequently to profit or loss:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remeasurement of defined benefit obligation</td>
<td>$(1,057,220)</td>
<td>-</td>
<td>$(827,703)</td>
<td>-</td>
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<tr>
<td>Share of other comprehensive loss of subsidiaries and associates</td>
<td>(19,961)</td>
<td>-</td>
<td>(2,523)</td>
<td>-</td>
</tr>
<tr>
<td>Income tax benefit related to items that will not be reclassified subsequently</td>
<td>126,867</td>
<td>-</td>
<td>99,324</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>(950,314)</td>
<td>-</td>
<td>(730,902)</td>
<td>-</td>
</tr>
<tr>
<td>Items that may be reclassified subsequently to profit or loss:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange differences arising on translation of foreign operations</td>
<td>(9,439,776)</td>
<td>(1)</td>
<td>6,525,608</td>
<td>1</td>
</tr>
<tr>
<td>Changes in fair value of available-for-sale financial assets</td>
<td>47,506</td>
<td>-</td>
<td>94,064</td>
<td>-</td>
</tr>
<tr>
<td>Share of other comprehensive loss of subsidiaries and associates</td>
<td>(656,684)</td>
<td>-</td>
<td>(20,578,859)</td>
<td>(3)</td>
</tr>
<tr>
<td>Income tax expense related to items that may be reclassified subsequently</td>
<td>(61,176)</td>
<td>-</td>
<td>(15,991)</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>(10,110,130)</td>
<td>(1)</td>
<td>(13,975,178)</td>
<td>(2)</td>
</tr>
<tr>
<td>Other comprehensive loss for the year, net of income tax</td>
<td>(11,060,444)</td>
<td>(1)</td>
<td>(14,706,080)</td>
<td>(2)</td>
</tr>
<tr>
<td>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</td>
<td>$323,186,736</td>
<td>35</td>
<td>$291,867,757</td>
<td>35</td>
</tr>
</tbody>
</table>

EARNINGS PER SHARE (NT$, Note 27)

|                      |        |      |        |      |
| Basic earnings per share | $12.89 |      | $11.82 |      |
| Diluted earnings per share | $12.89 |      | $11.82 |      |

The accompanying notes are an integral part of the parent company only financial statements.  (Concluded)
## PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY
(In Thousands of New Taiwan Dollars, Except Dividends Per Share)

|                               | Shares   | Amount     | Capital Stock - Common Stock | Legal Capital Reserve | Capital Surplus | Capital Stock - Preferred Stock | Foreign Currency Translation Reserve | Unrealized Gain/Loss from Available Financial Assets | Cash Flow Hedges Reserve | Cash Flow | Total   | Total Equity |
|-------------------------------|----------|------------|-----------------------------|----------------------|-----------------|---------------------------------|-------------------------------------|--------------------------------|------------------------|------------|----------|----------|-------------|
| **BALANCE, JANUARY 1, 2015**  |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          | $ 25,929,662 | $ 259,296,624 |
| Appropriations of prior year’s earnings |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| Legal capital reserve         |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| Cash dividends to shareholders - NT$4.5 per share |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| Total                         |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| **Net income in 2015**        |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| **BALANCE, DECEMBER 31, 2015**|          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| Appropriations of prior year’s earnings |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| Legal capital reserve         |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| Cash dividends to shareholders - NT$6.0 per share |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| Total                         |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| **Net income in 2016**        |          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |
| **BALANCE, DECEMBER 31, 2016**|          |            |                             |                      |                 |                                 |                                      |                                |                        |            |          |          |              |

The accompanying notes are an integral part of the parent company only financial statements.
Taiwan Semiconductor Manufacturing Company Limited

PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASH FLOWS FROM OPERATING ACTIVITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income before income tax</td>
<td>$ 385,188,960</td>
<td>$ 349,988,668</td>
</tr>
<tr>
<td>Adjustments for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>213,977,324</td>
<td>213,293,810</td>
</tr>
<tr>
<td>Amortization expense</td>
<td>3,724,066</td>
<td>3,159,437</td>
</tr>
<tr>
<td>Finance costs</td>
<td>2,643,193</td>
<td>2,440,459</td>
</tr>
<tr>
<td>Share of profits of subsidiaries and associates</td>
<td>(14,941,372)</td>
<td>(33,694,186)</td>
</tr>
<tr>
<td>Interest income</td>
<td>(1,683,150)</td>
<td>(1,726,503)</td>
</tr>
<tr>
<td>Gain on disposal of property, plant and equipment, net</td>
<td>(100,503)</td>
<td>(21,569)</td>
</tr>
<tr>
<td>Impairment loss on property, plant and equipment</td>
<td>-</td>
<td>228,037</td>
</tr>
<tr>
<td>Impairment loss on financial assets</td>
<td>4,537</td>
<td>21,437</td>
</tr>
<tr>
<td>Gain on disposal of available-for-sale financial assets, net</td>
<td>(101,411)</td>
<td>(51)</td>
</tr>
<tr>
<td>Loss (gain) on disposal of investments accounted for using equity method, net</td>
<td>296,065</td>
<td>(2,419,785)</td>
</tr>
<tr>
<td>Unrealized (realized) gross profit on sales to subsidiaries and associates</td>
<td>26,082</td>
<td>(18,117)</td>
</tr>
<tr>
<td>Loss (gain) on foreign exchange, net</td>
<td>(2,656,406)</td>
<td>2,548,291</td>
</tr>
<tr>
<td>Dividend income</td>
<td>(133,653)</td>
<td>(113,359)</td>
</tr>
<tr>
<td>Changes in operating assets and liabilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial instruments at fair value through profit or loss</td>
<td>(127,857)</td>
<td>(249,322)</td>
</tr>
<tr>
<td>Notes and accounts receivable, net</td>
<td>(20,448,337)</td>
<td>(6,375,554)</td>
</tr>
<tr>
<td>Receivables from related parties</td>
<td>(29,562,888)</td>
<td>31,322,516</td>
</tr>
<tr>
<td>Other receivables from related parties</td>
<td>(493,473)</td>
<td>108,834</td>
</tr>
<tr>
<td>Inventories</td>
<td>17,833,842</td>
<td>(759,653)</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>(22,662)</td>
<td>823,847</td>
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<tr>
<td>Other current assets</td>
<td>18,337</td>
<td>(142,763)</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>7,639,380</td>
<td>(1,916,970)</td>
</tr>
<tr>
<td>Payables to related parties</td>
<td>1,108,002</td>
<td>(1,024,427)</td>
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<tr>
<td>Salary and bonus payable</td>
<td>1,966,597</td>
<td>595,592</td>
</tr>
<tr>
<td>Accrued profit sharing bonus to employees and compensation to directors</td>
<td>1,881,697</td>
<td>2,860,254</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>3,891,345</td>
<td>(2,788,099)</td>
</tr>
<tr>
<td>Provisions</td>
<td>7,961,632</td>
<td>(948,176)</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>46,163</td>
<td>73,473</td>
</tr>
<tr>
<td>Cash generated from operations</td>
<td>577,935,510</td>
<td>555,266,121</td>
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<tr>
<td>Income taxes paid</td>
<td>(45,387,724)</td>
<td>(40,493,290)</td>
</tr>
<tr>
<td>Net cash generated by operating activities</td>
<td>532,547,786</td>
<td>514,772,831</td>
</tr>
</tbody>
</table>

CASH FLOWS FROM INVESTING ACTIVITIES

Acquisitions of:

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available-for-sale financial assets</td>
<td>(172)</td>
<td>(3,628)</td>
</tr>
<tr>
<td>Held to maturity financial assets</td>
<td>(11,242,766)</td>
<td>(23,074,925)</td>
</tr>
<tr>
<td>Investments accounted for using equity method</td>
<td>(445,012)</td>
<td>-</td>
</tr>
</tbody>
</table>

(Continued)
### PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity interest in subsidiary</td>
<td>(1,630,700)</td>
<td>(394,674)</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>(323,009,940)</td>
<td>(249,921,656)</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>(4,207,065)</td>
<td>(4,269,815)</td>
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<tr>
<td>Proceeds from disposal or redemption of:</td>
<td></td>
<td></td>
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<tr>
<td>Available-for-sale financial assets</td>
<td>126,289</td>
<td>3,679</td>
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<tr>
<td>Held-to-maturity financial assets</td>
<td>10,550,000</td>
<td>16,800,000</td>
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<tr>
<td>Financial assets carried at cost</td>
<td>-</td>
<td>8,000</td>
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<tr>
<td>Investments accounted for using equity method</td>
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<td>3,962,848</td>
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<td>Equity interest in subsidiary</td>
<td>2,325</td>
<td>806,807</td>
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<td>Property, plant and equipment</td>
<td>104,020</td>
<td>347,840</td>
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<tr>
<td>Proceeds from return of capital of financial assets carried at cost</td>
<td>7,493</td>
<td>-</td>
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<tr>
<td>Interest received</td>
<td>1,748,570</td>
<td>1,636,497</td>
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<tr>
<td>Other dividends received</td>
<td>133,653</td>
<td>113,359</td>
</tr>
<tr>
<td>Dividends received from investments accounted for using equity method</td>
<td>5,469,549</td>
<td>3,001,834</td>
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<tr>
<td>Refundable deposits paid</td>
<td>(138,204)</td>
<td>(404,253)</td>
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<td>Refundable deposits refunded</td>
<td>169,464</td>
<td>348,283</td>
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<tr>
<td>Decrease (increase) in receivables for temporary payments</td>
<td>47,924</td>
<td>(47,924)</td>
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<tr>
<td>Cash inflow (outflow) from incorporation of subsidiary</td>
<td>396,262</td>
<td>(3,725,916)</td>
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<tr>
<td><strong>Net cash used in investing activities</strong></td>
<td>(321,918,310)</td>
<td>(254,813,644)</td>
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### CASH FLOWS FROM FINANCING ACTIVITIES

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<tr>
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<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in short-term loans</td>
<td>18,968,936</td>
<td>3,138,680</td>
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<tr>
<td>Repayment of bonds</td>
<td>(12,000,000)</td>
<td>-</td>
</tr>
<tr>
<td>Interest paid</td>
<td>(2,644,187)</td>
<td>(2,456,299)</td>
</tr>
<tr>
<td>Guarantee deposits received</td>
<td>420,719</td>
<td>747,108</td>
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<tr>
<td>Guarantee deposits refunded</td>
<td>(421,002)</td>
<td>(740,829)</td>
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<tr>
<td>Cash dividends</td>
<td>(155,582,283)</td>
<td>(116,683,481)</td>
</tr>
<tr>
<td>Proceeds from exercise of employee stock options</td>
<td>-</td>
<td>33,891</td>
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<tr>
<td>Payment of partial acquisition of interests in subsidiaries</td>
<td>(74,130,714)</td>
<td>(64,744,242)</td>
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<tr>
<td>Proceeds from partial disposal of interests in subsidiaries</td>
<td>144,035</td>
<td>380,336</td>
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<tr>
<td><strong>Net cash used in financing activities</strong></td>
<td>(225,244,496)</td>
<td>(180,324,836)</td>
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### NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>(14,615,020)</td>
<td>79,634,351</td>
<td></td>
</tr>
</tbody>
</table>

### CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>264,493,583</td>
<td>184,859,232</td>
<td></td>
</tr>
</tbody>
</table>

### CASH AND CASH EQUIVALENTS, END OF YEAR

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 249,878,563</td>
<td>$ 264,493,583</td>
<td></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the parent company only financial statements. (Concluded)
Taiwan Semiconductor Manufacturing Company Limited

NOTES TO PARENT COMPANY ONLY FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

1. GENERAL

Taiwan Semiconductor Manufacturing Company Limited (the “Company” or “TSMC”), a Republic of China (R.O.C.) corporation, was incorporated on February 21, 1987. The Company is a dedicated foundry in the semiconductor industry which engages mainly in the manufacturing, selling, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing of masks.

On September 5, 1994, the Company’s shares were listed on the Taiwan Stock Exchange (TWSE). On October 8, 1997, the Company listed some of its shares of stock on the New York Stock Exchange (NYSE) in the form of American Depositary Shares (ADSs).

The address of its registered office and principal place of business is No. 8, Li-Hsin Rd. 6, Hsinchu Science Park, Taiwan.

2. THE AUTHORIZATION OF FINANCIAL STATEMENTS

The accompanying parent company only financial statements were approved and authorized for issue by the Board of Directors on February 14, 2017.

3. APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS

As of the date that the accompanying parent company only financial statements were authorized for issue, the Company have not applied the following amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) issued by the International Accounting Standards Board (IASB) (collectively, “IFRSs”).

a. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers

Rule No. 1050050021 issued by Financial Supervisory Commission (FSC) stipulated that starting January 1, 2017, the Company should apply the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

The amendments include additions of several accounting items and requirements for disclosures of impairment of non-financial assets as a consequence of the IFRSs endorsed by the FSC for application starting from 2017. In addition, as a result of the post implementation review of IFRSs in Taiwan, the amendments also include emphasis on certain recognition and measurement considerations and add requirements for disclosures of related party transactions and goodwill.

The amendments stipulate that other companies or institutions of which the chairman of the board of directors or president serves as the chairman of the board of directors or the president, or is the spouse or second immediate family of the chairman of the board of directors or president of the Company are deemed to have a substantive related party relationship, unless it can be demonstrated that no control, joint control, or significant influence exists. Furthermore, the amendments require the disclosure of the names of the related parties and the relationship with whom the Company has significant transaction.
If the transaction or balance with a specific related party is 10% or more of the Company’s respective total transaction or balance, such transaction should be separately disclosed by the name of each related party.

The amendments also require additional disclosure if there is a significant difference between the actual operation after business combination and the expected benefits on acquisition date.

The disclosures of related party transactions and impairment of goodwill will be enhanced when the above amendments are retrospectively applied in 2017.

Except for the aforementioned impact, as of the date that the accompanying parent company only financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers. The related impact will be disclosed when the Company completes the evaluation.

b. The IFRSs in issue and endorsed by FSC with effective date starting 2017

According to Rule No. 1050026834 issued by the FSC, the following IFRSs issued by the IASB and endorsed by the FSC should be adopted by the Company starting 2017.

<table>
<thead>
<tr>
<th>New, Revised or Amended Standards and Interpretations</th>
<th>Effective Date Issued by IASB (Note 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Improvements to IFRSs 2010 - 2012 Cycle</td>
<td>July 1, 2014 or transactions on or after July 1, 2014</td>
</tr>
<tr>
<td>Annual Improvements to IFRSs 2011 - 2013 Cycle</td>
<td>July 1, 2014</td>
</tr>
<tr>
<td>Annual Improvements to IFRSs 2012 - 2014 Cycle</td>
<td>January 1, 2016 (Note 2)</td>
</tr>
<tr>
<td>Amendments to IFRS 10, IFRS 12 and IAS 28 “Investment Entities: Applying the Consolidation Exception”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendment to IFRS 11 “Accounting for Acquisitions of Interests in Joint Operations”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendment to IAS 1 “Disclosure Initiative”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendments to IAS 16 and IAS 38 “Clarification of Acceptable Methods of Depreciation and Amortization”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendment to IAS 19 “Defined Benefit Plans: Employee Contributions”</td>
<td>July 1, 2014</td>
</tr>
<tr>
<td>Amendment to IAS 27 “Equity Method in Separate Financial Statements”</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>Amendment to IAS 36 “Recoverable Amount Disclosures for Non-Financial Assets”</td>
<td>January 1, 2014</td>
</tr>
<tr>
<td>Amendment to IAS 39 “Novation of Derivatives and Continuation of Hedge Accounting”</td>
<td>January 1, 2014</td>
</tr>
</tbody>
</table>

Note 1: The aforementioned new, revised or amended standards or interpretations are effective after fiscal year beginning on or after the effective dates, unless specified otherwise.

Note 2: The amendment to IFRS 5 is applied prospectively to changes in a method of disposal that occur in annual periods beginning on or after January 1, 2016; the remaining amendments are effective for annual periods beginning on or after January 1, 2016.
Except for the following, the Company believes that the adoption of aforementioned IFRSs with effective date starting 2017 will not have a significant effect on the Company’s accounting policies:

1) Amendments to IAS 36, “Recoverable Amount Disclosures for Non-Financial Assets”

The amendments to IAS 36 clarify that the Company is required to disclose the recoverable amount of an asset or a cash-generating unit only when an impairment loss on the asset has been recognized or reversed during the period. Furthermore, if the recoverable amount for which impairment loss has been recognized or reversed is fair value less costs of disposal, the Company is required to disclose the fair value hierarchy. If the fair value measurements are categorized within Level 2 or Level 3, the valuation technique and key assumptions used to measure the fair value are disclosed. The discount rate used is disclosed if such fair value less costs of disposal is measured by using present value technique. The Company expects the aforementioned amendments will result in a broader disclosure of recoverable amount for non-financial assets.

Except for the aforementioned impact, as of the date that the accompanying parent company only financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of IFRSs with effective date starting 2017. The related impact will be disclosed when the Company completes the evaluation.

c. The IFRSs issued by IASB but not yet endorsed by FSC

The Company has not applied the following IFRSs issued by the IASB but not endorsed by the FSC. The FSC announced that the Company should apply IFRS 9 and IFRS 15 starting January 1, 2018. As of the date the parent company only financial statements were authorized for issue, the FSC has not announced the effective dates of other new IFRSs.

<table>
<thead>
<tr>
<th>New, Revised or Amended Standards and Interpretations</th>
<th>Effective Date Issued by IASB (Note 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Improvements to IFRSs 2014-2016 Cycle</td>
<td>Note 4</td>
</tr>
<tr>
<td>Amendment to IFRS 2 “Classification and Measurement of Share-based Payment Transactions”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>IFRS 9 “Financial Instruments”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>Amendments to IFRS 9 and IFRS 7 “Mandatory Effective Date of IFRS 9 and Transition Disclosure”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”</td>
<td>To be determined by IASB</td>
</tr>
<tr>
<td>IFRS 15 “Revenue from Contracts with Customers”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>Amendment to IFRS 15 “Clarifications to IFRS 15”</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>IFRS 16 “Leases”</td>
<td>January 1, 2019</td>
</tr>
<tr>
<td>Amendment to IAS 7 “Disclosure Initiative”</td>
<td>January 1, 2017</td>
</tr>
<tr>
<td>Amendment to IAS 12 “Recognition of Deferred Tax Assets for Unrealized Losses”</td>
<td>January 1, 2017</td>
</tr>
<tr>
<td>IFRIC 22 “Foreign Currency Transactions and Advance Consideration”</td>
<td>January 1, 2018</td>
</tr>
</tbody>
</table>

Note 3: The aforementioned new, revised or amended standards or interpretations are effective after fiscal year beginning on or after the effective dates, unless specified otherwise.

Note 4: The amendment to IFRS 12 is retrospectively applied for annual periods beginning on or after January 1, 2017; the amendment to IAS 28 is retrospectively applied for annual periods beginning on or after January 1, 2018.

Except for the following items, the Company believes that the adoption of aforementioned standards or interpretations will not have a significant effect on the Company’s accounting policies.
1) IFRS 9, “Financial Instruments”

All recognized financial assets currently in the scope of IAS 39, “Financial Instruments: Recognition and Measurement,” will be subsequently measured at either the amortized cost or the fair value. The classification and measurement requirements in IFRS 9 are stated as follows:

For the debt instruments invested by the Company, if the contractual cash flows that are solely for payments of principal and interest on the principal amount outstanding, the classification and measurement requirements are stated as follows:

a) If the objective of the Company’s business model is to hold the financial asset to collect the contractual cash flows, such assets are measured at the amortized cost. Interest revenue should be recognized in profit or loss by using the effective interest method, continuously assessed for impairment and the impairment loss or reversal of impairment loss should be recognized in profit and loss.

b) If the objective of the Company’s business model is to hold the financial asset both to collect the contractual cash flows and to sell the financial assets, such assets are measured at fair value through other comprehensive income and are continuously assessed for impairment. Interest revenue should be recognized in profit or loss by using the effective interest method. A gain or loss on a financial asset measured at fair value through other comprehensive income should be recognized in other comprehensive income, except for impairment gains or losses and foreign exchange gains and losses. When such financial asset is derecognized or reclassified, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss.

The other financial assets which do not meet the aforementioned criteria should be measured at the fair value through profit or loss. However, the Company may irrevocably designate an investment in equity instruments that is not held for trading as measured at fair value through other comprehensive income. All relevant gains and losses shall be recognized in other comprehensive income, except for dividends which are recognized in profit or loss. No subsequent impairment assessment is required, and the cumulative gain or loss previously recognized in other comprehensive income cannot be reclassified from equity to profit or loss.

IFRS 9 adds a new expected loss impairment model to measure the impairment of financial assets. A loss allowance for expected credit losses should be recognized on financial assets measured at amortized cost and financial assets mandatorily measured at fair value through other comprehensive income. If the credit risk on a financial instrument has not increased significantly since initial recognition, the Company should measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on a financial instrument has increased significantly since initial recognition and is not deemed to be a low credit risk, the Company should measure the loss allowance for that financial instrument at an amount equal to the lifetime expected credit losses. The Company should always measure the loss allowance at an amount equal to lifetime expected credit losses for trade receivables.

The main changes in hedge accounting amended the application requirements for hedge accounting to better reflect the entity’s risk management activities. Compared with IAS 39, the main changes include: (1) enhancing types of transactions eligible for hedge accounting, specifically broadening the risks eligible for hedge accounting of non-financial items; (2) changing the way hedging derivative instruments are accounted for to reduce profit or loss volatility; and (3) replacing retrospective effectiveness assessment with the principle of economic relationship between the hedging instrument and the hedged item.
2) IFRS 15, “Revenue from Contracts with Customers” and related amendment

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and will supersede IAS 18, “Revenue,” IAS 11, “Construction Contracts,” and a number of revenue-related interpretations.

When applying IFRS 15, the Company shall recognize revenue by applying the following steps:

- Identify the contract with the customer;
- Identify the performance obligations in the contract;
- Determine the transaction price;
- Allocate the transaction price to the performance obligations in the contracts; and
- Recognize revenue when the entity satisfies a performance obligation.

When IFRS 15 and related amendment are effective, the Company may elect to apply this Standard either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this Standard recognized at the date of initial application.

3) IFRS 16, “Leases”

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

Under IFRS 16, if the Company is a lessee, it shall recognize right-of-use assets and lease liabilities for all leases on the parent company only balance sheets except for low-value and short-term leases. The Company may elect to apply the accounting method similar to the accounting for operating lease under IAS 17 to the low-value and short-term leases. On the parent company only statements of comprehensive income, the Company should present the depreciation expense charged on the right-of-use asset separately from interest expense accrued on the lease liability; interest is computed by using effective interest method. On the parent company only statements of cash flows, cash payments for both the principal and interest portion of the lease liability are classified within financing activities.

When IFRS 16 becomes effective, the Company may elect to apply this Standard either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of the initial application of this Standard recognized at the date of initial application.

Except for the aforementioned impact, as of the date that the accompanying parent company only financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of the initial adoption of the other standards or interpretations. The related impact will be disclosed when the Company completes the evaluation.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

For the convenience of readers, the accompanying parent company only financial statements have been translated into English from the original Chinese version prepared and used in the R.O.C. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language parent company only financial statements shall prevail.

Statement of Compliance

The accompanying parent company only financial statements have been prepared in conformity with the Regulations Governing the Preparation of Financial Reports by Securities Issuers (the “Accounting Standards Used in Preparation of the Parent Company Only Financial Statements”).
Basis of Preparation

The accompanying parent company only financial statements have been prepared on the historical cost basis except for financial instruments that are measured at fair values, as explained in the accounting policies below. Historical cost is generally based on the fair value of the consideration given in exchange for the assets.

When preparing the parent company only financial statements, the Company account for subsidiaries and associates by using the equity method. In order to agree with the amount of net income, other comprehensive income and equity attributable to shareholders of the parent in the consolidated financial statements, the differences of the accounting treatment between the parent company only basis and the consolidated basis are adjusted under the heading of investments accounted for using equity method, share of profits of subsidiaries and associates and share of other comprehensive income of subsidiaries and associates in the parent company only financial statements.

Foreign Currencies

In preparing the parent company only financial statements, transactions in currencies other than the entity’s functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Such exchange differences are recognized in profit or loss in the year in which they arise. Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising on the retranslation of non-monetary items are included in profit or loss for the year except for exchange differences arising on the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which case, the exchange differences are also recognized directly in other comprehensive income. Non-monetary items that are measured in terms of historical cost in foreign currencies are not retranslated.

For the purposes of presenting parent company only financial statements, the assets and liabilities of the Company’s foreign operations are translated into NT$ using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity.

Classification of Current and Noncurrent Assets and Liabilities

Current assets are assets held for trading purposes and assets expected to be converted to cash, sold or consumed within one year from the end of the reporting period. Current liabilities are obligations incurred for trading purposes and obligations expected to be settled within one year from the end of the reporting period. Assets and liabilities that are not classified as current are noncurrent assets and liabilities, respectively.

Cash Equivalents

Cash equivalents, for the purpose of meeting short-term cash commitments, consist of highly liquid time deposits and investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Financial Instruments

Financial assets and liabilities shall be recognized when the Company becomes a party to the contractual provisions of the instruments.
Financial assets and liabilities are initially recognized at fair values. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

Financial Assets

Financial assets are classified into the following specified categories: Financial assets “at fair value through profit or loss” (FVTPL), “held-to-maturity” financial assets, “available-for-sale” financial assets and “loans and receivables”. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. Regular way purchases or sales of financial assets are recognized and derecognized on a trade date or settlement date basis for which financial assets were classified in the same way, respectively. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

Financial assets at fair value through profit or loss

Financial assets are classified as at fair value through profit or loss when the financial asset is either held for trading or it is designated as at fair value through profit or loss.

Financial assets at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

Held-to-maturity financial assets

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity dates that the Company has the positive intent and ability to hold to maturity. Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest method less any impairment.

Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are either designated as available-for-sale or are not classified as (a) loans and receivables, (b) held-to-maturity financial assets or (c) financial assets at fair value through profit or loss.

Available-for-sale financial assets are measured at fair value. Interest income from available-for-sale monetary financial assets and dividends on available-for-sale equity investments are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to profit or loss.

Dividends on available-for-sale equity instruments are recognized in profit or loss when the Company’s right to receive the dividends is established.

Available-for-sale equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost less any identified impairment losses at the end of each reporting period. Such equity instruments are subsequently remeasured at fair value when their fair value can be reliably measured, and the difference between the carrying amount and fair value is recognized in profit or loss or other comprehensive income.
Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables including cash and cash equivalents, notes and accounts receivable and other receivables are measured at amortized cost using the effective interest method, less any impairment, except for those loans and receivables with immaterial discounted effect.

Impairment of financial assets

Financial assets, other than those carried at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Those financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial assets, their estimated future cash flows have been affected.

For financial assets carried at amortized cost, such as trade receivables, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. The Company assesses the collectability of receivables by performing the account aging analysis and examining current trends in the credit quality of its customers.

For financial assets carried at amortized cost, the amount of the impairment loss is the difference between the asset’s carrying amount and the present value of estimated future cash flows, discounted at the financial asset’s original effective interest rate.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment loss was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the financial assets at the date the impairment loss is reversed does not exceed what the amortized cost would have been had the impairment loss not been recognized.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the year.

In respect of available-for-sale equity instruments, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to the recognition of an impairment loss is recognized in other comprehensive income and accumulated under the heading of unrealized gains or losses from available-for-sale financial assets.

For financial assets carried at cost, the amount of the impairment loss is measured as the difference between the asset’s carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account.

Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the financial asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the financial asset to another entity.
On derecognition of a financial asset in its entirety, the difference between the financial asset’s carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income and accumulated in equity is recognized in profit or loss.

Financial Liabilities and Equity Instruments

Classification as debt or equity

Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Financial liabilities

Financial liabilities are subsequently measured either at amortized cost using effective interest method or at FVTPL.

Financial liabilities are classified as at fair value through profit or loss when the financial liability is either held for trading or is designated as at fair value through profit or loss.

Financial liabilities at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

Financial liabilities other than those held for trading purposes and designated as at FVTPL are subsequently measured at amortized cost at the end of each reporting period.

Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company’s obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

Derivative Financial Instruments

Derivative financial instruments are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative financial instrument is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

Financial Instruments Designated as at Fair Value through Profit or Loss

A financial instrument may be designated as at fair value through profit or loss (FVTPL) upon initial recognition. The financial instrument forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company’s documented risk management or investment strategy, and information about the grouping is provided internally on that basis.
Inventories

Inventories are stated at the lower of cost or net realizable value. Inventories are recorded at standard cost and adjusted to approximate weighted-average cost at the end of the reporting period. Net realizable value represents the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale.

Noncurrent Assets Held for Sale

Noncurrent assets are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the noncurrent asset held for sale is available for immediate sale in its present condition. To meet the criteria for the sale being highly probable, the appropriate level of management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the committed sale plan involves loss of control of a subsidiary, all of the investments of that subsidiary are classified as held for sale and still using equity methods, regardless of whether investments in its former subsidiary is retained after the sale.

Noncurrent assets classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell. Recognition of depreciation would cease.

Investments Accounted for Using Equity Method

Investments accounted for using the equity method include investments in subsidiaries and associates.

Investment in subsidiaries

A subsidiary is an entity that is controlled by the Company.

Under the equity method, an investment in a subsidiary is initially recognized at cost and adjusted thereafter to recognize the Company’s share of profit or loss and other comprehensive income of the subsidiary as well as the distribution received. The Company also recognized its share in the changes in the equity of subsidiaries.

Changes in the Company’s ownership interests in subsidiaries that do not result in the Company losing control over the subsidiaries are accounted for as equity transactions. Any difference between the carrying amount of the subsidiary and the fair value of the consideration paid or received is recognized directly in equity.

When the Company loses control of a subsidiary, any retained investment of the former subsidiary is measured at the fair value at that date. A gain or loss is recognized in profit or loss and calculated as the difference between (a) the aggregate of the fair value of consideration received and the fair value of any retained interest at the date when control is lost; and (b) the previous carrying amount of the investments in such subsidiary. In addition, the Company shall account for all amounts previously recognized in other comprehensive income in relation to the subsidiary on the same basis as would be required if the subsidiary had directly disposed of the related assets and liabilities.

When the Company transacts with its subsidiaries, profits and losses resulting from the transactions with the subsidiaries are recognized in the Company’s parent company only financial statements only to the extent of interests in the subsidiaries that are not owned by the Company.
Investment in associates

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The operating results and assets and liabilities of associates are incorporated in these parent company only financial statements using the equity method of accounting. Under the equity method, an investment in an associate is initially recognized in the statement of financial position at cost and adjusted thereafter to recognize the Company’s share of profit or loss and other comprehensive income of the associate as well as the distribution received. The Company also recognizes its share in the changes in the equities of associates.

Any excess of the cost of acquisition over the Company’s share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Company’s share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Company discontinues the use of the equity method from the date when the Company ceases to have significant influence over an associate. When the Company retains an interest in the former associate, the Company measures the retained interest at fair value at that date. The difference between the carrying amount of the associate at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate is included in the determination of the gain or loss on disposal of the associate. In addition, the Company shall account for all amounts recognized in other comprehensive income in relation to that associate on the same basis as would be required if the associate had directly disposed of the related assets or liabilities. If the Company’s ownership interest in an associate is reduced as a result of disposal, but the investment continues to be an associate, the Company should reclassify to profit or loss only a proportionate amount of the gain or loss previously recognized in other comprehensive income.

When the Company subscribes to additional shares in an associate at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company’s proportionate interest in the net assets of the associate. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus. If the Company’s ownership interest is reduced due to the additional subscription to the shares of associate, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate shall be reclassified to profit or loss on the same basis as would be required if the associate or jointly controlled entity had directly disposed of the related assets or liabilities.

When the Company transacts with an associate, profits and losses resulting from the transactions with the associate are recognized in the Company’ parent company only financial statements only to the extent of interests in the associate that are not owned by the Company.

Property, Plant and Equipment

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment. Costs include any incremental costs that are directly attributable to the construction or acquisition of the item of property, plant and equipment.
Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Such properties are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Depreciation is recognized so as to write off the cost of the assets less their residual values over their useful lives, and it is computed using the straight-line method over the following estimated useful lives: buildings - 10 to 20 years; machinery and equipment - 2 to 5 years; and office equipment - 3 to 5 years. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis. Land is not depreciated.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the assets. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

**Leases**

Leases are classified as finance lease whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

**The Company as lessor**

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease.

**The Company as lessee**

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

**Intangible Assets**

**Goodwill**

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment losses, if any.

**Other intangible assets**

Other separately acquired intangible assets with finite useful lives are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized using the straight-line method over the following estimated useful lives: Technology license fees - the estimated life of the technology or the term of the technology transfer contract; software and system design costs - 3 years or contract period; patent and others – the economic life or contract period. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

**Impairment of Tangible and Intangible Assets**

**Goodwill**

Goodwill is not amortized and instead is tested for impairment annually, or more frequently when there is an indication that the cash-generating unit may be impaired. For the purpose of impairment testing, goodwill is allocated to each of the Company’s cash-generating units or groups of cash-generating units that are expected to benefit. If the recoverable amount of a cash-generating unit is less than its carrying
amount, the difference is allocated first to reduce the carrying amount of any goodwill allocated to such cash-generating unit and then to the other assets of the cash-generating unit pro rata based on the carrying amount of each asset in the cash-generating unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

Other tangible and intangible assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset or a cash-generating unit is increased to the revised estimate of its recoverable amount, but the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

Provision

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

Guarantee Deposit

Guarantee deposit mainly consists of cash received under deposit agreements with customers to ensure they have access to the Company’s specified capacity; and as guarantee of accounts receivable to ensure payment from customers. Cash received from customers is recorded as guarantee deposit upon receipt. Guarantee deposits are refunded to customers when terms and conditions set forth in the deposit agreements have been satisfied.

Revenue Recognition

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.
Sale of goods

Revenue from the sale of goods is recognized when the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- It is probable that the economic benefits associated with the transaction will flow to the Company; and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

In principle, payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued. Due to the short term nature of the receivables from sale of goods with the immaterial discounted effect, the Company measures them at the original invoice amounts without discounting.

Royalties, dividend and interest income

Revenue from royalties is recognized on an accrual basis in accordance with the substance of the relevant agreement, provided that it is probable that the economic benefits will flow to the Company and the amount of revenue can be measured reliably.

Dividend income from investments is recognized when the shareholder’s right to receive payment has been established, provided that it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

Employee Benefits

Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for service rendered by employees.

Retirement benefits

For defined contribution retirement benefit plans, payments to the benefit plan are recognized as an expense when the employees have rendered service entitling them to the contribution. For defined benefit retirement benefit plans, the cost of providing benefit is recognized based on actuarial calculations.

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the Projected Unit Credit Method. Service cost (including current service cost), and net interest on the net defined benefit liability (asset) are recognized as employee benefits expense in the period they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liability represents the actual deficit in the Company’s defined benefit plan.
**Share-based Payment Arrangements**

The Company elected to take the optional exemption according to related guidance for the share-based payment transactions granted and vested before January 1, 2012, the date of transition to Accounting Standards Used in Preparation of the Parent Company Only Financial Statements. There were no stock options granted prior to but unvested at the date of transition.

The compensation costs of employee stock options that were granted after January 1, 2012 are measured at the fair value of the stock options at the grant date. The fair value of the stock option granted determined at the grant date of the stock options is expensed on a straight-line basis over the vesting period, based on the Company’s estimate of the number of stock options that will eventually vest, with a corresponding increase in capital surplus - employee stock option. The estimate is revised if subsequent information indicates that the number of stock options expected to vest differs from original estimates.

**Taxation**

Income tax expense represents the sum of the tax currently payable and deferred tax.

**Current tax**

Income tax on unappropriated earnings at a rate of 10% is expensed in the year the shareholders approved the appropriation of earnings which is the year subsequent to the year the earnings are generated.

Adjustments of prior years’ tax liabilities are added to or deducted from the current year’s tax provision.

**Deferred tax**

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the parent company only financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused tax credits to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered. The deferred tax assets which originally not recognized is also reviewed at the end of each reporting period and recognized to the extent that it is probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the year in which the liability is settled or the asset is realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.
Current and deferred tax for the year

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity, respectively.

Insurance Claim

The Company recognizes insurance claim reimbursement for losses incurred related to disaster damages. Insurance claim reimbursements are recorded, net of any deductible amounts, at the time while there is evidence that the claim reimbursement is virtually certain to be received.

Business Combinations

Business combination involving group reorganization is not accounted for by acquisition method but accounted for at the carrying amounts of the entity.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION AND UNCERTAINTY

In the application of the aforementioned Company’s accounting policies, the directors are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimate is revised if the revision affects only that year, or in the year of the revision and future years if the revision affects both current and future years.

The following are the critical judgments, apart from those involving estimations, that the directors have made in the process of applying the Company’s accounting policies and that have the most significant effect on the amounts recognized in the parent company only financial statements.

Revenue Recognition

The Company recognizes revenue when the conditions described in Note 4 are satisfied. The Company also records a provision for estimated future returns and other allowances in the same period the related revenue is recorded. Provision for estimated sales returns and other allowances is generally made and adjusted based on historical experience and the consideration of varying contractual terms, and our management periodically reviews the adequacy of the estimation used.

Impairment of Tangible and Intangible Assets Other than Goodwill

In the process of evaluating the potential impairment of tangible and intangible assets other than goodwill, the Company is required to make subjective judgments in determining the independent cash flows, useful lives, expected future revenue and expenses related to the specific asset groups with the consideration of the nature of semiconductor industry. Any changes in these estimates based on changed economic conditions or business strategies could result in significant impairment charges or reversal in future years.
Impairment of Goodwill

The assessment of impairment of goodwill requires the Company to make subjective judgment to determine the identified cash-generating units, allocate the goodwill to relevant cash-generating units and estimate the recoverable amount of relevant cash-generating units.

Impairment Assessment on Investment Using Equity Method

The Company assesses the impairment of investments accounted for using the equity method whenever triggering events or changes in circumstances indicate that an investment may be impaired and carrying value may not be recoverable. The Company measures the impairment based on a projected future cash flow of the investees, including the underlying assumptions of sales growth rate and capacity utilization rate formulated by such investees’ internal management team. The Company also takes into account market conditions and the relevant industry trends to ensure the reasonableness of such assumptions.

Realization of Deferred Income Tax Assets

Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which those deferred tax assets can be utilized. Assessment of the realization of the deferred tax assets requires the Company’s subjective judgment and estimate, including the future revenue growth and profitability, tax holidays, the amount of tax credits can be utilized and feasible tax planning strategies. Any changes in the global economic environment, the industry trends and relevant laws and regulations could result in significant adjustments to the deferred tax assets.

Valuation of Inventory

Inventories are stated at the lower of cost or net realizable value, and the Company uses judgment and estimate to determine the net realizable value of inventory at the end of each reporting period.

Due to the rapid technological changes, the Company estimates the net realizable value of inventory for obsolescence and unmarketable items at the end of reporting period and then writes down the cost of inventories to net realizable value. The net realizable value of the inventory is mainly determined based on assumptions of future demand within a specific time horizon.

Recognition and Measurement of Defined Benefit Plans

Net defined benefit liability and the resulting defined benefit costs under defined benefit pension plans are calculated using the Projected Unit Credit Method. Actuarial assumptions comprise the discount rate, rate of employee turnover, and future salary increase rate. Changes in economic circumstances and market conditions will affect these assumptions and may have a material impact on the amount of the expense and the liability.

6. CASH AND CASH EQUIVALENTS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and deposits in banks</td>
<td>$ 245,520,074</td>
<td>$ 259,075,563</td>
</tr>
<tr>
<td>Repurchase agreements collateralized by corporate bonds</td>
<td>2,361,250</td>
<td>5,132,778</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>1,997,239</td>
<td>-</td>
</tr>
<tr>
<td>Repurchase agreements collateralized by government bonds</td>
<td>-</td>
<td>285,242</td>
</tr>
<tr>
<td></td>
<td>$ 249,878,563</td>
<td>$ 264,493,583</td>
</tr>
</tbody>
</table>
Deposits in banks consisted of highly liquid time deposits that were readily convertible to known amounts of cash and were subject to an insignificant risk of changes in value.

7. FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ 140,094</td>
<td>$ 6,026</td>
</tr>
<tr>
<td>Cross currency swap contracts</td>
<td>10,976</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Financial assets held for trading</strong></td>
<td><strong>$ 151,070</strong></td>
<td><strong>$ 6,026</strong></td>
</tr>
</tbody>
</table>

| Financial liabilities                     |                   |                   |
| Held for trading                          | $ 62,441          | $ 45,254          |

The Company entered into derivative contracts to manage exposures due to fluctuations of foreign exchange rates. The derivative contracts entered into by the Company did not meet the criteria for hedge accounting. Therefore, the Company did not apply hedge accounting treatment for derivative contracts.

Outstanding forward exchange contracts consisted of the following:

<table>
<thead>
<tr>
<th>Maturity Date</th>
<th>Contract Amount (In Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2016</td>
<td></td>
</tr>
<tr>
<td>Sell NTS/Buy EUR</td>
<td>January 2017 NT$5,393,329/EUR159,400</td>
</tr>
<tr>
<td>Sell NTS/Buy JPY</td>
<td>January 2017 NT$7,314,841/JPY26,501,800</td>
</tr>
<tr>
<td>Sell US$/Buy EUR</td>
<td>January 2017 US$4,180/EUR4,000</td>
</tr>
<tr>
<td>Sell US$/Buy NTS</td>
<td>January 2017 to February 2017 US$420,000/NT$13,531,450</td>
</tr>
<tr>
<td>December 31, 2015</td>
<td></td>
</tr>
<tr>
<td>Sell US$/Buy JPY</td>
<td>January 2016 US$126,944/JPY15,272,035</td>
</tr>
<tr>
<td>Sell US$/Buy NTS</td>
<td>January 2016 US$430,000/NT$14,106,892</td>
</tr>
</tbody>
</table>

Outstanding cross currency swap contracts consisted of the following:

<table>
<thead>
<tr>
<th>Maturity Date</th>
<th>Contract Amount (In Thousands)</th>
<th>Range of Interest Rates Paid</th>
<th>Range of Interest Rates Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 2017</td>
<td>US$170,000/NT$5,487,600</td>
<td>3.98%</td>
<td>-</td>
</tr>
</tbody>
</table>
8. HELD-TO-MATURITY FINANCIAL ASSETS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial paper</td>
<td>$ 8,628,176</td>
<td>-</td>
</tr>
<tr>
<td>Corporate bonds/Bank debentures</td>
<td>2,819,362</td>
<td>7,787,947</td>
</tr>
<tr>
<td>Structured product</td>
<td>-</td>
<td>3,000,000</td>
</tr>
<tr>
<td></td>
<td>$ 11,447,538</td>
<td>$ 10,787,947</td>
</tr>
<tr>
<td>Current portion</td>
<td>$ 11,447,538</td>
<td>$ 9,166,523</td>
</tr>
<tr>
<td>Noncurrent portion</td>
<td>-</td>
<td>1,621,424</td>
</tr>
<tr>
<td></td>
<td>$ 11,447,538</td>
<td>$ 10,787,947</td>
</tr>
</tbody>
</table>

9. NOTES AND ACCOUNTS RECEIVABLE, NET

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes and accounts receivable</td>
<td>$ 40,492,727</td>
<td>$ 26,119,625</td>
</tr>
<tr>
<td>Allowance for doubtful receivables</td>
<td>(475,430)</td>
<td>(483,502)</td>
</tr>
<tr>
<td>Notes and accounts receivable, net</td>
<td>$ 40,017,297</td>
<td>$ 25,636,123</td>
</tr>
</tbody>
</table>

In principle, the payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued. The allowance for doubtful receivables is assessed by reference to the collectability of receivables by performing the account aging analysis, historical experience and current financial condition of customers.

Except for those impaired, for the rest of the notes and accounts receivable, the account aging analysis at the end of the reporting period is summarized in the following table. Notes and accounts receivable include amounts that are past due but for which the Company has not recognized a specific allowance for doubtful receivables after the assessment since there has not been a significant change in the credit quality of its customers and the amounts are still considered recoverable. In addition, the Company’s subsidiary has obtained guarantee of NT$5,559,960 thousand to certain receivables.

Aging analysis of notes and accounts receivable, net

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither past due nor impaired</td>
<td>$ 28,511,717</td>
<td>$ 20,024,433</td>
</tr>
<tr>
<td>Past due but not impaired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past due within 30 days</td>
<td>6,755,262</td>
<td>5,611,690</td>
</tr>
<tr>
<td>Past due 31-60 days</td>
<td>1,693,463</td>
<td>-</td>
</tr>
<tr>
<td>Past due 61-120 days</td>
<td>3,056,855</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>$ 40,017,297</td>
<td>$ 25,636,123</td>
</tr>
</tbody>
</table>
Movements of the allowance for doubtful receivables

<table>
<thead>
<tr>
<th></th>
<th>Individually Assessed for Impairment</th>
<th>Collectively Assessed for Impairment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2016</td>
<td>$ 8,393</td>
<td>$ 475,109</td>
<td>$ 483,502</td>
</tr>
<tr>
<td>Provision</td>
<td>-</td>
<td>321</td>
<td>321</td>
</tr>
<tr>
<td>Reversal/Write-off</td>
<td>(8,393)</td>
<td>-</td>
<td>(8,393)</td>
</tr>
<tr>
<td>Balance at December 31, 2016</td>
<td>$ -</td>
<td>$ 475,430</td>
<td>$ 475,430</td>
</tr>
<tr>
<td>Balance at January 1, 2015</td>
<td>$ 8,093</td>
<td>$ 475,409</td>
<td>$ 483,502</td>
</tr>
<tr>
<td>Provision</td>
<td>300</td>
<td>4,803</td>
<td>5,103</td>
</tr>
<tr>
<td>Reversal/Write-off</td>
<td>-</td>
<td>(5,103)</td>
<td>(5,103)</td>
</tr>
<tr>
<td>Balance at December 31, 2015</td>
<td>$ 8,393</td>
<td>$ 475,109</td>
<td>$ 483,502</td>
</tr>
</tbody>
</table>

Aging analysis of accounts receivable that is individually determined as impaired

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past due over 121 days</td>
<td>$ -</td>
<td>$ 8,393</td>
</tr>
</tbody>
</table>

10. INVENTORIES

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished goods</td>
<td>$ 8,324,267</td>
<td>$ 7,733,331</td>
</tr>
<tr>
<td>Work in process</td>
<td>32,317,210</td>
<td>52,251,863</td>
</tr>
<tr>
<td>Raw materials</td>
<td>3,864,429</td>
<td>2,813,029</td>
</tr>
<tr>
<td>Supplies and spare parts</td>
<td>1,998,440</td>
<td>1,539,965</td>
</tr>
<tr>
<td></td>
<td>$ 46,504,346</td>
<td>$ 64,338,188</td>
</tr>
</tbody>
</table>

Write-down of inventories to net realizable value (excluding earthquake losses) in the amount of NT$1,508,452 thousand and NT$466,825 thousand, respectively, were included in the cost of revenue for the years ended December 31, 2016 and 2015. Please refer to related earthquake losses in Note 34.

11. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

Investments accounted for using the equity method consisted of the following:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidiaries</td>
<td>$ 377,111,820</td>
<td>$ 300,992,341</td>
</tr>
<tr>
<td>Associates</td>
<td>19,743,888</td>
<td>23,373,251</td>
</tr>
<tr>
<td></td>
<td>$ 396,855,708</td>
<td>$ 324,365,592</td>
</tr>
</tbody>
</table>
a. Investments in subsidiaries

Subsidiaries consisted of the following:

<table>
<thead>
<tr>
<th>Subsidiaries</th>
<th>Principal Activities</th>
<th>Place of Incorporation and Operation</th>
<th>Carrying Amount December 31, 2016</th>
<th>Carrying Amount December 31, 2015</th>
<th>% of Ownership and Voting Rights Held by the Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC Global Ltd. (TSMC Global)</td>
<td>Investment activities</td>
<td>Tortola, British Virgin Islands</td>
<td>$265,634,729</td>
<td>$203,425,723</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC Partners, Ltd. (TSMC Partners)</td>
<td>Investing in companies involved in the design, manufacture, and other related business in the semiconductor industry</td>
<td>Tortola, British Virgin Islands</td>
<td>51,749,910</td>
<td>50,827,318</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC China Company Limited (TSMC China)</td>
<td>Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers</td>
<td>Shanghai, China</td>
<td>42,618,308</td>
<td>40,234,742</td>
<td>100%</td>
</tr>
<tr>
<td>TSMC Nanjing Company Limited (TSMC Nanjing)</td>
<td>Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers</td>
<td>Nanjing, China</td>
<td>6,331,094</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>VisEra Technologies Company Ltd. (VisEra Tech)</td>
<td>Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter</td>
<td>Hsin-Chu, Taiwan</td>
<td>5,234,883</td>
<td>-</td>
<td>87%</td>
</tr>
<tr>
<td>TSMC North America</td>
<td>Selling and marketing of integrated circuits and semiconductor devices</td>
<td>San Jose, California, U.S.A.</td>
<td>4,340,303</td>
<td>4,234,685</td>
<td>100% 100%</td>
</tr>
<tr>
<td>VentureTech Alliance Fund II, L.P. (VTAF II)</td>
<td>Investing in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>467,171</td>
<td>554,240</td>
<td>98% 98%</td>
</tr>
<tr>
<td>TSMC Europe B.V. (TSMC Europe)</td>
<td>Marketing and engineering supporting activities</td>
<td>Amsterdam, the Netherlands</td>
<td>355,695</td>
<td>330,664</td>
<td>100% 100%</td>
</tr>
<tr>
<td>VentureTech Alliance Fund III, L.P. (VTAF III)</td>
<td>Investing in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>219,350</td>
<td>385,834</td>
<td>98% 98%</td>
</tr>
<tr>
<td>TSMC Japan Limited (TSMC Japan)</td>
<td>Marketing activities</td>
<td>Yokohama, Japan</td>
<td>132,999</td>
<td>127,453</td>
<td>100% 100%</td>
</tr>
<tr>
<td>TSMC Korea Limited (TSMC Korea)</td>
<td>Customer service and technical supporting activities</td>
<td>Seoul, Korea</td>
<td>35,706</td>
<td>35,231</td>
<td>100% 100%</td>
</tr>
<tr>
<td>TSMC Solar Europe GmbH</td>
<td>Selling of solar related products and providing customer service</td>
<td>Hamburg, Germany</td>
<td>(6,328)</td>
<td>1,186</td>
<td>100% 100%</td>
</tr>
<tr>
<td>Venture Tech Alliance Holdings, LLC (VTA Holdings)</td>
<td>Investing in new start-up technology companies</td>
<td>Delaware, U.S.A.</td>
<td>-</td>
<td>-</td>
<td>7% -</td>
</tr>
<tr>
<td>Emerging Alliance Fund, L.P. (Emerging Alliance)</td>
<td>Investing in new start-up technology companies</td>
<td>Cayman Islands</td>
<td>-</td>
<td>440,901</td>
<td>- 99.5%</td>
</tr>
<tr>
<td>Chi Cherng Investment Co., Ltd. (Chi Cherng)</td>
<td>Investment activities</td>
<td>Taipei, Taiwan</td>
<td>-</td>
<td>394,364</td>
<td>- 100%</td>
</tr>
</tbody>
</table>

In August 2015, TSMC Solar Ltd. (TSMC Solar) ceased its manufacturing operations. TSMC Solar and TSMC Guang Neng Investment, Ltd. (TSMC GN) were incorporated into TSMC in December 2015. After the incorporation, TSMC Solar Europe GmbH, the subsidiary of TSMC Solar, is held directly by TSMC.

The Company acquired OmniVision Technologies, Inc.’s (“OVT’s”) 100% ownership in OVT Taiwan (changed to Chi Cherng) on November 20, 2015. As a result, the Company obtained control of OVT Taiwan. For more information on acquisition of subsidiary, please refer to Note 33 to the consolidated financial statements for the year ended December 31, 2016. In December 2016, Chi Cherng was incorporated into the Company.

To simplify investment structure, the Company acquired 253,120 thousand shares of VisEra Tech previously held by VisEra Holding Company (VisEra Holding) by NT$4,874,231 thousand in August 2016. The percentage of ownership held by the Company was 87%.
Due to the expiration of the investment agreement between Emerging Alliance and the Company, Emerging Alliance completed the liquidation procedures in April 2016. Emerging Alliance’s ownership in VTA Holdings is held directly by TSMC.

Under the investment agreement entered into with the municipal government of Nanjing, China on March 28, 2016, the Company and its subsidiaries will make an investment in Nanjing in the amount of approximately US$3 billion to establish a subsidiary managing a 300mm wafer fab with the capacity of 20,000 12-inch wafers per month, and a design service center. TSMC Nanjing was established in May 2016. In 2016, the Company continually increased its investment in TSMC Nanjing for the amount of NT$6,435,200 thousand. This project was approved by the Investment Commission, Ministry of Economic Affairs, R.O.C. (MOEA).

To lower the hedging cost, in both of 2016 and 2015, the Company continually increased its investment in TSMC Global for the amount of NT$64,451,983 thousand and NT$64,640,368 thousand, respectively. This project was approved by the Investment Commission, MOEA.

In January 2015, the Board of Directors of TSMC approved a sale of TSMC Solid State Lighting common shares of 565,480 thousand held by TSMC and TSMC GN to Epistar Corporation. The transaction was completed in February 2015.

b. Investments in associates

Associates consisted of the following:

<table>
<thead>
<tr>
<th>Name of Associate</th>
<th>Principal Activities</th>
<th>Place of Incorporation and Operation</th>
<th>Carrying Amount</th>
<th>% of Ownership and Voting Rights Held by the Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanguard International Semiconductor Corporation (VIS)</td>
<td>Research, design, development, manufacture, packaging, testing and sale of memory integrated circuits, LSI, VLSI and related parts</td>
<td>Hsinchu, Taiwan</td>
<td>$8,806,384</td>
<td>28%</td>
</tr>
<tr>
<td>Systems on Silicon Manufacturing Company Pte Ltd. (SSMC)</td>
<td>Fabrication and supply of integrated circuits</td>
<td>Singapore</td>
<td>7,163,516</td>
<td>39%</td>
</tr>
<tr>
<td>Xintec Inc. (Xintec)</td>
<td>Wafer level chip size packaging service</td>
<td>Taoyuan, Taiwan</td>
<td>2,599,807</td>
<td>41%</td>
</tr>
<tr>
<td>Global Unichip Corporation (GUC)</td>
<td>Researching, developing, manufacturing, testing and marketing of integrated circuits</td>
<td>Hsinchu, Taiwan</td>
<td>1,174,181</td>
<td>35%</td>
</tr>
<tr>
<td>Motech Industries, Inc. (Motech)</td>
<td>Manufacturing and sales of solar cells, crystalline silicon solar cell, and test and measurement instruments and design and construction of solar power systems</td>
<td>New Taipei, Taiwan</td>
<td>-</td>
<td>12%</td>
</tr>
</tbody>
</table>

After TSMC Solar incorporated into the Company in December 2015, the Company directly owned 12% of the equity interest in Motech previously held by TSMC Solar. Starting June 2016, the Company has no longer served as Motech’s board of director. As a result, the Company exercises no significant influence over Motech. Therefore, Motech is no longer accounted for using the equity method. Further, such investment was reclassified to available-for-sale financial assets and the Company recognized a disposal loss of NT$259,960 thousand.

In March 2015, Xintec listed its shares on the R.O.C. Over-the-Counter (Taipei Exchange). Consequently, the Company’s percentage of ownership over Xintec was diluted to approximately 35.4%. In April 2015, the Company sold 2,172 thousand common shares of Xintec and recognized a disposal gain of NT$43,017 thousand. To simplify investment structure, the Company acquired 18,504 thousand shares of Xintec previously held by VisEra Holding by NT$445,012 thousand in August 2016. The percentage of ownership held by the Company increased to 41.4%.
In the second quarter of 2015, the Company sold 82,000 thousand common shares of VIS and recognized a disposal gain of NT$2,263,539 thousand. After the sale, the Company owned approximately 28.3% of the equity interest in VIS.

The summarized financial information in respect of each of the Company’s material associates is set out below. The summarized financial information below represents amounts shown in the associate’s financial statements prepared in accordance with the Accounting Standards Used in Preparation of the Parent Company Only Financial Statements, which is also adjusted by the Company using the equity method of accounting.

1) VIS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>$ 25,662,921</td>
<td>$ 24,800,749</td>
</tr>
<tr>
<td>Noncurrent assets</td>
<td>$ 9,501,442</td>
<td>$ 7,785,093</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>$ 5,476,672</td>
<td>$ 4,262,001</td>
</tr>
<tr>
<td>Noncurrent liabilities</td>
<td>$ 804,107</td>
<td>$ 712,611</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Net revenue</td>
<td>$ 25,828,634</td>
</tr>
<tr>
<td>Income from operations</td>
<td>$ 6,083,625</td>
</tr>
<tr>
<td>Net income</td>
<td>$ 5,520,645</td>
</tr>
<tr>
<td>Other comprehensive income (loss)</td>
<td>$ 5,592</td>
</tr>
<tr>
<td>Total comprehensive income</td>
<td>$ 5,526,237</td>
</tr>
<tr>
<td>Cash dividends received</td>
<td>$ 1,206,981</td>
</tr>
</tbody>
</table>

Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the parent company only balance sheets was as follows:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net assets</td>
<td>$ 28,883,584</td>
<td>$ 27,611,230</td>
</tr>
<tr>
<td>Percentage of ownership</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>The Company’s share of net assets of the associate</td>
<td>8,179,830</td>
<td>7,819,500</td>
</tr>
<tr>
<td>Goodwill</td>
<td>626,554</td>
<td>626,554</td>
</tr>
<tr>
<td>Carrying amount of the investment</td>
<td>$ 8,806,384</td>
<td>$ 8,446,054</td>
</tr>
</tbody>
</table>

2) SSMC

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>$ 14,585,150</td>
<td>$ 20,078,179</td>
</tr>
<tr>
<td>Noncurrent assets</td>
<td>$ 5,360,076</td>
<td>$ 6,144,263</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>$ 1,746,602</td>
<td>$ 1,954,057</td>
</tr>
<tr>
<td>Noncurrent liabilities</td>
<td>$ 286,340</td>
<td>$ 303,217</td>
</tr>
</tbody>
</table>
Years Ended December 31

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net revenue</td>
<td>$14,045,927</td>
<td>$15,026,016</td>
</tr>
<tr>
<td>Income from operations</td>
<td>$4,921,735</td>
<td>$5,802,261</td>
</tr>
<tr>
<td>Net income</td>
<td>$4,918,140</td>
<td>$5,904,586</td>
</tr>
<tr>
<td>Total comprehensive income</td>
<td>$4,918,140</td>
<td>$5,904,586</td>
</tr>
<tr>
<td>Cash dividends received</td>
<td>$4,076,170</td>
<td>$1,556,592</td>
</tr>
</tbody>
</table>

Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the parent company only balance sheets was as follows:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net assets</td>
<td>$17,912,284</td>
<td>$23,965,168</td>
</tr>
<tr>
<td>Percentage of ownership</td>
<td>39%</td>
<td>39%</td>
</tr>
<tr>
<td>The Company’s share of net assets of the associate</td>
<td>6,948,175</td>
<td>9,296,089</td>
</tr>
<tr>
<td>Goodwill</td>
<td>213,984</td>
<td>213,984</td>
</tr>
<tr>
<td>Other adjustments</td>
<td>1,357</td>
<td>1,442</td>
</tr>
<tr>
<td>Carrying amount of the investment</td>
<td>$7,163,516</td>
<td>$9,511,515</td>
</tr>
</tbody>
</table>

Aggregate information of associates that are not individually material was summarized as follows:

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Company’s share of profits of associates</td>
<td>$42,457</td>
<td>$219,007</td>
</tr>
<tr>
<td>The Company’s share of other comprehensive loss of associates</td>
<td>$(17,777)</td>
<td>$(855)</td>
</tr>
<tr>
<td>The Company’s share of total comprehensive income of associates</td>
<td>$24,680</td>
<td>$218,152</td>
</tr>
</tbody>
</table>

The market prices of the investments accounted for using the equity method in publicly traded stocks calculated by the closing price at the end of the reporting period are summarized as follows. The closing price represents the quoted price in active markets, the level 1 fair value measurement.

<table>
<thead>
<tr>
<th>Name of Associate</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIS</td>
<td>$26,089,360</td>
<td>$19,868,766</td>
</tr>
<tr>
<td>GUC</td>
<td>$3,664,997</td>
<td>$3,081,399</td>
</tr>
<tr>
<td>Xintec</td>
<td>$3,622,227</td>
<td>$3,006,017</td>
</tr>
<tr>
<td>Motech</td>
<td>$2,636,054</td>
<td>$2,636,054</td>
</tr>
</tbody>
</table>
12. PROPERTY, PLANT AND EQUIPMENT

<table>
<thead>
<tr>
<th>Cost</th>
<th>Land</th>
<th>Buildings</th>
<th>Machinery and Equipment</th>
<th>Office Equipment</th>
<th>Equipment under Installation and Construction in Progress</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2016</td>
<td>$ 3,212,000</td>
<td>$ 272,949,721</td>
<td>$ 1,807,955,631</td>
<td>$ 27,809,576</td>
<td>$ 191,052,788</td>
<td>$ 2,302,979,686</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>9,000,012</td>
<td>155,226,807</td>
<td>4,264,166</td>
<td>193,144,768</td>
<td>361,635,753</td>
</tr>
<tr>
<td>Disposals or retirements</td>
<td>-</td>
<td>(13,321)</td>
<td>(2,724,958)</td>
<td>(243,085)</td>
<td>-</td>
<td>(2,981,364)</td>
</tr>
<tr>
<td>Balance at December 31, 2016</td>
<td>$ 3,212,000</td>
<td>$ 281,936,412</td>
<td>$ 1,960,457,480</td>
<td>$ 31,830,657</td>
<td>$ 384,197,526</td>
<td>$ 2,661,634,075</td>
</tr>
</tbody>
</table>

Accumulated depreciation

<table>
<thead>
<tr>
<th>Cost</th>
<th>Land</th>
<th>Buildings</th>
<th>Machinery and Equipment</th>
<th>Office Equipment</th>
<th>Equipment under Installation and Construction in Progress</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2016</td>
<td>$ -</td>
<td>140,493,396</td>
<td>1,313,095,298</td>
<td>17,606,080</td>
<td>-</td>
<td>$ 1,471,194,774</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>16,368,395</td>
<td>190,655,507</td>
<td>3,953,422</td>
<td>-</td>
<td>213,977,324</td>
</tr>
<tr>
<td>Disposals or retirements</td>
<td>-</td>
<td>(7,278)</td>
<td>(2,688,997)</td>
<td>(243,085)</td>
<td>-</td>
<td>(2,939,360)</td>
</tr>
<tr>
<td>Balance at December 31, 2016</td>
<td>$ -</td>
<td>156,854,513</td>
<td>1,504,061,808</td>
<td>21,316,417</td>
<td>-</td>
<td>$ 1,682,232,738</td>
</tr>
<tr>
<td>Carrying amounts at December 31, 2016</td>
<td>$ 3,212,000</td>
<td>$ 125,081,899</td>
<td>$ 456,395,672</td>
<td>$ 10,514,240</td>
<td>$ 384,197,526</td>
<td>$ 979,401,337</td>
</tr>
</tbody>
</table>

13. INTANGIBLE ASSETS

<table>
<thead>
<tr>
<th>Cost</th>
<th>Goodwill</th>
<th>Technology License Fees</th>
<th>Software and System Design Costs</th>
<th>Patent and Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2016</td>
<td>$ 1,567,756</td>
<td>$ 8,399,059</td>
<td>$ 19,297,534</td>
<td>$ 4,722,667</td>
<td>$ 33,987,016</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>1,091,261</td>
<td>2,770,842</td>
<td>518,536</td>
<td>4,380,639</td>
</tr>
<tr>
<td>Retirements</td>
<td>-</td>
<td>-</td>
<td>(4,787)</td>
<td>-</td>
<td>(4,787)</td>
</tr>
<tr>
<td>Balance at December 31, 2016</td>
<td>$ 1,567,756</td>
<td>$ 9,490,320</td>
<td>$ 22,063,589</td>
<td>$ 10,203,496</td>
<td>$ 191,052,788</td>
</tr>
</tbody>
</table>

Accumulated amortization

<table>
<thead>
<tr>
<th>Cost</th>
<th>Goodwill</th>
<th>Technology License Fees</th>
<th>Software and System Design Costs</th>
<th>Patent and Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2016</td>
<td>$ -</td>
<td>$ 4,724,143</td>
<td>$ 16,279,451</td>
<td>$ 3,592,004</td>
<td>$ 24,595,598</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>1,367,370</td>
<td>1,716,836</td>
<td>639,860</td>
<td>3,724,066</td>
</tr>
<tr>
<td>Retirements</td>
<td>-</td>
<td>-</td>
<td>(4,787)</td>
<td>-</td>
<td>(4,787)</td>
</tr>
<tr>
<td>Balance at December 31, 2016</td>
<td>$ -</td>
<td>$ 6,091,513</td>
<td>$ 17,991,500</td>
<td>$ 4,231,864</td>
<td>$ 28,314,877</td>
</tr>
<tr>
<td>Carrying amounts at December 31, 2016</td>
<td>$ 1,567,756</td>
<td>$ 3,398,807</td>
<td>$ 4,072,089</td>
<td>$ 1,009,339</td>
<td>$ 10,047,991</td>
</tr>
</tbody>
</table>

The significant part of the Company’s buildings includes main plants, mechanical and electrical power equipment and clean rooms, and the related depreciation is calculated using the estimated useful lives of 20 years, 10 years and 10 years, respectively.

For the year ended December 31, 2015, the Company recognized an impairment loss of NT$228,037 thousand under foundry segment since the carrying amount of some of property, plant and equipment was expected to be unrecoverable. Such impairment loss was included in other operating income and expenses.
<table>
<thead>
<tr>
<th>Cost</th>
<th>Goodwill</th>
<th>Technology License Fees</th>
<th>Software and System Design Costs</th>
<th>Patent and Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2015</td>
<td>$ 1,567,756</td>
<td>$ 6,093,450</td>
<td>$ 18,532,060</td>
<td>$ 4,136,156</td>
<td>$ 30,329,422</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>2,112,572</td>
<td>854,962</td>
<td>586,511</td>
<td>3,554,045</td>
</tr>
<tr>
<td>Retirements</td>
<td>-</td>
<td>-</td>
<td>(101,218)</td>
<td>-</td>
<td>(101,218)</td>
</tr>
<tr>
<td>Effect of merger of subsidiary</td>
<td>-</td>
<td>193,037</td>
<td>11,730</td>
<td>-</td>
<td>204,767</td>
</tr>
<tr>
<td>Balance at December 31, 2015</td>
<td>$ 1,567,756</td>
<td>$ 8,399,059</td>
<td>$ 19,297,534</td>
<td>$ 4,722,667</td>
<td>$ 33,987,016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accumulated amortization</th>
<th>Goodwill</th>
<th>Technology License Fees</th>
<th>Software and System Design Costs</th>
<th>Patent and Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2015</td>
<td>$ -</td>
<td>$ 3,605,977</td>
<td>$ 14,706,168</td>
<td>$ 3,020,467</td>
<td>$ 21,332,612</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>925,129</td>
<td>1,662,771</td>
<td>571,537</td>
<td>3,159,437</td>
</tr>
<tr>
<td>Retirements</td>
<td>-</td>
<td>-</td>
<td>(101,218)</td>
<td>-</td>
<td>(101,218)</td>
</tr>
<tr>
<td>Effect of merger of subsidiary</td>
<td>-</td>
<td>193,037</td>
<td>11,730</td>
<td>-</td>
<td>204,767</td>
</tr>
<tr>
<td>Balance at December 31, 2015</td>
<td>$ -</td>
<td>$ 4,724,143</td>
<td>$ 16,279,451</td>
<td>$ 3,592,004</td>
<td>$ 24,595,598</td>
</tr>
<tr>
<td>Carrying amounts at December 31, 2015</td>
<td>$ 1,567,756</td>
<td>$ 3,674,916</td>
<td>$ 3,018,083</td>
<td>$ 1,130,663</td>
<td>$ 9,391,418</td>
</tr>
</tbody>
</table>

(Concluded)

The Company’s goodwill has been tested for impairment at the end of the annual reporting period and the recoverable amount is determined based on the value in use. The value in use was calculated based on the cash flow forecast from the financial budgets covering the future five-year period, and the Company used annual discount rate of 8.40% in its test of impairment for both December 31, 2016 and 2015 to reflect the relevant specific risk in the cash-generating unit.

For the years ended December 31, 2016 and 2015, the Company did not recognize any impairment loss on goodwill.

### 14. OTHER ASSETS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax receivable</td>
<td>$ 2,182,159</td>
<td>$ 1,875,772</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>821,648</td>
<td>1,185,194</td>
</tr>
<tr>
<td>Long-term receivable</td>
<td>-</td>
<td>360,000</td>
</tr>
<tr>
<td>Others</td>
<td>855</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>$ 3,004,662</td>
<td>$ 3,421,131</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current portion</td>
<td>$ 3,004,662</td>
<td>$ 3,061,131</td>
</tr>
<tr>
<td>Noncurrent portion</td>
<td>-</td>
<td>360,000</td>
</tr>
<tr>
<td></td>
<td>$ 3,004,662</td>
<td>$ 3,421,131</td>
</tr>
</tbody>
</table>
15. **SHORT-TERM LOANS**

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsecured loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>$ 57,958,200</td>
<td>$ 39,474,000</td>
</tr>
<tr>
<td>Original loan content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US$ (in thousands)</td>
<td>$ 1,800,000</td>
<td>$ 1,200,000</td>
</tr>
<tr>
<td>Annual interest rate</td>
<td>0.87%-1.07%</td>
<td>0.50%-0.77%</td>
</tr>
<tr>
<td>Maturity date</td>
<td>Due by January 2017</td>
<td>Due by February 2016</td>
</tr>
</tbody>
</table>

16. **PROVISIONS**

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales returns and allowances</td>
<td>$ 16,991,612</td>
<td>$ 9,011,863</td>
</tr>
<tr>
<td>Warranties</td>
<td>28,187</td>
<td>46,304</td>
</tr>
<tr>
<td></td>
<td>$ 17,019,799</td>
<td>$ 9,058,167</td>
</tr>
<tr>
<td>Current portion</td>
<td>$ 16,991,612</td>
<td>$ 9,011,863</td>
</tr>
<tr>
<td>Noncurrent portion (classified under other noncurrent liabilities)</td>
<td>28,187</td>
<td>46,304</td>
</tr>
<tr>
<td></td>
<td>$ 17,019,799</td>
<td>$ 9,058,167</td>
</tr>
</tbody>
</table>

Sales Returns and Allowances | Warranties | Total

**Year ended December 31, 2016**

<table>
<thead>
<tr>
<th></th>
<th>Sales Returns and Allowances</th>
<th>Warranties</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$ 9,011,863</td>
<td>$ 46,304</td>
<td>$ 9,058,167</td>
</tr>
<tr>
<td>Provision (Reversal)</td>
<td>35,699,912</td>
<td>(13,629)</td>
<td>35,686,283</td>
</tr>
<tr>
<td>Payment</td>
<td>(27,720,163)</td>
<td>(4,488)</td>
<td>(27,724,651)</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 16,991,612</td>
<td>$ 28,187</td>
<td>$ 17,019,799</td>
</tr>
</tbody>
</table>

**Year ended December 31, 2015**

<table>
<thead>
<tr>
<th></th>
<th>Sales Returns and Allowances</th>
<th>Warranties</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$ 9,959,817</td>
<td>$ -</td>
<td>$ 9,959,817</td>
</tr>
<tr>
<td>Provision (Reversal)</td>
<td>16,811,021</td>
<td>(222)</td>
<td>16,810,799</td>
</tr>
<tr>
<td>Payment</td>
<td>(17,758,975)</td>
<td>-</td>
<td>(17,758,975)</td>
</tr>
<tr>
<td>Effect of merger of subsidiary</td>
<td>-</td>
<td>46,526</td>
<td>46,526</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 9,011,863</td>
<td>$ 46,304</td>
<td>$ 9,058,167</td>
</tr>
</tbody>
</table>

Provisions for sales returns and allowances are estimated based on historical experience, management judgment, and any known factors that would significantly affect the returns and allowances, and are recognized as a reduction of revenue in the same year of the related product sales.

The provision for warranties represents the present value of the Company’s best estimate of the future outflow of the economic benefits that will be required under the Company’s obligations for warranties. The best estimate has been made on the basis of historical warranty trends of business.
17. BONDS PAYABLE

<table>
<thead>
<tr>
<th>Issuance</th>
<th>Tranche</th>
<th>Issuance Period</th>
<th>Total Amount</th>
<th>Coupon Rate</th>
<th>Repayment and Interest Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-1</td>
<td>A</td>
<td>September 2011 to September 2016</td>
<td>$10,500,000</td>
<td>1.40%</td>
<td>Bullet repayment; interest payable annually</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>September 2011 to September 2018</td>
<td>7,500,000</td>
<td>1.63%</td>
<td>The same as above</td>
</tr>
<tr>
<td>100-2</td>
<td>A</td>
<td>January 2012 to January 2017</td>
<td>$10,000,000</td>
<td>1.29%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>January 2012 to January 2019</td>
<td>7,000,000</td>
<td>1.46%</td>
<td>The same as above</td>
</tr>
<tr>
<td>101-1</td>
<td>A</td>
<td>August 2012 to August 2017</td>
<td>$9,900,000</td>
<td>1.28%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>August 2012 to August 2019</td>
<td>9,000,000</td>
<td>1.40%</td>
<td>The same as above</td>
</tr>
<tr>
<td>101-2</td>
<td>A</td>
<td>September 2012 to September 2017</td>
<td>$12,700,000</td>
<td>1.28%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>September 2012 to September 2019</td>
<td>9,000,000</td>
<td>1.39%</td>
<td>The same as above</td>
</tr>
<tr>
<td>101-3</td>
<td>-</td>
<td>October 2012 to October 2022</td>
<td>$4,400,000</td>
<td>1.53%</td>
<td>The same as above</td>
</tr>
<tr>
<td>101-4</td>
<td>A</td>
<td>January 2013 to January 2018</td>
<td>$10,600,000</td>
<td>1.23%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>January 2013 to January 2020</td>
<td>10,000,000</td>
<td>1.35%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>January 2013 to January 2023</td>
<td>3,000,000</td>
<td>1.49%</td>
<td>The same as above</td>
</tr>
<tr>
<td>102-1</td>
<td>A</td>
<td>February 2013 to February 2018</td>
<td>$6,200,000</td>
<td>1.23%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>February 2013 to February 2020</td>
<td>11,600,000</td>
<td>1.38%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>February 2013 to February 2023</td>
<td>3,600,000</td>
<td>1.50%</td>
<td>The same as above</td>
</tr>
<tr>
<td>102-2</td>
<td>A</td>
<td>July 2013 to July 2020</td>
<td>$10,200,000</td>
<td>1.50%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>July 2013 to July 2023</td>
<td>3,500,000</td>
<td>1.70%</td>
<td>The same as above (Continued)</td>
</tr>
</tbody>
</table>

Domestic unsecured bonds
Less: Current portion

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>$154,200,000</td>
<td>$166,200,000</td>
</tr>
<tr>
<td>(38,100,000)</td>
<td>(12,000,000)</td>
</tr>
</tbody>
</table>

The major terms of domestic unsecured bonds are as follows:
### Issuance

<table>
<thead>
<tr>
<th>Issuance</th>
<th>Tranche</th>
<th>Issuance Period</th>
<th>Total Amount</th>
<th>Coupon Rate</th>
<th>Repayment and Interest Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>102-3</td>
<td>A August 2013 to August 2017</td>
<td>$ 4,000,000</td>
<td>1.34%</td>
<td>Bullet repayment; interest payable annually</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B August 2013 to August 2019</td>
<td>8,500,000</td>
<td>1.52%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td>102-4</td>
<td>A September 2013 to September 2016</td>
<td>1,500,000</td>
<td>1.35%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B September 2013 to September 2017</td>
<td>1,500,000</td>
<td>1.45%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C September 2013 to March 2019</td>
<td>1,400,000</td>
<td>1.60%</td>
<td>Bullet repayment; interest payable annually (interest for the six months prior to maturity will accrue on the basis of actual days and be repayable at maturity)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D September 2013 to March 2021</td>
<td>2,600,000</td>
<td>1.85%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E September 2013 to March 2023</td>
<td>5,400,000</td>
<td>2.05%</td>
<td>The same as above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F September 2013 to September 2023</td>
<td>2,600,000</td>
<td>2.10%</td>
<td>Bullet repayment; interest payable annually</td>
</tr>
</tbody>
</table>

(Concluded)

### 18. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The plan under the R.O.C. Labor Pension Act (the “Act”) is deemed a defined contribution plan. Pursuant to the Act, the Company has made monthly contributions equal to 6% of each employee’s monthly salary to employees’ pension accounts. Accordingly, the Company recognized expenses of NT$1,735,492 thousand and NT$1,622,375 thousand in the parent company only statements of comprehensive income for the years ended December 31, 2016 and 2015, respectively.

b. Defined benefit plans

The Company has defined benefit plans under the R.O.C. Labor Standards Law that provide benefits based on an employee’s length of service and average monthly salary for the six-month period prior to retirement. The Company contributes an amount equal to 2% of salaries paid each month to their respective pension funds (the Funds), which are administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the Committee’s name in the Bank of Taiwan. Before the end of each year, the Company assesses the balance in the Funds. If the amount of the balance in the Funds is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The Funds are operated and managed by the government’s designated authorities; as such, the Company does not have any right to intervene in the investments of the Funds.
Amounts recognized in the parent company only statements of comprehensive income in respect of these defined benefit plans were as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current service cost</td>
<td>$ 132,786</td>
<td>$ 149,216</td>
</tr>
<tr>
<td>Net interest expense</td>
<td>$ 139,355</td>
<td>$ 144,754</td>
</tr>
<tr>
<td>Components of defined benefit costs recognized in profit or loss</td>
<td>$ 272,141</td>
<td>$ 293,970</td>
</tr>
<tr>
<td>Remeasurement on the net defined benefit liability:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on plan assets (excluding amounts included in net interest expense)</td>
<td>$ 45,721</td>
<td>$(13,707)</td>
</tr>
<tr>
<td>Actuarial loss arising from experience adjustments</td>
<td>$ 38,195</td>
<td>$ 297,077</td>
</tr>
<tr>
<td>Actuarial loss arising from changes in financial assumptions</td>
<td>$ 694,632</td>
<td>$ 544,333</td>
</tr>
<tr>
<td>Actuarial loss arising from changes in demographic assumptions</td>
<td>$ 278,672</td>
<td>-$</td>
</tr>
<tr>
<td>Components of defined benefit costs recognized in other comprehensive income</td>
<td>$ 1,057,220</td>
<td>$ 827,703</td>
</tr>
<tr>
<td>Total</td>
<td>$ 1,329,361</td>
<td>$ 1,121,673</td>
</tr>
</tbody>
</table>

The pension costs of the aforementioned defined benefit plans were recognized in profit or loss by the following categories:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of revenue</td>
<td>$ 176,977</td>
<td>$ 188,761</td>
</tr>
<tr>
<td>Research and development expenses</td>
<td>$ 73,395</td>
<td>$ 81,203</td>
</tr>
<tr>
<td>General and administrative expenses</td>
<td>$ 17,367</td>
<td>$ 19,091</td>
</tr>
<tr>
<td>Marketing expenses</td>
<td>$ 4,402</td>
<td>$ 4,915</td>
</tr>
<tr>
<td>Total</td>
<td>$ 272,141</td>
<td>$ 293,970</td>
</tr>
</tbody>
</table>

The amounts arising from the defined benefit obligation of the Company in the parent company only balance sheets were as follows:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value of defined benefit obligation</td>
<td>$ 12,480,480</td>
</tr>
<tr>
<td>Fair value of plan assets</td>
<td>(3,929,072)</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>$ 8,551,408</td>
</tr>
</tbody>
</table>
Movements in the present value of the defined benefit obligation were as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$ 11,318,174</td>
<td>$ 10,236,262</td>
</tr>
<tr>
<td>Current service cost</td>
<td>132,786</td>
<td>149,216</td>
</tr>
<tr>
<td>Interest expense</td>
<td>212,909</td>
<td>228,444</td>
</tr>
<tr>
<td>Remeasurement losses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actuarial loss arising from experience adjustments</td>
<td>38,195</td>
<td>297,077</td>
</tr>
<tr>
<td>Actuarial loss arising from changes in financial assumptions</td>
<td>694,632</td>
<td>544,333</td>
</tr>
<tr>
<td>Actuarial loss arising from changes in demographic assumptions</td>
<td>278,672</td>
<td>-</td>
</tr>
<tr>
<td>Benefits paid from plan assets</td>
<td>(194,888)</td>
<td>(146,136)</td>
</tr>
<tr>
<td>Effect of merger of subsidiary</td>
<td>-</td>
<td>8,978</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 12,480,480</td>
<td>$ 11,318,174</td>
</tr>
</tbody>
</table>

Movements in the fair value of the plan assets were as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>$ 3,870,148</td>
<td>$ 3,689,413</td>
</tr>
<tr>
<td>Interest income</td>
<td>73,554</td>
<td>83,690</td>
</tr>
<tr>
<td>Remeasurement gains (losses):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on plan assets (excluding amounts included in net interest expense)</td>
<td>(45,721)</td>
<td>13,707</td>
</tr>
<tr>
<td>Contributions from employer</td>
<td>225,979</td>
<td>220,496</td>
</tr>
<tr>
<td>Benefits paid from plan assets</td>
<td>(194,888)</td>
<td>(146,136)</td>
</tr>
<tr>
<td>Effect of merger of subsidiary</td>
<td>-</td>
<td>8,978</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 3,929,072</td>
<td>$ 3,870,148</td>
</tr>
</tbody>
</table>

The fair value of the plan assets by major categories at the end of reporting period was as follows:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 818,426</td>
</tr>
<tr>
<td>Equity instruments</td>
<td>1,852,950</td>
</tr>
<tr>
<td>Debt instruments</td>
<td>1,257,696</td>
</tr>
<tr>
<td>$ 3,929,072</td>
<td>$ 3,870,148</td>
</tr>
</tbody>
</table>

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The principal assumptions of the actuarial valuation were as follows:

<table>
<thead>
<tr>
<th>Measurement Date</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount rate</td>
<td>1.50%</td>
<td>1.90%</td>
</tr>
<tr>
<td>Future salary increase rate</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
</tbody>
</table>
Through the defined benefit plans under the R.O.C. Labor Standards Law, the Company is exposed to the following risks:

1) Investment risk: The pension funds are invested in equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the government’s designated authorities or under the mandated management. However, under the R.O.C. Labor Standards Law, the rate of return on assets shall not be less than the average interest rate on a two-year time deposit published by the local banks and the government is responsible for any shortfall in the event that the rate of return is less than the required rate of return.

2) Interest risk: A decrease in the government bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the debt investments of the plan assets.

Assuming a hypothetical decrease in interest rate at the end of the reporting period contributed to a decrease of 0.5% in the discount rate and all other assumptions were held constant, the present value of the defined benefit obligation would increase by NT$970,282 thousand and NT$844,058 thousand as of December 31, 2016 and 2015, respectively.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

Assuming the expected salary rate increases by 0.5% at the end of the reporting period and all other assumptions were held constant, the present value of the defined benefit obligation would increase by NT$951,424 thousand and NT$830,699 thousand as of December 31, 2016 and 2015, respectively.

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation liability recognized in the parent company only balance sheets.

The Company expects to make contributions of NT$232,759 thousand to the defined benefit plans in the next year starting from December 31, 2016. The weighted average duration of the defined benefit obligation is 14 years.

### 19. GUARANTEE DEPOSITS

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity guarantee</td>
<td>$20,929,350</td>
<td>$27,549,563</td>
</tr>
<tr>
<td>Others</td>
<td>176,992</td>
<td>172,624</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$21,106,342</strong></td>
<td><strong>$27,722,187</strong></td>
</tr>
</tbody>
</table>

Current portion (classified under accrued expenses and other current liabilities) $6,439,800 $6,167,813

Noncurrent portion $14,666,542 $21,554,374

**Total** $21,106,342 $27,722,187
Some of guarantee deposits were refunded to customers by offsetting related accounts receivable.

20. EQUITY

a. Capital stock

<p>| December 31, | December 31, |</p>
<table>
<thead>
<tr>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorized shares (in thousands)</td>
<td>28,050,000</td>
</tr>
<tr>
<td>Authorized capital</td>
<td>$280,500,000</td>
</tr>
<tr>
<td>Issued and paid shares (in thousands)</td>
<td>25,930,380</td>
</tr>
<tr>
<td>Issued capital</td>
<td>$259,303,805</td>
</tr>
</tbody>
</table>

A holder of issued common shares with par value of NT$10 per share is entitled to vote and to receive dividends.

The authorized shares include 500,000 thousand shares allocated for the exercise of employee stock options.

As of December 31, 2016, 1,072,194 thousand ADSs of the Company were traded on the NYSE. The number of common shares represented by the ADSs was 5,360,968 thousand shares (one ADS represents five common shares).

b. Capital surplus

<p>| December 31, | December 31, |</p>
<table>
<thead>
<tr>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional paid-in capital</td>
<td>$24,184,939</td>
</tr>
<tr>
<td>From merger</td>
<td>22,804,510</td>
</tr>
<tr>
<td>From convertible bonds</td>
<td>8,892,847</td>
</tr>
<tr>
<td>From share of changes in equities of subsidiaries</td>
<td>107,798</td>
</tr>
<tr>
<td>From share of changes in equities of associates</td>
<td>282,155</td>
</tr>
<tr>
<td>Donations</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>$56,272,304</td>
</tr>
</tbody>
</table>

Under the relevant laws, the capital surplus generated from donations and the excess of the issuance price over the par value of capital stock (including the stock issued for new capital, mergers and convertible bonds) may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or stock dividends up to a certain percentage of the Company’s paid-in capital. The capital surplus from share of changes in equities of subsidiaries and associates may be used to offset a deficit.

c. Retained earnings and dividend policy

In accordance with the amendments to the R.O.C. Company Act in May 2015, the recipients of dividends and bonuses are limited to shareholders and do not include employees. The amendments to the Company’s Articles of Incorporation on profits distribution policy had been approved by the Company’s shareholders in its meeting held on June 7, 2016. For policy about the profit sharing bonus to employees, please refer to Note 28.
The Company’s amended Articles of Incorporation provide that, when allocating the net profits for each fiscal year, the Company shall first offset its losses in previous years and then set aside the following items accordingly:

1) Legal capital reserve at 10% of the profits left over, until the accumulated legal capital reserve equals the Company’s paid-in capital;

2) Special capital reserve in accordance with relevant laws or regulations or as requested by the authorities in charge;

3) Any balance left over shall be allocated according to the resolution of the shareholders’ meeting.

The Company’s Articles of Incorporation also provide that profits of the Company may be distributed by way of cash dividend and/or stock dividend. However, distribution of profits shall be made preferably by way of cash dividend. Distribution of profits may also be made by way of stock dividend; provided that the ratio for stock dividend shall not exceed 50% of the total distribution.

Any appropriations of the profits are subject to shareholders’ approval in the following year.

The appropriation for legal capital reserve shall be made until the reserve equals the Company’s paid-in capital. The reserve may be used to offset a deficit, or be distributed as dividends in cash or stocks for the portion in excess of 25% of the paid-in capital if the Company incurs no loss.

Pursuant to existing regulations, the Company is required to set aside additional special capital reserve equivalent to the net debit balance of the other components of stockholders’ equity, such as the accumulated balance of foreign currency translation reserve, unrealized valuation gain/loss from available-for-sale financial assets, gain/loss from changes in fair value of hedging instruments in cash flow hedges, etc. For the subsequent decrease in the deduction amount to stockholders’ equity, any special reserve appropriated may be reversed to the extent that the net debit balance reverses.

The appropriations of 2015 and 2014 earnings have been approved by the Company’s shareholders in its meetings held on June 7, 2016 and on June 9, 2015, respectively. The appropriations and dividends per share were as follows:

<table>
<thead>
<tr>
<th>Appropriation of Earnings</th>
<th>Dividends Per Share (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For Fiscal Year 2015</td>
</tr>
<tr>
<td>Legal capital reserve</td>
<td>$30,657,384</td>
</tr>
<tr>
<td>Cash dividends to shareholders</td>
<td>155,582,283</td>
</tr>
<tr>
<td></td>
<td>$186,239,667</td>
</tr>
</tbody>
</table>

The Company’s appropriations of earnings for 2016 had been approved in the meeting of the Board of Directors held on February 14, 2017. The appropriations and dividends per share were as follows:

<table>
<thead>
<tr>
<th>Appropriation of Earnings</th>
<th>Dividends Per Share (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For Fiscal Year 2016</td>
</tr>
<tr>
<td>Legal capital reserve</td>
<td>$33,424,718</td>
</tr>
<tr>
<td>Cash dividends to shareholders</td>
<td>181,512,663</td>
</tr>
<tr>
<td></td>
<td>$214,937,381</td>
</tr>
</tbody>
</table>
The appropriations of earnings for 2016 are to be presented for approval in the Company’s shareholders’ meeting to be held on June 8, 2017 (expected).

Under the Integrated Income Tax System that became effective on January 1, 1998, the R.O.C. resident shareholders are allowed a tax credit for their proportionate share of the income tax paid by the Company on earnings generated since January 1, 1998.

d. Others

Changes in others were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31, 2016</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign Currency Reserve</td>
<td>Unrealized Gain/Loss from</td>
<td>Cash Flow Hedges Reserve</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Translation Reserve</td>
<td>Available-for-sale Financial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance, beginning of year</td>
<td>$ 11,039,949</td>
<td>$ 734,771</td>
<td>$ (607)</td>
<td>$ 11,774,113</td>
<td></td>
</tr>
<tr>
<td>Exchange differences arising on</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>translation of foreign operations</td>
<td>(9,439,776)</td>
<td>-</td>
<td>-</td>
<td>(9,439,776)</td>
<td></td>
</tr>
<tr>
<td>Changes in fair value of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>available-for-sale financial assets</td>
<td>-</td>
<td>148,917</td>
<td>-</td>
<td>148,917</td>
<td></td>
</tr>
<tr>
<td>Cumulative gain reclassified to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>profit or loss upon disposal of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>available-for-sale financial assets</td>
<td>-</td>
<td>(101,411)</td>
<td>-</td>
<td>(101,411)</td>
<td></td>
</tr>
<tr>
<td>Share of other comprehensive income of subsidiaries and associates</td>
<td>65,776</td>
<td>(714,991)</td>
<td>712</td>
<td>(648,503)</td>
<td></td>
</tr>
<tr>
<td>The proportionate share of other comprehensive income/losses reclassified to profit or loss upon partial disposal of associates</td>
<td>(4,712)</td>
<td>(3,469)</td>
<td>-</td>
<td>(8,181)</td>
<td></td>
</tr>
<tr>
<td>Income tax effect</td>
<td></td>
<td>(61,176)</td>
<td>-</td>
<td>(61,176)</td>
<td></td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>$ 1,661,237</td>
<td>$ 2,641</td>
<td>$ 105</td>
<td>$ 1,663,983</td>
<td></td>
</tr>
</tbody>
</table>

(Continued)
The exchange differences arising on translation of foreign operation’s net assets from its functional currency to the Company’s presentation currency are recognized directly in other comprehensive income and also accumulated in the foreign currency translation reserve.

Unrealized gain/loss on available-for-sale financial assets represents the cumulative gains or losses arising from the fair value measurement on available-for-sale financial assets that are recognized in other comprehensive income. When those available-for-sale financial assets have been disposed of or are determined to be impaired subsequently, the related cumulative gains or losses in other comprehensive income are reclassified to profit or loss.

The cash flow hedges reserve represents the cumulative effective portion of gains or losses arising on changes in fair value of the hedging instruments entered into as cash flow hedges. The cumulative gains or losses arising on changes in fair value of the hedging instruments that are recognized and accumulated in cash flow hedges reserve will be reclassified to profit or loss only when the hedge transaction affects profit or loss.

21. SHARE-BASED PAYMENT

The Company’s Employee Stock Option Plans, consisting of the TSMC 2004 Plan, TSMC 2003 Plan and TSMC 2002 Plan, were approved by the Securities and Futures Bureau on January 6, 2005, October 29, 2003 and June 25, 2002, respectively. The maximum number of stock options authorized to be granted under the TSMC 2004 Plan, TSMC 2003 Plan and TSMC 2002 Plan was 11,000 thousand, 120,000 thousand and 100,000 thousand, respectively, with each stock option eligible to subscribe for one common share of the Company when exercised. The stock options may be granted to qualified employees of the Company or any of its domestic or foreign subsidiaries, in which the Company’s shareholding with voting rights, directly or indirectly, is more than fifty percent (50%). The stock options of all the plans are valid for ten years and exercisable at certain percentages subsequent to the second anniversary of the grant date. Under the terms of the plans, the stock options are granted at an exercise price equal to the closing price of the Company’s common shares quoted on the TWSE on the grant date.
The Company did not issue employee stock option plans for years ended December 31, 2016 and 2015. Information about the Company’s outstanding employee stock options is described as follows:

<table>
<thead>
<tr>
<th>Number of Stock Options (In Thousands)</th>
<th>Weighted-average Exercise Price (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning of year</td>
<td>718</td>
</tr>
<tr>
<td>Options exercised</td>
<td>(718)</td>
</tr>
<tr>
<td>Balance, end of year</td>
<td>-</td>
</tr>
<tr>
<td>Balance exercisable, end of year</td>
<td>-</td>
</tr>
</tbody>
</table>

The numbers of outstanding stock options and exercise prices have been adjusted to reflect the distribution of earnings by the Company in accordance with the plans.

The employee stock options have been fully exercised in the second quarter of 2015.

### 22. NET REVENUE

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net revenue from sale of goods</td>
<td>$ 935,864,491</td>
<td>$ 836,546,605</td>
</tr>
<tr>
<td>Net revenue from royalties</td>
<td>522,800</td>
<td>500,283</td>
</tr>
<tr>
<td></td>
<td><strong>$ 936,387,291</strong></td>
<td><strong>$ 837,046,888</strong></td>
</tr>
</tbody>
</table>

### 23. OTHER INCOME

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank deposits</td>
<td>$ 1,634,873</td>
<td>$ 1,655,118</td>
</tr>
<tr>
<td>Held-to-maturity financial assets</td>
<td>48,277</td>
<td>71,385</td>
</tr>
<tr>
<td></td>
<td><strong>1,683,150</strong></td>
<td><strong>1,726,503</strong></td>
</tr>
<tr>
<td>Dividend income</td>
<td><strong>133,653</strong></td>
<td><strong>113,359</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$ 1,816,803</strong></td>
<td><strong>$ 1,839,862</strong></td>
</tr>
</tbody>
</table>

### 24. FINANCE COSTS

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>$ 2,353,251</td>
<td>$ 2,367,179</td>
</tr>
<tr>
<td>Bank loans</td>
<td>289,942</td>
<td>73,280</td>
</tr>
<tr>
<td></td>
<td><strong>$ 2,643,193</strong></td>
<td><strong>$ 2,440,459</strong></td>
</tr>
</tbody>
</table>
25. OTHER GAINS AND LOSSES

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain on disposal of financial assets, net</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>$ 101,411</td>
<td>$ 51</td>
</tr>
<tr>
<td>Other gains</td>
<td>125,282</td>
<td>123,920</td>
</tr>
<tr>
<td>Net gain (loss) on financial instruments at FVTPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td>899,991</td>
<td>(1,719,106)</td>
</tr>
<tr>
<td>Designated as at FVTPL</td>
<td>(76,691)</td>
<td>-</td>
</tr>
<tr>
<td>Gain (loss) on disposal of investments accounted for using equity method, net</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial assets carried at cost</td>
<td>(4,537)</td>
<td>(21,437)</td>
</tr>
<tr>
<td>Other losses</td>
<td>(15,291)</td>
<td>(15,228)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net gain (loss) on financial instruments at FVTPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 734,100</td>
<td>$ 787,985</td>
</tr>
</tbody>
</table>

26. INCOME TAX

a. Income tax expense recognized in profit or loss

Income tax expense consisted of the following:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current income tax expense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current tax expense recognized in the current year</td>
<td>$ 53,577,418</td>
<td>$ 45,633,743</td>
</tr>
<tr>
<td>Income tax adjustments on prior years</td>
<td>(1,039,175)</td>
<td>(979,196)</td>
</tr>
<tr>
<td>Other income tax adjustments</td>
<td>168,040</td>
<td>142,426</td>
</tr>
<tr>
<td></td>
<td>52,706,283</td>
<td>44,796,973</td>
</tr>
<tr>
<td>Deferred income tax benefit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The origination and reversal of temporary differences</td>
<td>(1,764,503)</td>
<td>(1,382,142)</td>
</tr>
<tr>
<td>Income tax expense recognized in profit or loss</td>
<td>$ 50,941,780</td>
<td>$ 43,414,831</td>
</tr>
</tbody>
</table>

A reconciliation of income before income tax and income tax expense recognized in profit or loss was as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income before tax</td>
<td>$ 385,188,960</td>
<td>$ 349,988,668</td>
</tr>
<tr>
<td>Income tax expense at the statutory rate (17%)</td>
<td>$ 65,482,123</td>
<td>$ 59,498,074</td>
</tr>
<tr>
<td>Tax effect of adjusting items:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondeductible (deductible) items in determining taxable income</td>
<td>121,152</td>
<td>(6,011,617)</td>
</tr>
<tr>
<td>Tax-exempt income</td>
<td>(19,075,801)</td>
<td>(21,760,175)</td>
</tr>
<tr>
<td>Additional income tax under the Alternative Minimum Tax Act</td>
<td>-</td>
<td>6,041,603</td>
</tr>
</tbody>
</table>

(Continued)
Years Ended December 31

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional income tax on unappropriated earnings</td>
<td>$ 11,957,213</td>
<td>$ 12,103,200</td>
</tr>
<tr>
<td>The origination and reversal of temporary differences</td>
<td>(1,764,503)</td>
<td>(1,382,142)</td>
</tr>
<tr>
<td>Income tax credits</td>
<td>(4,907,269)</td>
<td>(4,237,342)</td>
</tr>
<tr>
<td></td>
<td>51,812,915</td>
<td>44,251,601</td>
</tr>
<tr>
<td>Income tax adjustments on prior years</td>
<td>(1,039,175)</td>
<td>(979,196)</td>
</tr>
<tr>
<td>Other income tax adjustments</td>
<td>168,040</td>
<td>142,426</td>
</tr>
<tr>
<td>Income tax expense recognized in profit or loss</td>
<td>$ 50,941,780</td>
<td>$ 43,414,831</td>
</tr>
</tbody>
</table>

(Concluded)

b. Income tax expense recognized in other comprehensive income

Years Ended December 31

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred income tax benefit (expense)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related to remeasurement of defined benefit obligation</td>
<td>$ 126,867</td>
<td>$ 99,324</td>
</tr>
<tr>
<td>Related to unrealized gain/loss on available-for-sale financial assets</td>
<td>(61,176)</td>
<td>(15,991)</td>
</tr>
<tr>
<td></td>
<td>$ 65,691</td>
<td>$ 83,333</td>
</tr>
</tbody>
</table>

c. Deferred income tax balance

The analysis of deferred income tax assets and liabilities in the parent company only balance sheets was as follows:

December 31, 2016          December 31, 2015

Deferred income tax assets
Temporary differences
Depreciation             | $ 3,284,735 | $ 1,874,632 |
Provision for sales returns and allowance | 1,428,787 | 1,081,423 |
Net defined benefit liability | 939,543    | 895,486     |
Unrealized loss on inventories | 698,858    | 573,243     |
Others                   | 94,858       | 81,891       |
                        | $ 6,446,781  | $ 4,506,675  |

Deferred income tax liabilities
Temporary differences
Available-for-sale financial assets | $ (92,447) | $ (31,271) |
Unrealized exchange gains        | (48,736)    | -            |
<pre><code>                    | $ (141,183)  | $ (31,271)   |
</code></pre>
<table>
<thead>
<tr>
<th>Balance, Beginning of Year</th>
<th>Recognized in</th>
<th>Other Comprehensive Income</th>
<th>Balance, End of Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Profit or Loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Year Ended December 31, 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred income tax assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary differences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>$ 1,874,632</td>
<td>$ 1,410,103</td>
<td>$ -</td>
</tr>
<tr>
<td>Provision for sales returns and allowance</td>
<td>1,081,423</td>
<td>347,364</td>
<td>-</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>895,486</td>
<td>(82,810)</td>
<td>126,867</td>
</tr>
<tr>
<td>Unrealized loss on inventories</td>
<td>573,243</td>
<td>125,615</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>81,891</td>
<td>12,967</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>$ 4,506,675</strong></td>
<td><strong>$ 1,813,239</strong></td>
<td><strong>$ 126,867</strong></td>
</tr>
<tr>
<td>Deferred income tax liabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary differences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>(31,271)</td>
<td>-</td>
<td>$ (61,176)</td>
</tr>
<tr>
<td>Unrealized exchange gains</td>
<td>-</td>
<td>(48,736)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Year Ended December 31, 2015</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred income tax assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary differences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>$ 610,819</td>
<td>$ 1,263,813</td>
<td>$ -</td>
</tr>
<tr>
<td>Provision for sales returns and allowance</td>
<td>1,195,178</td>
<td>(113,755)</td>
<td>-</td>
</tr>
<tr>
<td>Net defined benefit liability</td>
<td>787,492</td>
<td>8,670</td>
<td>99,324</td>
</tr>
<tr>
<td>Unrealized loss on inventories</td>
<td>547,249</td>
<td>25,994</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>68,941</td>
<td>12,950</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>$ 3,209,679</strong></td>
<td><strong>$ 1,197,672</strong></td>
<td><strong>$ 99,324</strong></td>
</tr>
<tr>
<td>Deferred income tax liabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary differences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>(15,280)</td>
<td>-</td>
<td>$ (15,991)</td>
</tr>
<tr>
<td>Unrealized exchange gains</td>
<td>(184,470)</td>
<td>184,470</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>(199,750)</strong></td>
<td><strong>184,470</strong></td>
<td><strong>(15,991)</strong></td>
</tr>
</tbody>
</table>

d. The deductible temporary differences for which no deferred income tax assets have been recognized in the parent company only financial statements

As of December 31, 2016 and 2015, the aggregate deductible temporary differences for which no deferred income tax assets have been recognized amounted to NT$1,919,784 thousand and NT$1,972,286 thousand, respectively.
e. Unused tax-exemption information

As of December 31, 2016, the profits generated from the following projects of the Company are exempt from income tax for a five-year period:

<table>
<thead>
<tr>
<th>Tax-exemption Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction and expansion of 2007</td>
</tr>
<tr>
<td>Construction and expansion of 2008</td>
</tr>
<tr>
<td>Construction and expansion of 2009</td>
</tr>
</tbody>
</table>

f. The information of unrecognized deferred income tax liabilities associated with investments

As of December 31, 2016 and 2015, the aggregate taxable temporary differences associated with investments in subsidiaries not recognized as deferred income tax liabilities amounted to NT$83,181,401 thousand and NT$80,919,309 thousand, respectively.

g. Integrated income tax information

<table>
<thead>
<tr>
<th>Balance of the Imputation Credit Account</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 82,072,562</td>
<td>$ 59,973,516</td>
</tr>
</tbody>
</table>

The estimated and actual creditable ratio for distribution of the Company’s earnings of 2016 and 2015 were 13.94% and 12.57%, respectively; however, effective from January 1, 2015, the creditable ratio for individual shareholders residing in the R.O.C. will be half of the original creditable ratio according to the revised Article 66 - 6 of the R.O.C. Income Tax Law.

The imputation credit allocated to shareholders is based on its balance as of the date of the dividend distribution. The estimated creditable ratio may change when the actual distribution of the imputation credit is made.

All earnings generated prior to December 31, 1997 have been appropriated.

h. Income tax examination

The tax authorities have examined income tax returns of the Company through 2013. All investment tax credit adjustments assessed by the tax authorities have been recognized accordingly.

27. EARNINGS PER SHARE

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
</tr>
<tr>
<td>Basic EPS</td>
</tr>
<tr>
<td>Diluted EPS</td>
</tr>
</tbody>
</table>
EPS is computed as follows:

<table>
<thead>
<tr>
<th></th>
<th>Amounts (Numerator)</th>
<th>Number of Shares (Denominator) (In Thousands)</th>
<th>EPS (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year ended December 31, 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic/Diluted EPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income available to common shareholders</td>
<td>$334,247,180</td>
<td>25,930,380</td>
<td>$12.89</td>
</tr>
<tr>
<td><strong>Year ended December 31, 2015</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic EPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income available to common shareholders</td>
<td>$306,573,837</td>
<td>25,930,288</td>
<td>$11.82</td>
</tr>
<tr>
<td>Effect of dilutive potential common shares</td>
<td>-</td>
<td>92</td>
<td>$11.82</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income available to common shareholders (including effect of dilutive potential common shares)</td>
<td>$306,573,837</td>
<td>25,930,380</td>
<td>$11.82</td>
</tr>
</tbody>
</table>

28. ADDITIONAL INFORMATION OF EXPENSES BY NATURE

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td><strong>a. Depreciation of property, plant and equipment</strong></td>
<td></td>
</tr>
<tr>
<td>Recognized in cost of revenue</td>
<td>$197,595,313</td>
</tr>
<tr>
<td>Recognized in operating expenses</td>
<td>16,357,124</td>
</tr>
<tr>
<td>Recognized in other operating income and expenses</td>
<td>24,887</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$213,977,324</td>
</tr>
<tr>
<td><strong>b. Amortization of intangible assets</strong></td>
<td></td>
</tr>
<tr>
<td>Recognized in cost of revenue</td>
<td>$2,014,814</td>
</tr>
<tr>
<td>Recognized in operating expenses</td>
<td>1,709,252</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$3,724,066</td>
</tr>
<tr>
<td><strong>c. Research and development costs expensed as incurred</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$70,366,179</td>
</tr>
<tr>
<td><strong>d. Employee benefits expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Post-employment benefits</td>
<td></td>
</tr>
<tr>
<td>Defined contribution plans</td>
<td>$1,735,492</td>
</tr>
<tr>
<td>Defined benefit plans</td>
<td>272,141</td>
</tr>
<tr>
<td>Other employee benefits</td>
<td>2,007,633</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>86,133,216</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$88,140,849</td>
</tr>
</tbody>
</table>
(Continued)
Employee benefits expense summarized by function

<table>
<thead>
<tr>
<th>Function</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognized in cost of revenue</td>
<td>$53,109,947</td>
<td>$48,246,789</td>
</tr>
<tr>
<td>Recognized in operating expenses</td>
<td>$35,030,902</td>
<td>$32,923,859</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$88,140,849</strong></td>
<td><strong>$81,170,648</strong></td>
</tr>
</tbody>
</table>

(Concluded)

In accordance with the amendments to the R.O.C. Company Act in May 2015 and the amended the Company’s Articles of Incorporation approved by the Company’s shareholders in its meeting held on June 7, 2016, the Company shall allocate compensation to directors and profit sharing bonus to employees of the Company not more than 0.3% and not less than 1% of annual profits during the period, respectively. Prior to the amendments, the Company’s Articles of Incorporation provided that, when allocating the net profits for each fiscal year, the Company shall first set aside legal capital reserve and special capital reserve, then set aside not more than 0.3% of the balance as compensation to directors and not less than 1% as profit sharing bonus to employees, respectively.

The Company accrued profit sharing bonus to employees based on a percentage of net income before income tax, profit sharing bonus to employees and compensation to directors during the period, which amounted to NT$22,418,339 thousand and NT$20,556,888 thousand for the years ended December 31, 2016 and 2015, respectively; compensation to directors was expensed based on estimated amount payable. If there is a change in the proposed amounts after the annual parent company only financial statements are authorized for issue, the differences are recorded as a change in accounting estimate.

The Board of Directors of the Company held on February 14, 2017 approved the profit sharing bonus to employees and compensation to directors in the amounts of NT$22,418,339 thousand and NT$376,432 thousand in cash for 2016, respectively. There is no significant difference between the aforementioned approved amounts and the amounts charged against earnings of 2016.

The Company’s profit sharing bonus to employees and compensation to directors in the amounts of NT$20,556,888 thousand and NT$356,186 thousand in cash for 2015, respectively, had been approved by the shareholders in its meetings held on June 9, 2015. The aforementioned approved amount has no difference with the one recognized in the parent company only financial statements for the year ended December 31, 2015.

The information about the appropriations of the Company’s profit sharing bonus to employees and compensation to directors is available at the Market Observation Post System website.
29. CAPITAL MANAGEMENT

The Company requires significant amounts of capital to build and expand its production facilities and acquire additional equipment. In consideration of the industry dynamics, the Company manages its capital in a manner to ensure that it has sufficient and necessary financial resources to fund its working capital needs, capital asset purchases, research and development activities, dividend payments, debt service requirements and other business requirements associated with its existing operations over the next 12 months.

30. FINANCIAL INSTRUMENTS

a. Categories of financial instruments

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVTPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td>$ 151,070</td>
<td>$ 6,026</td>
</tr>
<tr>
<td>Available-for-sale financial assets (Note)</td>
<td>3,279,220</td>
<td>1,050,645</td>
</tr>
<tr>
<td>Held-to-maturity financial assets</td>
<td>11,447,538</td>
<td>10,787,947</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>249,878,563</td>
<td>264,493,583</td>
</tr>
<tr>
<td>Notes and accounts receivable (including related parties)</td>
<td>126,862,867</td>
<td>82,918,805</td>
</tr>
<tr>
<td>Other receivables</td>
<td>3,088,166</td>
<td>2,581,900</td>
</tr>
<tr>
<td>Refundable deposits</td>
<td>369,895</td>
<td>398,693</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 395,077,319</strong></td>
<td><strong>$ 362,237,599</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial liabilities</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVTPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td>$ 62,441</td>
<td>$ 45,254</td>
</tr>
<tr>
<td>Amortized cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term loans</td>
<td>57,958,200</td>
<td>39,474,000</td>
</tr>
<tr>
<td>Accounts payable (including related parties)</td>
<td>29,373,925</td>
<td>20,462,601</td>
</tr>
<tr>
<td>Payables to contractors and equipment suppliers</td>
<td>62,449,143</td>
<td>25,346,206</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>19,485,257</td>
<td>16,797,935</td>
</tr>
<tr>
<td>Bonds payable (including long-term liabilities-current portion)</td>
<td>154,200,000</td>
<td>166,200,000</td>
</tr>
<tr>
<td>Other long-term payables (classified under accrued expenses and other current liabilities)</td>
<td>-</td>
<td>18,000</td>
</tr>
<tr>
<td>Guarantee deposits (including those classified under accrued expenses and other current liabilities)</td>
<td>21,106,342</td>
<td>27,722,187</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 344,635,308</strong></td>
<td><strong>$ 296,066,183</strong></td>
</tr>
</tbody>
</table>

Note: Including financial assets carried at cost.

b. Financial risk management objectives

The Company seeks to ensure sufficient cost-efficient funding readily available when needed. The Company manages its exposure to foreign currency risk, interest rate risk, equity price risk, credit risk and liquidity risk with the objective to reduce the potentially adverse effects the market uncertainties may have on its financial performance.
The plans for material treasury activities are reviewed by Audit Committees and/or Board of Directors in accordance with procedures required by relevant regulations or internal controls. During the implementation of such plans, Corporate Treasury function must comply with certain treasury procedures that provide guiding principles for overall financial risk management and segregation of duties.

c. Market risk

The Company is exposed to the market risks arising from changes in foreign exchange rates, interest rates and the prices in equity investments, and utilizes some derivative financial instruments to reduce the related risks.

**Foreign currency risk**

Most of the Company’s operating activities are denominated in foreign currencies. Consequently, the Company is exposed to foreign currency risk. To protect against reductions in value and the volatility of future cash flows caused by changes in foreign exchange rates, the Company utilizes derivative financial instruments, including currency forward contracts and cross currency swaps, to hedge its currency exposure. These instruments help to reduce, but do not eliminate, the impact of foreign currency exchange rate movements.

The Company also holds short-term borrowings in foreign currencies in proportion to its expected future cash flows. This allows foreign-currency-denominated borrowings to be serviced with expected future cash flows and provides a partial hedge against transaction translation exposure.

The Company’s sensitivity analysis to foreign currency risk mainly focuses on the foreign currency monetary items at the end of the reporting period. Assuming an unfavorable 10% movement in the levels of foreign exchanges against the New Taiwan dollar, the net income for the years ended December 31, 2016 and 2015 would have decreased by NT$116,345 thousand and NT$902,173 thousand, respectively, after taking into consideration of the hedging contracts and the hedged items.

**Interest rate risk**

The Company is exposed to interest rate risk arising from borrowing at fixed interest rates and from fixed income securities. All of the Company’s long-term bonds have fixed interest rates and are measured at amortized cost. As such, changes in interest rates would not affect the future cash flows.

The Company classified fixed income securities as held-to-maturity financial assets. Because held-to-maturity fixed income securities are measured at amortized cost, changes in interest rates would not affect the fair value.

**Other price risk**

The Company is exposed to equity price risk arising from available-for-sale equity investments.

Assuming a hypothetical decrease of 5% in equity prices of the equity investments at the end of the reporting period, the net income for the years ended December 31, 2016 and 2015 would have been unaffected as they were classified as available-for-sale; however, the other comprehensive income for the years ended December 31, 2016 and 2015 would have decreased by NT$141,570 thousand and NT$44,410 thousand, respectively.
d. Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company is exposed to credit risk from operating activities, primarily trade receivables, and from investing activities, primarily deposits, fixed-income investments and other financial instruments with banks. Credit risk is managed separately for business related and financial related exposures. As of the end of the reporting period, the Company’s maximum credit risk exposure is mainly from the carrying amount of financial assets recognized in the parent company only balance sheet.

Business related credit risk

The Company has considerable trade receivables outstanding with its customers worldwide. A substantial majority of the Company’s outstanding trade receivables are not covered by collateral or credit insurance. While the Company has procedures to monitor and limit exposure to credit risk on trade receivables, there can be no assurance such procedures will effectively limit its credit risk and avoid losses. This risk is heightened during periods when economic conditions worsen.

As of December 31, 2016 and 2015, the Company’s ten largest customers accounted for 74% and 67% of accounts receivable, respectively. The Company believes the concentration of credit risk is insignificant for the remaining accounts receivable.

Financial credit risk

The Company regularly monitors and reviews the transaction limit applied to counterparties and adjusts the concentration limit according to market conditions and the credit standing of the counterparties. The Company mitigates its exposure by selecting counterparties with investment-grade credit ratings.

e. Liquidity risk management

The objective of liquidity risk management is to ensure the Company has sufficient liquidity to fund its business requirements associated with existing operations over the next 12 months. The Company manages its liquidity risk by maintaining adequate cash.

The table below summarizes the maturity profile of the Company’s financial liabilities based on contractual undiscounted payments, including principal and interest.

<table>
<thead>
<tr>
<th>Less Than 1 Year</th>
<th>2-3 Years</th>
<th>4-5 Years</th>
<th>5+ Years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-derivative financial liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term loans</td>
<td>$57,974,562</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Accounts payable (including related parties)</td>
<td>$29,373,925</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Payables to contractors and equipment suppliers</td>
<td>$62,449,143</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>$19,485,257</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>$20,677,749</td>
<td>$61,831,777</td>
<td>$35,340,742</td>
<td>$22,979,426</td>
</tr>
<tr>
<td>Guarantee deposits (including those classified under accrued expenses and other current liabilities)</td>
<td>6,439,800</td>
<td>13,056,592</td>
<td>1,609,950</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>215,790,436</td>
<td>74,888,369</td>
<td>36,950,692</td>
<td>22,979,426</td>
</tr>
</tbody>
</table>

(Continued)
f. Fair value of financial instruments

1) Fair value measurements recognized in the parent company only balance sheets

Fair value measurements are grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).
2) Fair value of financial instruments that are measured at fair value on a recurring basis

Fair value hierarchy

The following table presents the Company’s financial assets and liabilities measured at fair value on a recurring basis:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial assets at FVTPL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ -</td>
<td>$ 140,094</td>
<td>$ -</td>
<td>$ 140,094</td>
</tr>
<tr>
<td>Cross currency swap contracts</td>
<td>_______</td>
<td>10,976</td>
<td>_______</td>
<td>10,976</td>
</tr>
<tr>
<td>Total</td>
<td>$ -</td>
<td>$ 151,070</td>
<td>$ -</td>
<td>$ 151,070</td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly traded stocks</td>
<td>$ 2,843,952</td>
<td>_______</td>
<td>_______</td>
<td>$ 2,843,952</td>
</tr>
<tr>
<td>Financial liabilities at FVTPL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ -</td>
<td>$ 62,441</td>
<td>$ -</td>
<td>$ 62,441</td>
</tr>
<tr>
<td>December 31, 2015</td>
<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
<td>Total</td>
</tr>
<tr>
<td>Financial assets at FVTPL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ -</td>
<td>$ 6,026</td>
<td>$ -</td>
<td>$ 6,026</td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly traded stocks</td>
<td>$ 706,924</td>
<td>_______</td>
<td>_______</td>
<td>$ 706,924</td>
</tr>
<tr>
<td>Financial liabilities at FVTPL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward exchange contracts</td>
<td>$ -</td>
<td>$ 45,254</td>
<td>$ -</td>
<td>$ 45,254</td>
</tr>
</tbody>
</table>

There were no transfers between Level 1 and Level 2 for the years ended December 31, 2016 and 2015, respectively.

There were no purchases and disposals for assets on Level 3 for the years ended December 31, 2016 and 2015, respectively.

Valuation techniques and assumptions used in fair value measurement

The fair values of financial assets and financial liabilities are determined as follows:

- The fair values of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices (includes publicly traded stocks).
- Forward exchange contracts and cross currency swap contracts are measured using quoted forward exchange rates and yield curves derived from quoted interest rates matching maturities of the contracts.
3) Fair value of financial instruments that are not measured at fair value

Except as detailed in the following table, the Company considers that the carrying amounts of financial instruments that are not measured at fair value recognized in the parent company only financial statements approximate their fair values.

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carrying Amount</td>
<td>Fair Value</td>
</tr>
<tr>
<td>Financial assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held-to-maturity financial assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial paper</td>
<td>$ 8,628,176</td>
<td>$ 8,630,769</td>
</tr>
<tr>
<td>Corporate bonds/Bank debentures</td>
<td>2,819,362</td>
<td>2,821,660</td>
</tr>
<tr>
<td>Structured product</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Financial liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measured at amortized cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds payable</td>
<td>154,200,000</td>
<td>155,930,125</td>
</tr>
</tbody>
</table>

Fair value hierarchy

The table below sets out the balances for the Company’s assets and liabilities that are not measured at fair value but for which the fair value is disclosed:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held-to-maturity securities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial paper</td>
<td>$ -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>$ 8,630,769</td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>2,821,660</td>
<td></td>
<td>-</td>
<td>-</td>
<td>2,821,660</td>
</tr>
<tr>
<td></td>
<td>$ 2,821,660</td>
<td>-</td>
<td>$ 8,630,769</td>
<td></td>
<td>$ 11,452,429</td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measured at amortized cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds payable</td>
<td>$ 155,930,125</td>
<td></td>
<td>-</td>
<td>-</td>
<td>$ 155,930,125</td>
</tr>
</tbody>
</table>

|                      | December 31, 2015 |         |         |         |         |
|                      | Level 1           | Level 2 | Level 3 | Total   |         |
| Assets               |                   |         |         |         |         |
| Held-to-maturity securities |       |         |         |         |         |
| Corporate bonds/Bank debentures | $ 7,792,428 | $ -      | -       | -       | $ 7,792,428 |
| Structured product   | -                 | 2,995,731 |         | -       | 2,995,731 |
|                      | $ 7,792,428       | 2,995,731 |         | -       | $ 10,788,159 |
| Liabilities          |                   |         |         |         |         |
| Measured at amortized cost |       |         |         |         |         |
| Bonds payable        | $ 167,709,976     |         | -       | -       | $ 167,709,976 |

Fair value measurement

For investments in bonds, the fair value is determined using active market prices.
For investments in commercial paper and structured product, the fair value is determined using the present value of future cash flows based on the observable yield curves.

The fair value of the Company’s bonds payable is determined using active market prices.

31. RELATED PARTY TRANSACTIONS

The significant transactions between the Company and its related parties, other than those disclosed in other notes, are summarized as follows:

a. Net revenue

<table>
<thead>
<tr>
<th>Item</th>
<th>Related Party Categories</th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Net revenue from sale of goods</td>
<td>Subsidiaries</td>
<td>$ 633,923,575</td>
</tr>
<tr>
<td></td>
<td>Associates</td>
<td>5,084,397</td>
</tr>
<tr>
<td></td>
<td>Joint venture of the Company’s subsidiaries</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$ 639,007,972</strong></td>
</tr>
<tr>
<td>Net revenue from royalties</td>
<td>Subsidiaries</td>
<td>$ 355</td>
</tr>
<tr>
<td></td>
<td>Associates</td>
<td>516,749</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$ 517,104</strong></td>
</tr>
</tbody>
</table>

b. Purchases

<table>
<thead>
<tr>
<th>Related Party Categories</th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Subsidiaries</td>
<td>$ 27,788,470</td>
</tr>
<tr>
<td>Associates</td>
<td>10,107,719</td>
</tr>
<tr>
<td></td>
<td><strong>$ 37,896,189</strong></td>
</tr>
</tbody>
</table>

c. Receivables from related parties

<table>
<thead>
<tr>
<th>Item</th>
<th>Related Party Categories</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receivables from related parties</td>
<td>Subsidiaries</td>
<td>$ 85,913,783</td>
<td>$ 56,798,070</td>
</tr>
<tr>
<td></td>
<td>Associates</td>
<td>931,787</td>
<td>484,612</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$ 86,845,570</strong></td>
<td><strong>$ 57,282,682</strong></td>
</tr>
<tr>
<td>Other receivables from related parties</td>
<td>Subsidiaries</td>
<td>$ 802,179</td>
<td>$ 330,456</td>
</tr>
<tr>
<td></td>
<td>Associates</td>
<td>146,621</td>
<td>124,871</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$ 948,800</strong></td>
<td><strong>$ 455,327</strong></td>
</tr>
</tbody>
</table>
d. Payables to related parties

<table>
<thead>
<tr>
<th>Item</th>
<th>Related Party Categories</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payables to related parties</td>
<td>Subsidiaries</td>
<td>$3,579,248</td>
<td>$2,609,731</td>
</tr>
<tr>
<td></td>
<td>Associates</td>
<td>$1,260,753</td>
<td>$1,149,900</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$4,840,001</strong></td>
<td><strong>$3,759,631</strong></td>
</tr>
</tbody>
</table>

e. Acquisition of property, plant and equipment and intangible assets

<table>
<thead>
<tr>
<th>Acquisition Price</th>
<th>Years Ended December 31</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
<td>2015</td>
</tr>
<tr>
<td>Related Party Categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsidiaries</td>
<td></td>
<td>$ -</td>
<td>$41,146</td>
</tr>
<tr>
<td>Associates</td>
<td></td>
<td>$ -</td>
<td>26,207</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$ -</strong></td>
<td><strong>$67,353</strong></td>
</tr>
</tbody>
</table>

f. Disposal of property, plant and equipment

<table>
<thead>
<tr>
<th>Proceeds</th>
<th>Years Ended December 31</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
<td>2015</td>
</tr>
<tr>
<td>Related Party Categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsidiaries</td>
<td></td>
<td>$10,622</td>
<td>$183,838</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related Party Categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsidiaries</td>
<td></td>
<td>$49,108</td>
<td>$41,583</td>
</tr>
</tbody>
</table>

Deferred Gains from Disposal of Property, Plant and Equipment

<table>
<thead>
<tr>
<th>Related Party Categories</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidiaries</td>
<td>$144,689</td>
<td>$183,175</td>
</tr>
</tbody>
</table>
g. Others

<table>
<thead>
<tr>
<th>Item</th>
<th>Related Party Categories</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing expenses</td>
<td>Subsidiaries</td>
<td>$ 15,954</td>
<td>$ 806</td>
</tr>
<tr>
<td></td>
<td>Associates</td>
<td>1,376,763</td>
<td>2,321,774</td>
</tr>
<tr>
<td></td>
<td>Joint venture of the Company’s subsidiaries</td>
<td>-</td>
<td>12,819</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$ 1,392,717</strong></td>
<td><strong>$ 2,335,399</strong></td>
</tr>
<tr>
<td>Research and development expenses</td>
<td>Subsidiaries</td>
<td>$ 2,179,813</td>
<td>$ 2,070,611</td>
</tr>
<tr>
<td></td>
<td>Associates</td>
<td>161,671</td>
<td>142,833</td>
</tr>
<tr>
<td></td>
<td>Joint venture of the Company’s subsidiaries</td>
<td>-</td>
<td>1,398</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$ 2,341,484</strong></td>
<td><strong>$ 2,214,842</strong></td>
</tr>
<tr>
<td>Marketing expenses - commission</td>
<td>Subsidiaries</td>
<td>$ 873,117</td>
<td>$ 782,254</td>
</tr>
</tbody>
</table>

The sales prices and payment terms to related parties were not significantly different from those of sales to third parties. For other related party transactions, price and terms were determined in accordance with mutual agreements.

The Company leased machinery and equipment, factory and office from Xintec and VIS. The lease terms and prices were both determined in accordance with mutual agreements. The rental expenses were paid to Xintec and VIS quarterly or monthly; the related expenses were both classified under manufacturing expenses.

The Company deferred the disposal gain/loss derived from sales of property, plant and equipment to related parties using equity method, and then recognized such gain/loss over the depreciable lives of the disposed assets.

h. Compensation of key management personnel

The compensation to directors and other key management personnel for the years ended December 31, 2016 and 2015 were as follows:

<table>
<thead>
<tr>
<th>Years Ended December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term employee benefits</td>
<td>$ 1,926,654</td>
<td>$ 1,798,390</td>
</tr>
<tr>
<td>Post-employment benefits</td>
<td>3,617</td>
<td>10,567</td>
</tr>
<tr>
<td></td>
<td><strong>$ 1,930,271</strong></td>
<td><strong>$ 1,808,957</strong></td>
</tr>
</tbody>
</table>

The compensation to directors and other key management personnel were determined by the Compensation Committee of the Company in accordance with the individual performance and the market trends.
32. SIGNIFICANT OPERATING LEASE ARRANGEMENTS

The Company leases several parcels of land. These operating leases expire between January 2017 and March 2035 and can be renewed upon expiration.

The Company expensed the lease payments as follows:

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Minimum lease payments</td>
<td>$ 815,178</td>
</tr>
</tbody>
</table>

Future minimum lease payments under the above non-cancellable operating leases are as follows:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not later than 1 year</td>
<td>$ 777,233</td>
<td>$ 742,592</td>
</tr>
<tr>
<td>Later than 1 year and not later than 5 years</td>
<td>2,683,437</td>
<td>2,574,330</td>
</tr>
<tr>
<td>Later than 5 years</td>
<td>5,300,624</td>
<td>5,398,730</td>
</tr>
<tr>
<td></td>
<td>$ 8,761,294</td>
<td>$ 8,715,652</td>
</tr>
</tbody>
</table>

33. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

Significant contingent liabilities and unrecognized commitments of the Company as of the end of the reporting period, excluding those disclosed in other notes, were as follows:

a. Under a technical cooperation agreement with Industrial Technology Research Institute, the R.O.C. Government or its designee approved by the Company can use up to 35% of the Company’s capacity provided the Company’s outstanding commitments to its customers are not prejudiced. The term of this agreement is for five years beginning from January 1, 1987 and is automatically renewed for successive periods of five years unless otherwise terminated by either party with one year prior notice. As of December 31, 2016, the R.O.C. Government did not invoke such right.

b. Under a Shareholders Agreement entered into with Philips and EDB Investments Pte Ltd. on March 30, 1999, the parties formed a joint venture company, SSMC, which is an integrated circuit foundry in Singapore. The Company’s equity interest in SSMC was 32%. Nevertheless, in September 2006, Philips spun-off its semiconductor subsidiary which was renamed as NXP B.V. Further, the Company and NXP B.V. purchased all the SSMC shares owned by EDB Investments Pte Ltd. pro rata according to the Shareholders Agreement on November 15, 2006. After the purchase, the Company and NXP B.V. currently own approximately 39% and 61% of the SSMC shares, respectively. The Company and NXP B.V. are required, in the aggregate, to purchase at least 70% of SSMC’s capacity, but the Company alone is not required to purchase more than 28% of the capacity. If any party defaults on the commitment and the capacity utilization of SSMC falls below a specific percentage of its capacity, the defaulting party is required to compensate SSMC for all related unavoidable costs. There was no default from the aforementioned commitment as of December 31, 2016.

c. In June 2010, Keranos, LLC. filed a complaint in the U.S. District Court for the Eastern District of Texas alleging that the Company, TSMC North America, and several other leading technology companies infringe three expired U.S. patents. In response, the Company, TSMC North America, and several co-defendants in the Texas case filed a lawsuit against Keranos in the U.S. District Court for the Northern District of California in November 2010, seeking a judgment declaring that they did not infringe the asserted patents, and that those patents were invalid. These two litigations have been consolidated into a single lawsuit in the U.S. District Court for the Eastern District of Texas.
February 2014, the Court entered a final judgment in favor of the Company and TSMC North America, dismissing all of Keranos’ claims against the Company and TSMC North America with prejudice. Keranos appealed the final judgment to the U.S. Court of Appeals for the Federal Circuit, and in August 2015, the Federal Circuit remanded the case back to the Texas court for further proceedings. In January 2017, the Texas court dismissed all of Keranos’s claims against the Company and TSMC North America with prejudice, and dismissed the Company’s and TSMC North America’s counterclaims without prejudice. The case is over as to the Company and TSMC North America.

d. In December 2010, Ziptronix, Inc. filed a complaint in the U.S. District Court for the Northern District of California accusing the Company, TSMC North America and one other company of infringing several U.S. patents. In September 2014, the Court granted summary judgment of noninfringement in favor of the Company and TSMC North America. Ziptronix, Inc. can appeal the Court’s order. In August 2015, Tessera Technologies, Inc. announced it had acquired Ziptronix. In February 2017, the Court dismissed all of Ziptronix’s claims against the Company and TSMC North America with prejudice.

e. The Company joined the Customer Co-Investment Program of ASML and entered into the investment agreement in August 2012. The agreement includes an investment of EUR837,816 thousand by TSMC Global to acquire 5% of ASML’s equity with a lock-up period of 2.5 years. TSMC Global has acquired the aforementioned equity on October 31, 2012. The lock-up period expired on May 1, 2015 and as of October 8, 2015, all ASML shares had been disposed.

Both parties also signed the research and development funding agreement whereby the Company shall provide EUR276,000 thousand to ASML’s research and development programs from 2013 to 2017. As of December 31, 2016, the Company has paid EUR228,603 thousand to ASML under the research and development funding agreement.

f. In March 2014, DSS Technology Management, Inc. (DSS) filed a complaint in the U.S. District Court for the Eastern District of Texas alleging that the Company, TSMC North America, TSMC Development and several other companies infringe one U.S. patent. TSMC Development has subsequently been dismissed. In May 2015, the Court entered a final judgment of noninfringement in favor of the Company and TSMC North America. DSS appealed the final judgment to the U.S. Court of Appeals for the Federal Circuit (Federal Circuit). In November 2015, the Patent Trial and Appeal Board (PTAB) determined after concluding an Inter Partes Review (IPR) that the patent claims asserted by DSS in the District Court litigation are unpatentable. DSS appealed the PTAB’s decision to the Federal Circuit in January 2016. In March 2016, the District Court’s judgment of noninfringement was affirmed by the Federal Circuit. In April 2016, the District Court litigation between the parties and the related Federal Circuit appeal were dismissed, and the appeal proceeding of the PTAB’s decision is also over as to the Company.

g. As of December 31, 2016, the Company provided financial guarantees of NT$37,028,850 thousand to its subsidiary, TSMC Global, in respect of the issuance of unsecured corporate bonds.

h. As of December 31, 2016, the Company provided endorsement guarantees of NT$2,679,385 thousand to its subsidiary, TSMC North America, in respect of providing endorsement guarantees for office leasing contract.

34. SIGNIFICANT LOSS FROM DISASTER

On February 6, 2016, an earthquake struck Taiwan. The resulting damage was mostly to inventories and equipment. The Company recognized related earthquake losses of NT$2,492,138 thousand, net of insurance claim, for the year ended December 31, 2016. Such losses were primarily included in cost of revenue.
## 35. Exchange Rate Information of Foreign-Currency Financial Assets and Liabilities

The following information was summarized according to the foreign currencies other than the functional currency of the Company. The exchange rates disclosed were used to translate the foreign currencies into the functional currency. The significant financial assets and liabilities denominated in foreign currencies were as follows:

<table>
<thead>
<tr>
<th>Foreign Currencies (In Thousands)</th>
<th>Exchange Rate (Note)</th>
<th>Carrying Amount (In Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>December 31, 2016</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monetary items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USD</td>
<td>$ 4,583,146</td>
<td>32.199</td>
</tr>
<tr>
<td>EUR</td>
<td>19,545</td>
<td>34.30</td>
</tr>
<tr>
<td>JPY</td>
<td>36,963,829</td>
<td>0.2775</td>
</tr>
<tr>
<td>Non-monetary items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HKD</td>
<td>257,056</td>
<td>4.15</td>
</tr>
<tr>
<td><strong>Financial liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monetary items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USD</td>
<td>3,981,333</td>
<td>32.199</td>
</tr>
<tr>
<td>EUR</td>
<td>183,821</td>
<td>34.30</td>
</tr>
<tr>
<td>JPY</td>
<td>60,843,106</td>
<td>0.2775</td>
</tr>
<tr>
<td><strong>December 31, 2015</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monetary items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USD</td>
<td>3,075,149</td>
<td>32.895</td>
</tr>
<tr>
<td>EUR</td>
<td>43,050</td>
<td>36.00</td>
</tr>
<tr>
<td>JPY</td>
<td>9,626,627</td>
<td>0.2733</td>
</tr>
<tr>
<td>Non-monetary items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HKD</td>
<td>166,727</td>
<td>4.24</td>
</tr>
<tr>
<td><strong>Financial liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monetary items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USD</td>
<td>2,925,009</td>
<td>32.895</td>
</tr>
<tr>
<td>EUR</td>
<td>43,293</td>
<td>36.00</td>
</tr>
<tr>
<td>JPY</td>
<td>25,993,829</td>
<td>0.2733</td>
</tr>
</tbody>
</table>

**Note:** Exchange rate represents the number of N.T. dollars for which one foreign currency could be exchanged.

The realized and unrealized foreign exchange gain and loss were net gains of NT$609,345 thousand and NT$2,698,396 thousand for the years ended December 31, 2016 and 2015, respectively. Since there were varieties of foreign currency transactions of the Company, the Company was unable to disclose foreign exchange gain (loss) towards each foreign currency with significant impact.
36. ADDITIONAL DISCLOSURES

Following are the additional disclosures required by the Securities and Futures Bureau for the Company:

a. Financings provided: Please see Table 1 attached;

b. Endorsement/guarantee provided: Please see Table 2 attached;

c. Marketable securities held (excluding investments in subsidiaries, associates and joint venture): Please see Table 3 attached;

d. Marketable securities acquired and disposed of at costs or prices of at least NT$300 million or 20% of the paid-in capital: Please see Table 4 attached;

e. Acquisition of individual real estate properties at costs of at least NT$300 million or 20% of the paid-in capital: Please see Table 5 attached;

f. Disposal of individual real estate properties at prices of at least NT$300 million or 20% of the paid-in capital: None;

g. Total purchases from or sales to related parties of at least NT$100 million or 20% of the paid-in capital: Please see Table 6 attached;

h. Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital: Please see Table 7 attached;

i. Information about the derivative financial instruments transaction: Please see Note 7;

j. Names, locations, and related information of investees over which the Company exercises significant influence (excluding information on investment in mainland China): Please see Table 8 attached;

k. Information on investment in mainland China

1) The name of the investee in mainland China, the main businesses and products, its issued capital, method of investment, information on inflow or outflow of capital, percentage of ownership, income (losses) of the investee, share of profits/losses of investee, ending balance, amount received as dividends from the investee, and the limitation on investee: Please see Table 9 attached.

2) Significant direct or indirect transactions with the investee, its prices and terms of payment, unrealized gain or loss, and other related information which is helpful to understand the impact of investment in mainland China on financial reports: Please see Note 31.

37. OPERATING SEGMENTS INFORMATION

The Company has provided the operating segments disclosure in the consolidated financial statements.
### Table 1

**Taiwan Semiconductor Manufacturing Company Limited and Investees**

**FINANCINGS PROVIDED**

**FOR THE YEAR ENDED DECEMBER 31, 2016**

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1</td>
<td>TSMC China</td>
<td>TSMC Nanjing</td>
<td>Other receivables from related parties</td>
<td>Yes</td>
<td>$ 21,313,180 (RMB4,600,000)</td>
<td>$ 21,313,180 (RMB4,600,000)</td>
<td>$ 4,169,970 (RMB900,000)</td>
<td>0.35%-1.5%</td>
<td>The need for short-term/long-term financing (Note 3)</td>
<td>$ -</td>
<td>Operating capital</td>
<td>$ -</td>
<td>-</td>
<td>$ -</td>
<td>$ 42,850,549 (Note 1)</td>
<td>$ 42,850,549 (Note 1)</td>
</tr>
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</table>

Note 1: The total amount for lending to a company for funding for a short-term period shall not exceed ten percent (10%) of the net worth of TSMC China. In addition, the total amount lendable to any one borrower shall be no more than thirty percent (30%) of the borrower’s net worth. The above restriction does not apply to the subsidiaries whose voting shares are 100% owned, directly or indirectly, by TSMC. However, the total amount lendable to 100% owned subsidiaries by TSMC shall not exceed forty percent (40%) of the net worth of TSMC China. When there is a lending for funding needs by TSMC China to TSMC, or to the subsidiaries, which are not located in Taiwan, directly or indirectly wholly owned by TSMC, the lending will not be subject to the restriction set forth in the above paragraph of this Article. Notwithstanding the foregoing, the aggregate amount available for lending and the total amount lending limit for such borrower still shall not exceed the net worth of TSMC China.

Note 2: The maximum balance for the period and ending balance represent the amounts approved by the Board of Directors.

Note 3: The restriction of the term of each loan for funding not exceeding one year shall not apply to inter-company loans for funding between offshore subsidiaries in which the Company holds, directly or indirectly, 100% of the voting shares.
<table>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>TSMC</td>
<td>TSMC Global</td>
<td>Subsidiary</td>
<td>$347,312,065</td>
<td>$ 48,298,500 (US$ 1,500,000)</td>
<td>$ 37,028,850 (US$ 1,150,000)</td>
<td>$ 37,028,850 (US$ 1,150,000)</td>
<td>$ -</td>
<td>2.67%</td>
<td>$ 347,312,065</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<td>TSMC</td>
<td>TSMC North America</td>
<td>Subsidiary</td>
<td>$347,312,065</td>
<td>2,679,385 (US$ 83,213)</td>
<td>2,679,385 (US$ 83,213)</td>
<td>2,679,385 (US$ 83,213)</td>
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<td>0.19%</td>
<td>347,312,065</td>
<td>Yes</td>
<td>No</td>
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</table>

**Note 1:** The total amount of the guarantee provided by TSMC to any individual entity shall not exceed ten percent (10%) of TSMC’s net worth, or the net worth of such entity. However, subsidiaries whose voting shares are 100% owned, directly or indirectly, by TSMC are not subject to the above restrictions after the approval of the Board of Directors.

**Note 2:** The total amount of guarantee shall not exceed twenty-five percent (25%) of TSMC’s net worth.

**Note 3:** The maximum balance for the period and ending balance represent the amounts approved by the Board of Directors.
## TABLE 3

**Taiwan Semiconductor Manufacturing Company Limited and Investees**

**MARKETABLE SECURITIES HELD**

**DECEMBER 31, 2016**

( Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise )

<table>
<thead>
<tr>
<th>Held Company Name</th>
<th>Marketable Securities Type and Name</th>
<th>Relationship with the Company</th>
<th>Financial Statement Account</th>
<th>December 31, 2016</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shares/Units (In Thousands)</td>
<td>Carrying Value (Foreign Currencies in Thousands)</td>
</tr>
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<td>TSMC</td>
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<td></td>
<td>Held-to-maturity financial assets</td>
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<td>Formosa Petrochemical Corporation</td>
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<td>1,066,780</td>
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<td></td>
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<td>Capital One NA</td>
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<td>Oracle Corp.</td>
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(Continued)
<table>
<thead>
<tr>
<th>Held Company Name</th>
<th>Marketable Securities Type and Name</th>
<th>Relationship with the Company</th>
<th>Financial Statement Account</th>
<th>December 31, 2016</th>
<th>Note</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shares/Units (In Thousands)</td>
<td>Carrying Value (Foreign Currencies in Thousands)</td>
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(Continued)
## Fair Value

### Relationship with the Company

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<tr>
<th>Held Company Name</th>
<th>Marketable Securities Type and Name</th>
<th>Relationship with the Company</th>
<th>Financial Statement Account</th>
<th>December 31, 2016</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>Shares/Units (In Thousands)</td>
<td>Carrying Value (Foreign Currency in Thousands)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of Ownership (%)</td>
<td>Fair Value (Foreign Currencies in Thousands)</td>
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### Carrying Value vs. Fair Value

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<th>Fair Value (in Thousands)</th>
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<th>Company Name</th>
<th>Marketable Securities Type and Name</th>
<th>Financial Statement Account</th>
<th>Counter-party</th>
<th>Nature of Relationship</th>
<th>Beginning Balance</th>
<th>Acquisition</th>
<th>Disposal</th>
<th>Gain/Loss on Disposal</th>
<th>Ending Balance (Note 1)</th>
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<td>Shares/Units (in Thousands)</td>
<td>Amount</td>
<td>Shares/Units (in Thousands)</td>
<td>Amount</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company Name</td>
<td>Marketable Securities Type and Name</td>
<td>Financial Statement Account</td>
<td>Counter-party</td>
<td>Nature of Relationship</td>
<td>Beginning Balance</td>
<td>Acquisition</td>
<td>Disposal</td>
<td>Gain/Loss on Disposal</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------</td>
<td>----------------------------</td>
<td>---------------</td>
<td>------------------------</td>
<td>-------------------</td>
<td>-------------</td>
<td>---------</td>
<td>----------------------</td>
</tr>
<tr>
<td></td>
<td>Fund</td>
<td>Financial assets carried at cost</td>
<td>Primavera Capital Fund II L.P.</td>
<td>-</td>
<td>- US$ 12,017</td>
<td>- US$ 11,767</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Money market fund</td>
<td>Available-for-sale financial assets</td>
<td>Goldman Sachs US$ Liquid Reserves Fund</td>
<td>-</td>
<td>- 199,144</td>
<td>199,144</td>
<td>199,144</td>
<td>-</td>
</tr>
</tbody>
</table>

Note 1: The ending balance includes the amortization of premium/discount on bonds investments, share of profits/losses of investees and other related adjustment.

Note 2: The Company restructured the organizational structure to simplify investment structure. Therefore, the acquisition amount was the carrying value of VisEra Holding’s investment in VisEra Tech and Xintec, respectively.

(Concluded)
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Types of Property</th>
<th>Transaction Date</th>
<th>Transaction Amount (Foreign Currencies in Thousands)</th>
<th>Payment Term</th>
<th>Counter-party</th>
<th>Nature of Relationships</th>
<th>Prior Transaction of Related Counter-party</th>
<th>Purpose of Acquisition</th>
<th>Other Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>April 15, 2015 to February 17, 2016</td>
<td>$362,111</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>Environetica Design Group Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>September 17, 2015 to January 25, 2016</td>
<td>3,201,800</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>DA CIN Construction Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>November 20, 2015 to October 26, 2016</td>
<td>329,010</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>TASA Construction Corporation</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>December 10, 2015 to April 11, 2016</td>
<td>3,167,768</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>Fu Tsu Construction Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>December 31, 2015 to January 04, 2016</td>
<td>1,250,000</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>China Steel Structure Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>January 22, 2016 to January 25, 2016</td>
<td>750,000</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>KEDGE Construction Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Nanjing Land use right Fab</td>
<td>Nanjing Fab</td>
<td>June 16, 2016</td>
<td>RMB 160,521</td>
<td>100% payment</td>
<td>Nanjing Municipal Bureau of Land and Resources</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Nanjing Land use right Fab</td>
<td>Nanjing Fab</td>
<td>June 30, 2016</td>
<td>RMB 899,997</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>China Construction First Division Group Construction &amp; Development Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>TSMC Fab</td>
<td>Fab</td>
<td>October 17, 2016</td>
<td>RMB 408,980</td>
<td>Monthly settlement by the construction progress and acceptance</td>
<td>Shanghai Baoye Group Co., Ltd.</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### TABLE 6
Taiwan Semiconductor Manufacturing Company Limited and Investees

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2016
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Related Party</th>
<th>Nature of Relationships</th>
<th>Transaction Details</th>
<th>Abnormal Transaction</th>
<th>Notes/Accounts Payable or Receivable</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ending Balance (Foreign Currencies in Thousands)</td>
<td>% to Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Payment Terms</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Unit Price</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Payment Terms</td>
<td></td>
</tr>
<tr>
<td>TSMC</td>
<td>TSMC North America</td>
<td>Subsidiary</td>
<td>Purchases Sales</td>
<td>$ 633,917,888</td>
<td>65</td>
<td>Net 30 days from invoice date (Note)</td>
</tr>
<tr>
<td>GUC</td>
<td>Associate</td>
<td>Sales</td>
<td>5,008,684</td>
<td>1</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>TSMC China</td>
<td>Subsidiary</td>
<td>Purchases</td>
<td>19,256,773</td>
<td>27</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>WaferTech</td>
<td>Indirect subsidiary</td>
<td>Purchases</td>
<td>8,531,562</td>
<td>12</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>VIS</td>
<td>Associate</td>
<td>Purchases</td>
<td>6,732,298</td>
<td>10</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>SSMC</td>
<td>Associate</td>
<td>Purchases</td>
<td>3,375,422</td>
<td>5</td>
<td>Net 30 days from the end of the month of when invoice is issued</td>
<td>-</td>
</tr>
<tr>
<td>TSMC North America</td>
<td>GUC</td>
<td>Associate of TSMC</td>
<td>Sales</td>
<td>842,301</td>
<td>(US$ 26,098)</td>
<td>Net 30 days from invoice date</td>
</tr>
</tbody>
</table>

Note: The tenor is 30 days from TSMC’s invoice date or determined by the payment terms granted to its clients by TSMC North America.
## Table 7

Taiwan Semiconductor Manufacturing Company Limited and Investees

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL

DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Related Party</th>
<th>Nature of Relationships</th>
<th>Ending Balance (Foreign Currencies in Thousands)</th>
<th>Turnover Days (Note 1)</th>
<th>Overdue Amount</th>
<th>Action Taken</th>
<th>Amounts Received in Subsequent Period</th>
<th>Allowance for Bad Debts</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC</td>
<td>TSMC North America</td>
<td>Subsidiary</td>
<td>$ 86,675,335 (US$ 2,901)</td>
<td>44</td>
<td>$ 4,546,517</td>
<td>-</td>
<td>$ 1,517,760 (US$ 45,546)</td>
<td>$ -</td>
</tr>
<tr>
<td></td>
<td>GUC</td>
<td>Associate</td>
<td>931,787 (US$ 29,352)</td>
<td>32</td>
<td>$ 4,546,517</td>
<td>-</td>
<td>$ 1,517,760 (US$ 45,546)</td>
<td>$ -</td>
</tr>
<tr>
<td>TSMC North America</td>
<td>TSMC</td>
<td>Parent company</td>
<td>200,701 (US$ 6,233)</td>
<td>Note 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSMC China</td>
<td>TSMC</td>
<td>Parent company</td>
<td>1,775,774 (RMB 338,375)</td>
<td>31</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSMC Nanjing</td>
<td>TSMC</td>
<td>The same parent company</td>
<td>4,190,708 (RMB 804,476)</td>
<td>Note 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSMC Technology</td>
<td>TSMC</td>
<td>Parent company</td>
<td>209,112 (US$ 6,494)</td>
<td>Note 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>WaferTech</td>
<td>TSMC</td>
<td>The ultimate parent of the Company</td>
<td>1,303,795 (US$ 40,492)</td>
<td>42</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSMC Development</td>
<td>Parent company</td>
<td>172,015 (US$ 5,342)</td>
<td>Note 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note 1: The calculation of turnover days excludes other receivables from related parties.

Note 2: The ending balance is primarily consisted of other receivables, which is not applicable for the calculation of turnover days.
<table>
<thead>
<tr>
<th>Investor Company</th>
<th>Investee Company</th>
<th>Location</th>
<th>Main Businesses and Products</th>
<th>Original Investment Amount</th>
<th>Balance as of December 31, 2016</th>
<th>Net Income (Losses) of the Investee (Foreign Currencies in Thousands)</th>
<th>Share of Profits/Losses of Investee (Note 1)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC Partners</td>
<td>TSMC Partners</td>
<td>Tortola, British Virgin Islands</td>
<td>Investing in companies involved in the semiconductor industry</td>
<td>31,456,130 (US$ 459,867)</td>
<td>31,456,130 (US$ 459,867)</td>
<td>-</td>
<td>100</td>
<td>7</td>
</tr>
<tr>
<td>VLSI</td>
<td>Hsin-Chu, Taiwan</td>
<td>Research, design, development, manufacture, packaging, testing and sales of memory integrated circuits, LSIs, VLSIs and related parts</td>
<td>10,180,677 (US$ 167,236)</td>
<td>10,180,677 (US$ 167,236)</td>
<td>46,223 (US$ 9,299)</td>
<td>28</td>
<td>8,063,840</td>
<td>5,537,925 (US$ 841,947)</td>
</tr>
<tr>
<td>SSMC</td>
<td>Singapore</td>
<td>Fabrication and supply of integrated circuits</td>
<td>5,120,028 (US$ 5,120,028)</td>
<td>5,120,028 (US$ 5,120,028)</td>
<td>314 (US$ 2,145,629)</td>
<td>39</td>
<td>7,163,516</td>
<td>4,921,406 (US$ 74,059)</td>
</tr>
<tr>
<td>VisTea Tech</td>
<td>Hsin-Chu, Taiwan</td>
<td>Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, packaging and testing of color filter</td>
<td>5,005,171 (US$ 5,005,171)</td>
<td>-</td>
<td>253,200 (US$ 168,346)</td>
<td>87</td>
<td>5,234,883</td>
<td>661,562 (US$ 841,947)</td>
</tr>
<tr>
<td>TSMC North America</td>
<td>San Jose, California, U.S.A.</td>
<td>Selling and marketing of integrated circuits and semiconductor devices</td>
<td>333,718 (US$ 333,718)</td>
<td>11,000 (US$ 1,000)</td>
<td>100</td>
<td>4,340,303</td>
<td>195,672</td>
<td></td>
</tr>
<tr>
<td>Xintec</td>
<td>Tasyuan, Taiwan</td>
<td>Wafer level chip size packaging service</td>
<td>1,988,317 (US$ 1,988,317)</td>
<td>111,282 (US$ 253,200)</td>
<td>46,688 (US$ 11,000)</td>
<td>35</td>
<td>1,174,181</td>
<td>551,082</td>
</tr>
<tr>
<td>GUC</td>
<td>Hsin-Chu, Taiwan</td>
<td>Researching, developing, manufacturing, testing and marketing of integrated circuits</td>
<td>386,568 (US$ 386,568)</td>
<td>40,471 (US$ 40,471)</td>
<td>100</td>
<td>1,322,999</td>
<td>3,861</td>
<td></td>
</tr>
<tr>
<td>VTFII</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>608,562 (US$ 608,562)</td>
<td>467,171 (US$ 467,171)</td>
<td>-</td>
<td>97</td>
<td>467,171</td>
<td>(841,947)</td>
</tr>
<tr>
<td>VTFII Europe</td>
<td>Amsterdam, the Netherlands</td>
<td>Marketing and engineering supporting activities</td>
<td>15,749 (US$ 15,749)</td>
<td>467,171 (US$ 467,171)</td>
<td>-</td>
<td>97</td>
<td>13,072 (US$ 13,072)</td>
<td>(841,947)</td>
</tr>
<tr>
<td>VTFII Japan</td>
<td>Yokohama, Japan</td>
<td>Marketing activities</td>
<td>83,760 (US$ 83,760)</td>
<td>551,082 (US$ 551,082)</td>
<td>-</td>
<td>87</td>
<td>13,072 (US$ 13,072)</td>
<td>(841,947)</td>
</tr>
<tr>
<td>TSMC Solar Europe GmbH</td>
<td>Hamburg, Germany</td>
<td>Selling of solar related products and providing customer service</td>
<td>25,266 (US$ 25,266)</td>
<td>100</td>
<td>6,328 (US$ 6,328)</td>
<td>7</td>
<td>2,300 (US$ 2,300)</td>
<td></td>
</tr>
<tr>
<td>VTA Holdings</td>
<td>Delaware, U.S.A</td>
<td>Investing in new start-up technology companies</td>
<td>-</td>
<td>844,775 (US$ 844,775)</td>
<td>-</td>
<td>7</td>
<td>-</td>
<td>(313)</td>
</tr>
<tr>
<td>Emerging Alliance</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>-</td>
<td>394,674 (US$ 394,674)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(313)</td>
</tr>
<tr>
<td>Hi-Cheng</td>
<td>Taipei, Taiwan</td>
<td>Investment activities</td>
<td>Note 4</td>
<td>394,674 (US$ 394,674)</td>
<td>Note 4</td>
<td>Note 4</td>
<td>Note 4</td>
<td>1,612</td>
</tr>
<tr>
<td>Motech</td>
<td>New Taipei, Taiwan</td>
<td>Manufacturing and sales of solar cells, crystalline silicon solar cell, and test and measurement instruments and design and construction of solar power systems</td>
<td>Note 3</td>
<td>93,030 (US$ 93,030)</td>
<td>Note 3</td>
<td>Note 3</td>
<td>Note 3</td>
<td>1,612</td>
</tr>
<tr>
<td>TSMC Partners</td>
<td>TSMC Development</td>
<td>Delaware, U.S.A</td>
<td>Investment activities</td>
<td>18,898,843 (US$ 18,898,843)</td>
<td>-</td>
<td>100</td>
<td>27,109,843</td>
<td>1,606,936</td>
</tr>
<tr>
<td>TSMC Technology</td>
<td>Delaware, U.S.A</td>
<td>Engineering support activities</td>
<td>459,867 (US$ 459,867)</td>
<td>-</td>
<td>100</td>
<td>543,177</td>
<td>91,719</td>
<td></td>
</tr>
<tr>
<td>ISDF H</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>167,236 (US$ 167,236)</td>
<td>14,870 (US$ 14,870)</td>
<td>9,299 (US$ 9,299)</td>
<td>97</td>
<td>195,721</td>
<td>91,719</td>
</tr>
<tr>
<td>TSMC Canada</td>
<td>Ontario, Canada</td>
<td>Engineering support activities</td>
<td>74,059 (US$ 74,059)</td>
<td>39,977 (US$ 39,977)</td>
<td>39,977 (US$ 39,977)</td>
<td>-</td>
<td>168,346</td>
<td>39,977</td>
</tr>
<tr>
<td>ISDF</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>15,301 (US$ 15,301)</td>
<td>-</td>
<td>58,3 (US$ 58,3)</td>
<td>58,3</td>
<td>489</td>
<td>(69)</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Investor Company</th>
<th>Investee Company</th>
<th>Location</th>
<th>Main Businesses and Products</th>
<th>Original Investment Amount</th>
<th>Balance as of December 31, 2016</th>
<th>Net Income (Losses) of the Investee (Foreign Currencies in Thousands)</th>
<th>Share of Profits/Losses of Investee (Note 1) (Foreign Currencies in Thousands)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC Partners</td>
<td>VisEra Holding</td>
<td>Cayman Islands</td>
<td>Investing in companies involved in the design, manufacturing, and other related businesses in the semiconductor industry</td>
<td>Note 5 $ 4,868,630 (US$ 15,1204)</td>
<td>Note 5 Shares (In Thousands) 15,204 Note 5 Percentage of Ownership 100 Note 5 Carrying Value (Foreign Currencies in Thousands) 351,135 (US$ 10,880)</td>
<td>Note 2 Note 5</td>
<td>Note 2 Note 5</td>
<td></td>
</tr>
<tr>
<td>VTAF III</td>
<td>Growth Fund</td>
<td>Cayman Islands</td>
<td>Investing in new start-up technology companies</td>
<td>$ 47,067 (US$ 1,462)</td>
<td>- Shares (In Thousands) 100 Percentage of Ownership 58 Carrying Value (Foreign Currencies in Thousands) 29,486 (US$ 916)</td>
<td>Note 2 Note 2 Note 2 Subsidiary</td>
<td>Note 2 Subsidiary</td>
<td></td>
</tr>
<tr>
<td>VTA Holdings</td>
<td>Mutual-Pak</td>
<td>New Taipei, Taiwan</td>
<td>Manufacturing and retailing of electronic parts, and researching, developing and testing of RFID</td>
<td>$ 167,843 (US$ 5,213)</td>
<td>$ 15,643 Shares (In Thousands) 62 Percentage of Ownership 31 Carrying Value (Foreign Currencies in Thousands) 21,725 (US$ 78)</td>
<td>Note 2 Note 2 Note 2 Subsidiary</td>
<td>Note 2 Subsidiary</td>
<td></td>
</tr>
<tr>
<td>VTAF II</td>
<td>VTA Holdings</td>
<td>Delaware, U.S.A</td>
<td>Investing in new start-up technology companies</td>
<td>-</td>
<td>- Shares (In Thousands) 293,637 Percentage of Ownership 100 Carrying Value (Foreign Currencies in Thousands) 5,785,335 (US$ 179,674)</td>
<td>Note 2 Note 2 Note 2 Subsidiary</td>
<td>Note 2 Subsidiary</td>
<td></td>
</tr>
<tr>
<td>TSMC Development</td>
<td>WaferTech</td>
<td>Washington, U.S.A</td>
<td>Manufacturing, selling, testing and computer-aided designing of integrated circuits and other semiconductor devices</td>
<td>-</td>
<td>293,637 Shares (In Thousands) 100 Percentage of Ownership 100 Carrying Value (Foreign Currencies in Thousands) 5,785,335 (US$ 179,674)</td>
<td>Note 2 Note 2 Note 2 Subsidiary</td>
<td>Note 2 Subsidiary</td>
<td></td>
</tr>
<tr>
<td>VisEra Holding</td>
<td>VisEra Tech</td>
<td>Hsin Chu, Taiwan</td>
<td>Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter</td>
<td>Note 5 $ 3,028,916 (US$ 94,069)</td>
<td>Note 5 Shares (In Thousands) 15,204 Percentage of Ownership 100 Carrying Value (Foreign Currencies in Thousands) 661,562 (US$ 20,498)</td>
<td>Note 2 Note 2 Note 2 Subsidiary</td>
<td>Note 2 Note 5</td>
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</tr>
<tr>
<td>Xintec</td>
<td>Taoyuan, Taiwan</td>
<td></td>
<td>Wafer level chip size packaging service</td>
<td>$ 19,586 (US$ 608)</td>
<td>Note 5 Shares (In Thousands) 15,204 Percentage of Ownership 100 Carrying Value (Foreign Currencies in Thousands) 661,562 (US$ 20,498)</td>
<td>Note 2 Note 2 Note 2 Subsidiary</td>
<td>Note 2 Note 5</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: The share of profits/losses of investee includes the effect of unrealized gross profit on intercompany transactions.

Note 2: The share of profits/losses of the investee company is not reflected herein as such amount is already included in the share of profits/losses of the investor company.

Note 3: The Company has no longer served as Motech's board of director starting June 2016. As a result, the Company exercises no significant influence over Motech. Therefore, Motech is no longer accounted for using the equity method. Further, such investment was reclassified to available-for-sale financial assets.

Note 4: Chi Cheng was incorporated into TSMC in December 2016.

Note 5: In October 2016, VisEra Holding was incorporated into TSMC Partners, the subsidiary of TSMC.

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<tbody>
<tr>
<td>TSMC China</td>
<td>Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers</td>
<td>$18,939,667 (RMB 4,502,080)</td>
<td>Note 1</td>
<td>$18,939,667 (US$ 596,000)</td>
<td>$N/A</td>
<td>$6,181,335</td>
<td>$N/A</td>
<td>100%</td>
<td>$25,374,867 (US$ 756,000)</td>
<td>$192,412,667 (US$ 5,960,000)</td>
<td>Note 3</td>
</tr>
<tr>
<td>TSMC Nanjing</td>
<td>Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers</td>
<td>$6,435,200 (RMB 1,366,240)</td>
<td>Note 1</td>
<td>$6,435,200 (US$ 200,000)</td>
<td>$N/A</td>
<td>$939</td>
<td>$N/A</td>
<td>100%</td>
<td>$N/A</td>
<td>$N/A</td>
<td>Note 3</td>
</tr>
</tbody>
</table>

Note 1: TSMC directly invested US$596,000 thousand in TSMC China and US$200,000 thousands in TSMC Nanjing.
Note 2: Amount was recognized based on the audited financial statements.
Note 3: As the Company has obtained the certificate of being qualified for operating headquarters issued by Industrial Development Bureau, MOEA on August 2016, the upper limit on investment in mainland China pursuant to “Principle of Investment or Technical Cooperation in Mainland China” is not applicable.
# The Contents of Statements of Major Accounting Items

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<th>Statement Index</th>
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</thead>
<tbody>
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<td><strong>Major Accounting Items in Assets, Liabilities and Equity</strong></td>
<td></td>
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<td>Statement of Notes and Accounts Receivable, Net</td>
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<tr>
<td>Statement of Receivables from Related Parties</td>
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</tr>
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<td>Statement of Inventories</td>
<td>4</td>
</tr>
<tr>
<td>Statement of Other Current Assets</td>
<td>Note 14</td>
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<tr>
<td>Statement of Changes in Investments Accounted for Using Equity Method</td>
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</tr>
<tr>
<td>Statement of Changes in Property, Plant and Equipment</td>
<td>Note 12</td>
</tr>
<tr>
<td>Statement of Changes in Accumulated Depreciation and Accumulated Impairment of Property, Plant and Equipment</td>
<td>Note 12</td>
</tr>
<tr>
<td>Statement of Changes in Intangible Assets</td>
<td>Note 13</td>
</tr>
<tr>
<td>Statement of Guarantee Deposits</td>
<td>Note 19</td>
</tr>
<tr>
<td>Statement of Deferred Income Tax</td>
<td>Note 26</td>
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<tr>
<td><strong>Assets/Liabilities</strong></td>
<td></td>
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<td>Statement of Short-Term Loans</td>
<td>6</td>
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<td>Statement of Payables to Related Parties</td>
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</tr>
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<td>Statement of Payables to Contractors and Equipment Suppliers</td>
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</tr>
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<td>Statement of Provisions</td>
<td>Note 16</td>
</tr>
<tr>
<td>Statement of Accrued Expenses and Other Current Liabilities</td>
<td>9</td>
</tr>
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<td><strong>Statement of Bonds Payable</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>Major Accounting Items in Profit or Loss</strong></td>
<td></td>
</tr>
<tr>
<td>Statement of Net Revenue</td>
<td>11</td>
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<tr>
<td>Statement of Cost of Revenue</td>
<td>12</td>
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<tr>
<td>Statement of Operating Expenses</td>
<td>13</td>
</tr>
<tr>
<td>Statement of Finance Costs</td>
<td>Note 24</td>
</tr>
<tr>
<td>Statement of Labor, Depreciation and Amortization by Function</td>
<td>14</td>
</tr>
</tbody>
</table>
## Taiwan Semiconductor Manufacturing Company Limited

### STATEMENT OF CASH AND CASH EQUIVALENTS

**DECEMBER 31, 2016**

*(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td><strong>Cash</strong></td>
<td></td>
<td>$ 330</td>
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<tr>
<td>Petty cash</td>
<td></td>
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<tr>
<td>Cash in banks</td>
<td></td>
<td>58,649,136</td>
</tr>
<tr>
<td>Checking accounts and demand deposits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign currency deposits</td>
<td>Including US$484,702 thousand @32.199, JPY36,954,884 thousand @0.2775 and EUR5,746 thousand @34.30</td>
<td>26,058,971</td>
</tr>
<tr>
<td>Time deposits</td>
<td>From 2016.01.22 to 2017.12.30, interest rates at 0.19%-1.16%, including NT$159,061,551 thousand and US$53,700 thousand @32.199</td>
<td>160,811,637</td>
</tr>
<tr>
<td><strong>Cash equivalents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repurchase agreements collateralized by corporate bonds</td>
<td>Expired by 2017.01.13 , interest rates at 0.5%-1.5%</td>
<td>2,361,250</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>Expired by 2017.03.15 , interest rates at 0.61%-0.62%</td>
<td>1,997,239</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$ 249,878,563</td>
</tr>
</tbody>
</table>
# STATEMENT OF NOTES AND ACCOUNTS RECEIVABLE, NET
## DECEMBER 31, 2016
### (In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>Client Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spreatrum Communications, Inc.</td>
<td>$9,368,967</td>
</tr>
<tr>
<td>MediaTek Inc.</td>
<td>5,097,068</td>
</tr>
<tr>
<td>Huawei Technologies Co., Ltd.</td>
<td>3,556,318</td>
</tr>
<tr>
<td>Sony Electronics Inc.</td>
<td>3,275,717</td>
</tr>
<tr>
<td>NXP Semiconductors N.V.</td>
<td>2,189,935</td>
</tr>
<tr>
<td>Analog Devices, Inc.</td>
<td>2,097,785</td>
</tr>
<tr>
<td>Others (Note 1)</td>
<td>14,906,937</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40,492,727</strong></td>
</tr>
</tbody>
</table>

Less: Allowance for doubtful accounts  
**475,430**

Total: **$40,017,297**

Note 1: The amount of individual client included in others does not exceed 5% of the account balance.

Note 2: The accounts receivable past due over one year amounted to NT$35 thousand for which the Company has recognized appropriate allowance for doubtful accounts.
Taiwan Semiconductor Manufacturing Company Limited

STATEMENT OF RECEIVABLES FROM RELATED PARTIES
DECEMBER 31, 2016
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>Client Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC North America</td>
<td>$ 85,874,678</td>
</tr>
<tr>
<td>Others (Note)</td>
<td>970,892</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 86,845,570</strong></td>
</tr>
</tbody>
</table>

Note: The amount of individual client included in others does not exceed 5% of the account balance.
**STATEMENT 4**

Taiwan Semiconductor Manufacturing Company Limited

**STATEMENT OF INVENTORIES**
**DECEMBER 31, 2016**
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost</td>
</tr>
<tr>
<td>Finished goods</td>
<td>$ 8,324,267</td>
</tr>
<tr>
<td>Work in process</td>
<td>32,317,210</td>
</tr>
<tr>
<td>Raw materials</td>
<td>3,864,429</td>
</tr>
<tr>
<td>Supplies and spare parts</td>
<td>1,998,440</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 46,504,346</strong></td>
</tr>
</tbody>
</table>
### STATEMENT 5
Taiwan Semiconductor Manufacturing Company Limited

**STATEMENT OF CHANGES IN INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD**

**FOR THE YEAR ENDED DECEMBER 31, 2016**

(All amounts are in New Taiwan Dollars unless otherwise noted)

#### (Note 3)

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#### Balance, January 1, 2016

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#### Adjustments to Share of Changes in Equity Method

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#### Balance, December 31, 2016

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**Note 1:** The unit price is calculated by closing price of Gre Tai Securities Market as of December 30, 2016.

**Note 2:** The unit price is calculated by closing price of the Taiwan Stock Exchange as of December 30, 2016.

**Note 3:** Including share of profit or loss of subsidiaries and associates, share of other comprehensive income of subsidiary and associates and cash dividends received from subsidiary and associates.
## STATEMENT OF SHORT-TERM LOANS

**DECEMBER 31, 2016**

(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th>Type</th>
<th>Balance, End of Year</th>
<th>Contract Period</th>
<th>Range of Interest Rates (%)</th>
<th>Loan Commitments</th>
<th>Collateral</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsecured loans</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bank Of America</td>
<td>$ 8,693,730</td>
<td>2016.12.02-2017.01.03</td>
<td>0.87</td>
<td>US$ 300,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Citibank Taipei</td>
<td>7,888,755</td>
<td>2016.12.02-2017.01.13</td>
<td>0.93-1.03</td>
<td>US$ 484,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Sumitomo Mitsui Banking Corporation</td>
<td>5,956,815</td>
<td>2016.12.16-2017.01.19</td>
<td>1.03</td>
<td>US$ 200,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Mizuho Bank, Ltd.</td>
<td>5,795,820</td>
<td>2016.12.14-2017.01.17</td>
<td>0.985</td>
<td>US$ 200,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>JPMorgan Chase Bank N.A.</td>
<td>5,795,820</td>
<td>2016.12.07-2017.01.19</td>
<td>0.95-1.02</td>
<td>US$ 200,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Crédit Agricole CIB</td>
<td>5,795,820</td>
<td>2016.12.19-2017.01.19</td>
<td>1.00</td>
<td>US$ 200,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>The Bank Of Tokyo-Mitsubishi UFJ, Ltd.</td>
<td>5,795,820</td>
<td>2016.12.02-2017.01.03</td>
<td>0.91</td>
<td>US$ 200,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Citibank Taiwan</td>
<td>3,541,890</td>
<td>2016.12.02-2017.01.03</td>
<td>0.93</td>
<td>US$ 110,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Standard Chartered Bank</td>
<td>3,219,900</td>
<td>2016.11.23-2017.01.03</td>
<td>0.88</td>
<td>US$ 450,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>BNP</td>
<td>2,253,930</td>
<td>2016.12.07-2017.01.09</td>
<td>0.93</td>
<td>US$ 75,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>HSBC Taiwan</td>
<td>1,931,940</td>
<td>2016.12.23-2017.01.23</td>
<td>1.07</td>
<td>US$ 70,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>HSBC</td>
<td>1,287,960</td>
<td>2016.12.23-2017.01.23</td>
<td>1.07</td>
<td>US$ 55,000</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>$ 57,958,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Statement of Payables to Related Parties

**Taiwan Semiconductor Manufacturing Company Limited**

**Statement of Payables to Related Parties**

**December 31, 2016**

*(In Thousands of New Taiwan Dollars)*

<table>
<thead>
<tr>
<th>Vendor Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC China</td>
<td>$1,775,774</td>
</tr>
<tr>
<td>WaferTech, LLC</td>
<td>1,303,795</td>
</tr>
<tr>
<td>VIS</td>
<td>587,407</td>
</tr>
<tr>
<td>SSMC</td>
<td>505,655</td>
</tr>
<tr>
<td>Others (Note)</td>
<td>667,370</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4,840,001</strong></td>
</tr>
</tbody>
</table>

Note: The amount of individual vendor in others does not exceed 5% of the account balance.
Taiwan Semiconductor Manufacturing Company Limited

STATEMENT OF PAYABLES TO CONTRACTORS AND EQUIPMENT SUPPLIERS
DECEMBER 31, 2016
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>Vendor Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Materials South East Asia Pte Ltd.</td>
<td>$14,916,260</td>
</tr>
<tr>
<td>Lam Research International Sarl</td>
<td>5,256,320</td>
</tr>
<tr>
<td>ASML Hong Kong Ltd.</td>
<td>4,859,978</td>
</tr>
<tr>
<td>TOKYO Electron Ltd.</td>
<td>4,707,932</td>
</tr>
<tr>
<td>Others (Note)</td>
<td>32,708,653</td>
</tr>
<tr>
<td>Total</td>
<td>$62,449,143</td>
</tr>
</tbody>
</table>

Note: The amount of individual vendor included in others does not exceed 5% of the account balance.
Taiwan Semiconductor Manufacturing Company Limited

STATEMENT OF ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES
DECEMBER 31, 2016
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarantee deposit</td>
<td>$6,439,800</td>
</tr>
<tr>
<td>Receipts in advance</td>
<td>2,695,412</td>
</tr>
<tr>
<td>Utilities</td>
<td>2,043,240</td>
</tr>
<tr>
<td>Insurance expense</td>
<td>1,766,864</td>
</tr>
<tr>
<td>Research and development expense</td>
<td>1,458,825</td>
</tr>
<tr>
<td>Others (Note)</td>
<td>14,216,328</td>
</tr>
<tr>
<td>Total</td>
<td>$28,620,469</td>
</tr>
</tbody>
</table>

Note: The amount of each item in others does not exceed 5% of the account balance.
Taiwan Semiconductor Manufacturing Company Limited

STATEMENT OF BONDS PAYABLE
DECEMBER 31, 2016
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>Bonds Name</th>
<th>Trustee</th>
<th>Issuance Date</th>
<th>Interest Payment Date</th>
<th>Coupon Rate (%)</th>
<th>Total Amount</th>
<th>Repayment paid</th>
<th>Balance, End of Year</th>
<th>Unamortized Premiums (Discounts)</th>
<th>Carrying Value</th>
<th>Repayment</th>
<th>Collateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic unsecured bonds-100-1</td>
<td>Mega International Commercial Bank Co., Ltd.</td>
<td>2011.09.28</td>
<td>on 09.28 annually</td>
<td>1.40</td>
<td>$ 10,500,000</td>
<td>$ 10,500,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-100-2</td>
<td>Mega International Commercial Bank Co., Ltd.</td>
<td>2012.01.11</td>
<td>on 01.11 annually</td>
<td>1.29</td>
<td>10,000,000</td>
<td>-</td>
<td>10,000,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-101-1</td>
<td>Mega International Commercial Bank Co., Ltd.</td>
<td>2012.08.02</td>
<td>on 08.02 annually</td>
<td>1.28</td>
<td>9,500,000</td>
<td>-</td>
<td>9,500,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-101-2</td>
<td>Taipei Fubon Commercial Bank Co., Ltd.</td>
<td>2012.09.26</td>
<td>on 09.26 annually</td>
<td>1.28</td>
<td>12,700,000</td>
<td>-</td>
<td>12,700,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-101-3</td>
<td>Taipei Fubon Commercial Bank Co., Ltd.</td>
<td>2012.10.09</td>
<td>on 10.09 annually</td>
<td>1.39</td>
<td>9,000,000</td>
<td>-</td>
<td>9,000,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-101-4</td>
<td>Taipei Fubon Commercial Bank Co., Ltd.</td>
<td>2013.01.04</td>
<td>on 01.04 annually</td>
<td>1.23</td>
<td>10,000,000</td>
<td>-</td>
<td>10,000,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-102-1</td>
<td>Taipei Fubon Commercial Bank Co., Ltd.</td>
<td>2013.02.06</td>
<td>on 02.06 annually</td>
<td>1.23</td>
<td>6,200,000</td>
<td>-</td>
<td>6,200,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-102-2</td>
<td>Taipei Fubon Commercial Bank Co., Ltd.</td>
<td>2013.07.16</td>
<td>on 07.16 annually</td>
<td>1.50</td>
<td>3,600,000</td>
<td>-</td>
<td>3,600,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-102-3</td>
<td>Taipei Fubon Commercial Bank Co., Ltd.</td>
<td>2013.08.09</td>
<td>on 08.09 annually</td>
<td>1.34</td>
<td>4,000,000</td>
<td>-</td>
<td>4,000,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>Domestic unsecured bonds-102-4</td>
<td>Taipei Fubon Commercial Bank Co., Ltd.</td>
<td>2013.09.25</td>
<td>on 09.25 annually</td>
<td>1.35</td>
<td>1,500,000</td>
<td>-</td>
<td>1,500,000</td>
<td>-</td>
<td>-</td>
<td>Bullet repayment</td>
<td>Nil</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ 166,200,000</td>
<td>$ 12,000,000</td>
<td>$ 154,200,000</td>
<td>-</td>
<td>-</td>
<td>$ 154,200,000</td>
<td>Nil</td>
</tr>
</tbody>
</table>
Taiwan Semiconductor Manufacturing Company Limited

STATEMENT OF NET REVENUE
FOR THE YEAR ENDED DECEMBER 31, 2016
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th>Item</th>
<th>Shipments (Piece) (Note)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wafer</td>
<td>9,604,226</td>
<td>$ 897,955,740</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>38,431,551</td>
</tr>
<tr>
<td>Net revenue</td>
<td></td>
<td>$ 936,387,291</td>
</tr>
</tbody>
</table>

Note: 12-inch equivalent wafers.
# Taiwan Semiconductor Manufacturing Company Limited

## STATEMENT OF COST OF REVENUE

FOR THE YEAR ENDED DECEMBER 31, 2016

(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials used</td>
<td></td>
</tr>
<tr>
<td>Balance, beginning of year</td>
<td>$ 2,813,029</td>
</tr>
<tr>
<td>Raw material purchased</td>
<td>32,811,307</td>
</tr>
<tr>
<td>Raw materials, end of year</td>
<td>(3,864,429)</td>
</tr>
<tr>
<td>Transferred to manufacturing or operating expenses</td>
<td>(6,984,906)</td>
</tr>
<tr>
<td>Others</td>
<td>(22,648)</td>
</tr>
<tr>
<td>Subtotal</td>
<td>24,752,353</td>
</tr>
<tr>
<td>Direct labor</td>
<td>13,355,882</td>
</tr>
<tr>
<td>Manufacturing expenses</td>
<td>392,240,592</td>
</tr>
<tr>
<td>Manufacturing cost</td>
<td>430,348,827</td>
</tr>
<tr>
<td>Work in process, beginning of year</td>
<td>52,251,863</td>
</tr>
<tr>
<td>Work in process, end of year</td>
<td>(32,317,210)</td>
</tr>
<tr>
<td>Transferred to manufacturing or operating expenses</td>
<td>(7,557,644)</td>
</tr>
<tr>
<td>Cost of finished goods</td>
<td>442,725,836</td>
</tr>
<tr>
<td>Finished goods, beginning of year</td>
<td>7,733,331</td>
</tr>
<tr>
<td>Finished goods purchased</td>
<td>37,927,662</td>
</tr>
<tr>
<td>Finished goods, end of year</td>
<td>(8,324,267)</td>
</tr>
<tr>
<td>Transferred to manufacturing or operating expenses</td>
<td>(8,020,109)</td>
</tr>
<tr>
<td>Scrapped</td>
<td>(153,660)</td>
</tr>
<tr>
<td>Subtotal</td>
<td>471,888,793</td>
</tr>
<tr>
<td>Others</td>
<td>2,664,120</td>
</tr>
<tr>
<td>Total</td>
<td>$ 474,552,913</td>
</tr>
</tbody>
</table>
Taiwan Semiconductor Manufacturing Company Limited

STATEMENT OF OPERATING EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2016
(In Thousands of New Taiwan Dollars)

<table>
<thead>
<tr>
<th>Item</th>
<th>Research and Development Expenses</th>
<th>General and Administrative Expenses</th>
<th>Selling Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll and related expense</td>
<td>$ 25,585,675</td>
<td>$ 7,075,633</td>
<td>$ 2,038,528</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>15,515,812</td>
<td>830,609</td>
<td>10,703</td>
</tr>
<tr>
<td>Consumables</td>
<td>15,161,280</td>
<td>261,522</td>
<td>4,779</td>
</tr>
<tr>
<td>Repair and maintenance expense</td>
<td>2,475,463</td>
<td>1,149,395</td>
<td>362</td>
</tr>
<tr>
<td>Moving expense</td>
<td>277,529</td>
<td>1,462,185</td>
<td>1,771</td>
</tr>
<tr>
<td>Patents</td>
<td>-</td>
<td>1,775,446</td>
<td>-</td>
</tr>
<tr>
<td>Management fees of the Science Park Administration</td>
<td>-</td>
<td>1,685,164</td>
<td>-</td>
</tr>
<tr>
<td>Commission</td>
<td>-</td>
<td>-</td>
<td>873,088</td>
</tr>
<tr>
<td>Others (Note)</td>
<td>11,350,420</td>
<td>4,457,509</td>
<td>168,855</td>
</tr>
<tr>
<td>Total</td>
<td>$ 70,366,179</td>
<td>$ 18,697,463</td>
<td>$ 3,098,086</td>
</tr>
</tbody>
</table>

Note: The amount of each item in others does not exceed 5% of the account balance.
Taiwan Semiconductor Manufacturing Company Limited

STATEMENT OF LABOR, DEPRECIATION AND AMORTIZATION BY FUNCTION
FOR THE YEAR ENDED DECEMBER 31, 2016 AND 2015
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

<table>
<thead>
<tr>
<th>Year Ended December 31, 2016</th>
<th>Year Ended December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classified as Cost of Revenue</td>
<td>Classified as Operating Expenses</td>
</tr>
<tr>
<td>Labor cost (Note)</td>
<td></td>
</tr>
<tr>
<td>Salary and bonus</td>
<td>$ 47,718,885</td>
</tr>
<tr>
<td>Labor and health insurance</td>
<td>2,393,838</td>
</tr>
<tr>
<td>Pension</td>
<td>1,305,083</td>
</tr>
<tr>
<td>Others</td>
<td>1,692,141</td>
</tr>
<tr>
<td></td>
<td>$ 53,109,947</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$ 197,595,313</td>
</tr>
<tr>
<td>Amortization</td>
<td>$ 2,014,814</td>
</tr>
</tbody>
</table>

Note: As of December 31, 2016 and 2015, the Company had 41,850 and 40,152 employees, respectively.