Stock Code: 3105

WIN Semiconductors Corp.

2019 Annual Report

<u>Notice to readers</u>

This English version annual report is a summary translation of the Chinese version and is not an official document of the shareholders' meeting. If there is any discrepancy between the English version and Chinese version, the Chinese version shall prevail.

Taiwan Stock Exchange Market Observation Post System: http://mops.twse.com.tw
WIN's website: http://www.winfoundry.com
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Auditors

Firm: KPMG
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Overseas Securities Exchange: None
Company Website: http://www.winfoundry.com

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APPENDIX

I. LETTER TO SHAREHOLDERS

Dear Shareholders,

The year 2019 was a year of abundance to WIN Semi. Despite the industry being in a slump at the beginning of the year, our revenue began to show an upward trend each quarter following changes in the smartphone market and strong demand from customers, as well as capacity expansion being completed at the right time. This led to our record high revenue, net profit, and EPS for the year. As we enter the year 2020, governments or telecom operators around the world are accelerating the release of the 5G spectrum and construct 5G infrastructures, and smartphone manufacturers are expected to release multiple 5G models to meet the demand. Based on the estimates of numerous research institutes, penetration of 5G smartphones will rise from 1% in 2019 to 15-20% in 2020, and surpass 30% in 2021. Hence, 5G can be expected to formally enter its growth stage this year. WIN Semi. is the global leader of wireless communications power amplifiers, and has long developed related solutions for customers. We have continued to invest production capacity and R&D resources in preparation for future growth.

In spite of this success, we have not forgotten the importance of continuously improving corporate governance. WIN Semi. was selected as an Industry Mover in the Sustainability Yearbook 2020 published by S&P Global and RobecoSAM in 2020, showing that we have taken a great leap in sustainable operation and information disclosures. WIN Semi.'s overall sustainability performance ranked top 10 in the global semiconductor and semiconductor equipment industries, which proves that WIN Semi.'s efforts in implementing sustainable operation is recognized internationally and neck and neck with leaders in the semiconductor industry. The Sustainability Yearbook published by RobecoSAM is compiled based on CSA (SAM Corporate Sustainability Assessment) results for global industries each year. In the 2019 assessment items, WIN Semi. received high scores for innovation management, code of business conduct, customer relationship management, supply chain management, and corporate citizenship and philanthropy.

Furthermore, WIN Semi. has published Chinese and English version CSR reports since 2016, and was recognized in the top 5% of TPEx-listed companies in the Corporate Governance Evaluation co-organized by Taiwan Stock Exchange and Taipei Exchange for 5 consecutive years. The Company will continue dedicate our efforts to corporate governance.

2019 operating results and 2020 outlook are reported as follows:

A. Operating Performance in 2019

● **Operating Performance**

The Company's 2019 consolidated revenues totaled NT$21,377,724 thousand, representing an increase of 23.5% compared to the year 2018. 2019 net profit attributable to owners of parent was NT$4,474,399 thousand, representing an increase of 43.2% compared to the prior year, and EPS for 2019 was NT$10.59.

● **Analysis of Receipts, Expenditures, and Profitability**

Unit: NT$ thousand; %

<table>
<tr><th colspan="3">Items</th><th>2019 (Consolidated)</th><th>2018 (Consolidated)</th></tr>
<tr><td rowspan="2">Interest Income & Interest Expense</td><td colspan="2">Interest Income</td><td>67,365</td><td>59,064</td></tr>
<tr><td colspan="2">Interest Expense</td><td>50,699</td><td>22,456</td></tr>
<tr><td rowspan="6">Profitability</td><td colspan="2">Return on Total Assets (%)</td><td>11.45</td><td>8.51</td></tr>
<tr><td colspan="2">Return on Equity (%)</td><td>16.26</td><td>12.27</td></tr>
<tr><td rowspan="2">Ratio to Issued Capital (%)</td><td>Operating Income</td><td>131.08</td><td>75.63</td></tr>
<tr><td>Profit before Tax</td><td>127.19</td><td>88.12</td></tr>
<tr><td colspan="2">Profit Ratio (%)</td><td>20.59</td><td>17.71</td></tr>
<tr><td colspan="2">Earnings Per Share (NT$ dollars)</td><td>10.59</td><td>7.39</td></tr>
</table>

● **Budget Implementation**

The Company is not required to make public its 2019 financial forecast information; however, the Board of Directors approved the budget plan and the overall operating plan is in good condition.

● **Research and Development Status**

WIN continues to provide diversified new technologies to service customers; the primary compound semiconductors materials have expanded from GaAs to GaN with more than 20 processes are available and production-ready in order to satisfy the diverse wireless communication needs. In terms of market application, WIN has actively focused on the R&D for 5G infrastructure and optical communications technologies under the Internet of Things (IoT) trend in order to capture future market opportunities. In addition, WIN developed various optional processes to fullfill various unique application requirements and package technology. That approach enables highly integrated product design and superior performance with advanced packaging. For instance, the interconnection structure of Bump can be used for flip-chip attachment of GaAs die to a variety of substrate material, the optional metal layer for compact interconnection designs and high Q-factor inductors, the optional PN diodes (ESD Diode) for ESD protection, and the pHEMT technology for 0.5um E/D mode for logics circuit design. Moreover, WIN developed Hotvia, the BS via could be designed as GND or for transmitting the RF signals. Hotvia not only eases the installation with die attachment process but also eliminate wire bonding for great RF performance. WIN also provides bumping re-distribution layer (RDL) for flexible bumping.) WIN Semi. will continue to strengthen the development of technologies to provide customers with high-quality and competitive solutions for 5G smartphones, infrastructure, 3D sensing, and other optical devices.

B. Business Plan in 2020

In order to meet the growth in market demand, WIN Semi. has launched a new capacity expansion plan of 5,000 wafers per month in advance at the end of 2019. Even though we immediately faced interference from the pandemic of COVID-19 as soon as we entered 2020, capacity expansion is still in full swing in Fab C, and we expect new capacity to be sequentially released each month from end of the second quarter. We expect this new capacity to contribute during the peak season this year.

C. Development Strategy

The Company is optimistic about the demand on handheld devices and base stations created by the upgrade of wireless communications spec to 5G and Wi-Fi 6/7. Along with the popularization of the applications of optical devices, these developments will be the two main engines of growth in the next few years. With regard to 5G wireless communications, the Company closely following developments in 5G spectrum, whether it may be the most popular n77, n78, or n79 during early stages of 5G, frequency bands not used by 4G, or the n41 band that overlaps with the 4G spectrum. All of these require redesigned independent 5G power amplifiers. The Company began providing customers with 5G Sub-6GHz power amplifier solutions several years ago, and began to ramp-up production in the second half of 2019. WIN Semi. monitors developments in the release of more 5G bands in countries around the world, and even refarming the 4G spectrum for 5G, developing corresponding processes to meet customers' demand. As for infrastructure such as base stations, WIN Semi. has long applied the GaAs pHEMT process in 4G/5G base station mmWave power amplifiers and low noise amplifiers, as well as SATCOM and VSAT ground stations and MEO and LEO satellites. WIN Semi. also saw the opportunity of 5G LDMOS being replaced by GaN, and began developing GaN technologies 5-10 years in advance. Mass production has already begun to meet market demand, and shipments significantly increased in 2019 compared with the previous year.

With regard to optical devices, 3D sensing continued to maintain market leadership in 2019. Besides increasing smartphone applications and customers this year, automotive 3D sensing device projects, such as LiDAR and gesture recognition, continue to be implemented. After years of development, there will be opportunities to deliver small amounts of optical transceivers for data centers this year, and we look forward to greater contributions in the next few years.

D. The Impact of the External Competitive Environment, Regulatory Environment, and Macroeconomic Environment

WIN has always believed that there will always be competition and that the Company needs to stay ahead of the competition to maintain its leadership in the industry. The economic and political situation is volatile, and industry supply and demand fluctuates. This year, we must also face the potential impact of the novel coronavirus pandemic. Besides staying alert and cautiously responding, WIN believes that implementing corporate governance and abiding by the law will always be the right way to operate a business.

Sincerely yours,

Chin-Tsai Chen	*Kyle Chen*	*Linna Su*
Chairman & President	*CEO*	*Head of Accounting*

WIN Semiconductors Corp.

II. COMPANY PROFILE

2.1. Date of Incorporation

WIN Semiconductors Corp. was founded in October 16, 1999.

2.2. Company History

Year	Month	Milestone
1999	Oct.	WIN Semiconductors Corp. incorporated in Taiwan
	Dec.	Ground breaking ceremony for corporate office & Fab-A
2000	Jul.	Facility construction completed
	Sep.	Process equipment installation completed, process qualification initiated, and HBT preliminary design kit available
	Nov.	Completed production of the first 6-inch GaAs HBT MMIC wafer and pHEMT wafer in Asia
2001	Jan.	WIN Semiconductors Corp. initiated pre-initial public offering (pre-IPO)
	Mar.	Presented the first 6-inch 0.15µm GaAs pHEMT MMIC wafer in the world
	Apr.	pHEMT preliminary design kit available
	May	Produced the first 6-inch pHEMT MMIC wafer with 2-mil substrate in the world
	May	Granted by Economy Ministry for R&D Project
	Jun.	Presented 6-inch GaAs 2µm HBT MMIC wafer
	Sep.	Pass QS-9000 & ISO9001 certification, creating a new quality certification record of III-V semiconductor industry
	Nov.	Began foundry production for 0.15µm pHEMT
2002	May	World's first 0.15µm mHEMT wafer on 6-inch GaAs
	Jun.	Production release of 2µm HBT
	Jun.	Demonstrated the first 6-inch pHEMT wafer with 1-mil substrate in the world
	Jun.	The first 0.5µm switch pHEMT wafer for customer
	Oct.	Foundry production of 0.5µm power pHEMT
	Nov.	Production released 1µm HBT
	Nov.	Pilot run release 0.15µm power pHEMT with 2-mil substrate
	Nov.	The first & largest pure-play GaAs wafer foundry service provider to pass ISO14001 & OHSAS18001 certification
2003	Jan.	Foundry production of customer specific 3µm HBT started
	Feb.	The first 0.15µm mHEMT wafer for customer
	Dec.	Shipped more than 1.5 million WLAN PAs in a single month
2004	Feb.	Baseline release of 2µm high ruggedness HBT
	Sep.	Pilot run of 0.5µm 35V pHEMT for CATV
2005	May.	Successfully developed HBT process for high efficiency, high performance 2G/3G cellphone application

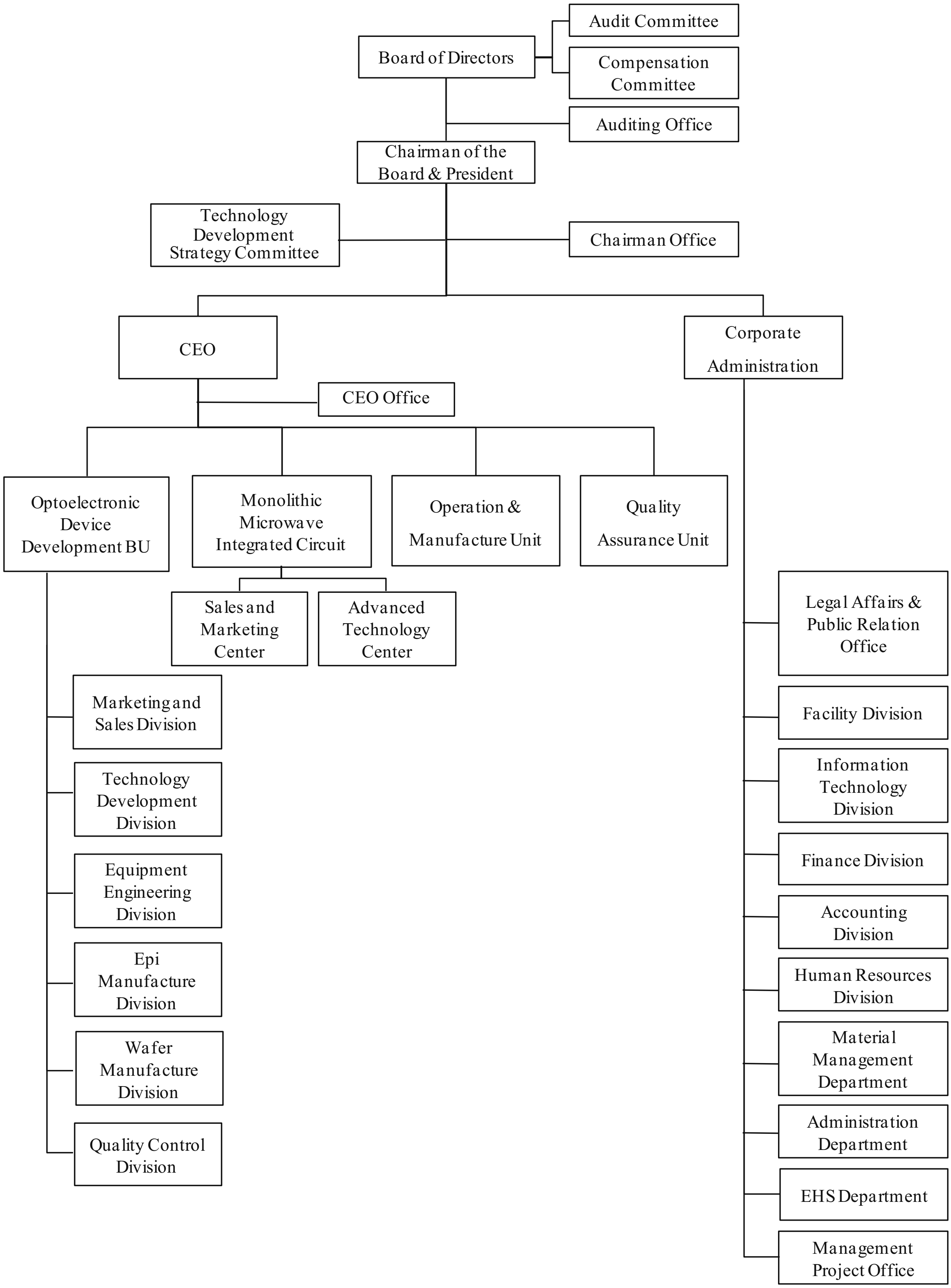
Year	Month	Milestone
2007	Apr.	Acquired Fab-B's land and factory
	Apr.	Established MMIC and Optoelectronic business units, lead by PhD Y.C. Wang and PhD W.M. Chang respectively
	Dec.	Started making profit annually (EPS: NT$0.79)
2008	May	Successfully developed 0.25μm pHEMT MMIC wafer process
	Jun.	Skyworks Solution announced WIN as their official GaAs foundry
	Oct.	The first pilot run of HBT GaAs wafer in Fab-B
2009	Apr.	Fab-B mass production
	Jul.	Successfully developed BiHEMT process to integrates both of HBT and pHEMT processes
	Oct.	Initial public offering
	Oct.	Announced strategic partnership with Anadigics
2010	Apr.	Acquired Fab-B second phase land and factory
	May	Start the second phase expansion of Fab-B
	Nov.	Passed ISO/TS 16949 certification
	Dec.	Developed high performance application for multiphase and multisystem cellphone switch process
	Dec.	Successfully developed the first 6-inch 0.1μm MMIC wafer in the world
2011	May.	Morgan Stanley Capital International enlists WIN Semiconductors Corp. in MSCI Index
	Oct.	Taipei Exchange (TPEx) awarded Contribution Excellence Golden Laurel Award to WIN Semiconductors Corp.
	Nov.	Awarded the best supplier award from M/A COM Technology Solutions
	Dec.	Stock was offered publically in TPEx
	Dec.	Annual revenue broke NT$10 billion record
2012	Oct.	WIN participates Seasoned Equity Offering and offers Global Depositary Receipts
	Dec.	Granted 2012 Best Supplier Award by muRata, a publicly traded company in Japan
	Dec.	Awarded 2012 Best Technology Partner by Inphi, a publicly traded company in US
	Dec.	Became one of the world's top 12 foundries, and only one manufacturing GaAs products with 62.4% pure-play foundry service market share
2013	Dec.	Won 3rd National Industrial Innovation Award, Outstanding Enterprise Innovation Award category
2014	Feb.	Won 2nd Taiwan Mittelstand Award

Year	Month	Milestone
2015	Apr.	WIN got the top 5% in Y2014 Corporate Governance Evaluation on TPEx-listed companies
	Jul.	To improve the capital structure and enhance return on equity, WIN conducted a 20% capital reduction by distributing cash to shareholders
	Dec.	Surpassed 1,000,000 wafers shipped
2016	Jan.	Fab-C completed the facility construction
	Mar.	WIN attended the 2016 Optical Fiber Conference and launched foundry services for optical device manufacturing
	Apr.	Fab-C formally announced for mass production
	Apr.	WIN got the top 5% in Y2015 Corporate Governance Evaluation on TPEx-listed companies
	Aug.	To improve the capital structure and enhance return on equity, WIN conducted a 30% capital reduction by distributing cash to shareholders
	Sep.	WIN GaN technology project got A+ Industrial Innovative R&D Program of the MOEA
2017	Apr.	WIN got the top 5% in Y2016 Corporate Governance Evaluation on TPEx-listed companies
	Oct.	WIN market value broke NT$100 billion record
	Nov.	Morgan Stanley Capital International enlists WIN Semiconductors Corp. in MSCI Global Standard Indexes
2018	Jan.	Pass AS9100 certification
	Feb.	Pass SONY Green Partner certification (WIN Fab-B)
	Apr.	WIN got the top 5% in Y2017 Corporate Governance Evaluation on TPEx-listed companies
2019	Mar.	WIN passed the certification of "ANSI/ESD S20.20 Electrostatic discharge protection control system"
	Apr.	WIN got the top 5% in Y2018 Corporate Governance Evaluation on TPEx-listed companies
	Nov.	Development of Semi-Insulating Silicon Carbide (S.I.-SiC) Wafer and Gallium Nitride Technology for New Generation RF Communication Applications
2020	Feb.	Selected as Industry Mover for The Sustainability Yearbook 2020 published by S&P Global in collaboration with RobecoSAM
	Apr.	WIN got the Top 5% in Y2019 Corporate Governance Evaluation on TPEx-listed Companies and Top 10% among Listed Electronics Companies with Market Value of 10 Billion or More

III. CORPORATE GOVERNANCE REPORT

3.1. Organization

Organization Chart



Major Corporate Functions

Department	Functions
Chairman Office	Execute the projects instructed by the Chairman.
Technology Development Strategy Committee (TDSC)	1. Continuously lead the research of technology innovation and integration of diverse technologies to reach the goal of gaining advantage of integrated service. 2. Develop and retain key technical talents and facilitate recruitment strategy for talents. 3. Assist in outlining global strategies of technology and operation.
CEO Office	Assist CEO in improving management effectiveness including: 1. Business operation analysis, planning and execution. 2. Coordination and improvement of management system. 3. Integrate, develop, and improve efficiency of enterprise resources. 4. Introduction of management information system. 5. Implementation and planning of projects.
Auditing Office	1. Regularly and on an ad-hoc basis implementing auditing activities to ensure the operation performance and progress of improvement in different business operation aspects; supervising and reviewing the self-inspection reports prepared by all departments and subsidiaries. 2. Submitting the audit reports, findings of deficiencies of the internal control system and follow up on the correction of any defects and irregularities to the independent directors. 3. Attending and presenting audit reports to the Board of Directors and the Audit Committee.
Monolithic Microwave Integrated Circuit BU	Planning and executing GaAs MMIC's key materials, technologies, process, equipment improvement, manufacturing and selling.
Optoelectronic Device Development BU	R&D and manufacturing for III-V optoelectronic materials and components.
Operation & Manufacture Unit	1. Manages efficiency of manufacturing operations of all fabs and conducts capacity management. 2. Operates mainstream product manufacturing and integrates process engineering technology development to support all BU's production orders. 3. Ensures implementing quality management system to meet customers' expectations on products. 4. Coordinates manufacturing operations resources and production demands to drive business efficiency.
Quality Assurance Unit	Coordination of product quality improvement and execution of quality control. 1. Implement quality assurance policy and carry out to daily operation. 2. Quality system build up and maintenance. 3. Customers complain management. 4. Engineering changes control. 5. Reliability system building up. 6. Product quality monitoring, analysis, and improvement.

Department	Functions
Corporate Administration	1. Legal Affairs & Public Relation Office: Drafting, reviewing, negotiating and managing of contracts and legal documents. Providing of legal advice and consultation to the management, intellectual property management, legal disputes and litigations. Public relation, corporate social responsibility and related projects. 2. Facility Division: Planning, set-up and maintaining of fab facility system. 3. Information Technology Division: Planning, implementation, managing and integration of IT systems, including application system fulfillment and infrastructure establishment in the company. 4. Finance Division: Fund raising, cash control and management analysis, maintaining credit facility and bank relationship, evaluating and monitoring investments, property insurance, stock affairs and investor relations. 5. Accounting Division: Reviewing transaction documents and vouchers, conducting accounting close, tax filing, budgeting and book-keeping. 6. Human Resources Division: Division: Ensuring human resources management to contribute to organization's accomplishment, based upon the company's business strategy, goals and objectives. Setting up, planning and executing the matters of employee recruitment, training, salary, compensation, welfare, performance management and employee engagement. 7. Material Management Department: Supply chain planning and risk management, raw material, machinery and equipments purchasing and subcontracting; inventory planning and controlling, import, export and storage management. 8. Administration Department: Providing administration and management service including employee resident, staff cafeteria, catering service, shuttle bus service, cleaning service and security. 9. EHS Department: Planning, managing and operating of environmental protection, fire prevention and labor safety and health of the company. 10. Management Project Office: Assessment, planning, and implementation of investments and M&A in coordination with the group's strategy and direction. Supervision, management, and professional assistance of subsidiaries. 11. An interdepartmental team for Corporate Social Responsibility (CSR) project to collaborate various organization of the company for planning, implementing, compiling and exploring issues of CSR related activities and issuing of CSR report.

3.2. Directors and Management Team

Directors

A. Information Regarding Directors

April 14, 2020

Title	Nationality	Name	Gender	Date Elected	Term (Years)	Date First Elected	Shareholding when Elected		Current Shareholding (Note 1)		Spouse & Minor Shareholding (Note 1)		Shareholding by Nominee Arrangement (Note 1)		Education & Major Experience	Other Major Positions	Executives, Directors or Supervisors Who Are Spouses or within Two Degrees of Kinship			Remarks (Note 4)
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relation	
Chairman	R.O.C.	Chin-Tsai Chen	Male	06/14/2019	3	05/01/2003	12,402,953	2.93	12,752,953	3.01	1,045,368	0.25	0	0	• Master Degree in Public Administration, University of San Francisco, USA • Master Degree in Accounting, Tamkang University, Taiwan • Director, Namchow Chemical Industrial Co., Ltd. • General Manager, Namchow Chemical Industrial Co., Ltd.	• President, WIN Semiconductors Corp. • Vice Chairman, HIWIN Technologies Corp. • Independent Director, Kinsus Interconnect Technology Corp. • Independent Director, Tong Hsing Electronic Ind, Ltd. • Director Representative, Taipei Financial Center Corp. • Chairman, ITEQ Corporation • Chairman Representative, WIN Venture Capital Corp. • Director Representative, Mercuries Life Insurance • Chairman Representative, WIN Earn Investment Corp. • Chairman Representative, WIN Chance Investment Corp. • Director, WIN SEMI. USA, INC. • Director, Win Semiconductors Cayman Islands Co., Ltd. • Chairman, Chainwin Agrotech and Biotech (Cayman Islands) Ltd. • Chairman, Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd. • Chairman, Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd. • Chairman, Jiangsu Merit/CM Agriculture Development Co., Ltd. • Director, Jiangsu CM/Merit Agriculture Development Co., Ltd. • Chairman, Jiangsu Win Yield Agriculture Development Co., Ltd. • Chairman, Jiangsu Win Shine Agriculture Development Co., Ltd • Chairman, Jiangsu Merit Runfu Agriculture Development Co., Ltd. • Director Representative, , Phalanx Biotech Group, Inc.	Director	Shun-Ping Chen	Son	(Note 4)

Title	Nationality	Name	Gender	Date Elected	Term (Years)	Date First Elected	Shareholding when Elected		Current Shareholding (Note 1)		Spouse & Minor Shareholding (Note 1)		Shareholding by Nominee Arrangement (Note 1)		Education & Major Experience	Other Major Positions	Executives, Directors or Supervisors Who Are Spouses or within Two Degrees of Kinship			Remarks (Note 4)
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relation	
Vice Chairman	ROC	Yu-Chi Wang	Male	06/14/2019	3	06/19/2008	880,000	0.21	800,000	0.19	0	0	0	0	• PhD in Material Engineering, Rutgers University, USA • Researcher, Bell Laboratories, Lucent Technologies, Murray Hill, NJ, USA • CEO, WIN Semiconductors Corp.	• Chairman of Technology Development Strategy Committee, WIN Semiconductors Corp.	-	-	-	-
Director	R.O.C.	International Fiber Technology Co., Ltd.	-	06/14/2019	3	10/12/1999	3,503,097	0.83	3,503,097	0.83	0	0	0	0	None	None	-	-	-	-
	R.O.C.	Representative: Ming-Chien Hsieh, (Note 2)	Male	11/12/2019	3	11/12/2019	0	0	0	0	0	0	0	0	• Bachelor Degree in Architecture, National Cheng Kung University, Taiwan • Master Degree in Science of Finance, Golden Gate University, USA • Chairman, Hua-chuang Development Co., Ltd.	• Chairman, Kuo Chang Investment Enterprise Co., Ltd. • Director, Kuo Cheng Investment Enterprise Co., Ltd.	-	-	-	-
Director	R.O.C.	Li-Cheng Yeh	Male	06/14/2019	3	06/24/2016	7,687,525	1.81	7,687,525	1.82	1,306,708	0.31	0	0	• Master Degree in Computer Science, Pace University, USA • Supervisor, Inventec Energy Corporation	• Chairman, Kou Hsieh Investment Co., Ltd. • Chairman, Fu Tai Investment Co., Ltd. • Chairman, Chuan Cheng Assets Management Co., Ltd. • Vice Chairman, Royal Base Corporation • Director Representative, Inventec Appliances Corp. • Director, Inventec Solar Energy Corporation • Supervisor, Inventec Besta Co., Ltd.	-	-	-	-
Director	R.O.C.	Wen-Ming Chang	Male	06/14/2019	3	06/19/2008	314,750	0.07	296,750	0.07	0	0	0	0	• PhD in Chemical Engineering, Clemson University, USA • General Manager, Huga Optotech Inc.	• BU General Manager, WIN Semiconductors Corp. • Independent Director, GIGA SOLAR MATERIALS CORPORATION	-	-	-	-
Director	R.O.C.	Shun-Ping Chen	Male	06/14/2019	3	06/10/2013	1,897,993	0.45	1,897,993	0.45	0	0	0	0	• Master Degree in Business Administration, Rutgers University, USA • Deputy Spokesperson, ASUSTEK Computer Inc. • Manager, Protek (Shanghai) Limited	• General Manager of Corporate Administration, WIN Semiconductors Corp • Chairman of Corporate Social Responsibility Committee, WIN Semiconductors Corp. • Supervisor Representative, CDIB CME Fund Ltd. • Director Representative, NEW FUTURE CAPITAL CO., LTD. • Independent Director, Wei Chuan Foods Corp.	Chairman	Chin-Tsai Chen	Father	-

Title	Nationality	Name	Gender	Date Elected	Term (Years)	Date First Elected	Shareholding when Elected		Current Shareholding (Note 1)		Spouse & Minor Shareholding (Note 1)		Shareholding by Nominee Arrangement (Note 1)		Education & Major Experience	Other Major Positions	Executives, Directors or Supervisors Who Are Spouses or within Two Degrees of Kinship			Remarks (Note 4)
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relation	
Independent Director	R.O.C.	Shen-Yi Lee	Male	06/14/2019	3	06/24/2010 (Note 3)	38,000	0.01	30,000	0.01	0	0	0	0	• PhD in Law, Chinese Culture University, Taiwan • Qualified Arbitrator, Chinese Arbitration Association • Chairman, Consumer's Foundation, Taiwan, R.O.C. • Commissioner, Political Party Review Commission, Executive Yuan, Taiwan • Commissioner, Fair Trade Commission, Executive Yuan, Taiwan • Member, 2nd and 3rd Sessions, Control Yuan, Taiwan	• Compensation Committee Member, WIN Semiconductors Corp. • Compensation Committee Member, Capital Futures Corporation • Director, Dharma Drum Mountain Humanity and Social Foundation • Director Representative, Nan Ya Plastics Corporation • Director, East Tender Optoelectronics Corporation • Supervisor, Chinese Culture University • Supervisor, Taoyuan International Airport Services Co., Ltd. • Independent Director, Capital Securities Corporation • Compensation Committee Member, Capital Securities Corporation	-	-	-	
Independent Director	R.O.C.	Chin-Shih Lin	Male	06/14/2019	2	06/16/2017	0	0	0	0	0	0	0	0	• Master Degree in Accounting, Tamkang University, Taiwan • Certified Public Accountant (CPA) • Supervisor, Prolific Technology Inc. • Independent Director, Namchow Holdings Co., Ltd. • Compensation Committee Member, Namchow Holdings Co., Ltd.	• Compensation Committee Member, WIN Semiconductors Corp. • Certified Public Accountant (CPA) • Supervisor, Prolific Technology Inc. • Independent Director, Namchow Holdings Co., Ltd. • Compensation Committee Member, Namchow Holdings Co., Ltd.	-	-	-	
Independent Director	R.O.C.	Hai-Ming Chen	Female	06/14/2019	3	06/14/2019	5120	0.001	5120	0.001	0	0	0	0	• Emeritus Professor, Tamkang University, Taiwan • Professor, Graduate Institute of Management Sciences & Dean of Human Resource, Tamkang University, Taiwan • Chairman and Professor, Graduate Institute of Management Science, Tamkang University, Taiwan • Adjunct Professor, Institute of Business and Management, National Chiao Tung University, Taiwan • Consultant, Taiwan Research Institute • Compensation Committee Member, BES Engineering Corporation	• Chairman and Member of Compensation Committee, WIN Semiconductors Corp. • Independent Director & Chairman of Compensation Committee, Tecom Co., Ltd. • Compensation Committee Member, Namchow Holdings Co., Ltd.	-	-	-	

Note 1: Shareholdings as of April 14, 2020

Note 2: Representative of International Fiber Technology Co., Ltd has changed to Ming-Chien Hsieh from Su-Chang Hsieh effective on Nov. 12, 2019.

Note 3: Independent Director, Shen-Yi Lee, was not the Company's director during the period from June 10, 2013 to June 9, 2016.

Note 4: Where the chairman and president or equivalent position (highest level managerial officer) is the same person, the spouse, or a first-degree relative, the reason, reasonableness, necessity, and response measures must be disclosed:

In order to strengthen the company's operation and management, the chairman and the president of the company are the same person. Under the leadership of the chairman, the Company's profit keep reaching record high, proven that the company's operations still need to draw on his experience. However, the company is expected to add one more independent director in the ninth session of Board of Directors to further strengthen corporate governance and increase independence,

B. Major Shareholders of the Institutional Shareholders

April 14, 2020

Name of Institutional Shareholders	Major Shareholders of the Institutional Shareholders
International Fiber Technology Co., Ltd.	Yun-Yun Hou (26.0%)
	Ming-Hui Hsieh (21.9%)
	Ming-Chieh Hsieh (6.3%)
	Kuo Cheng Investment Enterprise Co., Ltd. (20.3%)
	Kuo Chang Investment Enterprise Co., Ltd. (20.4%)

C. Major Shareholders of the Company's Institutional Shareholders

April 14, 2020

Name of Institutional Shareholders	Major Shareholders of the Institutional Shareholders
Kuo Cheng Investment Enterprise Co., Ltd.	Ming-Chieh Hsieh (66.9%)
	Chao-Chi Hsiung (16.9%)
Kuo Chang Investment Enterprise Co., Ltd.	Ming-Chien Hsieh (77.8%)
	Ming-Chieh Hsieh (11.1%)
	Ming-Hui Hsieh (11.1%)

D. Professional Qualifications and Independence Analysis of Directors

April 16, 2019

Criteria / Name	Meet One of the Following Professional Qualification Requirements, Together with at Least Five Years Work Experience			Independence Criteria (Note)												Number of Other Public Companies in Which the Individual is Concurrently Serving as an Independent Director
	An Instructor 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	A Judge, Public Prosecutor, Attorney, CPA, or Other Professional or Technical Specialist Who has Passed a National Examination and been Awarded a Certificate in a Profession Necessary for the Business of the Company	Have Work Experience in the Areas of Commerce, Law, Finance, or Accounting, or Otherwise Necessary for the Business of the Company	1	2	3	4	5	6	7	8	9	10	11	12	
Chin-Tsai Chen	✓		✓					✓	✓		✓	✓		✓	✓	2
Yu-Chi Wang	✓		✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	0
Ming-Chien Hsieh (Representative of International Fiber Technology Co., Ltd.)			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Li-Cheng Yeh			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Wen-Ming Chang			✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	1
Shun-Ping Chen			✓		✓	✓		✓	✓	✓	✓	✓		✓	✓	1
Chin-Shih Lin		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1
Shen-Yi Lee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1
Hai-Ming Chen	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1

Note: Please tick the corresponding boxes if directors have been any of the following during the two years prior to be elected or during the term of office.

1. Not an employee of the Company or any of its affiliates.
2. Not a director or supervisor of any of the Company's affiliates. The same does not apply, however, in cases where the person is an independent director of the Company, its parent company, or any subsidiary, as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary.
3. Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or more of the total number of outstanding shares of the Company or ranking in the top 10 in holdings.
4. Not a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of a managerial officer under subparagraph 1 or any of the persons in the preceding two subparagraphs.
5. Not a director, supervisor, or employee of a corporate shareholder that directly holds 5% or more of the total number of issued shares of the Company, or that ranks among the top five in shareholdings, or that designates its representative to serve as a director or supervisor of the Company under Article 27, paragraph 1 or 2 of the Company Act.
6. Not a director, supervisor, or employee of the Company which majority director seats or voting shares and those of any other company are controlled by the same person.
7. Not a director (or governor), supervisor, or employee of the Company or institution which the chairperson, general manager, or person holding an equivalent position of the Company and a person in any of those positions at another company or institution are the same person or are spouses.
8. Not a director, supervisor, officer, or shareholder holding 5% or more of the shares, of a specified company or institution that has a financial or business relationship with the Company.

9. Not a professional individual who, or an owner, partner, director, supervisor, or officer of a sole proprietorship, partnership, company, or institution that provides auditing services to the Company or any affiliate of the Company, or that provides commercial, legal, financial, accounting or related services to the Company or any affiliate of the Company for which the provider in the past 2 years has received cumulative compensation exceeding NT$500,000, or a spouse thereof, provided this restriction does not apply to a member of the remuneration committee, public tender offer review committee, or special committee for merger/ consolidation and acquisition, who exercises powers pursuant to the Act or to the Business Mergers and Acquisitions Act or related laws or regulations.
10. Not having a marital relationship, or a relative within the second degree of kinship to any other director of the Company.
11. Not been a person of any conditions defined in Article 30 of the Company Law.
12. Not a governmental, juridical person or its representative as defined in Article 27 of the Company Law.

Management Team

April 14, 2020

Title	Nationality	Name	Gender	Date Effective	Shareholding (Note1)		Spouse & Minor Shareholding (Note1)		Shareholding by Nominee Arrangement (Note1)		Education & Major Experience	Other Major Positions	Managers who are Spouses or within Second Degrees of Kinship			Remarks (Note 2)
					Shares	%	Shares	%	Shares	%			Title	Name	Relation	
President	R.O.C.	Chin-Tsai Chen	Male	12/16/2011	12,752,953	3.01	1,045,368	0.25	0	0	• Master Degree in Public Administration, University of San Francisco, USA • Master Degree in Accounting, Tamkang University, Taiwan • Director, Namchow Chemical Industrial Co., Ltd. • General Manager , Namchow Chemical Industrial Co., Ltd.	• Vice Chairman, HIWIN Technologies Corp. • Independent Director, Kinsus Interconnect Technology Corp. • Independent Director, Tong Hsing Electronic Ind, Ltd. • Director Representative, Taipei Financial Center Corp. • Chairman, ITEQ Corporation • Chairman Representative, WIN Venture Capital Corp. • Director Representative, Mercuries Life Insurance • Chairman Representative, WIN Earn Investment Corp. • Chairman Representative, WIN Chance Investment Corp. • Director, WIN SEMI. USA, INC. • Director, Win Semiconductors Cayman Islands Co., Ltd. • Chairman, Chainwin Agrotech and Biotech (Cayman Islands) Ltd. • Chairman, Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd. • Chairman, Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd. • Chairman, Jiangsu Merit/CM Agriculture Development Co., Ltd. • Director, Jiangsu CM/Merit Agriculture Development Co., Ltd. • Chairman, Jiangsu Win Yield Agriculture Development Co., Ltd. • Chairman, Jiangsu Win Shine Agriculture Development Co., Ltd • Chairman, Jiangsu Merit Runfu Agriculture Development Co., Ltd. • Director Representative, , Phalanx Biotech Group, Inc.	General Manager of Corporate Administration,	Shun-Ping Chen	Son	(Note 2
Chairman of Technology Development Strategy Committee	R.O.C.	Yu-Chi Wang	Male	09/28/2010	800,000	0.19	0	0	0	0	• PhD in Material Engineering, Rutgers University, USA • Researcher, Bell Laboratories, Lucent Technologies, Murray Hill, NJ, USA • CEO, WIN Semiconductors Corp.	-	-	-	-	-
CEO	R.O.C.	Kyle Chen	Male	07/01/2010	175,176	0.04	0	0	0	0	• EMBA, Graduate Institute of Accounting, National Taiwan University, Taiwan • Fab Director, Macronix International Co., Ltd. • BU General Manager, WIN Semiconductors Corp.	• CEO, WIN SEMI. USA, INC.	-	-	-	-
BU General Manager	R.O.C.	Wen-Ming Chang	Male	03/01/2007	296,750	0.07	0	0	0	0	• PhD in Chemical Engineering, Clemson University, USA • General Manager, Huga Optotech Inc.	Independent Director, GIGA SOLAR MATERIALS CORPORATION	-	-	-	-
General Manager of Corporate Administration	R.O.C	Shun-Ping Chen	Male	07/01/2010	1,897,993	0.45	0	0	0	0	• Master Degree in Business Administration, Rutgers University, USA • Deputy Spokesperson, ASUSTEK Computer Inc. • Manager, Protek (Shanghai) Limited	• Supervisor Representative, CDIB CME Fund Ltd. • Director Representative, NEW FUTURE CAPITAL CO., LTD. • Independent Director, Wei Chuan Foods Corp.	President	Chin-Tsai Chen	Father	-
Vice President	R.O.C.	Brian Lee	Male	04/01/2010	385,330	0.09	0	0	0	0	• Master's Degree, University of Southern California, USA • Sales Manager, United Microelectronics Corporation	-	-	-	-	-

Title	Nationality	Name	Gender	Date Effective	Shareholding (Note1)		Spouse & Minor Shareholding (Note1)		Shareholding by Nominee Arrangement (Note1)		Education & Major Experience	Other Major Positions	Managers who are Spouses or within Second Degrees of Kinship			Remarks (Note 2)
					Shares	%	Shares	%	Shares	%			Title	Name	Relation	
Vice President	Canada	Lap-Sum Yip	Male	05/01/2016	3,473	0.00	56,043	0.01	0	0	• PhD in Electrical Engineering, McGill University, Canada	-	-	-	-	-
Vice President	R.O.C.	Eric Hsu	Male	05/15/2018	200,000	0.05	0	0	0	0	• Master Degree in Material Science and Engineering, National Tsing Hua University, Taiwan • Manager, United Microelectronics Corporation	• Director, Nan Ya Food Industrial Corp.	-	-	-	-
Vice President	R.O.C.	HP Hsiao	Male	05/15/2018	30,113	0.01	0	0	0	0	• PhD in Optics and Photonics, National Central University, Taiwan • Director of Technology Development, Inforcomm Semiconductor Corporation • Assistant Professor, Department of Electrical Engineering, Dayeh University, Taiwan • Technical Consultant, Hugo Optotech Inc. • Researcher, Chunghwa Telecom Laboratories	-	-	-	-	-
Vice President	R.O.C.	S.Y. Wang	Male	09/01/2005	190,000	0.04	0	0	0	0	• Master Degree in Industrial Engineering and Engineering Management, Tsing Hua University, Taiwan • Manager, Macronix International Co., Ltd.	-	-	-	-	-
Chief Officer of Corporate Governance and Associate Vice President	R.O.C.	Annie Yu	Female	03/15/2005	14,202	0.00	0	0	0	0	• Master Degree in Law, Cornell University, USA • Supervisor, Huga Optotech Inc.	-	-	-	-	-
Associate Vice President of Accounting Division	R.O.C.	Linna Su	Female	11/01/2010	83,706	0.02	0	0	0	0	• Master Degree in Accounting, Soochow University, Taiwan • Associate Manager of Accounting & Audit Manger, Elitegroup Computer Systems Co., Ltd.	-	-	-	-	-
Associate Vice President of Finance Division	R.O.C.	Joe Tsen	Male	11/01/2010	337,834	0.08	0	0	0	0	• MBA in Finance, Baruch College, USA • Account Manager, CIBC, Canada	• CFO, WIN SEMI. USA, INC. • Director, Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd. • Supervisor, Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd. • Supervisor, Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd. • Supervisor, Jiangsu Merit Runfu Agriculture Development Co., Ltd. • Supervisor, Jiangsu Merit/CM Agriculture Development Co., Ltd. • Supervisor, Jiangsu Win Yield Agriculture Development Co., Ltd. • Supervisor, Jiangsu Win Shine Agriculture Development Co., Ltd	-	-	-	-

Note 1: Shareholdings as of April 14, 2020.

Note 2: Where the chairman and president or equivalent position (highest level managerial officer) is the same person, the spouse, or a first-degree relative, the reason, reasonableness, necessity, and response measures must be disclosed:

In order to strengthen the company's operation and management, the chairman and the president of the company are the same person. Under the leadership of the chairman, the Company’s profit keep reaching record high, proven that the company's operations still need to draw on his experience. However, the company is expected to add one more independent director in the ninth session of Board of Directors to further strengthen corporate governance and increase independence,.

Remuneration of Directors, President and Vice President

A. Remuneration of Directors

Unit: NT$ thousand; Shares in thousands; %

<table>
<tr><th rowspan="4">Title</th><th rowspan="4">Name</th><th colspan="8">Remuneration (Note1)</th><th rowspan="2" colspan="2">Ratio of Total Remuneration (A+B+C+D) to Net Income (%) (Note 4)</th><th colspan="8">Relevant Remuneration Received by Directors Who Are Also Employees</th><th rowspan="2" colspan="2">Ratio of Total Compensation (A+B+C+D+E+F+G) to Net Income (%) (Note 4)</th><th rowspan="4">Compensation Paid to Directors from Non-consolidated Affiliates or Parent Company</th></tr>
<tr><th colspan="2">Base Compensation (A)</th><th colspan="2">Severance Pay (B) (Note 2)</th><th colspan="2">Bonus to Directors (C) (Note 3)</th><th colspan="2">Allowances (D)</th><th colspan="2">Salary, Bonuses, and Allowances (E)</th><th colspan="2">Severance Pay (F) (Note 2)</th><th colspan="4">Profit Sharing-Employee Bonus (G) (Note 3)</th></tr>
<tr><th rowspan="2">The Company</th><th rowspan="2">All Consolidated Entities</th><th rowspan="2">The Company</th><th rowspan="2">All Consolidated Entities</th><th rowspan="2">The Company</th><th rowspan="2">All Consolidated Entities</th><th rowspan="2">The Company</th><th rowspan="2">All Consolidated Entities</th><th rowspan="2">The Company</th><th rowspan="2">All Consolidated Entities</th><th rowspan="2">The Company</th><th rowspan="2">All Consolidated Entities</th><th rowspan="2">The Company</th><th rowspan="2">All Consolidated Entities</th><th colspan="2">The Company</th><th colspan="2">All Consolidated Entities</th><th rowspan="2">The Company</th><th rowspan="2">All Consolidated Entities</th></tr>
<tr><th>Cash</th><th>Stock</th><th>Cash</th><th>Stock</th></tr>
<tr><td>Chairman</td><td>Chin-Tsai Chen</td><td>0</td><td>0</td><td>0</td><td>0</td><td>53,450</td><td>53,450</td><td>30</td><td>30</td><td>1.20%</td><td>1.20%</td><td rowspan="8">146,910</td><td rowspan="8">186,787</td><td rowspan="8">324</td><td rowspan="8">324</td><td rowspan="8">90,040</td><td rowspan="8">0</td><td rowspan="8">90,040</td><td rowspan="8">0</td><td rowspan="8">7.25%</td><td rowspan="8">8.14%</td><td rowspan="8">0</td></tr>
<tr><td rowspan="3">Director (Note 6)</td><td>International Fiber Technology Co., Ltd. -</td><td rowspan="7">0</td><td rowspan="7">0</td><td rowspan="7">0</td><td rowspan="7">0</td><td rowspan="7">33,406</td><td rowspan="7">33,406</td><td rowspan="7">130</td><td rowspan="7">130</td><td rowspan="7">0.75%</td><td rowspan="7">0.75%</td></tr>
<tr><td>Representative: Ming-Chien Hsieh</td></tr>
<tr><td>Former Representative: Su-Chang Hsieh</td></tr>
<tr><td>Director</td><td>Li-Cheng Yeh</td></tr>
<tr><td>Director</td><td>Yu-Chi Wang</td></tr>
<tr><td>Director</td><td>Wen-Ming Chang</td></tr>
<tr><td>Director</td><td>Shun-Ping Chen</td></tr>
</table>

Title	Name	Remuneration (Note1)								Ratio of Total Remuneration (A+B+C+D) to Net Income (%) (Note 4)		Relevant Remuneration Received by Directors Who Are Also Employees								Ratio of Total Compensation (A+B+C+D+E+F+G) to Net Income (%) (Note 4)		Compensation Paid to Directors from Non-consolidated Affiliates or Parent Company
		Base Compensation (A)		Severance Pay (B) (Note 2)		Bonus to Directors (C) (Note 3)		Allowances (D)				Salary, Bonuses, and Allowances (E)		Severance Pay (F) (Note 2)		Profit Sharing- Employee Bonus (G) (Note 3)						
		The Company	All Consolidated Entities	The Company	All Consolidated Entities	The Company	All Consolidated Entities	The Company	All Consolidated Entities	The Company	All Consolidated Entities	The Company	All Consolidated Entities	The Company	All Consolidated Entities	The Company		All Consolidated Entities		The Company	All Consolidated Entities	
																Cash	Stock	Cash	Stock			
Independent Director	Chin-Shih Lin	0	0	0	0	20,044	20,044	90	90	0.45%	0.45%	0	0	0	0	0	0	0	0	0.45%	0.45%	0
Independent Director	Shen-Yi Lee																					
Independent Director	Hai-Ming Chen (Note 7)																					
Independent Director	Wei-Lin Wang (Note 8)																					

* Compensation policy, standards/packages, procedures, the linkage to operating performance and future risk exposure:
  Remuneration for Directors and independent directors is made according to the Company's Articles of Incorporation. According to the Article, if there is any net profit after closing of a fiscal year, no more than 3% of the same shall be allocated as Directors' compensation. The rational of Directors' remuneration policy takes into account the Procedures for Board Performance Evaluation, overall business performance of the Company, operation requirement and development of the industry in the future, and the individual Director contribution to the Company's operations. The reasonable Directors' compensation is proposed by the Compensation Committee and approved by the Board of Directors, in addition, a report of such remuneration shall be submitted to the shareholders' meeting.
* Other than disclosure in the above table, Directors remunerations earned by providing services (e.g. providing consulting services as a non-employee) to the Company and all consolidated entities in the 2018 financial statements: None.

Note 1: If the total remuneration paid to all directors and supervisors in their capacity as directors or supervisors from all consolidated entities exceeds 2% of the net income, and the remuneration paid to any individual director or supervisor exceeds NTD$15 million, the remuneration paid to that individual director or supervisor shall be disclosed.

Note 2: Pensions funded according to applicable law, there was no pensions paid during the most recent year.

Note 3: The employees' remuneration and Directors' remuneration for year 2019 were NT$368,400 thousand and NT$106,900 thousand, respectively, which were approved by the Board of Directors' meeting on March 18, 2020 and will be reported at the 2019 Annual Shareholders' Meeting.

Note 4: The Company's net income for 2019 was NT$4,474,399 thousand.

Note 5: The Company that has had an average ratio of share pledging by directors in excess of 50 percent in any 3 months during the most recent fiscal year: None

Note 6: Representative of International Fiber Technology Co., Ltd has changed to Ming-Chien Hsieh from Su-Chang Hsieh effective on Nov. 12, 2019.

Note 7: Ms. Hai-Ming Chen was elected as an independent director by AGM on June 14, 2019.

Note 8: Mr. Wei-Lin Wang's tenure expired on June 14, 2019

Range of Remuneration	Name of Directors			
	Total of (A+B+C+D)		Total of (A+B+C+D+E+F+G)	
	The Company	All Consolidated Entities	The Company	All Consolidated Entities
NT$0~NT$999,999	Directors: Ming-Chien Hsieh (Note 1) Independent Directors: Wei-Lin Wang	Directors: Ming-Chien Hsieh (Note 1) Independent Directors: Wei-Lin Wang	Directors: Ming-Chien Hsieh (Note 1) Independent Directors: Wei-Lin Wang	Directors: Ming-Chien Hsieh (Note 1) Independent Directors: Wei-Lin Wang
NT$1,000,000 ~ NT$1,999,999				
NT$2,000,000 ~ NT$3,499,999				
NT$3,500,000 ~ NT$4,999,999				
NT$5,000,000 ~ NT$9,999,999	Directors: International Fiber Technology Co., Ltd., Li-Cheng Yeh, Yu-Chi Wang, Wen-Ming Chang, Shun-Ping Chen, Independent Directors: Shen-Yi Lee, Chin-Shih Lin, Hai-Ming Chen	Directors: International Fiber Technology Co., Ltd., Li-Cheng Yeh, Yu-Chi Wang, Wen-Ming Chang, Shun-Ping Chen, Independent Directors: Shen-Yi Lee, Wei-Lin Wang, Chin-Shih Lin, Hai-Ming Chen	Directors: International Fiber Technology Co., Ltd., Li-Cheng Yeh, Independent Directors: Shen-Yi Lee, Wei-Lin Wang, Chin-Shih Lin Hai-Ming Chen	Directors: International Fiber Technology Co., Ltd., Li-Cheng Yeh, Independent Directors: Shen-Yi Lee, Wei-Lin Wang, Chin-Shih Lin Hai-Ming Chen
NT$10,000,000 ~ NT$14,999,999				
NT$15,000,000 ~ NT$29,999,999				
NT$30,000,000 ~ NT$49,999,999			Directors: Wen-Ming Chang	Directors: Wen-Ming Chang
NT$50,000,000 ~ NT$99,999,999	Directors: Chin-Tsai Chen	Directors: Chin-Tsai Chen	Directors: Yu-Chi Wang, Shun-Ping Chen	Directors: Yu-Chi Wang, Shun-Ping Chen
Over NT$100,000,000			Directors: Chin-Tsai Chen	Directors: Chin-Tsai Chen
Total	10	10	10	10

Note 1: Mr. Ming-Chien Hsieh is the representative of International Fiber Technology Co., Ltd.

B. Compensation of President and Vice President

Unit: NT$ thousand; Shares in thousands; %

Title	Name	Salary (A)		Severance Pay (B) (Note 1)		Bonuses and Allowances (C) (Note 2)		Profit Sharing- Employee Bonus (D) (Note 3)				Ratio of Total Compensation (A+B+C+D) to Net Income (%) (Note 4)		Compensation paid to the President and Vice President from Non-consolidated Affiliates or Parent Company
		The Company	All Consolidated Entities	The Company	All Consolidated Entities	The Company	All Consolidated Entities	The Company		All Consolidated Entities		The Company	All Consolidated Entities	
								Cash	Stock	Cash	Stock			
President	Chin-Tsai Chen	49,374	65,939	540	540	179,201	201,995	121,940	0	121,940	0	7.85%	8.73%	0
Chairman of Technology Development Strategy Committee	Yu-Chi Wang													
CEO	Kyle Chen													
BU General Manager	Wen-Ming Chang													
General Manager of Corporate Administration	Shun-Ping Chen													
Vice President	Brian Lee													
Vice President	Lap-Sum Yip													
Vice President	Eric Hsu													
Vice President	HP Hsiao													
Vice President	S.Y. Wang													

Note 1: Pensions funded according to applicable law, there was no pensions paid during the most recent year.
Note 2: Including long-term incentives.
Note 3: The employees' remuneration for year 2019 was NT$368,400 thousand which was approved by the Board of Directors' meeting on March 18, 2020 and will be reported at the 2020 Annual Shareholders' Meeting.
Note 4: The net income for 2019 was NT$4,474,399 thousand.

Range of Remuneration	Name of Presidents and Vice Presidents	
	The Company	All Consolidated Entities
NT$0~NT$999,999		
NT$1,000,000~NT$1,999,999		
NT$2,000,000 ~ NT$3,499,999		
NT$3,500,000 ~ NT$4,999,999		
NT$5,000,000 ~ NT$9,999,999	Lap-Sum Yip, S.Y. Wang	Lap-Sum Yip, S.Y. Wang
NT$10,000,000 ~ NT$14,999,999	Brian Lee, HP Hisao	Brian Lee, HP Hisao
NT$15,000,000 ~ NT$29,999,999	Wen-Ming Chang, Eric Hsu	Wen-Ming Chang, Eric Hsu
NT$30,000,000 ~ NT$49,999,999		
NT$50,000,000 ~ NT$99,999,999	Chin-Tsai Chen, Yu-Chi Wang, Kyle Chen, Shun-Ping Chen	Yu-Chi Wang, Kyle Chen, Shun-Ping Chen
Over NT$100,000,000		Chin-Tsai Chen
Total	10	10

D. Employee Bonus Granted to Management Team

Year 2019; Unit: NT$ thousand; %

<table>
<tr><th></th><th>Title</th><th>Name</th><th>Employee Bonus - in Stock (Fair Market Value)</th><th>Employee Bonus - in Cash (Note 1)</th><th>Total</th><th>Ratio of Total Amount to Net Income (%)</th></tr>
<tr><td rowspan="13">Managerial Officers</td><td>President</td><td>Chin-Tsai Chen</td><td rowspan="13">0</td><td rowspan="13">128,940</td><td rowspan="13">128,940</td><td rowspan="13">2.88%</td></tr>
<tr><td>Chairman of Technology Development Strategy Committee</td><td>Yu-Chi Wang</td></tr>
<tr><td>CEO</td><td>Kyle Chen</td></tr>
<tr><td>BU General Manager</td><td>Wen-Ming Chang</td></tr>
<tr><td>General Manager of Corporate Administration</td><td>Shun-Ping Chen</td></tr>
<tr><td>Vice President</td><td>Brian Lee</td></tr>
<tr><td>Vice President</td><td>Lap-Sum Yip</td></tr>
<tr><td>Vice President</td><td>Eric Hsu</td></tr>
<tr><td>Vice President</td><td>HP Hsiao</td></tr>
<tr><td>Vice President</td><td>S.Y. Wang</td></tr>
<tr><td>Chief Officer of Corporate Governance and Associate Vice President</td><td>Annie Yu</td></tr>
<tr><td>Associate Vice President of Accounting Division</td><td>Linna Su</td></tr>
<tr><td>Associate Vice President of Finance Division</td><td>Joe Tsen</td></tr>
</table>

Note 1:The employees' remuneration for year 2019 was NT$368,400 thousand which was approved by the Board of Directors' meeting on March 18, 2020 and will be reported at the 2020 Annual Shareholders' Meeting.

Comparison of Remuneration for Directors, Supervisors, Presidents and Vice Presidents in the Most Recent Two Fiscal Years and Remuneration Policy for Directors, Supervisors, Presidents and Vice Presidents

A. The Ratio of Total Remuneration Paid by the Company and by All Companies Included in the Consolidated Financial Statements for the Most Recent Two Fiscal Years to Directors, Supervisors, Presidents and Vice Presidents of the Company, to the Net Income

Year / Items	Ratio of Total Remuneration to Net Income (Note 1)			
	2018		2019 (Note 2)	
	The Company	All Consolidated Entities	The Company	All Consolidated Entities
Paid to Directors	2.38%	2.38%	2.39%	2.39%
Paid to Supervisors	Not applicable		Not applicable	
Paid to Presidents and Vice Presidents	7.85%	9.05%	7.85%	8.73%

Note 1: The net income for 2018 and 2019 were NT$3,124,454 thousand and NT$4,474,399 thousand, respectively.

Note 2: The employees' remuneration and Directors' remuneration for year 2019 were NT$368,400 thousand and NT$106,900 thousand, respectively, which were approved by the Board of Directors' meeting on March 18, 2020 and will be reported at the 2020 Annual Shareholders' Meeting.

B. The Policies, Standards, and Portfolios for the Payment of Remuneration, the Procedures for Determining Remuneration, and the Correlation with Business Performance

(1) The Company has established a Compensation Committee to review and form corporate policy, structure and payment terms applicable to compensation of directors and managers, as well as rewards and incentive programs of managers.

(2) Remuneration for Directors is made according to the Company's Articles of Incorporation. According to the Article, if there is any net profit after closing of a fiscal year, no more than 3% of the same shall be allocated as Directors' compensation. The rational of Directors' remuneration policy takes into account the Procedures for Board Performance Evaluation, overall business performance of the Company, operation requirement and development of the industry in the future, and the individual Director contribution to the Company's operations. The reasonable Directors' compensation is proposed by the Compensation Committee and approved by the Board of Directors, in addition, a report of such remuneration shall be submitted to the shareholders' meeting.

(3) The appointment, dismissal and compensation for presidents and vice presidents shall be approval by the Board of Directors meeting according to the Company's regulations. According to the Company's employer performance assessment rules, the compensation is measured based on the personal performance of officers' goal achievement, accomplishment of company's profit target and contribution made to the business operation, and the market benchmarking, which is prepared by the Human Resource Division. The compensation for presidents and vice presidents shall be approved by the Compensation Committee and the Board of Directors.

(4) The compensation policy is measured based on the employee's capability, contribution made to the Company and performance which has a positive correlation with the performance of the Company's business. The compensation package mainly includes salaries, incentive and bonus, and welfares. The payment standards of compensation are: the payment of salaries is according to the market averages of that position; the payment of incentive and bonus is related to achievement of goals of employee and his/her organization or the Company's operation performance; and the welfare system is planned by need of employees based on applicable regulations and rules.

(5) Correlation with future risks: The payment of remuneration will be subjected to future changes in environment and business performance, if Directors or employees are involved in anything illegal and cause any loss of the Company, proper actions will be taken according to relevant laws and regulations.

3.3. Implementation of Corporate Governance

Board of Directors Meeting Status

A total of 2 (A) meetings of the 7th session of Board of Directors were held in 2019. Director attendance was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Chairman	Chin-Tsai Chen	2	0	100%	—
Director	International Fiber Technology Co., Ltd.-Representative: Su-Chang Hsieh	0	2	0%	—
Director	Li-Cheng Yeh	2	0	100%	—
Director	Yu-Chi Wang	2	0	100%	—
Director	Wen-Ming Chang	2	0	100%	—
Director	Shun-Ping Chen	2	0	100%	—
Independent Director	Chin-Shih Lin	2	0	100%	—
Independent Director	Shen-Yi Lee	2	0	100%	—
Independent Director	Wei-Lin Wang	2	0	100%	Tenure expired on June 14, 2019

A total of 5 (A) meetings of the 8th session of Board of Directors were held in 2019. Director attendance was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Chairman	Chin-Tsai Chen	5	0	100%	Re-elected on June 14, 2019
Director	International Fiber Technology Co., Ltd.-Representative: Su-Chang Hsieh	2	1	66.7%	Re-elected on June 14, 2019, resigned on Nov. 12, 2019: 3 meetings should be attended in 2019
	International Fiber Technology Co., Ltd.-Representative: Ming-Chien Hsieh,	2	0		Newly appointed on Nov. 12, 2019, 2 meetings should be attended in 2019
Director	Li-Cheng Yeh	5	0	100%	Re-elected on June 14, 2019
Director	Yu-Chi Wang	5	0	100%	Re-elected on June 14, 2019
Director	Wen-Ming Chang	5	0	100%	Re-elected on June 14, 2019
Director	Shun-Ping Chen	5	0	100%	Re-elected on June 14, 2019
Independent Director	Chin-Shih Lin	5	0	100%	Re-elected on June 14, 2019

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Independent Director	Shen-Yi Lee	5	0	100%	Re-elected on June 14, 2019
Independent Director	Hai-Ming Chen	5	0	100%	Newly elected on June 14, 2019

Annotations:

1.If there are any circumstances listed below during a meeting of the Board of Directors, the dates of meetings, sessions, contents of motions of the directors' meetings, all Independent Directors' opinion and the Company's response to independent directors' opinion should be specified:

(1) Items listed in Article 14-3 of Securities and Exchange Act:
The Company has established Audit Committee, independent directors shall express their opinions in accordance with Article 14-5 of Securities and Exchange Act, please refer to pages 30~31 "Audit Committee Members' Opinions or Resolutions to Material Matters."

(2) Besides the above-stated resolutions of the Board of Directors, resolutions which received objections or reserved comments from the Independent Directors that are supported by appropriate records or written declarations:
None.

2. If there is any Director(s) excused from motions due to conflict of interest, such Directors' names, contents of motions, causes for avoidance and voting should be specified:

The 2nd meeting of 8th Board held on Aug. 14, 2019:

Content of Motion	Directors of Conflict of Interest Avoidance	Status
The Company's organizational adjustment	Yu-Chi Wang and Shun-Ping Chen	Yu-Chi Wang and Shun-Ping Chen are the Company's executive officers, they recused themselves according to the Article 206-2 of Company Act. The other Directors had no objection to the consent.

The 3rd meeting of 8th Board held on Oct 29, 2019:

Content of Motion	Directors of Conflict of Interest Avoidance	Status
Adding compensation budget and recommendation for compensation of executive officers promoted in 2019	Yu-Chi Wang and Shun-Ping Chen	Yu-Chi Wang and Shun-Ping Chen are the Company's executive officers, they recused themselves according to the Article 206-2 of Company Act. The other Directors had no objection to the consent.

3. The evaluation cycle and period, scope of evaluation, evaluation method, and evaluation items of the self-evaluations conducted by the Board of Directors.

Evaluation cycle	Once a year
Evaluation period	December 1, 2018 ~ November 30, 2019
Scope of evaluation	Includes overall operations of the Board of Directors, Audit Committee, and Remuneration Committee. Individual Board members
Evaluation method	Self-evaluation by the secretary of the Board of Directors and each functional committee, audit units, and individual Board members
Evaluation items	Evaluation of the overall operation of the Board of Directors and functional committees include the level of participation in company operations, decision-making quality, composition and structure, appointment of directors/members and their continuing education, and internal controls. Individual director self-evaluations include grasp of company targets and missions, understanding of the director's responsibilities, level of participation in company operations, internal relationship management and communication, director's specialty and continuing education, and internal controls.

4. Measures taken to strengthen the function of the Board:
(1) To scheduled the meeting calendar in the beginning of the year.
(2) To request for agenda items from all directors before one month of the each board meeting date.
(3) The Board of Directors continues to enhance corporate governance and corporate social responsibility, and the Company got the top 5% TPEx-listed companies in Taiwan in Corporate Governance Evaluation.
(4) The Board of Directors sets up the Audit Committee and the Compensation Committee assisting the Board to fulfill its supervising functions.
(5) The Company has established its Procedures Governing the Board Performance Evaluation, and execute the performance assessments for the Board and each of the Directors of the Board from year 2019.
(6) After the election held in the Annual Shareholders' Meeting on June 24, 2016, three Independent Directors has organized the Audit Committee to supervise the following matters: (a) fair presentation of the financial reports of the Company, (b) the hiring (and dismissal), independence, and performance of certificated public accountants of the Company, (c) the effective implementation of the internal control system of the Company, (d) compliance with relevant laws and regulations by the Company, and (e) control of the existing or potential risks of the Company.
(7) Since 2011, the Company has established the Compensation Committee to review and form corporate policy, structure and payment terms applicable to compensation of Directors and managers, as well as rewards and incentive programs of managers of the Company.

Attendance of Independent Director at Board Meetings in 2019

◎Attendance in Person ☆By Proxy

Independent Director's Name	Meeting Date						
	7th Board		8th Board				
	03/21/2019	05/14/2019	06/14/2019	08/14/2019	10/29/2019	11/13/2019	12/26/2019
Chin-Shih Lin	◎	◎	◎	◎	◎	◎	◎
Shen-Yi Lee	◎	◎	◎	◎	◎	◎	◎
Wei-Lin Wang	◎	◎	Tenure expired on June 14th, 2019				
Hai-Ming Chen	Newly elected on June 14th, 2019		◎	◎	◎	◎	◎

Audit Committee Meeting Status

A total of 2 (A) meetings of the 1st session of Audit Committee were held in 2019. Independent director attendance was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate in Person (B/A) (%)	Remarks
Independent Director (Convener)	Chin-Shih Lin	2	0	100%	—
Independent Director	Shen-Yi Lee	2	0	100%	—
Independent Director	Wei-Lin Wang	2	0	100%	Tenure expired on June 14, 2019

A total of 5 (A) meetings of the 2nd session of Audit Committee were held in 2019. Independent director attendance was as follows:

<table>
<tr><th>Title</th><th>Name</th><th>Attendance in Person (B)</th><th>By Proxy</th><th>Attendance Rate in Person (B/A) (%)</th><th colspan="2">Remarks</th></tr>
<tr><td>Independent Director (Convener)</td><td>Chin-Shih Lin</td><td>5</td><td>0</td><td>100%</td><td>Re-elected</td><td rowspan="3">The 8th session of Board of Directors was elected during AGM held on June 14th, 2019 and the Audit Committee was formed by newly elected Independent Directors</td></tr>
<tr><td>Independent Director</td><td>Wei-Lin Wang</td><td>5</td><td>0</td><td>100%</td><td>Re-elected</td></tr>
<tr><td>Independent Director</td><td>Hai-Ming Chen</td><td>5</td><td>0</td><td>100%</td><td>Newly elected</td></tr>
</table>

Annotations:

1. If there are any circumstances listed below during a meeting of the Audit Committee, the dates of meetings, sessions, contents of motions of the Committee' meetings, all committee members' opinion and the Company's response to committee members' opinion should be specified:
   (1) Items listed in Article 14-5 of Securities and Exchange Act:
   Please refer to pages 30~31 "Audit Committee Members' Opinions or Resolutions to Material Matters."
   (2) Besides the above-stated matters, any matter that has not been approved with the consent of one-half or more of all Audit Committee members but approved by two-thirds or more of all Directors:
   Please refer to pages 30~31 "Audit Committee Members' Opinions or Resolutions to Material Matters."
2. If there is any Independent Director(s) avoiding of motions due to conflict of interest, such Independent Directors' names, contents of motions, causes for avoidance and voting should be specified:
   None.

3. Communications between the Independent Directors, the Internal Auditors and the Independent Auditors (e.g. the items, methods and results of the audits of corporate finance or operations, etc.):

(1) Communications between Audit Committee and the Internal Auditors in 2019:

Date	Communications between the Independent Directors and the Internal Auditors	Communication Memos
03/21/2019	Reviewing internal audit reports of the fourth quarter of 2018 and the assessments of overall efficacy of all internal control systems.	No additional comments.
05/14/2019	Reviewing internal audit reports of the first quarter of 2019 and internal auditing directions for the following quarter.	No additional comments.
08/14/2019	Reviewing internal audit reports of the second quarter of 2019 and internal auditing directions for the following quarter.	No additional comments.
11/13/2019	Reviewing internal audit reports of the third quarter of 2019, internal auditing directions for the following quarter and annual audit plan for the year of 2020.	No additional comments.

Head of internal auditing office communicates with independent director through monthly auditing report, reporting auditing execution status in Audit Committee meeting at least one time each quarter, and update Audit Committee members any time where there are special circumstances. There is no above-stated special circumstance up to the date of the annual report. The communications between the Audit Committee members and the internal auditor chief are good.

(2) Communications between Audit Committee and the external CPAs in 2019:

Date	Communications between the Independent Directors and the External CPAs	Communication Memos
03/21/2019	1. Reviewing the scope of audit, auditors' responsibility, audit findings (key audit matters, major accounting estimates, etc.), impact of changes in accounting policy and independence, for the year of 2018. 2. Reviewing regulatory changes - Corporate governance roadmap, and "Regulations Governing the Acquisition and Disposal of Assets by Public Companies."	No additional comments.
05/14/2019	1. Reviewing the scope of review, auditors' responsibility, review findings (major accounting estimates, etc.), impact of changes in accounting policy- IFRS16 "Leases" and independence, for the first quarter of 2019. 2. Reviewing regulatory changes – Company Act, and proposed amendments to the "Governing Procedure for Board of Directors Meetings of Public Companies"	No additional comments.
08/14/2019	1. Reviewing the scope of review, auditors' responsibility and independence, review findings (major accounting estimates, etc.), for the second quarter of 2019. 2. Preliminary identify the key audit matters for the year of 2019. 3. Reviewing regulatory changes – Proposed amendments to the "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies", and amendments to the Article 14-5 and Article 36 of the "Securities and Exchange Act."	No additional comments.
11/13/2019	1. Reviewing the scope of review, auditors' responsibility and independence, review findings (major accounting estimates, etc.), for the third quarter of 2019. 2. Reviewing the audit plan for the year of 2020. 3. Reviewing the key audit matters and major audit matters for the year of 2019.	No additional comments.

Date	Communications between the Independent Directors and the External CPAs	Communication Memos
	4. Reviewing regulatory changes - draft for "Regulations on Deduction of Undistributed Earnings and Application for Tax Refund for Substantive Investment Made by a Profit-seeking Enterprise or a Limited Partnership."	

The external CPAs communicated with Audit Committee, among other matters, results of the audited or reviewed quarterly financial report, the plan and timing of the audit and significant audit findings, the statement of the personnel from CPA firm is independent of the Company in accordance with the Certified Public Accountants Code of Professional Ethics in Republic of China, the determination that key audit matters should be communicated in the auditors' report, impact on the Company of regulatory changes. The external CPAs will report to Audit Committee members from time to time when there are special circumstances. There is no above-stated special circumstance up to the date of the annual report. The communications between the Audit Committee members and the external CPAs are good.

Major tasks of Audit Committee are listed as below:

1. The adoption of or amendments to the internal control system
2. Assessment of the effectiveness of the internal control system.
3. The adoption or amendment of the procedures for handling financial or business activities of a material nature, such as acquisition or disposal of assets, derivatives trading, loaning of funds to others, and endorsements or guarantees for others.
4. Matters in which a director is an interested party.
5. Asset transactions or derivatives trading of a material nature.
6. Loans of funds, endorsements, or provision of guarantees of a material nature.
7. The offering, issuance, or private placement of equity-type securities.
8. The hiring or dismissal of a certified public accountant, or their compensation.
9. The appointment or discharge of a financial, accounting, or internal audit officer.
10. Financial reports.

Audit Committee Members' Opinions or Resolutions to Material Matters in 2018

Items listed in Article 14-5 of Securities and Exchange Act:

Audit Committee Meeting Date	Resolutions	Audit Committee Members' Opinion and Company's Response
03/21/2019 The 18th meeting of the 1st Committee	1. Approval of the parent-company-only financial statements and consolidated financial statements for the year of 2019. 2. Approval of the Business report for the year of 2019. 3. Recommendation of the distribution of earnings for the year of 2019. 4. Changed of CPAs effective from 1Q19 and evaluation of independence and suitability of the CPAs to be engaged by the Company. 5. Approval of the professional service fee of the CPAs for the year of 2019. 6. Assessment of the effectiveness of the Internal Control System. 7. Amendment to the Article of Incorporation. 8. Amendment to the Internal Control System. 9. Amendment to the Procedures for Acquisition or Disposal of Assets. 10. Amendment to the Procedures for Lending Funds to Other Parties and Procedures for endorsement and guarantee.	No Audit Committee member had any dissenting opinion or qualified opinion to the proposal and all attending members agree to pass the proposal.

Audit Committee Meeting Date	Resolutions	Audit Committee Members' Opinion and Company's Response
05/14/2019 The 19th meeting of the 1st Committee	1. The Company's endorsement and guarantee to subsidiaries. 2. Proposal for the second issuance of Restricted Stock Awards ("RSA").	
08/14/2019 The 2nd meeting of the 2nd Committee	Investment in subsidiary, Win Semiconductors Cayman Islands Co., Ltd.	
10/29/2019 The 3rd meeting of the 2nd Committee	Investment in subsidiary, Phalanx Biotech Group, Inc.	
11/13/2019 The 4th meeting of the 2nd Committee	Amendment to the Internal Control System.	
12/26/2019 The 5th meeting of the 2nd Committee	Increase of the Company's endorsement and guarantee to subsidiaries.	

Note: Besides the matters referred to Article 14-5 of Securities and Exchange, any matter that has not been approved with the consent of one-half or more of all Audit Committee members but approved by two-thirds or more of all directors: None.

Corporate Governance Implementation Status

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
1. Does the Company follow "Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies" to establish and disclose its Corporate Governance Best-Practice Principles?	V		The Company has established its "Corporate Governance Best Practice Principles" and disclose on its website and the Market Observation Post System (MOPS).	None
2. Shareholding Structure & Shareholders' Rights				
(1) Does the Company have internal operation procedures for handling shareholders' suggestions, concerns, disputes and litigation matters. If yes, has these procedures been implemented accordingly?	V		(1) The Company has internal operation procedures for handling shareholders' suggestions, concerns, disputes and litigation matters: it has designated the spokesperson /deputy spokesperson and to handle shareholders' recommendations or issues. There have been no dispute or law suits incurred between shareholders and the Company.	None
(2) Does the Company possess a list of its major shareholders and beneficial owners of these major shareholders?	V		(2) The Company has assigned employee to be responsible for stock affairs. The stock transfer agent - Registrar Transfer Department, Grand Fortune Securities Corporation assists the Company to collect and disclose the updated information about its shareholders holding more than 10 percent of the outstanding shares, directors relating to the pledge, increase or decrease of share ownership, and other matters that may possibly trigger a change in the ownership of their shares. The Company ensures duly updating of information regarding of major shareholders and the ultimate control persons who have an actual control over the Company.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
(3) Has the Company built and executed a risk management system and "firewall" between the Company and its affiliates?	V		(3) The Company has promulgated rules related to internal control such as "Operating Procedures for Transactions between Affiliated Enterprises, Related Parties and Group Enterprises" and "Operating Procedures for Supervision of Subsidiaries." The rules are made to strictly regulate transactions between the Company and its affiliates to set up the "firewall" and manage risk.	None
(4) Has the Company established internal rules prohibiting insider trading on undisclosed information?	V		(4) To prevent the insider trading, the Company has established the "Procedures for the Prevention of Insider Trading" and advised all insiders to comply with the rules.	None
3. Composition and Responsibilities of the Board of Directors (1) Has the Company established a diversification policy for the composition of its Board of Directors and has it been implemented accordingly?	V		(1) The Company's diversification policy for the composition of its Board of Directors is defined in its "Corporate Governance Best Practice Principle" and "Rules for Election of Directors" and disclosed on its official website, as well as described as following: The composition of the Board of Directors shall be determined by taking diversity into account. An appropriate policy on diversity from perspectives of the Company's business operations, operating dynamics, and development needs. It is advisable that the policy include, but not limited to, the following two general standards: A. Basic requirements and values: Gender, age, nationality, and culture. B. Professional knowledge and skills: A professional background (e.g., law, accounting, industry, finance, marketing, or technology), professional skills, and industry experience.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
			All members of the Board shall have knowledge, skills, and experience necessary to perform their duties. To achieve the ideal goal of corporate governance, the Board of Directors shall possess the following abilities: 1. Ability to make operational judgments. 2. Ability to perform accounting and financial analysis. 3. Ability to conduct management administration. 4. Ability to conduct crisis management. 5. Knowledge of the industry. 6. An international market perspective. 7. Leadership. 8. Ability to make decisions. In addition, the Board of Directors has nine directors, and the Board's overall abilities meet the Company's needs for future development and comply with the Board diversity policy. Please refer to page 46 (Note 1) of this annual report for Company's implementation of the Board diversity policy. Independent directors account for 33% of all Board members, 44% of all directors are executive directors of the Company, and 11% of directors are female, achieved the target of at least one female director. Two directors are 71-80 years old (22%), three are 61-70 years old (33%), and four are 45-55 years old (44%). The three independent directors have not served consecutive terms for over nine years.	
(2) Other than the Compensation Committee and the Audit Committee which are required by law, does the Company plan to set up other Board committees?	V		(2) The Company has set up the Compensation Committee since 2011 and proactively established the Audit Committee in place of the supervisors since 2016. We will establish other functional committees in accordance with laws and regulations or practical requirements.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
(3) Has the Company established methodology for evaluating the performance of its Board of Directors, on an annual basis and submit performance evaluation results to the Board, and use the results as a basis for determining the remuneration and nomination of individual directors?	V		(3) In according with the “Regulations Governing the Board Performance Evaluation” approved by the Board, the criteria for evaluating the performance should cover the following five aspects: 1. Participation in the operation of the Company; 2. Improvement of the quality of the Board of Directors’ decision making; 3. Composition and structure of the Board of Directors; 4. Election and continuing education of the Directors; and 5. Internal control. Before the end of each year, we conduct questionnaire surveys of Board of Directors, Remuneration Committee, and Audit Committee's operations and self-evaluations by directors. Operations of the Board of Directors, Remuneration Committee, and Audit Committee are evaluated by dedicated secretaries, and results are used along with self-evaluations by directors as the basis for nominating directors and determining their remuneration. Evaluation results for operations of the Board of Directors, Remuneration Committee, and Audit Committee in 2019 are divided into excellent, good, and acceptable. After evaluations by secretaries, overall operations of the Board of Directors and functional committees were excellent, and the results were reported to the Board of Directors on December 26, 2019.	None
(4) Does the Company regularly evaluate its external CPAs’ independence?	V		(4) The CPAs excuse himself/herself when handling the matters involving conflicting interests. The accounting division evaluates independence and suitability of CPAs regularly and reported to and approved by the Audit Committee meeting and Board meeting on March 21, 2019 (please refer to Note2, pages 46~47, “the evaluation of independence and suitability of external CPAs”).	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
4. Does the public company have a suitable number of competent corporate governance personnel, and has it appointed a corporate governance supervisor responsible for corporate governance matters (including but not limited to providing information for directors and supervisors to perform their duties, assisting directors and supervisors with regulatory compliance, handling matters related to Board meetings and shareholders' meetings, and preparing proceedings for Board meetings and shareholders' meetings)?	V		The Company's Board established a corporate governance unit on May 14th, 2019, the Associate Vice President of Legal and Public Affairs who has more than 3 years of experience in the legal business of a public offering company and has 18 hours of training within a year after taking office in accordance with the regulation,(please refer to Note3, pages 47~48) is the chief officer. The corporate governance unit is responsible for handling matters relating to Board meetings and shareholders' meetings according to laws; producing minutes of Board meetings and shareholders' meetings; assisting in on boarding and continuous education of directors; furnishing information required for business execution by directors; and assisting directors with regulatory compliance. Major work in 2019 was as below: 1. Acting as the secretary of the Board and the major contact between the Directors and the Company. 2. Assisting Directors to performing their duties and provide meeting materials information as they deem necessary as well as to help the communications between Directors and internal officers. 3. Providing continuing educations information to Directors and arranging training courses for them. 4. Assisting the arrangement the communication affairs between Audit Committee members, external CPAs and chief of internal auditor. 5. Setting up the Board meetings agenda, call the meetings and providing meetings materials. Reminder the director for rescue in advance if there is any conflict interests matter. Providing meeting minutes within 20 days after the Board meeting. 6. Assisting shareholders' meeting affairs.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
5. Has the Company established a means of communicating with its stakeholders (including but not limited to shareholders, employees, customers, suppliers, etc.) or created a Stakeholders Section on its Company website? Does the Company respond to stakeholders' question on corporate responsibilities?	V		The Company has set up the Stakeholders Engagement Section \Contact WIN on its official website, and has sound communication channel with shareholders, employees, clients, banks, suppliers and other stakeholders. The Company shall provide sufficient business information in good faith to protect the interest of the Stakeholders. Please refer to "rights with stakeholders", pages 40~41, for further details.	None
6 Has the Company appointed a professional registrar for its Shareholders' Meetings?	V		The Company has appointed the professional registrar "Registrar Transfer Department, Grand Fortune Securities Corporation" to facilitate shareholders' meetings.	None
7. Information Disclosure (1) Has the Company established a corporate website to disclose information regarding its financials, business and corporate governance status?	V		(1) The Company's financials, business and corporate governance information have been disclosed in the Investor Relations Section on its official website and the Company has designated appropriate personnel to handle information collection, disclosure and update.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
(2) Does the Company use other information disclosure channels (e.g. maintaining an English-language website, designating staff to handle information collection and disclosure, appointing spokespersons, webcasting investors conference etc.)?	V		(2) The Company has set up its website both in Chinese and English, and has designated the spokesperson and deputy spokesperson in charge of making external statements. The Company has also designated appropriate departments to handle the information collection, disclosure and update about its shareholders, regulations/laws changes, investment and market status. The Company has recorded and disclosed investor conference webcasts on its website.	None
(3) Does the company publish its annual financial statements within two months after the end of each fiscal year, and publish its Q1, Q2, and Q3 financial statements, as well as monthly operation results, before the prescribed time limit?			(3) We plan to publish the Company's Q1, Q2, and Q3 financial statements before the prescribed time limit, as for the annual financial statements, the Company is striving to make them to be published before the prescribed time limit, but it's still under evalution.	Currently being evaluated
8. Has the Company disclosed other information to facilitate a better understanding of its corporate governance practices (e.g. including but not limited to employee rights, employee wellness, investor relations, supplier relations, rights of stakeholders, directors' and supervisors' training records, the implementation of risk management policies and risk evaluation measures, the implementation of customer relations policies, and purchasing insurance for directors and supervisors)?	V		See explanations below:	None
Other important information to facilitate better understanding of the Company's implementation of corporate governance: (1) Employee rights: WIN believes that employees are a company's most precious asset. The Company pays attention to employee rights and employee care. The Company provides free regular health examinations for employees, clinic services provided by professional doctors in the Company, and various employee health promotion knowledge promotion and events. Furthermore, the Company sets up Employee Welfare Committee to handle the activities about employee welfare, the Committee also set up several clubs such as badminton, yoga, aerobic combat sports, jogging, volleyball and softball. To care for our employees, we strive to build a happy enterprise, providing employees with reasonable welfares and favorable environments where work and life are balanced.				

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	

(2) Employee wellness:

We hope that every employee, including new employees and existing employees will be able to build a successful team and organization established on the foundation of reciprocity and trust through communication. Therefore, we pay special attention to new employees who have been with us for less than three months, and have their supervisors talk to them about any problems they encounter so as to help them solve their problems. In addition, team-building activities are incorporated in substitute service programs and internship programs to provide these employees with a better understanding of the Company's core values. The Company respects the human rights of all of its employees, providing fair job opportunities for applicants and employees with the right skills. The Company does not discriminate against potential candidates based on race, skin color, age, gender, sexual orientation, ethnicity, disability, pregnancy, religion, beliefs, political affiliation, union membership, marital status, or other entities protected under governmental regulations. Such principles apply to recruitment, employment, training, job promotion, remuneration, and welfare systems.

To build a friendly workplace for mothers, each fab has designated independent and private lactation (breastfeeding) room. We also provide health education programs, medical consultation services, occupational risk investigation and management, classrooms for parents and baby health information, parking space for pregnant employees, birth subsidies, group insurance subsidies, and cooperation with neighboring day care. These provisions are aimed at creating a workplace environment that encourages a better work-life balance for employees with children, with special consideration for female employees who may often take on the bulk of responsibility for childcare.

(3) Investors:

Investors can easily understand the Company's operation status from the spokesperson, the MOPS and the Company's website. In addition, WIN holds investor conference quarterly to update investors the Company's operational results and outlook. The webcast replays are released in the Company's website. We have good communications with domestic/foreign institutional investors, through attending investor conference each year and visit investors in Asia, Europe or America in person. In the meetings, we give investors our operational results and also learn knowledge and suggestions regarding corporate operation, finance, corporate governance from investors. WIN attended 12 investor conferences held by domestic/foreign securities companies or competent authority in 2019. We also pay attention to individual shareholders by assigning employee to receive phone calls from them and responding the shareholders' suggestions on the annual general shareholders meeting.

(4) Suppliers:

The Company maintains close partnership with suppliers and deal with supplies based on the principal of good faith.

(5) Rights with stakeholders:

The Company upholds the spirits of corporate governance to keep good communications and good relationships with stakeholders which including shareholders, employees, customers, banks and suppliers. In order to understand the extent to which stakeholders are concerned with WIN's sustainability issues, we have followed the GRI Standards guidelines and the criteria for AA1000SES stakeholder engagement to compile these issues, so that we can understand their economic, environmental and social impacts. This information serves as the basis for the analysis of material topics and the results were reported to the Board of Director at the end of each year. Below please see the stakeholder engagement of the Company:

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	

Stakeholders	Issue of Concern	Communication Frequency and Method	Communication with Stakeholders in 2019
Customers	1. Innovation and management 2. Customer privacy 3. Business performance	Irregular: video conference, visiting customers, on-site audit by customers Annually: customer satisfaction questionnaire survey Contact: Ms. Chen E-mail: winbusiness@winfoundry.com	1. Conducted a customer satisfaction survey and Average satisfaction rate was 78.9% 2. Visited customers and accepted customer to audited our fabs
Employees	1. Occupational health and safety 2. Human right assessments 3. Employee diversity and equality	Irregular: website portal, project satisfaction survey, sexual harassment grievance hotline & email Quarterly: employee/employer meeting, foreign labor seminar, meetings of the employee welfare committee Contact: Ms. Chen E-mail: investigating.office@winfoundry.com	1. Hold 9 health promoted events. 2. Hold annual health check for employees with an average satisfaction rate of 91%.
Suppliers/Contractors	1. Occupational health and safety 2. Compliance with environmental regulations 3. Customer privacy	Irregular: on-site audit of suppliers, communicate with suppliers via telephone or email Annually: supplier/contractor assessment on environmental protection and safety and health management systems and performance Contact: Ms. Chen E-mail: wincsr@winfoundry.com	96% of WIN's new suppliers signed "WIN Supplier Code of Conduct."

(Continued)

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	

Stakeholders	Issue of Concern	Communication Frequency and Method	Communication with Stakeholders in 2019
Government authorities	1. Wastewater and waste 2. Occupational health and safety 3. Labor-Employer relationship	Irregular: official documents, participation in seminars and conferences held by government Monthly: reporting required information via the Market Observation Post System (MOPS) Contact: Ms. Chen E-mail:wincsr@winfoundry.com	Attended seminars and promotional meetings held by government
Shareholders/ investors/ financial institutions	1. Business performance 2. Ethical corporate management 3. Compliance with environmental protection regulations	Quarterly: financial report, investor conference Annually: annual report, shareholders' meeting Irregular: investment institution conference, telephonic response to investor/media questions Contact: Mr. Tsen E-mail: ir@winfoundry.com	1. Hold 16 investor-related events to give investors the Company's operating results. 2. Spokesperson replied to shareholder's questions irregularly.
General public /non-governmental organizations	1. Wastewater and waste 2. Compliance with environmental protection regulations 3. Customer's health and safety	Irregular: participation in charity events Contact: Ms. Chen E-mail: wincsr@winfoundry.com	Hold 6 public welfare events including environmental protection, talent cultivation and community give back.

(6) Implementation of customer policy:

The Company has designated appropriate departments to handle and implement customer policy, respond inquires raised by customers regarding products and service and ensure sound communication with customer.

In addition, WIN actively participates in international exhibitions such as MWE 2019 Microwave Workshops & Exhibition、EuMW2019 European Microwave Week 2019、IMS2019 International Microwave Symposium、EDI2019 Electronic Design Innovation Conference, etc. to enhance relationships with customers, promote WIN's newly developed products and innovative technology and help customers to increase their industrial competitive edge.

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	

(7) Directors' education/training records:

The Directors of the Company have professional background and work their respective fields of expertise. The Company facilitated seminars and provided updates of relevant regulatory information to directors as needed. The Directors take continuous education by attending corporate governance courses held by professional organizations to further strengthens their knowledge. The education/training records of Directors in 2019 were listed below:

Title	Name	Date	Host by	Course Title	Hours
Chairman	Chin-Tsai Chen	01/10/2019	Corporate Operation Association	Discussing the future development of Taiwan's capital market and opportunities for industrial consolidation and mergers and acquisitions from the perspective of global political and economic situations.	3
		01/23/2019	Taiwan Institute of Directors	Attract good foreign capital x invest in good Taiwanese companies	3
		06/20/2019	Taiwan Corporate Governance Associate	Anti-money Laundering and Combating Terrorism and Insider Trading	3
Director	International Fiber Technology Co., Ltd. Representative: Ming-Chien Hsieh	11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
		11/26/2019 ~11/27/2019	Securities and Futures Institute	Practical Workshop for Directors, Supervisors (Including independent directors) and Corporate Governance Executives	12
		12/03/2019	Securities and Futures Institute	Advance Practical Workshop for Directors, Supervisors (Including independent directors) and Corporate Governance Executives – "The Impact and Respond of Business Operation to the Latest Tax Law Changes"	3
Director	Li-Cheng Yeh	03/25/2019	Taiwan Corporate Governance Associate	Government of Cayman and BVI Introduce New Regulations for substantive economic activities	1.5
		05/13/2019	Taiwan Corporate Governance Associate	Impact of Industrial Innovation Bill to Corporate Tax Planning	1.5
		08/12/2019	Taiwan Corporate Governance Associate	Internet Security and Emergency Response	1.5
		11/11/2019	Taiwan Corporate Governance Associate	Introduction to Corporate Governance Evaluation	1.5

(Continued)

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	

Title	Name	Date	Host by	Course Title	Hours
Director	Yu-Chi Wang	11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
		12/26/2019	Taiwan Corporate Governance Associate	Development Trends and Important Norms of Money Laundering and Terrorism Prevention	3
Director	Wen-Ming Chang	11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
		12/26/2019	Taiwan Corporate Governance Associate	Development Trends and Important Norms of Money Laundering and Terrorism Prevention	3
Director	Shun-Ping Chen	06/26/2019	Taiwan Institute of Directors	2019 Annual Meeting of the Institute of Directors - A + Corporate X Shareholder 's Value	4
		11/11/2019	Taiwan Corporate Governance Associate	Practical cases for the three major codes including integrity management, corporate governance and corporate social responsibility	3
		11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
		12/26/2019	Taiwan Corporate Governance Associate	Development Trends and Important Norms of Money Laundering and Terrorism Prevention	3
Independent Director	Shen-Yi Lee	11/15/2019	Securities and Futures Institute	Avoidance of Violation of Securities Trading Laws - Talking about False Financial Reports and Insider Trading	3
		11/22/2019	Dharma Drum Mountain Humanities and Social Improvement Foundation	Series of Corporate Social Responsibility - “Innovation of Enterprise Value – Talk about Chunghwa Telecom's MOD and 5G”	3
Independent Director	Hai-Ming Chen	07/31/2019	Taipei Exchange	Propaganda of Company’s Insider’s Equity of OTC and Emerging Stock Market	3
		08/20/2019	Taiwan Corporate Governance Associate	Introduce corporate governance and social responsibility into corporate culture	3

(Continued)

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	

Title	Name	Date	Host by	Course Title	Hours
Independent Director	Chin-Shih Lin	03/27/2019	Accounting Research and Development Foundation	Key Points and Doubts of Declaration of Profit-seeking Enterprise Income Tax	7
		07/18/2019	Accounting Research and Development Foundation	Practice and Accounting of Derivatives	3
		07/23/2019	Accounting Research and Development Foundation	Inheritance of family business and planning of closed company's charter	3
		08/02/2019	Accounting Research and Development Foundation	Analysis of the latest interpretation letter of Profit-seeking Enterprise Income Tax and the Case s of Taxes Administrative Remedy of Taxpayer's Rights Protection Act	3
		08/28/2019	Accounting Research and Development Foundation	Analysis of issues related to wealth inheritance tax	3
		11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
		11/27/2019	Accounting Research and Development Foundation	Introduction of important contract terms of corporate mergers and acquisitions	3
		12/07/2019	Accounting Research and Development Foundation	Independent Director's "Power" and "Responsibility"	3
		12/09/2019	Accounting Research and Development Foundation	Cases Illustration of Inheritance Law	3

(8) Status of risk management policies and risk evaluation:

The Board of Directors of WIN is the highest guiding unit responsible for the Company's management risk. With the assistance of the Audit Committee, the Board controls and manages the existing or latent risks of the Company, including establishing internal control systems, implementing internal auditing, and determining budgets to manage significant capital expenditure. The CEO is the chief organizer of the risk management organization. The CEO oversees the implementation and execution of risk management mechanisms and there are responsible units assigned to take charge of risk management in all operations under CEO. The scope of risk management includes technical risk, operational risk, product risk, legal risk, financial risk, information security risk and climate change risk. Existing systems and regulations are used to handle and execute risk matters pertaining to marketing, production services, technology R&D, purchases and supply, quality control, human resource planning, amendments to domestic and foreign regulations, and finance and accounting. Furthermore, risk identification assessment and management mechanisms are strengthened to reduce the possibilities of risk occurrence and mitigate the impact of risk-induced damage.

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	

The responsible units in the risk management organization proposed 73 risk factors in 2019 and classified them into 21 potential risk items. After assessment, we found one item with relatively high risk of infringing on trade secrets, trademark, patent rights, copyright, or other intellectual property right in violation of our ethical corporate management policy. Our response measure is that all new employees are required to sign a letter of commitment to maintain confidentiality of operations and protect intellectual property rights. We also established the Procedures for Handling Whistleblower Cases to encourage employees to report related matters, and promote the culture and policy of integrity each year for employees to engage in ethical conduct.

Please refer to "7.6. Risk Management", pages 121~123, for information on the risks items and response measures for operating risks and financial risks.

(9) Directors' and officers' insurance for company directors:

The Company has purchased directors' and officers' liability and company indemnification insurance for all directors.

Insured	Insurance Company	Insured Amount (NT$)	Term of Policy
All directors	Fubon Property & Casualty Insurance Co., Ltd.	307,200,000	08/24/2018~08/24/2019
All directors	Fubon Property & Casualty Insurance Co., Ltd.	313,900,000	08/24/2019~08/24/2020

9. Status of the improvement regarding the result of Corporate Governance Assessment announced by Taiwan Stock Exchange:

The Company ranked in the top 5% among TWSE/TPEx-listed companies in the Corporate Governance Evaluation of the Securities & Futures Institute for 6th consecutive years.

(1) Improvements already made: Based on the most recent Corporate Governance Evaluation results, improvements already made by the Company are as follows:

1. Established a clear dividend policy
2. Added a female director when electing directors.
3. Appointed a corporate governance supervisor.

(2) Priority Matters the Require Strengthening and Measures: In response to revisions to indicators used in the Corporate Governance Evaluation, we prioritized the following matters for improvement:

1. We plan to publish our Q1, Q2, and Q3 financial statements before the prescribed time limit
2. We plan to disclose the scope of risk management, organizational structure, and operations

(3) We will continue to evaluate the feasibility of future improvements in areas that we did not receive a score in.

Note 1: The diversity of composition of the Board of Directors

Name \ Professional Skill	Gender	Business Judgment and Management	Crisis Management /Leadership and Decision-making	Industry Knowledge	International Outlook	Accounting and Financial	Law
Chin-Tsai Chen	Male	V	V	V	V	V	
Yu-Chi Wang	Male	V	V	V	V		
International Fiber Technology Co., Ltd. Representative: Ming-Chien Hsieh*	Male	V	V		V	V	
International Fiber Technology Co., Ltd. Former Representative: Su-Chang Hsieh*	Male	V	V	V	V		
Li-Cheng Yeh	Male	V	V		V		
Wen-Ming Chang	Male	V	V	V	V		
Shun-Ping Chen	Male	V	V	V	V	V	
Shen-Yi Lee	Male				V		V
Chin-Shih Lin	Male				V	V	
Hai-Ming Chen	Female				V	V	

*Representative changed to Mr. Ming-Chien Hsieh effective on Nov. 12, 2019.

Note2: Evaluation of independence and suitability of external CPAs

CPA: Chia-Chien Tang Education & Major Experience:	Accounting Firm: KPMG Education: Bachelor Degree in Accounting, Fu Jen Catholic University Major Experience: Certified Public Accountant of R.O.C. Certified Public Accountant of U.S.A.
CPA: Ya-Ling Chen Education & Major Experience:	Accounting Firm: KPMG Education: Master Degree in Accounting, National Taiwan University Bachelor Degree in Money and Banking, National Chengchi University Major Experience: Certified Public Accountant of R.O.C. Certified Internal Auditor of R.O.C.

Evaluation Item	Evaluation Result	Independence
1. Does the CPA have significant financial stakes with the Company?	No	Yes
2. Whether the CPA has financing or guarantees with the Company or the directors of the Company?	No	Yes

Evaluation Item	Evaluation Result	Independence
3. Does the CPA have close business relationships and potential employment relationships with the Company?	No	Yes
4. Whether the members in the Audit Services team have served as directors, managers or any position that have a significant impact on the audit case for the previous two years.	No	Yes
5. Does the CPA have any non-audit service project that may affect the audit of the Company?	No	Yes
6. Does the CPA act as broker of the stock or other securities issued by the Company?	No	Yes
7. Whether the CPA acts as a defender of the Company or coordinates conflicts with third parties on behalf of the Company.	No	Yes
8. Does the CPA have kinship with the directors, managers of the Company or those who have significant influence on the audit case?	No	Yes
9. Whether the CPA has received a gift or gift of great value to the directors or managers of the Company or the Company.	No	Yes

Evaluation result: the external CPAs meet the requirements of independence and suitability of the Company.

Note3: Management team education/training records in 2019

Chairman, Chin-Tsai Chen, Directors, Yu-Chi Wang, Wen-Ming Chang, and Shun-Ping Chen are executive officers of the Company, whose education/training record have been disclosed in Pages 43~44.

Title	Name	Date	Host by	Course Title	Hours
CEO	Kyle Chen	11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
		12/26/2019	Taiwan Corporate Governance Associate	Development Trends and Important Norms of Money Laundering and Terrorism Prevention	3
Vice President	Brian Lee	11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
Vice President	Eric Hsu	11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
		12/26/2019	Taiwan Corporate Governance Associate	Development Trends and Important Norms of Money Laundering and Terrorism Prevention	3
Vice President	Lap-Sum Yip	11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
Vice President	S.Y. Wang	11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3

Title	Name	Date	Host by	Course Title	Hours
Associate Vice President of Accounting Division	Linna Su	03/13/2019	KPMG	Seminar on Returning Taiwanese Overseas Funds under the Essential Requirements of Taxation Paradise	2.5
		08/26/2019	Taipei Exchange	Propaganda of promotion for adoption of international financial reporting standards.	3
		11/11/2019	KPMG	Tax Law / Accounting Practice Update.	3
		11/14/2019~ 11/15/2019	Accounting Research and Development Foundation	Continuing Education and Training Courses for Accounting Officers	12
		12/10/2019	Taipei Exchange	Propaganda of promotion for adoption of international financial reporting standards	3
Associate Vice President of Finance Division	Joe Tsen	12/26/2019	Taiwan Corporate Governance Associate	Development Trends and Important Norms of Money Laundering and Terrorism Prevention	3
Chief Officer of Corporate Governance and Associate Vice President	Annie Yu	07/31/2019	Taipei Exchange	Propaganda of Company's Insider's Equity of OTC and Emerging Stock Market	3
		10/16/2019	Fubon Insurance Co Ltd.	Seminar on Responsibility of Directors and Supervisors and Corporate Governance Practice	3
		10/21/2019	Corporate Operation Association	Corporate Governance – Succession Strategy and Establishment of Compensation Committee	3
		12/03/2019	Corporate Operation Association	Find out company's malpractice or operating crisis from financial statement	3
		11/13/2019	Taiwan Corporate Governance Associate	Impact and Respond of US-China Trade War to Taiwanese Enterprises	3
		12/26/2019	Taiwan Corporate Governance Associate	Development Trends and Important Norms of Money Laundering and Terrorism Prevention	3

Composition, Responsibilities and Operations of the Compensation Committee

A. Professional Qualifications and Independence Analysis of the Compensation Committee Members

Position	Criteria / Name	Meet One of the Following Professional Qualification Requirements, Together with at Least Five Years Work Experience: An Instructor 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	A Judge, Public Prosecutor, Attorney, CPA, or Other Professional or Technical Specialist Who has Passed a National Examination and been Awarded a Certificate in a Profession Necessary for the Business of the Company	Have Work Experience in the Areas of Commerce, Law, Finance, or Accounting, or Otherwise Necessary for the Business of the Company	Independence Criteria (Note) 1	2	3	4	5	6	7	8	9	10	Number of Other Public Companies in Which the Individual is Concurrently Serving as an Member of the Compensation Committee	Remarks
Independent Director	Hai-Ming Chen	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2	-
Independent Director	Shen-Yi Lee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2	-
Independent Director	Chin-Shih Lin		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1	-
Other	Wei-Lin Wang	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	4	-
Other	Wei-Kang Pan			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	-

Note: Please tick the corresponding boxes if members have been any of the following during the two years prior to being elected or during the term of office.

1. Not an employee of the Company or any of its affiliates.
2. Not a director or supervisor of any of the Company's affiliates. The same does not apply, however, in cases where the person is an independent director of the Company, its parent company, or any subsidiary, as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary.
3. Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or more of the total number of outstanding shares of the Company or ranking in the top 10 in holdings.
4. Not a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of a managerial officer under subparagraph 1 or any of the persons in the preceding two subparagraphs.
5. Not a director, supervisor, or employee of a corporate shareholder that directly holds 5% or more of the total number of issued shares of the Company, or that ranks among the top five in shareholdings, or that designates its representative to serve as a director or supervisor of the Company under Article 27, paragraph 1 or 2 of the Company Act.
6. Not a director, supervisor, or employee of the Company which majority director seats or voting shares and those of any other company are controlled by the same person.

7. Not a director (or governor), supervisor, or employee of the Company or institution which the chairperson, general manager, or person holding an equivalent position of the Company and a person in any of those positions at another company or institution are the same person or are spouses.
8. Not a director, supervisor, officer, or shareholder holding 5% or more of the shares, of a specified company or institution that has a financial or business relationship with the Company.
9. Not a professional individual who, or an owner, partner, director, supervisor, or officer of a sole proprietorship, partnership, company, or institution that provides auditing services to the Company or any affiliate of the Company, or that provides commercial, legal, financial, accounting or related services to the Company or any affiliate of the Company for which the provider in the past 2 years has received cumulative compensation exceeding NT$500,000, or a spouse thereof, provided this restriction does not apply to a member of the remuneration committee, public tender offer review committee, or special committee for merger/ consolidation and acquisition, who exercises powers pursuant to the Act or to the Business Mergers and Acquisitions Act or related laws or regulations.
10. Not been a person of any conditions defined in Article 30 of the Company Law.

B. Authorities of the Compensation Committee

The Compensation Committee shall exercise the care of a good administrator in faithfully performing the official powers listed below, and shall submit its recommendations for deliberation by the Board of Directors, including:

1. to review the performance appraisal and Compensation Committee Charter periodically and proposed amendments.
2. to prescribe and review periodically the performance appraisal and remuneration policy, systems, standards and structure for directors, supervisors and managerial officers.
3. to evaluate status of performance appraisal periodically and prescribe the remuneration of individual director, supervisor, and managerial officer.

The Committee shall comply with the following principles when exercising its authority set forth in the preceding paragraph:

1. Ensure that the Company's compensation standards conform to the law and are sufficient to attract talented personnel.
2. The performance evaluation and compensation of Directors, supervisors and executives should take prevailing industry standards into account and take into consideration the amount of personal time invested, responsibilities, personal target completion, performance in other roles and company compensation for other people in equivalent roles in recent years. The achievements of the company's short-term and long-term business objectives as well as the company's finances are used to evaluate the correlation between personal performance, company business performance and future risks.
3. There shall be no incentive for the directors or managerial officers to pursue compensation by engaging in activities that exceed the tolerable risk level of the Company.
4. For Directors and senior managerial officers, the percentage of bonus to be distributed based on their short-term performance and the time for payment of any variable compensation shall be decided with regard to the characteristics of the industry and the nature of this Company’s business.
5. No member of the Committee may participate in discussion and voting when the Committee is deciding on that member’s individual compensation.

C. Compensation Committee Meeting Status

1. The Compensation Committee is composed of 5 members.
2. The tenure of the 3rd session is from June 24, 2016 to June 23, 2019.
   A total of 1 (A) meeting of the compensation committee was held in 2019. The members' attendance status was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate in Person (%) (B/A)	Remarks
Convener	Wei-Lin Wang	1	0	100%	
Member	Shen-Yi Lee	0	1	0%	
Member	Chin-Shih Lin	1	0	100%	
Member	Hai-Ming Chen	1	0	100%	
Member	Wei-Kang Pan	0	1	0%	

3. The tenure of the 4th session is from June 14, 2019 to June 13, 2022.
   A total of 2 (A) meeting of the compensation committee were held in 2019. The members' attendance status was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate in Person (%) (B/A)	Remarks
Convener	Wei-Lin Wang	2	0	100%	Re-appointed and the tenure is the same as the 8th session Board of Directors.
Member	Shen-Yi Lee	2	0	100%	
Member	Chin-Shih Lin	2	0	100%	
Member	Hai-Ming Chen	2	0	100%	
Member	Wei-Kang Pan	2	0	100%	

Annotations:

1. If the Board of Directors declines to adopt, or modifies a recommendation of the Compensation Committee:
   None.
2. The Compensation member has an objection or qualified opinion together with a record or written statement regarding a Compensation Committee resolution:
   None.
3. Major resolutions of Compensation Committee meetings in 2018 and the Company's response to committee members' opinion:

Compensation Committee Meeting Date	Content of Motion	Resolutions	Compensation Committee Members' Opinion and Company's Response
03/14/2019 The 9th meeting of the 3rd Committee	1. Executive officers' compensation budget for the year of 2019. 2. Directors' compensation budget for year 2018. 3. Added self-assessment questionnaire for performance evaluation of the board of directors of the company	All attending members unanimously agree to pass the proposal.	All attending Directors unanimously agree to pass the proposal on the Board meeting.

Compensation Committee Meeting Date	Content of Motion	Resolutions	Compensation Committee Members' Opinion and Company's Response
10/25/2019 The 1st meeting of the 4th Committee	1. Promotion of internal executive officers and review of their compensation for year 2019. 2. Added budget of quarterly incentive bonus for internal executive officers for year 2019	All attending members unanimously agree to pass the proposal.	All attending Directors unanimously agree to pass the proposal on the Board meeting.

Fulfillment of Social Responsibility and Deviations from the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
1. Does the Company assess ESG risks associated with its operations based on the principle of materiality, and establish related risk management policies or strategies?	V		1. The Company prepares a CSR Report each year, and analyzes the effect of material issues on WIN and strategies based on the principle of materiality. Please refer to Note 1 on pages 62~64 of this Annual Report for a description of risk assessments for material issues.	None
2. Does the Company have a dedicated (or ad-hoc) CSR organization with Board of Directors authorization for senior management, which reports to the Board of Directors?	V		2. The Company's Corporate Social Responsibility Committee was established in 2016, Mr. Shun-Ping Chen, General Manager of Corporate Administration, is the chair of the committee. The Committee has five CSR promotion teams whose members consist mainly of executives of Centers and Departments. The teams are dedicated to CSR tasks in corporate governance, care for culture and humanity, innovative technology, sustainable environment, and corporate value chain. They are responsible for formulating objectives for and the execution of policies or systems for corporate governance, development of a sustainable environment, and protection of social welfare. The CSR Committee reviews the results of its operations at the end of each year and reports to the Board.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
3. Environmental Topics (1) Has the Company set an Environmental management system designed to industry characteristics?	V		(1) All fabs of the Company have obtained ISO14001 Occupational Health and Safety Management System certifications. The maintenance certifications are passed annually. In addition, the Company conducts regular review of environmental impact on, and risks to facility safety to upgrade its EHS management system.	None
(2) Is the Company committed to improving resource efficiency and to the use of renewable materials with low environmental impact?	V		(2) The Company continues to utilize all resources more efficiently and uses recyclable materials such as dummy wafers, gold-related scrap, acetone, isopropanol and NMP.	None
(3) Does the Company evaluate potential risks and opportunities brought by climate change, and take response measures to climate-related issues?	V		(3) WIN responds to emergency global climate issues and identifies climate risks and opportunities, including physical risks, transition risks, energy opportunities, and market opportunities. Each plant established corresponding strategies to reduce the impact on the Company, seek opportunities, and embrace challenges. WIN began compiling a GHG inventory for the previous year starting in 2014, and passed the external certification for ISO 14064. We also reported results to the Environmental Protection Administration, and disclosed the results in the CSR report each year. We began disclosing data and information on climate issue management and carbon emissions in 2018 by actively responding to the climate issue questionnaire of the Carbon Disclosure Project (CDP). We applied to the Environmental Protection Administration for the offset project in 2019, adopted high-efficiency local scrubbers for PFC emissions on new production lines, and gradually replaced or upgraded existing production lines.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
(4) Does the Company compile statistics of greenhouse gas emissions, water use, and total weight of waste in the past two years, and does it establish policies for energy conservation & carbon reduction, greenhouse gas emission reduction, water use reduction, and other waste management?			(4) We established policies and reduction goals for water conservation, energy conservation, and pollution prevention, proposed corresponding improvement plans, and periodically inspected results. Under the premise of technology, economy, and feasibility, we carried out company-wide water conservation, energy conservation, and pollution prevention work, included it in annual reduction goals, and periodically inspected results. We prepare quarterly implementation reports and conduct performance reviews, and report the progress and results of improvement plans. At the end of each year, we review implementation results and set goals for the following year. Please refer to Note 2 on page 64 of this annual report	None
4. Social issues (1) Does the Company set policies and procedures in compliance with regulations and internationally recognized human rights principles?	V		(1) To protect the rights and interests of all workers, WIN strictly abides by the provisions of the Labor Standards Act and those of the requirements of international standards in all of our actions relevant to human rights. At the same time, we have consulted the code of conduct established by the Responsible Business Alliance (RBA), formerly known as the Electronic Industry Citizenship Coalition, as the basis for our management policies into order to protect our employees. Our guidelines for human rights management are set out in the following specifications: a. Meetings between management and workers are conducted based on the “Regulations for Implementing Employee-Management Meetings”: Although WIN does not have a labor union at the present time, a labor-management meeting is held every quarter. Fourteen representatives each are appointed by employees and the Company to prompt effective and fair communication in the event of a matter of concern. These measures promote harmonious labor-management relations and to find mutually beneficial solutions. b. We have established the “Measures of Handling Prevention, Complaint and Correction of Sexual Harassment in the Workplace” to protect the rights and privacy of the individuals concerned.	None

Assessment Item	Implementation Status: Yes	No	Explanation	Non-implementation and Its Reason(s)
	V		c. Issuance of the "Social Responsibility Statement": WIN has issued the statement, which promises to protect employees against harassment and illicit discrimination. The Company respects the human rights of all of its employees, providing fair job opportunities for applicants and employees with the right skills. The Company does not discriminate against potential candidates based on race, skin color, age, gender, sexual orientation, ethnicity, disability, pregnancy, religion, beliefs, political affiliation, union membership, marital status, or other entities protected under governmental regulations. Such principles apply to recruitment, employment, training, job promotion, remuneration, and welfare systems. The Company does not force employees or request employees to receive discriminatory medical examinations. d. With the "Supplier Code of Conduct", the Company hopes to examine human rights issues with a more positive attitude and a broader perspective through communication and cooperation with our suppliers. We also take our responsibility seriously when it comes to social and environmental issues. e. When new employees report for duties, we sign documents to protect the rights of new employees and the Company including the "Zero Sexual Assault and Sexual Harassment Announcement" and "Corporate Social Responsibility Announcement." It shows WIN's commitment to human rights.	
(2) Does the Company have reasonable employee benefit measures (including salaries, leave, and other benefits), and do business performance or results reflect on employee salaries?	V		(2) The Company has established the "Work Rules", "Employment Performance Assessment Rules", "Employee Reward and Discipline Rules" and "Procedures for Ethical Management and Guidelines for Conduct" according to relevant laws and regulations. The compensation policy is measured based on the employee's capability, contribution made to the Company and performance which has a positive correlation with the performance of the Company's business. The Company offers competitive salaries and establishes and reviews a reasonable compensation policy by participating reliable compensation survey annually. The overall remuneration includes the base salary, allowances, bonuses and employee dividends; employees receive competitive compensation based on such factors as job	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
			responsibility, core functions, academic background, prior experience, performance evaluation, market conditions, future development of the company, retention of employees with exceptional performance, and shareholder equity. Compensation is not subject to discrimination on the basis of gender, age, race, religion, political affiliation, marital status or other factors, and salaries are adjusted annually based on overall operating conditions and industry standards. In addition to providing competitive salaries, WIN also offers incentives include: a. Remuneration of employees: in order to express our gratitude to the employees for their contribution to the Company as well as to share the fruits of our labor, given that the year has been profitable, we will set aside 5% to 10% of the profits, in accordance with the provisions of the Company's Articles of Incorporation, as part of the employees' remuneration, as a token of appreciation for their hard work during the previous year. b. Year-end bonus: year-end bonus payments are distributed to employees based on their individual performance and the Company's overall business performance. The amount of the bonus is generally 2 months of salary, plus an additional amount that depends on the year's business performance. For 2019, this additional bonus was determined to be 1 month of salary. c. Quarterly bonus: bonus payments are made based on the fulfillment rates of profit targets d. Loyalty bonus: direct employees receive a NT$15,000 bonus for each completed year of service with the Company. e. Diverse bonuses and prizes as incentives: bonus for proposals, accountability, innovation and instant rewards as recognition of skills. f. Stock Ownership Trust: WIN's employees have independently established an Employee Stock Ownership Trust. To facilitate employees' financial planning and share its business outcomes, the Company provides funds that match 100% of employee contributions. The Company has established its employment performance assessment rules and implements each year, employees shall set up his/her performance goals and training plans to enhance	

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
			his/her capability, knowledge and skills regarding the Company's business.	
(3) Does the Company provide employees with a safe and healthy working environment, with regular safety and health training?	V		(3) Over the years the Company has been conducted the environmental impact and safety risk assessment, and comply with requirements of relevant laws and regulations to establish a workplace friendly and healthy to employees, which were certified by OHSAS18001. In 2019, the following education and training was provided to protect employee safety and health: a. Occupational safety and health training for new comers: Establish employees' safety and health awareness. b. Supervisor occupational safety and health training: Establish supervisors' safety and health awareness. c. Liberal hazardous chemicals Training for new comers: Establish employees' hazards of chemical substances awareness and how to use personal protection equipment. d. On-the-job labor safety/fire safety/fire extinguisher/emergency evacuation training. e. Quarterly emergency response drills at each factory. f. Six scooter safety lectures were organized. g. Employees receive health examination every year. General health examination: 2466 employees; Special health examination: (1) Arsenide (As) and its compounds: 1,513 employees, (2) Ionizing radiation: 265 employees. h. AEDs are provided in the plant area and we organize AED and CPR training. Protective measures taken to ensure a safe working environment and maintain employees' personal safety Please refer to page 107, "5.5 Employee Relation" of this annual report.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
(4) Has the Company established effective career development training plans?	V		(4) WIN strives to create a diverse learning environment that offers rich and interesting contents. By establishing the “Education and Training Procedures”, the Company has systematically integrated both internal and external resources, thus providing a complete talent development strategy as well as cultivating and improving employees’ skills and capabilities so that they can grow with the Company and together create a mutually beneficial relationship. A training roadmap for professional and managerial competencies is designed on the basis of the company’s mid-to-long-term business strategy and WIN’s core values. Multiple training methods are used to promote different types of training and development programs. Examples include: classroom-based courses, on-the-job training and coaching, and online English language training. The objective is to develop a blueprint for each employee’s future development through a comprehensive training program. WIN’s talent cultivation is divided into three contexts, formulating professional training roadmaps based on the department in which employee belongs, the job position, the expertise and familiarity required to be successful in the role. Additionally, the HR Division plans and organizes all types of professional training courses that meet the requirements to help employees adapt and learn the skills they need at work.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
(5) Does the Company comply with relevant regulations and international standards in customer health and safety, customer privacy, and marketing and labeling its goods and services, and has it established consumer rights protection policies and complaint procedures?	V		(5) Customers of the Company are not end users, and there are clear and effective channels between the Company and customers to deal the customer complaints. The Company has secured products liability insurance for all products to ensure consumers rights. The Company's commitment: Dedication to development and innovation of manufacturing technology to provide manufacturing service of superior compound semiconductor devices and integrated circuits. Continuous pursuit of excellence demonstrated by providing high-quality products characterized by the employment of "Plan-Do-Check-Act" cycles for continuous improvement. To assure sustainable operation and to fulfill responsibility of a good corporate citizen, the Company passed the following certifications after audits of third parties: a. ISO9001 Quality Management System Certification; b. ISO/TS16949 Automotive Management System Certification; c. ISO14001 Environmental Management System Certification; and d. OHSAS18001 Occupational Health and Safety Management System Certification. To protect the confidentiality and integrity of customer information, we continue to strengthen system and data security including the establishment of a comprehensive anti-virus system and file encryption systems and mechanisms. We also implement rigorous access control and management for customer data and files.	None
(6) Does the Company have a supplier management policy, require suppliers to comply with regulations on environmental protection, occupational safety and health, and labor rights, and what is its implementation status?	V		(6) Company, depending on the nature of material, a chemical operation review will be undertaken in accordance with the Company's New Material and Supplier Verification Procedures to determine if the material supplier complies with EU directives of RoHS/REACH and the material to be offered is conflict. In addition, to enhance the Corporate Social Responsibility the company has established "Suppliers Code of Conduct" and disclosed the information includes labor, health and safety, environment, ethic and integrity on our website. Ratio of new suppliers in the supply chain that signed the "WIN Supplier Code of Conduct" in 2018 reached 96%.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
5. Does the Company references internationally accepted reporting standards or guidelines, and prepare reports that disclose non-financial information of the company, such as corporate social responsibility reports? Do the reports above obtain assurance from a third party verification unit?			Our 2019 CSR Report has been assured by SGS Taiwan Ltd. to be in compliance with the “Core” option of the GRI Standards and AA1000 Type 2 moderate level assurance.	None

6. If the Company has established corporate social responsibility principles based on the “Corporate Social Responsibility Best Practice Principles for TWSE/TPEx Listed Companies”, please describe any discrepancy between the principles and their implementation:
The Company has established “Corporate Social Responsibility Best Practice Principles.” The Company well recognizes a corporation is one of the community citizens and should fulfill corporate social responsibility. The Company has taken into consideration CSR related issues in designing of company systems and operating strategies, such as corporate governance, sustainability environment, social benefits, and corporate social responsibility. Operation of the Company is fully in compliance with the corporate governance guidelines set forth in the “Corporate Social Responsibility Best Practice Principles for TWSE/TPEx Listed Companies.”

7. Other important information to facilitate better understanding of the Company’s corporate social responsibility practices:

(1) Since its establishment, WIN got sewer connection consent from the environmental protection agency and maintains the permit for wastewater effluent. Effluents out of WIN facilities undergo pre-treatment in house and treatment by Wastewater Treatment Plant of Hwaya Technology Park (the “Park”) before discharging into surface water body. Hwaya Technology Park Administration (the “Park Administration”) operating wastewater treatment for the Company checks effluents on a weekly basis and during Year 2019, WIN’s effluents strictly met water quality standards required by the Park Administration.

(2) The Park Administration analyzes samples of air, water and underground water within and outside the Park quarterly to monitor quality of the same. The Environment Quality Supervision Committee of the Park, consisted of representatives of the firms in the Park, experts and academia, invites leaders of neighboring villages to communicate and discussion agenda related to interaction between the Park and its community, including environmental protection issues such as air and river water quality, transportation. The Company keeps involved in the committee to enhance environment quality of neighboring community.

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	

(3) Since the European Union's RoHS directive took effect on July 1, 2006, all products available on the market with substances such as lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ether, have been required to contain less than 1,000 ppm of these substances. Customers have actively inquired and requested that WIN comply with EU's relevant regulations governing hazardous substances. Therefore, we began checking the ingredients of our raw materials and have since established a hazardous substance free management procedure. WIN is committed to meeting customer requirements concerning hazardous-substance-free operations. Since late 2010, we have included the requirements of the EU's hazardous substance free directive in our test reports for product ingredients. These directives include REACH, RoHS, PFOS & PFOA, and Halogen-Free Regulations.
At the following Customer login page (select E-Service) on WIN's official website (https://www.winfoundry.com/Other/other_login), a Hazardous Substance Free section was set up in the Customer section of WIN's official website which provides the following information pertaining to hazardous-substance-free and conflicting minerals for customer access:

- ✓ Declaration for Hazardous Substance Free
- ✓ Third-Party Product Testing Report for the Year
- ✓ Introduction to Hazardous Substance Free Management Procedure.

Besides establishing a hazardous substance free management procedure, WIN is committed to protecting the Earth by actively collaborating with its suppliers to produce products that are hazardous substance-free for customers and consumers. WIN specifies in purchase contracts and order forms that new material suppliers must comply with WIN's supplier management procedures, and that the provided materials may not contain hazardous substances as defined by WIN. Furthermore, suppliers must regularly provide product testing reports and undertake annual supplier assessments. Regarding new materials, the Technology R&D Department must abide by WIN's hazardous substance free management procedures when determining product specifications and selecting materials to ensure that new materials are hazardous substance-free. Responding the issue of metal conflict-free, the Company also requires suppliers to provide declaration of metal conflict-free, disclosure of minerals source and smelter information questionnaires in a RBA form. By actually taking action, WIN demonstrates its efforts in keeping in line with relevant environmental regulations, green purchase trends, and customer requirements.

(4) The Company upholds the core values of Integrity, Innovation, Discipline, and Efficiency in providing foundry total solutions to its worldwide wireless communications customers to meet the mission of pursuing excellent and caring society.

(5) WIN upholds the spirit of respecting life, caring for disadvantaged individuals, and giving back what is taken from society. WIN spreads its love for society by donating resources as a way of showing our concern for the economically disadvantaged. We donated cash and supplies worth a total of NT$27,191,000 to charity in 2019 to fulfill our CSR and promote community services and cultural and educational activities. The major charitable events were as follows:

a. The Company organized chemical courses and events with Tamkang University in Fu-Yuan Elementary School in Taoyuan City, Jian-Shan Junior High School in New Taipei City, and Shi-Ding Senior High School in New Taipei City and organized 23 attendees as volunteers to spread elements of chemical safety and knowledge more schools in Taiwan that lack resources based on the philosophy of "giving back to local communities."

b. WIN organized the "Summer donation of used clothes and handbags" event to encourage employees to donate used clothes and handbags that are still in good condition but no longer needed to social welfare organizations. Statistics show that WIN employees donated a total of 1,874 items (1,721 used shirts/pants, 153 used handbags) to Taoyuan City Private Funchao Education and Nursing Institute, Catholic Angel Center for the Development of the Disabled, and Taoyuan City Private White Kite Orphanage.

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
c. WIN invited 40 fifth and sixth graders from Fuyuan Elementary School in Guishan District, Taoyuan City to participate in the Family Day event at West Lake Resortopia in Miaoli. WIN employees donated NT$70,600 to make the school's yearbooks, and a donation ceremony was held during the event that day. Furthermore, we made arrangements for teachers and students to participate in numerous events that day, and gave them meal vouchers at the fair, building good relations with local communities. In addition to corporate sponsorship, our employees actively participate in fundraisers, supplies and book donations, and donate the funds and supplies to nursing homes, nurseries, and students in remote areas. (6) Increase work opportunities for the underprivileged, and hire visually impaired people to serve as masseuses in accordance with the People with Disabilities Rights Protection Act, so that employees can enjoy a massage in the company at a preferential price. (7) Launch "Employee Friendly Enterprise" Campaign a. The Company is committed to creating job opportunities; local employees come first. b. We offer competitive salaries that are linked to performance. Besides providing employees with stable living conditions, this also encourages employees with outstanding performance. c. We emphasize employees' work-life balance and established a reasonable leave system, flexible work hours, and care for employees' physical and mental health; implement Employee Assistance Programs (EAP); encourage employees to join clubs through the Employee Welfare Committee, and plan company trips and other recreational activities to promote a harmonious labor-management relationship. d. For the details of the working environment and employee safety protection measures, please refer to "5.5. Employee Relations", page 107. (8) Other social responsibility activities: The Company appointed personnel responsible for gathering and disclosing the information to be disclosed on MOPS, so as to ensure proper and timely disclosure of information that might affect the decisions of shareholders and stakeholders.				

Note 1: Description of risk assessments for material issues

Material Topics	**Risk Assessment Item**	**Importance to WIN**	**WIN's Strategy**
Corporate Governance	Economic performance	A good business strategy is key to maintaining a healthy capital foundation that maintains investor, creditor, and market confidence, supports future operations and development, and maximizes benefits for customers, suppliers, and employees.	1. Technological innovation 2. Quality improvement 3. Lower production costs
Corporate Governance	Anti-corruption	"Integrity and accountability" constitute one of WIN's core values. We uphold corporate governance principles and require members of the governance unit and company employees to uphold high moral standards and implement ethical management. We prohibit any behavior that may damage WIN's reputation or interests in order to achieve sustainable development.	1. Promote the Company's core value of "integrity and accountability" during training courses for new employees 2. Promote the policy of integrity to employees at the end of each year 3. Set up an independent mailbox for whistleblowing

Material Topics	Risk Assessment Item	Importance to WIN	WIN's Strategy
Corporate Governance	Socioeconomic Compliance	Failure to comply with social and economic laws and regulations may affect the Company's image, reputation, and business risks. WIN therefore abides by taxation obligations, promotes the principle of good faith, established a human rights policy, and irregularly promotes occupational health and safety procedures to maintain long-term development of the Company.	Use education, training, and announcements to make employees aware of and comply with related laws and regulations
Environment	Emissions	WIN has adopted a corporate sustainable development philosophy that supports environmental protection and green production and we continue to supervise or improve emissions reduction measures for energy management, greenhouse gas emissions management, air pollution control, water resource management, and effluents and waste management. We implement these measures and work hard to reduce the impact of production on the environment.	1. Prioritize high-efficiency and low-energy consumption models for replacement of equipment 2. We plan to establish green energy and renewable energy based on the status of the Company's operations 3. Reduce the use of raw materials in production 4. Increase the recycling rate of waste solvents 5. Water consumption reduction plan 6. Water recycling and reuse
Environment	Energy		
Environment	Effluents and waste		
Environment	Water and discharged water		
Environment	Environmental compliance	WIN's minimum standards are to protect the environmental and the health of citizens and comply with related environmental protection regulations and administrative rules. We adopt self-disciplinary measures superior to legal requirements and aim to achieve zero pollution of the environment.	Obey all governmental regulations and related international covenants
Society	Occupational health and safety	Massive amounts of chemicals and machines that pose high risks are involved in the production of semiconductors. Safety and health management is of the utmost importance. Through the operations and promotion of the management system, we effectively reduce risks of potential hazards, prevent accidents, protect the physical and mental health of workers, and protect the Company's assets and operations.	1. Use education materials to strengthen employees' awareness of correct and safe conduct at work 2. Convene quarterly meetings of the Occupational Safety Management Committee to discuss and review related issues

Material Topics	Risk Assessment Item	Importance to WIN	WIN's Strategy
Society	Employment	Human resources are our most important asset, as well as the driving force behind our growth. To fulfill our CSR and reduce human rights risks, we provide employees with a friendly workplace. We attach importance to employee benefits, provide employees with communication and complaint channels, and are actively improving the work environment.	Implement human rights management principles: Prohibit forced labor, ban child labor, non-discrimination, respect for freedom of association, respect for privacy, pay attention to employee health, balance safety and work
Society	Training and education	We established a comprehensive training and development system to improve employees' professional skills and satisfy requirements for growth.	Establish plans for talent cultivation and draft blueprints for employees' future development

Note 2: Our main environmental, health, and safety goals for 2018 and 2019 are to increase the efficiency of energy use and reduce waste emissions through process and engineering improvements. Due to the expansion of Fab C in 2018. We only established product electricity consumption and water consumption reduction objectives for Fab A and Fab B, results are as follows:

Year / Total consumption	2018		2019	
	Reduction objective	Performance	Reduction objective	Performance
Electricity consumption (kW / 6”e wafer)	309.6	370.83	520.59	470.27
Water consumption (m3/ 6”e wafer)	2.53	2.98	3.41	3.07
General solid waste (kg/ 6”e wafer)	—	1.33	1.32	0.96
PFCs emissions (ton CO2e / 6”e wafer)	0.192	0.228	0.226	0.201

Electricity and water consumption during the past three years are shown in the table below:

Year / Total consumption	2017	2018	2019*
Electricity consumption (10,000 kW)	9,452.32	13,171.23	14,138.72
Water consumption (km^3)	815.76	870.17	921.89
*: Total consumption increased in 2019 due to production and expansion requirements of our Guishan Fab C.			

Green house gas emission during the past three years are shown in the table below:

Year / Total consumption	2017	2018	2019
General solid waste (ton)	241,496	336,764	289,380
Green house gas category one (ton CO2 e)	54,515	64,447	66,342
Green house gas category two (ton CO2 e)	96,562	101,253	104,151
The above data is verified externally by third parties and disclosed in the CSR report.			

Implementation of Ethical Corporate Management and Deviations from the "Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
1. Establishment of Corporate Conduct and Ethics Policy and Implementation Measures				
(1) Does the Company established Corporate Conduct and Ethics Policy that approved by the Board and have bylaws and publicly available documents addressing its corporate conduct and ethics policy and measures, and the commitment regarding implementation of such policy from the Board of Directors and the exclusive management team?	V		(1) "Integrity and Accountability" is one of WIN's core values. The Company has established its "Ethical Corporate Management Best Practice Principles", "Procedures for Ethical Management and Guidelines for Conduct" and "Guidelines for the Code of Ethical Conduct". These principles/ procedures/ guidelines have been reviewed and approved by the Board and promoted actively to employees during their regular training sessions, and directors and senior executives are also required to attend training courses in ethical corporate management.	None
(2) Does the company establish mechanisms for assessing the risk of unethical conduct, periodically analyze and assess operating activities within the scope of business with relatively high risk of unethical conduct, and formulate an unethical conduct prevention plan on this basis, which at least includes preventive measures for conduct specified in Article 7, Paragraph 2 of the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies?	V		(2) The Company implements corruption risk assessments and mitigation measures each year, and contents include unethical conduct specified in subparagraphs of Article 7, Paragraph 2 of the Ethical Corporate Management Best Practice Principles for TWSE/TPEx-Listed Companies. The level of risk is determined after analyzing the probability and impact on the Company's asset losses. In addition to preventive measures, education, and training, high risk items are included in annual audit items.	None
(3) Did the company specify operating procedures, guidelines for conduct, punishments for violation, rules of appeal in the unethical conduct prevention plan, and does it implement and periodically review and revise the plan?	V		(3) The Company established its "Procedures for Ethical Management and Guidelines for Conduct" which includes preventing unethical conduct, whistle-blowing system and punishment against rule breakers. The Company also established a reporting procedure and an independent mailbox on its official website and review every year whether it is necessary to revise or establish supporting policies and operating procedures.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
2. Ethic Management Practice (1) Does the Company assess the ethics records of whom it has business relationship with and include business conduct and ethics related clauses in the business contracts?	V		(1) The Company upholds the principle of fair treatment to customers and suppliers. Before entering into contracts with the company, all suppliers have to comply with the Suppliers' Code of Ethics which covers labor, health, safety, environmental protection, ethics and integrity.	None
(2) Does the Company set up a unit which is dedicated to or tasked with promoting the Company's ethical standards and reports directly to the Board of Directors with periodical (at least once a year) updates on policy of ethic management and prevention program of unethical conduct and surprise the status of implementation?	V		(2) The Company upholds the principles of ethical corporate management and delegated Human Resources Division as responsible unit. Its main tasks are as follow: 1. Assist in incorporating the values of integrity and ethics into the Company's business strategies, and establish anti-corruption measures to ensure ethical corporate management in coordination with laws and systems. 2. Establish measures for preventing unethical conduct and establish SOPs for work in each measure. 3. Plan the internal organization and responsibilities, and establish supervision and balance mechanisms for operating activities in the scope of business with relatively high risk of unethical conduct. 4. Implement and coordinate promotion and training related to the policy of integrity. 5. Plan the whistleblower system to ensure the effectiveness of implementation. 6. Assist the Board of Directors and managers in inspecting and evaluating whether or not preventive measures are effectively implemented for ethical corporate management, periodically evaluate the compliance of related business processes, and prepare reports.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
			7. Report the implementation status to the Board of Directors at the end of the year, including promotion, education, and training related to the implementation of the ethical corporate management policy and measures for preventing unethical conduct.	
(3) Does the Company establish policies to prevent conflict of interests, provide appropriate communication and complaint channels and implement such policies properly?	V		(3) The Company has established its "Ethical Corporate Management Best Practice Guidelines", "Procedures for Ethical Management and Guidelines for Conduct" and "Guidelines for the Code of Ethical Conduct" to require the Company personnel not offer, commitment, requirements or accepting any improper profit gains directly or indirectly when engaging in business operation, nor have any unethical or illegal conduct or breach the fiduciary obligations.	None
(4) Does the company have effective accounting system and internal control systems set up to facilitate ethical corporate management, does the internal auditing unit formulate audit plans based on unethical conduct risk assessment results, and does it audit compliance with the unethical conduct prevention plan or commission a CPA to perform the audit?	V		(4) The Company has established internal control systems, accounting systems and related management regulations and asked the audit unit to do the assessment of the risks of ethic management policy. 21 risk factors related to ethic were identified, and 14 audit operations were completed in 2019, no abnormalities have been found.	None
(5) Does the Company provide internal and external ethical conduct training programs on a regular basis?	V		(5) WIN has been conducting integrity awareness for years. New recruits who are required to sign the "Guidelines for the Code of Ethical Conduct" and "Employee Commitment Statement" on their first day of work. In terms of course offerings, training courses on integrity management are held for employees of the company every year, courses including internal and external education training. In 2019, 5,054 employees participated the integrity management training courses, which accounts for about 1,703 hours.	None

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
3. Implementation of Complaint Procedures				
(1) Does the Company establish specific complaint and reward procedures, set up conveniently accessible complaint channels, and designate responsible individuals to handle the complaint received?	V		(1) Any person who suspects or finds any violation of laws or ethical code may report the case to independent directors, manager officers, head of internal audit, or other eligible personnel. The Company has set up Reward and Discipline Commission to evaluate employee ethical and unethical conducts. The Company encourages anyone to report any illegal or unethical conducts to the personnel through mailbox in stakeholders' engagement section of its official website.	None
(2) Does the Company establish standard operation procedures for investigating the complaints received, respond and measurements after investigation and ensuring such complaints are handled in a confidential manner?	V		(2) The Company encourages its employees to report to a managerial officer, chief internal auditor, Independent Director or other appropriate individual upon discovery of any activity in violation of a law or regulation and also undertakes information confidential and whistleblowers protection based on its "Ethical Corporate Management Best Practice Guidelines" and "Procedures for Ethical Management and Guidelines for Conduct."	None
(3) Does the Company adopt proper measures to prevent a complainant from retaliation for his/her filing a complaint?	V		(3) The Company keeps the whistleblowers' identity and contents of information confidential and assures the whistleblowers' rights and interests based on its "Procedures for Ethical Management and Guidelines for Conduct."	None
4. Information Disclosure				
(1) Does the Company disclose its guidelines on business ethics as well as information about implementation of such guidelines on its website and the MOPS?	V		(1) The Company has established its "Ethical Corporate Management Best Practice Guidelines" and disclosed on the Company's website and the MOPS, and assigned a dedicated unit to responsible for establishing and supervising the implementation of the ethical corporate management policies.	None
5. If the Company has established its own ethical corporate governance in accordance with Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, describe the operation status and difference with the best practice principles: The Company has implemented its ethical corporate management policies based on its "Ethical Corporate Management Best Practice Principles."				

Assessment Item	Implementation Status			Non-implementation and Its Reason(s)
	Yes	No	Explanation	
6. Other important information to facilitate better understanding of the Company's ethical corporate management operations (e.g. discussion of revisions to ethical corporate management rules set down by the Company): None.				

Corporate Governance Guidelines and Regulations

The Company has disclosed its corporate governance best practice principles and related regulations on its official website (http://www.winfoundry.com). Please visit Major Internal Policies\ Corporate Governance\ Investor Relations for more details.

Major Internal Policies	
• Articles of Incorporation • Rules for Elections of Directors • Procedures for Endorsement and Guarantee • Corporate Governance Best Practice Principles • Procedures Governing the Board Performance Evaluation • Procedures of Ethical Management and Guidelines for Conduct	• Rules for the Procedures of the Shareholders' Meeting • Procedures for Acquisition or Disposal of Assets • Procedures for Loaning Funds to Other Parties • Corporate Social Responsibility Best Practice Principles • Ethical Corporate Management Best Practice Principles • Guidelines for the Code of Ethical Conduct

Other important information to facilitate the Company's implementation of Corporate Governance

A. The Company discloses the material information to investors in time and holds investor conference regularly to give investors the Company's operational results.

B. The Company has established "Procedures for the Prevention of Insider Trading", please refer to pages 139~142.

C. Employee behavior and ethics regulation were as below:

a. In the Company's working rules, employees of the Company are not allowed to take advantage of their position to engage in malpractice or benefit oneself or others, nor accept any gifts or other improper benefits. The key points in the Company's employee rewards and punishments also include the relevant penalties for violation of the above specifications to ensure that the Company performs its integrity management.

b. In the education and training of new personnel, the Company strengthens the core value of the company, which is "integrity", and emphasizes the importance to conduct on daily work, so that the new comer fully understands the determination and policy of the Company's integrity management. Furthermore, the assessment system is combined to give appropriate rewards and punishments in a timely manner.

c. The major content of "Work Rules" were as below:

I. The employees shall abide by the following regulations during service period:

1. To represent the Company and carry a good image.
2. To perform as is required by the Company's policies and managers' indications.
3. To respect individuals and cooperate to achieve business objectives.
4. To follow personnel rotation changed to business needs.
5. To perform accurately with no fears and no excuses or delay.
6. Never to reveal or inquire confidential compensation packages
7. Never to gamble, fight, do drugs or take any immoral action.
8. Never to look over documents irrelevant to individual's own business without

permissions and never to reveal documents to the irrelevant third party.

9. To obey to regulations regards health and safety and maintain a healthy and safe working environment.

II. The employer, family of the employer, agent of the Company and every employee shall NOT behave any of the followings:

1. To insult, belittle or discriminate by gender.
2. To agitate oral or physical sexual harassment.
3. To intercourse for exchange or reward.
4. To threaten or punish for intercourse.
5. To rape or sexual attack.
6. No manifest discrimination at work, e.g. post pornographic pictures or books.

III. To prevent sexual harassment at work and protect gender equality, the Company enacts "Measures of Handling Prevention, Complaint and Correction of Sexual Harassment." If any violation is verified, the rule-breaker will be spared the punishment of reprimand, peccadillo, serious offense, transferral, degradation or dismission (Article 12, Labor Standard Act), depends on the severity. If the violation is criminal responsible, the Company could have the judicial authorities involved.

IV. According to its "Measures of Handling Prevention, Complaint and Correction of Sexual Harassment in the Workplace", the Company constitutes investigation team.

Internal Control Systems

A. Statement of Internal Control

WIN Semiconductors Corp.

Statement of Internal Control

March 18, 2020

The internal control self-assessment of WIN Semiconductors Corp. was conducted for the year ended December 31, 2019 based on the Company's internal control system. The results are described as following:

1. WIN Semiconductors Corp. acknowledges that the board of directors and the management are responsible for establishing, executing and maintaining an effective internal control system, which has been already set up. The purposes of the internal control system are to provide a reasonable assurance of achieving the goals of efficiency and effectiveness of the operations, such as profitability, performance and the safeguard of the assets, the reliability of the financial reports and the compliance with the applicable laws and regulations.
2. No matter how perfectly designed, the internal control system has its inherent limitations, and it can only provide reasonable assurance of achieving the three goals mentioned above. The effectiveness of the internal control system may subject to changes of environment and circumstances. WIN Semiconductors Corp. has established an internal control system with self-monitoring capabilities, which can undertake corrective actions whenever a deficiency is identified.
3. WIN Semiconductors Corp. evaluates the design and operating effectiveness of its internal control system based on the criteria provided in the Regulations Governing the governing the establishment of internal control system by public companies promulgated by the Securities and Futures Bureau of the Financial Supervisory Commission. The criteria adopted by the Regulations identify five components of internal control based on the process of management control: (1) control environment, (2) risk assessment (3) control activities, (4) information and communication, and (5) monitoring. Each component consists of certain items, which could be referred to the Standards.
4. WIN Semiconductors Corp. has evaluated the design and effectiveness of its internal control system according to the aforementioned criteria.
5. WIN Semiconductors Corp. believes that the effectiveness of the design and execution of the internal control system (including its subsidiaries) during the above mentioned assessment period provides reasonable assurance of achieving the goals of the efficiency and effectiveness of operations, the reliability of financial reports and the compliance with applicable laws and regulations.
6. The Statement of Internal Control will be an integral part of WIN Semiconductors Corp. annual report and prospectus and will be made public. Any false statement, concealment, or other illegality in the content made public will entail legal liabilities under Articles 20, 32, 171, and 174 of the Securities and Exchange Law.
7. The statement has been passed by the Board of Directors in the meeting held on March 18, 2020, with none of the nine attending directors expressing dissenting opinions on the content of the Statement.

WIN Semiconductors Corp.

Chairman: Chin-Tsai Chen *CEO: Kyle Chen*

B. A CPA Has Been Hired to Carry Out a Special Audit of the Internal Control System, Furnish the CPA Audit Report

None.

For the most recent fiscal year or during the current fiscal year up to the date of printing of the annual report, disclose any sanctions imposed in accordance with the law upon the company or its internal personnel, any sanctions imposed by the company upon its internal personnel for violations of internal control system provisions. If the result of the punishment may have a significant impact on shareholders' equity or securities prices, the content of the punishment, principle deficiencies and the state of any efforts to make improvements shall be listed

None.

Major Resolutions of Shareholders' Meeting and Board Meetings

A. Action Arising of 2019 Annual General Shareholders' Meeting:

Major Resolutions	Action Arising
Approved the adoption of the 2018 Business Report and financial statements.	The relevant documents were filed with authority and disclosed on the MOPS.
Approved the adoption of the proposal for distribution of 2018 profits.	The Company decided to set up the ex-dividend date of cash dividend for July 7, 2019 and paid on July 19, 2019 (NT$5 per share) according to the resolution of the 2018 Annual Shareholders' Meeting.
Approved the amendment to the Company's "Articles of Incorporation."	The amendment of "Articles of Incorporation" was filed with MOEA, R.O.C. on July 03, 2019 and disclosed on the Company's website.
Approved the amendment to the Company's "Procedures for Acquisition or Disposal of Assets."	The amendment of was passed by the AGM and disclosed on the Company's website. The Company has executed the rules accordingly.
Approved the amendment to the Company's "Procedures for Lending Funds to Other Parties."	The amendment of was passed by the AGM and disclosed on the Company's website. The Company has executed the rules accordingly.
Approved the amendment to the Company's "Procedures for Endorsement & Guarantee."	The amendment of was passed by the AGM and disclosed on the Company's website. The Company has executed the rules accordingly.
Election of nine Directors of the Board (including three Independent Directors).	Elected Directors list: Chin-Tsai Chen, International Fiber Technology Co., Ltd.-Representative: Shih-Chuan Hsieh, Li-Cheng Yeh, Yu-Chi Wang, Wen-Ming Chang and Shun-Ping Chen. Elected Independent Directors list: Chin-Shih Lin, Shen-Yi Lee and Hai-Ming Chen. The tenure of newly elected directors shall commence on June 14, 2019 and expire on June 13, 2022. The registration was completed by MOEA, R.O.C. on July 03, 2019 and disclosed on t he Company's website.
Approved the proposal for release of Directors from non-competition restrictions.	The proposal become effective after approval by the AGM and was disclosed on the MOPS.

B. Major Resolutions of Board Meetings

Date	Major Resolutions
03/21/2019	1. Approval of the parent-company-only financial statements and consolidated financial statements for the year of 2018. 2. Approval of the Business Report for the year of 2018. 3. Recommendation of the distribution of earnings for the year of 2018. 4. Authorize the chairman of Audit Committee to sign Audit Committee's Review Report. 5. Approval of CPA change starting from the first quarter of 2019 and evaluation of independence and suitability of the successor CPA. 6. Approval of the professional service fee of the CPAs for the year of 2019. 7. Evaluation the effectiveness of the Internal Control System. 8. Amendments to the "Article of Incorporation." 9. Amendments to the Internal Control System. 10. Amendments to the "Procedures for Acquisition or Disposal of Assets." 11. Amendments to the "Procedures for Lending Funds to Other Parties" and "Procedures for Endorsement & Guarantee." 12. Election for nine Directors (including three Independent Directors) at the 2019 Annual Shareholders' Meeting. 13. Nomination of nine candidates for Board of Directors (including three Independent Directors). 14. Proposal for release of Directors from non-competition restrictions. 15. Convening the 2019 Annual Shareholders' Meeting. 16. Redemption of Restricted Stock Awards and set the record date for cancellation. 17. Application for short-term and mid-term facilities with financial institutions. 18. Donation of Taoyuan i-Fare Charity Foundation. 19. Executive officers' compensation for the year of 2018 and compensation budget for the year of 2019.
05/14/2019	1. Approval of endorsement and guarantee to subsidiaries. 2. Set the Company's "Standard Operating Procedures for Handling Requests Made by Directors." 3. Appointment of the Chief Officer of Corporate Governance. 4. Set the record date of capital increase, issuing shares and list of employees being award for the second issue issuance of Restricted Stock Awards ("RSA") in 2018.
06/14/2019	1. Election of Chairman and Vice Chairman of the Company. 2. Appointment of members of the Company's Compensation Committee.
08/14/2019	1. Investment in subsidiary, Win Semiconductors Cayman Islands Co., Ltd. 2. Proposal for directors and important staffs' liability insurance. 3. Application for short-term and mid-term facilities with financial institutions. 4. Proposal for the Company's organizational adjustment.
10/29/2019	1. Proposal for the use of the company's undistributed profit in 2018 to purchase software and hardware equipment for the Company's self-production or business use. 2. Investment in subsidiary, Phalanx Biotech Group, Inc. 3. Donation of Taoyuan i-Fare Charity Foundation. 4. Proposal for adding compensation budget and recommendation for compensation of executive officers promoted in 2019.
11/13/2019	1. The Company's audit plan for year 2020. 2. Amendments to the Company's Internal Control System. 3. Application for short-term and mid-term facilities with financial institutions.
12/26/2019	1. Approval of 2020 budget plan of the Company. 2. Approval of adding the Company's endorsement and guarantee to its subsidiaries.
03/18/2020	1. The distribution of employees' profit sharing bonus and directors' compensations for the year of 2019.

Date	Major Resolutions
	2. Approval of the financial statements and consolidated financial statements for the year of 2019. 3. Approval of the business report for the year of 2019. 4. Recommendation of the distribution of earnings for the year of 2019. 5. Approval of CPA change starting from the first quarter of 2020 and evaluation of independence and suitability of the successor CPA. 6. Approval of the professional service fee of the CPAs for the year of 2020. 7. Process of the evaluation for the effectiveness of internal control and issuance of Internal Control Statement of the Company for the year of 2019. 8. Proposal for release of Directors from non-competition restrictions. 9. Convening the 2019 Annual Shareholders' Meeting. 10. Application for short-term and mid-term facilities with financial institutions. 11. Approval for the Company's participation to ITEQ's issuance of common stock for cash. 12. Donation of Taoyuan i-Fare Charity Foundation. 13. Executive officers' compensation for the year of 2019 and compensation budget for the year of 2020.

Major Issues of Record or Written Statements Made by Any Director or Supervisor Dissenting to Important Resolutions Passed by the Board of Directors

None

Resignation or Dismissal of the Company's Key Individuals, Including the Chairman, CEO, and Heads of Accounting, Finance, Internal Audit, Chef Officer of Corporate Governance and R&D

Title	Name	Date Effective	Date Dismissal	Reasons of Resignation or Dismissal
CEO	Yu-Chi Wang	09/28/2010	08/14/2019	Position adjustment: The Company set up a "Technology Development Strategy Committee" under Chairman Office. The committee is responsible for the highest level of WIN's technology decisions, leading the company's R&D innovations, cultivating key technology talents, integrating relevant technologies and assisting operation the deployment of the company's operation strategy. WIN's CEO, Dr. Yu-Chi Wang is transferred to the committee and dedicated to relevant affairs, in order to fulfill WIN's short-, mid- and long-term operation goals. In addition to the committee, Dr. Yu-Chi Wang is also WIN's Vice Chairman. The Board has appointed Mr. Kyle Chen to take over the CEO position of WIN.

3.4. Information Regarding the Company's Audit Fee and Independence

Audit Fee

Accounting Firm	Name of CPA		Period Covered by CPA's Audit	Remarks
KPMG	Chia-Chien Tang	Ya-Ling Chen	01/01/2019~12/31/2019	—

Unit: NT$ thousand

Fee Range \ Fee Items		Audit Fee	Non-audit Fee	Total
1	Under NT$2,000		1,122	1,122
2	NT$2,000 ~ NT$4,000			
3	NT$4,000 ~ NT$6,000			
4	NT$6,000 ~ NT$8,000	6,855		6,855
5	NT$8,000 ~ NT$10,000			
6	Over NT$100,000			

Unit: NT$ thousand

Firm	Name of CPA	Audit Fee	Non-audit Fee (Note)					Period Covered by CPA's Audit	Remarks
			System of Design	Company Registration	Human Resource	Others	Subtotal		
KPMG	Chia-Chien Tang Ya-Ling Chen	6,855		81		1,041	1,122	01/01/2019 ~ 12/31/2019	—

Note: Non-audit fee includes Transfer Pricing report, application to Investment Commission of MOEA, and oversea agency service.

3.5. Replacement of CPA

A. Regarding the Former CPA

<table>
<tr><td>Replacement Date</td><td colspan="3">March 18, 2020</td></tr>
<tr><td>Replacement reasons and explanations</td><td colspan="3">Due to internal restructuring at KPMG firm, the CPAs of the Company were changed starting January 1, 2020.</td></tr>
<tr><td rowspan="3">Describe whether the Company terminated or the CPA did not accept the appointment</td><td>Parties / Status</td><td>CPA</td><td>The Company</td></tr>
<tr><td>Termination of appointment</td><td>Not applicable</td><td>Not applicable</td></tr>
<tr><td>No longer accepted (continued) appointment</td><td>Not applicable</td><td>Not applicable</td></tr>
<tr><td>Other issues (except for unqualified issues) in the audit reports within the last two years</td><td colspan="3">Not applicable</td></tr>
<tr><td rowspan="4">Differences with the company</td><td>None</td><td colspan="2">Accounting principles or practices</td></tr>
<tr><td>None</td><td colspan="2">Disclosure of Financial Statements</td></tr>
<tr><td>None</td><td colspan="2">Audit scope or steps</td></tr>
<tr><td>None</td><td colspan="2">Others</td></tr>
<tr><td>Other Revealed Matters</td><td colspan="3">None</td></tr>
</table>

B. Regarding the Successor CPA

Name of accounting firm	KPMG
Name of CPA	Chia-Chien Tang and Ming-Hung Huang
Date of appointment	March 18, 2020
Consultation results and opinions on accounting treatments or principles with respect to specified transactions and the company's financial reports that the CPA might issue prior to the engagement	Not applicable
Succeeding CPA's written opinion of disagreement toward the former CPA	Not applicable

3.6. Audit Independence

The Company's Chairman, Chief Executive Officer, Chief Financial Officer, and managers in charge of its finance and accounting operations did not hold any positions in the Company's independent auditing firm or its affiliates during 2019.

3.7. Transfer of Equity Interests and/or Pledge of or Changes in Equity Interests by Directors, Supervisors, Managers or Major Shareholders with a Stake of More than 10 Percent

Changes in Shareholding of Directors, Supervisors, Managers and Major Shareholders

Unit: Shares

Title	Name	2019		As of April 30, 2020	
		Shares Additions (Deductions) in Shareholding	Shares Additions (Deductions) in Pledge	Shares Additions (Deductions) in Shareholding	Shares Additions (Deductions) in Pledge
Chairman	Chin-Tsai Chen	350,000	0	0	0
Vice Chairman	Yu-Chi Wang	(80,000)	0	0	0

Title	Name	2019		As of April 30, 2020	
		Shares Additions (Deductions) in Shareholding	Shares Additions (Deductions) in Pledge	Shares Additions (Deductions) in Shareholding	Shares Additions (Deductions) in Pledge
Director (Note 1)	International Fiber Technology Co., Ltd.	0	0	0	0
	Representative: Ming-Chien Hsieh	0	0	0	0
	Former Representative: Su-Chang Hsieh	0	0	Not applicable	Not applicable
Director	Li-Cheng Yeh	0	0	0	0
Director	Wen-Ming Chang	(65,000)	0	(4,000)	0
Director	Shun-Ping Chen	0	0	0	0
Independent Director	Shen-Yi Lee	(3,000)	0	(5,000)	0
Independent Director	Chin-Shih Lin	0	0	0	0
Independent Director	Hai-Ming Chen (Note 2)	0	0	0	0
Former Independent Director	Wei-Lin Wang (Note 3)	0	0	Not applicable	Not applicable
CEO	Kyle Chen	0	0	0	0
Vice President	Brian Lee	(35,000)	0	(9,000)	0
Vice President	Lap-Sum Yip	0	0	0	0
Vice President	Eric Hsu	0	0	0	0
Vice President	HP Hsiao	2,497	0	0	0
Vice President	S.Y. Wang	15,000	0	5,000	0
Associate Vice President and Chief Officer of Corporate Governance	Annie Yu	0	0	0	0
Associate Vice President of Accounting Division	Linna Su	0	0	0	0
Associate Vice President of Finance Division	Joe Tsen	(41,000)	0	(7,000)	0

Note 1: Representative of International Fiber Technology Co., Ltd has changed to Ming-Chien Hsieh from Su-Chang Hsieh effective on Nov. 12, 2019.

Note 2: Ms. Hai-Ming Chen became independent director since June 14, 2019, the shares addition (deduction) in 2019 started to be calculated from the date she became the independent director.

Note 3: Former independent director Wei-Ling Wang was dismissed from his positions as of June 14, 2019 when the shares addition (deduction) ended to be calculated.

Shares Trading with Related Parties

None

Shares Pledge with Related Parties

None

3.8. Relationship among the Top Ten Shareholders

April 14, 2020; Unit: Shares; %

Name	Shareholding		Spouse & Minor		Shareholding by Nominee Arrangement		The Relationship between Any of the Company's Top Ten Shareholders		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relation	
Tien Ho Industrial Co., Ltd.	21,706,330	5.12	Not applicable						None
Representative: Yu-Wen Chen	0	—	Not available						None
CTBC Bank in Custody for Avago Technologies Sales Pte Limited	20,000,000	4.72	Not applicable						None
Kou-I Yeh	16,705,214	3.94	445,064	0.11	0	—	Li-Chuan Yeh Li-Cheng Yeh	Son Son	None
Chin-Tsai Chen	12,752,953	3.01	1,045,368	0.25	0	—	None	None	None
Labor Pension Fund (New Scheme)	10,807,426	2.55	Not applicable						None
Standard Chartered in Custody for Next Generation Connectivity Fund	10,272,000	2.42	Not applicable						None
CTBC Bank in Custody for WIN Semiconductors Corp. Employees Stock Ownership Trust	8,206,782	1.94	Not applicable						None
Li-Chuan Yeh	7,687,525	1.81	3,067,876	0.72	0	—	Kou-I Yeh Li-Cheng Yeh	Father Brother	None
Li-Cheng Yeh	7,687,525	1.81	1,306,708	0.31	0	—	Kou-I Yeh Li-Chuan Yeh	Father Brother	None
HSBC in Custody for Virtus Vontobel Emerging Markets Opportunities Fund	7,179,784	1.69	Not applicable						None

3.9. Ownership of Shares in Affiliated Enterprises

March 31, 2020

Affiliated Enterprises (Note)	Ownership by the Company		Directly or Indirectly by Directors and Supervisors, Managers		Total Ownership	
	Shares (thousands)	%	Shares (thousands)	%	Shares (thousands)	%
Win Semiconductors Cayman Islands Co., Ltd.	167,000	100	0	0	167,000	100
WIN SEMI. USA, INC.	1,000	100	0	0	1,000	100
WIN Venture Capital Corp.	50,000	100	0	0	50,000	100
WIN Earn Investment Corp.	29,000	100	0	0	29,000	100
WIN Chance Investment Corp.	29,000	100	0	0	29,000	100
Phalanx Biotech Group, Inc.	24,650	54.48	3,600	4.39	48,250	58.87

Note: Investments accounted for using equity method.

IV. CAPITAL OVERVIEW

4.1. Capital and Shares

Source of Capital

A. Issued Shares

April 30, 2019; Unit: Shares

Share Type	Authorized Capital			Remarks
	Issued Shares	Un-issued Shares	Total Shares	
Common shares	424,056,384 (including 20,000,000 shares of private placement)	576,943,616	1,000,000,000	Listed on Taipei Exchange, and the par value for each share is NT$10.

B. Type of Stock

Month/ Year	Issue Price	Authorized Capital		Paid-in Capital		Remarks	
		Shares (thousands)	Amount (NT$ thousands)	Shares (thousands)	Amount (NT$ thousands)	Sources of Capital	Capital Increased by Assets Other than Cash
Jan. 2017	10	1,000,000	10,000,000	402,666	4,026,664	Capital reduction due to cancellation of treasury shares	None
Jan. 2018	277	1,000,000	10,000,000	422,666	4,226,664	Capital increase by cash through private placement	None
Oct. 2018	10	1,000,000	10,000,000	423,814	4,238,144	Capital increase by issuing new restricted employee shares	None
Apr. 2018	10	1,000,000	10,000,000	423,794	4,237,943	Capital deduction by redemption and retirement of restricted shares of stock for employee	None
June 2019	10	1,000,000	10,000,000	424,056	4,240,564	Capital increase by issuing new restricted employee shares	None

Status of Shareholders

April 14, 2020

Item	Government Agencies	Financial Institutions	Other Juridical Person	Domestic Natural Persons	Foreign Institutions & Natural Persons	Total
Number of Shareholders	5	124	151	22,440	722	23,442
Shareholding (Shares)	17,700,000	42,365,605	36,579,029	123,436,299	203,975,451	424,056,384
Percentage	4.17%	9.99%	8.63%	29.11%	48.10%	100.00%

Shareholding Distribution Status

April 14, 2020

Class of Shareholding (Share)	Number of Shareholders	Shareholding (Shares)	Percentage
1 ~ 999	4,257	1,077,352	0.25%
1,000 ~ 5,000	16,511	28,104,621	6.63%
5,001 ~ 10,000	1,207	9,253,996	2.18%
10,001 ~ 15,000	294	3,757,364	0.89%
15,001 ~ 20,000	213	3,921,002	0.93%
20,001 ~ 30,000	189	4,831,027	1.14%
30,001 ~ 40,000	124	4,395,932	1.04%
40,001 ~ 50,000	80	3,665,110	0.86%
50,001 ~ 100,000	186	13,108,493	3.09%
100,001 ~ 200,000	128	18,824,786	4.44%
200,001 ~ 400,000	108	30,395,031	7.17%
400,001 ~ 600,000	44	21,374,177	5.04%
600,001 ~ 800,000	24	17,043,741	4.02%
800,001 ~ 1,000,000	14	12,985,671	3.06%
1,000,001 or over	63	251,318,081	59.26%
Total	23,442	424,056,384	100.00%

Note: The Company did not issue prefer stocks all shares are issued as common shares.

List of Major Shareholders

April 14, 2020

Shareholder's Name	Shareholding	
	Shares	Percentage
Tien Ho Industrial Co., Ltd.	21,706,330	5.12%
CTBC Bank in Custody for Avago Technologies Sales Pte Limited	20,000,000	4.72%
Kou-I Yeh	16,705,214	3.94%
Chin-Tsai Chen	12,752,953	3.01%
Labor Pension Fund (New Scheme)	10,807,426	2.55%
Standard Chartered in Custody for Next Generation Connectivity Fund	10,272,000	2.42%
CTBC Bank in Custody for WIN Semiconductors Corp. Employees Stock Ownership Trust	8,206,782	1.94%
Li-Chuan Yeh	7,687,525	1.81%
Li-Cheng Yeh	7,687,525	1.81%
HSBC in Custody for Virtus Vontobel Emerging Markets Opportunities Fund	7,179,784	1.69%

Market Price, Net Worth, Earnings, and Dividends per Share

Unit: NT$; Shares in thousands

Item		2018	2019	01/01/2020~ 04/30/2020
Market Price Per Share	Highest Market Price	334.50	343.50	327.00
	Lowest Market Price	86.70	108.50	195.50
	Average Market Price	185.23	222.01	271.04

Item			2018	2019	01/01/2020~ 04/30/2020
Net Worth Per Share	Before Distribution		59.88	69.94	As of the publication date of this annual report, we have not obtained the audited financial statement information for the first quarter of 2020.
	After Distribution		54.89	62.94	
Earnings Per Share	Weighted Average Shares (thousand shares)		422,666	422,666	
	Earnings Per Share		7.39	10.59	
Dividends Per Share	Cash Dividends		5	7	
	Stock Dividends	Dividends from Retained Earnings	0	0	
		Dividends from Capital Surplus	0	0	
	Accumulated Undistributed Dividends		0	0	
Return on Investment	Price / Earnings Ratio (Note 1)		27.41	21.93	
	Price / Dividend Ratio (Note 2)		40.51	33.18	
	Cash Dividend Yield Rate (Note 3)		2.47%	3.01%	

Note 1: Price / Earnings Ratio = Average Market Price / Earnings per Share
Note 2: Price / Dividend Ratio = Average Market Price / Cash Dividends per Share
Note 3: Cash Dividend Yield Rate = Cash Dividends per Share / Average Market Price

Dividend Policy and Implementation Status

A. Dividend Policy
In accordance with Article 22-1 of the Article of Incorporation, If there is any net profit after closing of a fiscal year, the Corporation shall first pay business income tax, offset losses in previous years, set aside a legal capital reserve at 10% of the profits left over, provided that no allocation of legal reserve is required if the accumulated legal reserve is equivalent to the total capital amount of the Corporation; and then set aside or rotate special reserve according to the rule set out by the government authority in charge. If there is still remaining balance, the Corporation shall set aside at least 50% for shareholders' dividends, the Board of Directors should draw up a meeting regarding the issue of profit distribution and report to the shareholders' meeting for the resolution of the distribution of the dividend, in which cash dividend shall not be lower than 10% of entire dividend.
It is authorized the distributable dividends and bonuses or legal capital reserve and capital reserve in whole or in part may be paid in cash after a resolution has been adopted by a majority vote at a meeting of the Board of Directors attended by two-thirds of the total number of directors; and in addition thereto a report of such distribution shall be submitted to the shareholders' meeting.
As the Company is a high-tech firm with intensive capital expenditure, conditions, timing, amount and kinds of the above-stated dividend policy may be adjusted, taking into account economic cycles, industry change and the Company's growth and cash demand.

B. Proposed Distribution of Dividend
Not Applicable.

C. Material Change in Dividend Policy Is Expected
Not expected to have material change in dividend policy.

Effect upon Business Performance and Earnings per Share of Any Stock Dividend Distribution Proposed or Adopted at the Most Recent Shareholders' Meeting
There was no stock dividend distribution proposed or adopted at the most recent shareholders' meeting.

Compensation of Employees and Directors

A. Information Relating to Employee and Director Compensation in the Articles of Incorporation

If there is any net profit after closing of a fiscal year, the Company shall be allocated according to the following principles:

1. Employee's profit sharing bonus: not less than 5% but no more than 10% and shall be determined and pursuant to Employee Bonus Procedure of the Corporation. In addition, employee's profit sharing bonus shall be distributed in the form of shares or cash. Stock-type employee's profit sharing bonus may be distributed to qualified employees of affiliates of the Corporation.
2. Compensation of Directors: no more than 3%.

However, if there are any accumulated losses of the Corporation, the Corporation shall pre-reserve the amount to offset the loss. The distribution of employees' compensation and compensation of Directors shall follow the special resolution by Board of Directors, and report it to the shareholders' meeting.

B. The Estimated Basis for Calculating the Employee and Director Compensation

1. The estimate foundation: The Company estimates the employees' profit sharing bonus and Directors' compensation base on the pre-tax profit after deducting the employees' profit sharing bonus and compensation for Directors times the ratios described in the Article of Incorporation.
2. The Company has not distributed employees' profit sharing bonus and Directors' compensation in stock in year 2018.
3. Accounting policy for difference between the amounts paid and those recognized in the financial statements: The differences between the actual amount of employees' profit sharing bonus and directors' compensation and the amount of those recognized in the financial statements, if any, are accounted for as changes in accounting estimates and adjust it at the year of issuing.

C. Distribution for Employees' Profit Sharing Bonus and Directors' Compensation for 2018 Approved in Board of Directors Meeting

1. Distribution for employees' profit sharing bonus and Directors' compensation for 2019 was approved by the Board of Directors' meeting on March 18, 2020 as below:
   (1) Employees' profit sharing bonus distributed in cash is NT$368,400 thousand.
   (2) Directors' compensation is NT$106,900 thousand.
   (3) There was no difference between the actual distributed amounts as determined by the Board of Directors and those recognised in the financial statements, for the year ended December 31, 2019.
2. Ratio of employees' profit sharing bonus distributed in stocks to capitalization of earnings: Not applicable.

D. Information of 2018 Earnings Set Aside for Employees' Profit Sharing Bonus and Directors' Compensation

1. Distribution of employees' profit sharing bonus and Directors' compensation
   The 2018 earnings appropriation plan was passed by the Board of Directors' meeting on March 21, 2019. The employees' profit sharing bonus and Directors' compensation were NT$255,600 thousand and NT$74,200 thousand, respectively, and both were distributed in cash.
2. Ratio of employees' profit sharing bonus by stock to capitalization of earnings: 0%.
3. Recounted EPS after recommended distribution of employees' profit sharing bonus and

Directors' compensation: NT$7.39.
4. The actual distribution of employees' profit sharing bonus and Directors' compensation above-mentioned was consistent with the resolutions of the Board of Directors' meeting.

Buyback of Treasury Stock

None

4.2. Corporate Bonds

None

4.3. Preferred Stock

None

4.4. Global Depositary Receipts (GDR)

None

4.5. Employee Stock Options

Issuance of Unexpired Employee Stock Options in Existence as of the Date of Printing the Annual Report

None

List of Executives Receiving Employee Stock Options and the Top 10 Employees as of the Date of Printing the Annual Report

None

4.6. New Restricted Employee Stocks

Issuance of New Restricted Employee Shares

Type of New Restricted Employee Shares	Issuance of New Restricted Employee Shares in 2018	
	1st Grant	2nd Grant
Date of Effective Registration	August 22, 2018	
Issue Date	September 14, 2018	May 14, 2019
Number of New Restricted Employee Shares Issued	1,148,000 shares	262,000 shares
Issued Price	NT$ 0 (free to qualified employees)	
New Restricted Employee Shares as a Percentage of Shares Issued	0.27%	0.06%
Vesting Conditions of New Restricted Employee Shares	1. The award of Restricted Stock shall vest at a rate of 100% at the end of three years of continuous employment after granting the award and achievement both of personal performance goals and business performance. 2. The aforementioned personal performance goals shall mean the year-end individual performance evaluation is better than B^+, which takes into account various KPIs of performance and contribution to the firm. 3. The aforementioned business performance goals shall mean the Earnings Per Share (EPS) of the Company for the previous year prior to the scheduled date to vest is not less than NT$7, and the Return On Equity (ROE) and of the Company for the previous year prior to the scheduled date to vest is not less than 11%. In determining the business performance hurdles we	

Type of New Restricted Employee Shares	Issuance of New Restricted Employee Shares in 2018	
	1st Grant	2nd Grant
	considered the 3-year average net income and resulting ROE accordingly. 4. Granted employees shall have no violation on any terms of the Company's employment agreement, employee handbook, or policies during the vesting period, otherwise the Company shall redeem and cancel all new restricted employee shares.	
Restricted Rights of New Restricted Employee Shares	1. During the vesting period, employee may not sell, pledge, transfer, give to another person, create any encumbrance on, or otherwise dispose of, restricted employee shares. 2. All the attending rights, proposal rights, motion rights, speech rights, voting rights and any other shareholder rights are the same as the issued ordinary shares of the Company and shall be exercised by the trustee. 3. During the vesting period, the RSA can participate in stock and cash dividends and subscription to cash rights issues and subscription is not required to be deposited in trust. 4. If the vested date is during the book closure period, the lifting of the restrictions on RSA data and procedure shall be executed by the trustee rules or related regulations.	
Custody Status of New Restricted Employee Shares	The new restricted employee shares are deposited in a security trust account.	
Measures to be Taken When Vesting Conditions are not Met	1. During the vesting period, if the employee resigns, is dismissed or is laid off, the Company shall redeem and cancel all new restricted employee shares with immediate effect. 2. Leave of absence without pay: When the granted employee has been approved by the Company for leave of absence without pay, the vesting period shall be suspended from the effective date of leave until reinstatement. The vesting period will be deferred in accordance with the period of the leave of absence without pay. The Company shall redeem the unvested and cancel the new restricted employee shares, if the employee resigns upon the termination of his/her leave of absence without pay. 3. Retirement: The retiring employees' unvested shares of new restricted employee shares will be deemed vested upon retirement date if the aforementioned personal performance and business performance goals are both achieved. The actual number of vested shares of new restricted employee shares shall be calculated on a pro-rata basis based on the number of months of employment. However, if one or both of the personal performance and business performance goals have not been achieved, the Company shall redeem and cancel the unvested new restricted employee shares. 4. Occupational accidents: Termination of employment due to disabilities as a result of occupational accidents of employees. Any unvested new restricted employee shares shall immediately vest upon such termination date. Termination of employment due to an occupational fatality: Upon death of the employee, unvested new restricted employee shares will be deemed vested, the legal heirs of the employee shall complete all required legal procedures and provide relevant supporting documentation before being granted the shares to be inherited	

Type of New Restricted Employee Shares	Issuance of New Restricted Employee Shares in 2018	
	1st Grant	2nd Grant
	or interest disposed of. 5. Death: Upon death of the employee, for unvested new restricted employee shares will be deemed vested if the aforementioned personal performance and business performance goals have been both achieved. The actual number of vested shares of new restricted employee shares shall be calculated on a pro-rata basis based on the number of months of employment. The legal heirs of the employee shall complete all required legal procedures and provide relevant supporting documentation before being granted the shares to be inherited or interest disposed of. However, if one or both of personal performance and business performance have not been achieved, the Company shall redeem and cancel the unvested new restricted employee shares. 6. If granted employees have violated any terms of the Company's employment agreement, employee handbook, or policies during the vesting period, the Company shall redeem and cancel all new restricted employee shares.	
Number of New Restricted Employee Shares that Have been Redeemed or Bought Back	20,000 shares	0 shares
Number of Released New Restricted Employee Shares	0 share	0 share
Number of Unreleased New Restricted Shares	1,128,000 shares	262,000 shares
Ratio of Unreleased New Restricted Shares to Total Issued Shares (%)	0.27%	0.06%
Impact on Possible Dilution of Shareholdings' Equity	No material impact on shareholders' equity.	

List of Managerial Officers the Top 10 Employees Receiving New Restricted Employee Shares

April 30, 2020; Unit: NT$ thousand; Shares in thousands

	Title (Note1)	Name (Note2)	No. of New Restricted Shares	New Restricted Shares as a Percentage of Shares Issued (Note5)	Released				Unreleased			
					No. of Shares	Issued Price (NT$)	Amount (NT$)	Released Restricted Shares as a Percentage of Shares Issued (Note5)	No. of Shares	Strike Price (NT$)	Amount (NT$)	Unreleased Restricted Shares as a Percentage of Shares Issued (Note5)
Managerial Officer & Employee	Employee	Wen-Kai Wang	335	0.07%	0	Free to qualified employees	0	0%	315 (Note4)	Free to qualified employees	0	0.07%
	Employee	Benny Ho (Note3)										
	Employee	Angus Leu										
	Employee	Cheng-Kuo Lin										
	Employee	Yu-Chi Lin										
	Employee	Alex Weng										
	Employee	Kerry Chang										
	Employee	Wei-Der Chang										
	Employee	Richard Kuo										
	Employee	Jeff Yeh										
	Employee	Paul Yeh										
	Employee	Maya Chai										
	Employee	Ming-Wei Tsai										
	Employee	Andy Tsai										
	Employee	Galen Hsieh										
	Employee	Iris Hsieh										

Note1: There is no managerial officer award new restricted employee share.
Note2: Alphabetically by employees' surnames in Chinese and those with same shares were disclosed as well.
Note3: Resigned.
Note4: 20,000 shares were deducted from shares received by resigned employees.
Note5: The shares issued were 424,056,384 as of April 30, 2020.

4.7. Status of New Shares Issuance in Connection with Mergers and Acquisitions

None

4.8. Financing Plans and Implementation

Uncompleted share issuance or private placement or completed transactions without expected benefits in the past 3 years: None.

V.OPERATIONAL HIGHLIGHTS

5.1. Business Overview

Business Scope

A. Major Business Operated by the Company

WIN is a Gallium Arsenide (GaAs) pure play foundry that provides the best quality III-V semiconductors foundry service to its customers. In addition to advanced semiconductor fabrication technology, WIN also provides layout support and automated DC/RF on-wafer testing to its customers.

B. Net Revenue by Products

Unit: NT$ thousand

Products	2019	Percentage
GaAs Wafer	20,874,280	97.65%
Others	503,444	2.35%
Total Revenues	21,377,724	100.00%

C. The Company's Current Product (Service)

In the microwave high-tech field of wireless broadband communications, WIN primarily provides two major GaAs transistor manufacturing process technologies: Heterojunction Bipolar Transistor (HBT) and pseudomorphic High Electron Mobility Transistor (pHEMT), both of which are the state-of-the-art wireless broadband communications microwave process technologies. Our product lines can satisfy a multitude of frequency band wireless communication application systems ranging from 100MHz to 100GHz. With MMIC technique as basis, WIN also provides optoelectronic device fabrication services for optical communication and 3D sensing applications.

The process technologies developed independently by WIN for wireless communications and optical communications applications are now mostly in mass produced products, including handheld mobile communications devices (such as smart phones and tablet PCs) with 4G/5G communications and WiFi functions and wireless routers that are produced using GaAs HBT and pHEMT. 4G/5G base stations and SATCOM and VSAT signal transmission and reception related applications produced using GaAs pHEMT and GaN HEMT. Optical communication sensors or optical information transmission related components produced using GaAs VCSEL and InP, in which smartphone 3D sensing is one of WIN's applications that have shown rapid growth in recent years.

To satisfy the high power and high efficiency base station application needs of the 4G and 5G era, WIN has completed the R&D for the Gallium Nitride (GaN) process technology in 2013, which started to have small revenue contribution in 2016 by providing more foundry service choices to our customers.

In addition to the comprehensive GaAs and GaN technology portfolio, WIN has also developed optoelectronic device production capabilities. Such capabilities enable flexible and large scale manufacturing of semiconductor laser and photodiode products. The manufacturing services include customized epitaxial growth/re-growth, full device fabrication, and device characterization analysis and testing.

D. Products Developed by the Company in 2019

(1) The enhanced the 5th generation HBT5A for the 5G Sub-6GHz band applications
(2) Enhanced humidity resistance on 0.25μm E/D GaAs pHEMT
(3) Enhanced power stability on the 1st generation 0.25μm GaN HEMT
(4) The 1st generation 0.15μm GaN HEMT for Ka-band applications
(5) 25G VCSEL Technology for datacomm applications

E. New Products Planned for Development

(1) The 7th generation GaAs HBT epitaxial structure and process development
(2) The 2nd generation GaAs PINHEMT epitaxial structure and process development
(3) High voltage GaAs PINHEMT epitaxial structure and process development
(4) 70 nm GaAs pHEMT epitaxial structure and process development
(5) The 2nd generation 0.25μm GaN HEMT epitaxial structure and process development
(6) The 2nd generation 0.15μm GaN HEMT epitaxial structure and process development
(7) Backside emitting VCSEL with microlens process development
(8) Enhanced reliability on 10G and 25G DFB laser diode

Industry Overview

A. Current Status and Development of the Industry

1. Current Status and Development of the GaAs Industry

Semiconductor materials can be categorized into single-element semiconductor and compound semiconductor. The former are semiconductors made using element like Silicon (Si) and Germanium (Ge). The latter are III-V compound semiconductors such as Gallium Arsenide (GaAs), Indium Phosphide (InP), or Gallium Nitride (GaN) made using group-III element such as Gallium (Ga), Indium (In), or Aluminum (Al) as well as group-V element such as Arsenic (As), phosphorus (P), or nitrogen (N). Compared to the silicon semiconductors, GaAs semiconductors have characteristics in high frequency, anti-radiation, and high breakdown voltage, and are widely adopted for mainstream commercial optical communications, wireless communications, and advanced defense, aviation, and satellite applications. The popularity of wireless communication is critical to the success of GaAs foundry business model. For example, the key components of radio frequency front-end modules in both cellular phones and wireless networks (Wi-Fi) are the Power Amplifier (PA), RF Switch, and Low Noise Amplifier (LNA). At present, most of the RF power amplifiers are made from the material of GaAs. The characteristics of GaAs made it an indispensable component for wireless communications, optical communications, and advanced national defense, aviation, and satellite industries. GaAs semiconductor has its own foundry technologies, design flow and verification model different from silicon semiconductor in order to satisfy the rapid development of the wireless communication systems, thus allowing GaAs to maintain exclusivity and uniqueness in the field.

Due to the continuous progress of the silicon semiconductor process in recent years, the operating frequency and performance of RF CMOS have continued to improve. Most of the cellular phone and Wi-Fi RF transceivers are made using RF CMOS now. This is the inevitable result of the highly integrated single chip SoC technology development in the commercial RF IC industry. Although today’s RF CMOS can work in high operating frequencies and can be highly integrated, its inherent physical characteristics, such as low breakdown voltage, high power consumption, poor signal isolation, and low output power density, make it difficult to compete with GaAs in terms of PA applications. Therefore, when the telecom standard evolved from 4G LTE into 5G applications, GaAs PA had the irreplaceable physical advantage, specifically high power transmission. Therefore, GaAs compound semiconductor components will continue to be an important component of the communications market.

Looking ahead to the 5G technology which has been commercialized in countries one after another lately, its data transmission rate are expected to be 100 times faster than 4G LTE, thus, only the GaAs PA can handle such rapid data transmissions. The cost-to-performance gap between GaAs and silicon in power amplifier applications continues to widen, not narrow.

The concept of IoT is emerging in recent years, making the applications for wireless communications and ADAS grow rapidly. Numbers of digital commercial electronic products with wireless communication function is also increasing year by year. Thus, there is room for GaAs applications to grow. In addition, compound semiconductors will continue to play an important role in communication and optical devices markets. For example, the laser of III-V semiconductor has the advantage of small size and high integration, so its applications have been widely used in both industrial and commercial fields especially VCSEL which is the most suitable for mass production. Lately, more and more new applications of VCSEL were developed in the fields such as Biometric, AR/VR, and ADAS. Thus, VCSEL is expected to become the key GaAs component on mobile devices

2. Current Status and Outlook of the GaAs Foundry Industry

Similar to the Silicon foundry business model, GaAs foundries require a certain scale of investment and long-term development of process technologies. These two factors provide IC designers fast, convenient, and relatively low cost processes to realize the products they designed. The silicon foundry model was a breakthrough that lifted the control of large IDMs over parts and components, and allowed small capital companies with an expertise in IC design to survive without making large investments in semiconductor manufacturing, which they are not familiar with. This specialization of labor has allowed IC design companies to focus on developing new generation ICs. Foundries focus on developing more advanced process technologies and providing more complete solutions. This win-win strategy successfully took down the monopoly of IDMs from IC design to process technology, and created an extremely competitive cost advantage. The flourishing development of mobile communications and wireless network, and large demand on devices such as power amplifiers have caused even more IC design companies to join in the development and popularization of GaAs semiconductor ICs. This also led to the development of a model with larger scale GaAs foundries. Similar to the experience of silicon foundries, once this business model is formed, it will take down the monopoly of IDMs. Early GaAs IDMs were mostly concentrated in advanced countries in Europe and America and their core business, including GaAs IC design and GaAs semiconductor process technology. Following the popularization of GaAs semiconductor applications and the successful foundry model, companies with both process technologies and IC design technologies began to develop towards the Fab-lite and pure module design business models. They outsourced most of the wafer processes to wafer foundries, retained IC design, and provided modulized RFIC and RF solutions. The wafer processes were mainly outsourced to specialized foundries with a complete semiconductor manufacturing supply chain and experience, such as WIN Semi. Foundries not only need to go through a strict and long customer qualification process, but also strive to develop more efficient process technologies with greater cost competitiveness. This has created a barrier to entry that is difficult for new entrants to cross over, and also created a cost advantage that is hard for European and American competitors to imitate, which accelerated the transition of European and American companies to the so called fab-lite and even fab-less business model, further increasing their dependency on foundries. We signed a MOU with Avago at the end of 2017 and agreed to purchase the company's HBT production line machinery and equipment. The company will outsource all HBT products that were produced from their HBT production line to us in the future. This event shows that after years of developing proprietary process technologies and capacity expansion to meet customers' demand, our customers feel even more at ease when outsourcing their processes to a specialized GaAs foundry.

B. The Interconnectivity of Upstream, Midstream, and Downstream Entities in the Industry

In the GaAs industry, substrate production is the first upstream activity of the supply chain, followed by key materials and GaAs epitaxial wafers, including MOCVD and MBE technologies. For the mid-stream, the supply chain includes wafer fabrication, packaging, and testing. Regarding the industry as a whole, apart from wafer fabrication, the design and advanced technologies in the industry are still dominated by international IDM companies. Downstream vendors comprise mobile phone and WLAN manufacturers as well as radio frequency system developers. The supply chain of the GaAs industry is summarized below:

<table>
<tr><th colspan="2">SUPPLY CHAIN</th><th colspan="3">COMPANY</th></tr>
<tr><td colspan="2">Substrate</td><td colspan="3">Freiberger, AXTI Inc, Sumitomo</td></tr>
<tr><td colspan="2">Epitaxial Wafer</td><td colspan="3">IQE, VPEC, SCIOCS, Sumika, IntelliEPI, Land Mark</td></tr>
<tr><td colspan="2">IC Design House</td><td>Airoha, Richwave, UNISOC, Hisilicon, Murata</td><td rowspan="4">IDM</td><td rowspan="4">Skyworks
Qorvo
Broadcom
Lumentum
II-VI/ Finisar</td></tr>
<tr><td colspan="2">Foundry</td><td>WIN Semi., AWSC, GCS, Wavetek</td></tr>
<tr><td colspan="2">IC Packaging</td><td>Tong Shing, Lingsen Precision</td></tr>
<tr><td colspan="2">IC Testing</td><td>Giga Solution, ASE, Sigurd, King Yuan</td></tr>
<tr><td rowspan="2">Terminal Applications</td><td>Smartphones</td><td colspan="3">Apple, Samsung, LG, Huawei, Xiaomi, Oppo, Vivo, HTC</td></tr>
<tr><td>Base Station</td><td colspan="3">Huawei, ZTE, Ericsson, Nokia, Cisco</td></tr>
</table>

C. Various Product Development Trends

Light, short, thin, small, cheap, and good quality are the unchangeable demands for consumer electronics products and the main direction of RF module designs. Traditionally, the different IC in RF modules are using different technologies to make; e.g., PA's are designed using HBT process, and RF switches and low noise amplifiers use the pHEMT process. Due to the low integration between different GaAs processes, it was difficult to reduce the size of RF modules. WIN's leading BiHEMT technology can integrate two or more high-performance components by single chip solution on a 6-inch wafer to reduce module circuit areas and costs, and further strengthen our customer product design competitiveness.

On the other hand, high frequency and high power application market is also growing by the rise demands on 4/5G base stations, fiber-optic networks, and satellite networks. It needs very unique, consistent and high-performance transistors and passive components made by advance technologies process and facilities. WIN is one of few foundry companies who are able to provide such process services in the market.

D. Competition Status

1. Business Development Direction

In the semiconductor industry, the IDM and foundry companies have different capacity investment strategies and core competencies in response to their respective market environments. With foundry market share expanding, IDM's capacity investment became more conservative than before because they must ensure full utilization of their own capacities in order not to stay idle. Foundry companies can maintain a certain level of capacity utilization by managing the orders from both IDM and design house customers to optimize the business. In addition, some of IDMs who also provide foundry services in the past has eventually quit the foundry business because they do not want to provide the latest R&D results and share the resources with their customers who also competitors. Consequently, they have gradually lost their customers. However, for a pure play foundry like WIN, we rely on providing the advanced technology to attract more customers and broaden product application field.

The core competencies of IDM companies are their product design capabilities. Due to continued growth and evolution of hand-held devices, they must continue to develop the newest generation of products to create opportunities for future development. At the same time, foundries must rely on diversification and advanced technology as well as more efficient mass production methods to achieve operating efficiency.

2. Production Technology

WIN uses diversified and advanced technologies to provide the foundry services to customers and has continued to increase production flexibility, reduce unit costs, and shorten the production delivery time to provide foundry services with more competitiveness.

In terms of advanced technologies, the leading advantages of domination for independent R&D capability by IDM companies have gradually changed. After many years of attempts and challenges, the Company has insisted on developing advanced technologies to establish long-term competitiveness. After a decade of hardships, the Company's advanced technology is on par with IDM companies, and we have successfully transcended the law of having to porting technology from IDM companies. The Company has already collaborated with IDM companies on R&D for new technologies. As a result, the Company became one of the leading companies possess the newest generation of technologies in the industry.

In terms of GaAs wafer size, unlike most of the peers in the industry who convert to 6-inch from 4-inch in the past decades, the Company established the world's first 6-inch GaAs wafer foundry service in 1999, when it was just established. Until today, 6-inch is still the main production size. With over two decade of 6-inch wafer manufacturing experience, we are more capable of ensuring product reliability, quality, and stability. That is also the reason why WIN can support customer to mass produce high quality wafers in 6-inch base on customer's design in such short period when high end smartphone maker decided to adopt 3D sensing for the first time in 2017.

3. Production Scale and Capacity Planning

In the current GaAs industry, IDM companies still holds over 50% of the market share.

In recent years, IDMs have increased the willingness to partnership with foundries for more outsourcing opportunities due to the cost efficiency and conservative of capacity expansion investments made by IDMs. The sustained growth of overall market demand seemed to provide the best business expansion opportunities for foundry companies. As of the end of 2019, Fabs A, B, and C of the Company have total capacity of 36,000 wafers per month. The plant spaces of Fab C will successively be turned into production lines according to the market demands of the future. It is expected that the expansion will continue in 2020 to fulfill the increasing demand from 5G in the future, the capacity will become 41,000 wafers per month in peak season.

Technology and R&D Status

A. R&D Expenses

In 2019, the Company invested NT$1,107,918 thousand in R&D, which accounted for 5.18% of the total revenues. As of the publication date of this annual report, we have not obtained the audited financial statement information for the first quarter of 2019.

B. Successful R&D and Technologies Development

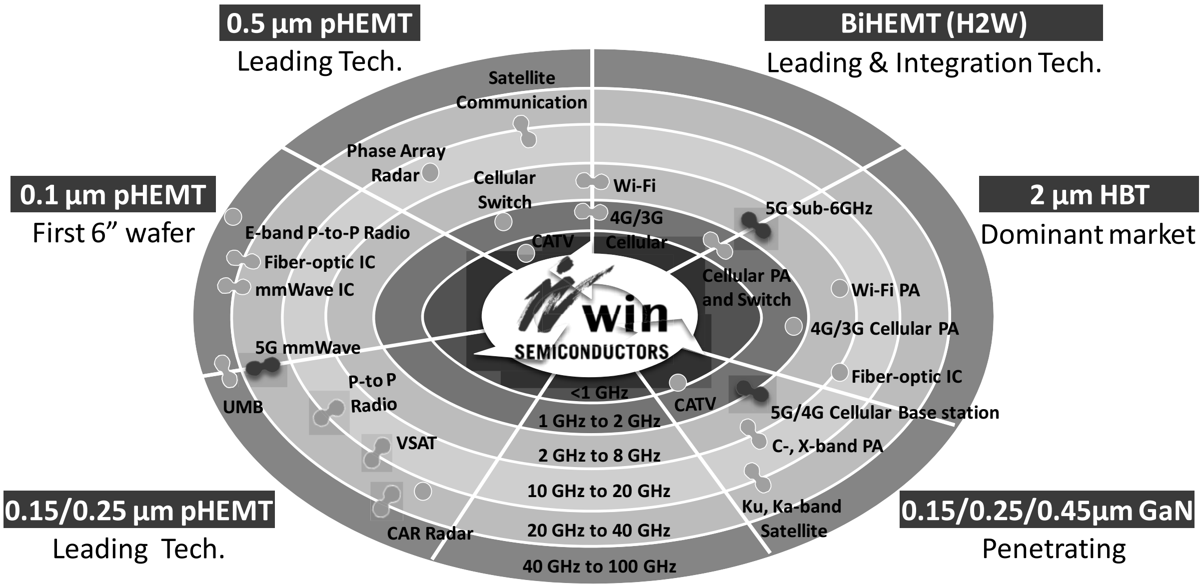
We continue to develop a wide range of process technologies in response to future wireless communication and high speed network applications, such as: 5G communications, Wi-Fi communications, SATCOM and VSAT, and optical communications. Following the maturity of sensing technologies in recent years, we are focusing on the development of microwave and optical sensing technologies required for auto-pilot.

The development of 5G communications added 3 new frequency bands N41, N77, and N79, and increased the demand from base stations and mobile phones on our new process technologies. Such as: GaN HEMT is applied to base station power amplifiers and GaAs pHEMT/PINHEMT is applied to base station low noise amplifiers. The massive MIMO system used in new 5G base stations significantly increased demand on front-end wireless communication models. Due to the independent systems of 4G and 5G communications, new 5G mobile phones need an additional 5G power amplifier made from new generation GaAs HBT or BiHEMT to meet the stricter requirements. Following the significant increase in data transmission from 5G communications, Wi-Fi communication systems have begun to adopt the Wi-Fi 6 (802.11ax) protocol. The strict linearity requirement has driven customers to use new generation GaAs HBT to comply with the even more complex signal modulation protocol. Furthermore, the new Wi-Fi 6E or Wi-Fi 7 (802.11 be) has driven applications with frequencies up to 6-7GHz. This is one of the directions for developing the 7th generation of GaAs HBT technology.

As for other infrastructure, developments in satellite communications have been mainly from the active investment and deployment of high, medium, and low orbit satellite systems by various countries, in order to provide network services to regions that lack wireless/wired infrastructure. mmWave GaAs pHEMT and PINHEMT are especially suitable for Ku/Ka band power amplifiers and low noise amplifiers in RF front-end modules. With regard to optical communications, the mainstream data transmission speed is already 100G due to the deployment of data centers and back-end network connection requirements of 5G networks, and 400G and 800G networks will soon be developed. The driving amplifier in modulators, in particular, require the high frequency and high linearity advantages of advanced GaAs pHEMT processes.

In sensing technologies, VCSEL is already commonly used in facial and gesture recognition, and is expected to be even more commonly applied in handheld devices. The combination of new generation ToF (Time of Flight) and VCSEL technologies will further expand AR or VR killer applications. In the rapidly developing auto-pilot technology in recent years, besides conventional microwave radar, VCSEL LiDAR is the next important application in sensing technologies to achieve multi-dimensional detection and reduce sensing errors caused by different environmental factors. Furthermore, following the significant increase in data transmission in 5G communications, high speed optoelectronic devices, such as highly reliable 25G DFB LD, and InP-based light modulators, such as EA modulators and Mach-Zehnder modulators, are also key points of R&D.

WIN continues to invest in microwave and optoelectronic device design and development, developing required integrated manufacturing technologies, advanced epitaxy technologies, and wafer-level high-end testing services. These efforts aim to provide customers with design, manufacturing, and testing services, and rapidly commercialize their products. The integrated services and pure foundry model allowed WIN to expand from single GaAs microwave device OEM to multiple compound semiconductor materials in microwave and optical devices.



After WIN secured the core key technologies with proprietary development capabilities and talent, we have conducted the relevant technological cultivations and diversified developments continuously enhance competitiveness in the industry:

(1) Continuing to develop next-generation HBT technology and focusing on new frequency bands required for future 5G communication systems, especially on power amplifiers that require hyper frequency bands and higher output power in order to meet the data transfer speeds of 5G mobile devices, which is several times that offered by 4G systems.
(2) In response to the demand for highly integrated power amplifier modules, the Power Amplifier Module integrated Duplexer (PAMiD) is expected to become mainstream. In addition to advanced power amplifiers, WIN is also committed to providing OEM services for filters and duplexers to meet the future demand for highly integrated modules.
(3) Developing advanced process technologies, which are required for microwave communications, to provide high-power HBTs for femtocells and high-power GaN HEMTs for large base stations.

(4) Developing a more advanced and competitive <0.1μm GaAs pHEMT, for communication infrastructure, that will meet the increasing frequency requirements of point-to-point millimeter-wave communications.
(5) Developing a more advanced and competitive <0.1μm GaAs pHEMT for fast-growing big data applications, which rely on next generation 400Gbps ultra-high-speed fiber-optic communication driver amplifier applications for optical modulators.
(6) Continuing to develop next generation highly-integrated GaAs PINHEMT to realize single-chip, multifunction capabilities to meet future communications requirements.
(7) Establishing upstream expertise and capabilities in compound semiconductor epitaxy to improve quality control and to accommodate the development of new technologies in a timely manner in response to the shortening of new product development cycles and product life cycles.
(8) Continuing to develop advanced process technologies and packaging solutions with a focus on the requirements of future 5G products and applications.
(9) Providing customized high-frequency packaging product testing to help customers complete terminal tests of their products in-house, thus shortening wafer shipment times for customers.

Long-term and Short-term Business Development Plans

In response to future industrial development and overall trends in the economic environment, we have formulated long-term and short-term plans for our future business direction, so as to enhance our competitiveness. Our short-term and long-term plans are described below:

A. Short-Term Plan

Following the development of 5G, Wi-Fi technologies, and increased demand on optical communication related applications, we have seen great development opportunities in all of our major product lines.

Countries around the world have released even more 5G frequency bands in recent years, numerous 5G mobile phones have been launched since 2019, and commercial operation of 5G has begun in specific areas in several countries. The change in communication specifications has driven the deployment, renewal, and upgrade of infrastructure, and WIN's infrastructure-related revenue showed double digit growth in recent years, even growing over 50% in 2019. Besides infrastructure, 5G has also driven the growth in mobile phone PA demand. With 4G LTE still available after the arrival of the 5G era, each 5G mobile phone will not only support existing 4G LTE frequency bands, but also new 5G frequency bands. This increase in frequency bands represents an increased in PA demand. We have also seen some flagship models support Uplink MIMO technology, and it will further increase 5G PA demand. Hence, as communication technology transitions from 4G to 5G, PA demand will also increase, and we will continue to provide customers with the most advanced process technologies, jointly seizing the 5G market together with customers.

With regard to WiFi, we have seen an upgrade in Wi-Fi specifications from 11.ac to 11.ax, i.e., WiFi 6, in some flagship models starting in 2019, and we expect to see new frequency bands in 6-7 GHz be provided for WiFi. The upgrade in specifications and increase in new frequency bands both have a positive effect on WIN, and we will continue to invest even more R&D resources to help our customers launch the latest products before their competitors in every new generation.

In addition, the 3D sensing function adopted by high end smart phones in 2017 made considerable contribution to our revenue over the past two years. This is the result of our years of effort in developing III-V compound semiconductor technologies and applying the technologies to other fields of application. In the future, we remain optimistic about the application of optical devices, and expect to see an increase in overall demand as even smarter phone brands and handheld devices begin offering the function.

Besides continuing to build on our current foundation and engaging in research and development, we are also developing more competitive process technologies for mobile device and communication infrastructure customers, and aim to further widen our technological lead in the field of wafer fabrication for wireless communication ICs. In the short-term, we will continue to invest resources in technological innovation, quality improvement, and lowering manufacturing cost, and will make investments into the development of advanced process technologies in coordination with the future direction of customers' product applications. This will allow us to expand the scope of our foundry services and market, and further secure a key position in the global GaAs foundry market.

B. Long-Term Plan

The infrastructure of wireless communications will inevitably need to be strengthened following the significant increase in mobile phone use and the communication standard upgrade. Higher power base stations, in particular, will be able to achieve more stable high speed data transmission. Therefore, we have long begun developing high-power HBTs for femtocells, and high-power GaAs HEMT/ GaN HEMTs for large base stations required by 4/5G systems. From a mid- to long-term perspective, we believe GaAs devices will be in great demand for the IoT, future IoT gateways, V2V/V2X, and 5G communications. We already have a comprehensive blueprint of advanced process technologies that correspond to these drivers of long-term growth.

Furthermore, we will continue to develop optical communication technologies for automobile, data center, and fiber to home applications. In addition to the full array of GaAs and GaN technologies, we also developed the ability to manufacture optical semiconductor devices, and have begun providing flexible, large scale product manufacturing services for LD and PD design houses. This new manufacturing technology can be applied to 2.5G, 10G, and 25G data transfer rate products. Our complete vertically integrated manufacturing technologies can provide our partners with customized epitaxial growth/regrowth, optical device manufacturing, and material and device features description and testing services. Our epitaxy and optical device manufacturing capabilities can be used for 2-4 inch InP substrates. We have the technology to provide LD and PD epitaxy and device feature description services, and are working day and night on building a complete optical device production line and testing equipment, so that we can provide the optical devices market with specialized manufacturing technologies and highly efficiency solutions. Looking ahead to the future, we are optimistic regarding the development of optical devices, especially 3-D sensing applications on handheld devices, which is an area where Win Semiconductors is already a leader. We look forward to the demand for optical device growing rapidly with the adoption of even more handheld devices and brands during the next few years, as well as the increasing maturity of AR/VR applications and ADAS.

5.2. Marketing and Sales Overviews

Market Analysis

A. Sales and Service of WIN and Its Subsidiaries by Geographical Area in 2018 and 2019

Unit: NT$ thousand

Area (Note 1) \ Year		2018		2019	
		Revenue	%	Revenue	%
Domestic (Note 2)		2,131,793	12.31%	1,928,520	9.02%
Oversea	Asia	10,369,004	59.90%	14,525,043	67.95%
	Americas	4,169,406	24.09%	3,998,159	18.70%
	Europe	640,513	3.7%	926,002	4.33%
Total		17,310,716	100.00%	21,377,724	100.00%

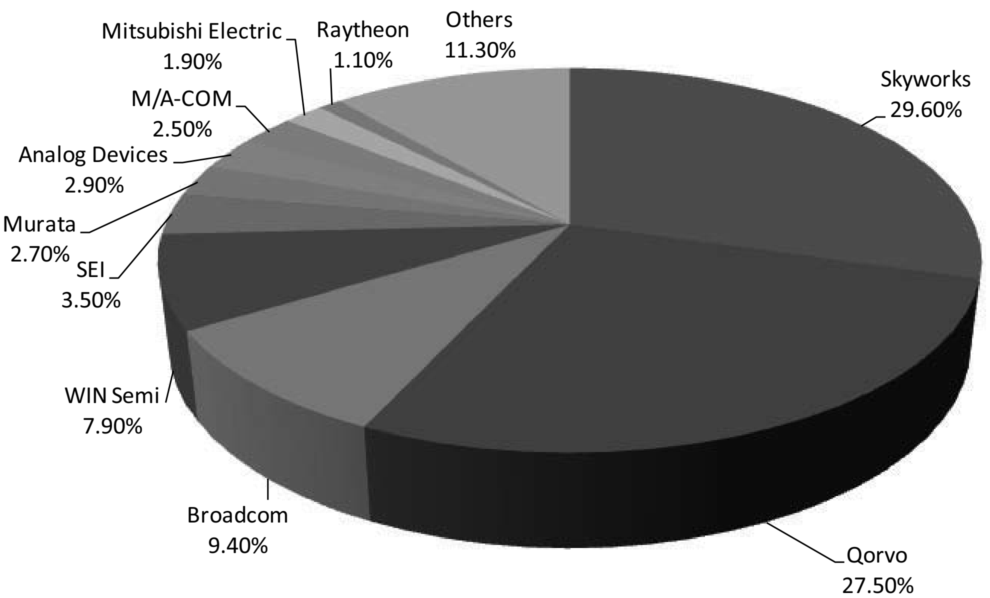
Note 1: Segment revenue is based on the geographical location of customers.

Note 2: Domestic means revenue from Taiwan area.

B. Market Share

According to Strategy Analytics, the total GaAs device and pure play foundry market declined by 3.7% to reach nearly US$8.54 billion of revenue in 2019. The declining revenue is primarily attributed to a decline in smartphone shipments in 2019. In 2019, WIN Semi held 7.9% of GaAs device market share remains in fourth place. Please see chart "2019 World GaAs Device Vendor Market Share" below.

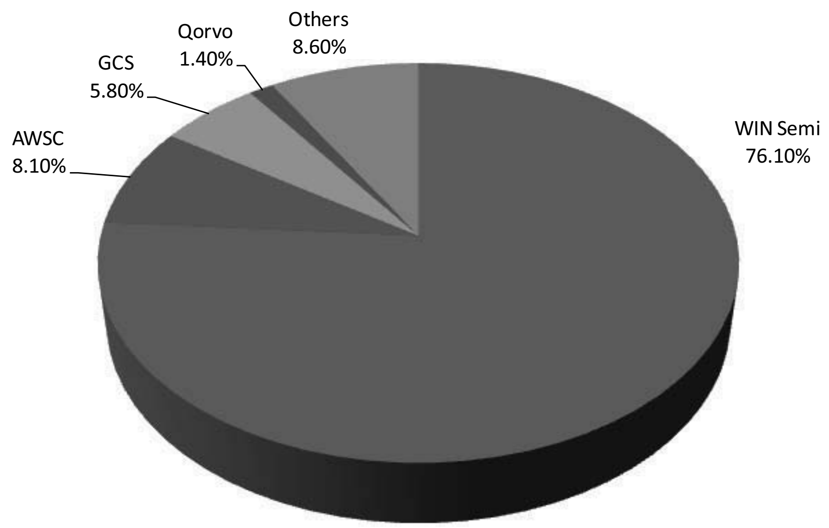
2019 World GaAs Device Vendor Market Share



Data Source: Strategy Analytics

In addition, the pure-play GaAs foundry revenue increased by 18% to reach $881 million in 2019 according to Strategy Analytics. In 2019, WIN Semi held 76.1% of GaAs foundry market share remains the largest GaAs foundry player worldwide. Please see chart "2019 World GaAs Foundry Vendor Market Share" below.

2019 World GaAs Foundry Vendor Market Share

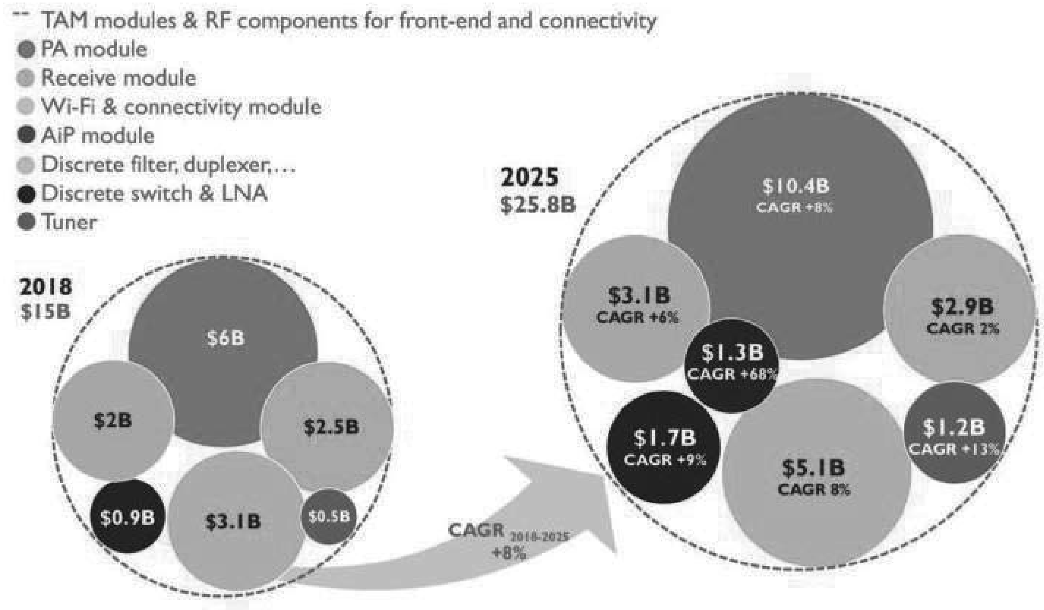


Data Source: Strategy Analytics

C. Future Market Supply, Demand, and Growth Status

Wireless communication products are the main driver for the GaAs industry, and cellular applications are still the largest market for GaAs followed by Wi-Fi and infrastructure demands. In terms of the cellular market, the PA demand has begun to increase as the maturity of the GaAs technology reduces the manufacturing costs, and the smartphone requirements for greater functionality. In general, a 2G cellular phone requires 1 to 2 PAs, a 3G cellular phone needs 3 to 4 PAs, and the frequency bands a 4G LTE cellular phone needs to cover have increased dramatically from 4 frequency bands to 30 frequency bands. Enter into 5G, the demand of PAs per 5G smartphone is at least 2 more than per 4G smartphone. Although the growth for global smartphone shipment is decelerating, RF devices and RF front-end modules still have an 8% CAGR from 2018 to 2025 and during the same period the CAGR for PAs is 8% according to Yole Développement report. That means the consumption for GaAs devices will continue to increase.

2018-2025 RF Components & RFM/PAMiD Module Estimation

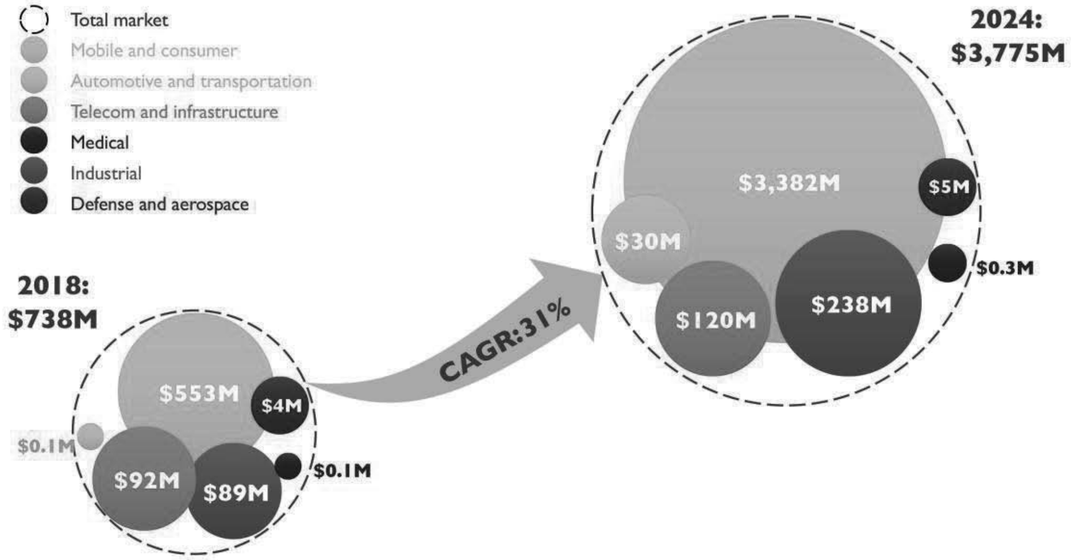


Data Source: 5G's Imapct on FR Front-End Moudle and Connectivity for Cell Phones 2019, Yole Développement, August 2019

Following the development of 5G and popularization of IoT in the next few years, the deployment of infrastructure and demand on upgrading handheld devices will only make GaAs applications even more extensive. Starting in 2019, the USA, South Korea, and China have begun providing 5G commercial services, and statistics show that major mobile phone manufacturers launched over 13 mobile phones that support 5G in 2019. Still, the development of 5G is still in its early stages. According to the forecasts of numerous research institutes, global 5G smart phone penetration rate will increase from 1% in 2019 to 15-20% in 2020, and may even surpass 30% in 2021. Also, the latest Ericsson Mobility Report published by Ericsson shows that the number of 5G users worldwide will reach 2.6 billion in 2025 under the rapid development and active promotion of the 5G ecosystem, covering 65% of the global population and handling 45% of mobile data worldwide.

The adoption of 3D sensing by iPhone X makes 3D sensing enter the application of consumer electronic products and provide new growth momentum for VCSEL. Also, it has changed the market of VCSEL industry dramatically. It will, in the future, also apply to new field such as AR/VR, drone, and autonomous car which making the VCSEL industry flourishing. According to Yole Développement, it forecasts VCSEL devices market is expected to grow at a CAGR of 31% between 2018 and 2024. Among VCSEL industry, mobile and consumer products would be the biggest application and the CAGR would be up to 35%.

2018-2024 VCSEL Market Value Estimation



Data Source：VCSEL s- Market and Technology Trends 2019 report, Yole Development, 2019

D. Competitive Advantage

1. Professional Management Team

We have a strong and stable management team. Our chairman of the board, Mr. Chin-Tsai Chen, has been chairman of our Company since 2003 and has led us to achieve consistent market share gains and significant profits. Our senior management team consists of professional executives with extensive industry experience in various aspects of our operations. A majority of the members of our technology management team have overseas educational backgrounds and work experience, and many worked in leading technology companies such as Bell Labs, United Microelectronics Corporation (‘‘UMC’’), Macronix International Co., Ltd., M/A-COM, Skyworks, Anadigics and Raytheon Company. We believe that our outstanding management team will continue to drive our success in the future.

2. Diversification in Technology and Strong R&D Capability

The strengths of our Company’s technical teams include high-level, wide range and high coverage of proprietary technologies; the ability to provide key technology manufacture services; and mastery of the HBT, pHEMT, BiHEMT, and GaN optical communications technologies which can satisfy numerous application demands simultaneously. So far, we have more than 20 process technologies entered into mass production, we not only can assist customers to rapidly develop new products, but also can provide one-stop shopping and total solution services to our customers.

3. Close Relationships with Industry Supply Chain

As GaAs comprised the key components for the communications industry; yield rate, quality stability, and rapid delivery have become standard requirements from the IC design houses and IDM companies. Due to the long period of time needed by customers to qualify a supplier and the risks of trade secret leakage, the costs to qualify a potential foundry is extremely high. Once the qualification has passed and the quality, delivery time, and manufacture capacity have all meet the requirements, the probability for the customer to switch to another foundry is very low. Therefore, once an IDM company has selected a foundry, it is not easy to make replacements. The quality of the Company's products has been affirmed by its downstream customers and has successively been certified by global IDMs, and we have built close relationships with industry leaders.

4. Capacity Scale

The Company has continued to invest in high-performance automation equipment. As of the end of 2019, the Company's Hwaya Fab A & B and the new Guishan Fab C have total capacity of 36,000 wafers per month. With solid management system and R&D investments, we can optimize the yield rate and produce high quality products in the shortest time possible, and reduce production costs to satisfy customer demands. Because we can provide adequate capacity, we can reduce the risk for customers to invest in capacity themselves.

5. High Product Quality and Market Awareness

The Company offers competitive prices, faster delivery, stable yield rate, and better foundry service quality to attract customers and strengthen the relationship with the customers through strategic alliances. The customer base of the Company includes IC design houses and IDMs, and we have successively passed the qualifications from numerous global companies. We are highly acclaimed for our quality, yield rate, prompt delivery, and cost advantages; and we have become the world's largest GaAs foundry service company since 2010.

6. Pure play Foundry Service Business Model

In addition to solidifying its smartphone market, the Company has continued to develop more cost-effective and higher value-added high frequency technologies to maintain its mid- and long-term competitive advantages. Since the Company is a pure-play foundry, the Company manufactures GaAs chips based on proprietary circuitry designs provided by customers. The company does not design its own GaAs chips and thus do not compete with its customers. Also, the foundry business model involves customers passing their proprietary design information to the Company for manufacturing, the Company's fabless and IDM customers do not perceive a conflict of interest in working with the Company and are more willing to share manufacturing know-how with the Company. The Company's pure-play model contributes to a higher degree of trust among customers and further strengthens the relationship with them.

7. Provide Customers with Value-added Services

The Company has established good partnership with its customers to provide efficient services and advanced technology, assist customers to resolve process technology related issues or quickly launch new products, and thereby seize market opportunities.

E. Favorable and Unfavorable Factors to Long-term Development and Response Measures

1. Favorable factors

(1) The Industry Has Growth Potential

GaAs devices are a key component in the wireless communications industry. They have become indispensable to mobile phones and WLAN in recent years as the industry is going through rapid growth and communication devices are becoming lighter, thinner, shorter, and smaller. Despite the slower growth in global smart phone shipments, VCSEL applications in smart phones and the arrival of the 5G era will only increase the use of GaAs devices. The popularization of UHF communication and rise of optical communication applications will create strong demand on GaAs components, and related process technologies often require special process equipment and production processes, which is one of our niches.

(2) IDMs' outsourcing trend

Due to considerations to reduce capital expenditures and lower costs and risks, major IDMs around the world are beginning to outsource to GaAs foundries and are seeking to form strategic alliances with GaAs foundries.

(3) Excellent proprietary technologies

Our management and R&D personnel all have years of experience in the field of GaAs, and have a profound understanding of the industry's environment and trends. Since the company was established, we have grasped the development trends and key technologies of the industry. We have the ability to independently develop new technologies and mass produce products to meet the needs of our customers.

(4) Firm belief in producing and selling high quality products

High product quality is the key to a company's survival and development, and GaAs's quality requirements are even stricter. We have been recognized by numerous multinational corporations for the stability and superiority of our product quality, which has allowed us to gain customers' trust and approval.

2. Unfavorable Factors and Response Measures

(1) Competition from Substitutes

The mature mass production of 8-12 inch silicon wafers has created the impression that wafers are small, low cost, and highly integrated, especially when CMOS replaced GaAs in Wi-Fi 802.11b, 802.11g, and a small portion of the 2G market during early periods. Since then, the threat of CMOS to GaAs has always lingered. The entire GaAs industry was shook several years ago when the global leader in smart phone baseband announced that it will be using the most advanced silicon process to make RF front-end modules. Even though CMOS has lower cost per chip, it will not necessarily have the advantage over GaAs when it comes to modules, and its performance is far worse than GaAs. Moreover, rapid developments have been made in GaAs technologies, and CMOS power amplifiers eventually fell to the excellent performance of GaAs. Hence, customers eventually choose to work with GaAs foundries for GaAs technology solutions.

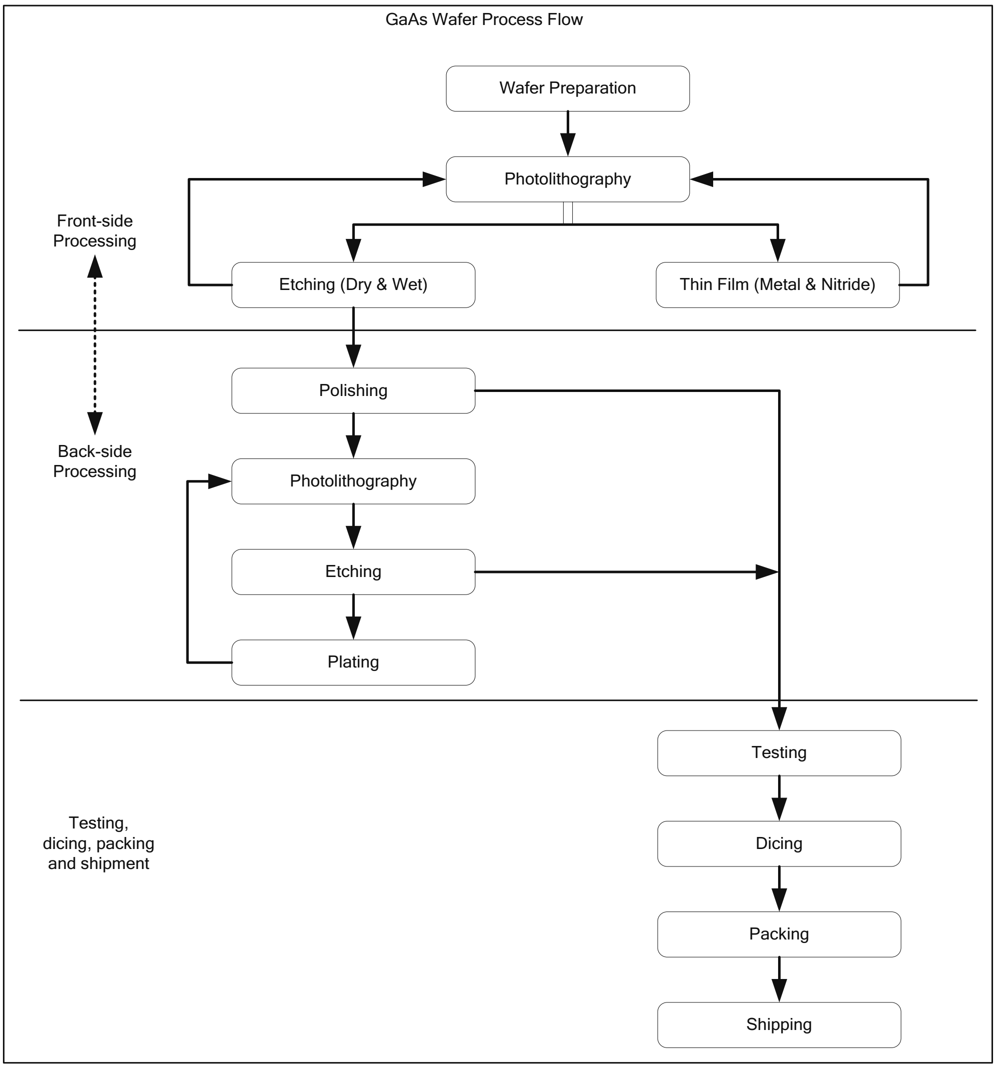
Response measures: Utilize superior R&D capabilities to provide highly integrated process technologies, and dedicate efforts to developing products that can lower cost, so that we will gain greater market differentiation and product competitiveness. Accelerate customers' product release by providing value-added design services, and thereby gain greater market opportunities. Since customers will be able to design modules that lower their overall cost, they will not need to give up on GaAs products, which offer higher power efficiency and linearity, when making decisions between the performance and cost of individual devices.

Important Purpose and Production Process of the Main Products

A. Important Purpose of the Main Products

Market Applications	Device Technology
Cable TV Amplifier	pHEMT
Optical Modulator Driver	pHEMT
Cellular Power Amplifier	HBT, BiHEMT
Base Station Power Amplifier	GaN HEMT
Wireless LAN (WLAN)	HBT, BiHEMT
Point-to-Point Radio	pHEMT
GPS Amplifier	pHEMT
Very Small Aperture Terminal (VSAT)	pHEMT, GaN HEMT
Broadband Satellite Communication	pHEMT
Automotive Radar	pHEMT, HBT
Optical Communication Laser	GaAs, InP Laser Diodes
Optical Communication Photo Detector	GaAs, InP Laser Diodes

B. Manufacturing Process



Raw Materials and Suppliers

Major types of raw materials used in our manufacturing process include GaAs epitaxial wafers, and precious metals. We seek to establish long-term relationships with stable and reliable suppliers to ensure uninterrupted supply of these raw materials on mutually satisfactory price, quality and delivery terms.

Most of our raw materials are available from several sources. We maintain several sources for each raw material so that a quality or delivery problem with any one supplier will not adversely affect our operations.

A List of Any Customers and Suppliers Accounting For 10 Percent or More of the Annual Net Revenue in Either of the 2 Most Recent Fiscal Years

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

Unit: NT$ thousand; %

Year	2018			2019			
Customer	Net Revenue	As % of Total Net Revenue	Relation to WIN	Customer	Net Revenue	As % of Total Net Revenue	Relation to WIN
Customer D	2,875,850	16.61	None	Customer A	3,032,337	14.19	None
Customer A	2,788,677	16.11	None	Customer B	2,698,003	12.62	None
Customer C	1,969,031	11.38	None	Customer C	2,011,520	9.41	None
Customer B	140,446	0.81	None	Customer D	2,003,256	9.37	None
Others	9,536,712	55.09	—	Others	11,632,608	54.41	—
Total Net Revenue	17,310,716	100.00	—	Total Net Revenue	21,377,724	100.00	—
Due to the change in smartphone market and the strong customers' demand in 2019, the Company's sales grew dramatically in 2019 compare to the previous year.							

B. Suppliers Accounted for at Least 10% of Annual Net Procurement

Unit: NT$ thousand; %

Year	2018			2019			
Supplier	Procurement Amount	As % of Total Net Procurement	Relation to WIN	Supplier	Procurement Amount	As % of Total Net Procurement	Relation to WIN
Supplier C	1,287,778	18.62%	None	Supplier A	950,883	13.54%	None
Supplier A	578,824	8.37%	None	Supplier B	774,313	11.03%	None
Supplier B	473,483	6.85%	None	Supplier C	268,540	3.82%	None
Others	4,574,326	66.16%	—	Others	5,027,822	71.61%	—
Total Net Procurement	6,914,411	100.00%	—	Total Net Procurement	7,021,558	100.00%	—
The company dynamically adjusts the suppliers according to the business needs on customer demands, raw material inventory status and fluctuation of market price. In addition, the procurement amount increased in 2019 due to the increase in customers' demand.							

Production in the Last Two Years

Capacity/Output Unit: Pieces; Amount Unit: NT$ thousand

Year	2018			2019		
Products \ Item	Capacity (Note)	Output (Note)	Amount	Capacity (Note)	Output (Note)	Amount
Wafers	350,000~ 370,000	245,000~ 260,000	11,821,311	370,000~420,000	270,000~310,000	12,722,913
Total	350,000~ 370,000	245,000~ 260,000	11,821,311	370,000~420,000	270,000~310,000	12,722,913

Note: 6-inch HBT equivalent wafers.

Shipments and Net Revenue in the Last Two Years

Unit: Pieces; NT$ thousand

Product \ Item	2018				2019			
	Export		Domestic (Note)		Export		Domestic (Note)	
	Shipment	Net Revenue	Shipment	Net Revenue	Shipment	Net Revenue	Shipment	Net Revenue
Wafers	209,765	14,821,468	36,112	2,110,862	270,003	19,012,672	29,544	1,861,608
Others	0	357,455	0	20,931	0	436,532	0	66,912
Total	209,765	15,178,923	36,112	2,131,793	270,003	19,449,204	29,544	1,928,520

Note: Domestic means revenues from Taiwan.

5.3. The Number of Employees Employed, Average Years of Service of Employees Employed, Average Age of Employees Employed, and Education Levels of Employees Employed

A. The Company:

Year		December 31, 2018	December 31, 2019	April 30, 2020
Number of Employees	Executive Officer	311	333	343
	Staff	1,131	1,162	1,203
	Direct Employees	1,322	1,415	1,460
	Total	2,764	2,910	3,006
Average Age		34.15	33.30	33.45
Average Years of Service (Years)		4.72	5.25	5.30
Education Ratio (%)	Ph.D.	1.41%	1.20%	1.30%
	Masters	22.18%	21.96%	22.16%
	Bachelor's Degree	61.18%	59.86%	61.27%
	Senior High School	15.23%	16.98%	15.27%
	Total	100%	100%	100%

B. The number of employees employed in all consolidated entities in 2018 and 2019 were 3,016 and 3,241, respectively.

5.4. Environmental Protection Expenditure Information

The total amount of losses (including compensation) and fines due to environmental pollution in the last year and as of the publication date of this annual report, future countermeasures (including improvement measures), and possible expenditures (including the anticipated loss, disposition, and compensation amounts incurred for not adopting the response measures). For amounts that cannot be reasonably estimated, please explain why.

We invest a considerable amount of resources into environmental protection and the improvement of pollution prevention facilities. Besides daily maintenance and management of existing equipment, we continue to procure wastewater, waste gas, and special chemical prevention equipment, as well as local exhaust treatment. We purchased 3 set of Regenerative Thermal Oxidizer (RTO) System for Fab A and Fab B in 2019 to deal with waste gas emitted from the process of volatility organic compound to reduce the emission of VOCs.

We have obtained the ISO14001 and OHSAS18001 Environmental and Occupational Health and Safety Management Systems certification for many years, and we continue to improve the environmental safety system and culture in our factories each year. We began compiling GHG inventories of the previous year starting in 2014, and passed the inspection of an external verification company for ISO14064 as part of our efforts to achieve our environmental health and safety policy.

5.5. Employee Relations

Employee Welfare

Human resources are WIN's most important asset, as well as the driving force behind WIN's growth. We provide employees with National Health Insurance, Labor Insurance, pension contributions, contributions to the Overdue Wages Repayment Fund, and Occupational Injury and Disease Insurance in accordance with the Labor Standards Act and related laws and regulations. We also provide numerous benefits to care for employees' needs, and provide employees with a comprehensive health maintenance and promotion plan, as well as injury and illness care services, offering an environment with good work-life balance. We also have an Employee Welfare Committee that organizes a variety of employee welfare activities. Our welfare measures for employees are as follows:

1. Insurance: apart from the labor insurance and national health insurance required by law, employees are enrolled in the group comprehensive insurance policy.
2. Free regular medical checkups for employees. Healthcare, including visits from medical specialists. Employee health promotion and awareness events.
3. Meal subsidies and employee dormitory.
4. New employees are entitled to 4 days of paid leave after an employment period of three months and after passing their performance appraisals.
5. Offer employees' compensations and employee stock ownership trusts program, in the hope that the Company enjoys profits with our employees.
6. Employee wedding, funeral service, hospitalization, and childbirth subsidies.
7. Birthday cash gift, Labor Day cash gift, cash gift for shopping during the three major traditional holidays, and year-end party prize drawing.
8. Employee travel allowance and health promotion program.
9. Offer various types of clubs with subsidies, including badminton, yoga, aerobic combat sports, jogging and table tennis.
10. Independent and private medical and lactation (breastfeeding) room.
11. Massage services from people with visual impairments.

Employee Education and Training

WIN strives to create a diverse learning environment that offers rich and interesting contents. By establishing the "Education and Training Procedures," the Company has systematically integrated both internal and external resources, thus providing a complete talent development strategy as well as cultivating and improving employees' skills and capabilities so that they can grow with the Company and together create a mutually beneficial relationship.

WIN's talent cultivation is divided into three contexts, formulating professional training roadmaps based on the department in which employee belongs, the job position, the expertise and familiarity required to be successful in the role. Examples include: classroom-based courses, on-the-job training and coaching, and online English language training. The objective is to develop a blueprint for each employee's future development through a comprehensive training program. Additionally, the HR Division plans and organizes all types of professional training courses that meet the requirements to help employees adapt and learn the skills they need at work.

- Specialized role: Cultivate employees who wish to refine their knowledge and skills to become an expert in certain fields;
- Managerial role: Cultivate leadership in management of different levels, including entry level, mid-level, and top level managers.
- Project-based role: Generally involves technical managers in charge of projects or customer project managers with a background in technological R&D.

In order to meet the diverse requirements of our employees and to achieve the long-term objectives of training and development, WIN makes available a variety of training opportunities and avenues, including abundant internal and external training resources. The Training Development team under the Human Resource Division is responsible for planning and promoting various learning programs and talent development projects.

Training Development Action Plan

- Management skills and development: The supervisor's leadership quality and capabilities is an important ingredient of what propels the organization toward excellence. Therefore, WIN greatly values leadership in executive management. The Company offers compulsory training courses for all levels of management to enhance and refine the supervisors' managerial capabilities. These courses include: topics for newly promoted and entry-level managers, performance interview, interview skills, and coaching skills, regulatory notices for managerial officers, talent retention, and strategy establishment. During 2019, WIN organized 7 training classes, which were attended by supervisors a total of 278 times.

- Orientation: Helping new employees understand the history of WIN, its current advantages, and future challenges. Department functions and experiences are introduced to help new employees understand WIN's culture and core values of Integrity and Accountability, Innovation, Customer Satisfaction, and Quality Foremost, which enable them to quickly adapt to the work environment. In addition, we provide environmental safety-related training courses, such as basic fire-prevention and firefighting concepts, general information about hazards and general labor safety and health training, the purpose of which is to provide a safe and worry-free workplace environment.

- Internal/on-the-job training for all business divisions: Apart from learning in a classroom setting, learning by doing is the most important means of building skills. WIN provides a series of on-the-job training programs for new hires. Based on the different needs of each department, we provide tailor-made courses to train new employees on the job, which is an important notion we embrace. We require new employees to complete training within 3 months to enable them to build on their professional expertise in a systematic manner.

- General knowledge training/Lifestyle talks: Based on government regulations and company policies, general knowledge training courses for the company have been arranged, including environmental safety and health, emergency response training, quality management, and workplace ethics. In addition, the Company has also setup talks by experts in health, parent-child relations, gender relations, travelling, and lifestyle-related topics, injecting positive energy among employees to encourage them to find a balance between their body and mind outside of work.

- Enhancing individual job performance: Self-management general knowledge courses that are available to all employees were provided to help employees improve their job performance and potential through the learning of soft skills.
- Language training:

  With WIN's rapid growth in recent years, the sources of our customers have also become more diversified. To improve our employees' abilities in foreign languages, the Company has developed a comprehensive language training/subsidy program. We provide:

  - English language workshops: By organizing work-related language topics (such as tips on oral presentation in English, business correspondence skills, and English for meetings), which are open to all anyone who is interested, our employees can apply what they have learned in the workshops and apply these new skills in the workplace—a win-win for everyone involved.
  - English simulation tests are provided for employees to determine their English proficiency and devise self-learning plans
  - Online English courses are offered to help employees who need to communicate in English at work to expand their business vocabulary.
  - Employees with specific job requirements are tutored in small groups on English or Japanese.
  - Official TOEIC test subsidies.
- Training for direct employees involved in production: We help assistant engineers in charge of production to acquire necessary knowledge and skills. By combining the certification mechanism with machinery operation training, trainees are able to obtain the required permits to operate machinery. Also with regular retraining, employees will be able to complete their tasks successfully.
- Industry-academia collaboration: In-service training is provided at flexible work hours to support employees' continuing education.

In 2019, 13,165 attendees underwent 329 training sessions for a total of 27,038.9 training hours, which averaged 9.3 hours per employee. The total training costs are around NT$5.8 million, 40% more than the previous year, this attested to the value WIN places on talent cultivation.

Number of training hours in 2019 by gender:

Gender	Male	Female	Total
Total training hours	15,805.5	11,233.4	27,038.9
Number of employees	1,355	1,555	2,910
Average training hours per employee	11.7	7.2	9.3

Number of training hours in 2019 by personnel category and gender:

Category	Total training hours	Average training hours per employee (Male)	Average training hours per employee (Female)
Managers	4,985.5	4,148	837.5
Professionals	13,303	10,569	2,734
Technicians	8,750.4	1,089	7,661.9

Number of training hours in 2019 by personnel category:

Category	Managers	Professionals	Technicians	Total
Total training hours	4,985.5	13,303	8,750.4	27,038.9
Number of employees	333	1,162	1,415	2,910
Average training hours per employee	15	11.4	6.2	9.3

Training hours in 2019 by course category:

Item	Session	Total number of people (Internal and external training)	Total participation hours
1. Management skills training	7	278	1,078
2. Quality control training	63	938	1,422
3. Core of corporate culture training	9	970	2,434
4. Professional training	44	429	2,284
5. General knowledge training	105	8,189	12,501.9
6. Environment, health and safety training	101	2,361	7,319
Total	329	13,165	27,038.9

WIN provides courses and also focuses on actual implementation status after courses. We use the four levels in the Kirkpatrick Model to assess the performance of the training on different levels.

- Reaction (Level 1): Evaluate the participants' satisfaction rate of the courses by using methods such as questionnaires after courses. This is used mainly for orientation.
- Learning (Level 2): Evaluate the degree to which participants acquire the intended knowledge in the course such as tests for professional courses (e.g. DOE).
- Behavior (Level 3): After evaluating participants' studies, we review the actual application status after they return to their work posts. This method is mostly used for project or management courses. In the case of project management courses, WIN uses behavioral assessment to investigate participants' applications after courses. We invite supervisors to evaluate participants' improvement in project management. Among the managers who have responded in 2019, 100% of the managers believe that the course can effectively improve students' project management skills.
- Results (Level 4): We evaluate the benefits of courses on participants' personal performance or organizational performance. This is used for internal instructor training. Trainees not only must pass education assessments but must also lecture in actual courses. They are subject to trainees' satisfaction rate reviews in the courses. Seven of WIN's

courses were evaluated based on Level 3 or Level 4 mechanisms in 2019 which accounted for 87% of all project courses. This showed WIN’ s commitment to the effectiveness of the courses.

In the succession plan of WIN, the successor must have excellent work ability, values that match the Company's values, and must be honest and have integrity. The Company's talent cultivation is as described above. Since most employees are relatively young between the ages 31 and 35, our goal is to establish a talent evaluation and development system in 2022, so that we can develop even more employees to become important members of management. In terms of Directors, we have developed four employees into Directors and former CEO Dr. Yu Chi Wang were promoted to be the Vice Chairman of the Company and the former COO Mr. Kyle Wang were promoted to be the CEO of the Company in 2019. In addition, we also arrange senior executives to participate the training courses while arranging director training courses every year. Please refer to pages 42~44 and 47~48 for the education/training records of Directors in 2019.

In addition, WIN continues to promote its core values of “integrity and accountability, innovation, customer satisfaction, and quality foremost” through different training courses and incentive measures.

Cultivate the Accountability Culture

WIN continues to promote its core values of Accountability and Innovation through different training courses and incentive measures, including accountability courses for new comers, lectures for raising employees’ accountability awareness, and internal lecturer training. These efforts facilitate implementing the spirit of accountability and encourage concrete actions within the departments. Furthermore, WIN has established incentive mechanisms such as monthly accountability rewards and yearly accountability awards.

Cultivation of an Innovative Culture

We encourage employees to show their creative thinking and actions during work to create an atmosphere that encourages innovation in the organization. We continue to offer innovative thinking training, such as innovation workshops, innovation lectures, and WIN Talks; we also established patent rewards for R&D personnel and rewards for proposals by entry-level assistant engineers. We continue to hold annual innovation competitions. The proposals are impartially reviewed by a committee, which selects winners of the annual innovation award, and hands out trophies and monetary awards.

Furthermore, WIN organizes annual roundtable sharing events, and award winners share report their award winning topic to management and employees in the form of a science fair and results presentation. The event allows everyone to understand the motive and breakthrough of various innovations, and exchange technologies and success stories. The event was organized in coordination with the Q&A Contest, which asks employees simple questions that they can find the answer to in exhibited works, making innovative thinking more appealing by providing education through entertainment.

Employee Certifications Relating to Information Transparency

- The Company’s accounting officer is certified by Accounting Research and Development Foundation as an accounting officer of public traded company.
- The Company has one employee in accounting division with Certified Internal Auditor

(CIA).

- The Company has one employee in accounting division with Certified Public Accountant (CPA).
- The Company has two employees in auditing office with certificate issued by Securities and Futures Institute.

Retirement System

The Company appropriated pension plan in accordance with the Labor Standard Law every year. The Company commissions professional actuaries to calculate pension reserve funds to ensure that full coverage of pension is reserved. Pension is calculated based on the employee's years of service and the average salary in the six months prior to retirement. The Company contributes pension reserve equivalent to 2% of the employees' salary each month to a special account in Bank of Taiwan. As of December 31, 2019, the fair value of plan assets was NT$45,194 thousand. Future amounts of pensions that need to be paid as required by law have been included in the pension liability. The balance as at the end of 2019 was NT$98,961 thousand. In addition, the Company appropriates pension funds equivalent to 6% of the employee's salary to the dedicated personal pension account of the Bureau of Labor Insurance based on the Labor Pension Act. The number of years worked by employees hired before July 1, 2005 shall be reserved. The amount of pension expenses in 2019 totaled NT$95,116 thousand.

We established the "Regulations for Management of the Retirement of Commissioned Managers" for commissioned managers to feel secure about their retirement and maintain harmonious relationships, which will improve our business performance.

Employee Communications Channel

WIN integrates harmonious labor-management relations in the Company's human resource management strategy as a testament to the high level of importance we attach to friendly management.

To ensure gender equality and the dignity employees are entitled at work, WIN combines existing laws and regulations such as the Act of Gender Equality in Employment to establish the Company's procedures for protecting female workers and regulations governing the prevention and handling of sexual harassment. The sexual harassment hotline and email are set up to protect employees' rights and safety in the workplace.

Meeting between employer and employees convenes quarterly, in the meetings employee representatives voice their opinions and advice on matters that are of concern to employees. The Employee Welfare Committee convenes quarterly meetings to inform committee members of any employee welfare events and current status on the use of welfare funds. For foreign employees, every quarter communication meetings are held in the dormitory, where they can provide feedback and receive updates on laws or welfare measures. Interpreters also attend such meetings to facilitate communication.

The Company has established the handbook of "Employee Work Rules" for new employees, which are given to them when they report for duty. These handbooks introduce employees to the Company's code of conduct. Furthermore, various types of communication links are provided on the Company's website to facilitate the acceptance and handling of employee feedback.

Working Environment and Employee Safety Protection Measures

We have established an internal management system and factory pollution prevention, health, and safety facilities in accordance with environmental protection, occupational safety and health, fire safety, and ionizing radiation related regulations. We have adopted improvements or control measures for operations that are identified or assessed as having a significant impact on the environment or high risk based on the logic of management system operations, to achieve pollution prevention and personnel health and safety protection.

Key results of other routine EHS management measures in 2019 are as follows:

Objective	Description	Result
Drinking water testing	To maintain the quality of drinking water and employee health, we conduct sampling inspections of e-coli bacterial colony in water dispensers every three months in accordance with the Regulations for the Use, Maintenance, and Management of Stationary Continuous Drinking Water Supply Equipment.	Number of water dispensers tested: 40. Pass rate: 100%.
Workplace environmental monitoring	We test workplaces for CO2, noise and chemical substances every six months in accordance with the Regulations for Workplace Environmental Monitoring. For machines, equipments, operations, or environments that use or store chemicals, we sample and analyze the concentration of chemical substances in the environment to protect employees from physical and chemical harm. Tested a total of 1,436 items.	Pass rate: 100%.
Health examination	Employees receive general and special health examination every year: General health examination: 2,466 employees Special health examination: 1. Arsenide (As) and its compounds: 1,513 employees 2. Ionizing radiation: 265 employees	Work related abnormal results in health examination: 0 (There were no class 3 and class 4 management abnormalities).
Environmental protection and labor safety training	The following education and training was provided in accordance with the Occupational Safety and Health Education and Training Rules to protect employee safety and health: 1. Occupational safety and health training for new employees: Establish employees' safety and health awareness. 2. Supervisor occupational safety and health training: Establish supervisors' safety and health awareness. 3. Liberal hazardous chemicals Training for new employees: Establish employees' hazards of chemical substances awareness and how to use personal protection equipment. 4. On-the-job labor safety / fire safety / fire extinguisher / emergency evacuation training. 5. Quarterly emergency response drills at each factory. 6. Six scooter safety lectures were organized.	Enhanced protection of employee safety and health.
On-site inspections, safety inspections, and internal audits	1. Daily EHS related on-site inspections. 2. Implementation of high-risk machinery safety inspections. 3. EHS Management System internal audits.	Active and systematic problem finding to reduce the potential risks.

Objective	Description	Result
GHG emission control management	Besides conducting inventories for GHG emission and commissioning a certifying body recognized by the Environmental Protection Administration in accordance with regulations each year, we also evaluate the economic and technical feasibility of reducing GHG emissions.	The inventories are reported in accordance with the law and serve as the basis for reducing GHG emissions.

Labor-Management Dispute Loss in 2018 and as of the Publication Date of the Annual Report:

1. Document No.: Lao-Zhi-Shou-Zi No. 1080201907 Date: May 29, 2019

Employees at Fab C were injured and hospitalized in a fire accident caused by organic solvents on April 30, and the Occupational Safety and Health Administration (OSHA) imposed a fine of NT$120,000 in accordance with Article 6 of the Occupational Safety and Health Act on May 28. Improvements made by WIN in response to the occupational accident: Established the flammable liquid heating permit systems and items that require verification, added management items in automatic inspections, and verified that equipment and auxiliary equipment are grounded and functioning normally. All improvements were completed on July 19, 2019.

2. Document No.: Lao-Zhi-Shou-Zi No. 1080202097 Date: June 19, 2019

The Northern Occupational Safety and Health Center, OSHA conducted a routine inspection of hazardous workplaces in Fab B on May 16, and imposed a fine of NT$120,000 for facilities found in violation in accordance with Article 6 of the Occupational Safety and Health Act on June 19. Improvements made by WIN: A static eliminator is used on pipes with power transmission of chemicals and filters, removed equipment without explosion proof structure in hazardous areas, removed and independently stored tanks that are not compatible with each other, and installed emergency shower equipment in the workplace. All improvement plans were completed before July 31, 2019.

5.6. Important Contracts

Type	Contractual Parties	Commencement Date and Expiration Date	Subject	Restriction
Technology Licensing Agreement	Terms and conditions cannot be disclosed according to the confidentiality obligation under the agreement	11/11/2010 ~ each expiration date of patents and know-how under the agreement	Licensing of packaging technology	None
Capital Equipment Transfer Agreement	Avago Technologies Wireless, (U.S.A.) Manufacturing, LLC	02/01/2019 ~ completion of the installation and testing by WIN	Obtain a batch of machinery and equipment	None

Type	Contractual Parties	Commencement Date and Expiration Date	Subject	Restriction
Syndicated Loan	The Company signed midterm credit agreement with 5 bank groups including Far EAST Internal Commercial Bank for its 6 subsidiaries including Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd., Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd., Jiangsu Win Yield Agriculture Development Co., Ltd., Jiangsu Win Shine Agriculture Development Co., Ltd., Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd., and Jiangsu Merit/CM Agriculture Development Co., Ltd. And act as joint guarantor.	07/10/2019 ~ 07/08/2022	Credit amount no more than US$200,000,000-	(Note)
Lease Contract	ITEQ Corporation	01/09/2013 ~ 12/31/2023	ITEQ Corporation leased the land and the plant at Xinpu town Hsinchu county from the Company.	None

Note: Current ratio (current assets / current liabilities) during loan period: May not be lower than 100% times interest earned [(Profit before tax + Depreciation + Amortization + Interest expense) / Interest expense]: May not be lower than 100% tangible assets (net worth - intangible assets): May not be lower than NT$15,000,000,000; the financial ratios above and agreements must be examined at least once every six months. Annual consolidated financial statements certified by an accountant and approved the managing bank and semi-annual consolidated financial statements certified by an accountant are used as the basis for calculation. Annual consolidated financial statements are inspected starting from the year that the contract provided by the joint guarantor was signed.

VI. FINANCIAL STATUS

6.1. Five-Year Financial Summary

A. Condensed Balance Sheets - IFRSs

Unit: NT$ thousand

Item \ Year		Consolidated Financial Statements					Parent-Company-Only Financial Statements				
		Five-Year Financial Summary (Note)					Five-Year Financial Summary (Note)				
		2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Current Assets		6,984,103	7,819,409	16,787,114	11,334,529	13,650,150	6,762,413	6,546,222	15,330,143	9,129,539	10,954,787
Property, plant and equipment		11,623,190	13,348,978	14,468,268	15,568,252	17,866,310	11,622,870	13,181,802	14,163,365	14,784,516	15,669,777
Intangible Assets		62,370	229,539	257,844	586,953	577,454	62,370	73,352	81,879	94,261	122,411
Other Assets		5,441,810	5,012,713	5,514,226	7,969,869	10,032,188	5,629,110	5,790,520	7,084,055	11,040,335	14,189,345
Total Assets		24,111,473	26,410,639	37,027,452	35,459,603	42,126,102	24,076,763	25,591,896	36,659,442	35,048,651	40,936,320
Current Liabilities	Before Distribution	4,605,604	4,194,420	5,077,465	3,828,383	5,975,700	4,570,894	4,067,122	4,969,052	3,648,259	5,819,200
	After Distribution	4,903,937	6,006,419	8,036,130	5,947,355	8,944,095	4,869,227	5,879,121	7,927,717	5,767,231	8,787,595
Non-current Liabilities		2,296,769	3,898,335	6,145,242	6,026,835	6,310,870	2,296,769	3,898,335	6,121,175	6,020,685	5,459,652
Total Liabilities	Before Distribution	6,902,373	8,092,755	11,222,707	9,855,218	12,286,570	6,867,663	7,965,457	11,090,227	9,668,994	11,278,852
	After Distribution	7,200,706	9,904,754	14,181,372	11,974,190	15,254,965	7,165,996	9,777,456	14,048,892	11,787,916	14,247,247
Total Equity Attributable to Owners of Parent		17,209,100	17,626,439	25,569,215	25,379,707	29,657,468	17,209,100	17,626,439	25,569,215	25,379,707	29,657,468
Share Capital		5,965,641	4,076,664	4,226,664	4,238,144	4,240,564	5,965,641	4,076,664	4,226,664	4,238,114	4,240,564
Capital Surplus		3,815,017	3,758,737	9,052,896	9,199,357	9,244,308	3,815,017	3,758,737	9,052,896	9,199,357	9,244,308
Retained Earnings	Before Distribution	7,045,498	9,376,801	10,821,687	11,178,324	13,399,189	7,045,498	9,376,801	10,821,687	11,178,324	13,399,189
	After Distribution	6,747,165	7,564,802	7,863,022	9,059,352	10,430,794	6,747,165	7,564,802	7,863,022	9,059,352	10,430,794
Other Equity		382,944	761,897	1,467,968	763,882	2,773,407	382,944	761,897	1,467,968	763,882	2,773,407
Treasury Shares		0	(347,660)	0	0	0	0	(347,660)	0	0	0
Non-controlling Interests		0	691,445	235,530	224,678	182,064	0	0	0	0	0
Total Equity	Before Distribution	17,209,100	18,317,884	25,804,745	25,604,385	29,839,532	17,209,100	17,626,439	25,569,215	25,379,707	29,657,468
	After Distribution	16,910,767	16,505,885	22,846,080	23,485,413	26,871,137	16,910,767	15,814,440	22,610,550	23,260,735	26,689,073

Note: The financial information has been audited by independent auditors.

B. Condensed Statements of Comprehensive Income - IFRSs

Unit: NT$ thousand, except for earnings per share

Item \ Year	Consolidated Financial Statement					Parent-Company-Only Financial Statement				
	Five-Year Financial Summary (Note)					Five-Year Financial Summary (Note)				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Operating Revenue	12,015,747	13,623,076	17,086,355	17,310,716	21,377,724	11,904,017	13,299,527	16,477,395	16,757,646	20,852,558
Gross Profit	4,761,031	4,989,252	6,327,970	5,415,171	8,160,874	4,712,349	4,885,266	6,109,465	5,304,319	8,074,918
Net Operating Income	3,510,364	3,494,602	4,569,335	3,205,342	5,558,552	3,556,040	3,526,852	4,590,484	3,453,510	5,853,554
Non-operating Income and Expenses	(76,726)	392,942	(40,656)	529,281	(165,124)	(122,657)	376,732	(12,924)	339,101	(386,852)
Profit before Tax	3,433,638	3,887,544	4,528,679	3,734,623	5,393,428	3,433,383	3,903,584	4,577,560	3,792,611	5,466,702
Profit from Continuing Operations	2,671,627	3,096,305	3,715,295	3,066,062	4,400,761	2,671,627	3,112,774	3,764,200	3,124,454	4,474,399
Profit from Discontinued Operations	0	0	0	0	0	0	0	0	0	0
Profit	2,671,627	3,096,305	3,715,295	3,066,062	4,400,761	2,671,627	3,112,774	3,764,200	3,124,454	4,474,399
Other Comprehensive Income, after Tax	156,841	340,654	743,099	(365,577)	1,970,089	156,841	367,600	706,238	(312,936)	1,973,599
Comprehensive Income	2,828,468	3,436,959	4,458,394	2,700,485	6,370,850	2,828,468	3,480,374	4,470,438	2,811,518	6,447,998
Profit, Attributable to Owners of Parent	2,671,627	3,112,774	3,764,200	3,124,454	4,474,399	2,671,627	3,112,774	3,764,200	3,1244,454	4,474,399
Profit, Attributable to Non-controlling Interests	0	(16,469)	(48,905)	(58,392)	(73,638)	0	0	0	0	0
Comprehensive Income, Attributable to Owners of Parent	2,828,468	3,480,374	4,470,438	2,811,518	6,447,998	2,828,468	3,480,374	4,470,438	2,811,518	6,447,998
Comprehensive Income, Attributable to Non-controlling Interests	0	(43,415)	(12,044)	(111,033)	(77,148)	0	0	0	0	0
Earnings Per Share (expressed in dollars)	3.97	6.04	9.34	7.39	10.59	3.97	6.04	9.34	7.39	10.59

Note: The financial information has been audited by independent auditors.

C. Auditors' Opinions in the Past Five Years

Year	CPA's Name	CPA Firm	Auditing Opinion
2014	Mei-Yen Chen and Pei-Chi Chen	KPMG	Unqualified opinion
2015	Mei-Yen Chen and Pei-Chi Chen	KPMG	Unqualified opinion
2016	Ya-Ling Chen and Mei-Yen Chen	KPMG	Unqualified opinion
2017	Ya-Ling Chen and Mei-Yen Chen	KPMG	Unqualified opinion
2018	Ya-Ling Chen and Mei-Yen Chen	KPMG	Unqualified opinion
2019	Ya-Ling Chen and Chia-Chien Tang	KPMG	Unqualified opinion

6.2. Five-Year Financial Analysis

A. Financial Analysis of Financial Statements - IFRSs

Year / Item (Note 2)		Consolidated Financial Statements					Parent-Company-Only Financial Statements				
		Financial Analysis in the Past Five Years (Note 1)					Financial Analysis in the Past Five Years (Note 1)				
		2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Financial Structure (%)	Debt Ratio	28.63	30.64	30.31	27.79	29.17	28.52	31.12	30.25	27.59	27.55
	Long-term Funds to Property, Plant and Equipment	167.82	166.43	220.83	203.18	202.34	167.82	163.29	223.75	212.39	224.11
Solvency (%)	Current Ratio	151.64	186.42	330.62	296.07	228.43	147.95	160.95	308.51	250.24	188.25
	Quick Ratio	94.60	115.00	250.51	185.80	148.78	90.48	91.12	229.41	140.17	109.13
	Times Interest Earned Ratio	63.29	76.33	60.07	56.40	58.54	63.28	76.65	60.71	57.27	81.02
Operating Ability	Accounts Receivable Turnover (turns)	17.29	15.40	13.04	11.64	11.17	21.78	15.37	11.79	10.36	10.70
	Days to Collect Accounts Receivable (day)	21	24	28	31	33	17	24	31	35	34
	Average Inventory Turnover (turns)	3.65	3.32	3.32	3.11	3.19	3.62	3.24	3.21	3.01	3.10
	Accounts Payable Turnover (turns)	6.48	7.56	8.05	8.52	9.05	6.42	7.47	7.90	8.29	8.81
	Average Days to Sell Inventory	100	110	110	117	114	101	113	114	121	118
	Property, Plant and Equipment Turnover (turns)	1.03	1.09	1.23	1.15	1.28	1.02	1.07	1.21	1.16	1.37
	Total Assets Turnover (turns)	0.52	0.54	0.54	0.48	0.55	0.52	0.54	0.53	0.47	0.55
Profitability	Return on Total Assets (%)	11.68	12.32	11.86	8.51	11.45	11.70	12.60	12.24	8.77	11.84
	Return on Equity (%)	16.12	17.87	17.43	12.27	16.26	16.12	17.87	17.43	12.27	16.26
	Profit before Tax to Issued Capital (%)	57.56	95.36	107.15	88.12	127.19	57.55	95.75	108.30	89.49	128.91
	Profit to Sales (%)	22.23	22.73	21.74	17.71	20.59	22.44	23.41	22.84	18.64	21.46
	Earnings Per Share (NT$)	3.97	6.04	9.34	7.39	10.59	3.97	6.04	9.34	7.39	10.59
Cash Flow	Cash Flow Ratio (%)	106.23	90.27	116.08	143.13	135.29	101.11	93.91	113.61	157.88	147.67
	Cash Flow Adequacy Ratio (%)	117.83	147.08	140.15	124.01	120.42	117.07	142.20	144.33	131.34	137.53
	Cash Flow Reinvestment Ratio (%)	16.19	10.43	9.02	5.31	11.29	15.27	10.75	8.52	5.93	12.52
Leverage	Operating Leverage	2.15	2.42	2.29	3.19	2.43	2.11	2.36	2.17	2.85	2.25
	Financial Leverage	1.00	1.01	1.01	1.01	1.01	1.00	1.01	1.01	1.01	1.01

Analysis of financial ratio change in the last two fiscal years: (If the difference does not exceed 20%, the analysis is not required)

1. Solvency: The lower current ratio and quick ratio in 2019 was mainly due to revenue growth and capacity expansion, resulting in increased current liabilities such as accounts payable, equipment payable and current income tax liabilities
2. Profitability: Return on total assets, return on equity, profit before tax to issued capital and EPS increased in 2019 mainly due to the increase in both revenue and utilization rate making both profit before and after income tax increased.
3. Cash Flow: The higher cash flow reinvestment ratio in 2019 was Mainly due to the increase in cash inflows from current operating activities.
4. Leverage: The lower operating leverage in 2019 was mainly due to the increase in utilization rate resulting in increased operating profit.

Note 1: The financial information has been reviewed or audited by independent auditors.

Note 2: The Formula of Financial Analysis:

1. Financial Structure Analysis (%)
   (1) Debt Ratio = Total Liabilities / Total Assets
   (2) Long-term Funds to Property, Plant and Equipment = (Total Equity + Non-current Liabilities) / Property, Plant and Equipment, Net
2. Solvency (%)
   (1) Current Ratio = Current Assets / Current Liability
   (2) Quick Ratio = (Current Assets - Inventories - Prepaid Expenses) / Current Liability
   (3) Times Interest Earned Ratio = Profit before Credit for Income Tax / Current Interest Expense
3. Operating Ability
   (1) Accounts Receivable Turnover = Sales / Average Accounts Receivable
   (2) Days to Collect Accounts Receivable = 365 / Accounts Receivable Turnover
   (3) Average Inventory Turnover = Cost of Sales / Average Inventories
   (4) Accounts Payable Turnover = Cost of Sales / Average Accounts Payable
   (5) Average Days to Sell Inventory = 365 / Average Inventory Turnover
   (6) Property, Plant and Equipment Turnover = Sales / Average Property, Plant and Equipment, Net
   (7) Total Assets Turnover = Sales / Total Assets
4. Profitability
   (1) Return on Total Assets = [Profit + Interest Expense X (1 - Tax Rate)] / Average Assets
   (2) Return on Equity = Profit / Average Total Equity
   (3) Profit before Tax to Issued Capital = Profit before Tax / Issued Capital
   (4) Profit to Sales = Profit / Sales
   (5) Earnings Per Share = (Equity Attributable to Owners of Parent - Dividend-preferred stock) / Weighted Average Outstanding Shares
5. Cash Flow
   (1) Cash Flow Ratio = Net Cash Flows from Operating Activities / Current Liability
   (2) Cash Flow Adequacy Ratio = 5-year Net Cash Flows from Operating Activities / 5-year (Capital Expense + Increase in Inventories + Cash Dividend)
   (3) Cash Flow Reinvestment Ratio = (Net Cash Flows from Operating Activities - Cash Dividend) - (Property, Plant and Equipment, Net + Long-term Investments + Other Non-current Assets + Operating Capital)
6. Leverage
   (1) Operating Leverage = (Net Sales – Variable Operating Costs and Expenses) / Operating Income
   (2) Financial Leverage = Operating Income / (Operating Income – Interest Expenses)

6.3. Audit Committee' Report for the Most Recent Year

2019 AUDIT COMMITTEE'S REVIEW REPORT

The Board of Directors has prepared the Company's 2019 Business Report, Financial Statements (parent-company-only & consolidated), and proposal for allocation of earnings. The CPA firm of KPMG was retained to audit WIN's Financial Statements and has issued an audit report relating to the Financial Statements.

The Business Report, Financial Statements, and earnings allocation proposal have been reviewed and determined to be correct and accurate by the Audit Committee members of WIN Semiconductors Corp. According to relevant Article 14-4 of the Securities and Exchange Act and Article 219 of the Company Law, we hereby submit this report.

WIN Semiconductors Corp.
Chairman of the Audit Committee: Chin-Shih Lin

March 18, 2020

6.4. Consolidated Financial Statements for the Years Ended December 31, 2019 and 2018, and Independent Auditors' Report

Please refer to pages 147~243 of this annual report.

6.5. Parent-Company-Only Financial Statements for the Years Ended December 31, 2019 and 2018, and Independent Auditors' Report

Please refer to pages 244~321 of this annual report.

6.6. If the Company or Its Affiliates Have Experienced Financial Difficulties in the Most Recent Fiscal Year or during the Current Fiscal Year up to the Date of Printing of the Annual Report, the Annual Report Shall Explain How Said Difficulties Will Affect the Company's Financial Situation

None

VII.REVIEW OF FINANCIAL CONDITIONS, OPERATING RESULTS, AND RISK MANAGEMENT

7.1. Financial Status

Analysis of Financial Status

Unit: NT$ thousand

Item \ Year	2018	2019	Difference	
			Amount	%
Current Assets	11,334,529	13,650,150	2,315,621	+20%
Property, Plant and Equipment	15,568,252	17,866,310	2,298,058	+15%
Intangible Assets	586,953	577,454	-9,499	-2%
Other Assets	7,969,869	10,032,188	2,062,319	+26%
Total Assets	35,459,603	42,126,102	6,666,499	+19%
Current Liabilities	3,828,383	5,975,700	2,147,317	+56%
Non-current Liabilities	6,026,835	6,310,870	284,035	+5%
Total Liabilities	9,855,218	12,286,570	2,431,352	+25%
Share Capital	4,238,144	4,240,564	2,420	+0.06%
Capital Surplus	9,199,357	9,244,308	44,951	+0.49%
Retained Earnings	11,178,324	13,399,189	2,220,865	+20%
Other Equity Interest	763,882	2,773,407	2,009,525	+263%
Equity Attributable to Owners of Parent	25,379,707	29,657,468	4,277,761	+17%
Total Equity	25,604,385	29,839,532	4,235,147	+17%

Effect of Change on the Company’s Financial Condition

1. The increase in current assets was mainly due to the increase in revenue that made account receivable, cash and inventory in respond to future revenue growth increased.
2. The increase in other assets was mainly due to the increase in the market price of financial assets, resulting in an increase in the non-current value of financial assets measured at fair value through other comprehensive income.
3. The increase in current liabilities and total liabilities was mainly due to revenue growth and capacity expansion, which resulted in increased accounts payable, equipment payable and current income tax liabilities.
4. The increase in retained earning mainly due to the increase in net profit.
5. The increase in other equity interest was mainly due to the increase in the market price of financial assets, which resulted in an increase in unrealized valuation gains of financial assets measured at fair value through other comprehensive income.

Future Response Actions

Based on the above analysis, the company's financial situation changed in the past two years was mainly due to the increase in revenue and profit in 2019, which is a benign change.

7.2. Finance Performance

Analysis of Finance Performance

Unit: NT$ thousand

Item \ Year	2018	2019	Difference	
			Amount	%
Operating Revenue	17,310,716	21,377,724	4,067,008	+23%
Operating Costs	11,895,545	13,216,850	1,321,305	+11%
Gross Profit from Operations	5,415,171	8,160,874	2,745,703	+51%
Operating Expenses	2,209,829	2,602,322	392,493	+18%
Net Operating Income	3,205,342	5,558,552	2,353,210	+73%
Non-operating Income and Expenses	529,281	(165,124)	(694,405)	-131%
Profit before Tax	3,734,623	5,393,428	1,658,805	+44%
Tax Expense	668,561	992,667	324,106	+48%
Profit	3,066,062	4,400,761	1,334,699	+44%
Other Comprehensive Income, Net	(365,577)	1,970,089	2,335,666	+639%
Comprehensive Income	2,700,485	6,370,850	3,670,365	+136%
Total Equity Attributable to Owners of Parent	3,124,454	4,474,399	1,349,945	+43%
Comprehensive Income Attributable to Owners of Parent	2,811,518	6,447,998	3,636,480	+129%

Effect of Change on the Company's Financial Condition

1. The increase in operating revenue, gross profit from operations, net operating income, profit before tax and profit was mainly due to the increase in smartphone demand and capacity utilization rate.
2. The decrease in non-operating income and expenses was mainly due to the increase in losses caused by disposing of unsuitable equipment and the increase in the exchange loss of foreign currency assets due to the appreciation of the New Taiwan Dollar against the US dollar.
3. The increase in tax expense was due to the increase in profit before income tax.
4. The increase in other comprehensive income was due to an increase in unrealized valuation gain on financial assets at fair value through other comprehensive income from increased market price of financial assets.

Effect of Change on the Company's Future Business and Future Response Plans

The Company is not required to disclose its financial forecast but has set up its internal target based on industrial environment and market demand. The Company will also keep investing in new technologies, quality improvement and cost-down to achieve the target of profitability.

7.3. Cash Flow

Cash Flow Analysis for the Current Year

Item \ Year	2018	2019	Variance (%)
Cash Flow Ratio (%)	143.13%	135.29%	-5.48%
Cash Flow Adequacy Ratio (%)	124.01%	120.42%	-2.89%
Cash Flow Reinvestment Ratio (%)	5.31%	11.29%	+112.54%

Analysis of financial ratio change: 1. The higher cash flow reinvestment ratio in 2019 was mainly due to the increase in cash inflow form operating activities.

Remedy for Cash Deficit and Liquidity Analysis

None

Cash Flow Analysis for the Coming Year

Unit: NT$ thousand

Estimated Cash and Cash Equivalents, Beginning of Year	Estimated Net Cash Flow from Operating Activities	Estimated Cash Outflow	Cash Balance	Leverage of Cash Surplus (Deficit)	
				Investment Plans	Financing Plans
5,926,473	8,136,767	(9,987,731)	4,075,509	—	—
• Analysis of change in cash flow in the coming year: (1) Operating Activities: The cash inflow will be generating from operating profit. (2) Cash outflow amount: Mainly due to the expected cash outflow from investment and financing activities, describe as below: Investment Activities: The cash outflow will be mainly due to the capital expenditure arising from capacity expansion. Financing Activities: The cash will be mainly use in cash dividends payment and proceeds from bank loans. • Remedy for Cash Deficit and Liquidity Analysis: None.					

7.4. The Effect on Finance and Sales of Major Capital Expenditure for the Most Recent Year

The 2019 capital expenditures was NT$5,305,864 thousand, which were primarily for capacity expansion in facilities, machine and equipment. The source of funds came from working capital and borrowings from financial institutions. The above-mentioned capital expenditures were to spend for capacity expansion in respond to the future revenue growth.

7.5. Investment Policy in Last Year, Main Causes for Profits or Losses, Improvement Plans and the Investment Plans for the Coming Year

Investment Policy

To secure our current market position and explore new competitive advantage to sustain the future growth momentum, the Company investment strategy is focusing on wireless communications, green energy, biotechnology and hog farming technology in addition to the existing field of compound semiconductors.

Main Causes for Profits or Losses and the Improvement Plans in Last Year

The Company's investment loss, totaling NT$199,856 thousand, mainly due to the slower than expected capacity expansion of subsidiary so the scale of operation was not expanded to what we were anticipated

The Investment Plans for the Coming Year

The Company will carefully evaluate investment plans as needed and implement them accordingly.

7.6. Risk Management

Effects of Changes in Interest Rates, Foreign Exchange Rates and Inflation on Corporate Finance, and Future Response Measures

Unit: NT$ thousand

Item	2019	2018
Interest income and expenses, net	16,666	36,608
Interest income and expenses, net / Total Revenue	0.08%	0.21%
Foreign exchange gain and loss, net	(74,602)	129,261
Foreign exchange gain and loss, net / Total Revenue	-0.35%	0.75%

A. Interest Rates

Our 2019 and 2018 interest income and expenses only accounted for 0.08% and 0.21% of our operating revenue for the year, respectively, so interest rate changes do not have a material effect. Furthermore, our financial position is stable, we have sound credit records, and will maintain close contact with banks to collect financial and economic information, in order to understand trends in interest rates and gain the best interest rates on loans.

B. Foreign Exchange Rates

The Company's export proportion was around 90.98% in 2019. The Company's products are mainly sold in US dollars, and raw materials and mechanical equipment are typically purchased in US dollars. The resulting offsets of recurrent purchases and sales generate a certain degree of natural hedging that can mitigate the influence that exchange rate fluctuation has on the Company's business results. The Company has dedicated personnel to stay abreast of exchange rate trends and international markets as a way of monitoring changes in the foreign exchange rate. Furthermore, we stays in close contact with financial institutions to facilitate the timely adoption of response measures, such as adjustment of foreign currency assets and liabilities or operation of foreign currency hedging instruments.

As show on above chart, foreign exchange gain/loss only accounted for about 0.35% and 0.75% of operating revenue in 2018 and 2019 respectively, the proportion were not large.

C. Inflation

The impact of inflation does not currently have a significant impact on the Company's profits and business operations.

Policies, Main Causes of Gain or Loss and Future Response Measures with Respect to High-risk, High-leveraged Investments, Lending or Endorsement Guarantees, and Derivatives Transactions

The Company has promulgated its "Procedures for Acquisition or Disposal of Assets", "Procedures for Lending Funds to Other Parties" and "Procedures for Endorsement & Guarantee", and asked its subsidiaries to promulgate the relevant procedures. The Company and its subsidiaries shall follow the relevant procedures to protect the Company's equity.

1. High risk, high leverage investments: All of our investments were carefully evaluated and made in accordance with the Procedures for the Acquisition or Disposal of Assets and level of authority. We do not engage in high risk, high leverage investments.
2. Lending to others: We did not lend funds to others in 2019 and up to the annual report publication date.
3. Providing endorsements or guarantees for others: The total amount of endorsements and guarantees provided by the Company may not reach 50% of the Company's net worth according to the most recent financial statements certified or reviewed by an accountant. The total amount of endorsements and guarantees for a single company may not reach 50% of the Company's net worth according to the most recent financial statements certified or reviewed by an accountant. The total amount of endorsements and guarantees provided by the Company and subsidiaries may not reach 50% of the Company's net worth according to the most recent financial statements certified or reviewed by an accountant. The total

amount of endorsements and guarantees for a single company may not exceed 50% of the Company's net worth according to the most recent financial statements certified or reviewed by an accountant. The amount of endorsements and guarantees provided by the Company and subsidiaries did not exceed the limit in 2019 and up to the annual report publication date.

4. Derivatives transactions: We mainly engage in derivatives transactions to hedge exchange rate risk resulting from our operations, and all transactions complied with regulations in 2019 and up to the annual report publication date.

Future Research & Development Projects and Corresponding Budget

1. New Products Planned for Development

(1) The 7th generation GaAs HBT epitaxial structure and process development
(2) The 2nd generation GaAs PINHEMT epitaxial structure and process development
(3) High voltage GaAs PINHEMT epitaxial structure and process development
(4) 70 nm GaAs pHEMT epitaxial structure and process development
(5) The 2nd generation 0.25μm GaN HEMT epitaxial structure and process development
(6) The 2nd generation 0.15μm GaN HEMT epitaxial structure and process development
(7) Backside emitting VCSEL with microlens process development
(8) Enhanced reliability on 10G and 25G DFB laser diode

2. Estimated Spending on Research & Development

The GaAs industry is characterized by frequent and rapid changes in technology. We aggressively invest in technology research and development, based on our current achievements, we aim to provide our customers with more competitive processing technologies and to further strengthen our leading position in the GaAs foundry industry. We expect optical devices and 5G communications to be our chief engines of growth during the next few years. In the case of optical devices, we will continue to team up with customers to jointly develop new 3D sensing technology for use in handheld devices. We are also developing technologies for data center, AR/VR, and LiDAR related applications, and are being qualified by some of our customers. As for 5G communications applications, our microwave communications technology roadmap spans both the sub-6GHz and millimeter waves. We began developing relevant processes as early as several years ago, and our products are currently being qualified by our customers. In 2019, the R&D expenditures was NT$1,107,918 thousand. We has consistently focused on developing new manufacturing technology and the R&D expenditures expect to increase to NT$1,171,917 thousand in 2020, which will be adjusted from time to time.

Effects of and Response to Changes in Policies and Regulations Relating to Corporate Finance and Sales

The Company consults lawyers and accountants regarding significant amendments to domestic and foreign policies and laws. When necessary, it commissions these experts to evaluate, advise, and plan response measures in order to meet legal compliance and lower the adverse influence of these changes on the Company’s financial operation. The changes in related laws had not had a significant impact on our operations.

Effects of and Response to Changes in Technology and in Industry Relating to Corporate Finance and Sales

Technological and industry changes have not impacted our finance position and business operations. We closely monitor industry conditions and relevant emerging technologies to provide immediate responses to any challenges arising from technology or industry-related changes. We will not only continuously increase R&D investments, but also make appropriate business adjustments, and maintain steady and flexible financial management to face the challenges of technological changes.

The Impact of Changes in Corporate Image on Corporate Risk Management, and the Company's Response Measures

Since the Company was established we have actively strengthened our internal business management, continued to improve production and quality management capabilities, and proposed plans for developing the capital market and along with the growth in the GaAs industry and the dramatic improvement to our market share and profitability, it has positively influencing the Company's image. There have been no negative changes to our corporate image, and there have been no reports in the market that negatively affect our corporate image.

Expected Benefits from, Risks Relating to and Response to Merger and Acquisition Plans

The Company has no ongoing merger and acquisition activities.

Expected Benefits from, Risks Relating to and Response to Facility Expansion Plans

Fab C in Guishan was planned with sufficient space to meet our current and future business and human resource requirements. The allocation of office space was carefully evaluated and analyzed to satisfy the requirements of our operations and employees' work. The effectiveness of space allocation has met our expectations. In the future, we will adopt the most suitable business strategies for capacity expansion or production adjustment based on customers' needs, market supply and demand, and source of funding.

Potential risks include supply exceeding demands in the market. In addition to increasing production lines in batches in response to market changes, we will actively solicit new customers, develop new process technologies, and improve yield rate and cost reduction, with the hope of maximizing the benefits of capacity expansion and building a long lasting competitive edge.

Risks Relating to and Response to Excessive Concentration of Purchasing Sources and Excessive Customer Concentration

A. Concentration of Purchasing Sources

Please refer to "suppliers accounted for at least 10% of annual net procurement", page 96. The Company is a pure-play GaAs MMIC foundry, providing optimized solutions for power amplifiers and related radio frequency components. The key materials, epitaxial wafers, were purchasing from several of domestic and foreign vendors. WIN has a broad portfolio of advanced technologies, and is able to engage in frequent technological exchange with its suppliers, indicating that the Company is capable of dispersing supplies. Therefore, the Company is not subject to risks of centralized procurements.

B. Customer Concentration

Please refer to "customers that accounted for at least 10% of annual net revenue", page 105. Our top three customers accounted for about 36% and 44% of our total revenues in 2019 and 2018. The high concentration of sales is attributed to the characteristics of the overall GaAs industry. Approximately 66.5% of the global GaAs devices market is controlled by three international IDM companies. In addition to maintaining existing customers, we also actively develop new processes and new customers to reduce sales concentration.

Effects of, Risks Relating to and Response to Large Share Transfers or Changes in Shareholdings by Directors or Shareholders with Shareholdings of over 10%

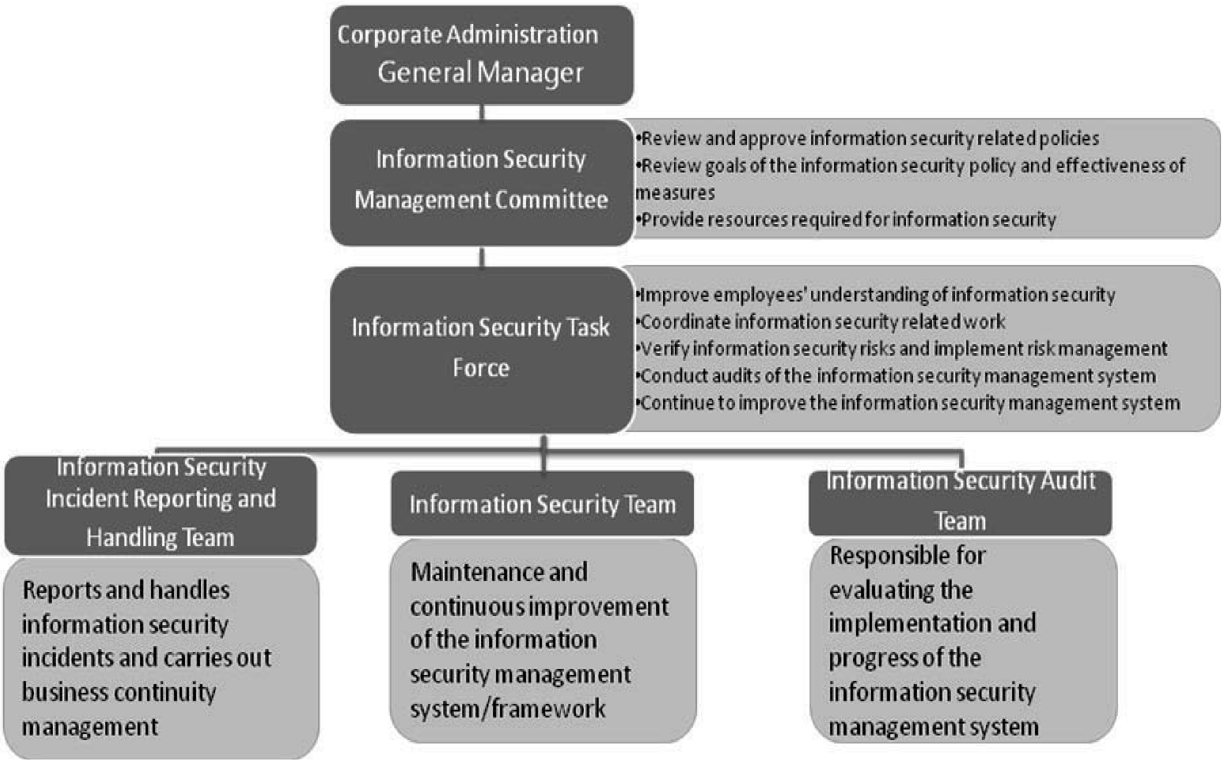
There have been no major transfers or swaps of shares by Directors or shareholders with shareholdings of over 10%.

Effects of, Risks Relating to and Response to Changes in Control over the Company
There is no change in control over the Company, and we continually strength our corporate governance and operation to achieve excellent performance in shareholders' equity.

Litigation or Non-litigation Matters
(1) Major ongoing lawsuits, non-lawsuits or administrative lawsuit: None.
(2) Major ongoing lawsuits, non-lawsuits or administrative lawsuits caused by directors or shareholders with over 10% shareholdings: None.

Other Important Risks and Mitigation Measures Being or to be Taken
We established the Information Security Management Committee in 2019 to protect the safety of information assets and ensure their confidentiality, completeness, and availability. The establishment of an information security policy ensures the Company's overall competitiveness and gains customers' trust.

Organizational Structure of the Information Security Management Committee



Information security policy
1. Avoid disclosing information to unauthorized personnel to maintain information confidentiality.
2. Prevent information from tampering by unauthorized personnel to maintain the integrity of information.
3. Allow lawful users to obtain information when they need it.
4. Comply with information security related laws and regulations.

Risk identification and management process
To properly protect information assets in the Company's information security management system, we established and implemented information asset-related regulations, and implemented information risk management and assessment procedures. The acceptable risk

level is determined based on risks assessment results, and is used as the basis for implementing control mechanisms. We continue to make improvements in order to be able to respond to any information security challenges, whether that originate internally or externally.

1. Establish information security risk management procedures

Planning (Establishment)	1. Establish a full view, including basic standards and scope 2. Risk assessment 3. Develop a risk response plan 4. Decide on criteria for accepting risk
Execution (Implementation and Operation)	5. Implement risk improvement plans
Inspection (Monitoring and Review)	6. Continue to monitor and review risks
Action (Maintenance and Improvement)	7. Maintenance and improvement

2. Timing for execution

The Information Security Task Force is required to regularly or irregularly assess the following risks:

- Internal and external issues that may cause the Company to not produce results expected by the information security management system, or fail to meet expectations of stakeholders; the risks that the Company needs to respond to should be examined.
- When a major change in information technology or the environment affects information risks, respond as soon as possible to ensure the information security system is able to respond to changes in the environment.
- In the information security system implementation and maintenance process, audit non-compliant matters and reevaluate the effectiveness of related control actions.

3. Assessment, analysis, and operations

(1) Calculation of risk value:

We take into consideration asset value, vulnerabilities, and external threats, and use a risk assessment model for information assets to quantify the level of risk, which serves as the basis for selecting control measures.

(2) Carry out risk assessments and improvements:

- Decide on the acceptable risk level
  We verify whether or not analysis results are reasonable based on information asset valuation, analysis of threats and vulnerabilities, and summary of risk levels. We then decide on the acceptable risk level and use it as the basis for selecting controls.
- Identify and select safety control measures
  If the calculated risk value is lower than the acceptable risk level, then current control mechanisms will continue to be used.
  If the calculated risk value is higher than the acceptable risk level, then high risk items will be listed and we formulate risk improvement plans; it is necessary to identify the risk owner and priority of each risk.
- Risk improvement plan
  Strengthen or add controls to reduce risks, controls are listed below:

Avoid risks	Reduce vulnerabilities
Risk transfer	Reduce the potential impact and effects
Reduce threats	Establish emergency response procedures and business continuity mechanisms

4. Residual risk management
After control procedures or mechanisms are added or strengthened, it is necessary to reassess risk values and repeatedly identify and reduce risks until the risk value reaches the acceptable level.

Response measures

1. Human resources safety: We established related operating procedures, signed documents, and implemented information security education, training, and promotion to improve employees' understanding of information security.
2. Information assets: We compiled a list of the Company's information assets, which is periodically maintained, classified information assets, and established corresponding procedures for management, in order to properly protect the Company's information assets.
3. Access control: We established related control processes and procedures for access control, and periodically verifies the access and usage of information assets, so as to avoid information assets from being misused for any reason.
4. Encryption: To protect the Company's highly confidential data from being accessed by unauthorized personnel, the data is encrypted and goes through strict controls. Standards are established for the certificate used for encryption to strengthen information security.
5. Physical and environmental security: The Company's physical areas are classified based on the level of confidentiality, and corresponding management procedures or control measures are established to protect the safety of information assets.
6. Operational safety: We established standard operating procedures for changes to the operating platform, prevention of computer viruses and malware, data backup, system monitoring, and system vulnerability management, in order to maintain the normal operation of information systems.
7. Communication security: We established communication security related management regulations for the management of the company network and related equipment, in order to maintain the security of information transmission.
8. System acquisition, development, and maintenance: To ensure information security items that need to be inspected in the application system analysis, design, development, testing, launch, and maintenance phases, or the purchase/outsourcing of systems, we established regulations for the management of system acquisition, development, and maintenance.
9. Supplier relations: We require compliance with Company regulations, a non-disclosure agreement to be signed, establish management requirements for supplier relations, and restrict and manage related access rights when outsourcing information system services.
10. Information security incidents: We established measures for reporting, handling, and preventing subsequent developments of information security incidents, and established complete handling processes and procedures for information security incidents.
11. Business continuity management: We assessed the risk of system interruption causing business suspension, and further developed response, backup, and recovery plans for main information and infrastructure of the information security management system. We also conduct periodic drills.
12. Compliance: WIN and its employees are required to comply with information security related laws, regulations, and contractual obligations, as well as the information security requirements of the Company. We periodically conduct information security audits to ensure the implementation of information security related control measures.

Implementation of internal audits

Audit units include information security in annual audits, and report audit results to the Audit Committee and Board of Directors.

7.7. Other Important Matters

None

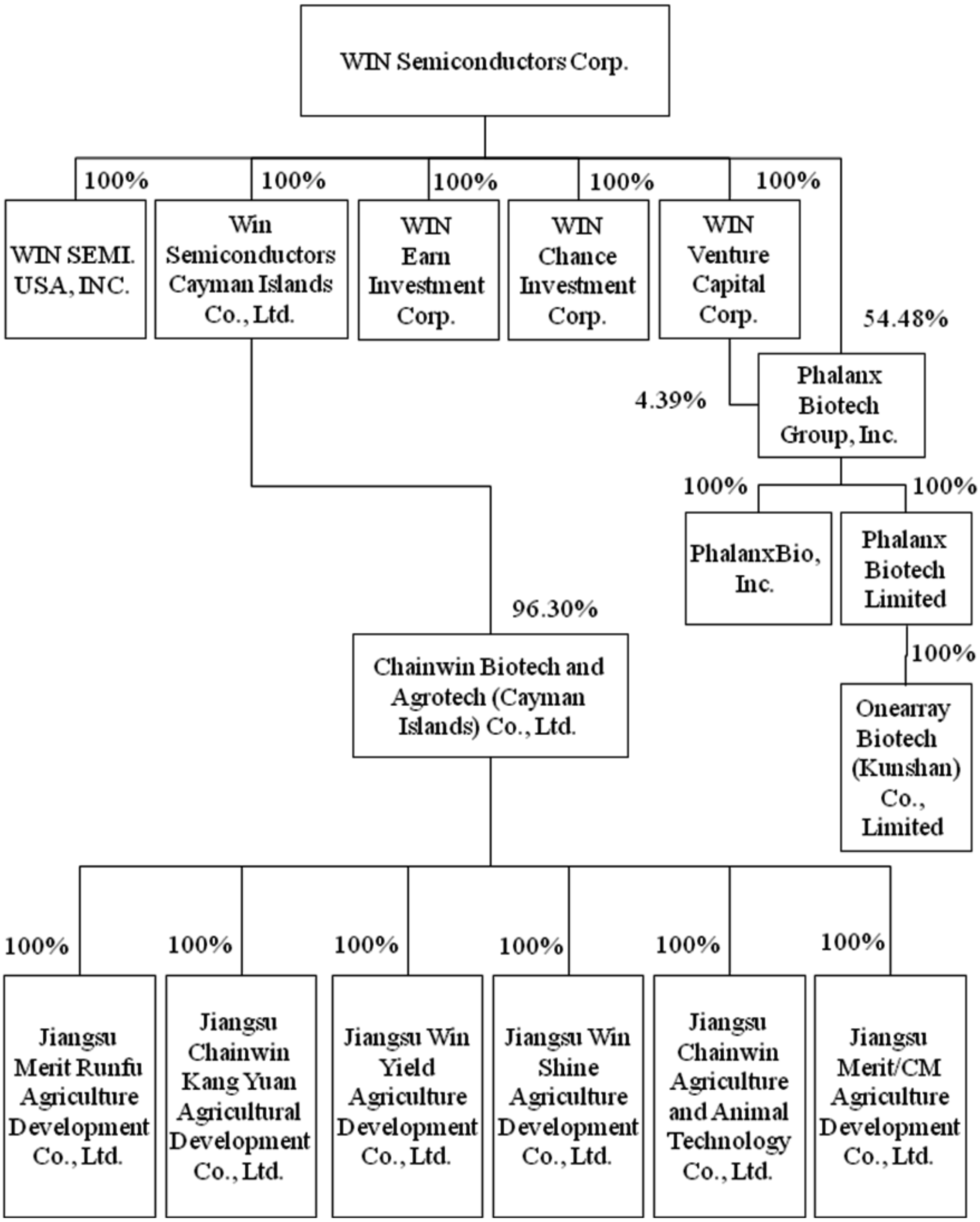
VIII. SPECIAL DISCLOSURE

8.1. Information Regarding Affiliates

Summary of Affiliates

A. Affiliates Overview

(1) Organization of Affiliates: Dec. 31, 2019



Note: Jiangsu Win Shine Agriculture Development Co., Ltd established on April 4th 2019, as of December 31st 2019, the capital injection had not been made yet.

(2) Basic Information on Affiliates

Name of Affiliate	Date of Incorporation	Place of Registration	Paid-in Capital	Main Business
WIN SEMI. USA, INC.	10/03/2000	California, USA	USD 312 thousand	Market research
Win Semiconductors Cayman Islands Co., Ltd.	09/14/2007	Cayman Islands	USD 167,000 thousand	Selling GaAs wafers
WIN Venture Capital Corp.	04/25/2014	Taiwan, R.O.C.	NTD 500,000 thousand	Investment activities
WIN Earn Investment Corp.	11/20/2019	Taiwan, R.O.C.	NTD 10,000 thousand	Investment activities
WIN Chance Investment Corp.	11/20/2019	Taiwan, R.O.C.	NTD 10,000 thousand	Investment activities
Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	01/07/2010	Cayman Islands	USD 88,325 thousand	Investment activities
Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	03/22/2012	Jiangsu, China	RMB 302,232 thousand	Developing hog farming technology and trading
Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	11/02/2016	Jiangsu, China	USD 21,790 thousand	Farm feed development and trading
Jiangsu Merit/CM Agriculture Development Co., Ltd.	01/14/2016	Jiangsu, China	USD 15,200 thousand	Developing hog farming technology and trading
Jiangsu Win Yield Agriculture Development Co., Ltd.	03/25/2019	Jiangsu, China	USD 5,000 thousand	Developing hog farming technology and trading
Jiangsu Win Shine Agriculture Development Co., Ltd.	04/04/2019	Jiangsu, China	USD 0 thousand	Developing hog farming technology and trading
Jiangsu Merit Runfu Agriculture Development Co., Ltd.	03/14/2012	Jiangsu, China	RMB 16,177 thousand	Developing hog farming technology and trading
Phalanx Biotech Group, Inc.	06/06/2002	Taiwan, R.O.C.	NTD 819,600 thousand	Researching, manufacturing and selling of high density gene chips and testing service
PhalanxBio, Inc.	04/27/2004	California, USA	USD 4,075 thousand	Selling of high density gene chips and testing service
Phalanx Biotech Limited	08/09/2011	Hong Kong	USD 300 thousand	Investment activities

Onearray Biotech (Kunshan) Co., Limited	03/05/2012	Jiangsu, China	RMB 1,898 thousand	Selling of high density gene chips and testing service

(3) Controlling and Subsidiary Shareholder Information: None.

(4) The industries covered by the business operated by the affiliates overall: The main operation of the Company and its subsidiaries are (a) researching, developing, manufacturing, and selling of GaAs wafers, (b) developing hog farming technology and trading, and (c) researching, manufacturing and selling of high density gene chips, biochip optical readers and micro-electrophoresis analyzers.

(5) Directors, Supervisors, Presidents of Affiliates

Unit: Shares in thousands; %

Company	Title	Name or Representative	Shareholding	
			Shares	%
WIN SEMI. USA, INC.	Director	Chin-Tsai Chen	0	0%
	CEO	Kyle Chen		
Win Semiconductors Cayman Islands Co., Ltd.	Director	Chin-Tsai Chen	0	0%
WIN Venture Capital Corp.	Director	Chin-Tsai Chen, Representative of WIN Semiconductors Corp.	50,000	100%
WIN Earn Investment Corp.	Director	Chin-Tsai Chen, Representative of WIN Semiconductors Corp	1,000	100%
WIN Chance Investment Corp.	Director	Chin-Tsai Chen, Representative of WIN Semiconductors Corp	1,000	100%
Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Director	Chin-Tsai Chen, Yun-Hsuan Wu, Chia-Hsin Huang, Hui-Jen Lo, Ching-Tsou Tsen (Joe Tsen)	0	0%
Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	Director	Chin-Tsai Chen, Yun-Hsuan Wu, Xin-Ciao Li	0	0%
	Supervisor	Ching-Tsou Tsen (Joe Tsen)	0	0%
	CEO	Yun-Hsuan Wu	0	0%
Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	Director	Chin-Tsai Chen, Yun-Hsuan Wu, Xin-Ciao Li	0	0%
	Supervisor	Ching-Tsou Tsen (Joe Tsen)		
	CEO	Yun-Hsuan Wu		
Jiangsu Merit/CM Agriculture Development Co., Ltd.	Director	Chin-Tsai Chen, Yun-Hsuan Wu, Xin-Ciao Li	0	0%
	Supervisor	Ching-Tsou Tsen (Joe Tsen)		
	CEO	Yun-Hsuan Wu		
Jiangsu Win Yield Agriculture Development Co., Ltd.	Director	Chin-Tsai Chen, Yun-Hsuan Wu, Xin-Ciao Li	0	0%
	Supervisor	Ching-Tsou Tsen (Joe Tsen)		
	CEO	Yun-Hsuan Wu		
Jiangsu Win Shine Agriculture Development Co., Ltd.	Director	Chin-Tsai Chen, Yun-Hsuan Wu, Xin-Ciao Li	0	0%
	Supervisor	Ching-Tsou Tsen (Joe Tsen)		
	CEO	Yun-Hsuan Wu		

Company	Title	Name or Representative	Shareholding	
			Shares	%
Jiangsu Merit Runfu Agriculture Development Co., Ltd.	Director	Chin-Tsai Chen, Yun-Hsuan Wu, Xin-Ciao Li	0	0%
	Supervisor	Ching-Tsou Tsen (Joe Tsen)		
	CEO	Yun-Hsuan Wu		
Phalanx Biotech Group, Inc.	Director	Gui-Hua Yang	1,037	1.27%
		Li-Chen Lin	0	0%
		Chih-Hsiang Lai	0	0%
		Kuo-Liang Yu	0	0%
		Industrial Technology Investment Corporation	2,239	2.37%
	Supervisor	Song-Chi Tsai, Representative of WIN Venture Capital Corp.	3,600	4.39%
		Zhi-Zhong Lu	30	0.04%
PhalanxBio, Inc.	CEO	Hong-Ru Su	0	0%
Phalanx Biotech Limited	Director	Chin-Nan Kao	0	0%
Onearray Biotech (Kunshan) Co., Limited	Executive Director	Xiang-Yu Zhuang	0	0%
	Supervisor	Wei-Dong Li	0	0%
	CEO	Xiang-Yu Zhuang	0	0%

B. Operation Status of Affiliates: Fiscal Year 2019

Unit: NT$ thousand

Name of Affiliate	Capital	Total Assets	Total Liabilities	Net Equity	Sales	Operating Income (Losses)	Net Profit (Loss)	EPS after Income Tax (NT dollars)
WIN SEMI. USA, INC.	8,203	12,939	12,533	406	85,308	(10,676)	(10,968)	(10.97) (Note 1)
Win Semiconductors Cayman Islands Co., Ltd.	5,135,146	5,238,238	21,945	5,216,293	1,321,057	(40,453)	(372,863)	(2.23) (Note 2)
WIN Venture Capital Corp.	500,000	456,871	210	456,661	25,973	17,086	17,086	(0.34) (Note 3)
WIN Earn Investment Corp.	10,000	10,000	34	9,966	0	(34)	(34)	(0.04) (Note 4)

Name of Affiliate	Capital	Total Assets	Total Liabilities	Net Equity	Sales	Operating Income (Losses)	Net Profit (Loss)	EPS after Income Tax (NT dollars)
WIN Chance Investment Corp.	10,000	10,000	34	9,966	0	(34)	(34)	(0.03) (Note 4)
Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	2,647,984	4,135,269	41,422	4,093,847	0	(82,941)	(371,223)	(4.20) (Note 5)
Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	1,363,751	1,876,563	643,402	1,233,161	428,403	(62,439)	(74,726)	Not applicable
Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	676,169	780,259	155,192	625,067	0	(8,225)	(1,207)	Not applicable
Jiangsu Merit Runfu Agriculture Development Co., Ltd.	72,313	55,194	0	55,194	0	(979)	472	Not applicable
Jiangsu Merit/CM Agriculture Development Co., Ltd.	466,944	514,688	71,242	443,446		(1,270)	3,901	Not applicable
Jiangsu Win Yield Agriculture Development Co., Ltd.	155,300	222,159	72,272	149,887	0	(18)	1,222	Not applicable
Jiangsu Win Shine Agriculture Development Co., Ltd.	Established on April 4th 2019, as of December 31st 2019, the capital injection had not been made yet.							
Phalanx Biotech Group, Inc.	819,600	406,571	34,372	372,199	48,677	(141,782)	(109,652)	(1.34) (Note 6)

Name of Affiliate	Capital	Total Assets	Total Liabilities	Net Equity	Sales	Operating Income (Losses)	Net Profit (Loss)	EPS after Income Tax (NT dollars)
PhalanxBio, Inc.	129,207	223	1,820	(1,597)	0	(345)	(345)	Not applicable
Phalanx Biotech Limited	8,784	7,852	0	7,852	0	0	31,702	Not applicable
Onearray Biotech (Kunshan) Co., Limited	8,784	15,492	7,640	7,852	7,930	(7,466)	31,702	Not applicable

Note 1: Imputed based on 1,000 thousand shares of WIN SEMI. USA, INC.
Note 2: Imputed based on 167,000 thousand shares of Win Semiconductors Cayman Islands Co., Ltd.
Note 3: Imputed based on 50,000 thousand shares of WIN Venture Capital Corp.
Note 4: Imputed based on 1,000 thousand shares of WIN Earn Investment Corp and 1,000 thousand shares of WIN Chance Investment Corp.
Note 5: Imputed based on 88,325 thousand shares of Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.
Note 6: Imputed based on 81,960 thousand shares of Phalanx Biotech Group, Inc.

Affiliates Consolidated Financial Statement

Please refer to page 155 of this annual report.

Relationship Report

None

8.2. Related-party Transactions

Name and Relationship with Related Parties

The followings are related parties that have had transactions with the company and its subsidiaries during year 2018 and 2019:

Name of related party	Relationship
Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. (Note 1)	Associates
Winresp INC. (Note 2)	Associates
Chainwin i Management (Shanghai) Co., Ltd. Huaian Branch.	Other related parties
Chainwin i Management (Huaian) Co., Ltd.	Other related parties
Chainwin i Management Co., Ltd.	Other related parties
Ningbo Winresp New Materials Co., Ltd. (Note 2)	Other related parties
Taoyuan i Fare Charity Foundation	Other related parties
ITEQ Corporation (Note 3)	Other related parties

Note1: The shareholders' meeting of Jiangsu CM/ Merit Agriculture Development Co., Ltd. had approved and decided to rename to Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. on June 20, 2019.
Note2: The Company has lost the control over Winresp INC. since December, 2019. Therefore, it was not related-party of the Group.
Note3: In July 2019, the Company's chairman of Board of Directors has been elected as the ITEQ Corporation's chairman of Board of Directors, and therefore ITEQ Corporation has become the Group's other related parties since July 2019

Significant Transactions with Related Parties

A. Loans to Related Parties

For the year ended December 31, 2018, Chainwin Cayman provided an unsecured loan to its associates, Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. Interest revenue arising from aforementioned transaction was amounting to US$30 thousand (NT$892 thousand). The aforementioned interest had been received. There was no such transaction for the year ended December 31, 2019.

B. Purchases

The amounts of significant purchases by the Company and its subsidiaries from related parties were as follows:

(NT$ thousand)

	2019	2018
Other related parties	$ 3,637	786

The terms and pricing of purchase transactions with related parties were not significantly different from those offered by other vendors.

C. Operating expenses

The amounts of operating expenses by the Group from related parties were as follows:

(NT$ thousand)

	2019	2018
Other related parties	$ 1000	-

D. Guarantee

For the years ended December 31, 2019, and 2018, Chainwin Cayman had provided a guarantee for loans amounting to US$7,350 thousand (NT$220,353 thousand and NT$225,792 thousand, respectively) to its associate, Jiangsu CM/ Chainwin Agriculture Development Co., Ltd.

E. Property Transactions

i) The prepayment, arising from that Chainwin Cayman purchased intelligent farming management system from its other related parties, Chainwin i-Management Co., Ltd., was amounting to US$526 thousand (NT$15,777 thousand) for the year ended December 31, 2019. There was no such transaction for the year ended December 31, 2018.

ii) Chainwin Cayman purchased property, plant and equipment from its other related parties, Ningbo Winresp New Materials Co., Ltd., for the year ended December 31, 2019, amounting to RMB 3,444 thousand (NT$15,552 thousand). There was no such transaction for the year ended December 31, 2018.

iii) Chainwin Cayman purchased other equipment from its other related parties, Chainwin i-Management (Huaian) Co., Ltd., for the year ended December 31, 2019, amounting to RMB 29 thousand (NT$132 thousand). There was no such transaction for the year ended December 31, 2018.

iv) The prepayment due to property transactions were as follows:

Account	Category	December 31, 2019	December 31, 2018
Prepayments for business facilities	Associates	$ -	21,617
Other non-current assets	Other related parties	$ 15,777	-

F. Leases

The Group leased the office and factories to its other related party, ITEQ Corporation, and the rent income received monthly is based on the nearby office and factories rental rates. The amount of rent income is $14,423 thousand for the year ended December 31, 2019. The preceding rent payment has been received.

Transactions with Key Management Personnel

Key management personnel compensation were comprised as below: (NT$ thousand)

	2019	2018
Short-term employee benefits	$ 492,963	396,899
Post-employment benefits	821	802
	$ 493,784	**397,701**

8.3. Private Placement Securities in the Most Recent Year

Item	2017 1st Private Placement Date of issuance: January 17, 2018
Securities under private placement	Common shares
Date of resolution and approved quantity	June 16, 2017, not exceeding 40,000,000 shares
Basis and rationality of price setting	1. In accordance with "Directions for Public Companies Conducting Private Placements of Securities", the higher of the following two calculations shall be the reference price: (a) the simple average closing price of the common shares of the Company for either the 1, 3, or 5 business days, or (b) for the 30 business days before the price determination date, after adjustment for any distribution of stock dividends, cash dividends, or capital reduction. 2. The actual issuance price shall no lower than the reference price. 3. The pricing date is the Board meeting date on December 8, 2017. The simple average closing price of the common shares of the Company for the 1, 3, or 5 business days before the price determination date, after adjustment for any distribution of stock dividends, cash dividends, or capital reduction is NT$267.50, NT$268.17 and NT$283.60, respectively, the closing price for 1 business day, NT$267.50, has been chosen. In addition, the simple average closing price of the common shares of the Company for 30 business days before the price determination date, after adjustment for any distribution of stock dividends, cash dividends, or capital reduction is NT$276.92. The higher of the two prices, that is, NT$276.92 is the reference price. The actual issuance price, NT$277, is not lower than the reference price and meets the 2017 AGM resolutions.
Method of selection of specified parties	The strategic investors have the priority to be considered as Specific Persons for private placement if (i) being qualified for the rules in Article 43-6, Security and Exchange Act and relevant regulations, (ii) can meet the Company's business needs in terms of developing new market, expanding operation scale and generating direct or indirect benefits for future operations. The major targets will be the Company's customers and shall not be insiders or related parties of the Company. It is proposed to authorize the Company's Board to determine the Specific Persons for private placement.

<table>
<tr><td>The reasons for private placement</td><td colspan="5">Considering the effectiveness, feasibility and costs to raise capital, the Company proposes to raise funds by way of issuance of common shares through private placement. Also, it is proposed to authorize the Company's Board to implement the private placement based on the capital market status and Company's actual needs, which can increase the flexibility and effectiveness. Fundraising through private placement with the imposed trading limitation period of 3 years can ensure more long-term cooperation between the Company and the strategic investors.</td></tr>
<tr><td>Date of payment and completion</td><td colspan="5">The aggregate subscription price NT$5,540,000,000 was fully received on December 22, 2017.</td></tr>
<tr><td rowspan="2">Information of contributing parties</td><td>Target</td><td>Eligibility</td><td>Quantity purchased</td><td>Relationship with the company</td><td>Participation in company operations</td></tr>
<tr><td>Avago Technologies General IP (Singapore) Pte. Ltd.</td><td>Subparagraph 2, Paragraph 1, Article 43-6 of Security and Exchange Act</td><td>20,000,000 shares</td><td>Non related-party of the Company</td><td>No</td></tr>
<tr><td>Actual purchase price</td><td colspan="5">NT$277</td></tr>
<tr><td>Difference between the actual purchase price and the reference price</td><td colspan="5">The actual issuance price, NT$277, is not lower than the reference price and meets the 2017 AGM resolutions.</td></tr>
<tr><td>Impact of private placement on shareholder's equity</td><td colspan="5">Shares of private placement to total ordinary shares is 4.72% as of December 31, 2017.</td></tr>
<tr><td rowspan="5">Use of funds from private placement and the progress of proposed plans</td><td colspan="5">The Board of Directors has resolved to issue 20,000,000 shares on December 8, 2017, the fundraising amount has been fully paid on December 22, 2017. Therefore, the Board has resolved to terminate the remaining 20,000,000 shares for private placement during the remaining period on December 29, 2017. The execution report was as follows:</td></tr>
<tr><td>Project name</td><td>Projected amount</td><td colspan="2">Actual amount</td><td>Achievement</td></tr>
<tr><td>Capital expenditure</td><td>NT$1,277,163,603</td><td colspan="2">NT$1,277,163,603</td><td>100%</td></tr>
<tr><td>Research & development expenses and working capital</td><td>NT$4,262,836,397</td><td colspan="2">NT$4,262,836,397</td><td>100%</td></tr>
<tr><td>Total</td><td>NT$5,540,000,000</td><td colspan="2">NT$5,540,000,000</td><td>100%</td></tr>
<tr><td>Effectiveness of private placement</td><td colspan="5">The capital usage plan and projected benefits of private placement: Proceeds raised will be used as capital expenditure, research & development expenses and working capital. The private placement will reinforce the financial structure and contribute to the stability of the Company's growth, which can benefit shareholders' equity.</td></tr>
</table>

8.4. The Shares in the Company Held or Disposed of by Subsidiaries in the Most Recent Year

None

8.5. Other Required Supplementary

A. Procedures for the Prevention of Insider Trading

WIN Semiconductors Corp.

Procedures for the Prevention of Insider Trading

Article 1 (Purpose of the Procedures)

The Procedures are established to prevent likely violations by insiders of the Company of relevant requirements with respect to insider trading by negligence as he or she is not familiar with related regulations which may result in legal actions against the Company or such insider and damage the Company's reputation.

Article 2 (Scope of application)

The Procedures shall apply to all directors, supervisors, managerial officers, and any shareholder holding more than ten (10) percent of the shares of the Company.

The Company shall ensure that any other person who acquires knowledge of the Company's material inside information due to their position, profession, or relationship of control shall comply with the applicable provisions of the Procedures.

Article 3 (Scope of material inside information that will have a material impact on price of the securities)

Information that will have a material impact on the price of the securities shall mean information relating to finances or business of the Company, or supply and demand of securities of the Company on the market, or tender offer of such securities, the specific content of which will have a material impact on the price of the securities, or will have a material impact on the investment decision of a reasonable prudent investor. The scope of the information shall be prescribed by the competent authority.

Article 4 (Responsible unit in charge of the handling of material inside information)

The Company establishes a unit charged with handling material inside information. The responsible unit is composed of spokesperson, deputy spokesperson, head of legal, head of finance and head of accounting, and adequate personnel in accordance with the business conditions, and operation needs of the Company. The unit shall have the following functions and authorities:

1. Responsibility for formulating drafts of the Procedures and any amendments to them, and designing a system for preserving all documents, files, electronic records, and other materials related to the Procedures.
2. Responsibility for receiving inquiries in connection with the methods of handling material inside information, and for consultation, review, and recommendations relating to the Procedures.
3. Responsibility for receiving reports on unauthorized disclosures of material inside information and formulation of corresponding measures.
4. Other activities related to the Procedures.

Article 5 (Measures for preventing trading before the public disclosure of material inside information that will have a material impact on price of securities)

Upon knowing of any information that will have material impact on the price of the securities of the Company, prior to the public disclosure of such information or within twelve (12) hours after its public disclosure, the persons listed in Article 2 of the Procedures shall not purchase or sell securities of the Company that are listed on an exchange or an over-the-counter market, or any other equity-type security of the Company.

Article 6 (Confidentiality operations before the public disclosure of material inside information that will have a material impact on price of securities)

1. The Company's insiders shall exercise the due care and fiduciary duty of a good administrator and act in good faith when performing their duties, and shall sign confidentiality agreements.
   No insider with knowledge of material inside information of the Company may divulge the information to others.
   No insider of the Company may inquire about or collect any non-public material inside information of the Company not related to their respective duties from a person with knowledge of such information, nor may they disclose to others any non-public material inside information of the Company of which they become aware for reasons other than performance of their duties.
2. Proper protection of confidentiality shall be given to files and documents containing the Company's material inside information when transmitted in written form. When transmitted by e-mail or other electronic means, such files and documents must be processed with appropriate security technology such as encryption or electronic signatures.
   Files and documents containing the Company's material inside information shall be backed up and stored in a safe location.

3. Any organization or person outside of the Company that is involved in any corporate action of the Company relating to a merger or acquisition, major memorandum of understanding, strategic alliance, other business partnership plans, or signing of a major contract shall be required to sign a nondisclosure agreement, and may not disclose to another party any material inside information of the Company's thus acquired.

Article 7 (Principles of disclosure of material inside information)

The Company shall comply with the following principles when making public disclosures of material inside information:

1. The information disclosed shall be accurate, complete, and timely.
2. There shall be a well-founded basis for the information disclosure.
3. The information shall be disclosed fairly.

Article 8 (Content, time, method and personnel of the public disclosure of information that will have a material impact on the price of securities)

Any disclosure of the Company's material inside information, except as otherwise provided by law or regulation, shall be made by the Company's spokesperson, or by a deputy spokesperson acting in such capacity in a confirmed sequential order. When necessary, the disclosure may be made directly by a responsible person of the Company. The Company's spokesperson or deputy spokesperson shall communicate to outside parties only information within the scope authorized by the Company, and no personnel of the Company other than those serving as the Company's responsible person, spokesperson, or deputy spokesperson may disclose any material inside information of the Company to outside parties without authorization.

Article 9 (Record of disclosure of material inside information)

The Company shall keep records of the following in respect of any disclosure of information to outside parties:

1. The person who discloses the information, the date and the time.
2. How the information is disclosed.
3. What information is disclosed.
4. What written material is delivered.
5. Any other relevant details.

Article 10 (Response to false media coverage)

If a media agency releases information that is in any respect inconsistent with material information disclosed by the Company, the Company shall promptly issue a clarification on the Market Observation Post System (MOPS) and request the media agency to correct the information.

Article 11 (Reporting of unusual events)

Any director, supervisor, managerial officer, or employee of the Company that becomes aware of any unauthorized disclosure of the Company's material inside information shall report to the responsible unit and the internal audit department of the Company as soon as practicable.

Upon receipt of a report made pursuant to the preceding paragraph, the responsible unit shall formulate corresponding measures. When necessary, it may invite members from the internal audit and other departments to meet for discussion of the measures, and shall keep a record of the results of the measures for future reference. The internal auditors shall also perform such audits as their duties may require.

Article 12 (Disciplinary measures)

The Company shall take measures to discover those responsible and take appropriate legal action against any personnel under either of the following circumstances:

1. Personnel of the Company disclose material inside information without authorization to any outside party, or otherwise violate the Procedures or any other applicable law or regulation.
2. A spokesperson or deputy spokesperson of the Company communicates to any outside party any information beyond the scope authorized by the Company, or otherwise violates the Procedures or any other applicable law or regulation.
3. If any person outside the Company divulges any material inside information of the Company, thereby causing damage to any property or interest of the Company, the Company shall pursue appropriate measures to hold the person divulging the information legally liable.

Article 13 (Awareness programs)

The Company shall conduct educational campaigns to promote awareness among all persons with respect to the Procedures and related laws and regulations.

Article 14 (Effective date and amendment)

The Procedures, and any amendments to them, shall be implemented upon approval by the Board of Directors.

B. Guidelines for the Code of Ethical Conduct

WIN Semiconductors Corp.
Guidelines for the Code of Ethical Conduct

Article 1 (Purpose of and basis for adoption)

These Guidelines are adopted for the purpose of encouraging directors, supervisors, and managerial officers of the Company (including general managers or their equivalents, vice general managers or their equivalents, associate general managers or their equivalents, chief financial and chief accounting officers, and other persons authorized to manage affairs and sign documents on behalf of the Company) to act in line with ethical standards, and to help interested parties better understand the ethical standards of the Company.

Article 2 (Content of the code)

1. Prevention of conflicts of interest:

Conflicts of interest occur when personal interest intervenes or is likely to intervene in the overall interest of the Company, as for example when a director, supervisor, or managerial officer of the Company is unable to perform their duties in an objective and efficient manner, or when a person in such a position takes advantage of their position in the Company to obtain improper benefits for either themselves or their spouse, parents, children, or relatives within the third degree of kinship. The Company shall pay special attention to loans of funds, provisions of guarantees, and major asset transactions or the purchase (or sale) of goods involving the affiliated enterprise at which a director, supervisor, or managerial officer works. The Company shall establish a policy aimed at preventing conflicts of interest, and shall offer appropriate means for directors, supervisors, and managerial officers to voluntarily explain whether there is any potential conflict between them and the Company.

2. Minimizing incentives to pursue personal gain:

The Company shall prevent its directors, supervisors, or managerial officers from engaging in any of the following activities: (1) Seeking an opportunity to pursue personal gain by using company property or information or taking advantage of their positions. (2) Obtaining personal gain by using company property or information or taking advantage of their positions. (3) Competing with the Company. When the Company has an opportunity for profit, it is the responsibility of the directors, supervisors, and managerial officers to maximize the reasonable and proper benefits that can be obtained by the Company.

3. Confidentiality:

The directors, supervisors, and managerial officers of the Company shall be bound by the obligation to maintain the confidentiality of any information regarding the Company itself or its suppliers and customers, except when authorized or required by law to disclose such information. Confidential information includes any undisclosed information that, if exploited by a competitor or disclosed, could result in damage to the Company or the suppliers and customers.

4. Fair trade:

Directors, supervisors, and managerial officers shall treat all suppliers and customers, competitors, and employees fairly, and may not obtain improper benefits through manipulation, nondisclosure, or misuse of the information learned by virtue of their positions, or through misrepresentation of important matters, or through other unfair trading practices.

5. Safeguarding and proper use of company assets:

All directors, supervisors, and managerial officers have the responsibility to safeguard company assets and to ensure that they can be effectively and lawfully used for official business purposes; any theft, negligence in care, or waste of the assets will all directly impact the Company's profitability.

6. Legal compliance:

The Company shall strengthen its compliance with the Securities and Exchange Act and other applicable laws, regulations and bylaws.

7. Encouraging reporting on illegal or unethical activities:

The Company shall raise awareness of ethics internally and encourage employees to report to a company supervisor, managerial officer, chief internal auditor, or other appropriate individual upon suspicion or discovery of any activity in violation of a law or regulation or the code of ethical conduct. To encourage employees to report illegal conduct, it is advisable that the Company adopts relevant procedures or mechanisms for such reporting and makes employees aware that the Company will use its best efforts to ensure the safety of informants and protect them from reprisals.

8. Disciplinary measures:

When a director, supervisor, or managerial officer violates the code of ethical conduct, the Company shall, depending on the level of violation, handle the matter in accordance with the resolution of the Board of the Directors without the violator, and shall without delay disclose on the Market Observation Post System (MOPS) the name and title of the violator, the date of the violation, reasons for the violation, the provisions of the code violated, and the disciplinary actions taken. The violator may file a complaint for review of the disciplinary action through normal complaint system.

Article 3 (Procedures for exemption)

The code of ethical conduct adopted by the Company must require that any exemption for directors, supervisors, or managerial officers from compliance with the code be adopted by a resolution of the Board of Directors, and that information on the name and title of the person entitled to such exemption, the date on which the board of directors adopted the resolution for exemption, and the period of, reasons for, and principles behind the application of the exemption be disclosed without delay on the MOPS, in order that the shareholders may evaluate the appropriateness of the board resolution to forestall any arbitrary or dubious exemption from the code, and to safeguard the interests of the company by ensuring appropriate mechanisms for controlling any circumstance under which such an exemption occurs.

Article 4 (Method of disclosure)

The Company shall disclose the code of ethical conduct it has adopted, and any amendments to it, in its annual reports and prospectuses and on the MOPS.

Article 5 (Enforcement)

This code of ethical conduct, and any amendments thereto, shall enter into force after it has been adopted by the board of directors, delivered to each supervisor, and submitted to a shareholders' meeting.

C. Commitment to the Taipei Exchange, R.O.C.

IPO Date: 12/13/2011

IPO Commitment	Status
WIN commit to add the Article "The Company shall not waive subsequent right(s) of subscribing stock in WIN SEMI. USA, INC. and Win Semiconductors Cayman Islands Co., Ltd. newly issued for the purpose of capital increase. In case any strategic alliance or other waiving of such right that is approved the ROC Taipei Exchange, special resolution of the Board of Directors shall be obtained for waiving the right" in its "Procedures for Acquisition or Disposal of Assets." If any amendments to the Procedures, it shall be announced on the Market Observation Post System (MOPS) and reported to the Taipei Exchange, R.O.C.	The Article has been added in "Procedures for Acquisition or Disposal of Assets" which has been approved by the Board of Directors on Oct. 27, 2011 and Shareholders' Meeting on June 5, 2012.

IX. If Any of the Situations Listed in Article 36, Paragraph 3, Subparagraph 2 of the Securities and Exchange Act, Which Might Materially Affect Shareholders' Equity or the Price of the Company's Securities, Has Occurred during the Most Recent Fiscal Year or during the Current Fiscal Year up to the Date of Printing of the Annual Report

None

APPENDIX I:

WIN SEMICONDUCTORS CORP. AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

With Independent Auditors' Report

For the Years Ended December 31, 2019 and 2018

Representation Letter

The entities that are required to be included in the combined financial statements of WIN Semiconductors Corp. as of and for the year ended December 31, 2019, 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 International Financial Reporting Standards No. 10 endorsed by the Financial Supervisory Commission, "Consolidated Financial Statements." In addition, the information required to be disclosed in the combined financial statements is included in the consolidated financial statements. Consequently, WIN Semiconductors Corp. and its subsidiaries do not prepare a separate set of combined financial statements.

Company name: WIN Semiconductors Corp.
Chairman: CHEN, CHIN-TSAI
Date: March 18, 2020

Independent Auditors' Report

To the Board of Directors of WIN Semiconductors Corp.:

Opinion

We have audited the consolidated financial statements of WIN Semiconductors Corp. and its subsidiaries ("the Group"), which comprise the consolidated balance sheets as of December 31, 2019 and 2018, the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and 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 Group as of December 31, 2019 and 2018, 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 with the International Financial Reporting Standards ("IFRSs"), International Accounting Standards ("IASs"), interpretations as well as related guidance endorsed by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

In 2019, we conducted our audit in accordance with the Regulations Governing Auditing, the Ruling No. 1090360805 issued by the FSC and Certification of Financial Statements by Certified Public Accountants and the auditing standards generally accepted in the Republic of China. In 2018, we conducted our audits in accordance with the Regulations Governing Auditing and Certification of Financial Statements by Certified Public Accountants and the 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 Group in accordance with the Certified Public Accountants Code of Professional Ethics in Republic of China ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis of 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, 2019. 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. In our judgment, the key audit matters we communicated in the auditors' report were as follows:

1. Evaluation of inventory

   Please refer to Note 4(h) "Inventories" for accounting policies, Note 5(a) for accounting assumptions, judgments and estimation uncertainty of inventories, and Note 6(e) for the amount of loss on valuation of inventories of the consolidated financial statements.

Due to the high industry demand and rapid fluctuation of the price of precious metals, the Group stored a significant volume of the said material, which resulted in slow turnover of inventories. Therefore, the Group cannot obtain sufficient information on inventories that were sold or used on the reporting date. Since the technology changes rapidly, the inventory may be out of date or may not conform to market demand, resulting in a risk wherein the carrying amount of inventories may exceed its net realizable value. Consequently, the evaluation of inventory is identified as a key matter in our audit.

How the matter was addressed in our audit:

Our principal audit procedures included: Testing the accuracy of the estimations of inventories at the lower of cost and net realizable value. Referring to the recent selling price and considering the amount of written-off inventories in the subsequent events to evaluate the appropriateness of the amount of loss on valuation of inventories or obsolescence. Analyzing the historical accuracy of judgments, including inspecting the amount of loss on valuation of inventories or obsolescence recognized in prior year and with reference to actual disposal to assess rationality of the judgments of the current period. Moreover, comparing with the provision for inventories valuation and obsolescence made in the current year to evaluate the appropriateness of the assumptions.

2. Assessment of goodwill impairment

Please refer to Note 4(o) “Impairment of non-financial assets” for accounting policies, Note 5(b) for accounting assumptions, judgments and estimation uncertainty of assessment of goodwill impairment, and Note 6(m) for the intangible assets.

The Group periodically assess and perform their impairment test of goodwill based on the recoverable amount that is calculated by using the value-in-use method. The value-in-use method takes into account by predicting the future cash flow, and is decided by applying the discount rate. Since the assessment of goodwill impairment relies on the subjective judgment and estimation made by the management, it has been identified as a key audit matter.

How the matter was addressed in our audit:

Our principal audit procedures included: Assessing the rationality of method used in measuring the recoverable amount, which is provided by the management of the Group, including evaluating the appropriateness of assumption and estimation on major parameters, such as the forecast of cash flow and discount rate. Comparing with the historical accuracy of judgments, including inspecting the amount of forecast of cash flow in prior year and with reference to actual cash flow to evaluate the appropriateness of the assumptions. Performing the sensitivity analysis on main assumption.

Other Matter

WIN Semiconductors Corp. has prepared its parent-company-only financial statements as of and for the years ended December 31, 2019 and 2018, 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 with the IFRSs, IASs, IFRIC as well as 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 also responsible for assessing the Group'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 Group 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 Group's financial reporting process.

Auditor's 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 Group'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 Group'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 Group 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 and appropriate audit evidence regarding the financial information of the entities or business activities within the Group 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, 2019 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 Chia-Chien Tang and Ya-Ling Chen.

KPMG

Taipei, Taiwan (The Republic of China)
March 18, 2020

Notes to Readers

The accompanying consolidated financial statements are intended only to present the consolidated statement of financial position, financial performance and cash flows in accordance with the 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 accepted and applied in the Republic of China.

The independent auditors' audit report and the accompanying consolidated financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language independent auditors' report and consolidated financial statements, the Chinese version shall prevail.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

WIN Semiconductors Corp. and Subsidiaries

Consolidated Balance Sheets

December 31, 2019 and 2018

(Expressed in Thousands of New Taiwan Dollars)

	Assets	December 31, 2019 Amount	%	December 31, 2018 Amount	%
	Current assets:				
1100	Cash and cash equivalents (Note 6(a))	$ 5,926,473	14	5,462,173	16
1110	Current financial assets at fair value through profit or loss (Note 6(b))	506,849	1	103,263	-
1170	Notes and accounts receivable, net (Notes 6(c) and 6(x))	2,406,673	6	1,422,365	4
1310	Inventories (Note 6(e))	4,389,156	10	3,907,390	11
1400	Current biological assets (Note 6(f))	21,923	-	103,289	-
1470	Other current assets (Notes 3(a), 6(d) and 6(n))	399,076	1	336,049	1
	Total current assets	13,650,150	32	11,334,529	32
	Non-current assets:				
1510	Non-current financial assets at fair value through profit or loss (Note 6(b))	565,804	1	722,405	2
1517	Non-current financial assets at fair value through other comprehensive income (Note 6(b))	4,556,205	11	2,356,132	7
1535	Non-current financial assets at amortized cost (Note 6(b))	-	-	29,900	-
1550	Investments accounted for using equity method (Note 6(g))	532,591	1	532,808	2
1600	Property, plant and equipment (Notes 6(i), 6(j), 6(k), 7 and 8)	17,866,310	43	15,568,252	44
1755	Right-of-use assets (Notes 3(a) and 6(k))	442,348	1	-	-
1760	Investment property (Notes 6(l) and 8)	1,401,155	3	1,421,528	4
1780	Intangible assets (Notes 3(a), 6(i) and 6(m))	577,454	2	586,953	2
1830	Non-current biological assets (Note 6(f))	10,066	-	31,059	-
1840	Deferred tax assets (Note 6(t))	235,826	1	135,802	-
1915	Prepayments for business facilities (Note 7)	2,137,914	5	2,643,202	7
1990	Other non-current assets (Notes 3(a), 6(n), 7 and 8)	150,279	-	97,033	-
	Total non-current assets	28,475,952	68	24,125,074	68
	Total assets	$ 42,126,102	100	35,459,603	100

	Liabilities and Equity	December 31, 2019 Amount	%	December 31, 2018 Amount	%
	Current liabilities:				
2170	Notes and accounts payable	$ 1,826,214	4	1,093,074	3
2200	Other payables	3,657,585	9	2,469,630	7
2280	Current lease liabilities (Notes 3(a), 6(q) and 6(ad))	68,740	-	-	-
2399	Other current liabilities (Notes 6(x) and 6(ad))	423,161	1	265,679	1
	Total current liabilities	5,975,700	14	3,828,383	11
	Non-current liabilities:				
2540	Long-term borrowings (Notes 6(p), 6(ad) and 8)	5,788,125	14	5,802,600	16
2580	Non-current lease liabilities (Notes 3(a), 6(q) and 6(ad))	300,587	1	-	-
2600	Other non-current liabilities (Notes 6(s) and 6(ad))	222,158	-	224,235	1
	Total non-current liabilities	6,310,870	15	6,026,835	17
	Total liabilities	12,286,570	29	9,855,218	28
	Equity (Notes 6(b), 6(h), 6(s), 6(u) and 6(v)):				
3110	Ordinary shares	4,240,564	10	4,238,144	12
3200	Capital surplus	9,244,308	22	9,199,357	26
3300	Retained earnings	13,399,189	32	11,178,324	31
3400	Other equity interests	2,773,407	7	763,882	2
	Total equity attributable to owners of parent	29,657,468	71	25,379,707	71
36XX	Non-controlling interests	182,064	-	224,678	1
	Total equity	29,839,532	71	25,604,385	72
	Total liabilities and equity	$ 42,126,102	100	35,459,603	100

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

WIN Semiconductors Corp. and Subsidiaries

Consolidated Statements of Comprehensive Income

For the years ended December 31, 2019 and 2018

(Expressed in Thousands of New Taiwan Dollars, Except for Earnings Per Common Share)

		2019		2018	
		Amount	**%**	**Amount**	**%**
4000	**Operating revenue (Notes 6(g) and 6(x))**	$ 21,377,724	100	17,310,716	100
5000	**Operating costs (Notes 6(e), 6(f), 6(g), 6(j), 6(k), 6(m), 6(q), 6(r), 6(s), 6(v), 6(y), 7 and 12)**	(13,216,850)	(62)	(11,895,545)	(69)
	Gross profit from operating	8,160,874	38	5,415,171	31
	Operating expenses (Notes 6(c), 6(j), 6(k), 6(l), 6(m), 6(q), 6(r), 6(s), 6(v), 6(y), 7 and 12):				
6100	Selling expenses	(339,221)	(2)	(238,957)	(1)
6200	Administrative expenses	(1,153,012)	(5)	(997,791)	(6)
6300	Research and development expenses	(1,107,918)	(5)	(973,921)	(5)
6450	Losses on expected credit impairment (reversal of expected credit impairment)	(2,171)	-	840	-
	Total operating expenses	(2,602,322)	(12)	(2,209,829)	(12)
	Net operating income	5,558,552	26	3,205,342	19
	Non-operating income and expenses (Notes 4(c), 6(b), 6(g), 6(i), 6(j), 6(q), 6(r), 6(z) and 7):				
7010	Other income	274,337	1	245,718	1
7020	Other gains and losses	(187,524)	(1)	415,834	2
7050	Finance costs	(50,699)	-	(22,456)	-
7770	Shares of losses of associates and joint ventures accounted for using equity method	(201,238)	(1)	(109,815)	-
	Total non-operating income and expenses	(165,124)	(1)	529,281	3
7900	**Profit before tax**	5,393,428	25	3,734,623	22
7950	**Tax expense (Note 6(t))**	(992,667)	(4)	(668,561)	(4)
	Profit	4,400,761	21	3,066,062	18
8300	**Other comprehensive income:**				
8310	**Components of other comprehensive income that will not be reclassified to profit or loss (Notes 6(s), 6(t) and 6(u))**				
8311	Gains (losses) on remeasurements of defined benefit plans	2,492	-	(34,051)	-
8316	Unrealized gains (losses) from investments in equity instruments measured at fair value through other comprehensive income	2,114,856	10	(352,044)	(2)
8349	Income tax related to components of other comprehensive income that will not be reclassified to profit or loss	(499)	-	7,730	-
	Total components of other comprehensive income (loss) that will not be reclassified to profit or loss	2,116,849	10	(378,365)	(2)
8360	**Components of other comprehensive income that will be reclassified to profit or loss (Notes 6(g) and 6(u))**				
8361	Exchange differences on translation of foreign financial statements	(151,023)	(1)	46,105	-
8370	Shares of other comprehensive income of associates and joint ventures accounted for using equity method	4,263	-	(33,317)	-
8399	Income tax related to components of other comprehensive income that will be reclassified to profit or loss	-	-	-	-
	Total components of other comprehensive income (loss) that will be reclassified to profit or loss	(146,760)	(1)	12,788	-
8300	**Other comprehensive income, net**	1,970,089	9	(365,577)	(2)
8500	**Total comprehensive income**	**$ 6,370,850**	**30**	**2,700,485**	**16**
	Profit (loss) attributable to:				
8610	Profit attributable to owners of parent	$ 4,474,399	21	3,124,454	18
8620	Profit (losses) attributable to non-controlling interests	(73,638)	-	(58,392)	-
		$ 4,400,761	**21**	**3,066,062**	**18**
	Comprehensive income (loss) attributable to:				
8710	Comprehensive income, attributable to owners of parent	$ 6,447,998	30	2,811,518	16
8720	Comprehensive income (loss), attributable to non-controlling interests	(77,148)	-	(111,033)	-
		$ 6,370,850	**30**	**2,700,485**	**16**
	Earnings per common share (expressed in New Taiwan dollars) (Note 6(w))				
9750	Basic earnings per share	**$ 10.59**		**7.39**	
9850	Diluted earnings per share	**$ 10.53**		**7.35**	

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

WIN Semiconductors Corp. and Subsidiaries

Consolidated Statements of Changes in Equity

For the years ended December 31, 2019 and 2018

(Expressed in Thousands of New Taiwan Dollars)

	Equity attributable to owners of parent												
			Retained earnings			Other equity interests							
	Ordinary shares	Capital surplus	Legal reserve	Unappropriated retained earnings	Total retained earnings	Exchange differences on translation of foreign financial statements	Unrealized gains (losses) on financial assets measured at fair value through other comprehensive income	Unrealized gains (losses) on available-for-sale financial assets	Other unearned compensation for restricted shares of employees	Total other equity interest	Total equity attributable to owners of parent	Non-controlling interests	Total equity
Balance at January 1, 2018	$ 4,226,664	9,052,896	1,379,394	9,442,293	10,821,687	(100,208)	-	1,568,176	-	1,467,968	25,569,215	235,530	25,804,745
Effects of retrospective application and retrospective restatement	-	-	-	166,337	166,337	-	1,401,839	(1,568,176)	-	(166,337)	-	-	-
Equity at beginning of period after adjustments	4,226,664	9,052,896	1,379,394	9,608,630	10,988,024	(100,208)	1,401,839	-	-	1,301,631	25,569,215	235,530	25,804,745
Appropriation and distribution of retained earnings:													
Legal reserve appropriated	-	-	376,420	(376,420)	-	-	-	-	-	-	-	-	-
Cash dividends of ordinary shares	-	-	-	(2,958,665)	(2,958,665)	-	-	-	-	-	(2,958,665)	-	(2,958,665)
	-	-	376,420	(3,335,085)	(2,958,665)	-	-	-	-	-	(2,958,665)	-	(2,958,665)
Profit (losses) for the year ended December 31, 2018	-	-	-	3,124,454	3,124,454	-	-	-	-	-	3,124,454	(58,392)	3,066,062
Other comprehensive income for the year ended December 31, 2018	-	-	-	(26,321)	(26,321)	65,429	(352,044)	-	-	(286,615)	(312,936)	(52,641)	(365,577)
Total comprehensive income for the year ended December 31, 2018	-	-	-	3,098,133	3,098,133	65,429	(352,044)	-	-	(286,615)	2,811,518	(111,033)	2,700,485
Disposal of investments accounted for using equity method	-	(21,163)	-	-	-	(1,421)	-	-	-	(1,421)	(22,584)	-	(22,584)
Change in ownership interest in subsidiaries	-	-	-	(40,573)	(40,573)	-	-	-	-	-	(40,573)	-	(40,573)
Adjustments to share of changes in equity associates	-	635	-	-	-	-	-	-	-	-	635	-	635
Issuance of restricted shares of employees	11,480	163,877	-	-	-	-	-	-	(175,357)	(175,357)	-	-	-
Compensation cost arising from restricted shares of stock issued to employees	-	-	-	-	-	-	-	-	17,049	17,049	17,049	-	17,049
Changes in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	96,486	96,486
Stock option compensation cost of subsidiary	-	3,112	-	-	-	-	-	-	-	-	3,112	3,695	6,807
Disposal of investments in equity instruments designated at fair value through other comprehensive income	-	-	-	91,405	91,405	-	(91,405)	-	-	(91,405)	-	-	-
Balance at December 31, 2018	4,238,144	9,199,357	1,755,814	9,422,510	11,178,324	(36,200)	958,390	-	(158,308)	763,882	25,379,707	224,678	25,604,385
Appropriation and distribution of retained earnings:													
Legal reserve appropriated	-	-	312,446	(312,446)	-	-	-	-	-	-	-	-	-
Cash dividends of ordinary shares	-	-	-	(2,118,972)	(2,118,972)	-	-	-	-	-	(2,118,972)	-	(2,118,972)
	-	-	312,446	(2,431,418)	(2,118,972)	-	-	-	-	-	(2,118,972)	-	(2,118,972)
Profit (losses) for the year ended December 31, 2019	-	-	-	4,474,399	4,474,399	-	-	-	-	-	4,474,399	(73,638)	4,400,761
Other comprehensive income for the year ended December 31, 2019	-	-	-	1,993	1,993	(143,250)	2,114,856	-	-	1,971,606	1,973,599	(3,510)	1,970,089
Total comprehensive income for the year ended December 31, 2019	-	-	-	4,476,392	4,476,392	(143,250)	2,114,856	-	-	1,971,606	6,447,998	(77,148)	6,370,850
Disposal of investment accounted for using equity method	-	(1,510)	-	-	-	-	-	-	-	-	(1,510)	-	(1,510)
Changes in ownership interests in subsidiaries	-	(5,161)	-	(119,915)	(119,915)	-	-	-	-	-	(125,076)	-	(125,076)
Adjustments to share of changes in equity associates	-	875	-	-	-	-	-	-	-	-	875	-	875
Issuance of restricted shares of employees	2,620	47,744	-	-	-	-	-	-	(50,364)	(50,364)	-	-	-
Compensation cost arising from restricted shares of stock issued to employees	-	-	-	-	-	-	-	-	71,643	71,643	71,643	-	71,643
Purchase and retirement of restricted shares of stock for employees	(200)	200	-	-	-	-	-	-	-	-	-	-	-
Changes in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	31,205	31,205
Stock option compensation cost of subsidiary	-	2,803	-	-	-	-	-	-	-	-	2,803	3,329	6,132
Disposal of investments in equity instruments designated at fair value through other comprehensive income	-	-	-	(16,640)	(16,640)	-	16,640	-	-	16,640	-	-	-
Balance at December 31, 2019	$ 4,240,564	9,244,308	2,068,260	11,330,929	13,399,189	(179,450)	3,089,886	-	(137,029)	2,773,407	29,657,468	182,064	29,839,532

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

WIN Semiconductors Corp. and Subsidiaries

Consolidated Statements of Cash Flows

For the years ended December 31, 2019 and 2018

(Expressed in Thousands of New Taiwan Dollars)

		2019	2018
Cash flows from (used in) operating activities:			
Profit before tax	$	5,393,428	3,734,623
Adjustments:			
Adjustments to reconcile profit (loss):			
Depreciation expense		3,348,054	3,158,550
Amortization expense		66,993	63,588
Losses on expected credit impairment (reversal of expected credit impairment)		2,171	(840)
Net (gains) losses on financial assets or liabilities at fair value through profit or loss		(246,768)	57,848
Interest expense		50,699	22,456
Interest income		(67,365)	(59,064)
Dividend income		(124,881)	(101,910)
Share-based payments		77,775	23,856
Shares of losses of associates and joint ventures accounted for using equity method		199,856	117,837
Losses (gains) on disposal of property, plant and equipment		375,910	(2,210)
Losses (gains) on disposal of investments		28,115	(286,514)
Changes in biological assets at fair value		(52)	(1,139)
Unrealized foreign exchange gains		(4,386)	-
Losses on lease modification		3,773	-
Prepayments for business facilities transferred to expenses		-	15
Total adjustments to reconcile profit (loss)		3,709,894	2,992,473
Changes in operating assets and liabilities:			
Changes in operating assets:			
Decrease (increase) in financial assets at fair value through profit or loss		(240,810)	23,485
Decrease (increase) in notes and accounts receivable		(986,334)	135,566
Increase in inventories		(486,866)	(150,018)
Decrease (increase) in biological assets		88,734	(12,397)
Decrease (increase) in other current assets		(73,847)	81,000
Total changes in operating assets		(1,699,123)	77,636
Changes in operating liabilities:			
Increase (decrease) in notes and accounts payable		733,140	(607,933)
Increase in other payables		464,709	143,905
Increase in other current liabilities		172,367	10,804
Increase in other non-current liabilities		2,987	1,827
Total changes in operating liabilities		1,373,203	(451,397)
Total changes in operating assets and liabilities		(325,920)	(373,761)
Cash inflow generated from operations		8,777,402	6,353,335
Dividends received		3,091	4,642
Income taxes paid		(696,134)	(878,459)
Net cash flows from operating activities		8,084,359	5,479,518
Cash flows from (used in) investing activities:			
Acquisition of financial assets at fair value through other comprehensive income		(76,775)	(84,704)
Proceeds from disposal of financial assets at fair value through other comprehensive income		17,274	244,675
Proceeds from capital reduction of financial assets at fair value through other comprehensive income		6,667	-
Proceeds from disposal of non-current financial assets at amortized cost		29,900	32,300
Acquisition of financial assets at fair value through profit or loss		(467,525)	(477,593)
Proceeds from disposal of financial assets at fair value through profit or loss		768,367	1,486,555
Proceeds from capital reduction of financial assets at fair value through profit or loss		35	-
Acquisition of investments accounted for using equity method		(248,320)	(389,970)
Proceeds from disposal of investments accounted for using equity method		-	21,925
Acquisition of property, plant and equipment		(3,516,505)	(3,188,631)
Proceeds from disposal of property, plant and equipment		77,653	4,334
Decrease in other receivables due from related parties		-	181,200
Acquisition of intangible assets		(40,360)	(46,528)
Net cash inflows (outflows) from business combination		(138,256)	56,790
Acquisition of right-of-use assets		(41,018)	-
Decrease (increase) in other non-current assets		(58,298)	24,295
Increase in prepayments for business facilities		(1,789,359)	(2,403,075)
Interest received		68,873	63,792
Dividends received		121,790	97,268
Net cash flows used in investing activities		(5,285,857)	(4,377,367)
Cash flows from (used in) financing activities:			
Proceeds from long-term debt		5,282,865	4,891,000
Repayments of long-term debt		(5,291,600)	(5,346,025)
Decrease in guarantee deposits received		(17,457)	(617)
Repayments of lease liabilities		(68,555)	-
Cash dividends paid		(2,118,972)	(2,958,665)
Interest paid		(30,292)	(22,945)
Changes in non-controlling interests		(38,532)	(68,770)
Net cash flows used in financing activities		(2,282,543)	(3,506,022)
Effect of exchange rate changes on cash and cash equivalents		(51,659)	16,921
Net increase (decrease) in cash and cash equivalents		464,300	(2,386,950)
Cash and cash equivalents at beginning of period		5,462,173	7,849,123
Cash and cash equivalents at end of period	$	5,926,473	5,462,173

See accompanying notes to consolidated financial statements.

(Expressed in Thousands of New Taiwan Dollars, Unless Otherwise Specified)

(1) Company history:

WIN Semiconductors Corp. (the "Company") was incorporated on October 16, 1999 as a company limited by shares and registered under the Ministry of Economic Affairs, R.O.C. The address of the Company's registered office is No. 69, Keji 7th Rd., Hwaya Technology Park, Guishan Dist., Taoyuan City, Taiwan.

The main operation the Company and its subsidiaries (together referred to as "the Group") are as follows:

(a) Researching, developing, manufacturing, and selling of GaAs wafers.

(b) Developing hog farming technology and trading.

(c) Researching, manufacturing and selling of high-density gene chips, biochip optical readers and micro-electrophoresis analyzers.

(2) Approval date and procedures of the consolidated financial statements:

These consolidated financial statements were authorized for issue by the Board of Directors as of March 18, 2020.

(3) New standards, amendments and interpretations adopted:

(a) The impact of the International Financial Reporting Standards ("IFRSs") endorsed by the Financial Supervisory Commission, R.O.C. ("FSC") which have already been adopted.

The following new standards, interpretations and amendments have been endorsed by the FSC and are effective for annual periods beginning on or after January 1, 2019.

New, Revised or Amended Standards and Interpretations	Effective date per IASB
IFRS 16 "Leases"	January 1, 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	January 1, 2019
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	January 1, 2019
Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"	January 1, 2019
Annual Improvements to IFRS Standards 2015–2017 Cycle	January 1, 2019

Except for the IFRS 16 "Leases", the Group believes that the adoption of the above IFRSs would not have any material impact on its consolidated financial statements. The extent and impact of signification changes are as follows:

(Continued)

IFRS 16 replaces the existing leases guidance, including IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement Contains a Lease", SIC 15 "Operating Leases – Incentives" and SIC 27 "Evaluating the Substance of Transactions Involving the Legal Form of a Lease".

The Group applied IFRS 16 using the modified retrospective approach. The details of the changes in accounting policies are disclosed below:

1) Definition of a lease

Previously, the Group determined at contract inception whether an arrangement is or contains a lease under IFRIC 4. Under IFRS 16, the Group assesses whether a contract is or contains a lease based on the definition of a lease, as explained in Note 4(m).

On transition to IFRS 16, the Group will choose to apply the definition of a lease to all its contracts whether a contract is, or contains, a lease.

2) As a lessee

As a lessee, the Group previously classified leases as operating or finance leases based on its assessment of whether the lease transferred significantly all of the risks and rewards incidental to ownership of the underlying asset to the Group. Under IFRS 16, the Group recognizes right-of-use assets and lease liabilities for most leases – i.e. these leases are on balance sheets.

Leases classified as operating leases under IAS 17. At transition, lease liabilities were measured at the present value of the remaining lease payments, discounted at the Group's incremental borrowing rate as at January 1, 2019. Right-of-use assets are measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments.

In addition, the Group used the following practical expedients when applying IFRS 16 to leases.

- Applied a single discount rate to a portfolio of leases with similar characteristics.
- Adjusted the right-of-use assets by the result of IAS 37 onerous contract provision immediately before the date of initial application, as an alternative to an impairment review.
- Applied the exemption not to recognize right-of-use assets and liabilities for leases with less than 12 months of lease term at the date of initial application.
- Excluded initial direct costs from measuring the right-of-use assets at the date of initial application.
- Used hindsight when determining the lease term if the contract contains options to extend or terminate the lease.

The Group decided to apply recognition exemptions to short-term leases of parts of land, transportation equipment, office and staff dormitories, etc.

(Continued)

3) As a lessor

The Group is not required to make any adjustments on transition to IFRS 16 for leases in which it acts as a lessor, except for a sub-lease. The Group accounted for its leases in accordance with IFRS 16 from the date of initial application.

4) Impacts on financial statements

On transition to IFRS 16, the Group recognized $337,816 thousand and $290,061 thousand of right-of-use assets and the lease liabilities, respectively, and prepaid rent expenses, guarantee deposits and intangible assets were decreased by $13,939 thousand, $1,902 thousand and $31,914 thousand, respectively. When measuring lease liabilities, the Group discounted lease payments using its incremental borrowing rate at January 1, 2019. The weighted-average rate applied is 3.37%.

The explanation of differences between operating lease commitments immediately preceding the date of initial application, and lease liabilities recognized in the statement of financial position at the date of initial application disclosed as follows:

		January 1, 2019
Operating lease commitment at December 31, 2018	$	398,517
Recognition exemption for:		
short-term leases		(5,696)
leases of low-value assets		(780)
Discounted cash flow of interest expense		(100,078)
Others		(1,902)
Lease liabilities recognized at January 1, 2019	**$**	**290,061**

(b) The impact of IFRS endorsed by FSC but not yet effective

The following new standards, interpretations and amendments have been endorsed by the FSC and are effective for annual periods beginning on or after January 1, 2020 in accordance with Ruling No. 1080323028 issued by the FSC on July 29, 2019:

New, Revised or Amended Standards and Interpretations	**Effective date per IASB**
Amendments to IFRS 3 “Definition of a Business”	January 1, 2020
Amendments to IFRS 9, IAS39 and IFRS7 “Interest Rate Benchmark Reform”	January 1, 2020
Amendments to IAS 1 and IAS 8 “Definition of Material”	January 1, 2020

The Group assesses that the adoption of the abovementioned standards would not have any material impact on its consolidated financial statements.

(Continued)

(c) The impact of IFRS issued by IASB but not yet endorsed by the FSC

As of the date, the following IFRSs that have been issued by the International Accounting Standards Board (IASB), but have yet to be endorsed by the FSC:

New, Revised or Amended Standards and Interpretations	Effective date per IASB
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets Between an Investor and Its Associate or Joint Venture"	Effective date to be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	January 1, 2022

The Group is evaluating the impact of its initial adoption of the abovementioned standards or interpretations on its consolidated financial position and consolidated financial performance. The results thereof will be disclosed when the Group completes its evaluation.

(4) Summary of significant accounting policies:

The accompanying consolidated financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language consolidated financial statements, the Chinese version shall prevail.

The significant accounting policies presented in the consolidated financial statements are summarized below. Except for those specifically indicated, the following accounting policies were applied consistently throughout the periods presented in the consolidated financial statements.

(a) Statement of compliance

These consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers (hereinafter referred to as "the Regulations") and the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations endorsed and issued into effect by the Financial Supervisory Commission, R.O.C..

(b) Basis of preparation

(i) Basis of measurement

The consolidated financial statements have been prepared on a historical cost basis except for the following significant accounts:

1) Financial instruments measured at fair value through profit or loss;

2) Fair value through other comprehensive income are measured at fair value;

3) The net defined benefit liabilities are recognized as the present value of the defined benefit obligation, and the effect of the plan assets ceiling disclosure in Note 4(r) less plan assets.

(Continued)

(ii) Functional and presentation currency

The functional currency of each Group entity is determined based on the primary economic environment in which the entity operates. The consolidated financial statements are presented in New Taiwan dollars, which is the Company's functional currency. All financial information presented in New Taiwan dollars has been rounded to the nearest thousand.

(c) Basis of consolidation

(i) Principles of preparation of the consolidated financial statements

The consolidated financial statements comprise the Company and its subsidiaries. When the Company is exposed to the variable remuneration from investing on other individual or sharing the rights of the remuneration, also, is able to influence the rewards, the Company controls the individual.

The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. Transactions, balances and any other unrealized profit or loss between the Company and other subsidiaries are all eliminated while preparing the consolidated financial reports. Comprehensive income (loss) of subsidiaries belongs to owner of the Company and the non-controlling interest respectively. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

Financial reports of subsidiaries had been adjusted properly and the accounting policies used in subsidiaries are same to the Group's accounting policies.

Changes in the Group's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions. Differences between the amount paid or received from fair value and the adjustment of the non-controlling interest are directly realized to the equity and belong to the owners of the Company.

(ii) Losing control of subsidiaries

When the Group loses control of its subsidiaries, the assets (including goodwill) and liabilities and any non-controlling interests of the former subsidiary at their carrying amounts at the date when control is lost will be derecognized and any investment retained in the former subsidiary at its fair value at the date when control is lost will be remeasured in the consolidated financial statement. The difference of disposal gain or loss is between the aggregate of (i) the fair value of the consideration received and any investment retained in the former subsidiary at its fair value at the date when control is lost and (ii) the assets (including goodwill) and liabilities and any non-controlling interests of the former subsidiary at their carrying amounts at the date when control is lost. The Group accounts for all amounts recognized in other comprehensive income in relation to that subsidiary on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

(Continued)

(iii) List of subsidiaries in the consolidated financial statements:

Name of investor	Name of subsidiary	Principal activity	Shareholding December 31, 2019	Shareholding December 31, 2018	Remark
The Company	WIN SEMI. USA, INC.	Marketing	100.00%	100.00%	
The Company	Win Semiconductors Cayman Islands Co., Ltd. (abbrev. Win Cayman)	Selling of GaAs wafers	100.00%	100.00%	
The Company	WIN Venture Capital Corp. (abbrev. WVC)	Investment activities	100.00%	100.00%	
The Company	Phalanx Biotech Group, Inc. (abbrev. PBL)	Researching, manufacturing and selling of high density gene chips and testing service	54.48%	39.89%	(Note 1) (Note 2)
The Company	WIN Earn Investment Corp.	Investment activities	100.00%	-	
The Company	WIN Chance Investment Corp.	Investment activities	100.00%	-	
WVC	Phalanx Biotech Group, Inc.	Researching, manufacturing and selling of high density gene chips and testing service	4.39%	5.82%	(Note 1) (Note 2)
Win Cayman	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd. (abbrev. Chainwin Cayman)	Investment activities	96.30%	94.71%	(Note 2)
Chainwin Cayman	Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	Developing hog farming technology and trading	100.00%	100.00%	
Chainwin Cayman	Jiangsu Merit/ CM Agriculture Development Co., Ltd.	Developing hog farming technology and trading	100.00%	90.79%	(Note 2)
Chainwin Cayman	Jiangsu Merit/ Cofcojoycome Agriculture Development Co., Ltd.	Developing hog farming technology and trading	-	60.00%	(Note 3)
Chainwin Cayman	Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	Farm feed development and trading	100.00%	100.00%	
Chainwin Cayman	Jiangsu Merit Runfu Agriculture Development Co., Ltd.	Developing hog farming technology and trading	100.00%	100.00%	
Chainwin Cayman	Jiangsu Win Yield Agriculture Development Co., Ltd.	Developing hog farming technology and trading	100.00%	-	(Note 4)
PBL	PhalanxBio, Inc.	Selling of high density gene chips and testing service	100.00%	100.00%	
PBL	Phalanx Biotech Limited. (abbrev. PBL (HK))	Investment activities	100.00%	100.00%	
PBL (HK)	Onearray Biotech (Kunshan) Co., Ltd.	Selling of high density gene chips and testing service	100.00%	100.00%	

Note 1: For the year end December 31, 2018, the Company and WVC do not hold more than half of the equity shares of PBL. However, the Company subscribed its new shares contribution and became the largest shareholder of PBL and obtained control over it on July 12, 2018; hence, PBL became a subsidiary of the Group since then. Please refer to Note 6(i) for the further information.

Note 2: For the related information of the shareholding percentage change, please refer to Note 6(h) for the further information.

Note 3: Jiansu Merit/ Cofcojoycome Agriculture Development Co., Ltd. had been liquidated on January 25, 2019. The losses on disposal of investments amounted to $25,666 thousand, which was recognized as other gains and losses.

Note 4: Jiangsu Win Yield Agriculture Development Co., Ltd. was incorporated on March 25, 2019. The capital injection had been made on June 12, 2019.

Note 5: The aforementioned subsidiaries were recognized based on the audited financial statements by the certified public accountant.

(iv) List of subsidiaries which are not included in the consolidated financial statements: None.

(Continued)

(d) Foreign currency

(i) Foreign currency transaction

Transactions in foreign currencies are translated into the respective functional currencies of the Group at the exchange rates at the dates of the transactions. At the end of each subsequent reporting period, monetary items denominated in foreign currencies are translated into the functional currencies using the exchange rate at that date. Non-monetary items denominated in foreign currencies that are measured at fair value are translated into the functional currencies using the exchange rate of the date the fair value was determined. Non-monetary items denominated in foreign currencies that are measured based on historical cost are translated using the exchange rate at the date of translation.

Exchange differences are generally recognized in profit or loss, except for the following differences which are recognized in other comprehensive income that arises from the retranslation:

- an investment in equity securities designated as at fair value through other comprehensive income;
- a financial liability designated as a hedge of the net investment in a foreign operation to the extent that the hedge is effective; or
- qualifying cash flow hedges to the extent that the hedge are effective.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to the reporting currency of the consolidated financial statements at the exchange rates of the reporting date. The income and expenses of foreign operations are translated to the reporting currency of the consolidated financial statements at average rate. Foreign currency differences are recognized in other comprehensive income, and presented in the foreign currency translation reserve in equity.

However, if the foreign operation is a non-wholly owned subsidiary, then the relevant proportion of the translation difference is allocated to non-controlling interests. When a foreign operation is disposed of such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. When the Group disposes any part of its interest in a subsidiary that includes a foreign operation while retaining control, the relevant proportion of the cumulative amount is reattributed to non-controlling interest. When the Group disposes of only part of investment in an associate of joint venture that includes a foreign operation while retaining significant or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely predicted in the foreseeable future, the foreign currency gains and losses arising from such items are considered to a part of investment in the foreign operation and are recognized in other comprehensive income.

(e) Classification of current and non-current assets and liabilities

An entity shall classify an asset as current when:

(i) It expects to realize the asset, or intends to sell or consume it in its normal operating cycle;

(ii) It holds the asset primarily for the purpose of trading;

(iii) It expects to realize the asset within twelve months after the reporting period; or

(iv) If the asset is cash and cash equivalent (unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period).

An entity shall classify all other assets as non-current.

An entity shall classify a liability as current when:

(i) It expects to settle the liability in its normal operating cycle;

(ii) It holds the liability primarily for the purpose of trading;

(iii) The liability is due to be settled within twelve months after the reporting period; or

(iv) It does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issuance of equity instruments that do not affect its classification.

(f) Cash and cash equivalents

Cash comprises cash on hand and cash in bank. Cash equivalents consist of highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits, which meet the above criteria and for the purpose of fulfilling short-term commitments instead of the purpose of investing activities or others, are categorized as cash equivalents.

(g) Financial instruments

Trade receivables are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Group becomes a party to the contractual provisions of the instrument. A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at fair value through profit or loss (FVTPL), transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(i) Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date and settle date basis.

(Continued)

On initial recognition, a financial asset is classified as measured at: amortized cost; fair value through other comprehensive income (FVOCI); or FVTPL. Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model. Regular way purchase or sales of financial assets shall be recognized and derecognized, as applicable, using trade day.

1) Financial assets measured at amortized cost

A financial asset is measured at amortized cost if both of the following conditions are met and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A financial asset measured at amortized cost is initially recognized at fair value, plus any directly attributable transaction costs. These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses, and impairment losses are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

2) Fair value through other comprehensive income (FVOCI)

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an instrument-by-instrument basis.

Debt investments at FVOCI are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognized in profit or loss. Other net gains and losses are recognized in other comprehensive income. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to profit or loss.

(Continued)

Equity investments at FVOCI are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in other comprehensive income and are never reclassified to profit or loss.

Dividend income from equity investments is recognized in profit or loss on the date on which the Group's right to receive payment is established, which is normally the ex-dividend date.

3) Fair value through profit or loss (FVTPL)

All financial assets not classified as amortized cost or FVOCI described above are measured at FVTPL, including derivative financial assets. On initial recognition, the Group may irrevocably designate a financial asset, which meets the requirements to be measured at amortized cost or at FVOCI, as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.

4) Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial assets on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs, as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension features; and
- terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse features)

5) Impairment of financial assets

The Group recognizes loss allowances for expected credit losses on financial assets measured at amortized cost (including cash and cash equivalents, financial assets at amortized costs, notes and accounts receivable, other receivables, guarantee deposit paid and other financial assets) and contract assets.

(Continued)

The Group measures loss allowances at an amount equal to lifetime expected credit loss (ECL), except for the following which are measured as 12-month ECL:

- debt securities that are determined to have low credit risk at the reporting date; and
- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

Loss allowance for accounts receivable and contract assets are always measured at an amount equal to lifetime ECL.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Group considers reasonable and supportable information that is relevant and available (without undue cost or effort). This includes both quantitative and qualitative information and analysis based on the Group's historical experience and informed credit assessment, as well as forward-looking information.

The Group considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of 'investment grade which is considered to be BBB- or higher per Standard & Poor's, Baa3 or higher per Moody's or twA or higher per Taiwan Ratings'.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due.

The Group considers a financial asset to be in default when the financial asset is more than 180 days past due.

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

At each reporting date, the Group assesses whether financial assets carried at amortized cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence that a financial asset is credit-impaired includes the following events:

(Continued)

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being more than 90 days past due;
- the lender of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession that the lender would not otherwise consider;
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganization; or
- the disappearance of an active market for that financial asset because of financial difficulties.

Loss allowances for financial assets measured at amortized cost are deducted from its carrying amount. For debt securities at FVOCI, the loss allowance is charged to profit or loss and is recognized in other comprehensive income instead of reducing the carrying amount of the asset.

The Group shall directly reduce the gross carrying amount of a financial asset when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

6) Derecognition of financial assets

The Group derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognized in its statement of balance sheet, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognized.

(ii) Financial liabilities

1) Financial liabilities

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss.

(Continued)

Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

2) Derecognition of financial liabilities

The Group derecognizes a financial liability when its contractual obligation has been discharged or cancelled or expires. The Group also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value.

On derecognition of a financial liability, the difference between the carrying amount of a financial liability extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

3) Offsetting of financial assets and liabilities

Financial assets and financial liabilities are offset and the net amount presented in the statement of balance sheet when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

(iii) Derivative financial instruments, including hedge accounting

The Group holds derivative financial instruments to hedge its foreign currency exposures. Derivatives are recognized initially at fair value and attributable transaction costs are recognized in profit or loss as incurred. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are recognized in profit or loss, and are included in other gains and losses. When a derivative is designated as a hedging instrument, its timing of recognition in profit or loss is determined based on the nature of the hedging relationship. When the fair value of a derivative instrument is positive, it is classified as a financial asset, and when the fair value is negative, it is classified as a financial liability.

(h) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on the weighted-average method, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(Continued)

(i) Biological assets

Biological assets are measured at fair value less costs to sell on initial recognition, with any change therein recognized in profit or loss at the end of each reporting period. Costs to sell include all costs that would be necessary to sell the assets, excluding finance costs and tax expenses. Biological asset does not have a quoted market price in an active market and for which alternative fair value measurements are determined to be clearly unreliable. In such case, the asset is measured at cost less accumulated depreciation and impairment losses.

(j) Investment in associates

Associates are those entities in which the Group has significant influence, but not control, or joint control over their financial and operating policies.

Investments in associates are accounted for using the equity method and are recognized initially at cost. The cost of the investment includes transaction costs. The carrying amount of the investment in associates includes goodwill which arises from the acquisition less any accumulated impairment losses.

The consolidated financial statements include the Group’s share of the profit or loss and other comprehensive income of those associates, after adjustments to align the accounting policies with those of the Group, from the date on which significant influence commences until the date on which significant influence ceases. The Group recognizes any changes of its proportionate share in the investee within capital surplus, when an associate’s equity changes due to reasons other than profit and loss or comprehensive income, which did not result in changes in actual significant influence.

Unrealized gains and losses resulting from transactions between the Group and an associate are recognized only to the extent of unrelated Group’s interests in the associate.

When the Group’s share of losses of an associate equals or exceeds its interest in associates, it discontinues recognizing its share of further losses. After the recognized interest is reduced to zero, additional losses are provided for, and a liability is recognized, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

The Group discontinues the use of the equity method and measures the retained interest at fair value from the date when its investment ceases to be an associate. The difference between the fair value of retained interest and proceeds from disposing, and the carrying amount of the investment at the date the equity method was discontinued is recognized in profit or loss. The Group accounts for all the amounts previously recognized in other comprehensive income in relation to that investment on the same basis as would have been required if the associates had directly disposed of the related assets or liabilities. If a gain or loss previously recognized in other comprehensive income would be reclassified to profit or loss (or retained earnings) on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) (or retained earnings) when the equity method is discontinued. If the Group’s ownership interest in an associate is reduced while it continues to apply the equity method, the Group reclassifies the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction in ownership interest to profit or loss.

If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Group continues to apply the equity method without remeasuring the retained interest.

When the Group 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 Group's proportionate interest in the net assets of the associate. The Group records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus. Moreover, a difference shall be debited to retained earnings when the balance of capital surplus resulting from investments accounted for using equity method is not sufficient to be written off. If the Group'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.

(k) Investment property

Investment property is the property held either to earn rental income or for capital appreciation or for both, but not for sale in the ordinary course of business use in the production or supply of goods or services or for administrative purposes. Investment property is measured at cost on initial recognition, and subsequently at cost, less accumulated depreciation and accumulated impairment losses. Depreciation expense is calculated based on the depreciation method, useful life, and residual value which are the same as those adopted for property, plant and equipment.

Any gain or loss on disposal of an investment property (calculated as the difference between the net proceeds from disposal and the carrying amount) is recognized in profit or loss.

When the use of an investment property changes such that it is reclassified as property, plant and equipment, its carrying amount at the date of reclassification becomes its cost for subsequent accounting.

Rental income from investment property is recognized as other revenue on a straight-line basis over the term of the lease.

(l) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. The cost consists of any cost directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, and any borrowing cost are eligible for capitalization.

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately, unless the useful life and the depreciation method of the significant part of an item of property, plant and equipment are the same as the useful life and depreciation method of another significant part of that same item.

(Continued)

The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item, and it shall be recognized in profit or loss, under net other gains and losses.

(ii) Reclassification to investment property

The property is reclassified to investment property at its carrying amount when the use of the property changes from owner-occupied to investment property.

(iii) Subsequent cost

Subsequent expenditure is capitalized only when it is probable that the future economic benefits associated with the expenditure will flow to the Group. The carrying amount of those parts that are replaced is derecognized. Ongoing repairs and maintenance is expensed as incurred.

(iv) Depreciation

The depreciable amount of an asset is determined after deducting its residual amount and it shall be allocated on a straight-line basis over its useful life. The items of property, plant and equipment with the same useful life may be grouped in determining the depreciation charge. The remainder of the items may be depreciated separately. The depreciation charge for each period shall be recognized in profit or loss.

Land has an unlimited useful life and therefore is not depreciated.

The estimated useful lives for the current and comparative years of significant items of property, plant and equipment are as follows:

1) Buildings and structures: 2 to 40 years

2) Machinery and equipment: 1 to 10 years

3) Factory and equipment: 1 to 20 years

4) Other equipment: 1 to 13 years

Depreciation methods, useful lives, and residual values are reviewed at each reporting date. If expectations differ from the previous estimates, the change is accounted for as a change in an accounting estimate.

(m) Leases

Policy applicable from January 1, 2019

(i) Identifying a lease

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether:

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1) the contract involves the use of an identified asset – this may be specified explicitly or implicitly, and should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, then the asset is not identified; and

2) the Group has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and

3) the Group has the right to direct the use of the asset. :

- The Group has the right to direct the use of the asset when it has the decision-making rights that are most relevant to changing how and for what purpose the asset is used.

- In rare cases where the decision on how, and for what purpose, the asset is used is predetermined, the Group has the right to direct the use of an asset if either:

  — the Group has the right to operate the asset throughout the period of use, without the supplier having the right to change those operating instructions; or

  — the Group designed the asset in a way that predetermines how and for what purpose the asset will be used throughout the period of use.

At inception or on reassessment of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices. However, for the leases of land and buildings in which it is a lessee, the Group has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

(ii) As a leasee

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be reliably determined, the Group' s incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

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Lease payments included in the measurement of the lease liability comprise the following:

1) fixed payments, including substantively fixed payments;

2) variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;

3) amounts expected to be payable under a residual value guarantee; and

4) payments for purchase or termination options that are reasonably certain to be exercised.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when:

1) there is a change in future lease payments arising from the change in an index or rate; or

2) there is a change in the Group' s estimate of the amount expected to be payable under a residual value guarantee; or

3) there is a change in the assessment on whether it will have the option to exercise a purchase; or

4) there is a change in the assessment on lease term as to whether it will be extended or terminated; or

5) there is any lease modifications.

When the lease liability is remeasured, other than lease modifications, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or in profit and loss if the carrying amount of the right-of-use asset has been reduced to zero.

When the lease liability is remeasured to reflect the partial or full termination of the lease for lease modifications that decrease the scope of the lease, the Group accounts for the remeasurement of the lease liability by decreasing the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognize in profit or loss any gain or loss relating to the partial or full termination of the lease.

The Group presents right-of-use assets that do not meet the definition of investment and lease liabilities as a separate line item respectively in the statement of financial position.

The Group has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

(Continued)

(iii) As a lessor

When the Group acts as a lessor, it determines at lease commencement whether each lease is a finance lease or an operating lease. To classify each lease, the Group makes an overall assessment of whether the lease transfers to the lessee substantially all of the risks and rewards of ownership incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then the lease is an operating lease. As part of this assessment, the Group considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

When the Group is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Group applies the exemption described above, then it classifies the sub-lease as an operating lease.

If an arrangement contains lease and non-lease components, the Group applies IFRS15 to allocate the consideration in the contract.

The lessor recognizes a finance lease receivable at an amount equal to its net investment in the lease. Initial direct costs, such as lessors to negotiate and arrange a lease, are included in the measurement of the net investment. The lessor recognizes the interest income over the lease term based on a pattern reflecting a constant periodic rate of return on the lessor's net investment in the lease. The Group recognizes lease payments received under operating leases as income on a straight-line basis over the lease term as part of 'other income'.

Policy applicable before January 1, 2019

(i) Lessor

Lease income from operating lease is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred in negotiating and arranging an operating lease is added to the carrying amount of the leased asset and recognized as an expense over the lease term on the same basis as the lease income. Incentives granted to the lessee to enter into the operating lease are spread over the lease term on a straight-line basis so that the lease income received is reduced accordingly.

Contingent rents are recognized as income in the period when the lease adjustments are confirmed.

(ii) Lessee

Leases in terms of which the Group assumes substantially all of the risks and rewards of ownership are classified as finance leases. On initial recognition, the lease asset is measured at an amount equal to the lower of its fair value with the present of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to the asset.

Other leases are operating leases and are not recognized in the Group's statement of financial position.

(Continued)

Payments made under operating lease, excluding insurance and maintenance expenses, are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense, over the term of the lease.

Contingent rent is recognized as expense in the periods in which they are incurred.

(n) Intangible assets

(i) Goodwill

1) Initial Recognition

Goodwill arising from the acquisition has been recognized as intangible assets.

2) Subsequent measurement

Goodwill is measured at cost less accumulated impairment losses. Impairment loss on equity investment in investees accounted for under the equity method is not allocated to any asset, including goodwill that forms part of the carrying amount of such investment.

(ii) Other intangible assets

Subsequent to the initial recognition, an intangible asset is measured at cost, less any accumulated amortization and any accumulated impairment losses. Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognized in profit or loss as incurred.

Amortizable amount is the cost of an asset less its residual values. Intangible assets are amortized from the date that they are available for use by using straight-line method, the estimated useful lives for the current and comparative periods are as follows:

1) Technical know-how: 12 to 17 years

2) Computer software and information systems: 1 to 10 years

3) Others: 1 to 5 years

The residual value, amortization period, and amortization method for an intangible asset with a finite useful life shall be reviewed at least annually at each fiscal year-end, and adjusted if appropriate.

(o) Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets, other than inventories, deferred tax assets, assets arising from employee benefits and biological assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. If it is not possible to determine the recoverable amount for the individual asset, then the Group will have to determine the recoverable amount for the asset's cash-generating unit.

(Continued)

The recoverable amount for the individual asset or the cash-generating unit is the higher of its fair value less costs to sell and its value in use. When evaluating value in use, the pre-tax discount rate is used to estimate the future cash flows. The discount rate should reflect the evaluation of specific risk resulting from the impact of the current market on the time value of money and on the asset or cash-generating unit.

If, and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. The reduction is an impairment loss which shall be recognized immediately in profit or loss.

The Group should assess at each reporting date whether there is any indication that an impairment loss recognized in prior periods for an asset other than goodwill may no longer exist or may have decreased. An impairment loss recognized in prior periods shall be reversed if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. If this is the case, the carrying amount of the asset shall be increased to its recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount net of depreciation or amortization that would have been determined if no impairment loss had been recognized.

Notwithstanding whether indicators exist, recoverability of goodwill and intangible assets with indefinite useful lives or those not yet in use are required to be tested at least annually. Impairment loss is recognized if the recoverable amount is less than the carrying amount.

For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash-generating units or groups of cash-generating units that is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquire are assigned to those units or group of units. If the carrying amount of the cash-generating units exceeds the recoverable amount of the unit, the entity shall recognize the impairment loss and the impairment loss shall be allocated to reduce the carrying amount of each asset in the unit. Reversal of an impairment loss for goodwill is prohibited.

(p) Treasury stock

Repurchased shares are recognized under treasury shares (a contra-equity account) based on their repurchase price (including all directly accountable costs). Gains on disposal of treasury shares should be recognized under "capital reserve — treasury share transactions". Losses on disposal of treasury shares should be offset against existing capital reserves arising from similar types of treasury shares. If there are insufficient capital reserves to be offset against, then such losses should be accounted for under retained earnings. The carrying amount of treasury shares should be calculated using the weighted average of different types of repurchase.

During the cancellation of treasury shares, "capital reserve — share premiums" and "share capital" should be debited proportionately. Gains on cancellation of treasury shares should be recognized under existing capital reserves arising from similar types of treasury shares; losses on cancellation of treasury shares should be offset against existing capital reserves arising from similar types of treasury shares. If there are insufficient capital reserves to be offset against, then such losses should be accounted for under retained earnings.

(Continued)

(q) Revenue

(i) Revenue from contracts with customers

Revenue is measured based on the consideration to which the Group expects to be entitled in exchange for transferring goods or services to a customer. The Group recognizes revenue when it satisfies a performance obligation by transferring control of a good or a service to a customer. The accounting policies for the Group's main types of revenue are explained below:

1) Sale of goods

The Group recognizes revenue when control of the products has been transferred, when the products are delivered to the customer, the customer has full discretion over the channel and price to sell the products, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or the Group has objective evidence that all criteria for acceptance have been satisfied.

The Group often offers volume discounts to its customers based on aggregate sales of electronic components over a 12 months period. Revenue from these sales is recognized based on the price specified in the contract, net of the estimated volume discounts. Accumulated experience is used to estimate the discounts, using the expected value method, and revenue is only recognized to the extent that it is highly probable that a significant reversal will not occur. A contract liability is recognized for expected volume discounts payable to customers in relation to sales made until the end of the reporting period. No element of financing is deemed present as the sales of electronic components are made with a credit term of 30 to 60 days, which is consistent with the market practice.

A receivable is recognized when the goods are delivered, as this is the point in time that the Group has a right to an amount of consideration that is unconditional.

2) Financing components

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

(r) Employee benefits

(i) Defined contribution plans

Obligations for contributions to defined contribution pension plans are recognized as expense as the related services is provided.

(Continued)

(ii) Defined benefit plans

The Group' s net obligation in respect of the defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Group, the recognized asset is limited to the total of the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income, and accumulated in retained earnings within equity. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset). Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Group recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(iii) Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(s) Share-based payment

The grant-date fair value of equity-settled share-based payment agreements granted to employees is generally recognized as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognized as an expense is adjusted to reflect the number of awards which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of award that meet the related service and non-market performance conditions at the vesting date.

For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between the expected and the actual outcomes.

The grant date of the share-based payment is the date the Group inform their employees about the exercise price and shares.

(Continued)

(t) Income taxes

Income taxes comprise both current taxes and deferred taxes. Except for expenses related to business combinations, or are recognized directly in equity or other comprehensive income, all current and deferred taxes shall be recognized in profit or loss.

The Group has determined that interest and penalties related to income taxes, including uncertain tax treatment, do not meet the definition of income taxes, and therefore accounted for them under IAS37.

Current taxes comprise the expected tax payables or receivables on the taxable profits (losses) for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payables or receivables are the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date.

Deferred taxes arise due to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases. Deferred taxes shall not be recognized for the below exceptions:

(i) temporary differences on the initial recognition of assets and liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profits (losses) at the time of the transaction;

(ii) temporary differences related to investments in subsidiaries, associates and joint arrangements to the extent that the Group is able to control the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future; and

(iii) taxable temporary differences arising on the initial recognition of goodwill.

Deferred taxes are measured at tax rates that are expected to be applied to temporary differences when they reserve, using tax rates enacted or substantively enacted at the reporting date, and reflect uncertainty related to income taxes, if any.

Deferred tax assets and liabilities may be offset against each other if the following criteria are met:

(i) The entity has the legal right to settle tax assets and liabilities on a net basis; and

(ii) the taxing of deferred tax assets and liabilities fulfill one of the below scenarios:

1) levied by the same taxing authority; or

2) levied by different taxing authorities, but where each such authority intends to settle tax assets and liabilities (where such amounts are significant) on a net basis every year of the period of expected asset realization or debt liquidation, or where the timing of asset realization and debt liquidation is matched.

A deferred tax asset should be recognized for the carry-forward of unused tax losses, unused tax credits, and deductible temporary differences to the extent that it is probable that future taxable profit will be available against which the unused tax losses, unused tax credits, and deductible temporary differences can be utilized. Such unused tax losses, unused tax credits, and deductible temporary differences shall also be reevaluated every year on the financial reporting date, and adjusted based on the probability that future taxable profit will be available against which the unused tax losses, unused tax credits, and deductible temporary differences can be utilized; such reductions are reversed when the probability of future taxable profits improves.

(u) Business combinations

The Group treats the business combination as acquisition. Goodwill is measured at the consideration transferred less the amounts of the identifiable assets acquired and liabilities assumed (generally at fair value) at the acquisition date. If the amount of net assets acquired and liabilities assumed exceeds the acquisition price, the Group re-assesses whether it has correctly identified all of the assets acquired and liabilities assumed, and recognize a gain for the excess.

All transaction cost relating to a business combination are recognized immediately as expense when incurred, except for the issuance of debt or equity instruments.

The Group shall measure any non-controlling interests in the acquiree either at fair value or at the non-controlling interest’s proportionate share of the acquiree’s identifiable net assets, if the non-controlling interests are present ownership interests and entitle their holders to a proportionate share of the entity’s net assets in the event of liquidation. Other non-controlling interests are evaluated by their fair value or by another basis permitted by the IFRSs endorsed by the FSC.

In a business combination achieved in batches, the previously held equity interest in the acquiree at its acquisition-date fair value is remeasured, and the resulting gain or loss, if any, is recognized in profit or loss. In prior reporting periods, the Group may have recognized changes in the value of its equity interest in the acquire in other comprehensive income. If so, the amount that was recognized in other comprehensive income shall be recognized on the same basis as would be required if the Group had directly disposed the previously held equity interest. If the disposal of the equity interest required a reclassification to profit or loss, such an amount shall be reclassified to profit or loss.

(v) Earnings per share

The Group discloses the Company’s basic and diluted earnings per share attributable to ordinary equity holders of the Company. The calculation of basic earnings per share is based on the profit attributable to the ordinary shareholder of the Company divided by weighted-average number of ordinary shares outstanding. The calculation of diluted earnings per share is based on the profit attributable to ordinary shareholders of the Company, divided by weighted-average number of ordinary shares outstanding after adjustment for the effects of all dilutive potential ordinary shares, such as employee remuneration and new restricted shares of employee.

(Continued)

(w) Operating segment

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the Group). Operating results of the operating segment are regularly reviewed by the Group's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance. Each operating segment consists of standalone financial information.

(5) Significant accounting assumptions and judgments, and major sources of estimation uncertainty:

The preparation of the consolidated financial statements in conformity with the IFRSs endorsed by the FSC requires management to make judgments, estimates, and assumptions that affect the application of the accounting policies and the reported amount of assets, liabilities, income, and expenses. Actual results may differ from these estimates.

The management continues to monitor the accounting estimates and assumptions. The management recognizes any changes in accounting estimates during the period and the impact of those changes in accounting estimates in the next period.

Information about critical judgments in applying accounting policies do not have significant effects on the amounts recognized in the consolidated financial statements.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are as follows:

(a) Valuation of inventories

As inventories are stated at the lower of cost or net realizable value, the Group estimates the net realizable value of inventories for obsolescence and unmarketable items at the end of the reporting period and then writes down the cost of inventories to net realizable value. The valuation of inventories is mainly determined based on assumptions as to future demand within a specific time horizon. Due to the rapid industrial transformation, there may be significant changes in the net realizable value of inventories. The further description of the valuation of inventories, please refer to Note 6(e).

(b) Assessment of goodwill impairment

The assessment of impairment of goodwill requires the Group to make subjective judgments to identify cash-generating units, allocate the goodwill to relevant cash-generating units, and estimate the recoverable amount of relevant cash-generating units. Refer to Note 6(m) for further description of the impairment of goodwill.

(Continued)

The accounting policy and disclosure of the Group include that measuring the financial assets and financial liabilities at fair value. The Group uses external information to make the evaluation result agreed to market status and to confirm the data resource is independent reliable and consistent with other resource. The Group regularly revises the inputs and any essential adjustments on the fair value to confirm that evaluation results is reasonable. The Group regularly evaluates investment property using the evaluation methods and parametric assumptions announced by FSC.

When measuring the fair value of an asset or a liability, the Group usually uses market observable data. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

(c) Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

(d) Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

(e) Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following notes:

(a) Note 6(l)-Investment property.

(b) Note 6(aa)-Financial instruments.

(6) Explanation of significant accounts:

(a) Cash and cash equivalents

	December 31, 2019	December 31, 2018
Cash on hand	$ 500	702
Cash in bank	5,681,365	5,191,898
Time deposits	244,608	269,573
	$ 5,926,473	5,462,173

Refer to Note 6(aa) for the fair value sensitivity analysis and currency risk of the financial assets and liabilities of the Group.

(Continued)

(b) Financial instruments

(i) Financial assets at fair value through profit or loss (FVTPL):

		December 31, 2019	December 31, 2018
Mandatorily measured at FVTPL:			
Stock listed on domestic markets	$	206,359	96,955
Private fund (Note)		565,804	722,405
Money market funds		300,490	6,308
Total	$	1,072,653	825,668
Current	$	506,849	103,263
Non-current		565,804	722,405
	$	1,072,653	825,668

Note: As of December 31, 2019 and 2018, part of the private fund is during the lock-up period.

The Group holds derivative financial instruments to hedge certain foreign exchange the Group is exposed to, arising from its operating activities. For the year ended December 31, 2019, the gains on settlement, amounting to $3,548 thousand, were recognized as other gains and losses. There was no transaction for the year ended December 31, 2018.

Refer to Note 6(z) for the gains or losses on disposal of investment and the amount of re-measurement at fair value recognized in profit or loss.

(ii) Non-current financial assets at fair value through other comprehensive income (FVOCI):

		December 31, 2019	December 31, 2018
Stocks listed on domestic markets	$	3,145,387	1,205,785
Stocks listed on US markets		710,571	585,861
Non-public stocks		700,247	564,486
	$	4,556,205	2,356,132

The Group decided to hold these equity instruments, which are not held for trading, at fair value through other comprehensive income.

For the year ended December 31, 2019, due to liquidation of investee or return of capital contributions, the Group disposed the equity investments designated at fair value through other comprehensive income, with a fair value of $23,941 thousand; upon derecognition, the loss of disposal, accumulated in other equity, amounting to $16,640 thousand was transferred to retained earnings.

(Continued)

For the year ended December 31, 2018, the Group considered the change in the proportion of investment portfolio, therefore, disposed partial of its equity investment designated at fair value through other comprehensive income, with a fair value of $244,675 thousand; upon derecognition, the gains of disposal, accumulated in other equity, amounting to $91,405 thousand was transferred to retained earnings.

(iii) Non-current financial assets at amortized cost:

	Issue period	Nominal rate (%)	December 31, 2019	December 31, 2018
Preferred stock B	2012.11.23~2019.11.22	-	$ -	29,900

The Group has assessed that its financial asset is held to collect contractual cash flows, which consist solely of payments of principal and interest on principal amount outstanding. The Group has designated these investments at the date of initial application as measured at amortized cost.

The non-current financial assets at amortized cost had been redeemed in the second quarter of 2019.

(iv) Sensitivity analysis in the equity price risk:

If the equity price changes, the impact to comprehensive income, using the sensitivity analysis based on the same variables except for the price index for both periods, will be as follows:

	2019		2018	
Prices of securities at the reporting date	After-tax other comprehensive income	After-tax profit (loss)	After-tax other comprehensive income	After-tax profit (loss)
Increasing 3%	$ 136,686	6,191	70,684	2,909
Decreasing 3%	$ (136,686)	(6,191)	(70,684)	(2,909)

(v) As of December 31, 2019 and 2018, the financial assets were not pledged. For information on the Group' s credit risk and market risk was disclosed in Note 6(aa).

(c) Notes and accounts receivable, net

	December 31, 2019	December 31, 2018
Notes receivable	$ 684	459
Accounts receivable	2,410,333	1,424,223
Less: loss allowance	(4,344)	(2,317)
	$ 2,406,673	1,422,365

The Group applies the simplified approach to provide for its loss allowance used for expected credit losses, which permit the use of lifetime expected loss provision for all receivables. To measure the expected credit losses, notes and accounts receivable have been grouped based on shared credit risk characteristics and days past due, as well as incorporate forward looking information.

(Continued)

The loss allowance provision was determined as follows:

(i) The segment of foundry and agriculture technology:

	December 31, 2019		
	Gross carrying amount	Weighted-average expected loss rate	Lifetime expected credit loss allowance
Not past due	$ 2,133,319	0%	-
Past due 1~60 days	266,022	0%	-
Past due 61~120 days	2,583	0%	-
Past due 121~180 days	-	21.28%~36.46%	-
Past due more than 181 days	-	100%	-
	$ 2,401,924		-

	December 31, 2018		
	Gross carrying amount	Weighted-average expected loss rate	Lifetime expected credit loss allowance
Not past due	$ 1,203,680	0%	-
Past due 1~60 days	196,437	0%	-
Past due 61~120 days	14,825	0%	-
Past due 121~180 days	3,148	0%~32.14%	-
Past due more than 181 days	-	100%	-
	$ 1,418,090		-

(ii) The segment of gene chip testing service:

	December 31, 2019		
	Gross carrying amount	Weighted-average expected loss rate	Lifetime expected credit loss allowance
Not past due	$ 3,264	0.64%~11.55%	87
Past due 1~60 days	1,719	5.30%~43.87%	291
Past due 61~120 days	171	10.96%~49.43%	74
Past due 121~180 days	151	38.09%~74.36%	104
Past due more than 181 days	3,788	100%	3,788
	$ 9,093		4,344

(Continued)

	December 31, 2018		
	Gross carrying amount	Weighted-average expected loss rate	Lifetime expected credit loss allowance
Not past due	$ 2,708	0%~7.29%	63
Past due 1~60 days	1,053	7.33%~18.55%	119
Past due 61~120 days	563	14.96%~24.59%	129
Past due 121~180 days	482	34.42%~67.65%	220
Past due more than 181 days	1,786	100%	1,786
	$ 6,592		2,317

The movements of loss allowance were as follows:

	2019	2018
Beginning balance	$ 2,317	2,086
Acquisition through business combinations	-	3,294
Impairment loss recognized (reversed), net	2,171	(840)
Amount written off	-	(2,173)
Effect of changes in foreign exchange rates	(144)	(50)
Ending balance	$ 4,344	2,317

As of December 31, 2019 and 2018, the notes and accounts receivable were not discounted and pledged.

(d) Other receivables (recognized as other current assets)

	December 31, 2019	December 31, 2018
Other receivables	$ 50,517	125,288
Less: loss allowance	-	-
	$ 50,517	125,288

As of December 31, 2019 and 2018, other receivables were not past due nor impaired.

For information on the Group’ s credit risk was disclosed in Note 6(aa).

(e) Inventories

	December 31, 2019	December 31, 2018
Raw materials, supplies and spare parts	$ 2,881,948	2,641,108
Work in process	1,130,127	793,552
Finished goods	377,081	472,730
	$ 4,389,156	3,907,390

Except cost of goods sold and inventories recognized as expenses, the remaining gains or losses

(Continued)

which were recognized as operating cost or deduction of operating cost were as follows:

		2019	2018
Losses on valuation of inventories and obsolescence	$	45,137	39,227
Unallocated overheads	$	-	15,156
Scraps income	$	(27,290)	(13,524)
Losses (gains) on physical inventory count	$	68	(619)

As of December 31, 2019 and 2018, the inventories were not pledged.

(f) Biological assets

(i) List of biological assets:

		December 31, 2019	December 31, 2018
Consumable biological assets	$	21,923	103,289
Bearer biological assets	$	10,066	31,059

(ii) Change in biological assets:

		2019	2018
Beginning balance	$	134,348	134,188
Increase due to purchase		-	5,374
Input costs		318,953	405,013
Depreciation expenses		(9,556)	(10,903)
Decrease due to sales		(407,687)	(397,990)
Changes in fair value less costs to sell due to price changes		52	1,139
Effect of changes in foreign exchange rates		(4,121)	(2,473)
Ending balance	$	31,989	134,348
Current	$	21,923	103,289
Non-current		10,066	31,059
	$	31,989	134,348

For the years ended December 31, 2019 and 2018, the gains of $52 thousand and $1,139 thousand, respectively, was recognized as operating costs of the consolidated statement of comprehensive income as a result of the remeasurement of biological assets at the higher of its carrying amount or fair value less costs to sell.

(Continued)

(iii) The numbers of the Group's biological assets were as follows:

Unit: head

	December 31, 2019	December 31, 2018
Farrows, hogs and breeders	4,029	32,659

(iv) Fair value

The Group uses valuation method to measure its biological assets to determine the fair value of the hogs and the farrows (which are required to reach a certain weight), less, cost to sell at the end of the reporting period. If biological asset does not have a quoted market price in an active market, the asset is measured at cost less accumulated depreciation and impairment losses.

Costs of the biological assets include all of the costs within the growth cycle, such as the cost of new-born farrows, the feed and the raising farm. The cost of the productive biological assets shall be depreciated on a straight-line basis over the producible term. The amortized term is within 36 months. For the years ended December 31, 2019 and 2018, the depreciation expenses of biological assets (which will be converted into its breeding biological assets) were $9,556 thousand and $10,903 thousand, respectively.

(v) The Group is exposed to the following risks relating to its hog farming:

1) Regulations and environmental risks

The Group is subject to laws and regulations in various countries in which it operates. The Group has established environmental policies and procedures aimed at complying with the local environment and other laws. Management performs regular reviews to identify environmental risks and to ensure that systems in place are adequate to manage those risks.

2) Supply and demand risks

The Group is exposed to risks arising from fluctuations in the price and sales volume of hogs. When possible, the Group manages this risk by aligning its farming volume with market supply and demand. Management performs regular industry trend analyses to ensure that the Group's pricing structure is in line with the market.

3) Climate and other risks

The Group's hog farming is exposed to the risk of damage from climate change, diseases, and other natural forces. The Group has extensive processes in place aimed at monitoring and mitigating those risks, including regular pig health inspections and industry pest and disease surveys.

(vi) As of December 31, 2019 and 2018, the biological assets were not pledged.

(vii) Fair value valuation technique of biological assets used inputs that were categorized in level 3. Please refer to the table above regarding the movement of biological assets for a reconciliation beginning from the opening balance to the closing balance for level 3 fair value. In this period the fair value hierarchy of the biological assets were not transferred into or out of level 3. The valuation technique and significant unobservable inputs were as follows:

Items	Fair value valuation technique	Significant unobservable inputs	Relationship between significant unobservable inputs and fair value
Hogs in China	Price comparison: Estimated value of price comparison is compared with the biological assets of different type, quality and kinds, etc.	Evaluate the quality	Evaluate the changes in fair value, according to the quality of biological assets.

(g) Investments accounted for using equity method

The components of investments accounted for using the equity method at the reporting date were as follows:

	December 31, 2019	December 31, 2018
Associates	$ 532,591	532,808

(i) Associates

In the third quarter of 2019 and the first quarter of 2018, the Group subscribed the new shares contributed by Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. for $248,320 thousand and $349,970 thousand in cash, respectively. Due to the new shares subscription in the first quarter of 2018, the Group has significant influence on it. The equity shares held by the Group were not changed by the abovementioned transaction.

Affiliates which are material to the Group consisted of the followings:

Name of Affiliates	Nature of Relationship with the Group	Main Operating Location/ Registered Country of the Company	Proportion of Shareholding and Voting Rights December 31, 2019	Proportion of Shareholding and Voting Rights December 31, 2018
Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. (Note)	Developing hog farming technology and trading	China	49%	49%

Note: The shareholders' meeting of Jiangsu CM/ Merit Agriculture Development Co., Ltd. had approved and decided to rename to Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. on June 20, 2019.

The following consolidated financial information of significant affiliates has been adjusted according to individually prepared IFRS financial statements of these affiliates.

(Continued)

The financial information of Jiangsu CM/ Chainwin Agriculture Development Co., Ltd.:

	December 31, 2019	December 31, 2018
Current assets	$ 455,271	234,687
Non-current assets	1,274,357	1,374,095
Current liabilities	(475,061)	(407,284)
Non-current liabilities	(287,127)	(313,098)
Net assets	$ 967,440	888,400
Net assets attributable to non-controlling interests	$ 472,528	433,761

	2019	2018
Operating revenue	$ 85,259	144,230
Loss from continuing operations	$ (408,074)	(187,990)
Other comprehensive income	-	-
Total comprehensive income	$ (408,074)	(187,990)

	2019	2018
Shares of net assets of affiliates at the beginning	$ 433,761	185,537
Loss attributable to the Group	(199,956)	(92,115)
Exchange differences on translation of foreign financial statements attributable to the Group	4,263	(33,366)
Shares of net assets of affiliates at the end	238,068	60,056
Add: Issuance of shares in cash	248,320	349,970
Effect of changes in foreign exchange rates	(13,860)	23,735
Carrying amount of equity of affiliate attributable to the Group	$ 472,528	433,761

Summary of financial information for the individually insignificant investments in associates accounted for using the equity method were as follows. The aforementioned financial information was included in the consolidated financial statements of the Group:

	December 31, 2019	December 31, 2018
Total equity of the individually insignificant investments in associates	$ 60,063	99,047

	2019	2018
Attributable to the Group:		
Profit (losses)	$ 100	(25,722)
Other comprehensive income	-	49
Total comprehensive income	$ 100	(25,673)

(ii) Pledge to secure

(Continued)

As of December 31, 2019 and 2018, the investments accounted for using equity method were not pledged.

(h) Acquisition of non-controlling interests

(i) Chainwin Cayman

On January 11, August 19, 2019 and January 19, August 24, 2018, the Group subscribed the new shares contributed by Chainwin Cayman for $1,352,560 thousand, $282,510 thousand, $346,297 thousand and $1,228,800 thousand in cash, respectively. Plus, on January 22 and December 27, 2018, Chainwin Cayman repurchased its own shares amounting to $2,913 thousand and $69,120 thousand, respectively, and cancelled afterwards; therefore, for the years ended December 31, 2019 and 2018, the Group increased its ownership from 94.71% to 96.30% and 88.14% to 94.71%, respectively.

Based on the aforementioned transactions, the effects of the changes in shareholdings were as follows:

	2019	2018
Carrying amount of interest on acquisition	$ 1,622,872	1,537,267
Consideration paid	(1,635,070)	(1,575,097)
Retained earnings changes in ownership interests in subsidiaries	$ (12,198)	(37,830)

(ii) Jiangsu CM/ Merit Agriculture Development Co., Ltd.

On December 6, 2019, the Group subscribed the new shares contributed by Jiangsu CM/ Merit Agriculture Development Co., Ltd. for $40,932 thousand in cash, increasing its ownership from 90.79% to 100%.

On September 26 and November 29, 2018, the Group subscribed the new shares contributed by Jiangsu CM/ Merit Agriculture Development Co., Ltd. for $58,007 thousand and $302,134 thousand, respectively, in cash, increasing its ownership from 60% to 90.79%, successively.

Based on the aforementioned transactions, the effects of the changes in shareholdings were as follows:

	2019	2018
Carrying amount of non-controlling interest on acquisition	$ 40,847	357,398
Consideration paid to non-controlling interests	(40,932)	(360,141)
Retained earnings changes in ownership interests in subsidiaries	$ (85)	(2,743)

(Continued)

(iii) Phalanx Biotech Group, Inc.

On December 24, 2019, the Group subscribed the new shares contributed by Phalanx Biotech Group, Inc., for $300,000 thousand in cash, increasing its ownership from 45.71% to 58.87%. For the year ended December 31, 2018, there was no such transaction.

Based on the aforementioned transaction, the effects of the changes in shareholdings were as follows:

		2019
Carrying amount of non-controlling interest on acquisition	$	187,207
Consideration paid to non-controlling interests		(300,000)
Aforementioned changes in ownership interests in subsidiaries	$	(112,793)

Aforementioned changes in ownership interests in subsidiaries included separately:

		2019
Capital surplus	$	(5,161)
Retained earnings		(107,632)
	$	(112,793)

(i) Acquisition of subsidiary

On July 12, 2018, the Group became the largest shareholder of PBL and obtained control over it since then, increasing its ownership from 37.88% to 45.71%. PBL is mainly engaged in researching, manufacturing and selling of high density chips and providing testing service.

From the acquisition date to December 31, 2018, PBL contributed revenue and net loss of $20,038 thousand and $63,847 thousand, respectively. If the acquisition had occurred on January 1, 2018, the management estimates that consolidated revenue would have been $41,567 thousand and the consolidated net loss would have been $117,589 thousand. The abovementioned influences do not include adjustments on fair value.

The acquisition-date fair value of major class of consideration transferred were as follows:

(i) Consideration transferred

The Group subscribed the new shares contributed by PBL and became the largest shareholder of PBL, and obtained control over it since then. The Group expects PBL’s future generated cash flow in accordance with the income approach that reflects the time value of investment and the risk of the discounted cash flow, and evaluates the implied consideration transferred of controlling over PBL.

The fair value measurement for the controlling interests has been categorized as a Level 3 fair value based on the inputs to the valuation technique used. The key assumptions are as follows:

1) The discount rate is based on the weighted-average cost of capital that computed by PBL and its comparable capital structures and corresponded by the market value;

(Continued)

2) Seven years of cash flows were included in the discounted cash flow model. Budgeted annual earnings after tax, before interest, depreciation and amortization was based on expectations of future outcomes taking into account past experience, adjusted for the anticipated revenue growth.

The shares of PBL held by the Group were measured and the fair value per share was $15 at the acquisition date.

(ii) The following table summarizes the recognized amounts of assets acquired and liabilities assumed at the acquisition date:

Cash and cash equivalents	$	180,540
Notes and accounts receivable		5,651
Inventories		19,984
Other current assets		24,281
Property, plant and equipment (Note 6(j))		15,881
Intangible assets (Note 6(m))		842
Other non-current assets		11,240
Notes and accounts payable		(2,522)
Other payables		(13,156)
Other current liabilities		(13,071)
Total identifiable net assets acquired	**$**	**229,670**

(iii) Goodwill arising from the acquisition has been recognized as follows:

Consideration transferred	$	123,750
Fair value of pre-existing interest in Phalanx Biotech Group, Inc.		300,000
Non-controlling interest in the acquire (proportionate share of the fair value of the identifiable net assets)		124,683
Less: Fair value of identifiable net assets		(229,670)
Goodwill (Note 6(m))	**$**	**318,763**

The Group re-measured the fair value of its existing equity interest in PBL before the business combination, and the resulting gain of $273,432 thousand was recognized as “other gains and losses”.

Goodwill mainly attributed to the profitability in the microarray services market and the know-how of PLB work force.

(Continued)

(j) Property, plant and equipment

The movements in property, plant and equipment were as follows:

	Land	Buildings and structures	Machinery and equipment	Factory and equipment	Other equipment	Construction in progress and inspection-awaited devices	Total
Cost:							
Balance as of January 1, 2019	$ 2,546,534	2,188,435	20,141,998	4,241,965	507,810	1,745,695	31,372,437
Additions	-	69,039	1,384,618	562,275	103,295	1,565,392	3,684,619
Reclassification (Note 1)	-	185,684	2,203,617	1,010,076	11,589	(1,005,156)	2,405,810
Disposals	-	(858)	(2,729,332)	(95,206)	(83,085)	(2,865)	(2,911,346)
Effect of changes in foreign exchange rates	-	(2,130)	(219)	(1,787)	(1,841)	(78,708)	(84,685)
Balance as of December 31, 2019	$ 2,546,534	2,440,170	21,000,682	5,717,323	537,768	2,224,358	34,466,835
Balance as of January 1, 2018	$ 2,546,534	2,153,117	17,777,113	4,255,435	363,944	649,245	27,745,388
Acquisitions through business combinations	-	-	22,975	-	2,708	-	25,683
Additions	-	16,608	1,549,416	84,393	163,532	1,243,747	3,057,696
Reclassification (Note 2)	-	19,798	1,197,356	33,775	58,127	(146,002)	1,163,054
Disposals	-	(124)	(404,674)	(130,889)	(79,577)	-	(615,264)
Effect of changes in foreign exchange rates	-	(964)	(188)	(749)	(924)	(1,295)	(4,120)
Balance as of December 31, 2018	$ 2,546,534	2,188,435	20,141,998	4,241,965	507,810	1,745,695	31,372,437
Accumulated depreciation:							
Balance as of January 1, 2019	$ -	689,336	12,637,886	2,240,384	236,579	-	15,804,185
Depreciation	-	111,228	2,573,484	428,655	146,380	-	3,259,747
Disposals	-	(858)	(2,286,215)	(91,973)	(82,575)	-	(2,461,621)
Effect of changes in foreign exchange rates	-	(427)	(88)	(635)	(636)	-	(1,786)
Balance as of December 31, 2019	$ -	799,279	12,925,067	2,576,431	299,748	-	16,600,525
Balance as of January 1, 2018	$ -	584,763	10,563,890	1,956,057	172,410	-	13,277,120
Acquisitions through business combinations	-	-	8,267	-	1,535	-	9,802
Depreciation	-	104,835	2,465,639	416,731	140,068	-	3,127,273
Reclassification	-	-	-	(1,228)	1,228	-	-
Disposals	-	(124)	(399,874)	(130,885)	(78,418)	-	(609,301)
Effect of changes in foreign exchange rates	-	(138)	(36)	(291)	(244)	-	(709)
Balance as of December 31, 2018	$ -	689,336	12,637,886	2,240,384	236,579	-	15,804,185
Carrying value:							
Balance as of December 31, 2019	$ 2,546,534	1,640,891	8,075,615	3,140,892	238,020	2,224,358	17,866,310
Balance as of January 1, 2018	$ 2,546,534	1,568,354	7,213,223	2,299,378	191,534	649,245	14,468,268
Balance as of December 31, 2018	$ 2,546,534	1,499,099	7,504,112	2,001,581	271,231	1,745,695	15,568,252

Note 1: Inventories, prepayments for business facilities, and capitalized right-of-use depreciation expenses were reclassified as property, plant and equipment.

Note 2: Inventories, prepayments for business facilities, and prepaid expenses were reclassified as property, plant and equipment.

(Continued)

(i) Pledge to secure

As of December 31, 2019 and 2018, property, plant and equipment were subject to a registered debenture to secured bank loans and line of credit, the collateral for these long-term borrowings was disclosed in Note 8.

(ii) Property, plant and equipment under construction

The Group rented some pieces of land and entered into different agreements for the construction of its new factories on the said lands. As of December 31, 2019, the Group has partially paid the price of $934,806 thousand, recognized construction in progress.

(iii) For the years ended December 31, 2019 and 2018, capitalized interest expenses amounted to $36,299 thousand and $44,164 thousand, respectively. The annual interest rates at which these interest expenses were capitalized ranged from 1.08%~1.34% and 1.14%~1.34%, respectively.

(k) Right-of-use assets

The Group leases many assets including land, buildings and structures and other equipment. The movements in right-of-use assets were as follows:

	Land	Buildings and structures	Other equipment	Total
Cost:				
Balance at January 1, 2019	$ -	-	-	-
Effects of retrospective application for IFRS 16	243,163	86,773	7,880	337,816
Additions	241,412	22,350	3,795	267,557
Disposals	(77,127)	(5,231)	(650)	(83,008)
Effect of change in foreign exchange rates	(15,699)	-	-	(15,699)
Balance at December 31, 2019	$ 391,749	103,892	11,025	506,666
Accumulated depreciation:				
Balance at January 1, 2019	$ -	-	-	-
Depreciation (Note)	26,443	35,858	4,637	66,938
Disposals	(1,349)	(129)	(650)	(2,128)
Effect of change in foreign exchange rates	(492)	-	-	(492)
Balance at December 31, 2019	$ 24,602	35,729	3,987	64,318
Carrying amount:				
Balance at December 31, 2019	$ 367,147	68,163	7,038	442,348

Note: Including capitalized depreciation expenses transferred to construction in process, which amounted to $8,560 thousand.

(Continued)

(l) Investment property

The movements in investment property were as follows:

		Land	Buildings and structures	Total
Cost:				
Balance as of January 1, 2019	$	963,127	529,952	1,493,079
Additions		-	-	-
Balance as of December 31, 2019	$	963,127	529,952	1,493,079
Balance as of January 1, 2018	$	963,127	529,952	1,493,079
Additions		-	-	-
Balance as of December 31, 2018	$	963,127	529,952	1,493,079
Accumulated depreciation:				
Balance as of January 1, 2019	$	-	71,551	71,551
Depreciation		-	20,373	20,373
Balance as of December 31, 2019	$	-	91,924	91,924
Balance as of January 1, 2018	$	-	51,177	51,177
Depreciation		-	20,374	20,374
Balance as of December 31, 2018	$	-	71,551	71,551
Carrying amount:				
Balance as of December 31, 2019	$	963,127	438,028	1,401,155
Balance as of January 1, 2018	$	963,127	478,775	1,441,902
Balance as of December 31, 2018	$	963,127	458,401	1,421,528
Fair value:				
Balance as of December 31, 2019				$ 1,578,738
Balance as of December 31, 2018				$ 1,632,183

When measuring the fair value of its investment property, the Group considered the present value of net cash flows to be generated from leasing the property. The expected net cash flows were discounted using the yield to reflect its specified inherit risk on the net cash flows. The inputs to the valuation technique used for measuring fair value were categorized as a Level 2 fair value.

As of December 31, 2019 and 2018, the yield applied to the net annual rentals to determine fair value of property for which current prices in an active market were unavailable, was as follows:

Location	2019	2018
Hsinchu	0.31%	0.24%
Taoyuan	0.34%	1.41%

(Continued)

As of December 31, 2019 and 2018, investment property was subject to a registered debenture to secured bank loans and line of credit, the collateral for these long-term borrowings was disclosed in Note 8.

(m) Intangible assets

(i) The movements in intangible assets were as follows:

		Technical know-how	Computer software and information systems	Goodwill	Land use rights	Others	Total
Cost:							
Balance as of January 1, 2019	$	46,005	150,871	446,068	32,591	25,628	701,163
Effects of retrospective application for IFRS 16		-	-	-	(32,591)	-	(32,591)
Additions		3,275	73,337	-	-	358	76,970
Reclassification (Note)		-	15,671	-	-	-	15,671
Disposals		-	(51,259)	-	-	(2,850)	(54,109)
Effect of changes in foreign exchange rates		-	(202)	(3,066)	-	(508)	(3,776)
Balance as of December 31, 2019	$	49,280	188,418	443,002	-	22,628	703,328
Balance as of January 1, 2018	$	46,051	119,718	123,327	31,448	26,059	346,603
Acquisition through business combinations		-	1,802	318,763	-	-	320,565
Additions		-	53,679	-	1,765	3,853	59,297
Reclassification (Note)		(46)	9,957	-	-	-	9,911
Disposals		-	(34,465)	-	-	(4,944)	(39,409)
Effect of changes in foreign exchange rates		-	180	3,978	(622)	660	4,196
Balance as of December 31, 2018	$	46,005	150,871	446,068	32,591	25,628	701,163
Amortization:							
Balance as of January 1, 2019	$	31,309	69,882	-	677	12,342	114,210
Effects of retrospective application for IFRS 16		-	-	-	(677)	-	(677)
Amortization		4,535	56,134	-	-	6,324	66,993
Disposals		-	(51,259)	-	-	(2,850)	(54,109)
Effect of changes in foreign exchange rates		-	(170)	-	-	(373)	(543)
Balance as of December 31, 2019	$	35,844	74,587	-	-	15,443	125,874
Balance as of January 1, 2018	$	27,494	52,510	-	53	8,702	88,759
Acquisition through business combinations		-	960	-	-	-	960
Amortization		3,834	50,798	-	637	8,319	63,588
Reclassification		(19)	19	-	-	-	-
Disposals		-	(34,465)	-	-	(4,944)	(39,409)
Effect of changes in foreign exchange rates		-	60	-	(13)	265	312
Balance as of December 31, 2018	$	31,309	69,882	-	677	12,342	114,210
Carrying value:							
Balance as of December 31, 2019	$	13,436	113,831	443,002	-	7,185	577,454
Balance as of January 1, 2018	$	18,557	67,208	123,327	31,395	17,357	257,844
Balance as of December 31, 2018	$	14,696	80,989	446,068	31,914	13,286	586,953

Note: Other current assets were reclassified as intangible assets.

(Continued)

(ii) Amortization expense recognized in profit or loss

For the years ended December 31, 2019 and 2018, the amortization expenses of intangible assets were as follows:

		2019	2018
Operating costs	$	18,578	18,131
Operating expenses		48,415	45,457
	$	66,993	63,588

(iii) Impairment testing for goodwill

1) Chainwin Cayman

The goodwill of $132,278 thousand was derived from the acquisition of and the control over Chainwin Cayman by the Group on August 19, 2016. The goodwill was mainly attributed to the profitability of the hog farming in Mainland China. Chainwin Cayman is regarded as a cash-generating units (the "CGU") to generate cash inflows that are independent of those from others. Therefore, the amount on impairment loss of goodwill, which was evaluated by using the value in use, exceeds the carrying amount of the net asset.

Also, the Group estimated its operating revenue for certain periods based on the purchase price allocation valuation report issued by the specialist, who was entrusted by the Group. The preceding estimation was analyzed based on the financial forecasts from 2016 to 2021. The construction of certain factory farms of Chainwin Cayman had been delayed, resulting in failure to increase the scale on farm raising. Therefore, the actual operating revenue for the years of 2019 and 2018 decreased by 89% and 88%, respectively, which were lower than the original forecast.

On December 31, 2019 and 2018, the recoverable amount determined by the value-in-use for the cash-generating unit is higher than the carrying amount. Therefore, there is no impairment loss should be recognized.

The total amount of goodwill has been allocated to the agriculture technology for the Group’s impairment testing purpose. The CGU are used as the minimum level for investment return of goodwill supervised by the management.

The Group’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 key assumption used in the estimation of the value-in-use of the CGU were as follows:

a) The future cash flow was based on expectations of future operations, taking into account past experience, adjusted for the anticipated revenue growth. Revenue growth was projected taking into account the average growth levels experienced over the past year, and the estimated sales volume and price growth for the next five years. The assumptions were in line with the information obtained from external local market who publish a statistical analysis on market trends.

(Continued)

b) The assumption on before-tax discount rate is based on the weighted average cost of capital. As of December 31, 2019 and 2018, the applied before-tax discount rate of the recoverable amount of the units were 11.49% and 8.95%, respectively.

2) PLB

The goodwill of $318,763 thousand was derived from the Group became the largest shareholder of and obtained control over PBL on July 12, 2018. The goodwill was mainly attributed to the profitability in microarray services market and the know-how of PLB work force. PBL is regarded as a CGU to generate cash inflows that are independent of those from others. Therefore, the amount on impairment loss of goodwill, which was evaluated by using the value in use, exceeds the carrying amount of the net asset.

Also, the Group estimated its operating revenue for certain periods based on the purchase price allocation valuation report issued by the specialist, who was entrusted by the Group. The preceding estimation was analyzed based on the financial forecasts from 2018 to 2025. The technology transfer cases of PLB did not be finished on time, and therefore, the actual operating revenue for the year of 2019 reached by 76%, which was lower than the original forecast.

On December 31, 2019 and 2018, the recoverable amount determined by the value-in-use for the cash-generating unit is higher than the carrying amount. Therefore, there is no impairment loss should be recognized.

The total amount of goodwill has been allocated to the gene chip testing service for the Group’s impairment testing purpose. The CGU are used as the minimum level for investment return of goodwill supervised by the management.

The Group’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 key assumption used in the estimation of the value-in-use of the CGU were as follows:

a) The future cash flow was based on expectations of future operations, taking into account past experience, adjusted for the anticipated revenue growth. Revenue growth was projected taking into account the average growth levels experienced over the past year, and the estimated sales volume and price growth for the next 19 years.

b) The assumption on before-tax discount rate is based on the weighted average cost of capital. As of December 31, 2019 and 2018, the applied before-tax discount rate of the recoverable amount of the units were 10.38% and 9.49%, respectively.

(iv) As of December 31, 2019 and 2018, the intangible assets were not pledged.

(Continued)

(n) Other current assets and other non-current assets

	December 31, 2019	December 31, 2018
Other receivables from metal recycling	$ 16,489	108,738
Business tax refund receivables	148,896	70,603
Long-term prepaid rent	-	3,150
Prepaid expenses	110,080	90,475
Restricted assets	41,580	41,799
Refundable deposits	51,358	46,556
Other receivables	34,028	16,550
Long-term prepaid intangible assets	51,813	-
Offset against business tax payable	80,273	40,585
Others	14,838	14,626
	$ 549,355	433,082

(o) Short-term borrowings

	December 31, 2019	December 31, 2018
Unused bank credit lines for short-term borrowings	$ 1,153,882	2,190,784
Unused bank credit lines for short-term and long-term borrowings	$ 3,276,609	3,068,629

(p) Long-term borrowings

	December 31, 2019	December 31, 2018
Secured long-term borrowings (in NTD)	$ 1,620,000	1,572,600
Secured long-term syndicated borrowings (in USD)	562,125	-
Unsecured long-term borrowings (in NTD)	3,606,000	4,230,000
Less: long-term liabilities, current portion	-	-
Total	$ 5,788,125	5,802,600
Unused bank credit lines for long-term borrowings	$ 9,221,400	5,779,000
Annual interest rate	0.98%~2.88%	1.08%~1.40%
Expiry date	2021/6/15~2025/8/16	2020/3/31~2025/8/16

(Continued)

As of December 31, 2019, the remaining balances of the borrowing due were as follows:

Year due	Amount
January 1, 2021~December 31, 2021	$ 1,035,000
January 1, 2022~December 31, 2022	2,578,125
January 1, 2023 and after	2,175,000
	$ 5,788,125

(i) The unused bank credit lines for short-term and long-term borrowings at the reporting date were disclosed in Note 6(o).

(ii) The collateral for these long-term borrowings was disclosed in Note 8.

(iii) In June 2019, the Group entered into a three-year syndicated loan agreement with Far Eastern International Bank and other four banks. The total credit facility under this loan agreement is US$200,000 thousand.

The related financial covenants and restrictions for the syndicated loans mentioned above were as follows:

1) At the end of reporting period, current ratio (current assets / current liabilities): shall not be lower than 100%;

2) Interest coverage ratio [(profit before tax + depreciation + amortization + interest expense) / interest expense)]: shall not be lower than 100%; and

3) Tangible net assets value (equity － intangible assets): shall not be lower than NT$15,000,000 thousand.

After the guarantor signs the loan agreement, the aforementioned financial ratio and criteria will be reviewed semi-annually, which are based on the year-end consolidated financial statements audited by the Certified Public Accountants (CPAs) that are approved by the leading bank, as well as the semi-annual consolidated financial statements reviewed by the CPAs.

For the year ended December 31, 2019, the Group was in compliance with the above financial covenants and restrictions.

(q) Lease liabilities

The carrying amounts of lease liabilities were as follow:

	December 31, 2019
Current	$ 68,740
Non-current	$ 300,587

For the maturity analysis, please refer to Note 6(aa).

(Continued)

The amounts recognized in profit or loss were as follows:

	2019
Interest expenses on lease liabilities	$ 6,040
Expenses relating to short-term leases	$ 9,666
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	$ 1,303

The amounts recognized in the statement of cash flows for the Group was as follows:

	2019
Total cash outflow for leases	$ 122,004

(i) Real estate and buildings leases

The Group leases land and buildings for its factories and staff dormitories. The leases of them typically run for a period of 2 to 50 years.

(ii) Other leases

The Group leases printer and transportation equipment, with lease terms of 2 to 6 years.

(iii) Others

Parts of the leases of land, transportation equipment, office and staff dormitories are with contract terms of less than one year. These leases are short-term. The Group has elected not to recognize right-of-use assets and lease liabilities for these leases. Also, some leases contain cancellation options exercisable by the Group. In which leasee is not reasonably certain to use an optional extended lease term, payments associated with the optional period are not included within lease liabilities.

(r) Operating lease

(i) Lease-lessor

The Group leased its investment property under operating lease, which was disclosed in Note 6(l).

For the years ended December 31, 2019 and 2018, the rental income recognized in other income amounting to $75,425 thousand and $79,426 thousand, respectively.

(ii) Lease-lessee

As of December 31, 2018, the Group leases a number of factories, office, parking lots and land etc. under operating lease. The leases typically run for a period of 1 to 30 years.

For the year ended December 31, 2018, the rent expenses amounted to $70,989 thousand which were recorded as operating costs and operating expenses.

(Continued)

(s) Employee benefits

(i) Defined benefit plans

Reconciliation of defined benefit obligation at present value and plan asset at fair value were as follows:

	December 31, 2019	December 31, 2018
Present value of the defined benefit obligations	$ 144,155	141,119
Fair value of plan assets	(45,194)	(42,653)
Net defined benefit liabilities (Note)	$ 98,961	98,466

Note: Recognized liabilities for defined benefit obligations were recognized as other non-current liabilities.

The Group makes defined benefit plan contributions to the pension fund account in the Bank of Taiwan that provides pensions for employees upon retirement. Plans (covered by the Labor Standards Law) entitle a retired employee to receive an annual payment based on years of service and average salary prior to six months of retirement.

1) Composition of plan assets

The Group set aside pension funds in accordance with the legislation from the Ministry of Labor and managed by the Bureau of Labor Founds. The annual budget for the allocation of the minimum income cannot be lower than the income calculated based on the interest rate of the banks’ two-year time deposit in accordance with the legislation “Management and Utilization of the Labor Pension Funds”.

The Group’s labor pension reserve account balance in the Bank of Taiwan amounted to $45,194 thousand as of December 31, 2019. The utilization of the labor pension fund assets includes the asset allocation and the yield of the fund. Please refer to the website of Bureau of Labor Founds, Ministry of Labor.

2) The movements in present value of the defined benefit obligations

For the years ended December 31, 2019 and 2018, movements in the present value of the defined benefit obligations for the Group were as follows:

	2019	2018
Defined benefit obligations at the beginning	$ 141,119	102,900
Current service costs and interest cost	4,190	3,205
Remeasurements of the net defined benefit liability (asset):		
－Actuarial (gains) losses arising from financial assumption	4,175	26,107
－Experience adjustments	(5,329)	8,907
Defined benefit obligations at the end	$ 144,155	141,119

(Continued)

3) The movements in fair value of the defined benefit plan assets

For the years ended December 31, 2019 and 2018, movements in the fair value of the plan assets were as follows:

	2019	2018
Fair value of plan assets at the beginning	$ 42,653	40,312
Interest revenue	579	647
Remeasurements of the net defined benefit liability (asset):		
－Return on plan assets (excluding the interest revenue)	1,338	963
Amounts contributed to plan	624	731
Fair value of plan assets at the end	$ 45,194	42,653

4) The movement in effect of plan asset ceiling

For the years ended December 31, 2019 and 2018, there were no changes in the effect of plan asset ceiling.

5) The expenses recognized in profit or losses

For the years ended December 31, 2019 and 2018, the expenses recognized in profit or losses for the Group were as follows:

	2019	2018
Current service costs	$ 2,296	1,579
Net interest expense of net defined benefit liabilities (assets)	1,315	979
	$ 3,611	2,558

	2019	2018
Administrative expenses	$ 3,611	2,558

6) The remeasurements of the net defined benefit liabilities (assets) recognized in other comprehensive income

For the years ended December 31, 2019 and 2018, the remeasurements of the net defined benefit liabilities (assets) recognized in other comprehensive income were as follows:

	2019	2018
Balance at the beginning	$ 64,717	30,666
Recognized in the current period	(2,492)	34,051
Balance at the end	$ 62,225	64,717

(Continued)

7) Actuarial assumptions

At the end of the reporting date, the principal actuarial assumptions were as follows:

	December 31, 2019	December 31, 2018
Discount rate	1.125%	1.375%
Future salary rate increases	4.500%	4.500%

The Group expects to make contributions of $129 thousand to the defined benefit plans in the next year starting from December 31, 2019. The weighted average duration of the defined benefit plans is 16.28 years.

8) Sensitivity analysis

As of December 31, 2019 and 2018, the changes in main actuarial assumptions might have an impact on the present value of the defined benefit obligation as follows:

	Influences of defined benefit obligations	
	Increase by 0.25%	Decrease by 0.25%
Balance as of December 31, 2019		
Discount rate	$ (4,175)	4,333
Future salary rate increases	4,121	(3,990)
Balance as of December 31, 2018		
Discount rate	$ (4,288)	4,475
Future salary rate increases	4,264	(4,124)

There is no change in other assumptions when performing the above-mentioned sensitivity analysis. In practice, assumptions may be interactive with each other. The method used on sensitivity analysis is consistent with the calculation on the net pension liabilities.

There is no change in the method and assumptions used in the preparation of sensitivity analysis for 2019 and 2018.

(ii) Defined contribution plans

The Group set aside 6% of the contribution rate of the employee’s monthly wages to the Labor Pension personal account of the Bureau of Labor Insurance in accordance with the provisions of the Labor Pension Act. The Group set aside a fixed amount to the Bureau of Labor Insurance without the payment of additional legal or constructive obligations.

The Group set aside $99,527 thousand and $93,963 thousand, respectively, of the pension under the pension plan costs to the Bureau of Labor Insurance for the years ended December 31, 2019 and 2018.

(Continued)

(iii) The Group's Mainland China subsidiaries have a defined contribution plan. Monthly contributions to an independent fund administered by the government in accordance with the pension regulations in the People's Republic of China (PRC) are based on certain percentage of employees' monthly salaries and wages. Other than the monthly contributions, the Group has no further obligations. For the years ended December 31, 2019 and 2018, the Group recognized the pension costs in accordance with the pension regulations and amounted to $5,090 thousand and $3,397 thousand, respectively.

(t) Income tax

(i) Income tax expense

The amount of income tax expense were as follows:

		2019	2018
Current tax expense (benefit)			
Current period	$	1,101,622	764,816
Adjustment for prior periods		(8,432)	(11,894)
Subtotal		1,093,190	752,922
Deferred tax expense (benefit)			
Origination and reversal of temporary differences		(100,523)	(77,567)
Adjustment in tax rate		-	(6,794)
Subtotal		(100,523)	(84,361)
Income tax expense	$	992,667	668,561

The amount of income tax (expense) benefit recognized in other comprehensive income for the years ended December 31, 2019 and 2018 were as follows:

		2019	2018
Components of other comprehensive income that will not be classified to profit or loss:			
The remeasurements of defined benefit plans	$	(499)	7,730

(Continued)

Reconciliation of income tax expenses (benefit) and profit before tax were as follows:

	2019	2018
Profit before tax	$ 5,393,428	3,734,623
Estimated income tax calculated using the Company's domestic tax rate	$ 1,078,685	746,924
Adjustment in tax rate	-	(6,794)
Tax-exempt income	(77,433)	(16,660)
Investment tax credits	(75,519)	(61,550)
Change in unrecognized deductible temporary differences	1,933	33,152
Change in provision in prior periods	(8,432)	(11,894)
Surtax on unappropriated earnings (2019: 5%; 2018: 10%)	37,906	42,928
Others	35,527	(57,545)
	$ 992,667	668,561

(ii) Deferred tax assets and liabilities

1) Unrecognized deferred tax assets and liabilities

Deferred tax assets have not been recognized in respect of the following items:

	December 31, 2019	December 31, 2018
Tax effect of deductible temporary differences	$ 40,442	51,984
The carry forward of unused tax losses	171,684	158,209
	$ 212,126	210,193

The R.O.C. Income Tax Act allows net losses, as assessed by the tax authorities, to offset taxable income over a period of ten years for local tax reporting purposes. Deferred tax assets have not been recognized in respect of these items because it is not probable that future taxable profit will be available against which the Group can utilize the benefits therefrom.

(Continued)

As of December 31, 2019, the information of the Group's unutilized business losses for which no deferred tax assets were recognized are as follows:

Year of loss	Unutilized business loss	Expiry date
2010	$ 48,013	2020
2011	74,383	2021
2012	44,302	2022
2013	49,138	2023
2014	53,221	2024
2015	50,740	2025
2016	77,243	2026
2017	142,749	2027
2018	152,741	2028
2019	165,891	2029
	$ 858,421	

As of December 31, 2019 and 2018, there were no deferred tax liabilities have not been recognized.

2) Changes in the amount of deferred tax assets and liabilities for the years ended December 31, 2019 and 2018 were as follows:

	Allowance for obsolete inventories	Difference in depreciation expense between financial and tax method	Unrealized investment loss recognized under equity method	Others	Total
Deferred tax assets:					
Balance as of January 1, 2019	$ 32,474	58,961	3,102	41,265	135,802
Recognized in profit or loss	6,162	1,582	76,766	16,013	100,523
Recognized in other comprehensive income	-	-	-	(499)	(499)
Balance as of December 31, 2019	$ 38,636	60,543	79,868	56,779	235,826
Balance as of January 1, 2018	$ 22,992	23,256	2,817	28,135	77,200
Recognized in profit or loss	9,482	35,705	285	5,400	50,872
Recognized in other comprehensive income	-	-	-	7,730	7,730
Balance as of December 31, 2018	$ 32,474	58,961	3,102	41,265	135,802

(Continued)

	Unrealized investment income recognized under equity method	Total
Deferred tax liabilities:		
Balance as of January 1, 2018	$ 33,489	33,489
Recognized in profit or loss	(33,489)	(33,489)
Balance as of December 31, 2018	$ -	-

There was no change in the amount of deferred tax liabilities for the year ended December 31, 2019.

(iii) Assessment

The Company's corporate income tax returns for all the years through 2017 were assessed and approved by the tax authorities National Taxation Bureau of the Northern Area, Ministry of Finance.

(u) Capital and other equity

(i) Ordinary share issuance

As of December 31, 2019 and 2018, the Company's authorized share capital consisted of 1,000,000 thousand shares of ordinary shares, with $10 dollars par value per share, of which 424,056 thousand shares, and 423,814 thousand shares, respectively, were issued. The Company has reserved $1,000,000 thousand for employee stock options.

Reconciliations of shares outstanding for the years ended December 31, 2019 and 2018:

	Ordinary share (in thousands)	
	2019	**2018**
Balance as of beginning	423,814	422,666
Restricted shares of stock issued for employees	262	1,148
Redeem restricted shares of stock issued for employees	(20)	-
Balance as of ending	**424,056**	**423,814**

On March 21, 2019, the Company's Board of Directors approved a resolution to redeem the unvested restricted employee share of stock amounting to 20 thousand shares, at $10 dollars par value per share, amounting to $200 thousand. The recognition date for capital reduction was March 31, 2019. Accordance with the resolution of Board of Directors meeting held on May 14, 2019, the Company issued 262 thousand shares, at $10 dollars par value per share, amounting to $2,620 thousand. All related registration procedures had been completed.

(Continued)

On June 15, 2018, the shareholders' meeting approved a resolution to issue 1,700 thousand new restricted employee shares, at $10 dollars par value per share, amounting to $17,000 thousand, to full-time regular employees who meet specific requirements. The above transaction had been approved by the Financial Supervisory Commission. In accordance with the resolution of Board of Directors meeting held on September 14, 2018, the Company issued 1,148 thousand shares, at $10 dollars par value per share, amounting to $11,480 thousand. The aforementioned stock issuance had been registered with the government authorities.

(ii) Capital surplus

The detail of capital surplus at the reporting date were as follows:

	December 31, 2019	December 31, 2018
Additional paid-in capital	$ 9,031,035	9,031,035
Changes in equity of associates and joint ventures accounted for using equity method	-	635
Employee stock options	1,452	3,810
Restricted shares of stock issued for employees	211,821	163,877
	$ 9,244,308	9,199,357

In accordance with amended Company Act, realized capital reserves can only be reclassified as share capital or be distributed as cash dividends after offsetting against losses. The aforementioned capital reserves include share premiums and donation gains. In accordance with the Regulations Governing the Offering and Issuance of Securities by Securities Issuers, the actual amount of capital reserves to be reclassified under share capital shall not exceed 10% of the actual share capital amount.

(iii) Retained earnings

The Company's Articles of Incorporation stipulate that 10% of the balance of annual income or earnings after deducting accumulated deficit, if any, must be set aside as a legal reserve and a special capital reserve is likewise appropriated or the annual income or earnings are retained in accordance with the relevant laws or regulations or as requested by the authorities. Otherwise, the Company shall set aside at least 50% for shareholder, the distribution of remaining balance of the earnings should be further proposed by the Board of Directors and resolved by the shareholders' meeting. And the cash dividends should not lower than 10% of the total stockholders' dividends.

It is authorized the distributable dividends and bonuses or legal capital reserve and capital reserve in whole or in part may be paid in cash after a resolution has been adopted by a majority vote at a meeting of the Board of Directors attended by two-thirds of the total number of directors; and in addition thereto a report of such distribution shall be submitted to the shareholders' meeting.

(Continued)

As the Company is a technology and capital-intensive enterprise and is in its growth phase, it has adopted a more prudent approach in appropriating its remaining earnings as its dividend policy in order to sustain its long-term capital needs and thereby maintain continuous development and steady growth.

1) Legal reserve

If the Company experienced profit for the year, the meeting of shareholders shall decide on the distribution of the legal reserve either by new shares or by cash of up to 25% of the actual share capital.

2) Special reverse

In accordance with Permit No. 1010012865 issued by the FSC on April 6, 2012, a portion of current period earnings and undistributed prior period earnings shall be reclassified as a special earnings reserve during earnings distribution. The amount to be reclassified should be equal to the total net reduction of current period of other shareholders' equity resulting from the IFRS first-time adoption. Similarly, a portion of undistributed prior period earnings shall be reclassified as a special earnings reserve (and does not qualify for earnings distribution) to account for cumulative changes to other shareholders' equity pertaining to prior periods due to the IFRS first time adoption. Amounts of subsequent reversals pertaining to the net reduction of other shareholders' equity shall qualify for additional distributions.

3) Appropriations of earnings

The appropriations of earning for 2018 and 2017 had been approved in shareholders' meetings held on June 14, 2019 and June 15, 2018, respectively. The appropriations and dividends were as follows:

	2018	2017
Cash dividends	$ 2,118,972	2,958,665

The above-mentioned appropriations of earning for 2018 and 2017 were consistent with the resolutions of the meeting of the Board of Directors.

The related information mentioned above can be found on websites such as the Market Observation Post System.

On March 18, 2020, the Company's Board of Directors resolved to appropriate the 2019 earnings. The earnings were appropriated as follows:

	2019	
	Amount per share (in dollars)	Total amount
Cash dividends	$ 7.00	$ 2,968,395

(Continued)

(iv) Other equity interests, net of tax

		Exchange differences on translation of foreign financial statements	Unrealized gains (losses) on financial assets at fair value through other comprehensive income	Other unearned compensation for restricted shares of employees
Balance as of January 1, 2019	$	(36,200)	958,390	(158,308)
Foreign currency differences (net of tax):				
The Group		(147,365)	-	-
Associates		4,115	-	-
Unrealized gain (losses) from financial assets measured at fair value through other comprehensive income (net of tax)		-	2,114,856	-
Cumulative gains (losses) reclassified to retained earnings on disposal of investments in equity instruments at fair value through other comprehensive income (net of tax)		-	16,640	-
Issuance of restricted shares of employees		-	-	(50,364)
Compensation cost arising from restricted shares of stock issued to employees		-	-	71,643
Balance as of December 31, 2019	$	(179,450)	3,089,886	(137,029)

		Exchange differences on translation of foreign financial statements	Unrealized gains (losses) on financial assets at fair value through other comprehensive income	Unrealized gains (losses) on available-for-sale financial assets	Other unearned compensation for restricted shares of employees
Balance as of January 1, 2018	$	(100,208)	-	1,568,176	-
Effects of retrospective application		-	1,401,839	(1,568,176)	-
Balances at the beginning after adjusted		(100,208)	1,401,839	-	-
Foreign currency differences (net of tax):					
The Group		95,350	-	-	-
Associates		(29,921)	-	-	-
Disposal of investments accounted for using equity method		(1,421)	-	-	-
Unrealized gain (losses) from financial assets measured at fair value through other comprehensive income (net of tax)		-	(352,044)	-	-
Cumulative gains (losses) reclassified to retained earnings on disposal of investments in equity instruments at fair value through other comprehensive income (net of tax)		-	(91,405)	-	-
Issuance of restricted shares of employees		-	-	-	(175,357)
Compensation cost arising from restricted shares of stock issued to employees		-	-	-	17,049
Balance as of December 31, 2018	$	(36,200)	958,390	-	(158,308)

(v) Share-based payment

(Continued)

(i) The Company insurance restricted shares of stock for employee

On June 15, 2018, the shareholders' meeting approved a resolution to issue 1,700 thousand new restricted employee shares to full-time regular employees who meet specific requirements. The above transaction had been approved by the Financial Supervisory Commission. The Company decided that the grant date was set on August 22, 2018 and in accordance with the resolution of Board of Directors meeting held on September 14, 2018, the Company issued 1,148 thousand shares (the date of capital increase was set on September 14, 2018), with the fair-value on grant date amounting to $175,357 thousand. On March 21, 2019, the Company's Board of Directors approved a resolution to redeem the unvested restricted employee share of stock amounting to 20 thousand shares. The Company decided that the second grant date was set on May 10, 2019. And in accordance with the resolution of Board of Directors meeting held on May 14, 2019, the Company issued 262 thousand shares (the date of capital increase was set on May 14, 2019), with the fair-value on grant date amounting to $50,364 thousand. The remaining amount of 290 thousand shares will not be processed during the remaining period.

As of December 31, 2019, there were 1,390 thousand outstanding shares.

Those employees with the restricted stock awards (RSA) are entitled to purchase shares without cost under the conditions that these employees will continue to provide service to the Company for at least 3 years (from the grant date), and meet certain requirement. Based on the Company's requirements, the restricted employee shares should be fully vested in the third year after the grant date. These shares shall not be sold, pledged, transferred, gifted, or disposed by any other means to third parties during the custody period. During the vesting period, the RSA can participate in stock and cash dividends and subscription to cash rights issues and subscription is not required to be deposited in trust. The cash and stock dividends distributed during the custody period will be granted to the employees. If the shares remain unvested after the vesting period, the Company will redeem all the unvested shares, and cancel the shares thereafter.

For the years ended December 31, 2019 and 2018, the Company recognized the compensation cost of $71,643 thousand and $17,049 thousand for the aforementioned RSA, respectively.

(ii) The employee stock option plans (ESOPs) of subsidiary (PBL)

	2018 ESOPs
Grant date	2018.4.20
Number of options granted (unit)	5,560
Number of common shares eligible (share)	1,000
Contract period	2018.4.20~2026.4.19
Vesting period	2018.4.20~2021.4.19
Recipients	Employees of PBL

(Continued)

PBL used the Black-Scholes Model in measuring the fair value of its employee stock option at the date of grant. The main inputs to the valuation model were as follows:

	2018 employee stock options exercise in the 1st year	2018 employee stock options exercise in the 2nd year	2018 employee stock options exercise in the 3rd year
Fair value at grant date (dollars)	$ 3.93	$ 4.13	$ 4.32
Share price at grant date (dollars)	$ 11.29	$ 11.29	$ 11.29
Exercise price (dollars)	$ 11	$ 11	$ 11
Expected volatility	40%	40%	40%
Expected life	4.5 years	5 years	5.5 years
Risk-free interest rate	0.70%	0.74%	0.77%

Details of the employee stock options were as follows:

	2019		2018	
	Weighted average exercise price (expressed in dollars)	Shares of options (expressed in thousands)	Weighted average exercise price (expressed in dollars)	Shares of options (expressed in thousands)
Outstanding at January 1	$ 11	5,560	-	-
Granted during the period	-	-	11	5,560
Outstanding at December 31	11	5,560	11	5,560
Exercisable at December 31	-	2,224	-	-

For the year ended December 31, 2019 and from the acquisition date to December 31, 2018, PLB recognized the compensation cost of $6,132 thousand and $6,807 thousand for the aforementioned ESOPs, respectively.

(w) Earnings per share (“EPS”)

For the years ended December 31, 2019 and 2018, the Company’s earnings per share were calculated as follows:

	2019	2018
Basic earnings per share:		
Profit belonging to common shareholders	$ 4,474,399	3,124,454
Weighted average number of outstanding shares of common stock (in thousands shares)	422,666	422,666
Basic earnings per share (in dollars)	$ 10.59	7.39

(Continued)

		2019	2018
Diluted earnings per share:			
Profit belonging to common shareholders	$	4,474,399	3,124,454
Weighted average number of outstanding shares of common stock (in thousands shares)		422,666	422,666
Effect of potentially dilutive common stock			
Employee remuneration (in thousands shares)		1,531	2,381
Restricted employee shares (in thousands shares)		752	-
Weighted average number of common stock (diluted) (in thousands shares)		424,949	425,047
Diluted earnings per share (in dollars)	$	10.53	7.35

For the year ended December 2018, the new restricted employee shares have anti-diluted effect, therefore, the new restricted employee shares were not included in the calculation of effect on potentially diluted common stock.

(x) Revenue from contracts with customers

(i) Disaggregation of revenue

	2019				
		Segment-Foundry	Segment- Agriculture technology	Segment-Others	Total
Primary geographical markets:					
Asia	$	14,088,651	428,403	7,989	14,525,043
Americas		3,998,159	-	-	3,998,159
Taiwan		1,862,898	-	65,622	1,928,520
Europe		925,986	-	16	926,002
	$	20,875,694	428,403	73,627	21,377,724
Main product/ services lines:					
Foundry	$	20,874,280	-	-	20,874,280
Others		1,414	428,403	73,627	503,444
	$	20,875,694	428,403	73,627	21,377,724

(Continued)

	2018			
	Segment-Foundry	**Segment- Agriculture technology**	**Segment-Others**	**Total**
Primary geographical markets:				
Asia	$ 10,011,798	353,128	4,078	10,369,004
Americas	4,169,406	-	-	4,169,406
Taiwan	2,111,067	-	20,726	2,131,793
Europe	640,513	-	-	640,513
	$ 16,932,784	353,128	24,804	17,310,716
Main product/ services lines:				
Foundry	$ 16,932,330	-	-	16,932,330
Others	454	353,128	24,804	378,386
	$ 16,932,784	353,128	24,804	17,310,716

(ii) Balance of contracts

	December 31, 2019	**December 31, 2018**	**January 1, 2018**
Notes receivable	$ 684	459	-
Accounts receivable	2,410,333	1,424,223	1,595,442
Less: loss allowance	(4,344)	(2,317)	(2,086)
	$ 2,406,673	1,422,365	1,593,356
Contract liabilities (Note)	$ 260,426	112,694	99,514

Note: Contract liabilities are included in other current liabilities.

For details of accounts receivable and allowance for impairment, please refer to Note 6(c).

The major change in the balance of contract liabilities is the difference between the time frame in the performance obligation to be satisfied and the payment to be received. The amount of revenue recognized for the years ended December 31, 2019 and 2018, that was included in the contract liabilities balance at the beginning of the period was $91,383 thousand and $84,264 thousand, respectively.

(y) Employees' and directors' remuneration

According to the Company's Article of Incorporation, if there is any net profit after closing of a fiscal year, it shall be allocated according to the following principles:

(i) Employees' remuneration: not less than 5% but no more than 10% and shall be determined and pursuant to Employee Bonus Procedure of the Company. In addition, employee's profit-sharing remuneration shall be distributed in the form of shares or cash. Stock-type employee remuneration may be distributed to qualified employees of affiliates of the Company.

(Continued)

(ii) Remuneration of Directors: no more than 3%.

However, if there are any accumulated losses of the Company, the Company shall pre-reserve the amount to offset the loss. The distribution of employees' profit-sharing bonus and remuneration of Directors shall follow the special resolution by Board of Directors, and report it to the shareholders' meeting.

The Company estimated its employees' and directors' remuneration as follows:

		2019	2018
Employees' remuneration	$	368,400	255,600
Directors' remuneration		106,900	74,200
	$	475,300	329,800

The amount of employee remuneration, and directors' remuneration were estimated based on profit before tax, net of the amount of the remuneration, and multiplied by the rule of Company's Article of Incorporation. The above remuneration was included in the operating costs and operating expenses of the years ended December 31, 2019 and 2018. The differences between the actual distributed amounts as determined by the Board of Directors and those recognized in the financial statements, if any, shall be accounted for as changes in accounting estimates and recognized in profit or loss in the following year. There was no difference between the actual distributed amounts as determined by the Board of Directors and those recognized in the Company's parent-company-only financial statements of the years ended December 31, 2019 and 2018.

The related information mentioned above can be found on websites such as the Market Observation Post System.

(z) Non-operating income and expenses

(i) Other income

		2019	2018
Interest income:			
Interest income from bank deposits	$	67,107	57,334
Interest income from financial assets at amortized cost		205	697
Other interest income		53	1,033
Total interest income		67,365	59,064
Dividend income		121,790	97,268
Rent income		85,182	89,386
Total	$	274,337	245,718

(Continued)

(ii) Other gains and losses

		2019	2018
Gains (losses) on disposals of property, plant and equipment	$	(375,910)	2,210
Gains (losses) on disposals of investments		(25,666)	286,391
Foreign exchange gains (losses)		(74,602)	129,261
Gains (losses) on financial assets or liabilities at fair value through profit or loss		221,437	(32,394)
Others		67,217	30,366
Total	$	(187,524)	415,834

(iii) Finance costs

		2019	2018
Interest expenses	$	50,446	22,199
Other finance costs		253	257
Total	$	50,699	22,456

(aa) Financial instruments

(i) Credit risk

1) Exposure of credit risk

As at reporting, the Group's exposure to credit risk and the maximum exposure were mainly from:

a) The carrying amount of financial assets recognized in the consolidated balance sheet; and

b) The amount of liabilities as a result from the Group providing financial guarantees was $220,353 thousand and $225,792 thousand as of December 31, 2019 and 2018.

2) Disclosures about concentrations of risk

As of December 31, 2019 and 2018, the Group's accounts receivable were concentrated on 5 and 4 customers, whose accounts represented 56% and 66% of the total accounts receivable, respectively. In order to reduce the credit risk on these accounts receivable, the Group continues to evaluate the financial status of these customers and request for collaterals when necessary. The Group evaluates the possible collectability of accounts receivable periodically and accrues allowance for doubtful accounts, if necessary.

(Continued)

3) Receivables and debt securities

For information on credit risk regarding notes and accounts receivable, please refers to Note 6(c).

Other financial assets measured at amortized cost include other receivables and financial assets at amortized cost. For related information of investment and impairment, please refers to Notes 6(b) and 6(d).

All of these financial assets are considered to have low risk, and thus, the impairment provision recognized during the period was limited 12 months expected losses.

(ii) Liquidity risk

The following were the contractual maturities of financial liabilities:

		Carrying amount	Contractual cash flows	Within 1 year	1-2 years	2-5 years	Over 5 years
As of December 31, 2019							
Non-derivative financial liabilities							
Secured bank loans	$	2,182,125	2,329,782	33,800	33,800	1,900,796	361,386
Unsecured bank loans		3,606,000	3,712,122	39,312	1,068,695	2,277,837	326,278
Notes and accounts payable		1,826,214	1,826,214	1,826,214	-	-	-
Other payables		1,288,817	1,288,817	1,288,817	-	-	-
Guarantee deposits received		125,611	125,611	15,611	-	110,000	-
Lease liabilities		369,327	495,192	69,764	47,590	102,056	275,782
	$	**9,398,094**	**9,777,738**	**3,273,518**	**1,150,085**	**4,390,689**	**963,446**
As of December 31, 2018							
Non-derivative financial liabilities							
Secured bank loans	$	1,572,600	1,661,678	21,294	124,638	997,014	518,732
Unsecured bank loans		4,230,000	4,350,337	48,837	1,494,684	2,560,556	246,260
Notes and accounts payable		1,093,074	1,093,074	1,093,074	-	-	-
Other payables		880,314	880,314	880,314	-	-	-
Guarantee deposits received		143,068	143,068	17,487	9,431	116,150	-
	$	**7,919,056**	**8,128,471**	**2,061,006**	**1,628,753**	**3,673,720**	**764,992**

The Group did not expect that the cash flows included in the maturity analysis could occur significantly earlier or at significantly different amounts.

(Continued)

(iii) Currency risk

1) Exposure to currency risk

The Group's significant exposure to foreign currency risk were as follows:

	December 31, 2019			December 31, 2018		
	Foreign currency	Exchange rate	NT$	Foreign currency	Exchange rate	NT$
Financial assets						
Monetary items						
USD	$ 206,117	29.98	6,179,373	191,938	30.72	5,896,330
EUR	75	33.59	2,531	172	35.20	6,038
JPY	1,321,385	0.2760	364,702	3,014	0.2782	842
GBP	11	39.36	433	11	38.88	428
HKD	51,537	3.85	198,365	62	3.92	241
RMB	-	-	-	8,884	4.47	39,713
			$ 6,745,404			$ 5,943,592
Non-monetary items						
USD	$ 10,570	29.98	318,268	6,312	30.72	193,828
RMB	110,112	4.31	472,528	97,324	4.47	433,761
			$ 790,796			$ 627,589
Financial liabilities						
Monetary items						
USD	$ 57,240	29.98	1,716,041	17,126	30.72	526,123
EUR	866	33.59	29,075	509	35.20	17,922
JPY	595,366	0.2760	164,321	328,936	0.2782	91,510
RMB	-	-	-	37	4.47	167
			$ 1,909,437			$ 635,722

2) Sensitivity analysis

The Group's exposure to foreign currency risk arises from the translation of the foreign currency exchange gains and losses on cash and cash equivalents, notes and accounts receivable, other receivables, financial assets at fair value through profit or loss, notes and accounts payable, long-term borrowings and other payables that are denominated in foreign currency. A strengthening (weakening) 5 % of appreciation (depreciation) of the NTD against the USD, EUR, GBP, JPY, HKD, RMB and etc. for the years ended December 31, 2019 and 2018 would have increased (decreased) the net profit after tax by $204,998 thousand and $220,129 thousand, respectively. The analysis assumes that all other variables remain constant.

3) Exchange gains or losses

Since the Group has many kinds of functional currency, the information on foreign exchange gains (losses) on monetary items is disclosed by total amount. For years ended December 31, 2019 and 2018, foreign exchange gains (losses) (including realized and unrealized portions) amounted to $(74,602) thousand and $129,261 thousand, respectively.

(iv) Interest rate risk

(Continued)

Please refer to the attached note for the liquidity risk and the Group's interest rate exposure to its financial liabilities.

The following sensitivity analysis is based on the risk exposure to interest rates on the non-derivatives financial instruments on the reporting date. For variable rate instruments, the sensitivity analysis assumes the variable rate liabilities are outstanding for the whole year on the reporting date.

If the interest rate increases (decreases) by 0.5%, the Group's net profit after tax would have increased (decreased) by $16,686 thousand and $11,299 thousand for the years ended December 31, 2019 and 2018, respectively, all other variable factors that remain constant. This is mainly due to the Group's borrowing in floating rates.

(v) Fair value

1) Accounting classifications and fair values

The fair value of financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income are measured on a recurring basis. The carrying amount and fair value of the Group's financial assets and liabilities, including the information on fair value hierarchy were as follows; however, except as described in the following paragraphs, for financial instruments not measured at fair value whose carrying amount is reasonably close to the fair value, and lease liabilities disclosure of fair value information is not required.

	December 31, 2019				
		Fair value			
	Carrying value	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss					
Stocks listed on domestic markets	$ 206,359	206,359	-	-	206,359
Funds and investment	300,490	300,490	-	-	300,490
Private fund	565,804	-	-	565,804	565,804
Subtotal	$ 1,072,653	506,849	-	565,804	1,072,653
Financial assets at fair value through other comprehensive income					
Stocks listed on domestic and foreign markets	$ 3,855,958	3,855,958	-	-	3,855,958
Non-public stocks	700,247	-	-	700,247	700,247
Subtotal	$ 4,556,205	3,855,958	-	700,247	4,556,205
Financial assets measured at amortized cost					
Cash and cash equivalents (Note)	$ 5,926,473	-	-	-	-
Notes and accounts receivable (Note)	2,406,673	-	-	-	-
Other receivables (Note)	50,517	-	-	-	-
Other non-current assets (Note)	92,938	-	-	-	-
Subtotal	$ 8,476,601	-	-	-	-
Financial liabilities measured at amortized cost					
Bank loans (Note)	$ 5,788,125	-	-	-	-
Notes and accounts payable (Note)	1,826,214	-	-	-	-
Other payables (Note)	1,288,817	-	-	-	-
Guarantee deposits received (Note)	125,611	-	-	-	-
Lease liabilities (Note)	369,327	-	-	-	-
Subtotal	$ 9,398,094	-	-	-	-

(Continued)

	December 31, 2018				
		Fair value			
	Carrying value	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss					
Stocks listed on domestic markets	$ 96,955	96,955	-	-	96,955
Funds and investment	6,308	6,308	-	-	6,308
Private fund	722,405	-	-	722,405	722,405
Subtotal	$ 825,668	103,263	-	722,405	825,668
Financial assets at fair value through other comprehensive income					
Stocks listed on domestic and foreign markets	$ 1,791,646	1,791,646	-	-	1,791,646
Non-public stocks	564,486	-	-	564,486	564,486
Subtotal	$ 2,356,132	1,791,646	-	564,486	2,356,132
Financial assets measured at amortized cost					
Cash and cash equivalents (Note)	$ 5,462,173	-	-	-	-
Financial assets measured at amortized cost (Note)	29,900	-	-	-	-
Notes and accounts receivable (Note)	1,422,365	-	-	-	-
Other receivables (Note)	125,288	-	-	-	-
Other non-current assets (Note)	88,355	-	-	-	-
Subtotal	$ 7,128,081	-	-	-	-
Financial liabilities measured at amortized cost					
Bank loan (Note)	$ 5,802,600	-	-	-	-
Notes and accounts payable (Note)	1,093,074	-	-	-	-
Other payables (Note)	880,314	-	-	-	-
Guarantee deposits received (Note)	143,068	-	-	-	-
Subtotal	$ 7,919,056	-	-	-	-

Note: The information on fair value is not disclosed since the carrying amount is a reasonable approximation of fair value.

2) Valuation techniques of financial instrument not valued at fair value

The valuation techniques of the Group’s financial instruments not valued at fair value by using the methods and assumptions are as follows:

- Financial assets measured at amortized cost and financial liabilities measured at amortized cost.

If recent transaction prices or market maker quotes are available, the fair value is based on such information. If there is no quoted market price available, the fair value is determined by using valuation techniques and calculated as the present value of the estimated cash flows.

3) Valuation techniques of financial instruments valued at fair value

a) Non-derivative instruments

The fair value of financial assets and liabilities traded in an active market is based on the quoted market prices. The quotation, which is published by the main exchange center or that which was deemed to be a public bond by the Treasury Bureau of Central Bank, is included in the fair value of the listed securities instruments and the debt instruments in active markets with open bid.

A financial instrument is regarded as the quoted price in an active market if the quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency; and if those prices represent the actual and regularly occurring market transactions on an arm’s length basis. Otherwise, the market is deemed to be inactive. Normally, a market is considered to

(Continued)

be inactive when:

- The bid-ask spread is increasing; or
- The bid-ask spread varies significantly; or
- There has been a significant decline in trading volume.

When the financial instrument of the Group is traded in an active market, its fair value is illustrated by the category and nature as follows:

- Financial assets and liabilities with standard terms and conditions and traded in an active market, for example, investment in stock of listed companies: the fair value is based on the market quoted price.
- Close-end funds with standard terms and conditions, such as money market funds, and bond funds; investors can require the investment trust company to redeem the fund at any time. The fair value is based on the net value of the fund.

Except for the above-mentioned financial instruments traded in an active market, the fair value is based on the valuation techniques or the quotation from the counterparty. The fair value refers to the current fair value of the other financial instruments with similar conditions and characteristics, using a discounted cash flow analysis or other valuation techniques, such as calculations of using models (for example, applicable yield curve from Taipei Exchange, or average quoted price on interest rate of commercial paper from Reuters), based on the information acquired from the market at the balance sheet date.

When the financial instrument of the Group is not traded in an active market, its fair value is determined as follows:

- The fair value is determined based on the ratio of the quoted market price of the comparative listed company and its book value per share. Also, the fair value is discounted for its lack of liquidity in the market.
- The fair value is determined by using the asset-based approach, whose assumptions are based on the market approach, income approach, cost approach or other valuation methods according to the nature of the assets or liabilities of the subject companies.

b) Derivative instruments

The fair value is determined by using the models that are acceptable to the market participants, for example, discounted cash flow analyses or option pricing models. Forward exchange contracts are measured using quoted forward exchange rates. The fair value of structured interest derivative financial instruments is determined by using the proper option pricing models, such as Black-Scholes model, or other valuation technique, such as Monte Carlo simulation.

4) Transfer between level 2 and level 1

For years ended December 31, 2019 and 2018, there was no transfer on the fair value

(Continued)

hierarchy of level 2 and level 1 financial asset.

5) Movement of level 3

		Fair value through profit or loss	Fair value through other comprehensive income
		Private fund	**Unquoted equity instruments**
Balance as of January 1, 2019	$	722,405	564,486
Total gains or losses:			
Recognized in profit and loss		67,261	-
Recognized in other comprehensive income		-	126,486
Purchased		142,794	-
Reclassify		-	34,525
Disposals		(366,621)	(17,274)
Capital reduction		(35)	(6,667)
Effect of changes in foreign exchange rates		-	(1,309)
Balance as of December 31, 2019	$	565,804	700,247
Balance as of January 1, 2018	$	612,978	630,405
Total gains or losses:			
Recognized in profit and loss		(18,166)	-
Recognized in other comprehensive income		-	(51,781)
Purchased		127,593	-
Disposals		-	(15,837)
Effect of changes in foreign exchange rates		-	1,699
Balance as of December 31, 2018	$	722,405	564,486

The preceding gains and losses were recognized as "other gains and losses" and "unrealized gains (losses) from investments in equity instruments measured at fair value through other comprehensive income". As of December 31, 2019 and 2018, the related information of the assets which were still held by the Group were as follows:

		2019	2018
Total gains or losses			
Profit or loss (recognized as other gains and losses)	$	(89)	(18,166)
Other comprehensive income (recognized as unrealized gains (losses) from investments in equity instruments measured at fair value through other comprehensive income)		121,738	(51,781)

6) Quantified information on significant unobservable inputs (Level 3) used in fair value measurement

The Group's financial instruments that use Level 3 inputs to measure fair value include

(Continued)

"financial assets at fair value through profit or loss – private funds" and "financial assets at fair value through other comprehensive income – equity investments".

Most of the fair value measurements categorized within Level 3 use the single and significant unobservable input. Equity investments without an active market contains multiple significant unobservable inputs. The significant unobservable inputs of the equity investments are independent from each other, as a result, there is no relevance between them.

Quantified information of significant unobservable inputs was as follows:

Item	Valuation technique	Significant unobservable inputs	Inter-relationship between significant unobservable inputs and fair value measurement
Financial assets at fair value through other comprehensive income – equity investments without an active market	● Comparable listed companies approach	● Price-book ratio (as of December 31, 2019 and 2018 was 1.65~6.14 and 1.34~3.50, respectively) ● Market liquidity discount rate (as of December 31, 2019 and 2018 were both 80%)	● The higher the price-book ratio, the higher the fair value ● The higher the market liquidity discount rate, the lower the fair value
	● Net asset value method	● Net asset value	Not applicable
Financial assets at fair value through profit or loss – private fund	● Net asset value method	● Net asset value	Not applicable

7) Sensitivity analysis of reasonably possible alternative assumptions for fair value measurements in Level 3 of the fair value hierarchy

The fair value measurements of the Group's financial instruments are reasonable. However, changes in the use of valuation models or valuation variables may affect the estimations. For fair value measurements in Level 3, a fluctuation in the valuation variable by 5% would have the following effect:

(Continued)

	Inputs	Increase or decrease	Effects of changes in fair value on profit or loss		Effects of changes in fair value on other comprehensive income	
			Favorable	Unfavorable	Favorable	Unfavorable
December 31, 2019						
Financial assets at fair value through profit or loss						
Private fund	Net asset value	5%	$ 28,290	(28,290)	-	-
Financial assets at fair value through other comprehensive income						
Equity investments without an active market	Price-book ratio	5%	-	-	18,939	(18,939)
〃	Market liquidity discount rate	5%	-	-	18,939	(18,939)
〃	Net asset value	5%	-	-	16,074	(16,074)
December 31, 2018						
Financial assets at fair value through profit or loss						
Private fund	Net asset value	5%	$ 36,120	(36,120)	-	-
Financial assets at fair value through other comprehensive income						
Equity investments without an active market	Price-book ratio	5%	-	-	20,665	(20,665)
〃	Market liquidity discount rate	5%	-	-	20,665	(20,665)
〃	Net asset value	5%	-	-	7,559	(7,559)

The favorable and unfavorable effects represent the changes in fair value, and fair value is based on a variety of unobservable inputs calculated using a valuation technique. The analysis above only reflects the effects of changes in a single input, and it does not include the inter-relationships with another input.

(ab) Management of financial risk

(i) The Group is exposed to the extent of the risks arising from financial instruments as below:

1) Credit risk

2) Liquidity risk

3) Market risk

Detailed information about exposure risk arising from the aforementioned risk was listed below. The Group’ s objective, policies and process for managing risks and methods used to measure the risk arising from financial instruments.

(Continued)

(ii) Risk management framework

The Board of Directors is responsible for overseeing the Group's risk management framework. The Group's internal auditor is responsible to identify and analyze the risks faced by the Group. The management of each division sets appropriate risk limits and controls, and monitor risks that follow the adherence to limits. The Group, through their training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group's Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group's Audit Committee is assisted in its oversight role by the internal auditor. The internal auditor undertakes both regular and ad hoc reviews of risk management controls and the procedures, and the result of which are reported to the Audit Committee.

(iii) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to financial instruments fails to meet it contractual obligations that arises principally from the Group's accounts receivable, investments in securities and investments in bond.

1) Notes and accounts receivable

According to the credit policy, the Group analyze each new customer individually for their credit worthiness before granting the new customer standard payment terms and delivery terms. The Group's review includes external ratings of customers' financial information and bank references. Credit lines are established for each customer and reviewed periodically.

2) Investments

The credit risk exposure in the bank deposits, fixed income investments and equity instruments are measured and monitored by the Group's finance department. Since the Group's transactions resulted from the external parties with good credit standing and investment grade above financial institutions, publicly traded stock companies and unlisted companies with good reputation, there are no incompliance issues and therefore no significant credit risk.

3) Guarantees

According to the Group's policy, the Group can only provide guarantees which are listed under the regulation. The Group did not provide any guarantee not listed under the regulation as of December 31, 2019 and 2018.

(Continued)

(iv) Liquidity risk

Liquidity risk is a risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group's financial department monitors cash flow requirements and optimizing its cash return on investments. The Group aims to maintain the level of its cash and cash equivalents at an amount in excess of expected cash flows on financial liabilities (other than trade payables) over the succeeding one year. The Group also monitors the level of expected cash outflows on account and other payables. This excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. As of December 31, 2019, the Group has unused bank credit lines for short-term borrowings, the unused bank credit lines for short-term borrowings and long-term borrowings and long-term bank borrowings amounted to $1,153,882 thousand, $3,276,609 thousand and $9,221,400 thousand, respectively.

(v) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices, which will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of the Group's entities, primarily the New Taiwan Dollars (NTD), US Dollars (USD) and Chinese Yen (RMB).

The policy of response to currency risk:

1) The Group reserves the foreign currency position arising from sales appropriately to remit the foreign currency expenditures and then meets the natural hedge.

2) The Group uses foreign currency borrowings and forward exchange contracts to hedge the remaining nature of currency risk arising from the netting of foreign currency accounts receivable and accounts payable.

3) The Group manages the currency risk and then determines the timing of exchanging the foreign currency through collecting the foreign currency information. It also stays in contact with the foreign currency department to control the foreign currency trend and market information.

(ac) Capital management

The Board of Directors' policy is to maintain a strong capital base to maintain the confidence of investors, creditors and market, and to sustain future development of the business. For the goal of business sustainability, the Group monitors the expansion plan as well as the level of dividends to ordinary shareholders.

For the years ended December 31, 2019 and 2018, the Group's return on common equity was

(Continued)

16.26% and 12.27%, respectively. The Group's debt ratio at the reporting date were as follows:

	December 31, 2019	December 31, 2018
Debt ratio	29.17%	27.79%

As of December 31, 2019, there were no changes in the Group's approach to capital management.

(ad) Financing activity

Reconciliation of liabilities arising from financing activities were as follows:

		Cash flows			Non-cash changes			
	January 1, 2019	Proceeds from long-term debt	Repayments of long-term debt and lease liabilities	Others	Interest expense	Others	Amortization of arranger fee of syndicated loan	December 31, 2019
Long-term borrowings	$ 5,802,600	5,282,865	(5,291,600)	-	-	(13,450)	7,710	5,788,125
Guarantee deposit received	143,068	-	-	(17,457)	-	-	-	125,611
Lease liabilities	290,061	-	(68,555)	(1,462)	12,044	137,239	-	369,327
Total liabilities from financing activity	$ 6,235,729	5,282,865	(5,360,155)	(18,919)	12,044	123,789	7,710	6,283,063

		Cash flows			Non-cash changes	
	January 1, 2018	Proceeds from long-term debt	Repayments of long-term debt	Others	Amortization of arranger fee of syndicated loan	December 31, 2018
Long-term borrowings	$ 6,257,536	4,891,000	(5,346,025)	-	89	5,802,600
Guarantee deposit received	143,685	-	-	(617)	-	143,068
Total liabilities from financing activity	$ 6,401,221	4,891,000	(5,346,025)	(617)	89	5,945,668

(7) Related-party transactions:

(a) Names and relationship with related parties

The followings are entities that have had transactions with related party during the periods covered in the consolidated financial statements:

Name of related party	Relationship with the Group
Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. (Note 1)	Associates
Winresp INC. (Note 2)	Associates
Chainwin i-Management (Shanghai) Co., Ltd. Huaian Branch.	Other related parties
Chainwin i-Management (Huaian) Co., Ltd.	Other related parties
Chainwin i-Management Co., Ltd.	Other related parties
Ningbo Winresp New Materials Co., Ltd. (Note 2)	Other related parties
Taoyuan i-Fare Charity Foundation	Other related parties
ITEQ Corporation (Note 3)	Other related parties

(Continued)

Note 1: The shareholders' meeting of Jiangsu CM/ Merit Agriculture Development Co., Ltd. had approved and decided to rename to Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. on June 20, 2019.

Note 2: The Company has lost the control over Winresp INC. since December, 2019. Therefore, it was not related-party of the Group.

Note 3: In July 2019, the Company's chairman of Board of Directors has been elected as the ITEQ Corporation's chairman of Board of Directors, and therefore ITEQ Corporation has become the Group's other related parties since July 2019.

(b) Significant transactions with related parties

(i) Loans to related parties:

For the year ended December 31, 2018, Chainwin Cayman provided an unsecured loan to its associates, Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. Interest revenue arising from aforementioned transaction was amounting to US$30 thousand (NT$892 thousand). The aforementioned interest had been received. There was no such transaction for the year ended December 31, 2019.

(ii) Purchases

The amounts of significant purchases by the Group from related parties were as follows:

	2019	2018
Other related parties	$ 3,637	786

The terms and pricing of purchase transactions with related parties were not significantly different from those offered by other vendors.

(iii) Operating expenses

The amounts of operating expenses by the Group from related parties were as follows:

	2019	2018
Other related parties	$ 1,000	-

(iv) Guarantee

For the years ended December 31, 2019, and 2018, Chainwin Cayman had provided a guarantee for loans amounting to US$7,350 thousand (NT$220,353 thousand and NT$225,792 thousand, respectively) to its associate, Jiangsu CM/ Chainwin Agriculture Development Co., Ltd.

(Continued)

(v) Property transactions

i) The prepayment, arising from that Chainwin Cayman purchased intelligent farming management system from its other related parties, Chainwin i-Management Co., Ltd., was amounting to US$526 thousand (NT$15,777 thousand) for the year ended December 31, 2019. There was no such transaction for the year ended December 31, 2018.

ii) Chainwin Cayman purchased property, plant and equipment from its other related parties, Ningbo Winresp New Materials Co., Ltd., for the year ended December 31, 2019, amounting to RMB 3,444 thousand (NT$15,552 thousand). There was no such transaction for the year ended December 31, 2018.

iii) Chainwin Cayman purchased other equipment from its other related parties, Chainwin i-Management (Huaian) Co., Ltd., for the year ended December 31, 2019, amounting to RMB 29 thousand (NT$132 thousand). There was no such transaction for the year ended December 31, 2018.

iv) The prepayment due to property transactions were as follows:

Account	Category	December 31, 2019	December 31, 2018
Prepayments for business facilities	Associates	$ -	21,617
Other non-current assets	Other related parties	$ 15,777	-

(vi) Leases

The Group leased the office and factories to its other related party, ITEQ Corporation, and the rent income received monthly is based on the nearby office and factories rental rates. The amount of rent income is $14,423 thousand for the year ended December 31, 2019. The preceding rent payment has been received.

(c) Transactions with key management personnel

Key management personnel compensation was comprised as below:

	2019	2018
Short-term employee benefits	$ 492,963	396,899
Post-employment benefits	821	802
	$ 493,784	397,701

(Continued)

(8) Pledged assets:

The carrying amount of pledged assets were as follows:

Pledged assets	Pledged to secure	December 31, 2019	December 31, 2018
Other non-current assets	Bank deposits－reserve accounts	$ 4,197	-
Other non-current assets	Gas deposits	4,700	4,700
Other non-current assets	Customs guarantee	20,242	20,050
Other non-current assets	Government subsidy deposits	-	4,300
Other non-current assets	Plant deposits	12,441	12,749
Property, plant and equipment	Long-term borrowings	2,382,554	2,759,181
Investment property	Long-term borrowings	336,574	351,631
Total		$ 2,760,708	3,152,611

(9) Commitments and contingencies:

(a) Contingencies: None.

(b) Commitment:

(i) The unrecognized commitment of acquisition of plant expansion and machinery equipment were as follows:

	December 31, 2019	December 31, 2018
The unrecognized amount	$ 3,353,094	4,726,547

	December 31, 2019	December 31, 2018
(ii) The unused letters of credit	$ 206,008	70,543

(10) Losses due to major disasters: None.

(11) Subsequent events:

The Company’ s subsidiary, Jiangsu Win Yield Agriculture Development Co. Ltd., entered into a contract with Jiangsu Nantong Sanjian Construction Group Co., Ltd. For construction, with the amount of RMB 342,511 thousand on January 10, 2020.

(Continued)

(12) Others:

The followings were the summary statement of employee benefits, depreciation and amortization expenses by function:

	2019			2018		
	Classified as operating costs	**Classified as operating expenses**	**Total**	**Classified as operating costs**	**Classified as operating expenses**	**Total**
Employee benefits						
Salaries	2,424,222	1,082,537	3,506,759	2,006,133	902,528	2,908,661
Labor and health insurance	179,353	55,141	234,494	168,800	44,871	213,671
Pension	79,483	28,745	108,228	76,207	23,711	99,918
Director remuneration	-	107,176	107,176	-	74,510	74,510
Others	127,652	51,197	178,849	62,014	15,454	77,468
Depreciation	3,012,526	335,528	3,348,054	2,922,094	236,456	3,158,550
Amortization	18,578	48,415	66,993	18,131	45,457	63,588

(13) Other disclosures:

(a) Information on significant transactions:

The following were the information on significant transactions required by the "Regulations Governing the Preparation of Financial Reports by Securities Issuers" for the Group for the year ended December 31, 2019:

(i) Loans to other parties: None.

(ii) Guarantees and endorsements for other parties: Please refer to schedule A.

(iii) Securities held as of December 31, 2019 (excluding investment in subsidiaries, associates and joint ventures): Please refer to schedule B.

(iv) Individual securities acquired or disposed of with accumulated amount exceeding the lower of NT$300 million or 20% of the Company's paid-in capital: Please refer to schedule C.

(v) Information on acquisition of real estate with purchase amount exceeding the lower of NT$300 million or 20% of the Company's paid-in capital: Please refer to schedule D.

(vi) Information on disposal of real estate with amounts exceeding the lower of NT$300 million or 20% of the Company's paid-in capital: None.

(vii) Information regarding related-parties purchases and/or sales with amounts exceeding the lower of NT$100 million or 20% of the Company's paid-in capital: Please refer to schedule E.

(viii) Information regarding receivables from related-parties exceeding the lower of NT$100 million or 20% of the Company's paid-in capital: None.

(ix) Information regarding trading in derivative financial instruments: None.

(x) Business relationships and significant intercompany transactions: Please refer to schedule F.

(Continued)

(b) Information on investments: Please refer to schedule G.

(c) Information on investment in Mainland China: Please refer to schedule H.

(14) Segment information:

(a) The Group's reportable segment is the foundry segment, and agriculture technology segment. The segment engages separately in researching, developing, manufacturing, selling of GaAs wafers and developing hog farming technology and trading, etc., respectively.

Other operating segments are mainly engaged in investment activities and gene chip and testing, which do not exceed the quantitative thresholds to be reported.

(b) Operating segment profit or loss (includes reportable segment revenue and expenses), segment assets, segment liabilities, and their measurement and reconciliations for the years ended December 31, 2019 and 2018, the reportable amount is similar to that in the report used by the operating decision maker and the operating segment accounting policies are similar to the ones described in Note 4 "significant accounting policies" were as follows:

2019	Foundry	Agriculture technology	Others	Reconciliation and elimination	Total
Revenue:					
Revenue from external customers	$ 20,875,694	428,403	73,627	-	21,377,724
Interest expenses	$ 31,579	18,667	453	-	50,699
Depreciation and amortization	$ 3,342,607	53,287	15,681	3,472	3,415,047
Shares of losses of associates and joint ventures accounted for using equity method	$ (1,282)	(199,956)	1,382	-	(199,856)
Reportable segment profit or loss	$ 5,805,224	(155,872)	(87,328)	(3,472)	5,558,552
Assets:					
Capital expenditures in noncurrent assets	$ 3,776,853	1,634,368	27,834	-	5,439,055

2018	Foundry	Agriculture technology	Others	Reconciliation and elimination	Total
Revenue:					
Revenue from external customers	$ 16,932,784	353,128	24,804	-	17,310,716
Interest expenses	$ 22,456	-	-	-	22,456
Depreciation and amortization	$ 3,174,490	41,636	3,161	2,851	3,222,138
Shares of losses of associates and joint ventures accounted for using equity method	$ (17,701)	(92,115)	(8,021)	-	(117,837)
Reportable segment profit or loss	$ 3,496,670	(192,132)	(96,345)	(2,851)	3,205,342
Assets:					
Capital expenditures in noncurrent assets	$ 5,135,225	499,151	3,858	-	5,638,234

(Continued)

The segment profit or loss, assets and liabilities of the operating segment above were consistent with the related accounts shown in the consolidated balance sheets and consolidated statements of comprehensive income of the Group.

(c) Segment information by products and services

The information from the product and the service segment coincides with the administrative segment, and its revenue from external customers was disclosed in Note 14(b).

(d) Geographic information

In presenting information on the basis of geography, segment revenue is based on the geographical location of customers, and segment assets are based on the geographical location of the assets.

Revenue from external customers for the years ended December 31, 2019 and 2018 were as follows:

Area	2019	2018
External Customers:		
America	$ 3,998,159	4,169,406
Asia	14,525,043	10,369,004
Taiwan	1,928,520	2,131,793
Europe	926,002	640,513
Total	$ 21,377,724	17,310,716

Area	December 31, 2019	December 31, 2018
Non-current Assets:		
Taiwan	$ 19,487,236	18,991,047
Asia	2,494,631	782,588
America	312	232
Total	$ 21,982,179	19,773,867

Non-current assets include property, plant and equipment, investment property, right-of-use assets, intangible assets and prepayments for business facilities; not including financial instruments, goodwill and deferred tax assets.

(Continued)

(e) Major customers

For the years ended December 31, 2019 and 2018, sales to customers greater than 10% of net revenue were as follows:

	2019		2018	
	Net revenue amount	Percentage of net revenue (%)	Net revenue amount	Percentage of net revenue (%)
Operating revenue of the Group-A company	$ 3,032,337	14	2,788,677	16
Operating revenue of the Group-B company	2,698,003	13	140,446	1
Operating revenue of the Group-C company	2,011,520	10	1,969,031	11
Operating revenue of the Group-D company	2,003,256	9	2,875,850	17
	$ 9,745,116	46	7,774,004	45

WIN Semiconductors Corp. and Its Subsidiaries Notes to Consolidated Financial Statements

Schedule A Guarantees and endorsements for other parties:

(In thousands of Dollars)

Number (Note 1)	Name of guarantor	Counter-party of guarantee and endorsement		Limitation on amount of guarantees and endorsements for a specific enterprise (Note 3)(Note 4)	Highest balance for guarantees and endorsements during the period	Balance of guarantees and endorsements as of reporting date	Actual usage amount	Property pledged for guarantees and endorsements (Amount)	Ratio of accumulated amounts of guarantees and endorsements to net worth of the latest financial statements	Maximum amount for guarantees and endorsements (Note 3)(Note 4)	Parent company endorsements/ guarantees to subsidiary	Subsidiary endorsements/ guarantees to parent company	Endorsements/ guarantees to the companies in mainland China
		Name	Relationship with the Company (Note 2)										
0	The Company	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	2	14,828,734	495,083	495,083	-	-	1.67%	Net equity 50% 14,828,734	Y	-	-
0	〃	Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	2	14,828,734	1,100,183	1,100,183	449,700	-	3.71%	Net equity 50% 14,828,734	Y	-	Y
0	〃	Jiangsu Win Yield Agriculture Development Co., Ltd.	2	14,828,734	1,650,276	1,650,276	-	-	5.56%	Net equity 50% 14,828,734	Y	-	Y
0	〃	Jiangsu Win Shine Agriculture Development Co., Ltd. (Note 7)	2	14,828,734	550,092	550,092	-	-	1.85%	Net equity 50% 14,828,734	Y	-	Y
0	〃	Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	2	14,828,734	1,100,183	1,100,183	149,900	-	3.71%	Net equity 50% 14,828,734	Y	-	Y
0	〃	Jiansu Merit/ CM Agriculture Development Co., Ltd.	2	14,828,734	1,100,183	1,100,183	-	-	3.71%	Net equity 50% 14,828,734	Y	-	Y
1	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. (Note 6)	6	1,228,154 (USD 40,965)	220,353 (USD 7,350)	220,353 (USD 7,350)	189,856 (USD 6,333)	-	5.38%	Net equity 50% 2,046,923	-	-	Y

Note 1: Company numbering as follows:
Issuer－0
Investee starts from 1

Note 2: Relationship with the Company
1. Ordinary business relationship.
2. An entity, directly and indirectly, owned more than 50% voting shares of a guarantor.
3. A guarantor, directly and indirectly, owned more than 50% voting shares of an entity.
4. An entity, directly and indirectly, owned more than 90% voting shares of a guarantor.
5. Fulfillment of contractual obligations by providing mutual endorsements and guarantees for peer or joint builders in order to undertake a construction project.
6. An entity that is guaranteed and endorsed by all capital contributing shareholders in proportion to their shareholding percentages.
7. Peer engaged in the escrow of the sales contract on pre-sale house under the Consumer Protection Act.

Note 3: WIN Semiconductors Corp.'s operating procedures of guarantee were as follows:
1. The guarantees and endorsements limit provided by WIN Semiconductors Corp. to other parties should not exceed 50% of its equity based on the most recent audited or reviewed financial statement by a certified accountant. The individual guarantee amount should not exceed 50% of its equity based on the most recent audited or reviewed financial statement by a certified accountant.
2. The guarantees and endorsements limit provided by WIN Semiconductors Corp. and its subsidiaries to other parties should not exceed 50% of its equity based on the most recent audited or reviewed financial statement by a certified accountant. The individual guarantee amount should not exceed 50% of its equity based on the most recent audited or reviewed financial statement by a certified accountant.
3. Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd., Jiangsu Chainwin Kang Yuan Agricultural Development Co., Jiangsu Win Yield Agriculture Development Co., Ltd., and Jiangsu Win Shine Agriculture Development Co., Ltd., Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd. and Jiansu Merit/ CM Agriculture Development Co., Ltd. (collectively referred to as "the Borrower") had been approved a total maximum credit line of US$200,000 thousand, wherein each Borrower was limited to the maximum loans of US$27,000 thousand, US$60,000 thousand, US$90,000 thousand, US$30,000 thousand, US$60,000 thousand, US$30,000 thousand, respectively.

Note 4: The guarantees and endorsements limit provided by Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd. to a particular single party and to other parties should not exceed 30% and 50%, respectively, of its equity based on the most recent audited or reviewed financial statement by a certified accountant.

Note 5: The aforementioned amount was translated at the exchange rate on the balance sheet date from USD to NTD and RMB to USD for NTD 29.98 and USD 0.1436, respectively.

Note 6: The shareholders' meeting of Jiangsu CM/ Merit Agriculture Development Co., Ltd. had approved and decided to rename to Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. on June 20, 2019.

Note 7: Jiangsu Win Shine Agriculture Development Co., Ltd. was incorporated on April 4, 2019. As of December 31, 2019, the capital injection had not been made yet.

WIN Semiconductors Corp. and Its Subsidiaries Notes to Consolidated Financial Statements

Schedule B Securities held as of December 31, 2019 (excluding investment in subsidiaries, associates and joint ventures):

(In thousands of New Taiwan Dollars)

Name of holder	Category and name of security	Relationship with the company	Account title	Ending balance				Highest percentage of ownership (%)	Remark
				Shares/ Units (in thousands)	Carrying value	Percentage of ownership (%)	Fair value		
The Company	Advanced Wireless Semiconductor Company/ Stock	None	Current financial assets at fair value through profit or loss	1,557	154,921	1.08	154,921	2.98	
WIN Venture Capital Corp.	Sercomm Corporation/ Stock	〃	〃	662	51,438	0.27	51,438	0.50	
〃	Allianz Global Investors Taiwan Money Market Fund	〃	〃	10,926	137,442	-	137,442	-	
〃	Capital Money Market Fund	〃	〃	10,066	163,048	-	163,048	-	
					506,849		506,849		
The Company	MagiCapital Fund II L.P.	〃	Non-current financial assets at fair value through profit or loss	-	217,722	5.81	217,722	5.81	
〃	CDIB Capital Growth Partners L.P.	〃	〃	-	77,842	3.30	77,842	3.30	
〃	Fuh Hwa Oriental Fund	〃	〃	15,000	38,160	-	38,160	-	
〃	Fuh Hwa Smart Energy Fund	〃	〃	12,000	89,664	-	89,664	-	
〃	LeaSun Winion L.P.	〃	〃	-	29,968	12.47	29,968	14.25	
〃	NFC Fund II L.P.	〃	〃	-	100,546	19.41	100,546	19.41	
〃	Foryou Venture Capital L.P.	〃	〃	-	11,902	5.77	11,902	5.77	
					565,804		565,804		
〃	ITEQ CORPORATION/ Stock	Other related parties	Non-current financial assets at fair value through other comprehensive income	24,670	3,145,387	8.14	3,145,387	8.14	
〃	Inventec Solar Energy Corporation/ Stock	None	〃	34,000	118,581	10.51	118,581	10.51	
〃	MagiCap Venture Capital Co., Ltd./ Preferred Stock A	〃	〃	909	131,492	18.28	131,492	18.28	
〃	CDIB Capital Creative Industries Limited / Stock	〃	〃	4,333	44,633	3.33	44,633	3.33	
〃	New Future Capital Co., Ltd./ Stock	〃	〃	10,000	90,800	15.87	90,800	15.87	
〃	Grand Fortune Venture Corp./ Stock	〃	〃	5,000	54,550	6.87	54,550	6.87	
Win Semiconductors Cayman Islands Co., Ltd.	Broadcom Ltd./ Stock	Client	〃	75	710,571	0.02	710,571	0.02	
〃	Anokiwave Inc./ Series B Preferred Stock	〃	〃	1,264	202,581	7.93	202,581	7.93	
WIN Venture Capital Corp.	MOAI Electronics Corporation/ Stock	None	〃	90	-	0.32	-	1.08	
〃	Merit Biotech INC./ Stock	〃	〃	1,320	-	2.93	-	2.93	(Note)
〃	Winresp INC./ Stock	〃	〃	2,500	34,525	18.26	34,525	18.52	
Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Formosa Fortune Group Cayman Islands Co., Ltd. / Stock	〃	〃	12	23,085	4.78	23,085	4.78	
					4,556,205		4,556,205		

Note: The Board of Directors of Merit Biotech INC. had resolved to dissolve and liquidate the company in 2017. As of December 31, 2019, the company is still within the period of liquidation.

WIN Semiconductors Corp. and Its Subsidiaries Notes to Consolidated Financial Statements

Schedule C Individual securities acquired or disposed of with accumulated amount exceeding the lower of NT$300 million or 20% of the Company's paid in capital:

(In thousands of New Taiwan Dollars)

Name of Company	Category and name of security	Account name	Name of counter-party	Relationship with the Company	Beginning		Purchases		Sales				Ending	
					Shares (in thousands)	Amount	Shares (in thousands)	Amount	Shares (in thousands)	Price	Cost	Gain (loss) on disposal	Shares (in thousands)	Amount
The Company	Win Semiconductors Cayman Islands Co., Ltd./ Stock	Investments accounted for using equity method	-	Subsidiary	114,000	3,503,656	53,000	1,631,490	-	-	-	-	167,000	5,216,293 (Note)
〃	Phalanx Biotech Group, Inc./ Stock	〃	-	〃	24,650	304,150	20,000	300,000	-	-	-	-	44,650	480,908 (Note)
〃	Fuh Hwa Tung-ta Fund	Non-current financial assets at fair value through profit or loss	-	-	15,725	157,246	-	-	15,725	366,621	157,246	209,375	-	
Win Semiconductors Cayman Islands Co., Ltd.	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd./ Stock	Investments accounted for using equity method	-	Investment through subsidiary	58,554	3,584,889	26,500	1,635,070	-	-	-	-	85,054	4,195,630 (Note)
Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	〃	-	〃	-	300,749	-	375,420	-	-	-	-	-	625,067 (Note)
〃	Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	〃	-	〃	-	959,571	-	404,180	-	-	-	-	-	1,233,161 (Note)

Note: The amount of ending balance was calculated using the equity method. The amount of the transaction and the ending balance had been offset in the consolidated financial statements.

Schedule D Information on acquisition of real estate with purchase amount exceeding the lower of NT$300 million or 20% of the Company's paid in capital:

(In thousands of New Taiwan Dollars)

Name of company	Name of Property	Transaction Date	Transaction amount	Status of payment	Counter-party	Relationship with the company	If the counter party is a related party, disclose the previous transfer information				References for determining price	Purpose of acquisition	Others
							Owner	Relationship with the company	Date of transfer	Amount			
Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	Factory buildings	2018/10/25	617,213	As of December 31, 2019, the price paid $592,208 thousand.	Jiangsu Nantong Sanjian Construction Group Co., Ltd.	-	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Operating purpose	None
Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	Factory buildings	2018/11/20	772,168	As of December 31, 2019, the price paid $310,589 thousand.	Jiangsu Nantong Sanjian Construction Group Co., Ltd.	-	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Operating purpose	None

WIN Semiconductors Corp. and Its Subsidiaries Notes to Consolidated Financial Statements

Schedule E Information regarding related parties purchases and/or sales with amounts exceeding the lower of NT$100 million or 20% of the Company's paid in capital:

(In thousands of New Taiwan Dollars)

Name of company	Related party	Nature of relationship	Transaction details				Transactions with terms different from others		Notes/Accounts receivable (payable)		Remark
			Purchase/ Sale	Amount	Percentage of the purchases/ sales	Payment terms	Unit price	Payment terms	Ending balance	Percentage of total notes/ accounts receivable (payable)	
The Company	Win Semiconductors Cayman Islands Co., Ltd.	Subsidiary	Sales	(1,297,921)	6%	1~2 Months	-	-	-	0%	(Note)
Win Semiconductors Cayman Islands Co., Ltd.	The Company	Parent	Purchase	1,297,921	100%	1~2 Months	-	-	-	0%	(Note)

Note: The amounts of the transaction and the ending balance had been offset in the consolidated financial statements.

Schedule F Business relationships and significant inter company transactions:

(In thousands of New Taiwan Dollars)

No. (Note 1)	Name of Company	Name of Counter-party	Nature of relationship (Note 2)	Intercompany transactions			
				Account name	Amount	Trading terms	Percentage of the consolidated net revenue or total assets
0	The Company	Win Semiconductors Cayman Islands Co., Ltd.	1	Operating revenue	1,297,921	Note 3	6.07%
1	Win Semiconductors Cayman Islands Co., Ltd.	The Company	2	Operating costs	1,297,921	〃	6.07%
0	The Company	WIN SEMI. USA, INC.	1	Operating expense	78,588	〃	0.37%
2	WIN SEMI. USA, INC.	The Company	2	Operating revenue	78,588	〃	0.37%

Note 1: Company numbering as follows:
Parent company－0
Subsidiary starts from 1
Note 2: The numbering of the relationship between transaction parties as follows:
Parent company to subsidiary－1
Subsidiary to parent company－2
Note 3: There is no significant difference from transaction terms with non-related parties.

WIN Semiconductors Corp. and Its Subsidiaries Notes to Consolidated Financial Statements

Schedule G Information on investments:

The following is the information on investees for the year ended December 31, 2019 (excluding information on investees in Mainland China):

(In thousands of New Taiwan Dollars)

Name of investor	Name of investee	Location	Main businesses and products	Original investment amount		The ending balance at this year			Highest percentage of ownership (%)	Net income (losses) of investee	Investment income (losses)	Remark
				The ending balance at this year	The ending balance at the last year	Shares (in thousands)	Percentage of ownership	Carrying value				
The Company	WIN SEMI. USA, INC.	California USA	Marketing	8,203	8,203	1,000	100.00%	406	100.00%	(10,968)	(10,968)	(Note 1)
〃	Win Semiconductors Cayman Islands Co., Ltd.	Cayman Islands	Selling of GaAs wafers	5,135,146	3,503,656	167,000	100.00%	5,216,293	100.00%	(372,863)	(372,863)	(Note 1)
〃	WIN Venture Capital Corp.	Taiwan	Investment activities	500,000	250,000	50,000	100.00%	456,661	100.00%	17,086	17,086	(Note 1)
〃	Phalanx Biotech Group, Inc.	Taiwan	Researching, manufacturing and selling of high density gene chips and testing service	604,150	304,150	44,650	54.48%	480,908	54.48%	(109,652)	(43,737)	(Note 1)
〃	CSDC Private Limited	Singapore	Development and manufacturing of compound semiconductors technologies	-	-	-	-	-	25.00%	-	-	(Note 3)
〃	WIN Chance Investment Corp.	Taiwan	Investment activities	10,000	-	1,000.00	100.00%	9,966	100.00%	(34)	(34)	(Note 1)
〃	WIN Earn Investment Corp.	Taiwan	Investment activities	10,000	-	1,000.00	100.00%	9,966	100.00%	(34)	(34)	(Note 1)
WIN Venture Capital Corp.	Phalanx Biotech Group, Inc.	Taiwan	Researching, manufacturing and selling of high density gene chips and testing service	39,600	39,600	3,600	4.39%	56,969	5.82%	(109,652)	(Note 2)	(Note 1)
〃	Winresp INC.	Taiwan	Developing and selling of water treatment systemand wholesaling of medical appliances	-	40,000	-	-	-	18.52%	(25,408)	(Note 2)	(Note 4)
Win Semiconductors Cayman Islands Co., Ltd.	Rainbow Star Group Limited	British Virgin Islands	Investment activities	62,920	62,920	38	49.30%	60,063	49.30%	(2,601)	(Note 2)	
〃	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Cayman Islands	Investment activities	5,219,959	3,584,889	85,054	96.30%	4,195,630	96.30%	(371,223)	(Note 2)	(Note 1)
Phalanx Biotech Group, Inc.	Phalanx Biotech Limited	Hong Kong	Investment activities	8,784	8,784	-	100.00%	7,852	100.00%	31,702	(Note 2)	(Note 1)
〃	PhalanxBio, Inc.	USA	Selling of high density gene chip and test service	208,110	208,110	2,550	100.00%	(1,597)	100.00%	(345)	(Note 2)	(Note 1)

Note 1: The amount of the transaction had been offset in the consolidated financial statements.

Note 2: The shares 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 shares of CSDC Private Limited has been sold in November, 2019.

Note 4: The Company has lost the significant influence on Winresp INC. since December, 2019. Therefore, the Company has stopped using the equity method accounted for Winresp INC. and transferred to non-current financial asset at fair value through other comprehensive income.

WIN Semiconductors Corp. and Its Subsidiaries Notes to Consolidated Financial Statements

Schedule H Information on investment in Mainland China:

(i) The names of investees in Mainland China, the main businesses and products, and other information:

(In thousands of Dollars)

Name of investee	Main businesses and products	Total amount of paid in capita	Method of investment	Accumulated outflow of investment from Taiwan at the beginning of this year	Investment flows		Accumulated outflow of investment from Taiwan as of December 31, 2019	Net income (losses) of the investee	Highest percentage of ownership (%)	Percentage of ownership	Investment income (losses) (Note 3)(Note 5)	Carrying value at the end of this year (Note 1)	Accumulated remittance of earnings in current period	Remark
					Outflow	Inflow								
Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	Developing hog farming technology and trading	1,363,751 (RMB 302,232)	(Note 1)	905,356 (USD 29,471)	404,180 (USD 13,000)	-	1,309,536 (USD 42,471)	(74,726) (USD (2,451))	96.30%	96.30%	(74,726) (USD (2,451))	1,233,161 (USD 41,133)	-	(Note 9)
Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	Farm feed developing and trading	676,169 (USD 21,790)	(Note 1)	277,885 (USD 9,046)	375,420 (USD 12,000)	-	653,305 (USD 21,046)	(1,207) (USD (44))	96.30%	96.30%	(1,207) (USD (44))	625,067 (USD 20,849)	-	(Note 9)
Jiangsu CM/ Chainwin Agriculture Development Co., Ltd.	Developing hog farming technology and trading	1,710,498 (USD 55,510)	(Note 1)	703,641 (USD 22,905)	248,320 (USD 8,000)	-	951,961 (USD 30,905)	(408,074) (USD (13,225))	47.19%	47.19%	(199,956) (USD (6,480))	472,528 (USD 15,761)	-	(Note 7)
Jiansu Merit/ CM Agriculture Development Co., Ltd.	Developing hog farming technology and trading	466,944 (USD 15,200)	(Note 1)	467,063 (USD 15,204)	40,850	-	507,913 (USD 16,567)	3,901 (USD 115)	96.30%	96.30%	3,542 (USD 105)	443,446 (USD 14,791)	-	(Note 9)
Jiangsu Merit/ Cofcojoycome Agriculture Development Co., Ltd.	Developing hog farming technology and trading	-	(Note 1)	149,664 (USD 4,872)	-	-	149,664 (USD 4,872)	-	-	-	-	-	-	(Note 8)
Jiangsu Merit Runfu Agriculture Development Co., Ltd.	Developing hog farming technology and trading	72,313 (RMB 16,177)	(Note 1)	41,009 (USD 1,335)	-	-	41,009 (USD 1,335)	472 (USD 16)	96.30%	96.30%	472 (USD 16)	55,194 (USD 1,841)	-	(Note 9)
Jiangsu Win Yield Agriculture Development Co., Ltd.	Developing hog farming technology and trading	155,300 (USD 5,000)	(Note 1)	-	155,300 (USD 5,000)	-	155,300 (USD 5,000)	1,222 (USD 37)	96.30%	96.30%	1,222 (USD 37)	149,887 (USD 5,000)	-	(Note 9)
Onearray Biotech (Kunshan) Co., Ltd.	Selling of high density gene chip and test service	8,784 (RMB 1,898)	(Note 2)	8,784 (USD 300)	-	-	8,784 (USD 300)	31,702 (RMB 7,181)	58.87%	58.87%	31,702 (RMB 7,181)	7,852 (RMB 1,822)	-	(Note 9)

(ii) Limitation on investment in Mainland China:

(In thousands of Dollars)

Investor Company Name	Accumulated Investment in Mainland China at the end of this year (Note 8)	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on Investment (Note 6)
The Company and subsidiaries	3,777,472 (USD 122,496)	4,656,168 (USD 155,309)	17,903,719

Note 1: The Group invested in Mainland China companies through Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd , which is established in a third region.

Note 2: The Group invested in Mainland China companies through Phalanx Biotech Limited, which is established in a third region.

Note 3: The amount of net income (losses) was recognized based on the audit financial statements of the investee companies.

Note 4: Carrying value as of December 31, 2019 was with reference to the amount recognized by the investment through subsidiaries to subsidiaries established in a third region.

Note 5: Investment income (loss) recognized was translated into New Taiwan Dollars at the average exchange rate for the each month from January 1 to December 31, 2019.

Note 6: Amount of upper limit on investment was the higher between sixty percentage of total equity or total consolidated equity.

Note 7: The shareholders' meeting of Jiangsu CM/ Merit Agriculture Development Co., Ltd. had approved and decided to rename to Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. on June 20, 2019.

Note 8: Jiansu Merit/ Cofcojoycome Agriculture Development Co., Ltd. had been liquidated on January 25, 2019. However, according to the regulation of Investment Commission the remittance to Mainland China amounting to US$4,872 thousand (NT$149,664 thousand) was included in the accumulated investment account.

Note 9: The amount of the transaction and the ending balance had been offset in the consolidated financial statements.

(iii) Significant transactions: None

APPENDIX II:

WIN SEMICONDUCTORS CORP.

Parent-Company-Only Financial Statements

With Independent Auditors' Report

For the Years Ended December 31, 2019 and 2018

Independent Auditors' Report

To the Board of Directors of WIN Semiconductors Corp.:

Opinion

We have audited the financial statements of WIN Semiconductors Corp. ("the Company"), which comprise the balance sheets as of December 31, 2019 and 2018, the statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and its financial performance and its cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

Basis for Opinion

In 2019, we conducted our audit in accordance with the Regulations Governing Auditing, the Ruling No. 1090360805 issued by the FSC and Certification of Financial Statements by Certified Public Accountants and the auditing standards generally accepted in the Republic of China. In 2018, we conducted our audits in accordance with the Regulations Governing Auditing and Certification of Financial Statements by Certified Public Accountants and the auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Certified Public Accountants Code of Professional Ethics in Republic of China ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis of 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 financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In our judgment, the key audit matters we communicated in the auditors' report was as follows:

Evaluation of inventory

Please refer to Note 4(g) "Inventories" for accounting policies, Note 5 for accounting assumptions, judgments and estimation uncertainty of inventories, and Note 6(e) for the amount of loss on valuation of inventories of the financial statements.

Due to the high industry demand and rapid fluctuation of the price of precious metals, the Company stored a significant volume of the said material, which resulted in slow turnover of inventories. Therefore, the Company cannot obtain sufficient information on inventories that were sold or used on the reporting date. Since the technology changes rapidly, the inventory may be out of date or may not conform to market demand, resulting in a risk wherein the carrying amount of inventories may exceed its net realizable value. Consequently, the evaluation of inventory is identified as the key matter in our audit.

How the matter was addressed in our audit

Our principal audit procedures included: Testing the accuracy of the estimations of inventories at the lower of cost and net realizable value. Referring to the recent selling price and considering the amount of written-off inventories in the subsequent events to evaluate the appropriateness of the amount of loss on valuation of inventories or obsolescence. Analyzing the historical accuracy of judgments, including inspecting the amount of loss on valuation of inventories or obsolescence recognized in prior year and with reference to actual disposal to assess rationality of the judgments of the current period. Moreover, comparing with the provision for inventories valuation and obsolescence made in the current year to evaluate the appropriateness of the assumptions.

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

Management is responsible for the preparation and fair presentation of the 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 financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is also 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 the Audit Committee) are responsible for overseeing the Company’s financial reporting process.

Auditor’s Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s 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 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 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 auditor's report to the related disclosures in the 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 auditor's 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 financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient and appropriate audit evidence regarding the financial information of the investment in other entities accounted for using the equity method to express an opinion on this financial statements. We are responsible for the direction, supervision and performance of the 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 financial statements for the year ended December 31, 2019 and are therefore the key audit matters. We describe these matters in our auditor's 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 Chia-Chien Tang and Ya-Ling Chen.

KPMG

Taipei, Taiwan (The Republic of China)
March 18, 2020

Notes to Readers

The accompanying financial statements are intended only to present the financial position, financial performance and cash flows in accordance with the 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 accepted and applied in the Republic of China.

The independent auditors' audit report and the accompanying financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language independent auditors' audit report and financial statements, the Chinese version shall prevail.

(English Translation of Financial Statements and Report Originally Issued in Chinese)

WIN Semiconductors Corp.

Balance Sheets

December 31, 2019 and 2018

(Expressed in Thousands of New Taiwan Dollars)

Code	Assets	December 31, 2019 Amount	%	December 31, 2018 Amount	%
	Current assets:				
1100	Cash and cash equivalents (Note 6(a))	$ 3,763,950	9	3,474,932	10
1110	Current financial assets at fair value through profit or loss (Note 6(b))	154,921	-	17,475	-
1170	Accounts receivable, net (Notes 6(c) and 6(u))	2,401,924	6	553,914	1
1180	Accounts receivable due from related parties, net (Notes 6(c), 6(u) and 7)	-	-	942,499	3
1210	Other receivables due from related parties (Notes 6(d) and 7)	1,199	-	-	-
1310	Inventories (Note 6(e))	4,358,799	11	3,876,539	11
1470	Other current assets (Notes 3(a), 6(d) and 6(k))	273,994	1	264,180	1
	Total current assets	10,954,787	27	9,129,539	26
	Non-current assets:				
1510	Non-current financial assets at fair value through profit or loss (Note 6(b))	565,804	1	722,405	2
1517	Non-current financial assets at fair value through other comprehensive income (Note 6(b))	3,585,443	9	1,682,788	5
1535	Non-current financial assets at amortized cost (Note 6(b))	-	-	29,900	-
1550	Investments accounted for using equity method (Note 6(f))	6,174,200	15	4,379,635	13
1600	Property, plant and equipment (Notes 6(g) and 8)	15,669,777	38	14,784,516	42
1755	Right-of-use assets (Notes 3(a) and 6(h))	48,318	-	-	-
1760	Investment property (Notes 6(i) and 8)	1,401,155	4	1,421,528	4
1780	Intangible assets (Note 6(j))	122,411	-	94,261	-
1840	Deferred tax assets (Note 6(q))	235,826	1	135,802	-
1915	Prepayments for business facilities	2,129,251	5	2,618,079	8
1990	Other non-current assets (Notes 6(k) and 8)	49,348	-	50,198	-
	Total non-current assets	29,981,533	73	25,919,112	74
	Total assets	$ 40,936,320	100	35,048,651	100

Code	Liabilities and Equity	December 31, 2019 Amount	%	December 31, 2018 Amount	%
	Current liabilities:				
2170	Accounts payable	$ 1,821,018	4	1,079,252	3
2200	Other payables	3,559,935	9	2,351,057	7
2220	Other payables to related parties (Note 7)	7,195	-	-	-
2280	Current lease liabilities (Notes 3(a), 6(n) and 6(aa))	33,526	-	-	-
2399	Other current liabilities (Notes 6(u) and 7)	397,526	1	217,950	1
	Total current liabilities	5,819,200	14	3,648,259	11
	Non-Current liabilities:				
2540	Long-term borrowings (Notes 6(m), 6(aa) and 8)	5,226,000	13	5,802,600	17
2580	Non-current lease liabilities (Notes 3(a), 6(n) and 6(aa))	15,072	-	-	-
2600	Other non-current liabilities (Notes 6(p) and 6(aa))	218,580	1	218,085	-
	Total non-current liabilities	5,459,652	14	6,020,685	17
	Total liabilities	11,278,852	28	9,668,944	28
	Equity (Notes 6(b), 6(p), 6(q), 6(r) and 6(s)):				
3110	Ordinary shares	4,240,564	10	4,238,144	12
3200	Capital surplus	9,244,308	22	9,199,357	26
3300	Retained earnings	13,399,189	33	11,178,324	32
3400	Other equity interests	2,773,407	7	763,882	2
	Total equity	29,657,468	72	25,379,707	72
	Total liabilities and equity	$ 40,936,320	100	35,048,651	100

See accompanying notes to financial statements.

(English Translation of Financial Statements Originally Issued in Chinese)

WIN Semiconductors Corp.

Statements of Comprehensive Income

For the years ended December 31, 2019 and 2018

(Expressed in Thousands of New Taiwan Dollars, Except for Earnings Per Common Share)

		2019		2018	
		Amount	%	Amount	%
4000	**Operating revenue (Notes 6(u) and 7)**	$ 20,852,558	100	16,757,646	100
5000	**Operating costs (Notes 6(e), (g), (h), (j), (n), (o), (p), (s), (v), 7 and 12)**	(12,777,640)	(61)	(11,453,327)	(68)
	Gross profit form operating	8,074,918	39	5,304,319	32
	Operating expenses (Notes 6(g), (h), (i), (j), (n), (o), (p), (s), (v), 7 and 12):				
6100	Selling expenses	(276,128)	(1)	(131,388)	(1)
6200	Administrative expenses	(918,807)	(5)	(802,989)	(5)
6300	Research and development expenses	(1,026,429)	(5)	(916,432)	(5)
	Total operating expenses	(2,221,364)	(11)	(1,850,809)	(11)
	Net operating income	5,853,554	28	3,453,510	21
	Non-operating income and expenses (Notes 6(b), 6(g), 6(n), (o), (w) and 7):				
7010	Other income	225,254	1	208,523	1
7020	Other gains and losses	(169,992)	(1)	377,909	2
7050	Finance costs	(31,564)	-	(22,452)	-
7070	Share of losses of subsidiaries, associates and joint ventures accounted for using equity method	(410,550)	(2)	(224,879)	(1)
	Total non-operating income and expenses	(386,852)	(2)	339,101	2
7900	**Profit before tax**	5,466,702	26	3,792,611	23
7950	**Total tax expenses (Note 6(q))**	(992,303)	(5)	(668,157)	(4)
	Profit	4,474,399	21	3,124,454	19
8300	**Other comprehensive income:**				
8310	**Components of other comprehensive income that will not be reclassified to profit or loss (Notes 6(p), 6(q) and 6(r))**				
8311	Remeasurements of defined benefit plans	2,492	-	(34,051)	-
8316	Unrealized gains (losses) from investments in equity instruments measured at fair value through other comprehensive income	1,845,073	9	(371,497)	(2)
8330	Share of other comprehensive income of subsidiaries, associates and joint ventures accounted for using equity method, components of other comprehensive income that will not be reclassified to profit or loss	269,783	1	19,453	-
8349	Income tax related to components of other comprehensive income that will not be reclassified to profit or loss	(499)	-	(7,730)	-
	Total components of other comprehensive income (loss) that will not be reclassified to profit or loss	2,116,849	10	(378,365)	(2)
8360	**Components of other comprehensive income (loss) that will be reclassified to profit or loss (Notes 6(r))**				
8361	Exchange differences on translation of foreign financial statements	(112,518)	(1)	120,184	1
8380	Share of other comprehensive income of subsidiaries, associates and joint ventures accounted for using equity method, components of other comprehensive income that will be reclassified to profit or loss	(30,732)	-	(54,755)	(1)
8399	Income tax related to components of other comprehensive income that will be reclassified to profit or loss	-	-	-	-
	Total components of other comprehensive income that will be reclassified to profit or loss	(143,250)	(1)	65,429	-
8300	**Other comprehensive income, net**	1,973,599	9	(312,936)	(2)
8500	**Total comprehensive income**	$ 6,447,998	30	2,811,518	17
	Earnings per common share (expressed in dollars) (Note 6(t))				
9750	**Basic earnings per share**	$ 10.59		7.39	
9850	**Diluted earnings per share**	$ 10.53		7.35	

See accompanying notes to financial statements.

(English Translation of Financial Statements Originally Issued in Chinese)

WIN Semiconductors Corp.

Statements of Changes in Equity

For the years ended December 31, 2019 and 2018

(Expressed in Thousands of New Taiwan Dollars)

	Ordinary shares	Capital surplus	Retained earnings: Legal reserve	Retained earnings: Unappropriated retained earnings	Retained earnings: Total retained earnings	Other equity interests: Exchange differences on translation of foreign financial statements	Other equity interests: Unrealized gains (losses) on financial assets at fair value through other comprehensive income	Other equity interests: Unrealized gains (losses) on available-for-sale financial assets	Other equity interests: Other unearned compensation for restricted shares of employees	Total other equity interests	Total equity
Balance at January 1, 2018	$ 4,226,664	9,052,896	1,379,394	9,442,293	10,821,687	(100,208)	-	1,568,176	-	1,467,968	25,569,215
Effects of retrospective application	-	-	-	166,337	166,337	-	1,401,839	(1,568,176)	-	(166,337)	-
Equity at beginning of period after adjustments	4,226,664	9,052,896	1,379,394	9,608,630	10,988,024	(100,208)	1,401,839	-	-	1,301,631	25,569,215
Appropriation and distribution of retained earnings:											
Legal reserve appropriated	-	-	376,420	(376,420)	-	-	-	-	-	-	-
Cash dividends of ordinary shares	-	-	-	(2,958,665)	(2,958,665)	-	-	-	-	-	(2,958,665)
	-	-	376,420	(3,335,085)	(2,958,665)	-	-	-	-	-	(2,958,665)
Profit for the year ended December 31, 2018	-	-	-	3,124,454	3,124,454	-	-	-	-	-	3,124,454
Other comprehensive income for the year ended December 31, 2018	-	-	-	(26,321)	(26,321)	65,429	(352,044)	-	-	(286,615)	(312,936)
Total comprehensive income for the year ended December 31, 2018	-	-	-	3,098,133	3,098,133	65,429	(352,044)	-	-	(286,615)	2,811,518
Disposal of investments accounted for using equity method	-	(19,746)	-	-	-	(1,165)	-	-	-	(1,165)	(20,911)
Adjustments to share of changes in equities of subsidiaries	-	2,330	-	-	-	(256)	-	-	-	(256)	2,074
Changes in ownership interests in subsidiaries	-	-	-	(40,573)	(40,573)	-	-	-	-	-	(40,573)
Issuance of restricted shares of employees	11,480	163,877	-	-	-	-	-	-	(175,357)	(175,357)	-
Compensation cost arising from restricted shares of stock issued to employees	-	-	-	-	-	-	-	-	17,049	17,049	17,049
Disposal of investments in equity instruments designated at fair value through other comprehensive income	-	-	-	91,405	91,405	-	(91,405)	-	-	(91,405)	-
Balance at December 31, 2018	4,238,144	9,199,357	1,755,814	9,422,510	11,178,324	(36,200)	958,390	-	(158,308)	763,882	25,379,707
Appropriation and distribution of retained earnings:											
Legal reserve appropriated	-	-	312,446	(312,446)	-	-	-	-	-	-	-
Cash dividends of ordinary share	-	-	-	(2,118,972)	(2,118,972)	-	-	-	-	-	(2,118,972)
	-	-	312,446	(2,431,418)	(2,118,972)	-	-	-	-	-	(2,118,972)
Profit for the year ended December 31, 2019	-	-	-	4,474,399	4,474,399	-	-	-	-	-	4,474,399
Other comprehensive income for the year ended December 31, 2019	-	-	-	1,993	1,993	(143,250)	2,114,856	-	-	1,971,606	1,973,599
Total comprehensive income for the year ended December 31, 2019	-	-	-	4,476,392	4,476,392	(143,250)	2,114,856	-	-	1,971,606	6,447,998
Adjustments to share of changes in equities of subsidiaries	-	2,168	-	(28,253)	(28,253)	-	28,252	-	-	28,252	2,167
Changes in ownership interests in subsidiaries	-	(5,161)	-	(119,914)	(119,914)	-	-	-	-	-	(125,075)
Issuance of restricted shares of employees	2,620	47,744	-	-	-	-	-	-	(50,364)	(50,364)	-
Purchase and retirement of restricted shares of stock for employees	(200)	200	-	-	-	-	-	-	-	-	-
Compensation cost arising from restricted shares of employees	-	-	-	-	-	-	-	-	71,643	71,643	71,643
Disposal of investments in equity instruments designated at fair value through other comprehensive income	-	-	-	11,612	11,612	-	(11,612)	-	-	(11,612)	-
Balance at December 31, 2019	$ 4,240,564	9,244,308	2,068,260	11,330,929	13,399,189	(179,450)	3,089,886	-	(137,029)	2,773,407	29,657,468

See accompanying notes to financial statements.

(English Translation of Financial Statements Originally Issued in Chinese)

WIN Semiconductors Corp.

Statements of Cash Flows

For the years ended December 31, 2019 and 2018

(Expressed in Thousands of New Taiwan Dollars)

		2019	2018
Cash flows from (used in) operating activities:			
Profit before tax	$	5,466,702	3,792,611
Adjustments:			
Adjustments to reconcile profit (loss):			
Depreciation expense		3,284,900	3,120,537
Amortization expense		57,599	53,836
Net (gains) losses on financial assets or liabilities at fair value through profit or loss		(221,437)	32,387
Interest expense		31,564	22,452
Interest income		(45,143)	(40,999)
Dividend income		(95,870)	(79,329)
Compensation cost arising from share-based payments		71,643	17,049
Shares of losses of subsidiaries, associates and joint ventures accounted for using equity method		410,550	224,879
(Gains) losses on disposal of property, plant and equipment		372,900	(2,403)
Gains on disposal of investments		-	(237,129)
Other income		(1,776)	-
Total adjustments to reconcile profit (loss)		3,864,930	3,111,280
Changes in operating assets and liabilities:			
Changes in operating assets:			
Increase in accounts receivable		(1,848,010)	(99,251)
Decrease in accounts receivable due from related parties		942,499	342,643
Increase in inventories		(487,360)	(148,308)
Decrease (increase) in other current assets		(30,728)	97,199
Total changes in operating assets		(1,423,599)	192,283
Changes in operating liabilities:			
Increase (decrease) in accounts payable		741,766	(603,497)
Increase in other payables		449,122	137,468
Increase in other payable to related parties		7,195	-
Increase in other current liabilities		179,576	6,301
Increase in other non-current liabilities		2,987	1,827
Total changes in operating liabilities		1,380,646	(457,901)
Total changes in operating assets and liabilities		(42,953)	(265,618)
Cash inflow generated from operations		9,288,679	6,638,273
Income taxes paid		(695,697)	(878,240)
Net cash flows from operating activities		8,592,982	5,760,033
Cash flows from (used in) investing activities:			
Acquisition of financial assets at fair value through other comprehensive income		(76,775)	(84,704)
Proceeds from disposal of financial assets at fair value through other comprehensive income		12,526	228,838
Proceeds from capital reduction of financial assets at fair value through other comprehensive income		6,667	-
Proceeds from disposal of non-current financial assets at amortized cost		29,900	32,300
Acquisition of financial assets at fair value through profit or loss		(467,526)	(477,593)
Proceeds from disposal of financial assets at fair value through profit or loss		708,083	1,451,464
Proceeds from capital reduction of financial assets at fair value through profit or loss		35	-
Acquisition of investments accounted for using equity method		(2,201,490)	(1,705,270)
Proceeds from disposal of investments accounted for using equity method		-	21,925
Acquisition of property, plant and equipment		(1,959,016)	(2,712,970)
Proceeds from disposal of property, plant and equipment		77,466	3,367
Acquisition of intangible assets		(33,468)	(43,538)
Decrease in other non-current assets		850	2,073
Increase in prepayments for business facilities		(1,784,177)	(2,378,658)
Interest received		46,511	42,151
Dividends received		95,870	79,329
Other income received		577	-
Net cash flows used in investing activities		(5,543,967)	(5,541,286)
Cash flows from (used in) financing activities:			
Proceeds from long-term debt		4,715,000	4,891,000
Repayments of long-term debt		(5,291,600)	(5,346,025)
Repayments of lease liabilities		(32,735)	-
Cash dividends paid		(2,118,972)	(2,958,665)
Interest paid		(31,690)	(22,941)
Net cash flows used in financing activities		(2,759,997)	(3,436,631)
Net increase (decrease) in cash and cash equivalents		289,018	(3,217,884)
Cash and cash equivalents at beginning of period		3,474,932	6,692,816
Cash and cash equivalents at end of period	$	3,763,950	3,474,932

See accompanying notes to financial statements.

(Expressed in Thousands of New Taiwan Dollars, Unless Otherwise Specified)

(1) Company history:

WIN Semiconductors Corp. (the "Company") was incorporated on October 16, 1999 as a company limited by shares and registered under the Ministry of Economic Affairs, R.O.C. The address of the Company's registered office is No. 69, Keji 7th Rd., Hwaya Technology Park, Guishan Dist., Taoyuan City, Taiwan. The Company engages in the researching, developing, manufacturing, and selling of GaAs wafers.

(2) Approval date and procedures of the financial statements:

The parent-company-only financial statements was authorized for issue by the Board of Directors as of March 18, 2020.

(3) New standards, amendments and interpretations adopted:

(a) The impact of the International Financial Reporting Standards ("IFRSs") endorsed by the Financial Supervisory Commission, R.O.C. ("FSC") which have already been adopted.

The following new standards, interpretations and amendments have been endorsed by the FSC and are effective for annual periods beginning on or after January 1, 2019.

New, Revised or Amended Standards and Interpretations	Effective date per IASB
IFRS 16 "Leases"	January 1, 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	January 1, 2019
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	January 1, 2019
Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"	January 1, 2019
Annual Improvements to IFRS Standards 2015–2017 Cycle	January 1, 2019

Except for the IFRS 16 "Leases", the Company believes that the adoption of the above IFRSs would not have any material impact on its financial statements. The extent and impact of signification changes are as follows:

IFRS 16 replaces the existing leases guidance, including IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement Contains a Lease", SIC 15 "Operating Leases – Incentives" and SIC 27 "Evaluating the Substance of Transactions Involving the Legal Form of a Lease".

(Continued)

The Company applied IFRS 16 using the modified retrospective approach. The details of the changes in accounting policies are disclosed below:

1) Definition of a lease

Previously, the Company determined at contract inception whether an arrangement is or contains a lease under IFRIC 4. Under IFRS 16, the Company assesses whether a contract is or contains a lease based on the definition of a lease, as explained in Note 4(l).

On transition to IFRS 16, the Company will choose to apply the definition of a lease to all its contracts whether a contract is, or contains, a lease.

2) As a lessee

As a lessee, the Company previously classified leases as operating or finance leases based on its assessment of whether the lease transferred significantly all of the risks and rewards incidental to ownership of the underlying asset to the Company. Under IFRS 16, the Company recognizes right-of-use assets and lease liabilities for most leases – i.e. these leases are on balance sheets.

Leases classified as operating leases under IAS 17. At transition, lease liabilities were measured at the present value of the remaining lease payments, discounted at the Company's incremental borrowing rate as at January 1, 2019. Right-of-use assets are measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments.

In addition, the Company used the following practical expedients when applying IFRS 16 to leases.

- Applied a single discount rate to a portfolio of leases with similar characteristics.
- Adjusted the right-of-use assets by the result of IAS 37 onerous contract provision immediately before the date of initial application, as an alternative to an impairment review.
- Applied the exemption not to recognize right-of-use assets and liabilities for leases with less than 12 months of lease term at the date of initial application.
- Excluded initial direct costs from measuring the right-of-use asset at the date of initial application.
- Used hindsight when determining the lease term if the contract contains options to extend or terminate the lease.

The Company decided to apply recognition exemptions to short-term leases of parts of transportation equipment, etc.

(Continued)

3) As a lessor

The Company is not required to make any adjustments on transition to IFRS 16 for leases in which it acts as a lessor, except for a sub-lease. The Company accounted for its leases in accordance with IFRS 16 from the date of initial application.

4) Impacts on financial statements

On transition to IFRS 16, the Company recognized \$78,239 thousand and \$78,201 thousand of right-of-use assets and the lease liabilities, respectively, and prepaid rent expenses decreased by \$38 thousand. When measuring lease liabilities, the Company discounted lease payments using its incremental borrowing rate at January 1, 2019. The weighted-average rate applied is 1.35%.

The explanation of differences between operating lease commitments immediately preceding the date of initial application, and lease liabilities recognized in the statement of financial position at the date of initial application disclosed as follows:

	January 1, 2019
Operating lease commitment at December 31, 2018	$ 81,239
Recognition exemption for:	
short-term leases	(1,013)
leases of low-value assets	(689)
Discounted cash flow of interest expense	(1,336)
Lease liabilities recognized at January 1, 2019	$ 78,201

(b) The impact of IFRS endorsed by FSC but not yet effective

The following new standards, interpretations and amendments have been endorsed by the FSC and are effective for annual periods beginning on or after January 1, 2020 in accordance with Ruling No. 1080323028 issued by the FSC on July 29, 2019:

New, Revised or Amended Standards and Interpretations	Effective date per IASB
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020
Amendments to IFRS 9, IAS39 and IFRS7 "Interest Rate Benchmark Reform"	January 1, 2020
Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020

The Company assesses that the adoption of the abovementioned standards would not have any material impact on its financial statements.

(Continued)

(c) The impact of IFRS issued by IASB but not yet endorsed by the FSC

As of the date, the following IFRSs that have been issued by the International Accounting Standards Board (IASB), but have yet to be endorsed by the FSC:

New, Revised or Amended Standards and Interpretations	Effective date per IASB
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets Between an Investor and Its Associate or Joint Venture"	Effective date to be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	January 1, 2022

The Company is evaluating the impact of its initial adoption of the abovementioned standards or interpretations on its financial position and financial performance. The results thereof will be disclosed when the Company completes its evaluation.

(4) Summary of significant accounting policies:

The parent-company-only financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language parent-company-only financial statements, the Chinese version shall prevail.

The significant accountings policies have been applied consistently to all periods presented in these parent-company-only financial statements.

The significant accounting policies presented in the parent-company-only financial statements are summarized as follows:

(a) Statement of compliance

These parent-company-only financial statements have been prepared in accordance with the "Regulations Governing the Preparation of Financial Reports by Securities Issuers. "

(b) Basis of preparation

(i) Basis of measurement

The parent-company-only financial statements have been prepared on the historical cost basis except for the following material items in the balance sheets:

1) Financial assets measured at fair value through profit or loss;

2) Financial assets measured at fair value through other comprehensive income;

3) The net defined benefit liabilities are recognized as the present value of the defined benefit obligation, and the effect of the plan assets ceiling disclosure in Note 4(q) less plan assets.

(ii) Functional and presentation currency

The functional currency of the Company is determined based on the primary economic environment in which the Company operates. The parent-company-only financial statements are presented in New Taiwan Dollars, which is the Company’s functional currency. All financial information presented in New Taiwan Dollars has been rounded to the nearest thousand.

(c) Foreign currency

(i) Foreign currency transaction

Transactions in foreign currencies are translated into the respective functional currencies of the Company at the exchange rates at the dates of the transactions. At the end of each subsequent reporting period, monetary items denominated in foreign currencies are translated into the functional currencies using the exchange rate at that date. Non-monetary items denominated in foreign currencies that are measured at fair value are translated into the functional currencies using the exchange rate at the date that the fair value was determined. Non-monetary items denominated in foreign currencies that are measured based on historical cost are translated using the exchange rate at the date of the transaction.

Exchange differences are generally recognized in profit or loss, except for those differences relating to the following, which are recognized in other comprehensive income that arises from the retranslation:

- an investment in equity securities designated as at fair value through other comprehensive income;
- financial liability designated as a hedge of the net investment in a foreign operation to the extent that the hedge is effective; or
- qualifying cash flow hedges to the extent the hedge is effective.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition are translated to the reporting currency of the Company’s parent-company-only financial statements at the exchange rates of the reporting date. The income and expenses of foreign operations, are translated to the reporting currency of the Company’s parent-company-only financial statements at average rate. Foreign currency differences are recognized in other comprehensive income, and presented in the foreign currency translation reserve in equity.

However, if the foreign operation is a non-wholly owned subsidiary, then the relevant proportion of the translation difference is allocated to non-controlling interests. When a foreign operation is disposed of such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. When the Company disposes any part of its interest in a subsidiary that includes a foreign operation while retaining control, the relevant proportion of the cumulative amount is reattributed to non-controlling interest. When the Company disposes of only part of investment in an associate of joint venture that includes a foreign operation while retaining significant or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely predicted in the foreseeable future, the foreign currency gains and losses arising from such items are considered to a part of investment in the foreign operation and are recognized in other comprehensive income.

(d) Classification of current and non-current assets and liabilities

An entity shall classify an asset as current when:

(i) It expects to realize the asset, or intends to sell or consume it in its normal operating cycle;

(ii) It holds the asset primarily for the purpose of trading;

(iii) It expects to realize the asset within twelve months after the reporting period; or

(iv) If the asset is cash and cash equivalent (unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period).

An entity shall classify all other assets as non-current.

An entity shall classify a liability as current when:

(i) It expects to settle the liability in its normal operating cycle;

(ii) It holds the liability primarily for the purpose of trading;

(iii) The liability is due to be settled within twelve months after the reporting period; or

(iv) It does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issuance of equity instruments that do not affect its classification.

(Continued)

(e) Cash and cash equivalents

Cash comprises of cash on hand and cash in bank. Cash equivalents consist of highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits, which meet the above criteria and for the purpose of fulfilling short-term commitments instead of the purpose of investing activities or others, are categorized as cash equivalents.

(f) Financial instruments

Trade receivables are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Company becomes a party to the contractual provisions of the instrument. A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at fair value through profit or loss (FVTPL), transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(i) Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date or settle date basis.

On initial recognition, a financial asset is classified as measured at amortized cost; Fair value through other comprehensive income (FVOCI); or Fair value through profit or loss (FVTPL). Financial assets are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model. Regular way purchase or sales of financial assets shall be recognized and derecognized, as applicable, using trade day.

1) Financial assets measured at amortized cost

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL：

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at amortized cost, which is the amount at which the financial asset is measured at initial recognition, plus/minus, the cumulative amortization using the effective interest method, adjusted for any loss allowance. Interest income, foreign exchange gains and losses, as well as impairment losses, are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

(Continued)

2) Fair value through other comprehensive income (FVOCI)

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL：

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an instrument-by-instrument basis.

Debt investments at FVOCI are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognized in profit or loss. Other net gains and losses are recognized in other comprehensive income. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to profit or loss.

Equity investments at FVOCI are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in other comprehensive income and are never reclassified to profit or loss.

Dividend income from equity investments is recognized in profit or loss on the date on which the Company's right to receive payment is established, which is normally the ex-dividend date.

3) Fair value through profit or loss (FVTPL)

All financial assets not classified as amortized cost or FVOCI described as above are measured at FVTPL, including derivative financial assets. On initial recognition, the Company may irrevocably designate a financial asset, which meets the requirements to be measured at amortized cost or at FVOCI, as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.

4) Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial assets on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs, as well as a profit margin.

(Continued)

In assessing whether the contractual cash flows are solely payments of principal and interest, the Company considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Company considers：

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension features; and
- terms that limit the Company’ s claim to cash flows from specified assets (e.g. non-recourse features).

5) Impairment of financial assets

The Company recognizes loss allowances for expected credit losses on financial assets measured at amortized cost (including cash and cash equivalents, financial assets at amortized costs, accounts receivable, other receivables, guarantee deposit paid and other financial assets), and contract assets.

The Company measures loss allowances at an amount equal to lifetime expected credit loss (ECL), except for the following which are measured as 12-month ECL：

- debt securities that are determined to have low credit risk at the reporting date；and
- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

Loss allowance for trade receivables and contract assets are always measured at an amount equal to lifetime ECL.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Company is exposed to credit risk.

(Continued)

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis based on the Company's historical experience and informed credit assessment as well as forward-looking information.

The Company considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of 'investment grade which is considered to be BBB- or higher per Standard & Poor's, Baa3 or higher per Moody's or twA or higher per Taiwan Ratings'.

The Company assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due.

The Company considers a financial asset to be in default when the financial asset is more than 180 days past due.

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Company in accordance with the contract and the cash flows that the Company expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

At each reporting date, the Company assesses whether financial assets carried at amortized cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence that a financial asset is credit-impaired includes the following events:

- significant financial difficulty of the borrower or issuer；
- a breach of contract such as a default or being more than 90 days past due；
- the lender of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession that the lender would not otherwise consider；
- it is probable that the borrower will enter bankruptcy or other financial reorganization；or
- the disappearance of an active market for a security because of financial difficulties.

Loss allowances for financial assets measured at amortized cost are deducted from its carrying amount. For debt securities at FVOCI, the loss allowance is charged to profit or loss and is recognized in other comprehensive income instead of reducing the carrying amount of the asset.

(Continued)

The Company shall directly reduce the gross carrying amount of a financial asset when the Company has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. This is generally the case when the Company determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company’s procedures for recovery of amounts due.

6) Derecognition of financial assets

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Company enters into transactions whereby it transfers assets recognized in its statement of balance sheet, but retains either all or substantially all of the risks and rewards of the transferred assets.

(ii) Financial liabilities

1) Financial liabilities

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

2) Derecognition of financial liabilities

The Company derecognizes a financial liability when its contractual obligations are discharged or cancelled, or expire. The Company also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value.

(Continued)

On derecognition of a financial liability, the difference between the carrying amount of a financial liability extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

3) Offsetting of financial assets and liabilities

Financial assets and financial liabilities are offset and the net amount presented in the statement of balance sheet when, and only when, the Company currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

(iii) Derivative financial instruments, including hedge accounting

The Company holds derivative financial instruments to hedge its foreign currency exposures. Derivatives are recognized initially at fair value and attributable transaction costs are recognized in profit or loss as incurred. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are recognized in profit or loss, and are included in other gains and losses. When a derivative is designated as a hedging instrument, its timing of recognition in profit or loss is determined based on the nature of the hedging relationship. When the fair value of a derivative instrument is positive, it is classified as a financial asset, and when the fair value is negative, it is classified as a financial liability.

(g) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on the weighted-average method, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(h) Investment in associates

Associates are those entities in which the Company has significant influence, but not control, or joint control over their financial and operating policies.

Investments in associates are accounted for using the equity method and are recognized initially at cost. The cost of the investment includes transaction costs. The carrying amount of the investment in associates includes goodwill which arises from the acquisition less any accumulated impairment losses.

(Continued)

The parent-company-only financial statements include the Company's share of the profit or loss and other comprehensive income of those associates, after adjustments to align the accounting policies with those of the Company, from the date on which significant influence commences until the date on which significant influence ceases. The Company recognizes any changes of its proportionate share in the investee within capital surplus, when an associate's equity changes due to reasons other than profit and loss or comprehensive income, which did not result in changes in actual significant influence.

Unrealized gains and losses resulting from transactions between the Company and an associate are recognized only to the extent of unrelated Company's interests in the associate.

When the Company's share of losses of an associate equals or exceeds its interest in associates, it discontinues recognizing its share of further losses. After the recognized interest is reduced to zero, additional losses are provided for, and a liability is recognized, only to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the associate.

The Company discontinues the use of the equity method and measures the retained interest at fair value from the date when its investment ceases to be an associate. The difference between the fair value of retained interest and proceeds from disposing, and the carrying amount of the investment at the date the equity method was discontinued is recognized in profit or loss. The Company accounts for all the amounts previously recognized in other comprehensive income in relation to that investment on the same basis as would have been required if the associates had directly disposed of the related assets or liabilities. If a gain or loss previously recognized in other comprehensive income would be reclassified to profit or loss (or retained earnings) on the disposal of the related assets or liabilities, the Company reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) (or retained earnings) when the equity method is discontinued. If the Company's ownership interest in an associate is reduced while it continues to apply the equity method, the Company reclassifies the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction in ownership interest to profit or loss.

If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Company continues to apply the equity method without remeasuring the retained interest.

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. Moreover, a difference shall be debited to retained earnings when the balance of capital surplus resulting from investments accounted for using equity method is not sufficient to be written off. 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 will 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.

(Continued)

(i) Investment in subsidiaries

When preparing the parent-company-only financial statements, the investments in subsidiaries, which are controlled by the Company, are accounted for using the equity method. Under the equity method, the profit or loss for the period and other comprehensive income presented in the parent-company-only financial statements should be the same as the allocations of profit or loss for the period and of other comprehensive income attributable to the owners of the parent presented in the financial statements prepared on a consolidated basis; and the owners' equity presented in the parent-company-only financial statements should be the same as the equity attributable to the owners of the parent presented in the financial statements prepared on a consolidated basis. The Company also recognized its shares in the changes in its equity of subsidiaries.

Changes in a parent's ownership interest in a subsidiary that do not result in the loss of control are accounted for within equity.

(j) Investment property

Investment property is property held either to earn rental income or for capital appreciation or for both, but not for sale in the ordinary course of business, use in the production or supply of goods or services or for administrative purposes. Investment property is measured at cost on initial recognition, and subsequently at cost, less accumulated depreciation and accumulated impairment losses. Depreciation expense is calculated based on the depreciation method, useful life, and residual value which are the same as those adopted for property, plant and equipment.

Any gain or loss on disposal of an investment property (calculated as the difference between the net proceeds from disposal and the carrying amount) is recognized in profit or loss.

When the use of an investment property changes such that it is reclassified as property, plant and equipment, its carrying amount at the date of reclassification becomes its cost for subsequent accounting.

Rental income from investment property is recognized as other revenue on a straight-line basis over the term of the lease.

(k) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. The cost consists of any cost directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, and any borrowing cost are eligible for capitalization.

(Continued)

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately, unless the useful life and the depreciation method of the significant part of an item of property, plant and equipment are the same as the useful life and depreciation method of another significant part of that same item.

The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item, and it shall be recognized in profit or loss, under net other gain and losses.

(ii) Reclassification to investment property

The property is reclassified to investment property at its carrying amount when the use of the property changes from owner-occupied to investment property.

(iii) Subsequent cost

Subsequent expenditure is capitalized only when it is probable that the future economic benefits associated with the expenditure will flow to the Company. The carrying amount of those parts that are replaced is derecognized. Ongoing repairs and maintenance are expensed as incurred.

(iv) Depreciation

The depreciable amount of an asset is determined after deducting its residual amount and it shall be allocated on a straight-line basis over its useful life. The items of property, plant and equipment with the same useful life may be grouped in determining the depreciation charge. The remainder of the items may be depreciated separately.

Land has an unlimited useful life and therefore is not depreciated.

The estimated useful lives for the current and comparative years of significant items of property, plant and equipment are as follows:

1) Buildings and structures： 3 to 25 years

2) Machinery and equipment： 1 to 10 years

3) Factory and equipment： 2 to 10 years

4) Other equipment： 1 to 5 years

Depreciation methods, useful lives, and residual values are reviewed at each reporting date. If expectations differ from the previous estimates, the change is accounted for as a change in an accounting estimate.

(Continued)

(l) Leases

Policy applicable from January 1, 2019

(i) Identifying a lease

At inception of a contract, the Company assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Company assesses whether:

1) the contract involves the use of an identified asset – this may be specified explicitly or implicitly, and should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, then the asset is not identified; and

2) the Company has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and

3) the Company has the right to direct the use of the asset:

● The Company has the right to direct the use of the asset when it has the decision-making rights that are most relevant to changing how and for what purpose the asset is used.

● In rare cases where the decision on how, and for what purpose, the asset is used is predetermined, the Company has the right to direct the use of an asset if either:

– the Company has the right to operate the asset throughout the period of use, without the supplier having the right to change those operating instructions; or

– the Company designed the asset in a way that predetermines how and for what purpose the asset will be used throughout the period of use.

At inception or on reassessment of a contract that contains a lease component, the Company allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices. However, for the leases of land and buildings in which it is a lessee, the Company has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

(ii) As a leasee

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

(Continued)

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be reliably determined, the Company’s incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise the following:

1) fixed payments, including substantively fixed payments;

2) variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;

3) amounts expected to be payable under a residual value guarantee; and

4) payments for purchase or termination options that are reasonably certain to be exercised.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when:

1) there is a change in future lease payments arising from the change in an index or rate; or

2) there is a change in the Company’s estimate of the amount expected to be payable under a residual value guarantee; or

3) there is a change in the assessment on whether it will have the option to exercise a purchase; or

4) there is a change in the assessment on lease term as to whether it will be extended or terminated; or

5) there is any lease modifications.

When the lease liability is remeasured, other than lease modifications, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or in profit and loss if the carrying amount of the right-of-use asset has been reduced to zero.

When the lease liability is remeasured to reflect the partial or full termination of the lease for lease modifications that decrease the scope of the lease, the Company accounts for the remeasurement of the lease liability by decreasing the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognize in profit or loss any gain or loss relating to the partial or full termination of the lease.

(Continued)

The Company presents right-of-use assets that do not meet the definition of investment and lease liabilities as a separate line item respectively in the statement of financial position.

The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The Company recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

(iii) As a lessor

When the Company acts as a lessor, it determines at lease commencement whether each lease is a finance lease or an operating lease. To classify each lease, the Company makes an overall assessment of whether the lease transfers to the lessee substantially all of the risks and rewards of ownership incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then the lease is an operating lease. As part of this assessment, the Company considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

When the Company is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Company applies the exemption described above, then it classifies the sub-lease as an operating lease.

If an arrangement contains lease and non-lease components, the Company applies IFRS15 to allocate the consideration in the contract.

The lessor recognizes a finance lease receivable at an amount equal to its net investment in the lease. Initial direct costs, such as lessors to negotiate and arrange a lease, are included in the measurement of the net investment. The lessor recognizes the interest income over the lease term based on a pattern reflecting a constant periodic rate of return on the lessor's net investment in the lease. The Company recognizes lease payments received under operating leases as income on a straight-line basis over the lease term as part of 'other income'.

Policy applicable before January 1, 2019

(i) Lesser

Lease income from operating lease is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred in negotiating and arranging an operating lease is added to the carrying amount of the leased asset and recognized as an expense over the lease term on the same basis as the lease income. Incentives granted to the lessee to enter into the operating lease are spread over the lease term on a straight-line basis so that the lease income received is reduced accordingly.

(Continued)

Contingent rents are recognized as income in the period when the lease adjustments are confirmed.

(ii) Lessee

Leases in terms of which the Company assumes substantially all of the risks and rewards of ownership are classified as finance leases. On initial recognition, the lease asset is measured at an amount equal to the lower of its fair value with the present of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to the asset.

Other leases are operating leases and are not recognized in the Company’s statement of financial position.

Payments made under operating lease, excluding insurance and maintenance expenses, are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense, over the term of the lease.

Contingent rent is recognized as expense in the periods in which they are incurred.

(m) Intangible assets

Subsequent to the initial recognition, an intangible asset is measured at cost, less any accumulated amortization and any accumulated impairment losses. Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognized in profit or loss as incurred.

Amortizable amount is the cost of an asset less its residual values. Intangible assets are amortized from the date that they are available for use by using straight-line method, the estimated useful lives for the current and comparative periods are as follows:

(i) Technical know-how: 12 years

(ii) Computer software and information systems: 1 to 5 years

(iii) Others: 1 to 1.5 years

The residual value, amortization period, and amortization method for an intangible asset with a finite useful life shall be reviewed at least annually at each fiscal year-end, and adjusted if appropriate.

(n) Impairment of non-financial assets

The carrying amounts of the Company’s non-financial assets, other than inventories, deferred tax assets and assets arising from employee benefits are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset’s recoverable amount is estimated. If it is not possible to determine the recoverable amount for the individual asset, then the Company will have to determine the recoverable amount for the asset’s cash-generating unit.

The recoverable amount for the individual asset or the cash-generating unit is the higher of its fair value less costs to sell and its value in use. When evaluating value in use, the pre-tax discount rate is used to estimate the future cash flows. The discount rate should reflect the evaluation of specific risk resulting from the impact of the current market on the time value of money and on the asset or cash-generating unit. If, and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. The reduction is an impairment loss which shall be recognized immediately in profit or loss.

The Company should assess at each reporting date whether there is any indication that an impairment loss recognized in prior periods for an asset other than goodwill may no longer exist or may have decreased. An impairment loss recognized in prior periods shall be reversed if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. If this is the case, the carrying amount of the asset shall be increased to its recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount net of depreciation or amortization that would have been determined if no impairment loss had been recognized.

Notwithstanding whether indicators exist, recoverability of goodwill and intangible assets with indefinite useful lives or those not yet in use are required to be tested at least annually. Impairment loss is recognized if the recoverable amount is less than the carrying amount.

For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash-generating units or groups of cash-generating units that is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquire are assigned to those units or group of units. If the carrying amount of the cash-generating units exceeds the recoverable amount of the unit, the entity shall recognize the impairment loss and the impairment loss shall be allocated to reduce the carrying amount of each asset in the unit. Reversal of an impairment loss for goodwill is prohibited.

(o) Treasury stock

Repurchased shares are recognized under treasury shares (a contra-equity account) based on their repurchase price (including all directly accountable costs). Gains on disposal of treasury shares should be recognized under "capital reserve — treasury share transactions". Losses on disposal of treasury shares should be offset against existing capital reserves arising from similar types of treasury shares. If there are insufficient capital reserves to be offset against, then such losses should be accounted for under retained earnings. The carrying amount of treasury shares should be calculated using the weighted average of different types of repurchase.

During the cancellation of treasury shares, "capital reserve — share premiums" and "share capital" should be debited proportionately. Gains on cancellation of treasury shares should be recognized under existing capital reserves arising from similar types of treasury shares; losses on cancellation of treasury shares should be offset against existing capital reserves arising from similar types of treasury shares. If there are insufficient capital reserves to be offset against, then such losses should be accounted for under retained earnings.

(Continued)

(p) Revenue

(i) Revenue from contracts with customers

Revenue is measured based on the consideration to which the Company expects to be entitled in exchange for transferring goods or services to a customer. The Company recognizes revenue when it satisfies a performance obligation by transferring control of a good or a service to a customer. The accounting policies for the Company’s main types of revenue are explained below:

1) Sale of goods

The Company recognizes revenue when control of the products has been transferred, when the products are delivered to the customer, the customer has full discretion over the channel and price to sell the products, and there is no unfulfilled obligation that could affect the customer’s acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or the Company has objective evidence that all criteria for acceptance have been satisfied.

The Company often offers volume discounts to its customers based on aggregate sales of electronic components over a 12 months period. Revenue from these sales is recognized based on the price specified in the contract, net of the estimated volume discounts. Accumulated experience is used to estimate the discounts, using the expected value method, and revenue is only recognized to the extent that it is highly probable that a significant reversal will not occur. A contract liability is recognized for expected volume discounts payable to customers in relation to sales made until the end of the reporting period. No element of financing is deemed present as the sales of electronic components are made with a credit term of 30 to 60 days, which is consistent with the market practice.

A receivable is recognized when the goods are delivered, as this is the point in time that the Company has a right to an amount of consideration that is unconditional.

2) Financing components

The Company does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Company does not adjust any of the transaction prices for the time value of money.

(q) Employee benefits

(i) Defined contribution plans

Obligations for contributions to defined contribution pension plans are recognized as expense as the related service is provided.

(Continued)

(ii) Defined benefit plans

The Company' s net obligation in respect of defined benefit plans is calculated separately for each the plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Company, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income, and accumulated in retained earnings within equity. The Company determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset). Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Company recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(iii) Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(r) Share-based payment

The grant-date fair value of equity-settled share-based payment agreements granted to employees is generally recognized as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognized as an expense is adjusted to reflect the number of awards which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between the expected and the actual outcomes.

The grant date of the share-based payment is the date the Company inform their employees about the exercise price and shares.

(Continued)

(s) Income taxes

Income taxes comprise current taxes and deferred taxes. Except for expenses related to business combinations, or are recognized directly in equity or other comprehensive income, all current and deferred taxes shall be recognized in profit or loss.

The Company has determined that interest and penalties related to income taxes, including uncertain tax treatment, do not meet the definition of income taxes, and therefore accounted for them under IAS37.

Current taxes comprise the expected tax payables or receivables on the taxable profits (losses) for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payables or receivables are the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date.

Deferred taxes arise due to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases. Deferred taxes shall not be recognized for the below exceptions:

(i) temporary differences on the initial recognition of assets and liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profits (losses) at the time of the transaction;

(ii) temporary differences related to investments in subsidiaries, associates and joint arrangements to the extent that the Company is able to control the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future; and

(iii) taxable temporary differences arising on the initial recognition of goodwill.

Deferred taxes are measured at the tax rates that are expected to be applied to temporary differences when they reserve, using tax rates enacted or substantively enacted at the reporting date, and reflect uncertainty related income tax, if any.

Deferred tax assets and liabilities may be offset against each other if the following criteria are met:

(i) The entity has the legal right to settle tax assets and liabilities on a net basis; and

(ii) the taxing of deferred tax assets and liabilities fulfill one of the below scenarios:

1) levied by the same taxing authority; or

2) levied by different taxing authorities, but where each such authority intends to settle tax assets and liabilities (where such amounts are significant) on a net basis every year of the period of expected asset realization or debt liquidation, or where the timing of asset realization and debt liquidation is matched.

(Continued)

A deferred tax asset should be recognized for the carry-forward of unused tax losses, unused tax credits, and deductible temporary differences to the extent that it is probable that future taxable profit will be available against which the unused tax losses, unused tax credits, and deductible temporary differences can be utilized. Such unused tax losses, unused tax credits, and deductible temporary differences shall also be re-evaluated every year on the financial reporting date, and adjusted based on the probability that future taxable profit will be available against which the unused tax losses, unused tax credits, and deductible temporary differences can be utilized; such reductions are reversed when the probability of future taxable profits improves.

(t) Earnings per share

The Company discloses the Company' s basic and diluted earnings per share attributable to ordinary equity holders of the Company. The calculation of basic earnings per share is based on the profit attributable to the ordinary shareholder of the Company divided by weighted-average number of ordinary shares outstanding. The calculation of diluted earnings per share is based on the profit attributable to ordinary shareholders of the Company, divided by weighted-average number of ordinary shares outstanding after adjustment for the effects of all dilutive potential ordinary shares, such as employee remuneration and new restricted shares of employee.

(u) Operating segment

The Company discloses its segment reporting in the consolidated financial statements. Therefore, the Company does not disclose segment information in the parent-company-only financial statements.

(5) Significant accounting assumptions and judgments, and major sources of estimation uncertainty:

The preparation of the parent-company-only financial statements in conformity with "Regulations Governing the Preparation of Financial Reports by Securities Issuers" requires the management to make judgments, estimates, and assumptions that affect the application of the accounting policies and the reported amount of assets, liabilities, income and expenses. Actual results may differ from these estimates.

The management continues to monitor the accounting estimates and assumptions. The management recognizes any changes in accounting estimates during the period and the impact of those changes in accounting estimates in the next period.

Information about critical judgments in applying the accounting policies that do not have significant effects on the amounts recognized in the parent-company-only financial statements.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment with the next financial year is as follows:

- Valuation of inventories:

As inventories are stated at the lower of cost or net realizable value, the Company estimates the net realizable value of inventories for obsolescence and unmarketable items at the end of the reporting period and then writes down the cost of inventories to net realizable value. The valuation of inventories is mainly determined based on assumptions as to future demand within a specific time horizon. Due to the rapid industrial transformation, there may be significant changes in the net realizable value of inventories. The further description of the valuation of inventories, please refer to Note 6(e).

The accounting policy and disclosure of the Company include that measuring the financial assets and financial liabilities at fair value. The Company uses external information to make the evaluation result agreed to market status and to confirm the data resource is independent reliable and consistent with other resource. The Company regularly revises the inputs and any essential adjustments on the fair value to confirm that evaluation results are reasonable. The Company regularly evaluates investment property using the evaluation methods and related parametric assumptions announced by FSC.

When measuring the fair value of an asset or a liability, the Company usually uses market observable data. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

－Level 1 : quoted prices (unadjusted) in active markets for identical assets or liabilities.

－Level 2 : inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

－Level 3 : inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The Company recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following notes:

(a) Note 6(i)-Investment property.

(b) Note 6(x)-Financial instruments.

(6) Explanation of significant accounts:

(a) Cash and cash equivalents

	December 31, 2019	December 31, 2018
Cash on hand	$ 163	164
Cash in bank	3,763,787	3,474,768
	$ 3,763,950	3,474,932

Refer to Note 6(x) for the fair value sensitivity analysis and currency risk of the financial assets and liabilities of the Company.

(b) Financial instruments

(i) Financial assets at fair value through profit or loss (FVTPL):

		December 31, 2019	December 31, 2018
Mandatorily measured at FVTPL:			
Stocks listed on domestic markets	$	154,921	17,475
Private fund (Note)		565,804	722,405
Total	$	720,725	739,880
Current	$	154,921	17,475
Non-current		565,804	722,405
	$	720,725	739,880

Note: As of December 31, 2019 and 2018, part of the private fund is during the lock-up period.

The Company holds derivative financial instruments to hedge certain foreign exchange the Company is exposed to, arising from its operating activities. For the year ended December 31, 2019, the gains on settlement, amounting to $3,548 thousand, were recognized as other gains and losses. There was no transaction for the year ended December 31, 2018.

Refer to Note 6(w) for the gains or losses on disposal of investment and the amount of re-measurement at fair value recognized in profit or loss.

(ii) Non-current financial assets at fair value through other comprehensive income (FVOCI):

		December 31, 2019	December 31, 2018
Stocks listed on domestic markets	$	3,145,387	1,205,785
Non-public stocks		440,056	477,003
	$	3,585,443	1,682,788

The Company decided to hold these equity instruments, which are not held for trading, at fair value through other comprehensive income.

For the year ended December 31, 2019, due to liquidation of investee or return of capital contributions, the Company disposed the equity investment designated at fair value through other comprehensive income, with a fair value of $19,193 thousand; upon derecognition, the gains of disposal, accumulated in other equity, amounting to $11,612 thousand was transferred to retained earnings.

(Continued)

For the year ended December 31, 2018, the Company considered the change in the proportion of investment portfolio, therefore, disposed partial of its equity investments designated at fair value through other comprehensive income, with a fair value of $228,838 thousand; upon derecognition, the gains of disposal, accumulated in other equity, amounting to $91,405 thousand was transferred to retained earnings.

(iii) Non-current financial assets at amortized cost:

	Issue period	Nominal rate (%)	December 31, 2019	December 31, 2018
Preferred stock B	2012.11.23~2019.11.22	-	$ -	29,900

The Company has assessed that its financial asset is held to collect contractual cash flows, which consist solely of payments of principal and interest on principal amount outstanding. The Company has designated these investments at the date of initial application as measured at amortized cost.

The non-current financial assets at amortized cost had been redeemed in the second quarter of 2019.

(iv) Sensitivity analysis in the equity price risk:

If the equity price changes, the impact to comprehensive income, using the sensitivity analysis based on the same variables except for the price index for both periods, will be as follows:

	2019		2018	
Prices of securities at the reporting date	**After-tax other comprehensive income**	**After-tax profit (loss)**	**After-tax other comprehensive income**	**After-tax profit (loss)**
Increasing 3%	$ 107,563	4,648	50,484	524
Decreasing 3%	$ (107,563)	(4,648)	(50,484)	(524)

(v) As of December 31, 2019 and 2018 the financial assets were not pledged. For information on the Company's currency risk and credit risk was disclosed in Note 6(x).

(c) Accounts receivable, net

	December 31, 2019	December 31, 2018
Accounts receivable	$ 2,401,924	553,914
Accounts receivable due from related parties	-	942,499
	$ 2,401,924	1,496,413

The Company applies the simplified approach to provide for its loss allowance used for expected credit losses, which permit the use of lifetime expected loss provision for all receivables. To measure the expected credit losses, accounts receivable has been grouped based on shared credit risk characteristics and days past due, as well as incorporate forward looking information.

(Continued)

The loss allowance provision was determined as follows:

	December 31, 2019		
	Gross carrying amount	Weighted-average expected loss rate	Lifetime expected credit loss allowance
Not past due	$ 2,133,319	0%	-
Past due 1~60 days	266,022	0%	-
Past due 61~120 days	2,583	0%	-
Past due 121~180 days	-	21.28%~36.46%	-
Past due more than 181 days	-	100%	-
	$ 2,401,924		-

	December 31, 2018		
	Gross carrying amount	Weighted-average expected loss rate	Lifetime expected credit loss allowance
Not past due	$ 1,480,539	0%	-
Past due 1~60 days	15,822	0%	-
Past due 61~120 days	52	0%	-
Past due 121~180 days	-	21.28%~32.14%	-
Past due more than 181 days	-	100%	-
	$ 1,496,413		-

As of December 31, 2019 and 2018, the accounts receivables were not discounted and pledged.

(d) Other receivables

	December 31, 2019	December 31, 2018
Other receivables due from related parties	$ 1,199	-
Other receivables (recognized as other current assets)	28,622	124,767
Less: allowance for doubtful accounts	-	-
	$ 29,821	124,767

As of December 31, 2019 and 2018, other receivables were not past due nor impaired.

For information on the Company’ s credit risk was disclosed in Note 6(x).

(Continued)

(e) Inventories

	December 31, 2019	December 31, 2018
Raw materials, supplies and spare parts	$ 2,859,659	2,619,165
Work in process	1,123,552	786,495
Finished goods	375,588	470,879
	$ 4,358,799	3,876,539

Except cost of goods sold and inventories recognized as expenses, the remaining gains or losses which were recognized as operating cost or deduction of operating cost were as follows:

	2019	2018
Loss on valuation of inventories and obsolescence	$ 44,822	39,142
Unallocated overheads	$ -	15,156
Revenue from sale of scraps	$ (27,290)	(13,524)

As of December 31, 2019 and 2018, the inventories were not pledged.

(f) Investments accounted for using equity method

The components of investments accounted for using the equity method at the reporting date were as follows:

	December 31, 2019	December 31, 2018
Subsidiaries	$ 6,174,200	4,379,635

(i) Subsidiaries

For the related information, please refer to consolidated financial statements for the year ended December 31, 2019.

(ii) As of December 31, 2019 and 2018, the investments accounted for using equity method were not pledged.

(Continued)

(g) Property, plant and equipment

The movements in property, plant and equipment were as follows:

	Land	Buildings and structures	Machinery and equipment	Factory and equipment	Other equipment	Construction in progress	Total
Cost：							
Balance as of January 1, 2019	$ 2,546,534	2,132,255	20,102,031	4,202,639	395,877	1,140,818	30,520,154
Additions	-	68,234	1,381,415	556,494	90,603	69,268	2,166,014
Reclassification (Note 1)	-	185,683	2,203,617	1,008,816	11,256	(1,012,122)	2,397,250
Disposals	-	(858)	(2,728,600)	(95,206)	(80,819)	-	(2,905,483)
Balance as of December 31, 2019	$ 2,546,534	2,385,314	20,958,463	5,672,743	416,917	197,964	32,177,935
Balance as of January 1, 2018	$ 2,546,534	2,111,113	17,761,484	4,218,562	321,148	446,835	27,405,676
Additions	-	5,297	1,548,836	81,185	150,577	777,166	2,563,061
Reclassification (Note 2)	-	15,969	1,196,358	33,775	135	(83,183)	1,163,054
Disposals	-	(124)	(404,647)	(130,883)	(75,983)	-	(611,637)
Balance as of December 31, 2018	$ 2,546,534	2,132,255	20,102,031	4,202,639	395,877	1,140,818	30,520,154
Accumulated depreciation：							
Balance as of January 1, 2019	$ -	682,291	12,612,104	2,227,477	213,766	-	15,735,638
Depreciation	-	106,848	2,569,703	424,407	130,516	-	3,231,474
Disposals	-	(858)	(2,285,483)	(91,973)	(80,640)	-	(2,458,954)
Balance as of December 31, 2019	$ -	788,281	12,896,324	2,559,911	263,642	-	16,508,158
Balance as of January 1, 2018	$ -	581,296	10,555,424	1,945,080	160,511	-	13,242,311
Depreciation	-	101,119	2,456,526	413,280	129,238	-	3,100,163
Disposals	-	(124)	(399,846)	(130,883)	(75,983)	-	(606,836)
Balance as of December 31, 2018	$ -	682,291	12,612,104	2,227,477	213,766	-	15,735,638
Carrying value：							
Balance as of December 31, 2019	$ 2,546,534	1,597,033	8,062,139	3,112,832	153,275	197,964	15,669,777
Balance as of January 1, 2018	$ 2,546,534	1,529,817	7,206,060	2,273,482	160,637	446,835	14,163,365
Balance as of December 31, 2018	$ 2,546,534	1,449,964	7,489,927	1,975,162	182,111	1,140,818	14,784,516

Note 1: Inventories, prepayments for business facilities were reclassified as property, plant and equipment.

Note 2: Inventories, prepayments for business facilities, and other prepaid expenses were reclassified as property, plant and equipment.

(i) Pledge to secure

As of December 31, 2019 and 2018, property, plant and equipment were subject to a registered debenture to secured bank loans, the collateral for these long-term borrowings were disclosed in Note 8.

(ii) For the years ended December 31, 2019 and 2018, capitalized interest expenses amounted to $36,299 thousand and $44,164 thousand, respectively. The annual interest rates at which these interest expenses were capitalized ranged from 1.08%~1.34% and 1.14%~1.34%, respectively.

(Continued)

(h) Right-of-use assets

The Company leases land, buildings and structures, and other equipment. The movements in right-of-use assets were as follows:

		Land	Buildings and structures	Other equipment	Total
Cost:					
Balance at January 1, 2019	$	-	-	-	-
Effects of retrospective application for IFRS 16		24,979	47,664	5,596	78,239
Additions		-	-	3,132	3,132
Balance at December 31, 2019	$	24,979	47,664	8,728	81,371
Accumulated depreciation:					
Balance at January 1, 2019	$	-	-	-	-
Depreciation		8,968	21,198	2,887	33,053
Balance at December 31, 2019	$	8,968	21,198	2,887	33,053
Carrying amount:					
Balance at December 31, 2019	$	16,011	26,466	5,841	48,318

(i) Investment property

The movements in investment property were as follows:

		Land	Buildings and structures	Total
Cost：				
Balance as of January 1, 2019	$	963,127	529,952	1,493,079
Additions		-	-	-
Balance as of December 31, 2019	$	963,127	529,952	1,493,079
Balance as of January 1, 2018	$	963,127	529,952	1,493,079
Additions		-	-	-
Balance as of December 31, 2018	$	963,127	529,952	1,493,079
Accumulated depreciation：				
Balance as of January 1, 2019	$	-	71,551	71,551
Depreciation		-	20,373	20,373
Balance as of December 31, 2019	$	-	91,924	91,924
Balance as of January 1, 2018	$	-	51,177	51,177
Depreciation		-	20,374	20,374
Balance as of December 31, 2018	$	-	71,551	71,551

(Continued)

		Land	Buildings and structures	Total
Carrying value：				
Balance as of December 31, 2019	$	963,127	438,028	1,401,155
Balance as of January 1, 2018	$	963,127	478,775	1,441,902
Balance as of December 31, 2018	$	963,127	458,401	1,421,528
Fair value：				
Balance as of December 31, 2019			$	1,578,738
Balance as of December 31, 2018			$	1,632,183

When measuring the fair value of its investment property, the Company considered the present value of net cash flows to be generated from leasing the property. The expected net cash flows were discounted using the yield to reflect its specified inherit risk on the net cash flows. The inputs to the valuation technique used for measuring fair value were categorized as a Level 2 fair value.

As of December 31, 2019 and 2018, the yield applied to the net annual rentals to determine fair value of property for which current prices in an active market were unavailable, was as follows:

Location	2019	2018
Hsinchu	0.31%	0.24%
Taoyuan	0.34%	1.41%

As of December 31, 2019 and 2018, investment property were subject to a registered debenture to secured bank loans, the collateral for these long-term borrowings were disclosed in Note 8.

(j) Intangible assets

(i) The movements in intangible assets were as follows:

		Technical know-how	Computer software and information systems	Others	Total
Cost：					
Balance as of January 1, 2019	$	46,005	140,788	4,523	191,316
Additions		-	69,720	358	70,078
Reclassification (Note)		-	15,671	-	15,671
Disposals		-	(50,228)	(2,850)	(53,078)
Balance as of December 31, 2019	$	46,005	175,951	2,031	223,987
Balance as of January 1, 2018	$	46,005	111,822	5,614	163,441
Additions		-	52,454	3,853	56,307
Reclassification (Note)		-	9,911	-	9,911
Disposals		-	(33,399)	(4,944)	(38,343)
Balance as of December 31, 2018	$	46,005	140,788	4,523	191,316

(Continued)

		Technical know-how	Computer software and information systems	Others	Total
Amortization：					
Balance as of January 1, 2019	$	31,309	63,605	2,141	97,055
Amortization		3,834	51,688	2,077	57,599
Disposals		-	(50,228)	(2,850)	(53,078)
Balance as of December 31, 2019	$	35,143	65,065	1,368	101,576
Balance as of January 1, 2018	$	27,475	51,178	2,909	81,562
Amortization		3,834	45,826	4,176	53,836
Disposals		-	(33,399)	(4,944)	(38,343)
Balance as of December 31, 2018	$	31,309	63,605	2,141	97,055
Carrying value：					
Balance as of December 31, 2019	$	10,862	110,886	663	122,411
Balance as of January 1, 2018	$	18,530	60,644	2,705	81,879
Balance as of December 31, 2018	$	14,696	77,183	2,382	94,261

Note：Other current assets were reclassified as intangible assets.

(ii) Amortization expense recognized in profit or loss

For the years ended December 31, 2019 and 2018, the amortization expenses of intangible assets were as follows:

		2019	2018
Operating costs	$	14,253	13,945
Operating expenses		43,346	39,891
	$	57,599	53,836

(iii) As of December 31, 2019 and 2018, the intangible assets were not pledged.

(k) Other current assets and other non-current assets

		December 31, 2019	December 31, 2018
Business tax refund receivables	$	148,896	70,401
Prepaid expense		96,476	68,953
Restricted assets		24,892	24,700
Refundable deposits		22,356	23,399
Other receivables from metal recycling		16,489	108,738
Other receivables		12,133	16,029
Others		2,100	2,158
	$	323,342	314,378

(Continued)

(l) Short-term borrowings

	December 31, 2019	December 31, 2018
Unsecured short-term borrowings	$ -	-
Unused bank credit lines for short-term borrowings	$ 1,153,882	2,190,784
Unused bank credit lines for short-term and long-term borrowings	$ 3,276,609	3,068,629

(m) Long-term borrowings

	December 31, 2019	December 31, 2018
Secured long-term borrowings (Settled in NTD)	$ 1,620,000	1,572,600
Unsecured long-term borrowings (Settled in NTD)	3,606,000	4,230,000
Less: long-term liabilities, current portion	-	-
Total	$ 5,226,000	5,802,600
Unused bank credit lines for long-term borrowings	$ 3,825,000	5,779,000
Annual interest rate	0.98%~1.18%	1.08%~1.40%
Expiry date	2021/6/15~2025/8/16	2020/3/31~2025/8/16

As of December 31, 2019, the remaining balances of the borrowing due were as follows:

Year due	Amount
January 1, 2021~December 31, 2021	$ 1,035,000
January 1, 2022~December 31, 2022	2,016,000
January 1, 2023 and after	2,175,000
	$ 5,226,000

(i) The unused bank credit lines for short-term and long-term borrowings at the reporting date were disclosed in Note 6(l).

(ii) The collateral for these long-term borrowings were disclosed in Note 8.

(n) Lease liabilities

The carrying amounts of lease liabilities were as follow:

	December 31, 2019
Current	$ 33,526
Non-current	$ 15,072

For the maturity analysis, please refer to Note 6(x).

(Continued)

The amounts recognized in profit or loss were as follows:

	2019
Interest expenses on lease liabilities	$ 846
Expenses relating to short-term leases	$ 1,185
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	$ 1,284

The amounts recognized in the statement of cash flows for the Company was as follows:

	2019
Total cash outflow for leases	$ 36,050

(i) Real estate and buildings leases

The Company leases land and buildings for its parking lots and staff dormitories. The leases of them typically run for a period of 2 to 6 years.

(ii) Other leases

The Company leases printer and transportation equipment, with lease terms of 2 to 5 years.

(iii) Parts of the leases of transportation and printer are with contract terms of less than one year. These leases are short-term. The Company has elected not to recognize right-of-use assets and lease liabilities for these leases. Also, some leases contain cancellation options exercisable by the Company. In which leasee is not reasonably certain to use an optional extended lease term, payments associated with the optional period are not included within lease liabilities.

(o) Operating lease

(i) Lease-lessor

The Company leased its investment property under operating lease, which was disclosed in Note 6(i).

For the years ended December 31, 2019 and 2018, the rental income recognized in other income amounting to $75,425 thousand and $79,426 thousand, respectively.

(ii) Lease-lessee

As of December 31, 2018, the Company leases a number of parking lots etc. under operating lease. The leases typically run for a period of 1 to 5 years.

For the year ended December 31, 2018, the rent expenses amounted to $35,340 thousand which were recorded as operating costs and operating expenses.

(Continued)

(p) Employee benefits

(i) Defined benefit plans

Reconciliation of defined benefit obligation at present value and plan asset at fair value were as follows:

		December 31, 2019	December 31, 2018
Present value of the defined benefit obligations	$	144,155	141,119
Fair value of plan assets		(45,194)	(42,653)
Net defined benefit liabilities (Note)	$	98,961	98,466

Noted: Recognized liabilities for defined benefit obligations were recognized as other non-current liabilities.

The Company makes defined benefit plan contributions to the pension fund account in the Bank of Taiwan that provides pensions for employees upon retirement. Plans (covered by the Labor Standards Law) entitle a retired employee to receive an annual payment based on years of service and average salary prior to six months of retirement.

1) Composition of plan assets

The Company set aside pension funds in accordance with the legislation from the Ministry of Labor and managed by the Bureau of Labor Founds. The annual budget for the allocation of the minimum income cannot be lower than the income calculated based on the interest rate of the banks' two-year time deposit in accordance with the legislation "Management and Utilization of the Labor Pension Funds".

The Company's labor pension reserve account balance in the Bank of Taiwan amounted to $45,194 thousand as of December 31, 2019. The utilization of the labor pension fund assets includes the asset allocation and the yield of the fund. Please refer to the website of Bureau of Labor Founds, Ministry of Labor.

2) The movements in present value of the defined benefit obligations

For the years ended December 31, 2019 and 2018, movements in the present value of the defined benefit obligations for the Company were as follows:

		2019	2018
Defined benefit obligations at the beginning	$	141,119	102,900
Current service costs and interest cost		4,190	3,205
Remeasurements of the net defined benefit liability (asset):			
－Actuarial (gains) losses arising from financial assumption		4,175	26,107
－Experience adjustments		(5,329)	8,907
Defined benefit obligations at the end	$	144,155	141,119

(Continued)

3) The movements in fair value of the defined benefit plan assets

For the years ended December 31, 2019 and 2018, movements in the fair value of the plan assets were as follows:

	2019	2018
Fair value of plan assets at the beginning	$ 42,653	40,312
Interest revenue	579	647
Remeasurements of the net defined benefit liability (asset):		
－Return on plan assets (excluding the interest revenue)	1,338	963
Amounts contributed to plan	624	731
Fair value of plan assets at the end	$ 45,194	42,653

4) The movement in effect of plan asset ceiling

For the years ended December 31, 2019 and 2018, there were no changes in the effect of plan asset ceiling.

5) The expenses recognized in profit or losses

For the years ended December 31, 2019 and 2018, the expenses recognized in profit or losses for the Company were as follows:

	2019	2018
Current service costs	$ 2,296	1,579
Net interest expense of net defined benefit liabilities (assets)	1,315	979
	$ 3,611	2,558

	2019	2018
Administrative expenses	$ 3,611	2,558

6) The remeasurements of the net defined benefit liabilities (assets) recognized in other comprehensive income

For the years ended December 31, 2019 and 2018, the remeasurements of the net defined benefit liabilities (assets) recognized in other comprehensive income were as follows:

	2019	2018
Balance at the beginning	$ 64,717	30,666
Recognized in the current period	(2,492)	34,051
Balance at the end	$ 62,225	64,717

(Continued)

7) Actuarial assumptions

At the end of the reporting date, the principal actuarial assumptions were as follows:

	December 31, 2019	December 31, 2018
Discount rate	1.125%	1.375%
Future salary rate increases	4.500%	4.500%

The Company expects to make contributions of $129 thousand to the defined benefit plans in the next year starting from December 31, 2019. The weighted average duration of the defined benefit plans is 16.28 years.

8) Sensitivity analysis

As of December 31, 2019, and 2018, the changes in main actuarial assumptions might have an impact on the present value of the defined benefit obligation as follows:

	Influences of defined benefit obligations	
	Increase by 0.25%	Decrease by 0.25%
Balance as of December 31, 2019		
Discount rate	$ (4,175)	4,333
Future salary rate increases	4,121	(3,990)
Balance as of December 31, 2018		
Discount rate	$ (4,288)	4,475
Future salary rate increases	4,264	(4,124)

There is no change in other assumptions when performing the above-mentioned sensitivity analysis. In practice, assumptions may be interactive with each other. The method used on sensitivity analysis is consistent with the calculation on the net pension liabilities.

There is no change in the method and assumptions used in the preparation of sensitivity analysis for 2019 and 2018.

(ii) Defined contribution plans

The Company set aside 6% of the contribution rate of the employee’s monthly wages to the Labor Pension personal account of the Bureau of Labor Insurance in accordance with the provisions of the Labor Pension Act. The Company set aside a fixed amount to the Bureau of Labor Insurance without the payment of additional legal or constructive obligations.

The Company set aside $95,116 thousand and $91,638 thousand of the pension under the pension plan costs to the Bureau of Labor Insurance for the years ended December 31, 2019 and 2018, respectively.

(Continued)

(q) Income tax

(i) Income tax expense

The amount of income tax expense for the years ended December 31, 2019 and 2018 were as follows:

	2019	2018
Current tax expense (benefits)		
Current period	$ 1,101,313	764,543
Adjustment for prior periods	(8,487)	(12,025)
Subtotal	1,092,826	752,518
Deferred tax expense (benefits)		
Origination and reversal of temporary differences	(100,523)	(77,567)
Adjustment in tax rate	-	(6,794)
Subtotal	(100,523)	(84,361)
Income tax expense	$ 992,303	668,157

The amount of income tax (expense) benefit recognized in other comprehensive income for the years ended December 31, 2019 and 2018 were as follows:

	2019	2018
Components of other comprehensive income that will not be classified to profit or loss:		
The remeasurements of defined benefit plans	$ (499)	7,730

Reconciliation of income tax expenses (benefit) and profit before tax were as follows:

	2019	2018
Profit before tax	$ 5,466,702	3,792,611
Estimated income tax calculated using the Company’ s domestic tax rate	$ 1,093,340	758,522
Adjustment in tax rate	-	(6,794)
Tax-exempt income	(75,824)	(16,469)
Investment tax credits	(75,519)	(61,550)
Change in provision in prior periods	(8,487)	(12,025)
Surtax on unappropriated earnings (2019:5%；2018:10%)	37,906	42,928
Others	20,887	(36,455)
	$ 992,303	668,157

(Continued)

(ii) Deferred tax assets and liabilities

Changes in the amount of deferred tax assets and liabilities for the years ended December 31, 2019 and 2018 were as follows:

	Allowance for obsolete inventories	Difference in depreciation expense between financial and tax method	Unrealized investment losses recognized under equity method	Others	Total
Deferred tax assets:					
Balance as of January 1, 2019	$ 32,474	58,961	3,102	41,265	135,802
Recognized in profit or loss	6,162	1,582	76,766	16,013	100,523
Recognized in other comprehensive income	-	-	-	(499)	(499)
Balance as of December 31, 2019	$ 38,636	60,543	79,868	56,779	235,826
Balance as of January 1, 2018	$ 22,992	23,256	2,817	28,135	77,200
Recognized in profit or loss	9,482	35,705	285	5,400	50,872
Recognized in other comprehensive income	-	-	-	7,730	7,730
Balance as of December 31, 2018	$ 32,474	58,961	3,102	41,265	135,802

	Unrealized investment income recognized under equity method	Total
Deferred tax liabilities:		
Balance as of January 1, 2018	$ 33,489	33,489
Recognized in profit or loss	(33,489)	(33,489)
Balance as of December 31, 2018	$ -	-

There was no change in the amount of deferred tax liabilities for the year ended December 31, 2019.

(iii) Examination and approval

The Company’ s corporate income tax returns for all the years through 2017 were assessed and approved by the tax authorities National Taxation Bureau of the Northern Area, Ministry of Finance.

(r) Capital and other equity

(i) Ordinary shares

As of December 31, 2019 and 2018, the Company’ s authorized share capital consisted of 1,000,000 thousand shares of ordinary shares, with $10 dollars par value per share, of which 424,056 thousand shares, and 423,814 thousand shares, respectively, were issued. The Company has reserved $1,000,000 thousand for employee stock options.

(Continued)

Reconciliations of shares outstanding for the years ended December 31, 2019 and 2018:

	Ordinary share (in thousands)	
	2019	**2018**
Balance as of beginning	423,814	422,666
Restricted shares of stock issued for employees	262	1,148
Redeemed restricted shares of stock issued for employees	(20)	-
Balance as of ending	**424,056**	**423,814**

On March 21, 2019, the Company's Board of Directors approved a resolution to redeem the unvested restricted employee share of stock amounting to 20 thousand shares, at $10 dollars par value per share, amounting to $200 thousand. The recognition date for capital reduction was March 31, 2019. Accordance with the resolution of Board of Directors meeting held on May 14, 2019, the Company issued 262 thousand shares, at $10 dollars par value per share, amounting to $2,620 thousand. All related registration procedures had been completed.

On June 15, 2018, the shareholders' meeting approved a resolution to issue 1,700 thousand new restricted employee shares, at $10 dollars par value per share, amounting to $17,000 thousand, to full-time regular employees who meet specific requirements. The above transaction had been approved by the Financial Supervisory Commission. In accordance with the resolution of Board of Directors meeting held on September 14, 2018, the Company issued 1,148 thousand shares, at $10 dollars par value per share, amounting to $11,480 thousand. The aforementioned stock issuance had been registered with the government authorities.

(ii) Capital surplus

The details of capital surplus at the reporting date were as follows:

		December 31, 2019	December 31, 2018
Additional paid-in capital	$	9,031,035	9,031,035
Changes in equity of subsidiaries, associates and joint ventures accounted for using equity method		754	3,747
Employee stock options		698	698
Restricted shares of stock issued for employees		211,821	163,877
	$	**9,244,308**	**9,199,357**

In accordance with amended Company Act, realized capital reserves can only be reclassified as share capital or be distributed as cash dividends after offsetting against losses. The aforementioned capital reserves include share premiums and donation gains. In accordance with the Regulations Governing the Offering and Issuance of Securities by Securities Issuers, the actual amount of capital reserves to be reclassified under share capital shall not exceed 10% of the actual share capital amount.

(Continued)

(iii) Retained earnings

The Company's Articles of Incorporation stipulate that 10% of the balance of annual income or earnings after deducting accumulated deficit, if any, must be set aside as a legal reserve and a special capital reserve is likewise appropriated or the annual income or earnings are retained in accordance with the relevant laws or regulations or as requested by the authorities. Otherwise, the Company shall set aside at least 50% for shareholder, the distribution of remaining balance of the earnings should be further proposed by the Board of Directors and resolved by the shareholders' meeting. And the cash dividends should not lower than 10% of the total stockholders' dividends.

It is authorized the distributable dividends and bonuses or legal capital reserve and capital reserve in whole or in part may be paid in cash after a resolution has been adopted by a majority vote at a meeting of the Board of Directors attended by two-thirds of the total number of directors; and in addition thereto a report of such distribution shall be submitted to the shareholders' meeting.

As the Company is a technology and capital-intensive enterprise and is in its growth phase, it has adopted a more prudent approach in appropriating its remaining earnings as its dividend policy in order to sustain its long-term capital needs and thereby maintain continuous development and steady growth.

1) Legal reserve

If the Company experienced profit for the year, the meeting of shareholders shall decide on the distribution of the legal reserve either by new shares or by cash of up to 25% of the actual share capital.

2) Special reverse

In accordance with Permit No. 1010012865 issued by the FSC on April 6, 2012, a portion of current period earnings and undistributed prior period earnings shall be reclassified as a special earnings reserve during earnings distribution. The amount to be reclassified should be equal to the total net reduction of current period of other shareholders' equity resulting from the IFRS first-time adoption. Similarly, a portion of undistributed prior period earnings shall be reclassified as a special earnings reserve (and does not qualify for earnings distribution) to account for cumulative changes to other shareholders' equity pertaining to prior periods due to the IFRS first time adoption. Amounts of subsequent reversals pertaining to the net reduction of other shareholders' equity shall qualify for additional distributions.

(Continued)

3) Appropriations of earnings

The appropriations of earning for 2018 and 2017 had been approved in shareholders' meetings held on June 14, 2019 and June 15, 2018, respectively. The appropriations and dividends were as follows:

	2018	2017
Cash dividends	$ 2,118,972	2,958,665

The above-mentioned appropriations of earning for 2018 and 2017 were consistent with the resolutions of the meeting of the Board of Directors.

The related information mentioned above can be found on websites such as the Market Observation Post System.

On March 18, 2020, the Company's Board of Directors resolved to appropriate the 2019 earnings. The earnings were appropriated as follows:

	2019	
	Amount per share (in dollars)	**Total amount**
Cash dividends	$ 7.00	$ 2,968,395

(iv) Other equity interest, net of tax

	Exchange differences on translation of foreign financial statements	Unrealized gains (losses) on financial assets at fair value through other comprehensive income	Other unearned compensation for restricted shares of employees
Balance as of January 1, 2019	$ (36,200)	958,390	(158,308)
Foreign currency differences (net of tax)－			
Subsidiaries	(143,250)	-	-
Unrealized gains (losses) on equity instruments at fair value through other comprehensive income (net of tax):			
－The company	-	1,845,073	-
－Subsidiaries	-	269,783	-
Cumulative gains (losses) reclassified to retained earnings on disposal of investments in equity instruments at fair value through other comprehensive income (net of tax)	-	(11,612)	-
Cumulative gains (losses) reclassified to retained earnings on disposal of investments in equity instruments of the subsidiaries accounted for using equity methods at fair value through other comprehensive income (net of tax)	-	28,252	-
Issuance of restricted shares of employees	-	-	(50,364)
Compensation cost arising from restricted shares of stock issued to employees	-	-	71,643
Balance as of December 31, 2019	$ (179,450)	3,089,886	(137,029)

(Continued)

	Exchange differences on translation of foreign financial statements	Unrealized gains (losses) on financial assets at fair value through other comprehensive income	Unrealized gains (losses) on available-for-sale financial assets	Other unearned compensation for restricted shares of employees
Balance as of January 1, 2018	$ (100,208)	-	1,568,176	-
Effects of retrospective application and retrospective restatement	-	1,401,839	(1,568,176)	-
Balances at the beginning after adjusted	(100,208)	1,401,839	-	-
Foreign currency differences (net of tax)－				
Subsidiaries	65,429	-	-	-
Foreign currency differences on subsidiaries accounted for using equity method	(256)	-	-	-
Disposal of investments accounted for using equity method	(1,165)	-	-	-
Unrealized gains (losses) on equity instruments at fair value through other comprehensive income (net of tax):				
－The company	-	(371,497)	-	-
－Subsidiaries	-	19,453	-	-
Disposal of investments in equity instruments at fair value through other comprehensive income (net of tax)	-	(91,405)	-	-
Issuance of restricted shares of employees	-	-	-	(175,357)
Compensation cost arising from restricted shares of stock issued to employees	-	-	-	17,049
Balance as of December 31, 2018	$ (36,200)	958,390	-	(158,308)

(s) Share-based payment

The Company insurance restricted shares of stock for employee

On June 15, 2018, the shareholders’ meeting approved a resolution to issue 1,700 thousand new restricted employee shares to full-time regular employees who meet specific requirements. The above transaction had been approved by the Financial Supervisory Commission. The Company decided that the grant date was set on August 22, 2018 and in accordance with the resolution of Board of Directors meeting held on September 14, 2018, the Company issued 1,148 thousand shares (the date of capital increase was set on September 14, 2018), with the fair-value on grant date amounting to $175,357 thousand. On March 21, 2019, the Company’ s Board of Directors approved a resolution to redeem the unvested restricted employee share of stock amounting to 20 thousand shares. The Company decided that the second grant date was set on May 10, 2019. And in accordance with the resolution of Board of Directors meeting held on May 14, 2019, the Company issued 262 thousand shares (the date of capital increase was set on May 14, 2019), with the fair-value on grant date amounting to $50,364 thousand. The remaining amount of 290 thousand shares will not be processed during the remaining period.

(Continued)

As of December 31, 2019, there were 1,390 thousand outstanding shares.

Those employees with the restricted stock awards (RSA) are entitled to purchase shares without cost under the conditions that these employees will continue to provide service to the Company for at least 3 years (from the grant date), and meet certain requirement. Based on the Company’s requirements, the restricted employee shares should be fully vested in the third year after the grant date. These shares shall not be sold, pledged, transferred, gifted, or disposed by any other means to third parties during the custody period. The voting rights of these shareholders need not be executed by the custodian, and will act based on law and regulations. The cash and stock dividends distributed during the custody period will be granted to the employees. If the shares remain unvested after the vesting period, the Company will redeem all the unvested shares, and cancel the shares thereafter.

For the years ended December 31, 2019 and 2018, the Company recognized the compensation cost of $71,643 thousand and $17,049 thousand for the aforementioned RSA, respectively.

(t) Earnings per share (“EPS”)

For the years ended December 31, 2019 and 2018, the Company’s earnings per share were calculated as follows:

	2019	2018
Basic earnings per share：		
Profit belonging to common shareholders	$ 4,474,399	3,124,454
Weighted average number of outstanding shares of common stock (in thousands shares)	422,666	422,666
Basic earnings per share (in dollars)	$ 10.59	7.39
Diluted earnings per share：		
Profit belonging to common shareholders	$ 4,474,399	3,124,454
Weighted average number of outstanding shares of common stock (in thousands shares)	422,666	422,666
Effect of potentially dilutive common stock		
Employee remuneration (in thousands shares)	1,531	2,381
Restricted employee shares (in thousands shares)	752	-
Weighted average number of common stock (diluted) (in thousands shares)	424,949	425,047
Diluted earnings per share (in dollars)	$ 10.53	7.35

For the year ended December 31, 2018, the new restricted employee shares have anti-diluted effect, therefore, the new restricted employee shares were not included in the calculation of effect on potentially diluted common stock.

(Continued)

(u) Revenue from contracts with customers

(i) Disaggregation of revenue

	2019	2018
Primary geographical markets:		
Asia	$ 13,663,043	6,401,799
Americas	4,509,148	8,200,326
Taiwan	1,862,415	2,109,738
Europe	817,952	45,783
	$ 20,852,558	16,757,646
Main product / services lines:		
Foundry	$ 20,851,144	16,757,192
Other	1,414	454
	$ 20,852,558	16,757,646

(ii) Balance of contracts

	December 31, 2019	December 31, 2018	January 1, 2018
Accounts receivable	$ 2,401,924	553,914	495,064
Accounts receivable due from related parties	-	942,499	1,287,299
Less: allowance doubtful for accounts	-	-	-
	$ 2,401,924	1,496,413	1,782,363
Contract liabilities (Note)	$ 246,459	87,057	91,259

Note: Contract liabilities are included in other current liabilities.

For details of accounts receivable and allowance for impairment, please refer to Note 6(c).

The major change in the balance of contract liabilities is the difference between the time frame in the performance obligation to be satisfied and the payment to be received. The amount of revenue recognized for the years ended December 31, 2019 and 2018 that was included in the contract liabilities balance at the beginning of the period was $74,679 thousand and $81,236 thousand, respectively.

(v) Employees' and directors' remuneration

According to the Company's Article of Incorporation, if there is any net profit after closing of a fiscal year, it shall be allocated according to the following principles:

(Continued)

(i) Employee remuneration: not less than 5% but no more than 10% and shall be determined and pursuant to Employee Bonus Procedure of the Company. In addition, employee's profit-sharing remuneration shall be distributed in the form of shares or cash. Stock-type employee remuneration may be distributed to qualified employees of affiliates of the Company.

(ii) Directors' remuneration: no more than 3%.

However, if there are any accumulated losses of the Company, the Company shall pre-reserve the amount to offset the loss. The distribution of employees' profit-sharing bonus and Directors' remuneration shall follow the special resolution by Board of Directors, and report it to the shareholders' meeting.

For the years ended December 31, 2019 and 2018, the Company estimated its employees' and directors' remuneration as follows:

	2019	2018
Employee remuneration	$ 368,400	255,600
Directors' remuneration	106,900	74,200
	$ 475,300	329,800

The amount of employee remuneration, and directors' remuneration were estimated based on profit before tax, net of the amount of the remuneration, and multiplied by the rule of Company's Article of Incorporation. The above remuneration were included in the operating costs and operating expenses of the years ended December 31, 2019 and 2018. The differences between the actual distributed amounts as determined by the Board of Directors and those recognized in the financial statements, if any, shall be accounted for as changes in accounting estimates and recognized in profit or loss in the following year. There was no difference between the actual distributed amounts as determined by the Board of Directors and those recognized in the Company's parent-company-only financial statements of the years ended December 31, 2019 and 2018.

The related information mentioned above can be found on websites such as the Market Observation Post System.

(w) Non-operating income and expenses

(i) Other income

The details of other incomes for the years ended December 31, 2019 and 2018 were as follows:

	2019	2018
Interest income:		
Interest income from bank deposits	$ 44,935	40,183
Interest income from financial assets at amortized cost	205	697
Other interest income	3	119
Total interest income	45,143	40,999
Rent income	84,241	88,195
Dividend income	95,870	79,329
Total other income	$ 225,254	208,523

(ii) Other gains and losses

(Continued)

The details of other gains and losses for the years ended December 31, 2019 and 2018 were as follows:

	2019	2018
Gains (losses) on disposal of property, plant and equipment	$ (372,900)	2,403
Gains on disposals of investments	-	237,129
Foreign exchange gains (losses)	(81,578)	146,240
Gains (losses) on financial assets or liabilities at fair value through profit or loss	221,437	(32,387)
Other	63,049	24,524
Total other gains and losses	$ (169,992)	377,909

(iii) Finance costs

The details of finance costs for the years ended December 31, 2019 and 2018 were as follows:

	2019	2018
Interest expense	$ 31,311	22,199
Other finance costs	253	253
Total finance costs	$ 31,564	22,452

(x) Financial instruments

(i) Credit risk

1) Exposure of credit risk

a) As at reporting, the Company’s exposure to credit risk and the maximum exposure were mainly from:

i) The carrying amount of financial assets recognized in the balance sheet; and

ii) The amount of liabilities as a result from the Company providing financial guarantees was $5,996,000 thousand as of December 31, 2019. There was no transaction for the year ended December 31, 2018.

(Continued)

In June 2019, the subsidiaries entered into a three-year syndicated loan agreement with Far Eastern International Bank and other four banks. The total credit facility under this loan agreement is US$200,000 thousand. The Company is the joint guarantor of this syndicated loan agreement.

The related financial covenants and restrictions for the syndicated loans mentioned above were as follows:

— At the end of reporting period, current ratio (current assets / current liabilities): shall not be lower than 100%;

— Interest coverage ratio [(profit before tax + depreciation + amortization + interest expense) / interest expense)]: shall not be lower than 100%; and

— Tangible net assets value (equity —intangible assets): shall not be lower than NT$15,000,000 thousand.

After the guarantor signs the loan agreement, the aforementioned financial ratio and criteria will be reviewed semi-annually, which are based on the year-end consolidated financial statements audited by the Certified Public Accountants (CPAs) that are approved by the leading bank, as well as the semi-annual consolidated financial statements reviewed by the CPAs.

2) Disclosures about concentrations of risk

As of December 31, 2019 and 2018, the Company's accounts receivable (included the related parties) were concentrated on 5 and 3 customers, whose accounts represented 56% and 87% of the total accounts receivable, respectively. In order to reduce the credit risk on these accounts receivable, the Company continues to evaluate the financial status of these customers and request for collaterals when necessary. The Company evaluates the possible collectability of accounts receivable periodically and accrues allowance for doubtful accounts, if necessary. Therefore, bad debt expense has always been under management's expectation.

3) Receivables and debt securities

For information on credit risk regarding accounts receivable, please refers to Note 6(c). Other financial assets measured at amortized cost include other receivables and financial assets measured at amortized cost. For related investment and impairment, please refer to Notes 6(b) and 6(d).

All of these financial assets are considered to have low risk, and thus, the impairment provision recognized during the period was limited 12 months expected losses.

(Continued)

(ii) Liquidity risk

The following were the contractual maturities of financial liabilities:

	Carrying amount	Contractual cash flows	Within 1 year	1-2 years	2-5 years	Over 5 years
As of December 31, 2019						
Non-derivative financial liabilities						
Secured bank loans	$ 1,620,000	1,693,049	19,110	19,110	1,293,443	361,386
Unsecured bank loans	3,606,000	3,712,122	39,312	1,068,695	2,277,837	326,278
Accounts payable	1,821,018	1,821,018	1,821,018	-	-	-
Other payables (including related parties)	1,254,326	1,254,326	1,254,326	-	-	-
Guarantee deposits received	119,619	119,619	9,619	-	110,000	-
Lease liabilities	48,598	49,133	33,941	12,442	2,750	-
	$ 8,469,561	8,649,267	3,177,326	1,100,247	3,684,030	687,664
As of December 31, 2018						
Non-derivative financial liabilities						
Secured bank loans	$ 1,572,600	1,661,678	21,294	124,638	997,014	518,732
Unsecured bank loans	4,230,000	4,350,337	48,837	1,494,684	2,560,556	246,260
Accounts payable	1,079,252	1,079,252	1,079,252	-	-	-
Other payables	809,187	809,187	809,187	-	-	-
Guarantee deposits received	119,619	119,619	188	9,431	110,000	-
	$ 7,810,658	8,020,073	1,958,758	1,628,753	3,667,570	764,992

The Company did not expect that the cash flows included in the maturity analysis could occur significantly earlier or at significantly different amounts.

(iii) Currency risk

1) Exposure to currency risk

The Company’s significant exposure to foreign currency risk were as follows:

	December 31, 2019			December 31, 2018		
	Foreign currency	Exchange rate	NT$	Foreign currency	Exchange rate	NT$
Financial assets						
Monetary items						
USD	$ 185,137	29.98	5,550,418	160,637	30.72	4,934,770
EUR	75	33.59	2,531	169	35.20	5,965
JPY	1,321,385	0.2760	364,702	552	0.2782	154
GBP	2	39.36	77	2	38.88	76
RMB	51,476	3.85	198,130	-	-	-
			$ 6,115,858			$ 4,940,965
Non-monetary items						
USD	$ 184,562	29.98	$ 5,534,561	131,580	30.72	$ 4,042,058
Financial liabilities						
Monetary items						
USD	$ 37,004	29.98	1,109,384	16,791	30.72	515,833
EUR	853	33.59	28,650	464	35.20	16,339
JPY	595,366	0.2760	164,321	328,936	0.2782	91,510
			$ 1,302,355			$ 623,682

(Continued)

2) Sensitivity analysis

The Company's exposure to foreign currency risk arises from the translation of the foreign currency exchange gains and losses on cash and cash equivalents, accounts receivable (included the related parties), other receivables (included the related parties), financial assets at fair value through profit or loss, accounts payable and other payables (included the related parties) that are denominated in foreign currency. A strengthening (weakening) 5% of appreciation (depreciation) of the NTD against the USD, EUR, JPY, GBP and the HKD etc. for the years ended December 31, 2019 and 2018 would have increased (decreased) the net profit after tax by $204,099 thousand and $180,506 thousand, respectively. The analysis assumes that all other variables remain constant.

3) Foreign exchange gain and loss on monetary items

Since the Company has many kinds of functional currency, the information on foreign exchange gain (loss) on monetary items is disclosed by total amount. For the years ended December 31, 2019 and 2018, foreign exchange gains (losses) (including realized and unrealized portions) amounted to $(81,578) thousand and $146,240 thousand, respectively.

(iv) Interest rate risk

Please refer to the attached note for the liquidity risk and the Company's interest rate exposure to its financial liabilities.

The following sensitivity analysis is based on the risk exposure to interest rates on the non-derivatives financial instruments on the reporting date. For variable rate instruments, the sensitivity analysis assumes the variable rate liabilities are outstanding for the whole year on the reporting date.

If the interest rate increases (decreases) by 0.5%, the Company's net profit after tax would have increased (decreased) by $15,806 thousand and $11,299 thousand for the years ended December 31, 2019 and 2018, all other variable factors that remain constant. This is mainly due to the Company's borrowing in floating rates.

(v) Fair value

1) Accounting classifications and fair values

The fair value of financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income are measured on a recurring basis. The carrying amount and fair value of the Company's financial assets and liabilities, including the information on fair value hierarchy were as follows; however, except as described in the following paragraphs, for financial instruments not measured at fair value whose carrying amount is reasonably close to the fair value, and lease liabilities, disclosure of fair value information is not required:

(Continued)

	December 31, 2019				
	Carrying value	Fair value			
		Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss					
Stocks listed on domestic markets	$ 154,921	154,921	-	-	154,921
Private fund	565,804	-	-	565,804	565,804
Subtotal	$ 720,725	154,921	-	565,804	720,725
Financial assets at fair value through other comprehensive income					
Stocks listed on domestic markets	$ 3,145,387	3,145,387	-	-	3,145,387
Non-public stocks	440,056	-	-	440,056	440,056
Subtotal	$ 3,585,443	3,145,387	-	440,056	3,585,443
Financial assets measured at amortized cost					
Cash and cash equivalents (Note)	$ 3,763,950	-	-	-	-
Accounts receivable (Note)	2,401,924	-	-	-	-
Other receivables (including related parties) (Note)	29,821	-	-	-	-
Other non-current assets (Note)	47,248	-	-	-	-
Subtotal	$ 6,242,943	-	-	-	-
Financial liabilities measured at amortized cost					
Bank loans (Note)	$ 5,226,000	-	-	-	-
Accounts payable (Note)	1,821,018	-	-	-	-
Other payables (including related parties) (Note)	1,254,326	-	-	-	-
Guarantee deposits received (Note)	119,619	-	-	-	-
Lease liabilities (Note)	48,598	-	-	-	-
Subtotal	$ 8,469,561	-	-	-	-

	December 31, 2018				
	Carrying value	Fair value			
		Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss					
Stocks listed on domestic markets	$ 17,475	17,475	-	-	17,475
Private fund	722,405	-	-	722,405	722,405
Subtotal	$ 739,880	17,475	-	722,405	739,880
Financial assets at fair value through other comprehensive income					
Stocks listed on domestic markets	$ 1,205,785	1,205,785	-	-	1,205,785
Non-public stocks	477,003	-	-	477,003	477,003
Subtotal	$ 1,682,788	1,205,785	-	477,003	1,682,788

(Continued)

	December 31, 2018				
	Carrying value	Fair value			
		Level 1	Level 2	Level 3	Total
Financial assets measured at amortized cost					
Cash and cash equivalents (Note)	$ 3,474,932	-	-	-	-
Financial assets measured at amortized cost (Note)	29,900	-	-	-	-
Accounts receivable (including related parties) (Note)	1,496,413	-	-	-	-
Other receivables (Note)	124,767	-	-	-	-
Other non-current assets (Note)	48,099	-	-	-	-
Subtotal	$ 5,174,111	-	-	-	-
Financial liabilities measured at amortized cost					
Bank loans (Note)	$ 5,802,600	-	-	-	-
Accounts payable (Note)	1,079,252	-	-	-	-
Other payables (Note)	809,187	-	-	-	-
Guarantee deposits received (Note)	119,619	-	-	-	-
Subtotal	$ 7,810,658	-	-	-	-

Note: The information on fair value is not disclosed since the carrying amount is a reasonable approximation of fair value.

2) Valuation techniques of financial instrument not valued at fair value

The valuation techniques of the Company’s financial instruments not valued at fair value by using the methods and assumptions are as follows:

- Financial asset measured at amortized cost (investments in debt instrument without active market) and financial liability measured at amortized cost

  If recent transaction prices or market maker quotes are available, the fair value is based on such information. If there is no quoted market price available, the fair value is determined by using valuation techniques and calculated as the present value of the estimated cash flows.

3) Valuation techniques of financial instruments valued at fair value

a) Non-derivative instruments

The fair value of financial assets and liabilities traded in an active market is based on the quoted market prices. The quotation, which is published by the main exchange center or that which was deemed to be a public bond by the Treasury Bureau of Central Bank, is included in the fair value of the listed securities instruments and the debt instruments in active markets with open bid.

(Continued)

A financial instrument is regarded as the quoted price in an active market if the quoted prices are readily and regularly available from an exchange, dealer broker, industry group, pricing service or regulatory agency; and if those prices represent the actual and regularly occurring market transactions on an arm's length basis. Otherwise, the market is deemed to be inactive. Normally, a market is considered to be inactive when:

- the bid-ask spread is increasing; or
- the bid-ask spread varies significantly; or
- there has been a significant decline in trading volume.

When the financial instrument of the Company is traded in an active market, its fair value is illustrated by the category and nature as follows:

- Financial assets and liabilities with standard terms and conditions and traded in an active market, for example, investment in stock of listed companies: the fair value is based on the market quoted price.
- Close-end funds with standard terms and conditions, such as money market funds, and bond funds; investors can require the investment trust company to redeem the fund at any time. The fair value is based on the net value of the fund.

Except for the above-mentioned financial instruments traded in an active market, the fair value is based on the valuation techniques or the quotation from the counterparty. The fair value refers to the current fair value of the other financial instruments with similar conditions and characteristics, using a discounted cash flow analysis or other valuation techniques, such as calculations of using models (for example, applicable yield curve from Taipei Exchange, or average quoted price on interest rate of commercial paper from Reuters), based on the information acquired from the market at the balance sheet date.

When the financial instrument of the Company is not traded in an active market, its fair value is illustrated by the category and nature as follows:

- The fair value is determined based on the ratio of the quoted market price of the comparative listed company and its book value per share. Also, the fair value is discounted for its lack of liquidity in the market.
- The fair value is determined by using the asset-based approach, whose assumptions are based on the market approach, income approach, cost approach or other valuation methods according to the nature of the assets or liabilities of the subject companies.

b) Derivative instruments

The fair value is determined by using the models that are acceptable to the market participants, for example, discounted cash flow analyses or option pricing models. Forward exchange contracts are measured using quoted forward exchange rates. The fair value of structured interest derivative financial instruments is determined by using the proper option pricing models, such as Black-Scholes model, or other valuation technique, such as Monte Carlo simulation.

4) Transfer between level 2 and level 1

For the years ended December 31, 2019 and 2018, there was no change on the fair value hierarchy of level 2 and level 1 financial asset.

5) Movement of level 3

		Fair value through profit or loss	Fair value through other comprehensive income
		Private fund	**Unquoted equity instruments**
January 1, 2019	$	722,405	477,003
Total gains or losses:			
Recognized in profit and loss		67,261	-
Recognized in other comprehensive income		-	(17,754)
Purchased		142,794	-
Disposals		(366,621)	(12,526)
Proceeds from capital reduction		(35)	(6,667)
December 31, 2019	$	565,804	440,056
January 1, 2018	$	612,978	536,857
Recognized in profit and loss		(18,166)	-
Recognized in other comprehensive income		-	(59,854)
Purchased		127,593	-
December 31, 2018	$	722,405	477,003

The preceding gains and losses were recognized as other gains and losses and unrealized gains (losses) on valuation of financial assets at fair value through other comprehensive income. As of December 31, 2019 and 2018, the related information of the assets which were still held by the Company were as follows:

		2019	2018
Total gains or losses			
Profit or loss (recognized as other gains and losses)	$	(89)	(18,166)
Other comprehensive income (recognized as unrealized gains (losses) from investments in equity instruments measured at fair value through other comprehensive income)		(17,754)	(59,854)

(Continued)

6) Quantified information on significant unobservable inputs (Level 3) used in fair value measurement

The Company's financial instruments that use Level 3 inputs to measure fair value include "financial assets at fair value through profit or loss – private funds" and "financial assets at fair value through other comprehensive income – equity investments".

Most of the fair value measurements categorized within Level 3 use the single and significant unobservable input. Equity investments without an active market contains multiple significant unobservable inputs. The significant unobservable inputs of the equity investments are independent from each other, as a result, there is no relevance between them.

Quantified information of significant unobservable inputs was as follows:

Item	Valuation technique	Significant unobservable inputs	Inter-relationship between significant unobservable inputs and fair value measurement
Financial assets at fair value through other comprehensive income – equity investments without an active market	● Comparable listed companies approach	● Price-book ratio (as of December 31, 2019 and 2018 were 1.73 and 1.34~2.64, respectively) ● Market liquidity discount rate (as of December 31, 2019 and 2018 were both 80%)	● The higher the price-book ratio, the higher the fair value ● The higher the market liquidity discount rate, the lower the fair value
	● Net asset value method	● Net asset value	Not applicable
Financial assets at fair value through profit or loss – private fund	● Net asset value method	● Net asset value	Not applicable

7) Sensitivity analysis of reasonably possible alternative assumptions for fair value measurements in Level 3 of the fair value hierarchy

The fair value measurements of the Company's financial instruments are reasonable. However, changes in the use of valuation models or valuation variables may affect the estimations. For fair value measurements in Level 3, a fluctuation in the valuation variable by 5% would have the following effect:

(Continued)

	Inputs	Increase or decrease	Effects of changes in fair value on profit or loss		Effects of changes in fair value on other comprehensive income	
			Favorable	Unfavorable	Favorable	Unfavorable
December 31, 2019						
Financial assets at fair value through profit or loss:						
Private fund	Net asset value	5%	$ 28,290	(28,290)	-	-
Financial assets at fair value through other comprehensive income:						
Equity investments without an active market	Price-book ratio	5%	-	-	5,929	(5,929)
〃	Market liquidity discount rate	5%	-	-	5,929	(5,929)
〃	Net asset value	5%	-	-	16,074	(16,074)
December 31, 2018						
Financial assets at fair value through profit or loss:						
Private fund	Net asset value	5%	$ 36,120	(36,120)	-	-
Financial assets at fair value through other comprehensive income:						
Equity investments without an active market	Price-book ratio	5%	-	-	16,291	(16,291)
〃	Market liquidity discount rate	5%	-	-	16,291	(16,291)
〃	Net asset value	5%	-	-	7,559	(7,559)

The favorable and unfavorable effects represent the changes in fair value, and fair value is based on a variety of unobservable inputs calculated using a valuation technique. The analysis above only reflects the effects of changes in a single input, and it does not include the inter-relationships with another input.

(y) Management of financial risk

(i) The Company is exposed to the extent of the risks arising from financial instruments as below：

1) Credit risk

2) Liquidity risk

3) Market risk

Detailed information about exposure risk arising from the aforementioned risk was listed below. The Company’ s objective, policies and process for managing risks and methods used to measure the risk arising from financial instruments.

(Continued)

(ii) Risk management framework

The Board of Directors is responsible for overseeing the Company’s risk management framework. The Company’s internal auditor is responsible to identify and analyze the risks faced by the Company. The management of each divisions sets appropriate risk limits and controls, and monitor risks that follow the adherence to limits. The Company, through their training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Company’s Audit Committee oversees how management monitors compliance with the Company’s risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Company. The Company’s Audit Committee is assisted in its oversight role by the internal auditor. The internal auditor undertakes both regular and ad hoc reviews of risk management controls and the procedures, and the result of which are reported to the Audit Committee.

(iii) Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to financial instruments fails to meet it contractual obligations that arises principally from the Company’s accounts receivable, investments in securities and investments in bond.

1) Accounts receivable

According to the credit policy, the Company analyzes each new customer individually for their credit worthiness before granting the new customer standard payment terms and delivery terms. The Company’s review includes external ratings of customers’ financial information and bank references. Credit lines are established for each customer and reviewed periodically.

2) Investments

The credit risk exposure in the bank deposits, fixed income investments and equity instruments are measured and monitored by the Company’s finance department. Since the Company’s transactions resulted from the external parties with good credit standing and investment grade above financial institutions, publicly traded stock companies and unlisted companies with good reputation, there are no incompliance issues and therefore no significant credit risk.

3) Guarantees

In 2019, the Company was the joint guarantor for the bank loan of its investment through subsidiary, and please refer to Note 7 for the further information. As of December 31, 2018, the Company did not provide guarantee.

(Continued)

(iv) Liquidity risk

Liquidity risk is a risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company’s approach to managing liquidity is to ensure, as far as possible, that it always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company’s reputation.

The Company’s financial department monitors cash flow requirements and optimizing its cash return on investments. The Company aims to maintain the level of its cash and cash equivalents at an amount in excess of expected cash flows on financial liabilities (other than trade payables) over the succeeding one year. The Company also monitors the level of expected cash outflows on account and other payables. This excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. As of December 31, 2019, the Company has unused bank credit lines for short-term borrowings, the unused bank credit lines for short-term borrowings, short-term borrowings and long-term borrowings, and long-term bank borrowings, amounted to $1,153,882 thousand, $3,276,609 thousand and $3,825,000 thousand, respectively.

(v) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices, which will affect the Company’s income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

The Company is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of the Company’s entities, primarily the New Taiwan Dollars (NTD) and US Dollars (USD).

The policy of response to currency risk：

1) The Company reserves the foreign currency position arising from sales appropriately to remit the foreign currency expenditures and then meets the natural hedge.

2) The Company uses foreign currency borrowings and forward exchange contracts to hedge the remaining nature of currency risk arising from the netting of foreign currency accounts receivable and accounts payable.

3) The Company manages the currency risk and then determines the timing of exchanging the foreign currency through collecting the foreign currency information. It also stays in contact with the foreign currency department to control the foreign currency trend and market information.

(Continued)

(z) Capital management

The Board of Directors' policy is to maintain a strong capital base to maintain the confidence of investors, creditors and market, and to sustain future development of the business. For the goal of business sustainability, the Company monitors the expansion plan as well as the level of dividends to ordinary shareholders.

For the years ended December 31, 2019 and 2018, the Company's return on common equity was 16.26% and 12.27%, respectively. The Company's debt ratio at the reporting date were as follows:

	December 31, 2019	December 31, 2018
Debt ratio	27.55%	27.59%

As of December 31, 2019, there were no changes in the Company's approach to capital management.

(aa) Financing activity

Reconciliation of liabilities arising from financing activities were as follows:

		Cash flows			Non-cash changes		
	January 1, 2019	Proceeds from long-term debt	Repayments of long-term debt and lease liabilities	Others	Interest expense	Others	December 31, 2019
Long-term borrowings	$ 5,802,600	4,715,000	(5,291,600)	-	-	-	5,226,000
Guarantee deposit received	119,619	-	-	-	-	-	119,619
Lease liabilities	78,201	-	(32,735)	(846)	846	3,132	48,598
Total liabilities from financing activity	$ 6,000,420	4,715,000	(5,324,335)	(846)	846	3,132	5,394,217

		Cash flows		Non-cash changes	
	January 1, 2018	Proceeds from long-term debt	Repayments of long-term debt	Amortization of arranger fee of syndicated loan	December 31, 2018
Long-term borrowings	$ 6,257,536	4,891,000	(5,346,025)	89	5,802,600
Guarantee deposit received	119,619	-	-	-	119,619
Total liabilities from financing activity	$ 6,377,155	4,891,000	(5,346,025)	89	5,922,219

(Continued)

(7) Related-party transactions:

(a) Relationship with the parent company and its subsidiaries:

The following are entities that have transactions with the Company during the periods covered in financial statements and its subsidiaries.

Name of related party	Relationship with the Company	Remark
WIN SEMI. USA, INC. (abbrev. WIN USA)	The Subsidiary	
WIN Semiconductors Cayman Islands Co., Ltd. (abbrev. WIN Cayman)	"	
WIN Venture Capital Corp.	"	
WIN Earn Investment Corp.	"	
WIN Chance Investment Corp.	"	
Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	"	
Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	"	
Jiangsu Merit/ CM Agriculture Development Co., Ltd.	"	
Jiangsu Merit/ Cofcojoycome Agriculture Development Co., Ltd.	"	(Note 1)
Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	"	
Formosa Fortune Group Co., Ltd. (abbrev. Fortune BVI)	"	(Note 2)
Jiangsu Merit Runfu Agriculture Development Co., Ltd.	"	
Jiangsu Win Yield Agriculture Development Co., Ltd.	"	
Jiangsu Win Shine Agriculture Development Co., Ltd.	"	(Note 3)
Phalanx Biotech Group, Inc. (abbrev. PBL)	"	(Note 4)
PhalanxBio, Inc.	"	(Note 4)
Phalanx Biotech Limited	"	(Note 4)
Onearray Biotech (Kunshan) Co., Ltd.	"	(Note 4)
Jiangsu CM/ Chainwin Agriculture Development Co., Ltd.	Associates	(Note 5)
ITEQ Corporation	Other related parties	(Note 6)
Taoyuan i-Fare Charity Foundation	"	

Note 1: Jiansu Merit/ Cofcojoycome Agriculture Development Co., Ltd. had been liquidated on January 25, 2019.

Note 2: Fortune BVI has been liquidated on November 30, 2018.

Note 3: Jiangsu Win Shine Agriculture Development Co., Ltd. was incorporated on April 4, 2019. As of December 31, 2019, the capital injection had not been made yet.

Note 4: The Company subscribed its new shares contribution and became the largest shareholder of PBL and obtained control over it on July 12, 2018; hence, PBL became a subsidiary of the Company since then. Please refer to the consolidated financial statements for the year ended December 31, 2019.

Note 5: The shareholders' meeting of Jiangsu CM/ Merit Agriculture Development Co., Ltd. had approved and decided to rename to Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. on June 20, 2019.

Note 6: In July 2019, the Company's chairman of Board of Directors has been elected as the ITEQ Corporation's chairman of Board of Directors, and therefore ITEQ Corporation has become the Company's other related parties since July 2019.

(Continued)

(b) Significant transactions with related parties

(i) Operating revenue

The amounts of significant transaction with related-parties for the years ended December 31, 2019 and 2018 were as follow:

	2019	2018
Subsidiary－WIN Cayman	$ 1,297,921	8,264,249

The prices for sales from related parties are not materially different from those of third-party customers. Receivables from related parties were not secured with collateral and did not require provisions for impairment losses.

(ii) Receivable from related parties

At the reporting date, the balance of accounts receivable resulting from the sales were as follow:

Account	Categories	December 31, 2019	December 31, 2018
Accounts receivable	Subsidiary－WIN Cayman	$ -	942,499

(iii) Others

As of December 31, 2018, the current refund liabilities due from subsidiary amounted to $4,518 thousand which was recognized as other-current liabilities. There was no such transaction for the year ended December 31, 2019.

(iv) Operating expenses

The amounts of operating expenses by the Company from related parties were as follows:

	2019	2018
Subsidiary	$ 82,724	-
Other related parties	1,000	-
	$ 83,724	-

(v) Payable to related parties

At the reporting date, the balance of other payable were as follow:

Account	Categories	December 31, 2019	December 31, 2018
Other payable	Subsidiary－WIN USA	$ 7,195	-

(Continued)

(vi) Guarantee

For the year ended December 31, 2019, the Company provided a guarantee for the loans amounting to US$200,000 thousand (NT$5,996,000 thousand) to its subsidiaries, Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd., Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd., Jiangsu Merit/ CM Agriculture Development Co., Ltd., Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd., Jiangsu Win Yield Agriculture Development Co., Ltd. and Jiangsu Win Shine Agriculture Development Co., Ltd. There was no such transaction for the year ended December 31, 2018.

For the year ended December 31, 2019, the Company recognized the guarantee income from Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd. and Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd., amounted to $1,693 thousand and $83 thousand, respectively, and recognized as other gains and losses. As of December 31, 2019, the unpaid amount was $1,199 thousand, recognized as other receivables due from related parties.

(vii) Leases

The Company leased the office and factories to its other related party, ITEQ Corporation, and the rent income received monthly is based on the nearby office and factories rental rates. The amount of rent income is $14,423 thousand for the year ended December 31, 2019. The preceding rent payment has been received.

(c) Transactions with key management personnel

Key management personnel compensation were comprised as below:

	2019	2018
Short-term employee benefits	$ 451,899	360,922
Post-employment benefits	821	802
	$ 452,720	361,724

(8) Pledged assets:

The carrying amount of pledged assets were as follows:

Pledged assets	Pledged to secure	December 31, 2019	December 31, 2018
Other non-current assets	Gas deposits	$ 4,700	4,700
Other non-current assets	Customs guarantee	20,192	20,000
Property, plant and equipment	Long-term borrowings	2,382,554	2,759,181
Investment property	Long-term borrowings	336,574	351,631
Total		$ 2,744,020	3,135,512

(Continued)

(9) Commitments and contingencies:

(a) Contingencies: None.

(b) Commitment:

(i) The unrecognized commitment of acquisition of plant expansion and machinery equipment were as follows:

	December 31, 2019	December 31, 2018
The unrecognized amount	$ 2,146,550	3,058,418

	December 31, 2019	December 31, 2018
(ii) The unused letters of credit	$ 206,008	70,543

(10) Losses due to major disasters: None.

(11) Subsequent events:

The Company's subsidiary, Jiangsu Win Yield Agriculture Development Co., Ltd., entered into a contract with Jiangsu Nantong Sanjian Construction Group Co., Ltd. for construction, with the amount of RMB 342,511 thousand on January 10, 2020.

(12) Other:

The followings were the summary statements of employee benefits, depreciation and amortization expenses by function:

	2019			2018		
	Classified as operating costs	Classified as operating expenses	Total	Classified as operating costs	Classified as operating expenses	Total
Employee benefits						
Salaries	2,383,778	856,319	3,240,097	1,978,986	730,772	2,709,758
Labor and health insurance	176,033	39,455	215,488	165,937	35,410	201,347
Pension	76,854	21,873	98,727	74,196	20,000	94,196
Directors remuneration	-	107,150	107,150	-	74,510	74,510
Others	124,089	42,185	166,274	59,913	9,860	69,773
Depreciation	2,978,951	305,949	3,284,900	2,903,187	217,350	3,120,537
Amortization	14,253	43,346	57,599	13,945	39,891	53,836

(Continued)

As of December 31, 2019 and 2018, the additional information for employee numbers and employee benefits were as follows:

		2019	2018
Average employee numbers		2,796	2,746
Average directors numbers without serving concurrently as employee		5	5
Average employee benefits	$	1,333	1,122
Average employee salaries	$	1,161	989
Average adjustment rate of employee salaries		17.39%	

(13) Other disclosures:

(a) Information on significant transactions

The following is the information on significant transactions required by the “Regulations Governing the Preparation of Financial Reports by Securities Issuers” for the Company:

(i) Loans to other parties: None.

(ii) Guarantees and endorsements for other parties: Please refer to schedule A.

(iii) Securities held as of December 31, 2019 (excluding investment in subsidiaries, associates and joint ventures): Please refer to schedule B.

(iv) Individual securities acquired or disposed of with accumulated amount exceeding the lower of NT$300 million or 20% of the capital stock: Please refer to schedule C.

(v) Acquisition of individual real estate with amount exceeding the lower of NT$300 million or 20% of the capital stock: Please refer to schedule D.

(vi) Disposal of individual real estate with amount exceeding the lower of NT$300 million or 20% of the capital stock: None.

(vii) Related-party transactions for purchases and sales with amounts exceeding the lower of NT$100 million or 20% of the capital stock: Please refer to schedule E.

(viii) Receivables from related parties with amounts exceeding the lower of NT$100 million or 20% of the capital stock: None

(ix) Trading in derivative instruments: None.

(b) Information on investments (excluding information on investees in Mainland China): Please refer to schedule F.

(c) Information on investment in Mainland China: Please refer to schedule G.

(14) Segment information:

Please refer to the consolidated financial statements for the year ended December 31, 2019.

WIN Semiconductors Corp. Notes to Parent-Company-Only Financial Statements

Schedule A Guarantees and endorsements for other parties:

(In thousands of dollars)

Number (Note 1)	Name of guarantor	Counter-party of guarantee and endorsement: Name	Counter-party of guarantee and endorsement: Relationship with the Company (Note 2)	Limitation on amount of guarantees and endorsements for a specific enterprise (Note 3)(Note 4)	Highest balance for guarantees and endorsements during the period	Balance of guarantees and endorsements as of reporting date	Actual usage amount	Property pledged for guarantees and endorsements (Amount)	Ratio of accumulated amounts of guarantees and endorsements to net worth of the latest financial statements	Maximum amount for guarantees and endorsements (Note 3)(Note 4)	Parent company endorsements/ guarantees to third parties on behalf of subsidiary	Subsidiary endorsements/ guarantees to third parties on behalf of parent company	Endorsements/ guarantees to the companies in Mainland China
0	The Company	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	2	14,828,734	495,083	495,083	-	-	1.67%	Net equity 50% 14,828,734	Y	-	-
0	〃	Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	2	14,828,734	1,100,183	1,100,183	449,700	-	3.71%	Net equity 50% 14,828,734	Y	-	Y
0	〃	Jiangsu Win Yield Agriculture Development Co., Ltd.	2	14,828,734	1,650,276	1,650,276	-	-	5.56%	Net equity 50% 14,828,734	Y	-	Y
0	〃	Jiangsu Win Shine Agriculture Development Co., Ltd. (Note 7)	2	14,828,734	550,092	550,092	-	-	1.85%	Net equity 50% 14,828,734	Y	-	Y
0	〃	Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	2	14,828,734	1,100,183	1,100,183	149,900	-	3.71%	Net equity 50% 14,828,734	Y	-	Y
0	〃	Jiansu Merit/ CM Agriculture Development Co., Ltd.	2	14,828,734	1,100,183	1,100,183	-	-	3.71%	Net equity 50% 14,828,734	Y	-	Y
1	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Jiangsu CM / Chainwin Agriculture Development Co., Ltd. (Note 6)	6	1,228,154 (USD 40,965)	220,353 (USD 7,350)	220,353 (USD 7,350)	189,856 (USD 6,333)	-	5.38%	Net equity 50% 2,046,923	-	-	Y

Note 1: Company numbering as follows:
Issuer－0
Investee starts from 1

Note 2: Relationship with the Company
1.Ordinary business relationship.
2.An entity, directly and indirectly, owned more than 50% voting shares of a guarantor.
3.A guarantor, directly and indirectly, owned more than 50% voting shares of an entity.
4.An entity, directly and indirectly, owned more than 90% voting shares of a guarantor.
5.Fulfillment of contractual obligations by providing mutual endorsements and guarantees for peer or joint builders in order to undertake a construction project.
6.An entity that is guaranteed and endorsed by all capital contributing shareholders in proportion to their shareholding percentages.
7.Peer engaged in the escrow of the sales contract on pre-sale house under the Consumer Protection Act.

Note 3: WIN Semiconductors Corp.'s operating procedures of guarantee were as follows:
1.The guarantees and endorsements limit provided by WIN Semiconductors Corp. to other parties should not exceed 50% of its equity based on the most recent audited or reviewed financial statement by a certified accountant. The individual guarantee amount should not exceed 50% of its equity based on the most recent audited or reviewed financial statement by a certified accountant.
2.The guarantees and endorsements limit provided by WIN Semiconductors Corp. and its subsidiaries to other parties should not exceed 50% of its equity based on the most recent audited or reviewed financial statement by a certified accountant. The individual guarantee amount should not exceed 50% of its equity based on the most recent audited or reviewed financial statement by a certified accountant.
3.Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd., Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd., Jiangsu Win Yield Agriculture Development Co., Ltd., Jiangsu Win Shine Agriculture Development Co., Ltd., Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd., Jiansu Merit/CM Agriculture Development Co., Ltd. and (collectively referred to as "the Borrower") had been approved a total maximum credit line of US $200,000 thousand, wherein each Borrower was limited to the maximum loans of US$27,000 thousand, US$60,000 thousand, US$90,000 thousand, US$30,000 thousand, US$60,000 thousand and US$60,000 thousand, respectively.

Note 4: The guarantees and endorsements limit provided by Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd. to a particular single party and to other parties should not exceed 30% and 50%, respectively, of its equity based on the most recent audited or reviewed financial statement by a certified accountant.

Note 5: The aforementioned amount was translated at the exchange rate on the balance sheet date from USD to NTD and RMB to USD for NTD 29.98 and USD 0.1436, respectively.

Note 6: The shareholders' meeting of Jiangsu CM/ Merit Agriculture Development Co., Ltd. had approved and decided to rename to Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. on June 20, 2019.

Note 7: Jiangsu Win Shine Agriculture Development Co., Ltd. was incorporated on April 4, 2019. As of December 31, 2019, the capital injection had not been made yet.

WIN Semiconductors Corp. Notes to Parent-Company-Only Financial Statements

Schedule B Securities held as of December 31, 2019 (excluding investment in subsidiaries, associates and joint ventures):

(In thousands of New Taiwan Dollars)

Name of holder	Category and name of security	Relationship with company	Account title	Ending balance: Shares/Units (in thousands)	Ending balance: Carrying value	Ending balance: Percentage of ownership (%)	Ending balance: Fair value	Remark
The Company	Advanced Wireless Semiconductor Company/ Stock	None	Current financial assets at fair value through profit or loss	1,557	**154,921**	1.08	**154,921**	
WIN Venture Capital Corp.	Sercomm Corporation / Stock	〃	〃	662	51,438	0.27	51,438	
〃	Allianz Global Investors Taiwan Money Market Fund	〃	〃	10,926	137,442	-	137,442	
〃	Capital Money Market Fund	〃	〃	10,066	163,048	-	163,048	
					351,928		**351,928**	
The Company	MagiCapital Fund II L.P.	〃	Non-current financial assets at fair value through profit or loss	-	217,722	5.81	217,722	
〃	CDIB Capital Growth Partners L.P.	〃	〃	-	77,842	3.30	77,842	
〃	Fuh Hwa Oriental Fund	〃	〃	15,000	38,160	-	38,160	
〃	Fuh Hwa Smart Energy Fund	〃	〃	12,000	89,664	-	89,664	
〃	LeaSun Winion L.P.	〃	〃	-	29,968	12.47	29,968	
〃	NFC Fund II L.P.	〃	〃	-	100,546	19.41	100,546	
〃	Foryou Venture Capital L.P.	〃	〃	-	11,902	5.77	11,902	
					565,804		**565,804**	
〃	ITEQ CORPORATION/ Stock	Other related parties	Non-current financial assets at fair value through other comprehensive income	24,670	3,145,387	8.14	3,145,387	
〃	Inventec Solar Energy Corporation/ Stock	None	〃	34,000	118,581	10.51	118,581	
〃	MagiCap Venture Capital Co., Ltd./ Preferred Stock A	〃	〃	909	131,492	18.28	131,492	
〃	CDIB Capital Creative Industries Limited/ Stock	〃	〃	4,333	44,633	3.33	44,633	
〃	New Future Capital Co., Ltd./ Stock	〃	〃	10,000	90,800	15.87	90,800	
〃	Grand Fortune Venture Corp./ Stock	〃	〃	5,000	54,550	6.87	54,550	
					3,585,443		**3,585,443**	
Win Semiconductors Cayman Islands Co., Ltd.	Broadcom Ltd./ Stock	Client	〃	75	710,571	0.02	710,571	
〃	Anokiwave Inc./ Series B Preferred Stock	〃	〃	1,264	202,581	7.93	202,581	
					913,152		**913,152**	
WIN Venture Capital Corp.	MOAI Electronics Corporation/ Stock	None	〃	90	-	0.32	-	
〃	Merit Biotech INC./ Stock	〃	〃	1,320	-	2.93	-	(Note)
〃	Winresp INC./ Stock	〃		2,500	34,525	18.26	34,525	
					34,525		**34,525**	
Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Formosa Fortune Group Cayman Islands Co., Ltd. / Stock	〃	〃	12	**23,085**	4.78	**23,085**	

Note: The Board of Directors of Merit Biotech INC. had resolved to dissolve and liquidate the company in 2017. As of December 31, 2019, the company is still within the period of liquidation.

WIN Semiconductors Corp. Notes to Parent-Company-Only Financial Statements

Schedule C Individual securities acquired or disposed of with accumulated amount exceeding the lower of NT$300 million or 20% of the Company's paid in capital:

(In thousands of New Taiwan Dollars)

Name of Company	Category and name of security	Account name	Name of counter-party	Relationship with the company	Beginning		Purchases		Sales				Ending	
					Shares (in thousands)	Amount	Shares (in thousands)	Amount	Shares (in thousands)	Price	Cost	Gain (loss) on disposal	Shares (in thousands)	Amount
The Company	Win Semiconductors Cayman Islands Co., Ltd./ Stock	Investments accounted for using equity method	-	Subsidiary	114,000	3,503,656	53,000	1,631,490	-	-	-	-	167,000	5,216,293 (Note)
〃	Phalanx Biotech Group, Inc./ Stock	〃	-	〃	24,650	304,150	20,000	300,000	-	-	-	-	44,650	480,908 (Note)
〃	Fuh Hwa Tung-ta Fund	Non-current financial assets at fair value through profit or loss	-	〃	15,725	157,246	-	-	15,725	366,621	157,246	209,375	-	-
Win Semiconductors Cayman Islands Co., Ltd.	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd./ Stock	Investments accounted for using equity method	-	Investment through subsidiary	58,554	3,584,889	26,500	1,635,070	-	-	-	-	85,054	4,195,630 (Note)
Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	〃	-	〃	-	300,749	-	375,420	-	-	-	-	-	625,067 (Note)
〃	Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	〃	-	〃	-	959,571	-	404,180	-	-	-	-	-	1,233,161 (Note)

Note: The amount of ending balance was calculated using equity method.

Schedule D Information on acquisition of real estate with purchase amount exceeding the lower of NT$300 million or 20% of the Company's paid in capital:

(In thousands of New Taiwan Dollars)

Name of Company	Name of Property	Transaction Date	Transaction amount	Status of payment	Counter-party	Relationship with the Company	If the counter party is a related party, disclose the previous transfer information				References for determining price	Purpose of acquisition	Others
							Owner	Relationship with the Company	Date of transfer	Amount			
Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	Factory buildings	2018/10/25	617,213	As of December 31, 2019, the price paid $592,208 thousand.	Jiangsu Nantong Sanjian Construction Group Co., Ltd.	—	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Operating purpose	None
Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	Factory buildings	2018/11/20	772,168	As of December 31, 2019, the price paid $310,589 thousand.	Jiangsu Nantong Sanjian Construction Group Co., Ltd.	—	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Operating purpose	None

Schedule E Information regarding related-parties purchases and/or sales with amounts exceeding the lower of NT$100 million or 20% of the Company's paid in capital:

(In thousands of New Taiwan Dollars)

Name of Company	Related party	Nature of relationship	Transaction details				Transactions with terms different from others		Notes/Accounts receivable (payable)		Remark
			Purchase/ Sale	Amount	Percentage of the purchases/ sales	Payment terms	Unit price	Payment terms	Ending balance	Percentage of total notes/ accounts receivable (payable)	
The Company	Win Semiconductors Cayman Islands Co., Ltd.	Subsidiary	Sales	(1,297,921)	6%	1~2 Months	-	-	-	0%	
Win Semiconductors Cayman Islands Co., Ltd.	The Company	Parent Company	Purchase	1,297,921	100%	1~2 Months	-	-	-	0%	

WIN Semiconductors Corp. Notes to Parent-Company-Only Financial Statements

Schedule F Information on investments:

The following is the information on investees for the year ended December 31, 2019 (excluding information on investees in Mainland China):

(In thousands of New Taiwan Dollars)

Name of investor	Name of investee	Location	Main businesses and products	Original investment amount		The ending balance at this year			Net income (losses) of investee	Investment income (losses)	Remark
				The ending balance at this year	The ending balance at the last year	Shares (in thousands)	Percentage of ownership	Carrying value			
The Company	WIN SEMI. USA, INC.	California USA	Marketing	8,203	8,203	1,000	100.00%	406	(10,968)	(10,968)	
〃	Win Semiconductors Cayman Islands Co., Ltd.	Cayman Islands	Selling of GaAs wafers	5,135,146	3,503,656	167,000	100.00%	5,216,293	(372,863)	(372,863)	
〃	WIN Venture Capital Corp.	Taiwan	Investment activities	500,000	250,000	50,000	100.00%	456,661	17,086	17,086	
〃	Phalanx Biotech Group, Inc.	Taiwan	Researching, manufacturing and selling of high density gene chips and testing service	604,150	304,150	44,650	54.48%	480,908	(109,652)	(43,737)	
〃	CSDC Private Limited	Singapore	Development and manufacturing of compound semiconductors technologies	-	-	-	-	-	-	-	(Note 2)
〃	WIN Chance Investment Corp.	Taiwan	Investment activities	10,000	-	1,000	100.00%	9,966	(34)	(34)	
〃	WIN Earn Investment Corp.	Taiwan	Investment activities	10,000	-	1,000	100.00%	9,966	(34)	(34)	
WIN Venture Capital Corp.	Phalanx Biotech Group, Inc.	Taiwan	Researching, manufacturing and selling of high density gene chips and testing service	39,600	39,600	3,600	4.39%	56,969	(109,652)	(Note 1)	
〃	Winresp INC.	Taiwan	Developing and selling of water treatment system and wholesaling of medical appliances	-	40,000	-	-	-	(25,408)	(Note 1)	(Note 3)
Win Semiconductors Cayman Islands Co., Ltd.	Rainbow Star Group Limited	British Virgin Islands	Investment activities	62,920	62,920	38	49.30%	60,063	(2,601)	(Note 1)	
〃	Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd.	Cayman Islands	Investment activities	5,219,959	3,584,889	85,054	96.30%	4,195,630	(371,223)	(Note 1)	
Phalanx Biotech Group, Inc.	Phalanx Biotech Limited	Hong Kong	Investment activities	8,784	8,784	-	100.00%	7,852	31,702	(Note 1)	
〃	PhalanxBio, Inc.	USA	Selling of high density gene chip and test service	208,110	208,110	2,550	100.00%	(1,597)	(345)	(Note 1)	

Note 1: The shares 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 2: The shares of CSDC Private Limited has been sold in November, 2019.

Note 3: The Company has lost the significant influence on Winresp INC. since December, 2019. Therefore, the Company has stopped using the equity method accounted for Winresp INC. and transferred to non-current financial asset at fair value through other comprehensive income.

WIN Semiconductors Corp. Notes to Parent-Company-Only Financial Statements

Schedule G Information on investment in Mainland China:

(i) The names of investees in Mainland China, the main businesses and products, and other information:

(In thousands of dollars)

Name of investee	Main businesses and products	Total amount of paid in capita	Method of investment	Accumulated outflow of investment from Taiwan at the beginning of this year	Investment flows		Accumulated outflow of investment from Taiwan at the end of this year	Net income (losses) of the investee	Percentage of ownership	Investment income (losses) (Note 3)(Note 5)	Carrying value at the end of this year (Note 1)	Accumulated remittance of earnings in current period	Remark
					Outflow	Inflow							
Jiangsu Chainwin Kang Yuan Agricultural Development Co., Ltd.	Developing hog farming technology and trading	1,363,751 (RMB 302,232)	(Note 1)	905,356 (USD 29,471)	404,180 (USD 13,000)	-	1,309,536 (USD 42,471)	(74,726) (USD (2,451))	96.30%	(74,726) (USD (2,451))	1,233,161 (USD 41,133)	-	
Jiangsu Chainwin Agriculture and Animal Technology Co., Ltd.	Farm feed developing and trading	676,169 (USD 21,790)	(Note 1)	277,885 (USD 9,046)	375,420 (USD 12,000)	-	653,305 (USD 21,046)	(1,207) (USD (44))	96.30%	(1,207) (USD (44))	625,067 (USD 20,849)	-	
Jiangsu CM/ Chainwin Agriculture Development Co., Ltd.	Developing hog farming technology and trading	1,710,498 (USD 55,510)	(Note 1)	703,641 (USD 22,905)	248,320 (USD 8,000)	-	951,961 (USD 30,905)	(408,074) (USD (13,225))	47.19%	(199,956) (USD (6,480))	472,528 (USD 15,761)	-	(Note 7)
Jiansu Merit/ CM Agriculture Development Co., Ltd.	Developing hog farming technology and trading	466,944 (USD 15,200)	(Note 1)	467,063 (USD 15,204)	40,850 (USD 1,363)	-	507,913 (USD 16,567)	3,901 (USD 115)	96.30%	3,542 (USD 105)	443,446 (USD 14,791)	-	
Jiangsu Merit/ Cofcojoycome Agriculture Development Co., Ltd.	Developing hog farming technology and trading	-	(Note 1)	149,664 (USD 4,872)	-	-	149,664 (USD 4,872)	-	-	-	-	-	(Note 8)
Jiangsu Merit Runfu Agriculture Development Co., Ltd.	Developing hog farming technology and trading	72,313 (RMB 16,177)	(Note 1)	41,009 (USD 1,335)	-	-	41,009 (USD 1,335)	472 (USD 16)	96.30%	472 (USD 16)	55,194 (USD 1,841)	-	
Jiangsu Win Yield Agriculture Development Co., Ltd.	Developing hog farming technology and trading	155,300 (USD 5,000)	(Note 1)	-	155,300 (USD 5,000)	-	155,300 (USD 5,000)	1,222 (USD 37)	96.30%	1,222 (USD 37)	149,887 (USD 5,000)	-	
Onearray Biotech (Kunshan) Co., Ltd.	Selling of high density gene chip and test service	8,784 (RMB 1,898)	(Note 2)	8,784 (USD 300)	-	-	8,784 (USD 300)	31,702 (RMB 7,181)	58.87%	31,702 (RMB 7,181)	7,852 (RMB 1,822)	-	

(ii) Limitation on investment in Mainland China:

(In thousands of dollars)

Investor Company Name	Accumulated Investment in Mainland China at the end of this year (Note 8)	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on Investment (Note 6)
The Company and subsidiaries	3,777,472 (USD 122,496)	4,656,168 (USD 155,309)	17,903,719

Note 1: The Company invested in Mainland China companies through Chainwin Biotech and Agrotech (Cayman Islands) Co., Ltd , which is established in a third region.

Note 2: The Company invested in Mainland China companies through Phalanx Biotech Limited, which is established in a third region.

Note 3: The amount of net income (losses) was recognized based on the audit financial statements of the investee companies.

Note 4: Carrying value as of December 31, 2019 was with reference to the amount recognized by the investment through subsidiaries to subsidiaries established in a third region.

Note 5: Investment income (loss) recognized was translated into New Taiwan Dollars at the average exchange rate for the each month from January 1 to December 31, 2019.

Note 6: Amount of upper limit on investment was the higher between sixty percentage of total equity or total consolidated equity.

Note 7: The shareholders' meeting of Jiangsu CM/ Merit Agriculture Development Co., Ltd. had approved and decided to rename to Jiangsu CM/ Chainwin Agriculture Development Co., Ltd. on June 20, 2019.

Note 8: Jiansu Merit/ Cofcojoycome Agriculture Development Co., Ltd. had been liquidated on January 25, 2019. However, according to the regulation of Investment Commission the remittance to Mainland China amounting to US$4,872 thousand (NT$149,664 thousand) was included in the accumulated investment account.

(iii) Significant transactions: None

WIN Semiconductors Corp.

Chairman: Chin-Tsai Chen