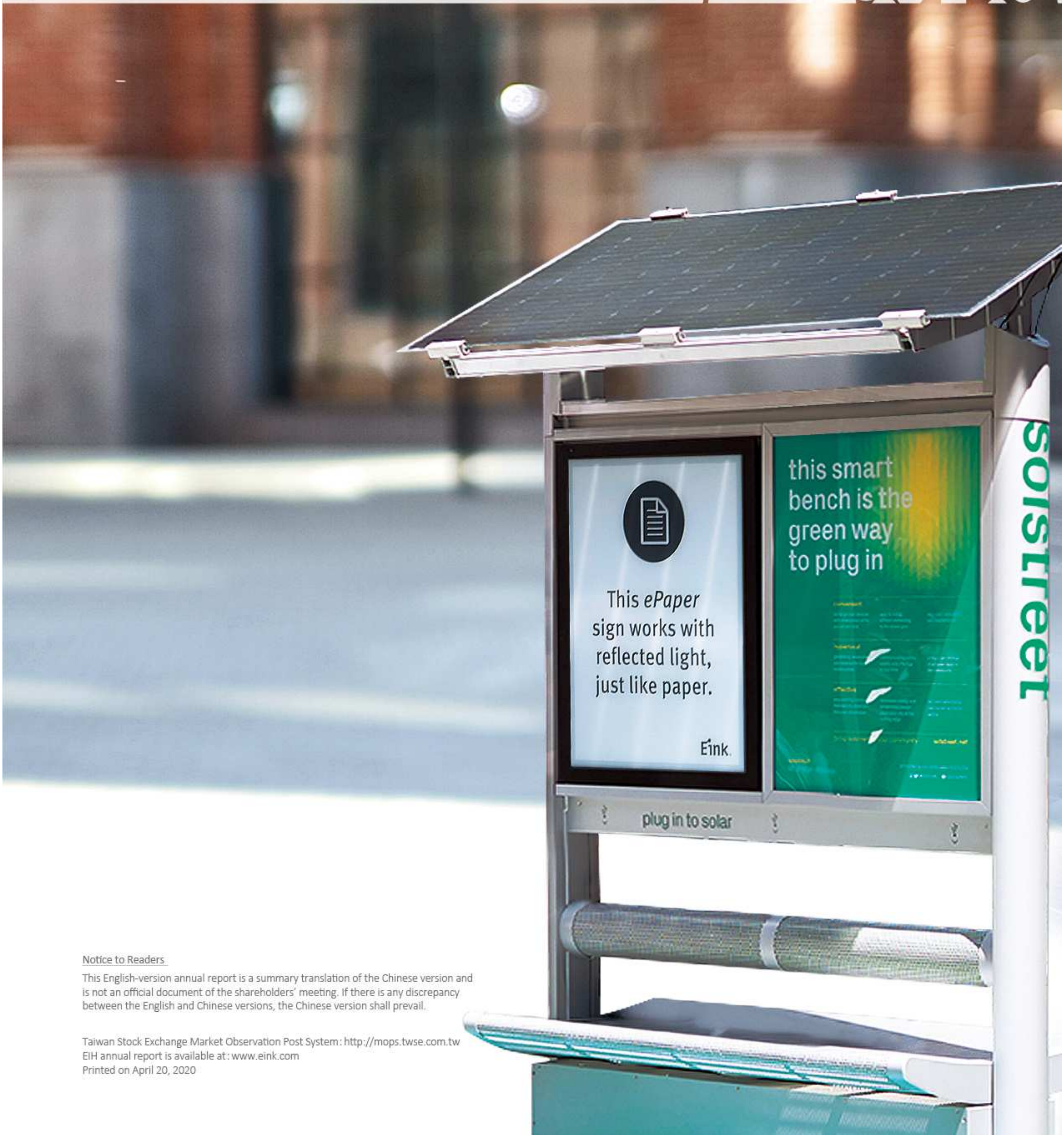
Stock Code : 8069

E INK HOLDINGS INC.

2019 Annual Report



Notice to Readers

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 and Chinese versions, the Chinese version shall prevail.

Taiwan Stock Exchange Market Observation Post System : http://mops.twse.com.tw
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Stock Transfer Agent
The company's common stock is listed on the Taiwan's OTC/TPEX Securities Market. (Ticker: 8069)
Common Share Transfer Agent & Registrar: SinoPac Securities
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Name Of International Public Securities Exchanges And How to Get Information about Securities Traded There
Trading house: Luxembourg Stock Exchange
Inquiry method: Bloomberg
Website http://www.bourse.lu/

Corporate Website
http://www.eink.com

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I. Letter to Shareholders

To all shareholders:

2019 Business Report

Continued US-China tensions in 2019 led to increased trade barriers and uncertainty in economic activities within the global economy. Global economic growth therefore dropped to its lowest rate in a decade. Faced with challenges such as conservative enterprise spending around the world and weak consumer buying power, E Ink revenues did not grow as much as expected and consolidated revenue for the year was NT$13.6 billion. Despite the challenges of revenue growth, E Ink engaged in aggressive efforts to improve business efficiency and governance. A gross profit of NT$6.04 billion with a gross profit margin of 44.4% created a new record. Net profit after tax was NT$3.08 billion with an earnings per share (EPS) of NT$2.72, making this the 7th consecutive year of record company earnings.

Looking back on developments in 2019, there was a shift towards larger displays and stacked product packages with a high unit price though eReaders experienced a slight decline in revenue and shipments. eNote also made great progress in the smart education and e-learning market. Due to cooperating to ecosystem partners on product launch and end-user market development timeline, product revenues were not achieved the growth targets. The increasing maturity of Print Color ePaper technologies means that eNote products will become colorful to meet the demands of the e-learning market.

For Internet-of-Things (IoT) applications, Electronic Shelf Label (ESL) is growing steadily in the New Retail market. In addition to its adoption by large supermarket chains in the Europe, U.S. and Chinese markets, the surface area of ePaper shipped for ESL now matches the surface area of ePaper shipped for eReader applications. In the ePaper signage business, we were actively involved in the smart healthcare and smart city applications market. We continued to strengthen our collaboration with ecosystem partners to design innovative or revolutionary products for hospital and transport applications. Our efforts are beginning to pay off and the visibility of our pilot locations have continued to increase. At the same time, ACeP™ (Advanced Color ePaper) is moving towards mass production and future applications will include retail signage as well as digital signage in other spaces.

E Ink was also presented with a 5th Taiwan Mittelstand Award by the Ministry of Economic Affairs in 2019 that recognized the company management's lean and highly-efficient business management, the continued refining of ePaper technology, the development of ePaper applications, and the steady growth of the company. That was not all either. E Ink made great strides in the economic, environmental, and social aspects of sustainability development by winning the Taiwan CSR Award for three consecutive years. In 2019, E Ink won four top awards in 2019: "Top 50 Corporate Sustainability Award," "Corporate sustainability Report Awards - IT & IC Manufacturing" (Gold award)," "Best Performance in a Specific Category - Social Inclusion Award," and "Best Performance in a Specific Category - Growth through Innovation Award."

2020 Business Focus

Having weathered the economic uncertainties of 2019, E Ink will continue to pursue revenue growth, technological capability, and sound governance in 2020. The global supply chain and economic development was however impacted by the Novel Coronavirus (COVID-19) at the start of 2020. Faced with this unexpected and even more challenging development, E Ink immediately took all precautions and cooperated fully with the epidemic prevention efforts of the relevant agencies. Epidemic prevention measures in company operations were also tightened. Resources were mobilized in a timely manner to ensure the continuity of production even as we stayed in close contact with our customers and worked together to ensure no interruption to shipments. Nevertheless, the already weak global economy and uncertainty over the pace of future recovery will all become significant variables in the future revenue growth of E Ink.

For business development in 2020, E Ink will continue to develop the market for eReader, eNote, and IoT applications. Even as eReaders move towards larger displays and stacked products with high unit prices, the introduction of handwriting function will hopefully attract more users and lead to a larger market. For eNote business, we will not only continue to develop existing markets and support the launch of new customer products, but also seek to generate new growth from the application of Print-Color ePaper to the education market. In IoT, the ESL business is growing steadily and the market shows no sign of abating. Previous market efforts onePaper tag for smart logistics should begin to deliver results. Digital signage applications in health care and transport should also start to bear fruit too, so revenues will be expected gradually increase.

In terms of technology development, we will not only supply black & white ePaper products with better performance but also consolidate our product and production technologies to achieve further improvements in the yield of flexible electronic products. At the same time, color ePaper products will enter mass production. This technology will contribute revenue in individual applications. The development of eReader and eNote technologies will focus on the refinement of the handwriting function; retail and logistics ePaper tags will focus on the development of power-saving and passive technology to lay down the foundations for future product development.

Business management will build on the solid foundations we have achieved so far. In addition to consolidating our R&D capability to accelerate the product development cycle and shorten the time-to-market, we will also continue to improve productivity through production automation. At the same time, the flexibility of operational management will be strengthened to maximize efficiency between product development and product shipping so that it can serve as a core component of our business competitiveness.

Future Prospects

Faced with an uncertain macro-economic environment, E Ink will streamline our business management, refine our development and manufacturing of color, flexible, energy-efficient and energy harvesting technologies, as well as liaise closely with customers and supply chain partners to ensure the smoothness and reliability of our ePaper manufacturing and shipments, as well as strengthening our business development. At the same time, facing the dual trends of smart city and IoT, E Ink will focus our efforts on the development of smart applications based on ACeP and Print Color ePaper technologies that epuip with the bistability and reflective attributes of ePaper. E Ink will take this opportunity to bring business growth and dedicate to bringing a sustainable, smart and "paper-free" future.

Best regards

Chairman
Johnson Lee

II. Company Profile

2.1 Date of Incorporation: June 16, 1992

2.2 Company History

Established in June 16, 1992

September 2000	Capacity reached 18,000 substrate per month.
October 2000	Public listing approved by Securities & Futures Institute ((2000)Tai-Cai-Zheng (I) Letter No. 86989).
September 2001	Capacity expanded to 36,000 substrate per month.
October 2001	Obtained ISO 9001 certification
April 2002	Permission granted by MOEA Investment Commission to establish Transcend Optronics (Yangzhou) Co., Ltd. as an indirect investment in China through an investment business in a third region.
July 2002	Received QS-9000 (quality), ISO 14001 (environment) and OHSAS 1800 (safety and health) certifications
February 2003	Officially listed as an Emerging Stock with Taipei Exchange on February 14.
October 2003	Applied for OTC trading with Taipei Exchange.
January 2004	Approved OTC trading with Taipei Exchange.
March 2004	Officially listed on the Taipei Exchange on March 30.
November 2004	Permission granted by MOEA Investment Commission to establish Rich Optronics (Yangzhou) Co., Ltd. as an indirect investment in China through an investment business in a third region.
May 2005	Contract signed for cooperating with the Philips N.V. ePaper display business.
May 2006	Equity reduced by 296,000 shares after first buyback of treasury stocks.
October 2006	U.S. subsidiary established for building U.S. sales network.
May 2007	Technology and patent licensing agreement signed with Company A.
November 2007	MOU signed to acquire Korean panel manufacture BOE Hydis Technology Co., Ltd.
July 2008	Hydis Technologies Co., Ltd. shares were formally purchased on July 4.
June 2009	Signed contract with E Ink, an U.S. ePaper manufacture, and its shareholders' representative to acquire 100% of its company shares.
September 2009	Signed the revised acquisition and share-swap contracts with E Ink, an U.S. Paper manufacture, and its shareholders' representative. 100% share of E Ink was acquired on December 23 of the same year.
December 2009	Hydis subsidiary signed bond purchasing contract, collateral contract, investment contract, and cross-licensing contract with LG Display.
May 2010	Permission granted by MOEA Investment Commission to establish Transyang Electronics (Yangzhou) Co., Ltd. as an indirect investment in China through an investment business in a third region.
June 2010	Company name changed to E Ink Holdings Inc.
November 2010	New E Ink Pearl™ monochrome ePaper display won "Best of What's New 2010" award from Popular Science (PopSci).
December 2010	Won award for printed electronics at 4th IDTechEx in the U.S.
January 2011	Permission granted by MOEA Investment Commission to establish Transmart Electronics (Yangzhou) Co., Ltd. as an indirect investment in China through an investment business in a third region.
March 2011	Resolution passed by the Board of Directors to make a second buy back of treasury stock and transfer them to employees as part of the company's overall talent retention plan.
May 2011	E Ink Triton™ color ePaper display won "Gold Display Component of the Year" at the 2011 Display of the Year Awards (DYA) presented by the Society for Information Display (SID).
May 2011	Yuen-Yu Investment Co., Ltd. transferred business units that it manages but does not have direct ownership over to the newly established Kai-Yu Investment Co., Ltd. The move was intended to boost returns on investment through better delegation on investment management.
July 2011	Resolution passed by the Board of Directors to purchase TWD 1.5 billion in domestic unsecured convertible company bonds issued by Chunghwa Picture Tubes, Ltd. as a private offering to establish a strategic alliance between the two companies.
October 2011	E Ink Triton™ color ePaper display won "Innovation of the Year Award" for 2011 from the Wall Street Journal.
November 2011	E Ink Pearl™ ePaper display wins won "Innovation of the Year" presented by the U.K. Institute of Engineering and Technology (IET).
June 2012	E Ink's next-generation high-efficiency ePaper display recognized at "15th Outstanding Photonics Product Awards" presented by PIDA.
June 2012	High contrast E Ink Pearl™ ePaper display received "Outstanding Component Award" at the "11th Gold Panel Awards"

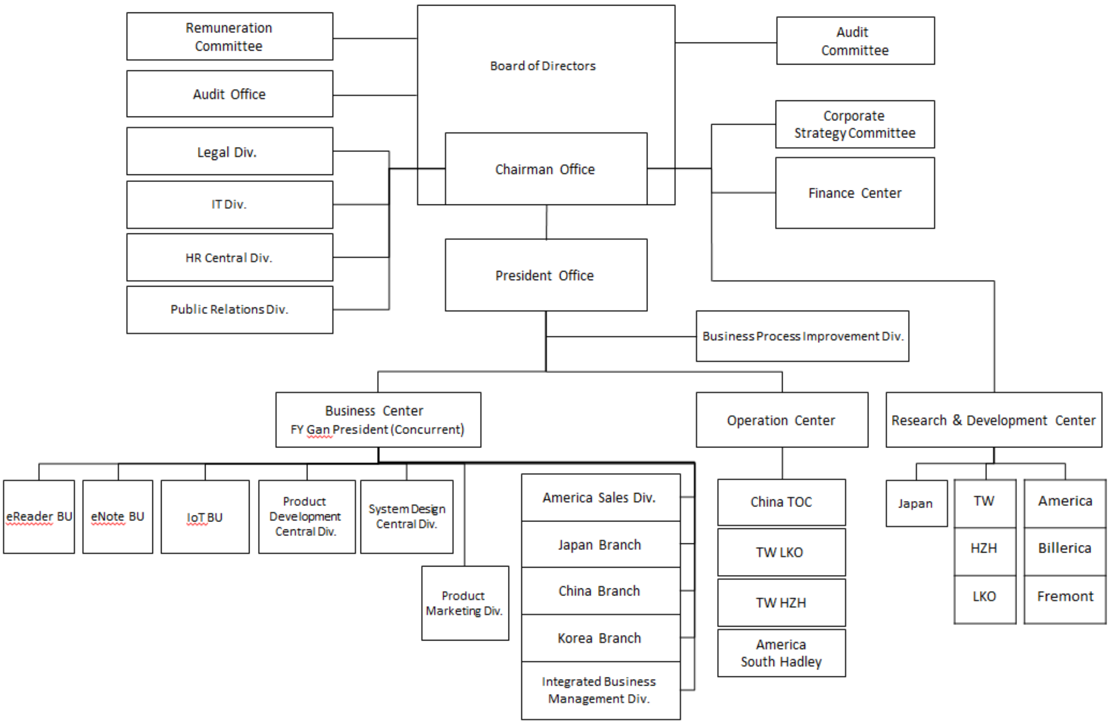
	presented by the MOEA Industrial Development Bureau.
July 2012	E Ink and the company's Korean subsidiary Hydis Technologies Co., Ltd. signed patent cross-licensing agreement with Company B.
October 2012	E Ink and the company's Korean subsidiary Hydis Technologies Co., Ltd. signed patent cross-licensing agreement with Company C.
November 2012	Acquired shares in SiPix Technology, Inc. to incorporate its Microcup® technologies and patented into the E Ink ePaper patent portfolio.
December 2012	E Ink and the company's Korean subsidiary Hydis Technologies Co., Ltd. signed patent cross-licensing agreement with Company D.
January 2013	Resolution passed by the Board of Directors to purchase the Linkou site and equipment of SiPix Technology, Inc. subsidiary in order to consolidate the production operations of E Ink Group in Taiwan and improve asset returns.
June 2013	E Ink Triton™ full-effect color ePaper display recognized at "16th Outstanding Photonics Product Awards" presented by PIDA.
November 2013	Korean subsidiary Hydis Technologies Co., Ltd. signed patent cross-licensing agreement with Company E.
April 2014	Korean subsidiary Hydis Technologies Co., Ltd. signed patent cross-licensing agreement with Company F.
June 2014	E Ink Spectra™ tri-color ePaper display recognized at "17th Outstanding Photonics Product Awards" presented by PIDA.
December 2014	Presented with "SEMI Standards Contribution Award" by SEMI Taiwan.
August 2015	Wirelessly powered ePaper display won the "Outstanding Technology Award" at the "14th Gold Panel Awards" presented by Taiwan Display Union Association (TDUA).
December 2015	Korean subsidiary Hydis Technologies Co., Ltd. sign patent cross-licensing agreement with Company G.
June 2016	Resolution passed by the Board of Directors to make a third buy back of treasury stock and transfer them to employees as part of the company's overall talent retention plan.
July 2016	Subsidiary Yuen-Yu Investment Co., Ltd. acquired Kai-Yu Investment Co., Ltd. to consolidate company resources and streamline the company structure.
September 2016	Korean subsidiary Hydis Technologies Co., Ltd. signed patent cross-licensing agreement with Company H.
November 2016	E Ink signed MOU on strategic cooperation with Company I.
February 2017	32" color ePaper displays presented with Gold Award at the "Taiwan Excellence Awards" by the MOEA.
April 2017	E Ink established a joint venture with SONY Semiconductor on ePaper display business.
September 2017	6.1" non-geometric flexible wearable ePaper display won the "Outstanding Product Award" at the "2017 Gold Panel Awards" presented by Taiwan Display Union Association (TDUA).
November 2017	E Ink's "2016 Corporate Social Responsibility Report" was recognized at the "2017 Taiwan Corporate Sustainability Awards" held by Taiwan Academy of Corporate Sustainability with a gold award in the IT & IC manufacturing industry category.
May 2018	E Ink formed strategic partnership with SES-imagotag, a French company
August 2018	Advanced Color ePaper (ACeP) won the "Outstanding Technology Award" at the "2018 Gold Panel Awards" presented by Taiwan Display Union Association (TDUA).
November 2018	E Ink's "2017 Corporate Social Responsibility" was recognized with three awards at the 2018 11th Annual Taiwan Corporate Sustainability Awards held by Taiwan Academy of Corporate Sustainability: "Top 50 Corporate Sustainability Award", "Corporate Sustainability Report Awards - Gold Award" and "Social Inclusion Award."
May 2019	E Ink Hardware TCON T1000 presented with COMPUTEX Best Choice Award by the Taipei Computer Association.
June 2019	Yuanhan Materials was acquired by Yuen-Yu Investment Co., Ltd., an E Ink subsidiary, and name changed to Yuanhan Materials Inc.
October 2019	Sipxix was acquired by E Ink subsidiary Yuanhan Materials to streamline the organization of the E Ink Group and improve the operating efficiency of the subsidiary.
October 2019	Presented with the 5th "Taiwan Mittelstad Award" by the Industrial Development Bureau, Ministry of Economic Affairs.
November 2019	"Wireless Power e-Paper Display" presented with Gold Award at the "Taiwan Excellence Awards" by the MOEA.
November 2019	E Ink was recognized at the Taiwan Corporate Sustainability Awards hosted by the Taiwan Institute for Sustainable Energy for the third consecutive year by winning four awards: "Top 50 Corporate Sustainability Award," "Corporate sustainability Report Awards - IT & IC Manufacturing" (Gold award)," "Best Performance in a Specific Category - Social Inclusion Award," and "Best Performance in a Specific Category - Growth through Innovation Award."
December 2019	Print Color ePaper technology revealed by E Ink with sights set on the development of smart applications for color ePaper.

III. Corporate Governance Report

3.1 Organization

3.1.1 Organizational Chart

Mar 31, 2020



3.1.2 Major Corporate Functions

- **Chairman's Office** (includes the Business Strategy Committee, Legal Division, IT Division, HR Central Division, Public Relations and Marketing Division, Research & Development Center, Finance Center, President’s Office, and subordinate units)

  Planning of the company’s business strategy and targets, planning and execution of internal controls, overall planning and management of legal affairs and document control, planning and execution of human resource affairs, IT planning and introduction of new information technologies, building of the company’s external image and media liaison, overall planning and execution of PR activities such as international exhibitions and product promotion events, oversee the direction of product R&D, design and application, master-planning of the company’s finances, delegating the execution of Board resolutions to the Chairman, realizing the business targets set by the Board.

- **Chairman's Office** (includes the Business Center, Operation Center, Business Process Improvement Division)

  Responsible for leading the company’s Operation Center, Business Center and branches. Provide coordination and direction to realize the company's objectives and strategy. Lead the overall business development, decide and implement policies and evaluations, and develop operating rules.

- **Research & Development Center**

  Responsible for the research and development of innovative technologies and products related to e-paper as well as their introduction into mass production. This includes the development of new e-paper types, patent portfolio and planning, preliminary panel design, research and development of production technologies, construction of new platforms and module production technologies, as well as the introduction of critical materials, parts, and components.

- **Operation Center**

  Overall planning and execution for purchasing products' raw materials, equipment and construction; planning of raw material requirements, bounded and logistics management; assurance of material/product quality and reliability; management and execution of production plans; responsible for planning and execution of product process analysis and production management during the production process.

- **Finance Center**

  Responsible for the planning and execution of financial, accounting business management, and public relations affairs.

- **Business Center** (includes eReader BU, eNote BU, IoT BU, Product Management Central Division, System Solution Development Central Division, Product Marketing Division, Integrated Business management Division)

  In charge of global business management and strategic direction, oversees global product planning and strategic direction, lead product application engineering departments in providing customers with an efficient product development timetable, shorten customer development times, formulate product road maps, achieve the company's sales targets, planning and building of eco-systems for new company products and markets.

3.2 Directors, Supervisors and Management Team

3.2.1 Directors and Supervisors

2019/12/31

Title	Nationality/ Country of Origin	Name	Gender	Date Elected	Term(Year)	Date First Elected	Shareholding when Elected		Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Experience （Education）	Other Position	Executives, Directors or Supervisors who are spouses or within two degrees of kinship		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relation
Director	ROC	Aidatek Electronics Inc.	N/A	2017/6/20	3	2014/6/18	100,000	0.01%	100,000	0.01%	0	0.00%	0	0.00%	N/A	None	None	None	None
	ROC	Johnson Lee, Representative of Aidatek Electronics Inc.	M	2017/6/20	3	2008/6/13	133,040	0.01%	623,040	0.05%	11,600,000	1.02%	355,000	0.03%	Tufts University Department of Economics &Electrical Engineering double major bachelor degree	Chairman, E Ink Holdings Inc.	Director	S.C. Ho	Son in law
																Chairman or Director , Affiliated Parties of EIH			
																Chairman, Zhengqi Investment Co., Ltd.			
																Director,Shin Lung Natural Gas Co.			
																Director,Foongtone technology			
																Director,BoardTek Electronics Corp			
																Director,Yilong Gas Co., Ltd.			
	ROC	S.C. Ho, Representative of Aidatek Electronics Inc.	M	2017/6/20	3	2002/6/20	80,434,300	7.05%	80,434,300	7.05%	0	0.00%	0	0.00%	Master of Mechanical Engineering,University of Wisconsin - Madison	Director, E Ink Holdings Inc.	Director	Felix Ho	Father
																Director, E Ink Corporation	Director	Johnson Lee	Father in law
																Director,YFY Jupiter (BVI) Inc.			
																Director, Chung Hwa Pulp Corporation			
																Director, YFY Packaging Inc.			
																Director, Yuen Foong Yu Consumer Products Co., Ltd.			
																Director, TaiGen Biotechnology Co., Ltd.			
																Director, San Ying Enterprise Co., Ltd.			
																Director, China Color Printing Co., Ltd.			
																Director, Cupid Infotech Co.,Ltd.			
																Director, EFFION Enertech Co., Ltd.			
																Director, YFY Biotechnology Co., Ltd.			
																Director, YFY Paradigm Investment Co., Ltd.			
																Director, YFY Venture Capital Investment Co., Ltd.			
																Director, Lotus Ecoscings & Engineering Co.,Ltd.			

															Director, Shen's Art Print Co., Ltd.			
															Director, Sustainable Carbohydrate Innovation Company Limited			
															Director, YFY Biotech Management Company			
															Executive Director, China Investment and Development Co., Ltd.			
															Director, Yuen Foong Yu Paper MFG (Yangzhou) Co., Ltd.			
															Director, Yuen Foong Yu Consumer Products Investment Ltd			
															Director, Yuen Foong International (Samoa) Ltd.			
															Director, YFY Japan Co., Ltd.			
															Director, TaiGen Biopharmaceuticals Holdings Ltd.			
															Director, Artone Investment (H.K.) Ltd.			
															Director, Artone Specialties Co., Ltd.			
															Director, Hsinex International Corp.			
															Director, Taitung Enterprise Co.			
															Director, Shin-Yi Enterprise Co., Ltd.			
															Chariman, Shin-Yi Investment Co., Ltd.			
															Director, Shin-Yi Recreation Co., Ltd.			
															Director, Ru Yi Enterprise Co., Ltd.			
															Director, Xing Yuan Investment Co., Ltd.			
															Chairman, Yuen Foong Paper Co., Ltd.			
															Chairman, Yuen Shin Yi Enterprise Co., Ltd.			
															Director, Yong-An Leasing Co., Ltd.			
															Director, YF Chemical Co., Ltd.			
															Director, SinoCell Technologies Co., Ltd.			
															Chairman, Fu Hwa Enterprise Co., Ltd.			
															Director, HuaDong Industrial Co., Ltd.			
															Director, Synmax Biochemical Co., Ltd.			
															Executive Shareholder, Ho Jei Lai Kosan Unlimited Company			
															Director, Shin-Yi Holding Inc.			
															Director, Hsin Yi Foundation			
															Chairman, Pre-school Education Magazine of Hsin yi Foundation			
															Chairman, Foundation of Fire Fighting Development			
															Chairman, Shang Shan Human Culture Foundation			
															Director, Liver Disease Prevention & Treatment Research Foundation			

																Director, The Eisenhower Fellows Association in the Republic of China			
																Executive Director, Yuan T. Lee Foundation Science Education for All			
																Director, Foundation for the Advancement of Outstanding Scholarship			
																Executive Director, Chinese International Economic Cooperation Association			
	ROC	Felix Ho, Representative of Aidatek Electronics Inc.	M	2017/6/20	3	2002/6/20	10,095,435	0.89%	10,095,435	0.89%	0	0.00%	0	0.00%	Master of Financial Management, Massachusetts Institute of Technology, Sloan College	Director, E Ink Holdings Inc. Director, Jupiter Prestige Group Holding Limited Chairman, Willpower Industries Limited Chairman, Yuen Foong Yu Paper Enterprise (Vietnam) Company Limited Chairman,YFY Jupiter (BVI) Inc. Director,YFY Biopulp Technology Ltd. Director,YFY RFID Co., Ltd. Director, SinoPac Holdings Co., Ltd. Director, Chung Hwa Pulp Corp. Director, YFY Packaging Inc. Chairman, Yuen Foong Yu Consumer Products Co., Ltd. Chairman, Ever Growing Agriculture Bio-tech Co., Ltd. Chairman, Yuen Foong Shop Co., Ltd. Director, Livebricks Inc. Director, eCrowd Media Inc. Chairman,Arizon RFID Technology Co., Ltd. Director,Arizon Japan Co., Ltd. Chairman, YFY Packaging (Yangzhou) Investment Co., Ltd. Director, Yuen Foong Yu Paper MFG (Yangzhou) Co., Ltd. Chairman, YFY Investment Co., Ltd. Chairman, YFY Cayman Co., Ltd. Director, YFY Mauritius Corp. Director, Yuen Foong Yu Consumer Products Investment Ltd. Director, Eihoyo Shoji Co., Ltd. Director, Yuen Foong International (Samoa) Ltd. Director, Artone Investment (H.K.) Ltd. Director, Shin-Yi Enterprise Co., Ltd. Director, Yuen Foong Paper Co., Ltd. Chairman, Yuen Foong Co., Ltd.	Director	S.C. Ho	Son

																Director, Fu Hwa Enterprise Co., Ltd. Director, Chen Yu Co., Ltd. Director, The Eisenhower Fellows Association in the Republic of China Director, Epoch Foundation Chairman, Taiwan Paper Industry Association6. Director, Monte Jade Taiwan Science & Tech Association Chairman, Association of Corporate Patent Executives			
Director	ROC	Luke Chen, Representative of Aidatek Electronics Inc.	M	2019/9/9	1	2019/9/9	336,000	0.03%	336,000	0.03%	0	0.00%	0	0.00%	Master of Electrical Engineering and Master of Industrial Engineering, New Mexico State University, USA	Executive Vice President, E Ink Holdings Inc.	None	None	None
																Director , Affiliated Parties of EIH	None	None	None
Director	ROC	YFY Inc.	N/A	2017/6/20	3	2002/6/20	133,472,904	11.70%	133,472,904	11.70%	0	0.00%	0	0.00%	N/A	None	None	None	None
	ROC	FY Gan, Representative of YFY Inc.	M	2017/6/20	3	0	0	0.00%	880,000	0.08%	0	0.00%	0	0.00%	Ph.D., Institute of Electrical Engineering, McGill University, Canada	General manager Director/General manager , Affiliated Parties of EIH	None	None	None
	ROC	CC Tsai, Representative of YFY Inc.	F	2017/6/20	3	2008/6/13	15,788	0.00%	233,788	0.02%	0	0.00%	0	0.00%	National Chiao Tung University Department of Photonies Institute of EO Engineering Professor, Quanta Display Inc. Senior Vice President/University of Chicago Department of Physics PhD degree	Auditor Office Vice President, E Ink Holdings Inc. Director , Affiliated Parties of EIH	None	None	None
Independent director	ROC	Ten-Chung Chen	M	2017/6/20	3	2005/6/16	0	0.00%	0	0.00%	0	0.00%	0	0.00%	General Manager of Advantech, USA/Advantech Co., Ltd. Director or Supervisor / Master of Business Administration, Indiana University, USA	Independent director,YFY Inc.	None	None	None
Independent director	ROC	Chao-Tung Wen	M	2017/6/20	3	2014/6/18	0	0.00%	0	0.00%	0	0.00%	0	0.00%	Professor and Director,NCCU Graduate Institute of	Independent director,Pharmadax Inc. Independent director,TSTI Chariman,Eastern International Ad.	None	None	None

															Technology,Innovation &Intellectual Property Management/EMBA CEO and Director of Innovation and Creativity Center / Ph.D. in Urban and Environmental Studies, Rensselaer Polytechnic Institute				
Independent director	ROC	Chao-Tung Wen	M	2017/6/20	3	2014/6/18	0	0.00%	0	0.00%	0	0.00%	0	0.00%	Professor and Director,NCCU Graduate Institute of Technology,Innovation &Intellectual Property Management/EMBA CEO and Director of Innovation and Creativity Center / Ph.D. in Urban and Environmental Studies, Rensselaer Polytechnic Institute	Independent director,Pharmadax Inc. Independent director,TSTI Chariman,Eastern International Ad.	None	None	None

3.2.2 Professional qualifications and independence analysis of directors and supervisors

December 31, 2019

Criteria / Name	Having more than 5 years work experience and professional qualifications listed below: Lecturer (or above) of commerce, law, finance, accounting, or any subject relevant to the Company's operations in a public or private tertiary institution	Judge, prosecutor, lawyer, accountant, or holder of national exam or professional qualification relevant to the Company's operations	Commercial, legal, financial, accounting or other work experiences required to perform the assigned duties	Compliance of independence (Note): 1	2	3	4	5	6	7	8	9	10	11	12	Number of positions as independent director in other public companies
Representative of Yuan Cheng Fa Technology Co., Ltd.: Johnson Lee			V			V		V	V	V		V		V	V	0
Representative of Yuan Cheng Fa Technology Co., Ltd.: S.C. Ho			V	V					V	V		V		V	V	0
Representative of Yuan Cheng Fa Technology Co., Ltd.: Felix Ho			V			V			V	V		V		V	V	0
Representative of Yuan Cheng Fa Technology Co., Ltd.: Luke Chen			V			V	V	V	V	V	V	V	V	V	V	0
Representative of YFY Inc.: CC Tsai			V			V	V	V	V	V	V	V	V	V	V	0
Representative of YFY Inc.: FY Gan			V			V	V	V	V	V	V	V	V	V	V	0
Tien-Chung Chen			V	V	V	V	V	V	V	V	V	V	V	V	V	1
Chao-Tung Wen	V		V	V	V	V	V	V	V	V	V	V	V	V	V	2
Po-Young Chu	V		V	V	V	V	V	V	V	V	V	V	V	V	V	3

Note: "V" is placed in the box if the director or supervisor met the following conditions at any time during active duty and two years prior to the date elected.

(1) Not employed by the Company or by any of its affiliated companies.

(2) Not a director or supervisor of the Company or any of its affiliated companies (this restriction does not apply to concurrent independent director positions in the Company, its parent company, subsidiary, or another subsidiary of the parent that is compliant with the Act or local laws).

(3) Does not hold more than 1% of the Company's outstanding shares in their own names or under the name of spouse, underage children, or proxy shareholder; nor is a top-10 natural-person shareholder of the Company.

(4) Not a manager listed in (1), or a spouse, 2nd-degree relative or closer or 3rd-degree direct relative or closer to any personnel listed in (2) or (3).

(5) Not a director, supervisor or employee of any corporate shareholder that: 1. holds 5% or more of the Company's outstanding shares; 2. is a top-5 shareholder; or 3. appoints director/supervisor representative in the Company according to Paragraph 1 or 2, Article 27 of The Company Act. (This excludes concurrent independent director positions held within the Company and its parent/subsidiary, or in other subsidiary of the parent company that are compliant with the Act local laws).

(6) Not a director, supervisor or employee of any other company that controls directorship in the Company or where more than half of total voting rights are controlled by a single party (this excludes concurrent independent director positions held within the Company and its parent/subsidiary, or in other subsidiary of the parent company that are compliant with the Act or local laws).

(7) Does not assume concurrent duties and is not a spouse to the Company's Chairman, President or equivalent role, and is not a director, supervisor or employee of another company or institution. (This excludes concurrent independent director positions held within the Company and its parent/subsidiary, or in other subsidiary of the parent company that are compliant with the Act or local laws).

(8) Not a director, supervisor, manager, or shareholder with more than 5% ownership interest in any company or institution that has financial or business relationship with the Company (however, this excludes concurrent independent director positions held within companies or institutions that hold more than 20% but less than 50% outstanding shares of the Company, or in the Company's parent or subsidiary, or in another subsidiary of the parent that is compliant with the Act or local laws).

(9) Not a professional who provides audit service, or commercial, legal, financial, accounting or related services for an accumulated sum of less than NT$500,000 in the last 2 years, to the Company or its affiliate, nor is an owner, partner, director, supervisor, or manager, or the spouse of any of the above, of a sole proprietorship, partnership, company, or organization that provides the above service to the Company or its affiliated companies. This excludes roles as Remuneration Committee, Public Acquisition Review Committee or M&A Special Committee member appointed in accordance with the Securities and Exchange Act or Business Mergers and Acquisitions Act.

(10) Not a spouse or relative of second degree or closer to any other directors.

(11) Does not meet any of the conditions stated in Article 30 of The Company Act.

(12) Not elected as a government or corporate representative according to Article 27 of The Company Act.

3.2.3Major shareholders of the institutional shareholders

Name of Institutional Shareholders	Major Shareholders	%
YFY Inc.	S.C. Ho	10.16%
	Shin-Yi Foundation	5.66%
	Shin-Yi Enterprise Co., Ltd.	4.69%
	Cheng Ting Ho	2.80%
	YFY Inc. Labor Retirement Reserve Supervisory Committee	2.79%
	Mei Yu Ho	2.66%
	NEW TALENT LIMITED	2.28%
	Felix Ho	2.14%
	Min Ting Ho	2.07%
	Hsinex International Corporation	1.87%
Aidatek Electronics, Inc.	Hsinex International Corporation	47.39%
	S.C. Ho	41.27%
	Felix Ho	7.46%
	Johnson Lee	3.58%
	Pao Yu Hsieh	0.30%

<u>Major shareholders of the Company's major institutional shareholders</u>

Name of Institutional Shareholders	Major Shareholders	%
Shin-Yi Foundation	Established in 1971, the main donors: Chuan Ho, Shou-shan Ho , S.C. Ho,Lin-fu-xiang Ho , Sun Ye, Yongfengyu Paper Co., Ltd. (donated before the listing), Shin-Yi Enterprise Co., Ltd.	
Shin-Yi Enterprise Co., Ltd.	S.C. Ho	27.84%
	Jucheng Investment & Management Co., Ltd.	12.50%
	BRILLIANT PRIDE LIMITED	12.50%
	Gao Da Global Ltd.	12.50%
	Mei Yu Ho	12.50%
	Guan Yu Investment Co., Ltd.	5.91%
	Tasi Hui Shin Ho	2.48%
	Richard Ho	2.18%
	Jin Jie Investment Ltd.	1.52%
	Hoss Educational Foundation	1.48%
	Hoss Cultural Foundation	1.48%
NEW TALENT LIMITED	Modern Victory Limited	100.00%
Hsinex International Corporation	S.C. Ho	53.13%
	Yi Chia Ho	24.48%
	Felix Ho	22.28%
	Chen Yu Co., Ltd.	0.11%

3.2.4 Management Team

Title	Nationality/ Country of Origin	Name	Gender	Date Effective	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Experience（Education）	Other Position	Managers who are Spouses or Within Two Degrees of Kinship			Remark
					Shares	%	Shares	%	Shares	%			Title	Name	Relation	
President	R.O.C	FY Gan	Man	2011/3/1	880,000.0	0.0	0.0	0.0	0.0	0.0	AU Optronics Corporation Associate Vice President /McGill University Department of Electrical Engineering PhD degree	President, Affiliated Parties of EIH	None	None	None	None
Chief Technology Officer	R.O.C	CC Tsai	Woman	2010/7/3	168,788	0.02%	0	0.00%	0	0.00%	National Chiao Tung University Department of Photonies Institute of EO Engineering Professor, Quanta Display Inc. Senior Vice President/University of Chicago Department of Physics PhD degree	Auditor Office Vice President, E Ink Holdings Inc. Director , Affiliated Parties of EIH	None	None	None	None
Operation Center Executive Vice President	R.O.C	Luke Chen	Man	2010/10/1	272,000	0.02%	0	0.00%	0	0.00%	Ningbo Chihsin Optoelectronics Corporation Executive Vice President/ Topsun Optronics, Inc. Executive Vice President/ Quanta Display Inc. LCM Engineering Office Director/New Mexico State University Department of Electrical Engineering & Industrial Engineering double major master degree	Director,Affiliated Parties of EIH Director of Zhenyao Technology Co., Ltd.	None	None	None	None
New Process Development Div. Vice President	R.O.C	YS Chang	Man	1996/2/1	185,414	0.02%	0	0.00%	0	0.00%	Industrial Technology Research Institute Electronic and Optoelectronic System Research Laboratories / National Chiao Tung University Department of Photonies Institute of EO Engineering master degree	Vice president of finance , Arizon RFID Technology (Yangzhou) Co., Ltd.	None	None	None	None
Chief Finance Officer	R.O.C	Lloyd Chen	Man	2018/4/23	6,950	0.00%	0	0.00%	0	0.00%	Deloitte & Touche Accounting Firm Leading Group / Lite-On Technology Senior Commissioner / Global Display Solutions, Asia Chief Financial Officer / TPV Technology Associate Financial Control Center / Macquarie University/CUNY--Baruch College	CFO, Affiliated Parties of EIH	None	None	None	None
Panel Technology Platform Development Div. Associate Vice President	British Subject	Ian Douglas French	Man	2012/3/1	10,000	0.00%	0	0.00%	0	0.00%	Philips Research Principal Senior Scientist/University of Dundee Department Of Semiconductor Materials Science And Engineering master degree	None	None	None	None	None

Title	Nationality/ Country of Origin	Name	Gender	Date Effective	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Experience（Education）	Other Position	Managers who are Spouses or Within Two Degrees of Kinship			Remark
					Shares	%	Shares	%	Shares	%			Title	Name	Relation	
FPL MFG Central Div. Associate Vice President	R.O.C	Mano Lo	Man	2013/12/9	158,000	0.01%	16,000	0.00%	0	0.00%	Optimax Technology Corporation Executive Vice President/PlexBio Co.,Ltd. President/AT&T Corporation Senior Manager/National Cheng Kung University Department of Engineering Science bachelor degree/ National Chiao Tung University Department of Technology Management, master degree	Director or Supervisor,Affiliated Parties of EIH	None	None	None	None
Product Development Div. I Associate Vice President	R.O.C	Tung Liang Lin	Man	1995/5/25	4,983	0.00%	0	0.00%	0	0.00%	Industrial Technology Research Institute Electronic and Optoelectronic System Research Laboratories / National Chiao Tung University Department of Electrical Engineering, master degree	None	None	None	None	None
IoT BU Associate Vice President	R.O.C	Max Chen	Man	2013/2/1	210,000	0.02%	0	0.00%	0	0.00%	AU Optronics Corporation Factory Director/ National Cheng Kung University Institute of Chemistry, master degree	Director or President,Affiliated Parties of EIH	None	None	None	None
System Design Central Div. Associate Vice President	R.O.C	JM Hung	Man	2018/9/6	274,000	0.02%	0	0.00%	0	0.00%	AU Optronics Corporation Manager/ National Chiao Tung University Institute of Electrical and Control Engineering master degree	None	None	None	None	None
Product Management Central Div. Associate Vice President	R.O.C	Jim Chang	Man	2018/9/6	164,000	0.01%	6,000	0.00%	0	0.00%	AU Optronics Corporation Marketing Director/National Tsing Hua University Institute of Nuclear Science master degree	None	None	None	None	None
Finance Center Accounting Director	R.O.C	James Huang	Man	2013/12/3	10,000	0.00%	0	0.00%	0	0.00%	Taiwan Semiconductor Manufacturing Co., Ltd Principal Administrator/National Taiwan University Department of Accounting bachelor degree/National Chung Cheng University Department of Accounting master degree	None	None	None	None	None

3.2.5 Remuneration of Directors, Supervisors, President, and Vice President

(1) Remuneration of Directors

Unit: NT$ thousands

Title	Name	Remuneration								Ratio of Total Remuneration (A+B+C+D) to Net Income (%)		Relevant Remuneration Received by Directors Who are Also Employees												Ratio of Total Compensation (A+B+C+D+E+F+G) to Net Income (%)		Compensation Paid to Directors from an Invested Company Other than the Company's Subsidiary
		Base Compensation (A)		Severance Pay (B)		Bonus to Directors (C.) Directors (C)		Allowances (D)				Salary, Bonuses, and Allowances (E)		Severance Pay (F)		Profit Sharing- Employee Bonus (G)				Exercisable Employee Stock Options (H)		New Restricted Employee Shares (I)				
		The company	All companies in the consolidated financial statements	The company	Companies in the consolidated financial statements	The company	Companies in the consolidated financial statements	The company	Companies in the consolidated financial statements	The company	Companies in the consolidated financial statements	The company	Companies in the consolidated financial statements	The company	Companies in the consolidated financial statements	The company		Companies in the consolidated financial statements		The company	Companies in the consolidated financial statements	The company	Companies in the consolidated financial statements	The company	Companies in the consolidated financial statements	
																Cash	Stock	Cash	Stock							
The representative of Aidatek Electronics, Inc.：Chairman	Frank Ko	0	0	0	0	10,500	10,500	720	720	0.36%	0.36%	65,583	65,583	432	432	422	0	422	0	0	0	0	0	2.52%	2.52%	1,070
The representative of Aidatek Electronics, Inc.：President	Johnson Lee																									
The representative of Aidatek Electronics, Inc.：director	S.C. Ho																									
The representative of Aidatek Electronics, Inc.：director	Felix Ho																									
The representative of YFY Inc.：Chief Technology Officer	CC Tsai																									
The representative of YFY Inc.：Executive Vice President	FY Gan																									
The representative of Aidatek Electronics, Inc.：Executive Vice President	Luke Chen																									
Independent director	Ten-Chung Chen	0	0	0	0	5,079	5,079	357	357	0.18%	0.18%	0	0	0	0	0	0	0	0	0	0	0	0	0.18%	0.18%	0
Independent director	Po-Young Chu																									
Independent director	Chao-Tung Wen																									

Remarks 1：It's has been count the expenditure of the company car about NTD 1,701 thousand ; The amount of driver's remuneration is about NTD 2,615 thousand.

Remarks 2：The amount of bonus to directors is NTD15,579 thousand , the profit sharing- employee bonus is NTD31,900 thousand on 2019.The bonus has been approved in board of directors on 3/18 and it will be offered after approve in shareholders meeting on 6/18 .

Range of Remuneration	Name of Directors			
	Total of (A+B+C+D)		Total of (A+B+C+D+E+F+G)	
	The company	Companies in the consolidated financial statements	The company	Companies in the consolidated financial statements
under 1,000,000	Luke Chen	Luke Chen		
1,000,001 ~ 2,000,000	S.C. Ho、Felix Ho、CC Tsai、FY Gan、Po-Young Chu	S.C. Ho、Felix Ho、CC Tsai、FY Gan、Po-Young Chu	S.C. Ho、Felix Ho、Po-Young Chu	S.C. Ho、Felix Ho、Po-Young Chu
2,000,001 ~ 3,500,0000	Frank Ko、Johnson Lee、Ten-Chung Chen、Chao-Tung Wen、YFY Inc.	Frank Ko、Johnson Lee、Ten-Chung Chen、Chao-Tung Wen、YFY Inc.	Ten-Chung Chen、Chao-Tung Wen、YFY Inc.	Ten-Chung Chen、Chao-Tung Wen、YFY Inc.
3,500,001 ~ 5,000,000				
5,000,001 ~ 10,000,000	Aidatek Electronics, Inc.	Aidatek Electronics, Inc.	Luke Chen、Aidatek Electronics, Inc.	Luke Chen、Aidatek Electronics, Inc.
10,000,001 ~ 15,000,000			Frank Ko、CC Tsai	Frank Ko、CC Tsai
15,000,001 ~ 30,000,000			Johnson Lee、FY Gan	Johnson Lee、FY Gan
30,000,001 ~ 50,000,000				
50,000,001 ~ 100,000,000				
Over 100,000,000				
Total	12	12	12	12

(2) Remuneration of the President and Vice President

Unit: NT$ thousands

<table>
<tr><th rowspan="3">Title</th><th rowspan="3">Name</th><th colspan="2">Salary(A)</th><th colspan="2">Severance Pay (B)</th><th colspan="2">Bonuses and Allowances (C)</th><th colspan="4">Profit Sharing-Employee Bonus (D)</th><th colspan="2">Ratio of total compensation (A+B+C+D) to net income (%)</th><th colspan="2">Exercisable Employee Stock Options</th><th colspan="2">New Restricted Employee Shares</th><th rowspan="3">Compensation paid to the President and Vice President from an Invested Company Other Than the Company's Subsidiary</th></tr>
<tr><th rowspan="2">The company</th><th rowspan="2">Companies in the consolidated financial statements</th><th rowspan="2">The company</th><th rowspan="2">Companies in the consolidated financial statements</th><th rowspan="2">The company</th><th rowspan="2">Companies in the consolidated financial statements</th><th colspan="2">The company</th><th colspan="2">Companies in the consolidated financial statements</th><th rowspan="2">The company</th><th rowspan="2">Companies in the consolidated financial statements</th><th rowspan="2">The company</th><th rowspan="2">Companies in the consolidated financial statements</th><th rowspan="2">The company</th><th rowspan="2">Companies in the consolidated financial statements</th></tr>
<tr><th>Cash</th><th>Stock</th><th>Cash</th><th>Stock</th></tr>
<tr><td>Chairman</td><td>Johnson Lee</td><td rowspan="6">45,961</td><td rowspan="6">45,961</td><td rowspan="6">648</td><td rowspan="6">648</td><td rowspan="6">32,568</td><td rowspan="6">32,568</td><td rowspan="6">588</td><td rowspan="6">-</td><td rowspan="6">588</td><td rowspan="6">-</td><td rowspan="6">2.59%</td><td rowspan="6">2.59%</td><td rowspan="6">0</td><td rowspan="6">0</td><td rowspan="6">0</td><td rowspan="6">0</td><td rowspan="6">1,070</td></tr>
<tr><td>President</td><td>FY Gan</td></tr>
<tr><td>Chief Technology Officer</td><td>CC Tsai</td></tr>
<tr><td>Executive Vice President</td><td>Luke Chen</td></tr>
<tr><td>Chief Finance Officer</td><td>Lloyd Chen</td></tr>
<tr><td>Vice President</td><td>YS Chang</td></tr>
</table>

<table>
<tr><th rowspan="2">Range of Remuneration</th><th colspan="2">Name of Supervisors</th></tr>
<tr><th>The company</th><th>Companies in the consolidated financial statements</th></tr>
<tr><td>under 1,000,000</td><td></td><td></td></tr>
<tr><td>1,000,001 ~ 2,000,000</td><td></td><td></td></tr>
<tr><td>2,000,001 ~ 3,500,0000</td><td></td><td></td></tr>
<tr><td>3,500,001 ~ 5,000,000</td><td></td><td></td></tr>
<tr><td>5,000,001 ~ 10,000,000</td><td>YS Chang、Lloyd Chen</td><td>YS Chang、Lloyd Chen</td></tr>
<tr><td>10,000,001 ~ 15,000,000</td><td>Luke Chen、CC Tsai</td><td>Luke Chen、CC Tsai</td></tr>
<tr><td>15,000,001 ~ 30,000,000</td><td>Johnson Lee、FY Gan</td><td>Johnson Lee、FY Gan</td></tr>
<tr><td>30,000,001 ~ 50,000,000</td><td></td><td></td></tr>
<tr><td>50,000,001 ~ 100,000,000</td><td></td><td></td></tr>
<tr><td>Over 100,000,000</td><td></td><td></td></tr>
<tr><td>Total</td><td>6</td><td>6</td></tr>
</table>

(3) Remuneration of the President and Vice President

Unit: NT$ thousands

Title	Name	Employee Bonus - in Stock (Fair Market Value)	Employee Bonus - in Cash	Total	Ratio of Total Amount to Net Income (%)
Chairman	Johnson Lee	-	1,196	1,196	0.04%
President	FY Gan				
Chief Technology Officer	CC Tsai				
Executive Vice President	Luke Chen				
Vice President	YS Chang				
Associate Vice President	Max Chen				
Associate Vice President	Mano Lo				
Associate Vice President	Tung Liang Lin				
Associate Vice President	Ian Douglas French				
Associate Vice President	Jim Chang				
Associate Vice President	JM Hung				
Chief Finance Officer	Lloyd Chen				
Accounting Director	James Huang				

3.2.6 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

(1) The analysis of the remunerations to the Directors, Supervisors, President, and Vice Presidents from the Company and all companies included in the consolidated financial statements in proportion to the net income presented in the separate financial statements in the last 2 years:

Targets of payment	The proportion of total amount of payment to net income			
	2018		2019	
	The Company	All companies included in the financial statements	The Company	All companies included in the financial statements
Directors	3.23%	3.23%	2.52%	2.52%
President and Vice Presidents	3.92%	3.92%	2.17%	2.17%

(2) The policy, standard, and components of the remuneration of the Company, the association between the procedure for determination of the remuneration, and operation performance and the risk in the future:

If the Company has earnings, appropriate 1%-10% as remuneration to employees, and no more than 1% as remuneration to Directors. If there is an accumulated deficit, appropriate for covering the loss first.

Remuneration to the Directors shall be made in cash. Remuneration to employees may be made in cash or stock. The employees of subsidiaries meeting specific condition are entitled to the remuneration. Such condition shall be determined by the Board under authorization. The ratio of remuneration to the Directors, the ratio of remunerations to employees and method of payment shall be determined by the Board in a session with the presence of at least two-thirds of the Directors and a simple majority of the Directors in session, and report to the Shareholders Meeting. Remunerations to employees and the Directors shall be calculated on the basis of the earnings of the current year (the balance of earnings before taxation and before the deduction of remunerations to employees and Directors) net of accumulated deficit.

The remuneration to the President and the Vice Presidents of the Company covers salary, bonus, employee bonus, and incentives for keeping good people. The Remuneration Committee will consider the position held, the scope of authority and responsibility, and the contribution to the business objective of the Company with reference to the operation performance of the year, the risk in the future, and the industry level of the same position, and present to the Board for final approval.

3.3 Implementation of Corporate Governance

3.3.1 Board of Directors

A total of 6 (A) meetings of the Board of Directors were held in the previous period. The attendance of director and supervisor were as follows:

Title	Name	Attendance in person (B)	Proxy attendance	Percentage of in-person attendance (%) [B/A] (Note)	Remarks
Directors	Representative of Aidatek Electronics Inc.: Johnson Lee	6		100%	
Directors	Representative of Aidatek Electronics Inc.: S.C. Ho	6		100%	
Directors	Representative of Aidatek Electronics Inc.: Felix Ho	6		100%	
Directors	Representative of Aidatek Electronics Inc.: Frank Ko	3		100%	Resigned from director position on September 9, 2019
Directors	Representative of Aidatek Electronics Inc.: Luke Chen	3		100%	Assumed director position on September 9, 2019
Directors	Representative of YFY Inc.: CC Tsai	6		100%	
Directors	Representative of YFY Inc.: FY Gan	6		100%	
Independent Director	Tien-Chung Chen	6		100%	
Independent Director	Chao-Tung Wen	6		100%	
Independent Director	Po-Young Chu	6		100%	Newly appointed independent director on June 18, 2019

Additional information:

I. For board of directors meetings that meet any of the following descriptions, state the date, session, the discussed topics, independent directors' opinions and how the Company has responded to such opinions.

(I) Conditions described in Article 14-3 of the Securities and Exchange Act.

Board of Directors Date	Session	Motion	Opposing opinions from independent directors	Company's response to independent directors' opposing opinions
2019.3.20	The 10th board The 11th meeting	1. Presentation of the Company's 2018 business report and financial statements 2. Report on derivative transactions undertaken by the Company in 2018 and January 2019 3. Report on external party lending, endorsement and guarantee by the Company and subsidiaries up till January 31, 2019 4. Report on the Company's audit plan execution between October and December 2018 5. Presentation of the Company's 2018 year-end accounts 6. Presentation of the Company's 2018 "Declaration of Internal Control System" 7. Proposal to apply for credit limits with banking partners 8. Proposal to designate the Company as co-drawer for subsidiary's credit limits maintained with banking partners	Nil.	-

		9. Proposal for partial amendments to the Company's Articles of Incorporation 10. Proposal for partial amendments to the Company's Asset Acquisition and Disposal Procedures 11. Proposal to remove restrictions imposed against the Company's directors for involving in competing businesses 12. Proposal to remove restrictions imposed against the Company's President for involving in competing businesses		
2019.5.8	The 10th board The 12th meeting	1. Report on regular evaluation of financial statement auditor's independence and competence 2. Presentation of the Company's 2019 Q1 business performance and financial statements 3. Report on derivative transactions undertaken by the Company between January and March 2019 4. Report on external party lending, endorsement and guarantee by the Company and subsidiaries up till March 31, 2019 5. Report on the Company's audit plan execution between January and March 2019 6. Proposal to apply for credit limits with banking partners 7. Proposal to designate the Company as co-drawer for subsidiary's credit limits maintained with banking partners 8. Proposal to appoint CPA Huei-Min Huang and CPA Chih-Ming Shao of Deloitte Taiwan to serve as the Company's financial statement auditors 9. Proposal of auditor remuneration for 2019 10. Proposal to appoint corporate governance officer for the Company 11. Establishment of Standard Operating Procedures for Resolving Directors' Requests 12. Background review of independent director candidates nominated by shareholders for the 10th board	Nil.	-
2019.8.9	The 10th board The 13th meeting	1. Presentation of the Company's 2019 Q2 business performance and consolidated financial statements 2. Report on derivative transactions undertaken by the Company between April and June 2019 3. Report on external party lending, endorsement and guarantee by the Company and subsidiaries up till June 30, 2019 4. Report on the Company's audit plan execution between April and June 2019 5. Proposal to set dividend baseline date and adjust payout ratio for the Company's 2018 earnings appropriation plan 6. Proposal to apply for credit limits with banking partners 7. Proposal to designate the Company as co-drawer for subsidiary's credit limits maintained with banking partners 8. Proposal for partial amendments to Audit Committee Foundation Principles 9. Proposal for partial amendments to Board of Directors Conference Rules	Nil.	-
2019.9.9	The 10th board The 14th meeting (extraordinary)	1. Election of chairperson for the extraordinary board meeting 2. Proposal to elect one of the directors to perform duties on the Chairman's behalf on a temporary basis	Nil.	
2019.11.7	The 10th board The 15th meeting	1. Presentation of the Company's 2019 Q1~Q3 business performance and consolidated financial statements 2. Report on derivative transactions undertaken by the Company between July and September 2019 3. Report on external party lending, endorsement and guarantee by the Company and subsidiaries up till September 30, 2019 4. Report on the Company's audit plan execution between July and September 2019 5. Presentation of the Company's 2020 "Audit Plan" 6. Proposal to apply for credit limits with banking partners 7. Proposal to designate the Company as co-drawer for subsidiary's credit limits maintained with banking partners 8. Proposal to remove restrictions imposed against the Company's directors for involving in competing businesses	Nil.	-
2019.12.19	The 10th board The 16th meeting	1. Election of Chairman for the Company's 10th board of directors 2. Proposal to appoint Mr. FY Gan as the Company's President	Nil.	-

		3. Report on derivative transactions undertaken by the Company between October and November 2019 4. Report on external party lending, endorsement and guarantee by the Company and subsidiaries up till November 30, 2019 5. Presentation of the Company's 2020 operational plan and budget 6. Proposal to apply for credit limits with banking partners 7. Discussion regarding expropriation of right-of-use over the 182.77-acre land plus superficies by Relocation and Accommodation Management Office of Yangzhou Economic Development Zone from the Company's subsidiary - "Yangzhou Huaxia Integrated O/E System Co., Ltd." (Yangzhou Huaxia) 8. Establishment of "Corporate Governance Code of Conduct" 9. Establishment of "Sustainability and Social Responsibility Code of Conduct" 10. Establishment of "Business Integrity Code of Conduct" 11. Establishment of "Board of Directors Performance Evaluation Policy" 12. Proposal to subsidize Director S.C. Ho (the "Applicant") for business-related litigation 13. Proposal to appoint Madam Yu-Ying Yuan as Chief Internal Auditor of the Company 14. Proposal to remove restrictions imposed against the Company's newly appointed President for involving in competing businesses		

(II) Any other documented objections or reservations raised by independent director against board resolution in relation to matters other than those described above: None.

I. Disclosure regarding avoidance of interest-conflicting motions , including the names of directors concerned, the motions, the nature of conflicting interests, and the voting process:

1. A proposal was raised during the 11th meeting of the 10th board to remove restrictions imposed against the Company's directors for competing business involvement, for which Director Johnson Lee and Director FY Gan had recused from discussion and voting. This motion was passed unanimously without objection from remaining directors that were free of conflicting interest when inquired by the chairperson.
2. A proposal was raised during the 11th meeting of the 10th board to remove restrictions imposed against the Company's President for competing business involvement, for which Director Johnson Lee had recused from discussion and voting. This motion was passed unanimously without objection from remaining directors that were free of conflicting interest when inquired by the chairperson.
3. A proposal was raised during the 12th meeting of the 10th board to adjust salary of managers graded Assistant Vice President or above for 2019, for which Director Johnson Lee, Director CC Tsai and Director FY Gan had recused from discussion and voting. This motion was thoroughly discussed between the chairperson and remaining directors, and passed unanimously without objection from remaining directors that were free of conflicting interest when inquired by the chairperson.
3. A proposal was raised during the 14th (extraordinary) meeting of the 10th board to elect one of the directors to perform duties on the Chairman's behalf on a temporary basis, for which Director S.C. Ho, Director Johnson Lee and Director Felix Ho had recused from resolution. This motion was thoroughly discussed between acting chairperson Tien-Chung Chen and remaining directors, and passed unanimously without objection from remaining directors that were free of conflicting interest when inquired by the acting chairperson.
4. A proposal was raised during the 15th meeting of the 10th board to remove restrictions imposed against the Company's directors for competing business involvement, for which Director Luke Chen had recused from resolution. This motion was passed unanimously without objection from remaining directors that were free of conflicting interest when inquired by the chairperson.
5. A proposal was raised during the 16th meeting of the 10th board to subsidize Director S.C. Ho (the "Applicant") for business-related litigation, for which Director S.C. Ho, Director Johnson Lee and Director Felix Ho had recused from discussion and voting. This motion was thoroughly discussed between acting chairperson Tien-Chung Chen and remaining directors, and passed unanimously without objection from remaining directors that were free of conflicting interest when inquired by the acting chairperson.
6. A proposal was raised during the 11th meeting of the 10th board to remove restrictions imposed against the Company's new President for competing business involvement, for which Director FY Gan had recused from discussion and voting. This motion was passed unanimously without objection from remaining directors that were free of conflicting interest when inquired by the chairperson.

III. TWSE/TPEX listed companies are required to disclose the cycle, duration, scope, method and detail of board performance self (or peer) evaluations performed, and complete Attachment 2 section (2) Execution of Board Performance Evaluation.

IV. Enhancement to functionality of the board of directors in the current and the most recent year (e.g., establishment of an Audit Committee, improvement of information transparency etc.,), and the progress of such enhancements:
A decision was passed during the 12th meeting of the 10th board of directors held in 2019 to appoint a Corporate Governance Officer for overseeing corporate governance affairs in accordance with Financial Supervisory Commission's

new corporate governance roadmap and Directions for Compliance Requirements for the Appointment and Exercise of Powers of the Boards of Directors of TPEx Listed Companies. Subsequently, internal policies including Corporate Governance Code of Conduct, Sustainability and Social Responsibility Code of Conduct, Business Integrity Code of Conduct and Board of Directors Performance Evaluation Policy were passed during the 16th meeting of the 10th board of directors to support sound corporate governance system and help accomplish governance goals.

Note: Calculated based on the number of board of directors meetings held and in-person attendance during active duty.

(2) Execution of Board Performance Evaluation

Assessment cycle (Note 1)	Assessment duration (Note 2)	Scope of assessment (Note 3)	Assessment method (Note 4)	Assessment details (Note 5)
Once a year	Nil.	Nil.	Nil.	Establishment of "Board of Directors Performance Evaluation Policy" was passed during the 16th meeting of the 10th board held in 2019

Note 1: Represents the frequency of board performance evaluation, e.g.: once a year.

Note 2: Represents the duration covered by performance evaluation, e.g.: performance of the board of directors between January 1 and December 31, 2019, was assessed.

Note 3: The scope of assessment covers performance of the board as a whole, the individual directors and functional committees.

Note 4: Assessment methods include: board internal self-assessment, director self-assessment, peer assessment, assessment by external institution or expert, and other methods as deemed appropriate.

Note 5: Assessment details, by scope of assessment, include at least the following:

(1) Board performance assessment: board's participation in the Company's operations, the quality of board's decisions, the board's composition, election and ongoing education of board members, and enforcement of internal control.

(2) Director individual performance assessment: director's awareness toward the Company's goals and missions, awareness to duties, level of participation in the Company's operations, maintenance of internal relations and communication, professionalism and ongoing education, and enforcement of internal control.

(3) Performance assessment for functional committees: participation in the Company's operations, awareness to duties, quality of committee's decisions, composition and member selection, and enforcement of internal control.

3.3.2 Audit Committee

A. Audit Committee

A total of 5 (A) Audit Committee meetings were held in the previous period. The attendance of the independent directors was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) 【B/A】	Remarks
Independent director	Ten-Chung Chen	5	0	100%	Convener
Independent director	Chao-Tung Wen	5	0	100%	
Independent director	Po-Young Chu	3	0	100%	New appointment on June 18,2019

Additional information:

I. If any of the following applies to the operation of the Auditing Committee, specify the date of the meeting and the session of the Board, the content of the motion, the resolutions of the Auditing Committee, and the response of the Company to the opinions of the Auditing Committee.

(I) The particulars exhibited in Article 14-5 of the Securities and Exchange Act.

Date	Major resolutions	Independent Directors' opinions	The company's response
14-Mar-19	1 Report of the 2018 business report and financial statements. 2 Report of the 2018 & 2019 Jan Financial Derivatives transaction. 3 Report the fund loan and endorsement guarantees of the Company and its subsidiaries as of Jan 31, 2019. 4 Report on the implementation of the audit plan for the period from October to December 2018. 5 Approval of the 2018 business report and financial statements. 6 Approval of the 2018"Internal Control System Statement". 7 Proposal for partial amendments to the Company's Asset Acquisition and Disposal Procedures 8 Proposal to remove restrictions imposed against the Company's directors for involving in competing businesses 9 Proposal to remove restrictions imposed against the Company's President for involving in competing businesses	None	None
3-May-19	1 Report of the 2019Q1 business report and financial statements. 2 Report of the 2019 Jan to Mar Financial Derivatives transaction. 3 Report the fund loan and endorsement guarantees of the Company and its subsidiaries as of March 31, 2019. 4 Report on the implementation of the audit plan for the period from Jan to Mar 2019. 5 Report assesses the independence and competence of the appointment of a visa accountant. 6 Proposal to appoint CPA Huei-Min Huang and CPA Chih-Ming Shao of Deloitte Taiwan to serve as the Company's financial statement auditors 7 Approval of 2019 annual visa accountant service fee case.	None	None
6-Aug-19	1 Presentation of the Company's 2019 Q2 business performance and consolidated financial statements 2 Report of the 2019 Apr to Jun Financial Derivatives transaction. 3 Report the fund loan and endorsement guarantees of the Company and its subsidiaries as of June 30, 2019. 4 Report on the implementation of the audit plan for the period from April to June 2019. 5 Proposal for partial amendments to Audit Committee Foundation Principles	None	None

6-Nov-19	1 Presentation of the Company's 2019 Q1~Q3 business performance and consolidated financial statements 2 Report of the 2019 July to Sep Financial Derivatives transaction. 3 Report the fund loan and endorsement guarantees of the Company and its subsidiaries as of Sep 30, 2019. 4 Report on the implementation of the audit plan for the period from Jul to Sep 2019. 5 Presentation of the Company's 2020 "Audit Plan" 6 Proposal to remove restrictions imposed against the Company's directors for involving in competing businesses	None	None
12-Dec-19	1 Report of the 2019 Oct to Nov Financial Derivatives transaction. 2 Report the fund loan and endorsement guarantees of the Company and its subsidiaries as of Nov 30, 2019. 3 Proposal to appoint Ms.Yu-Ying Yuan as Chief Internal Auditor of the Company 4 Discussion regarding expropriation of right-of-use over the 182.77-acre land plus superficies by Relocation and Accommodation Management Office of Yangzhou Economic Development Zone from the Company's subsidiary - "Yangzhou Huaxia Integrated O/E System Co., Ltd." (Yangzhou Huaxia) 5 Establishment of "Corporate Governance Code of Conduct" 6 Establishment of "Sustainability and Social Responsibility Code of Conduct" 7 Establishment of "Business Integrity Code of Conduct" 8 Establishment of "Board of Directors Performance Evaluation Policy"	None	None

(II) In addition to the aforementioned issues, any other motions not passed by the Audit Committee but passed by the Board at the consent of more than two-thirds of the Directors: Not applicable.

II. The recusal of Independent Directors from motions involving the interest of the Independent Directors, the names of the Independent Directors concerned, the content of the motions, the reason for recusal for the avoidance of conflict of interest, and the participation in voting: Not applicable.

III. The communication between the Independent Directors and the Chief Internal Auditor and the CPAs (including the financial position and state of business operation in materiality, the means of communication, and the result):

(1) The Audit Committee convenes regularly and will invite certified public accountants, Chief Internal Auditor, and related officers to attend the meeting.

(2) The internal auditors conduct audits in accordance with the Annual Audit Plan and report to the Audit Committee on the audit findings. The Audit Committee evaluates the internal control system, the internal auditors, and the pursuit of internal audits regularly.

(3) The Audit Committee exchanges opinions with the certified public accountants retained by the Company on the review or audits of the quarterly financial statements and related legal matters, and evaluate the independence of the certified public accountants on the selection, the audit and non-audit services rendered by the certified public accountants.

3.3.3 The pursuit of corporate governance and the variation with the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies, and the reason:

Items for evaluation	The pursuit			Variation from the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies and the reason
	Yes	No	Summary	
I. Has the Company instituted and disclosed corporate best practice principles in accordance with the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies?	ˇ		● The company has passed the "Corporate Governance Code" and approved by the board of directors on 108.12.19. Details can be found on the company's website: http://www.eink.com	● Fulfilled
II. The structure of shareholding and rights of the shareholders of the Company				
(I) Has the Company established internal operation procedures for responding to the suggestions, queries, disputes and legal actions of the shareholders, and follow the procedures?	ˇ		● The Company has appointed a spokesman, acting spokesman, and designated legal affairs staff who respond to the suggestions, queries, disputes, and legal actions of the shareholders in accordance with the operation procedure.	● Fulfilled
(II) Has the Company kept the list of the dominant shareholders that exercise de facto control of the Company and the parties that exercise ultimate control of these dominant shareholders under control?	ˇ		● Inquiry with the share registration and investor service agent at any time for proper information.	● Fulfilled
(III) Has the Company established and exercised risk control and firewall mechanisms with its affiliates?	ˇ		● The Company has instituted related rules and regulations governing the operation, business and financial transactions between the Company and the affiliates.	● Fulfilled
(IV) Has the Company instituted internal rules and regulations to prohibit insiders of the Company from using information undisclosed in the market for the trading of securities?	ˇ		● The Company has instituted the “Procedure for the Prevention of Insider Trade” to prohibit insiders of the Company using information not disclosed in market for the trading of securities.	● Fulfilled
III. The organization and function of the Board (I) Has the Board mapped out related policies on the basis of the diversity of its members and	ˇ		● The members of the Board are experts from different professional backgrounds, of both sexes, and in different areas of specializations. This composition makes the structure of the Board perfect.	● Fulfilled

<table>
<tr><th rowspan="2">Items for evaluation</th><th colspan="3">The pursuit</th><th rowspan="2">Variation from the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies and the reason</th></tr>
<tr><th>Yes</th><th>No</th><th>Summary</th></tr>
<tr><td>pursued these policies properly?</td><td></td><td></td><td></td><td></td></tr>
<tr><td>(II) Further to the establishment of the Remuneration Committee and the Auditing Committee as required by law, has the Company voluntarily established related functional committees?</td><td></td><td>ˇ</td><td>● The Company has established the Remuneration Committee and the Audit Committee as required by law for the time being.</td><td>● In the future, more functional committees will be established under law.</td></tr>
<tr><td>(III) Has the company established a set of policies and assessment tools for evaluating board performance, and conducted performance evaluation on a yearly basis? Are performance evaluation results reported to the board of directors and used as reference for compensation, remuneration and nomination decisions?</td><td></td><td>ˇ</td><td>● The company has formulated the board performance evaluation method and its evaluation method on 2019/12/19, and the members of the board of directors adhere to the highest governance principles to execute their business.</td><td>● Same as the summary</td></tr>
<tr><td>(IV) Has the Company conducted routine evaluation of the independence of the certified public accountants who conducted the external audits and certification?</td><td>ˇ</td><td></td><td>● The Company reviews the independence of the certified public accountants being retained annually and will report the findings to the session of the Audit Committee scheduled to be held on Mar 13, 2020 and to the session of the Board scheduled to be held on Mar 18, 2020 for a second review and final approval. The Accounting Department has assessed the state of independence of Hui-Min Huang and Chih-Ming Shao, CPAs from Deloitte Taiwan in accordance with the standard of independence of the Company. The result indicated that both CPAs are eligible for acting as the external independent auditors for the Company in financial audit and certification and for issuing related declaration.

Note: Criteria for the Assessment of the Independence of CPAs
<table>
<tr><th>Item</th><th>Items for evaluation</th><th>Yes</th><th>No</th></tr>
<tr><td>1.</td><td>No replacement has occurred over the last 7 years until the last time of certification.</td><td>✓</td><td></td></tr>
<tr><td>2.</td><td>No significant financial interest with clients.</td><td>✓</td><td></td></tr>
<tr><td>3.</td><td>Avoid unjustified relation with clients.</td><td>✓</td><td></td></tr>
<tr><td>4.</td><td>CPAs shall ensure their assistants to be honest, fair, and</td><td>✓</td><td></td></tr>
</table></td><td>● Fulfilled</td></tr>
</table>

<table>
<tr><th rowspan="2">Items for evaluation</th><th colspan="3">The pursuit</th><th rowspan="2">Variation from the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies and the reason</th></tr>
<tr><th>Yes</th><th>No</th><th>Summary</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td></td><td>independent.</td><td></td><td></td></tr>
<tr><td>5.</td><td>No audit and certification of the financial statements of the institutions that the CPAs have been working with 2 years prior to the present profession.</td><td>✓</td><td></td></tr>
<tr><td>6.</td><td>No third party may act in the name of the CPA.</td><td>✓</td><td></td></tr>
<tr><td>7.</td><td>No holding of the stocks issued by the Company and its subsidiaries.</td><td>✓</td><td></td></tr>
<tr><td>8.</td><td>No financing with the Company and its affiliates.</td><td>✓</td><td></td></tr>
<tr><td>9.</td><td>Joint investment or sharing profits with the Company or its affiliates.</td><td>✓</td><td></td></tr>
<tr><td>10.</td><td>No engagement in the routine work for regular salary payment with the Company or its subsidiaries.</td><td>✓</td><td></td></tr>
<tr><td>11.</td><td>No involvement with the job functions of the Company and its affiliates in decision-making.</td><td>✓</td><td></td></tr>
<tr><td>12.</td><td>No engagement in any other business that may damage the status of independence.</td><td>✓</td><td></td></tr>
<tr><td>13.</td><td>Not a spouse or kindred within the 2nd tier under the Civil Code to any management personnel of the Company.</td><td>✓</td><td></td></tr>
<tr><td>14.</td><td>No acceptance of commission from any business.</td><td>✓</td><td></td></tr>
<tr><td>15.</td><td>No penalty on violation of the principle of independence has ever been imposed.</td><td>✓</td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>IV. Has the Company listed at TWSE/TPEx established designated full-time (part-time) body or appointed such personnel for administering corporate governance (including but not limiting to the supply of information for</td><td>ˇ</td><td></td><td>● The Company has appointed designated personnel to administer corporate governance, including the supply of information to the needs of the Directors and Independent Directors for their performance of assigned duties, holding conventions of the Board and the Shareholders Meeting as required by law, making company registration and registration of change, compilation of minutes of Board meetings and Shareholders Meeting on record.</td><td>● Fulfilled</td></tr>
</table>

Items for evaluation		The pursuit			Variation from the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies and the reason
		Yes	No	Summary	
	the Directors and Supervisors in performing their duties, holding of meetings for the Board and the Shareholders Meeting and handling related matters, administering company registration and Fulfilled changes, compilation of the minutes of meetings of the Board and Shareholders Meeting on record)?				
V.	Has the Company developed the channels for the communications with the stakeholders (including without limiting to shareholders, employees, customers and suppliers) and established a special section for the stakeholders at the official website of the Company with proper response to the concerns of the stakeholders in the aspect of corporate social responsibility?	ˇ		● The Company has established the system of spokesman and provided the update information of the Company and communicate with stakeholders on issues pertaining to corporate social responsibility through the stakeholder section of the official website of the Company, the quarterly supplier meetings, and customer satisfaction survey.	● Fulfilled
VI.	Has the Company commissioned a professional share registration and investor services agent for handling matters related to Shareholder Meeting?	ˇ		● The Company has appointed SinoPac Securities Corp. to organize the Shareholders Meeting and handle related matters.	● Fulfilled
VII.	Disclosure of information				
(I)	Has the Company installed an official website for the disclosure of information on finance, operation, and corporate governance?	ˇ		● The Company has installed its official website (http://www.eink.com) to provide related financial and operation information and appointed designated personnel to maintain and update the content.	● Fulfilled
(II)	Has the Company adopted other means for disclosure (such as the installation of a website in the English language, appointment of designated persons to the collection and disclosure of information on the Company, the	ˇ		● The Company has set up the Public Relation Office and the Share Registration and Investor Service Office to perform the function of information gathering and disclosure. The Company also has had an official website in the English language and properly implemented the spokesman system.	● Fulfilled

Items for evaluation	The pursuit			Variation from the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies and the reason
	Yes	No	Summary	
implementation of the spokesman system, and the videotape on institutional investor conferences)? (III) Does the company publish and make official filing of annual financial report within two months after the end of an accounting period, and publish/file Q1, Q2 and Q3 financial reports along with monthly business performance before the required due dates?			● The company has announced and declared annual financial reports, first, second, third quarter financial reports and monthly operating conditions in accordance with the relevant provisions of the Securities and Exchange Act. For the disclosure of the above information, please refer to the Market Observation System (MOPS) : https://mops.twse.com.tw/mops/web/index	
VIII. Is there any vital information that helps to understand the actions on corporate governance better (including without limiting to employee rights, employee care, investor relation, supplier relation, stakeholder right, the continuing education of the Directors and Supervisors, risk management policy, and the standard of risk assessment and the pursuit of risk assessment, the pursuit of customer policy, professional liability insurance for the Directors and the Supervisors of the Company)?	ˇ		Description below:	● Fulfilled

(I) For information on the rights of employees, such as fringe benefits, continuing education, training, and retirement system of the Company, refer to Section 5.5.

(II) The Company takes risk management and the impact on the environment into consideration for the advocacy of sustainable development and holds training programs in safety, health, and environment management for all at regular intervals.

(III) The Company has duly observed applicable legal rules governing environmental protection. For further information on environmental protection and related expenditures, refer to Section 5.4.

(IV) The Company has instituted the procedure for the evaluation of suppliers.

(V) Continuing education of the Directors in 2019:

Title	Name	Course date	Training hours	Organizer	Name of course
Independent Director	Po-Young Chu	2019/5/7	3	Taiwan Corporate Governance Association	Board of Directors Communication Culture and Decision Quality

Items for evaluation	The pursuit			Variation from the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies and the reason
	Yes	No	Summary	

Independent Director	Po-Young Chu	2019/8/2	3	Taiwan Corporate Governance Association	Reforms and Prospects of Limited Liability Companies under New Company Act Amendments
Independent Director	Chao-Tung Wen	2019/2/25	3	Securities and Futures Institute	Trends and Challenges of Information Security Governance
Independent Director	Chao-Tung Wen	2019/10/29	3	Securities and Futures Institute	Directors' and Supervisors' Criminal Risks and Responses - Fraud and Money Laundering Prevention
Independent Director	Ten-Chung Chen	2019/8/23	3	Taiwan Corporate Governance Association	Analysis of Global Top-10 Risks 2019
Independent Director	Ten-Chung Chen	2019/9/6	3	Taiwan Corporate Governance Association	Trends of Digital Technology and AI and Risk Management
Independent Director	Ten-Chung Chen	2019/9/17	3	Taiwan Corporate Governance Association	Directors' Corporate Leadership in an Environment of Rapid Technological Changes
Independent Director	Ten-Chung Chen	2019/9/20	3	Taiwan Corporate Governance Association	Economic Substance Laws and Effect of Global Anti-tax Evasion on Corporate Governance - A Directors'/Supervisors' Perspective
Representative of Institutional Director	Johnson Lee	2019/11/8	3	Taiwan Corporate Governance Association	Impact and Response to Economic Development, Returning Investors and the New Southbound Expansion
Representative of Institutional Director	Johnson Lee	2019/9/27	3	Taiwan Corporate Governance Association	Introduction to Due Diligence and Commercial Contract in Corporate M&A
Representative of Institutional Director	FY Gan	2019/7/26	3	Taiwan Corporate Governance Association	Role and Responsibility of Directors, Supervisors, and Managers
Representative of Institutional Director	FY Gan	2019/8/30	3	Taiwan Corporate Governance Association	First Step to Assessing True Corporate Performance: Financial Statement Analysis and Limitations
Representative of Institutional Director	CC Tsai	2019/6/21	3	Taiwan Corporate Governance Association	Value and Disclosure of Non-financial Performance - Global Trends and Impact to Taiwanese Enterprises
Representative of Institutional Director	CC Tsai	2019/8/23	3	Taiwan Corporate Governance Association	Analysis of Global Top-10 Risks 2019
Representative of Institutional Director	Felix Ho	2019/11/8	3	Taiwan Corporate Governance Association	Impact and Response to Economic Development, Returning Investors and the New Southbound Expansion

Items for evaluation	The pursuit			Variation from the Corporate Governance Best Practice Principles for TWSE/TPEx-listed Companies and the reason
	Yes	No	Summary	

Representative of Institutional Director	Felix Ho	2019/11/8	3	Taiwan Corporate Governance Association	Trends and Challenges of Information Security Governance
Representative of Institutional Director	S.C. Ho	2019/11/8	3	Taiwan Corporate Governance Association	Impact and Response to Economic Development, Returning Investors and the New Southbound Expansion
Representative of Institutional Director	S.C. Ho	2019/11/8	3	Taiwan Corporate Governance Association	Trends and Challenges of Information Security Governance
Representative of Institutional Director	Luke Chen	2019/12/3	3	Taiwan Corporate Governance Association	Analysis of Global Top-10 Risks 2019
Representative of Institutional Director	Luke Chen	2019/12/6	3	Taiwan Corporate Governance Association	Accessibility of Company Information - Directors' Right to Information
Representative of Institutional Director	Luke Chen	2019/12/17	3	Taiwan Corporate Governance Association	Economic Sanction, Export Restrictions and the China-USA Trade War
Representative of Institutional Director	Luke Chen	2019/12/20	3	Taiwan Corporate Governance Association	Digital Resilience in Practice - Directors', Supervisors' and Senior Managers' Response

(VI) More than two-thirds of the Directors were present in each session of the Board to participate in the operation of the Board.

(VII) The recusal of the Directors on motions with a conflict of interest: Directors will recuse themselves from the discussion and voting of motions that involve a conflict of their personal interests.

(VIII) Professional liability insurance for the protection of the Directors and Supervisors: the Company has taken professional liability insurance for the protection of the Directors.

IX. The state of corrective action taken in response to the corporate governance evaluation result announced by the Corporate Governance Center of Taiwan Stock Exchange Corporation, and the issues required special effort for improvement and related measures.

(I) The Company’s corporate governance evaluation result for 2019 is 6%~20%.

(II) Future response actions:

a. Add a new section for stakeholder in the Company’s official website to disclose the information of a specified contact person.

b. Enhance the communication channel between the Company and its Board of Directors.

(III) Self-evaluation report will be prepared as the Company assessing its corporate governance evaluation items for further improvement.

3.3.4 Composition, Responsibilities and Operations of the Remuneration Committee

The Remuneration Committee assists the Board in discharging its responsibilities relating to the Company's compensation and benefits policies, plans and programs, and the evaluation of the directors' and executives' compensation.

The Chairman of the Remuneration Committee convened four regular meetings in 2019. The Remuneration Committee Charter is available on the Company's corporate website.

A. Professional Qualifications and Independence Analysis of Remuneration Committee Members

Title	Criteria / Name	Meets 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 Remuneration Committee Member	Remarks
		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, Certified Public Accountant, 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	Has 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		
Independent director	Ten-Chung Chen			V	V	V	V	V	V	V	V	V	V	V	1	Convener
Independent director	Chao-Tung Wen	V		V	V	V	V	V	V	V	V	V	V	V	2	N/A
Independent director	Po-Young Chu	V		V	V	V	V	V	V	V	V	V	V	V	3	N/A

Note: Please tick the corresponding boxes that apply to a member during the two years prior to being elected or during the term(s) of office.

1. Not an employee of the Company or any of its affiliates.
2. Not a director or supervisor of affiliated companies. Not applicable in cases where the person is an independent director of the parent company, or any subsidiary in which the Company holds, directly or indirectly, more than 50% of the voting shares.
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 any of the persons in the preceding three sub-paragraphs.
5. Not a director, supervisor, or employee of a corporate shareholder who directly holds 5% or more of the total number of outstanding shares of the Company, or who holds shares ranking in the top five holdings.
6. Not a director, supervisor, officer, or shareholder holding 5% or more of the shares of a specified company or institution which has a financial or business relationship with the Company.
7. Not a professional individual, who is an owner, partner, director, supervisor, or officer of a sole proprietorship, partnership, company, or institution that provides commercial, legal, financial, accounting services or consultation to the Company or to any affiliate of the Company, or a spouse thereof.
8. Not a person of any conditions defined in Article 30 of the Company Law.

B. Attendance of Members at Remuneration Committee Meetings

There are 3 members in the Remuneration Committee. A total of 2 (A) Remuneration Committee meetings were held in the previous period. The attendance record of the Remuneration Committee members was as follows:

Title	Name	Attendance in Person(B)	By Proxy	Attendance Rate (%)【B/A】	Remarks
Convener	Ten-Chung Chen	2	0	100%	
Committee Member	Chao-Tung Wen	2	0	100%	
Committee Member	Po-Young Chu	2	0	100%	

Other mentionable items:

1. If the board of directors declines to adopt or modifies a recommendation of the remuneration committee, it should specify the date of the meeting, session, content of the motion, resolution by the board of directors, and the Company's response to the remuneration committee's opinion (eg., the remuneration passed by the Board of Directors exceeds the recommendation of the remuneration committee, the circumstances and cause for the difference shall be specified):

Board of Directors Date	Session		Motion	Board Resolution Results	Company's response to directors' opposing opinions
2019.3.20	The 10th board The 11th meeting	1	Proposal for the company's 2019 profit distribution employee compensation amount and director compensation amount, payment method.	Resolution passed	-
2019.05.08	The 10th board The 12th meeting	1	Proposal for the company's 2019 salary adjustment plan.	Resolution passed	-
		2	Proposal for the company's associate manager (inclusive) and above is in charge of the 2019 salary adjustment plan.		
		3	Proposal for transfer to employees in the fourth time of buying back shares for the third time.		

2. Resolutions of the remuneration committee objected to by members or subject to a qualified opinion and recorded or declared in writing, the date of the meeting, session, content of the motion, all members' opinions and the response to members' opinion should be specified:

Date	Session		Motion	Resolution Results	Company's response to members' opposing opinions
2019.03.14	The 3th board The 5th meeting	1	Proposal for the company's 2019 profit distribution employee compensation amount and director compensation amount, payment method.	Resolution passed	-
2019.05.02	The 3th board The 6th meeting	1	Proposal for the company's 2019 salary adjustment plan.	Resolution passed	-
		2	Proposal for the company's associate manager (inclusive) and above is in charge of the 2019 salary adjustment plan.		
		3	Proposal for transfer to employees in the fourth time of buying back shares for the third time.		

C. Functions

1. Establish and regularly review the policies, systems, standards and structures for performance evaluation and compensation for directors and managers.
2. Regularly assess and determine the salary remuneration of directors and managers.

3.3.5 Fulfillment of social responsibilities and deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies

Items for evaluation	The pursuit			Variation with the Corporate Governance Best Practice Principles for TWSE/TPEx – Listed Companies, and the reason for the variation
	Yes	No	Summary	
I. Has the company conducted risk assessment on environmental, social and corporate governance issues that are relevant to its operations, and implemented risk management policies or strategies based on principles of materiality?	V		E Ink has developed a robust risk management organization supported by standard operating procedures and rules to support risk management practices. Through implementation of internal control systems and training, the Company not only promotes proper awareness among employees but also enforces risk management practice in daily activities. The Company conducts risk assessment on environmental, social and corporate governance issues and evaluates risk levels based on principles of materiality. Risk management policies and strategies are developed based on the above findings. The Company also adopts an internal audit system and performs regular audits to ensure that its risk management system is duly executed.	Fulfilled
II. Does the company have a unit that specializes (or is involved) in CSR practices? Is the CSR unit run by senior management and does the unit report its progress to the board of directors?	V		The Company assembled a Corporate Social Responsibility Committee in February 2016 comprising representatives from multiple departments, who hold concurrent roles in the committee. The role of lead committee is currently undertaken by a senior manager; responsibilities of the committee are to plan and carry out CSR affairs and make timely reports to the board of directors.	Fulfilled
IIII. Environmental issues				
(I) Has the company developed an appropriate environmental management system, given its distinctive characteristics?	V		The Company has been certified for ISO14001 Environmental Management System since 2002, and engages a third-party certifier to perform external audit on a yearly basis. Transition to ISO14001:2015 was completed and certified in 2017, and ongoing investments are being invested to improve environmental management practices.	Fulfilled
(II) Is the company committed to achieving efficient use of resources, and using renewable materials that produce less impact on the environment?	V		The Company has continued the advocacy of waste reduction in production process and the efficient use of energy. Chemical materials recycled in the process will be referred to the original suppliers for refinement for repeated use to enhance performance in safety, health and environmental protection. Packing materials that could be reused and waste that could be recycled as resources are recycled and reused through proper channels.	Fulfilled
(III) Does the company assess potential risks and opportunities associated with climate change, and undertake measures in response to climate issues?	V		The Company follows the spirit and framework established by Task Force on Climate-related Financial Disclosures (TCFD) to discuss, identify and evaluate risks and opportunities caused by climate change. The TCFD framework enables more practical, in-depth analysis of future scenarios, which opens up strategies and responses to various impacts and effects that arise in association with new risks and opportunities.	Fulfilled

Items for evaluation	The pursuit			Variation with the Corporate Governance Best Practice Principles for TWSE/TPEx – Listed Companies, and the reason for the variation
	Yes	No	Summary	
(IV) Does the company maintain statistics on greenhouse gas emission, water usage and total waste volume in the last two years, and implement policies aimed at reducing energy, carbon, greenhouse gas, water and waste?	V		The Company places great emphasis on environmental issues and is committed to preventing pollution and reducing resource consumption. ISO 14064-1 Greenhouse Gas Inventory has been performed on a yearly basis since 2005, and has been validated and certified by a third-party institution to date. Furthermore, certification for ISO 50001 Energy Management System has been attained since 2016. All environmental statistics and information has been duly disclosed and published in annual corporate social responsibility reports. In addition, the Company has continued the implementation of carbon reduction every year in supporting the government policy of carbon reduction and energy saving and in compliance with applicable laws governing energy resources. Objectives and action plans for the saving of resources have been prepared and achieved. The Company took part in the Voluntary Green Energy Pricing Trial Project introduced by the Ministry of Economic Affairs in 2017 and purchased 1.16 million kWh of green energy. It has also purchased 1,522 renewable energy certificates from National Renewable Energy Certification Center and 20 certifications through secondary trading to date, making it the largest holder of renewable energy certificates as of March 5, 2020. These actions are representative of the Company's resolve to supporting green energy while reducing energy consumption and carbon emission.	Fulfilled
IV. Social issues				
(I) Has the Company developed its policies and procedures in accordance with laws and International Bill of Human Rights?	V		The Company has instituted the Rules of Business Engagement that regulates different forms of behaviors. Lectures on the rules will be provided to the new employees in the orientation. The labor right of employees will also be introduced, including the right of employment, work hours, salaries and benefits, humanity treatment, no discrimination, the freedom of association and related basic rights. Others like employee health and safety, environmental protection, the protection of Company information and assets, the basic principle for transactions with the customers, legal and moral requirements, and code of conduct. The employment policy of the Company is in compliance with applicable laws in Taiwan and the international basic rights of labor. Human Resources is responsible for the implementation of the employment procedure after proper review.	Fulfilled
(II) Has the company developed and implemented reasonable employee welfare measures (including compensation, leave of absence and other benefits), and appropriately reflected business performance or outcome in employees' compensations?	V		The company provides related welfare measures, including the employee welfare committee to coordinate employee welfare, organize various activities, provide labor insurance and group insurance, so that colleagues enjoy multiple protections, provide employees with education and training to improve professional skills, and smooth promotion channels to enhance excellent talents. And reasonable salary and compensation, etc.; operating performance and results are also appropriately reflected in employee compensation.	Fulfilled
(III) Does the company provide employees with a safe and healthy work environment? Are employees trained regularly on safety and health issues?	V		The Company provides health examination for employees at regular intervals and has set up first aid stations. Nursing professionals were employees to educate employees in current affairs and health, provide weight loss class. The Company also organizes different kinds of ball games and annual family day to keep the employee healthy. The Company has also set up breast-feeding facilities with privacy for the mothers at workplace so that they could use the facilities with the peace of mind. The Company has arranged courses in occupational safety and health in the orientation of new employees as required by law, and also arranged training on the use of protective gears, lectures on driving safety, training in fire safety, and exercise drills in response to emergency in the year to ensure a safe work environment and the safety and health of employees.	Fulfilled

Items for evaluation	The pursuit			Variation with the Corporate Governance Best Practice Principles for TWSE/TPEx – Listed Companies, and the reason for the variation
	Yes	No	Summary	
(IV) Has the company implemented an effective training program that helps employees develop skills over their career?	V		The Company planned and organized different programs regularly in line with the strategic direction of the Company and the operation management objectives and the needs for organizational management. Prominent tutors in the industry will be invited to present lectures to upgrade the professional standing, competence, and team spirit of employees. This arrangement will help to remove the barrier between the departments and the individuals, bring about cohesiveness and build up consensus to achieve the organizational goal.	Fulfilled
(V) Has the company complied with laws and international standards with respect to customer health, safety and privacy, marketing and labeling in all products and services offered, and implemented consumer protection policies and complaint procedures?	V		The Company offers its products in conformity with international standards and customer requirements, and adheres strictly to behavioral and ethical guidelines in all internal and external business practices. Furthermore, the Company implements customer satisfaction survey and complaint handling procedures as means to enhance customer relationship and to secure long-term working relations. All departments within the Company have implemented corresponding procedures. To protect customer interest, the Company has even created a Quality Assurance Department that specializes in surveying customer satisfaction and needs and making corresponding changes to product design for improved satisfaction. The Company engages customers through regular visits and discussions to learn their needs; a monitoring system has been developed to ensure that the best quality products and services are delivered to customer satisfaction. It is the Company's policy to offer products free of prohibited substances and conflict materials in any parts, raw materials and packaging materials while at the same time comply with prevailing laws, satisfy customer requirements, protect Earth's environment and mitigate impact to the ecosystem. To ensure the above, we require all suppliers to comply with the following with respect to all raw materials supplied: 1. Registration, Evaluation, Authorization and Restriction of Chemicals (EU REACH) 2. Waste of Electrical and Electronic Equipment (EU WEEE) 3. Restriction of Hazardous Substances (EU RoHS) 4. Conflict mineral-free 5. The Company's product/environment policy and goals (established in accordance with international laws and at customers' request).	Fulfilled
(VI) Has the company implemented a supplier management policy that regulates suppliers' conducts with respect to environmental protection, occupational safety and health or work rights/human rights issues, and tracked suppliers' performance on a regular basis?	V		The Company has supplier evaluation procedures in place that take into consideration CSR issues such as environmental protection, occupational safety, work condition, human rights etc. All new suppliers are required to pass the abovementioned CSR evaluation, for which the Company arranges regular auditing and counseling to help suppliers pass. Suppliers that exhibit significant adverse social impact will have performance reflected in the assessment worksheet and taken into consideration in future decisions such as order placement, auditing etc. In addition, the Company assesses financial, environmental and social risks of its suppliers to facilitate early response and minimize probability of supply chain disruption.	Fulfilled

<table>
<tr><th rowspan="2">Items for evaluation</th><th colspan="3">The pursuit</th><th rowspan="2">Variation with the Corporate Governance Best Practice Principles for TWSE/TPEx – Listed Companies, and the reason for the variation</th></tr>
<tr><th>Yes</th><th>No</th><th>Summary</th></tr>
<tr><td>V. Does the company prepare corporate social responsibility report or any report of non-financial information based on international reporting standards or guidelines? Are the abovementioned reports supported by assurance or opinion of a third-party certifier?</td><td>V</td><td></td><td>The Company has prepared its CSR report based on GRI (Global Reporting Initiative) Standards, and opted for the Core disclosure.
The report was corroborated by an accounting firm using the standards published by Accounting Research and Development Foundation in Statement of Assurance Principles No. 1 - "Audit and Review of Non-financial Information" (which has been established based on revised International Standard on Assurance Engagements; ISAE 3000 Revised), and a Limited Assurance was issued to confirm conformity with GRI Standards - Core disclosure option. Refer to the appendix for CPA's independent assurance statement.</td><td>Fulfilled</td></tr>
</table>

V. If the company has established CSR principles in accordance with "Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies," please describe its current practices and any deviations from the Best Practice Principles:

The Company has established relevant systems and policies, and duly implemented them in line with the CSR spirit.

VI. Other information useful to the understanding of corporate social responsibilities:

The Company prepared its first CSR report (year of assessment: 2014) in 2015. The report covered a multitude of aspects including environmental protection, use of energy/resource, energy/carbon reduction, safety and health, product innovation, quality assurance, customer service, procurement and supplier management, human rights and employee welfare, internal/external communication and grievance system, compliance and public welfare; further details are available on the Company's website (http://www.eink.com) under the CSR section. The 2019 corporate social responsibility report is expected to be published in June 2020.

E Ink is a member of society and is conceived with the spirit of "Take from Society and Give Back to Society". For this reason, the Company commits its human resources and financial resource to build up a good quality society and make contribution to the natural environment.

Highlights of the Company's CSR activities are as follows:

[Awards]

The Company participated in the "12th (2019) Taiwan Corporate Sustainability Awards" organized by Taiwan Academy of Corporate Sustainability, during which it received Corporate Sustainability Report Awards (Chinese) - Gold, Overall Corporate Performance Awards - TOP 50, Best Performance of Specific Categories - Social Inclusion Awards for the [e-Read] mobile e-book reader and library development project, and Best Performance of Specific Categories - Growth through Innovation Awards for innovative application of e-paper in smart retail and smart transportation. The Executive Vice President had accepted the awards on the Company's behalf.

Highlights of the Company's CSR activities are as follows:

[e-Read]

For the third year, E Ink has cooperated with Netronix Inc. and Readmoo, world's largest Traditional Chinese e-book platform, for the launch of a mobile e-book reader and library development project called "e-Read." This year, the three businesses coordinated with Chiayi County Government to donate 450 e-book readers and 45,000 volumes of e-book worth NT$51 million. The project not only benefited children of 41 elementary schools in Chiayi County, the e-book readers also made their way into Chiayi municipal library and 18 township libraries for the first time this year, thereby enabling non-donated elementary schools to borrow on a per-class basis and experience the benefits of digital reading.

Through "e-Read," E Ink hopes to contribute to the society and bring convenience and comfort to people's lifestyle by presenting e-paper as an eye-friendly, energy-saving and environment-friendly technology. We shall continue working with our partners to rally more support from the public for our cause.

[Support for green energy development]

The Company took part in the Voluntary Green Energy Pricing Trial Project introduced by the Ministry of Economic Affairs in 2017 and purchased 1.16 million kWh of green energy. It purchased 262 renewable energy certificates from National Renewable Energy Certification Center in 2017, 786 certificates in 2018 and 474 certificates in 2019 for a total of 1,522 certificates, making it the largest holder of renewable energy certificates to date. These ongoing purchases are representative of the Company's resolve to supporting green energy while reducing energy consumption and carbon emission.

3.3.6 Ethical Corporate Management

Items for evaluation	The pursuit			Variation with the Ethical Corporate Management Best Practice Principles for TWSE/TPEx-listed Companies
	Yes	No	Summary	
I. Establishment of the Ethical Corporate Management Policy and Action Plan				
(I) Has the company established a set of board-approved business integrity policy, and stated in its Memorandum or external correspondence about the policies and practices it implements to maintain business integrity? Are the board of directors and the senior management committed to fulfilling this commitment?	V		The Company duly observes the Company Act, other applicable legal rules governing companies listed at TWSE and TPEx, and other laws governing commercial behaviors as the prerequisites for the implementation of ethical corporate governance.	Fulfilled
(II) Has the company developed systematic practices for assessing integrity risks? Does the company perform regular analyses and assessments on business activities that are prone to higher risk of dishonesty, and implement preventions against dishonest conducts that include at least the measures mentioned in Paragraph 2, Article 7 of "Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies"?	V		As stated in the internal control system and "Rules of Business Engagement" of the Company, Directors, employees and the parties with de facto control, shall not directly or indirectly offer, promise, request or accept unjustified benefits in any form in the pursuit of business activities, including kickbacks, commissions, finder's fee, or offers or accept unjustified benefit from customers, agents, contractors, suppliers, public officials, or other stakeholders in any other means.	Fulfilled
(III) Has the company defined and enforced operating procedures, behavioral guidelines, penalties and grievance systems as part of its preventive measures against dishonest conducts? Are the above measures reviewed and revised on a regular basis?	V		The Company has implemented a business integrity policy, and assigns senior managers to participate in business integrity conferences organized by the authority from time to time. This strengthened awareness helps managers enforce integrity and ethics internally and in external business activities as well.	Fulfilled
II. Integrity in business operation				
(I) Does the company evaluate the integrity of all counterparties it has business relationships with? Are there any integrity clauses in the agreements it signs with business partners?	V		The Company engaged in business operation in fairness and transparency. Before proceeding to business transaction, the Company will consider the legality of the counterparties of trade, and if there is any record of unethical practice to avoid business transactions with parties having a record of unethical practice.	Relevant
(II) Does the company have a unit that enforces business integrity directly under the board of directors? Does this unit report its progress (regarding implementation of business integrity policy and prevention against dishonest conducts) to the board of directors on a regular basis (at least once a year)?	V		The Company has an Auditor Office staffed with internal audit personnel who regularly audit corporate governance performance within the organization. Audit outcomes are compiled into formal reports and presented to the board of directors.	Fulfilled
(III) Has the Company made the policy for the prevention of the conflict of interest, provided appropriate channel for reflection, and properly pursued such policy?	V		Directors and managers recuse from matters where a conflict of interest is involved, and the recusal of the Board for avoidance of the conflict of interest was stated in the annual report.	Fulfilled
(IV) Has the company implemented effective accounting policy and internal control system to maintain business integrity? Has an internal or external audit unit been assigned to devise audit plans based on the outcome of integrity risk assessment, and to audit employees' compliance with various preventions against dishonest conduct?	V		The Company has established an effective internal control system and accounting system to assure the effective design and implementation of the system. The Company has also appointed CPAs to conduct annual review and amendment to the system jointly with the auditors, and the implementation of corporate governance so as to establish sound mechanisms for corporate governance and risk control.	Fulfilled

Items for evaluation	The pursuit			Variation with the Ethical Corporate Management Best Practice Principles for TWSE/TPEx-listed Companies
	Yes	No	Summary	
(V) Has the Company provided internal and external trainings on topics of ethical corporate management at regular intervals?	V		The Company conducts evaluation on the performance of employees annually. The HR Division arranges training while the function heads interview the staff for education and evaluation. In addition, the Company also appoints senior officers to participate in the seminars and conferences organized by the competent authority on topics of ethical corporate management from time to time to strengthen the idea of ethical corporate management and business ethics of the managers, and practice in internal management and external business activities.	Fulfilled
III. The reporting system of the Company in action				
(I) Has the Company established the system for reporting and rewards for the informants, and the channels for facilitating the reporting of unethical practices, and appointed appropriate personnel to conduct investigation on the suspects reported by the others?	V		The Company accepts reports of inappropriate business practice, corruption, fraud, violation and improvement suggestions from insiders and outsiders. All suggestions and reports are investigated or verified by the Auditor Office.	Fulfilled
(II) Has the company implemented any standard procedures for handling reported misconducts, and subsequent actions and confidentiality measures to be undertaken upon completion of an investigation?	V		Sections 5.5~5.7 of the Company's "Operating Behavior Policy" outlines measures such as confidentiality rules, identity protection and liability waiver to assure whistleblowers in the report of misconducts.	Fulfilled
(III) Has the Company established related policies for the protection of the informants from undue treatment?	V			Fulfilled
IV. Information Disclosure				
Has the company disclosed its integrity principles and progress onto its website and MOPS?	V		The Company publishes annual report over its website and Market Observation Post System to disclose the progress of its integrity efforts.	Fulfilled
V. If the company has established business integrity policies in accordance with "Ethical Corporate Management Best Practice Principles for TWSE/TPEX-Listed Companies," please describe its current practices and any deviations from the Best Practice Principles: The Company has implemented its "Business Integrity Code of Conduct" following board of directors' approval dated 2019.12.19. All systems and policies introduced in relation to business integrity are in alignment with integrity principles and have been enforced accordingly.				
VI. Other information useful to the understanding of integrity in business dealings: N/A.				

Note: Regardless of whether the evaluation item is achieved or not, the company shall state an appropriate explanation.

3.3.7 The implementation of ethical corporate management and policies: E Ink educate employees the value of business ethics from time to time for strengthening the moral idea of integrity and anti-corruption to all and provide related training to demand all to observe the code of conduct. Any offense against the ethical norm shall be punished in accordance with the internal rules and regulations of the Company.

3.3.8 The method of inquiry shall be disclosed if the Company has established the Corporate Governance Best Practice Principles and related rules and regulations: refer to: http://www.eink.com

3.3.9 Any other vital information that helps to understand the performance of corporate governance of the Company shall also be disclosed: nil.

3.3.10 The following shall be disclosed in the pursuit of internal control system：

1. Declaration of Internal Control: refer to Section 8.2.1
2. If CPAs are retained to audit the internal control system, disclose the Auditors' Report: nil.

3.3.11 Penalty of the Company and its personnel by law, punishment of the personnel by the Company on violation of the internal control system in the most recent year to the date this report was printed, the major defects and the status of corrective action: not applicable.

3.3.12 Major resolutions of the Shareholders Meeting and the Board in the most recent year to the date this reported was printed: refer to Section 8.7.

3.3.13 Adverse opinions of the Directors or Supervisors on motions passed by the Board on record or in written declaration in the most recent year to the date this report was printed, and the content of the opinions: nil.

3.3.14 Resignation or dismissal of senior officers of the Company like the Chairman, President, Chief Accounting Officer, Chief Financial Officer, Chief Internal Auditor, and Chief R&D Officer:

Title	Name	Date of office	Date of resignation/discharge	Reason for resignation and discharge
Chairman	Frank Ko	2013/12/02	2019/09/09	Resignation
President	Johnson Lee	2008/03/01	2019/12/09	Elected as chairman
Chief Internal Auditor	Mico Yu	2012/02/06	2019/12/13	Resignation

3.4 Information Regarding the Company's Audit Fee and Independence

3.4.1 Audit Fee

Unit: NT$ thousands

Accounting Firm	Name of CPA	Audit Fee	Non-audit Fee					Period Covered by CPA's Audit	Remarks
			System of Design	Company Registration	Human Resource	Others	Subtotal		
Deloitte Touche Tohmatsu Limited	Huang Hui-Min Chih-Ming Shao	12,910	-	1,242	-	1,600	2,842	2019.01.01~ 2019.12.31	Tax consulting service fee

3.5 Information on the replacement of CPAs in the last 2 years and beyond:

1. Information on preceding CPAs:

<table>
<tr><td>Date of reappointment</td><td colspan="4">Passed during the board of directors meeting held on May 8, 2019</td></tr>
<tr><td>Reasons and details of the reappointment</td><td colspan="4">Following an internal adjustment within Deloitte Taiwan, CPA Hui-Min Huang and CPA Chih-Ming Shao have been appointed to replace CPA Yia-Ling Weng and CPA Chih-Ming Shao starting from the first quarter of 2019.</td></tr>
<tr><td rowspan="3">Whether the termination of audit service was initiated by the client or by the auditor</td><td colspan="2">Situation \ Parties involved</td><td>Auditor</td><td>Client</td></tr>
<tr><td colspan="2">Service terminated by</td><td>Not applicable</td><td>Not applicable</td></tr>
<tr><td colspan="2">Service no longer accepted (continued) by</td><td>Not applicable</td><td>Not applicable</td></tr>
<tr><td>Reasons for issuing opinions other than unqualified opinion in the last 2 years</td><td colspan="4">Nil</td></tr>
<tr><td rowspan="7">Any disagreement with the issuer</td><td rowspan="5">Yes</td><td></td><td colspan="2">Accounting principles or practices</td></tr>
<tr><td></td><td colspan="2">Disclosure of financial report</td></tr>
<tr><td></td><td colspan="2">Audit coverage or procedures</td></tr>
<tr><td></td><td colspan="2">Others</td></tr>
<tr><td></td><td colspan="2"></td></tr>
<tr><td>No</td><td colspan="3">V</td></tr>
<tr><td>Description</td><td colspan="3"></td></tr>
<tr><td>Other disclosures (Disclosures deemed necessary under Item 1-4 to Item 1-7, Subparagraph 6, Article 10 of the Guidelines)</td><td colspan="4">Nil</td></tr>
</table>

2. Information on succeeding CPAs:

Name of accounting firm	Deloitte Taiwan
Name of CPA	CPA Hui-Min Huang, CPA Chih-Ming Shao
Date of appointment	Passed during the board of directors meeting held on May 8, 2019
Inquiries and replies relating to the accounting practices or accounting principles of certain transactions, or any audit opinions the auditors were likely to issue on the financial reports prior to reappointment	Not applicable
Written disagreements from the succeeding auditor against opinions of the former auditor	Not applicable

3. Replies from the preceding CPAs on matters specified in 6.1 and 6.2.3 in Article 10 of this regulations: not applicable.

3.6 Working in the capacity as the chairman, president, financial and accounting manager with the CPA office retained for auditing service or its affiliates in the most recent year: not applicable.

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

3.7.1 Changes in Shareholding

Unit: Shares

Title	Name		2019		As of Apr. 20, 2020	
			Holding Increase (Decrease)	Pledged Holding Increase (Decrease)	Holding Increase (Decrease)	Pledged Holding Increase (Decrease)
Chairman	Johnson Lee	Representative of Aidatek Electronics Inc.	-	-	-	-
Director	S.C. Ho					
Director	Felix Ho					
Director	Luke Chen					
Director	CC Tsai	Representative of YFY Inc.	-	-		-
Director	FY Gan					
Independent director	Ten-Chung Chen		-	-	-	-
Independent director	Biing-Seng Wu		-	-	-	-
Independent director	Po-Young Chu		N/A		-	-
Chairman	Johnson Lee		150,000	-	-	-
General manager	FY Gan		323,000	-	-	-
Chief Technology Officer	CC Tsai		65,000	-	-	-
Executive Vice President	Luke Chen		64,000	-	-	-
Vice President	YS Chang		(10,000)	-	-	-
Associate Vice President	Mano Lo		50,000	-	-	-
Associate Vice President	Tung Liang Lin		0	-	-	-
Associate Vice President	Ian Douglas French		8,000	-	(18000)	-
Associate Vice President	Max Chen		50,000	-	-	-
Associate Vice President	Jim Chang		36,000	-	-	-
Associate Vice President	JM Hung		65,000	-	-	-
Chief Finance Officer	Lloyd Chen		0	-	-	-
Finance Center Accounting Director	James Huang		10,000	-	-	-
Corporate Governance Officer	June Su		N/A		-	-
Major Shareholders	YFY Inc.		-	-	-	-

3.7.2 The transferee of equity shares is a related party: nil.

3.7.3 The lien holder of pledged equity shares is a related party: nil.

3.8 Relations among the Top 10 shareholders by quantity of shareholding.

2020/04/20

Name	Current Shareholding		Spouse's/minor's Shareholding		Shareholding by Nominee Arrangement		Name and Relationship Between the Company's Top Ten Shareholders, or Spouses or Relatives Within Two Degrees		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relationship	
YFY Venture Capital Investment Co., Ltd Representative：Felix Ho	133,472,904	11.70%	N/A	N/A	0	0.00%	1.Shin-Yi Enterprise Co., Ltd. 2.S.C. Ho 3.Felix Ho	1.Juristic-person Director 2.Representative of Juristic-person Director 3.Chairman	
S.C. Ho	80,434,300	7.05%	0	0.00%	0	0.00%	1.YFY Inc. 2.Felix Ho 3.Shin-Yi Enterprise Co., Ltd. 4.YFY Venture Capital Investment Co., Ltd 5.Shangyi Culture Industry Co., Ltd.	1.Representative of Juristic-person Director; Son is Chairman 2.Father 3.Director;Wife is Chairman; Son is Director 4.Representative of Juristic-person Director 5.Director;Spouse is the Chairman	
Cathay Life Insurance Co.,Ltd. Representative：HUANG,TIAO-GUI	58,067,737	5.09%	N/A	N/A	0	0.00%	None	None	
Shin-Yi Enterprise Co., Ltd. Representative：C. J. Chang	32,842,345	2.88%	N/A	N/A	0	0.00%	1.S.C. Ho 2.Felix Ho	1.Director;Spouse is the Chairman 2.Director;Mother is Chairman	
Shangyi Culture Industry Co., Ltd. Representative：C. J. Chang	26,402,127	2.32%	N/A	N/A	0	0.00%	S.C. Ho	Director; Spouse is the Chairman	
YFY Venture Capital Investment Co., Ltd Representative：Melody Chiu	23,059,296	2.02%	N/A	N/A	0	0.00%	S.C. Ho	Representative of Juristic-person Director	
Indus Select Master Fund, Ltd.	22,102,000	1.94%	N/A	N/A	0	0.00%	None	None	
Chung Hwa Pulp Corporation Representative：HUANG,KUN-XIONG	20,000,000	1.75%	N/A	N/A	0	0.00%	1.YFY Inc. 2.Felix Ho	1.Juristic-person Director 2.Representative of Juristic-person Director	
Taiwan Life Insurance Commission Fuhua Investment Trust Company Investment Special Account	19,181,000	1.68%	N/A	N/A	0	0.00%	None	None	
Norges Bank	18,111,497	1.59%	N/A	N/A	0	0.00%	None	None	

3.9 Ownership of Shares in Affiliated Enterprises

December 31, 2019/Unit: Shares

Affiliated Enterprises	Ownership by the Company		Direct or Indirect Ownership by Directors, Supervisors, Managers		Total Ownership	
	Shares	%	Shares	%	Shares	%
New Field e_Paper Co., Ltd.	671,032,318	100.00%	0	0	671,032,318	100.00%
PVI Global Corp.	99,413,176	100.00%	0	0	99,413,176	100.00%
YuanHan Materials Inc.	183,819,268	100.00%	0	0	183,819,268	100.00%
E Ink Corporation	1,034	45.31%	1,248	54.69%	2,282	100.00%
Dream Universe Ltd.	4,050,000	100.00%	0	0	4,050,000	100.00%
Prime View Communications Ltd.	3,570,000	100.00%	0	0	3,570,000	100.00%
Enttek Co., Ltd.(Note 2)	2,203,161	47.07%	0	0	2,203,161	47.07%
Tech Smart Logistics Ltd.	1,550,000	0.09%	1,748,251,748	99.91%	1,749,801,748	100.00%
Hot Tracks International Ltd.	50,000	100.00%	0	0	50,000	100.00%
Linfiny Corporation	1,680,000	4.00%	32,340,000	77.00%	34,020,000	81.00%

Note 1：Investment with equity method.
Note 2：Under liquidation.

IV. Capital Overview

4.1 Capital and Shares

4.1.1 Source of Capital

MM YYYY	Offering price	Authorized capital		Paid-in capital		Remark		
		Quantity of shares	Amount	Quantity of shares	Amount	Source of capital stock	Investment in kind by assets other than cash	Others
July 2004	10	1,000,000	10,000,000	425,960	4,259,597	Capitalization of retained earnings into new shares amounting to NT$259,597 thousand	Nil.	July 21, 2004: Jin-Guan-Zheng(I)-Zi No. 0930132629
June 2005	10	1,000,000	10,000,000	548,435	5,484,353	Capitalization of retained earnings into new shares amounting to NT$1,224,756 thousand	Nil.	June 29, 2005: Jin-Guan-Zheng(I)-Zi No. 0940125990
May 2006	10	1,000,000	10,000,000	548,139	5,481,393	Decapitalization amounting to NT$2,960 thousand	Nil.	February 20, 2006: Jin-Guan-Zheng (III)-Zi. No. 0950105976
September 2007	10	1,000,000	10,000,000	582,760	5,827,596	Capitalization of retained earnings amounting to NT$233,113 thousand. ESO and convertible bonds conversion amounting to NT$113,090 thousand.	Nil.	September 17, 2007: (2007)Yuan-Shang-Zi No. 0960025503
January 2008	10	1,000,000	10,000,000	587,833	5,878,331	ESO and convertible bonds conversion amounting to NT$50,735 thousand	Nil.	January 17, 2008: (2008)Yuan-Shang-Zi No. 0970000871
April 2008	10	1,000,000	10,000,000	590,128	5,901,280	ESO conversion amounting to NT$22,949 thousand	Nil.	April 10, 2008: (2008)Yuan-Shang-Zi No. 0970009235
June 2008	10	1,000,000	10,000,000	590,534	5,905,341	ESO conversion amounting to NT$4,061 thousand	Nil.	June 27, 2008: (2008) Yuan-Shang-Zi No. 0970017534
September 2008	10	1,000,000	10,000,000	678,278	6,782,781	Capitalization of retained earnings amounting to NT$873,130 thousand. ESO conversion amounting to NT$4,310 thousand.	Nil.	September 3, 2008: (2008)Yuan-Shang-Zi No. 0970024760
January 2009	**10**	**1,000,000**	**10,000,000**	**748,313**	**7,483,128**	**Offering new shares through private placement amounting to NT$700,000 thousand. ESO conversion amounting to NT$347 thousand.**	**Nil.**	**January 20, 2009: (2009) Yuan-Shang-Zi No. 0980001762**
April 2009	10	1,000,000	10,000,000	750,227	7,502,270	ESO conversion amounting to NT$19,143 thousand.	Nil.	April 13, 2009: (2009) Yuan-Shang-Zi No. 0980009913
August 2009	10	1,000,000	10,000,000	830,227	8,302,227	Raising capital by issuing new shares amounting to NT$800,000 thousand.	Nil.	August 25, 2009: (2009) Yuan-Shang-Zi No. 0980023051
September 2009	10	1,000,000	10,000,000	832,602	8,326,016	ESO conversion amounting to NT$23,746 thousand	Nil.	September 7, 2009: (2009) Yuan-Shang-Zi No. 0980024687
January 2010	10	2,000,000	20,000,000	956,321	9,563,210	ESO conversion amounting to NT$26,957 thousand. Convertible bonds conversion amounting to NT$510,237 thousand.	Nil.	January 7, 2010: (2010) Yuan-Shang-Zi No. 0990000661

MM YYYY	Offering price	Authorized capital		Paid-in capital		Remark		
		Quantity of shares	Amount	Quantity of shares	Amount	Source of capital stock	Investment in kind by assets other than cash	Others
February 2010	10	2,000,000	20,000,000	1,060,468	10,604,680	Offering of preferred shares amounting to NT$1,041,471 thousand.	Nil.	February 3, 2010: (2010) Yuan-Shang-Zi No. 0990003179
March 2010	10	2,000,000	20,000,000	1,060,468	10,604,680	Conversion of preferred shares to common shares amounting to NT$1,041,471 thousand.	Nil.	March 12, 2010: (2010) Yuan-Shang-Zi No. 0990006406
April 2010	10	2,000,000	20,000,000	1,073,586	10,735,856	ESO conversion amounting to NT$27,603 thousand. Convertible bonds conversion amounting to NT$103,571 thousand.	Nil.	April 12, 2010: (2010) Yuan-Shang-Zi No. 0990009479
July 2010	10	2,000,000	20,000,000	1,074,467	10,744,667	ESO conversion amounting to NT$2,590 thousand. Convertible bonds conversion amounting to NT$6,221 thousand.	Nil.	July 21, 2010: Yuan-Shang-Zi No. 0990020870
October 2010	10	2,000,000	20,000,000	1,075,118	10,751,180	ESO conversion amounting to NT$6,514 thousand	Nil.	November 17, 2010: Yuan-Shang-Zi No. 0990034114
December 2010	10	2,000,000	20,000,000	1,077,273	10,772,732	ESO conversion amounting to NT$21,552 thousand	Nil.	January 5, 2011: Yuan-Shang-Zi No. 1000000584
March 2011	10	2,000,000	20,000,000	1,078,495	10,784,953	ESO conversion amounting to NT$12,220 thousand	Nil.	April 20, 2011: Yuan-Shang-Zi No. 1000010702
August 2011	10	2,000,000	20,000,000	1,079,705	10,797,054	ESO conversion amounting to NT$12,101 thousand	Nil.	September 15, 2011: Yuan-Shang-Zi No. 1000027409
December 2011	10	2,000,000	20,000,000	1,080,142	10,801,418	ESO conversion amounting to NT$4,364 thousand	Nil.	January 17, 2012: Yuan-Shang-Zi No. 1010002102
March 2012	10	2,000,000	20,000,000	1,080,250	10,802,504	ESO conversion amounting to NT$1,086 thousand	Nil.	April 9, 2012: Yuan-Shang-Zi No. 1010010516
June 2012	10	2,000,000	20,000,000	1,080,398	10,803,981	ESO conversion amounting to NT$1,477 thousand	Nil.	July 9, 2012: Yuan-Shang-Zi No. 1010020074
August 2012	10	2,000,000	20,000,000	1,080,465	10,804,646	ESO conversion amounting to NT$665 thousand	Nil.	September 11, 2012: Yuan-Shang-Zi No. 1010028380
October 2012	10	2,000,000	20,000,000	1,080,896	10,808,962	ESO conversion amounting to NT$4,316 thousand	Nil.	November 12, 2012: Yuan-Shang-Zi No. 1010034764
March 2013	10	2,000,000	20,000,000	1,080,990	10,809,897	ESO conversion amounting to NT$935 thousand	Nil.	April 8, 2013: Yuan-Shang-Zi No. 1020009668
July 2013	**10**	**2,000,000**	**20,000,000**	**1,140,990**	**11,409,897**	**Offering new shares through private placement amounting to NT$600,000 thousand**	**Nil.**	**July 24, 2013: Yuan-Shang-Zi No. 1020022148**
June 2014	10	2,000,000	20,000,000	1,140,468	11,404,677	Cancellation of treasury shares amounting to NT$5,220 thousand.	Nil.	June 04, 2014: Zhu-Shang-Zi No. 1030016291

Class \ Share	Authorized capital			Remark:
	Outstanding shares	Unissued shares	Total	
Registered common shares	1,140,467,715	859,532,285	2,000,000,000	1. Stocks listed at TWSE or TPEx 2. Balance of 6,105 thousand treasury shares as of December 31, 2019

4.1.2 Status of Shareholders

2020/04/20

Item	Government Agencies	Financial Institutions	Other Juridical Persons	Domestic Natural Persons	Foreign Institutions & Natural Persons	Total
Number of Shareholders	2	18	273	69,135	299	69,727
Shareholding (shares)	22	89,265,369	313,718,450	515,530,516	221,953,358	1,140,467,715
Percentage	0.00%	7.83%	27.51%	45.20%	19.46%	100.00%

4.1.3 Shareholding Distribution Status

A. Common Shares

2020/04/20

Class of Shareholding			Number of Shareholders	Shareholding (Shares)	Percentage
1	-	999	21,594	1,837,537	0.16%
1,000	-	5,000	34,691	76,629,623	6.72%
5,001	-	10,000	6,569	53,414,816	4.68%
10,001	-	15,000	2,034	26,440,622	2.32%
15,001	-	20,000	1,476	27,602,015	2.42%
20,001	-	30,000	1,106	28,736,584	2.52%
30,001	-	50,000	937	37,873,921	3.32%
50,001	-	100,000	641	46,188,735	4.05%
100,001	-	200,000	352	49,873,250	4.37%
200,001	-	400,000	154	44,192,917	3.87%
400,001	-	600,000	49	23,853,446	2.09%
600,001	-	800,000	28	19,461,589	1.71%
800,001	-	1,000,000	16	14,697,000	1.29%
1,000,001 or over			80	689,665,660	60.47%
Total			69,727	1,140,467,715	100.00%

B. Preferred Shares: None.

4.1.4 List of Major Shareholders

2020/04/20

Shareholder's Name	Shareholding	
	Shares	Percentage
YFY Inc.	133,472,904	11.70%
S.C. Ho	80,434,300	7.05%
Cathay Life Insurance Co.,Ltd.	58,067,737	5.09%
Shin-Yi Enterprise Co., Ltd.	32,842,345	2.88%
Shangyi Culture Industry Co., Ltd.	26,402,127	2.32%
YFY Venture Capital Investment Co., Ltd	23,059,296	2.02%
Indus Select Master Fund, Ltd.	22,102,000	1.94%
Chung Hwa Pulp Corporation	20,000,000	1.75%
Taiwan Life Insurance Commission Fuhua Investment Trust Company Investment Special Account	19,181,000	1.68%
Norges Bank	18,111,497	1.59%

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

Unit: NT$

Items	2018	2019	As of 2020/04/20
Market Price per Share			
Highest Market Price	57.7	38.85	32.2
Lowest Market Price	21.6	26.75	20.6
Average Market Price	38.1	32.77	27.46
Net Worth per Share			
Before Distribution	24.49	25.57	–
After Distribution	22.41	(Note)	–
Earnings per Share			
Weighted Average Shares (thousand shares)	1,126,786	1,132,286	–
Diluted Earnings Per Share	2.32	2.72	–
Dividends per Share			
Cash Dividends	2.1	(Note)	–
Stock Dividends			
Dividends from Retained Earnings	–	–	–
Dividends from Capital Surplus	–	–	–
Accumulated Undistributed Dividends	–	–	–
Return on Investment			
Price / Earnings Ratio (Note 1)	16.42	12.05	–
Price / Dividend Ratio (Note 2)	18.14	(Note)	–
Cash Dividend Yield Rate (Note 3)	5.51	(Note)	–

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

4.1.6 Dividend Policy and Implementation Status

4.1.6 Dividend policy and implementation

1. The dividend policy of the Company is specified below:

   The Company is engaged in frontier technologies and adopted the residual dividend policy in supporting the long-term financial planning of the Company for sustainable development.

   If the Company has a balance after annual account settlement, appropriate for tax payment and covering carryforward loss, followed by the appropriation of 10% as legal reserve under law, and appropriation or reversal of special reserve. If there is still a balance, the Board will retain specific amount of earnings with reference to the capital budget planning of the future to meet the capital needs in the years ahead, and appropriate 50% of the remainder as dividend payable to the shareholders.

   The aforementioned distribution of income could be pooled up with the undistributed earnings accumulated in the previous year.

   Dividends to the shareholders may be paid in cash or in stock where cash dividend shall not fall below 10% of the total dividend payable to the shareholders of the year.

   The appropriation of legal reserve as mentioned in paragraph 2 could be waived if the amount is equivalent to the paid-in capital.

   The Board shall prepare the proposal for the distribution of income and present to the Shareholders Meeting for final approval.

   With the attendance of more than 2/3 of directors in the Board Meeting and the resolution of more than half of the present directors, all or part of the dividends and bonuses to be distributed shall be paid in cash, and the issue shall be reported to the shareholders' meeting.

2. The proposal of dividend payment in this session of the Shareholders Meeting:

   The Board passed the proposal for the distribution of income in 2019 in a session dated March 18, 2020, and the dividend approved for distribution is shown below:

   (Pending on the final approval of the Shareholders Meeting scheduled to be held on June 18, 2020)

E Ink Holdings Incorporated

Table for the Distribution of Earnings in 2019

Unit: NT$

Item	Amount		Remarks
Earnings undistributed at the period-beginning		$2,318,482,391	
Net income of the current year	$ 3,083,788,601		
Adjusted retained earnings for investment due to the use of the equity approach	1,054,839		
Disposal of equity instruments carried at fair value through other comprehensive income and transfer of cumulative gains/losses to retained earnings	7,678,000		
Remeasured amount of confirmed welfare plan listed in the retained earnings	(11,751,662)		
Sum of current net income and non-net income items added to current undistributed earnings		3,080,769,778	
Statutory surplus reserve set aside (10%)		(308,076,978)	
Reversal of special reserve previously provided		154,915,452	
Distributable earnings for the year		5,246,090,643	
Items of distribution			
Cash dividends and bonuses for shareholders		(2,268,725,430)	Cash dividends at NT$2.0 per share
Closing undistributed earnings		$2,977,365,213	

4.1.7 The influence of the payment of stock dividend proposed in this session of the Shareholders Meeting on the operation performance and earnings per share of the Company: not applicable.

4.1.8 Employee Bonus and Directors' and Supervisors' Remuneration

1. The percentage and scope of remuneration to employees, Directors, and Supervisors as stated in the Articles of Incorporation:

If the Company has earnings in the year, appropriate 1%-10% as remuneration to employees and no more than 1% as remuneration to the Directors and Supervisors. If there is an accumulated deficit, appropriate for covering the loss first.

Remuneration to the Directors shall be made in cash. Remuneration to employees may be made in cash or stock. The employees of subsidiaries meeting specific condition are entitled to the remuneration. Such condition shall be determined by the Board under authorization. The ratio of remuneration to the Directors, the ratio of remunerations to employees and method of payment shall be determined by the Board in a session with the presence of at least two-thirds of the Directors and a simple majority of the Directors in session, and report to the Shareholders Meeting.

Remunerations to employees and the Directors shall be calculated on the basis of the earnings of the current year (the balance of earnings before taxation before the deduction of remunerations to employees and Directors) net of accumulated deficit.

2. The estimation of the amount for the remunerations to employees, Directors, and Supervisors in current period is based on the quantity of shares paid as remunerations to employees in the calculation and the actual amount paid, and the accounting if there is a difference between the estimated amount and the actual amount:

(1) The estimation of remuneration to employees in 2019 amounted to NT$31,900 thousand and to the Directors in the same year amounted to NT$15,579 thousand. The Board resolved to pay the aforementioned amount in cash in a session dated March 18, 2020 pending on reporting to the Shareholders Meeting for final approval on June 18, 2020.

(2) If there is significant change in the amount stated in the consolidated financial statements before announcement, the accounting of the adjustment of the change is recognized as expense in the period. If there is still a significant change in the amount after the announcement of the consolidated financial statements, handle the account under the change in accounting estimation and entered for adjustment in the next fiscal year.

3. Remuneration passed by the Board:

(1) The amount of remuneration to employees, Directors, and Supervisors in cash or stock. If the recognized amount of expense is different from the estimated amount, disclose the difference, the reasons and the response:

A. The estimation of remuneration to employees in 2019 amounted to NT$31,900 thousand and to the Directors in the same year amounted to NT$15,579 thousand. The Board resolved to pay the aforementioned amount in cash in a session dated March 18, 2020 pending on reporting to the Shareholders Meeting for final approval on June 18, 2020.

B. There is no difference between the amount of remuneration passed by the Board and the amount of recognition in the year.

(2) The ratio of amount of remuneration to employees paid in cash to the sum of the net income and remuneration to employees in current period: not applicable.

4. The actual payment to employees, Directors, and Supervisors in the previous year:

Item	Amount
Remuneration to employees in cash	27,100,000
Remuneration to the Directors in cash.	12,238,356

There is no difference between the actual amounts paid and the recognized amounted.

4.1.9 Buyback of Treasury Stock

As of 04/20/2020

Item	Notes
Third buyback (in 2016) of company shares (completed)	
Passed by the board resolution	June 13, 2016
Purposes of buyback	To match with the Company's overall incentives, the scheme for the stay of personnel with excellent performance and the scheme for the engagement of special talents, the shares will be transferred to employees.
Period of buyback	June 14, 2016 - August 4, 2016
Price range of buyback	NT$13.00 - NT$24.60
Types and number of shares bought back	20,000,000 common shares
Amount of buyback	NT$ 360,463,846
Quantity bought back as a percentage of planned buyback (%)	100%
Number of shares retired and transferred	13,895,000 shares
Accumulated holding of the Company's shares	6,105,000 shares
Cumulative holding of own shares as a percentage to total outstanding shares (%)	0.54%
Average price of each share for the buyback	NT$ 18.02
Details about the third time (in 2017) of transfer of the treasury shares to employees (the first time of transfer)	
Period of transfer	July 2017
Number of transferred shares	2,896,000 shares
Available shares for transfer	17,104,000 shares
Price of shares transferred to employees	NT$ 18.02
Details about the third time (in 2018) of transfer of the treasury shares to employees (the second times of transfer)	
Period of transfer	July 2018
Number of transferred shares	6,845,000 shares
Available shares for transfer	10,259,000 shares
Price of shares transferred to employees	NT$ 18.02
Details about the third time (in 2019) of transfer of the treasury shares to employees (the 3rd times of transfer)	
Period of transfer	July 2019
Number of transferred shares	4,154,000 shares
Available shares for transfer	6,105,000 shares
Price of shares transferred to employees	NT$ 18.02

4.2 Corporate Bonds：None

4.3 Preferred Stock：None

4.4 Global Depository Receipts

<table>
<tr><td colspan="3">Issue date
Item</td><td>1998/12/11</td></tr>
<tr><td colspan="3" rowspan="2">Issuance and listing</td><td>1998/12/11</td></tr>
<tr><td>Luxembourg Stock Exchange</td></tr>
<tr><td colspan="3">Unit issuing price</td><td>USD165,012,400</td></tr>
<tr><td colspan="3">Units issued</td><td>USD23.5732</td></tr>
<tr><td colspan="3">Quantity of Issuance</td><td>7,000,000 units</td></tr>
<tr><td colspan="3">Source of negotiable securities</td><td>The Company’s common shares held by capital increased in Cash</td></tr>
<tr><td colspan="3">Quantity of negotiable securities</td><td>70,000,000 shares</td></tr>
<tr><td colspan="3">Rights and obligations of GDR holders</td><td>Same as those of common share holders</td></tr>
<tr><td colspan="3">Trustee</td><td>-</td></tr>
<tr><td colspan="3">Depository bank</td><td>CITIBANK,NA</td></tr>
<tr><td colspan="3">Custodian bank</td><td>Citi Bank, Taiwan</td></tr>
<tr><td colspan="3">Outstanding balance</td><td>140,160 units</td></tr>
<tr><td colspan="3">Treatment of expenses incurred at issuance and thereafter</td><td>Issue cost: amortized by the issuing companies and shareholder participants according to the actual shares issued Expenses incurred after issuance: amortized by the issuing company</td></tr>
<tr><td colspan="3">Important conventions about depository and escrow agreement</td><td>Detailed contract</td></tr>
<tr><td rowspan="6">Market price per unit (USD)</td><td rowspan="3">2019</td><td>Highest</td><td>12.3</td></tr>
<tr><td>Lowest</td><td>8.9</td></tr>
<tr><td>Average</td><td>10.6</td></tr>
<tr><td rowspan="3">Current year to 2020/04/20</td><td>Highest</td><td>10.6</td></tr>
<tr><td>Lowest</td><td>6.9</td></tr>
<tr><td>Average</td><td>8.75</td></tr>
</table>

4.5 Employee Stock Options

4.5.1 ESO before maturity shall be disclosed to the date this report was printed and the influence on shareholders' equity: not applicable.

4.5.2 The names of the mangers and the top 10 employees who have acquired ESO over the years to the date this report was printed, their status of acquisition and subscription of shares from the ESO: The Company offered ESO from 2004 to 2010, and the instruments were matured from 2010 to 2016. For information on the names of the managers and the Top 10 employees who have acquired ESO, the quantity and the amount of ESO, refer to the Annual Reports covering these periods.

4.6 The Offering of Restricted Stock: Not applicable.

4.7 Merger and acquisition, and acceptance of assigned shares from other Company for issuing new shares: Not applicable.

4.8 The implementation of the fund utilization plan: Not applicable.

V. Operational Highlights

5.1 Business Activities

5.1.1 Business Scope

1. E Ink's Main Business E Ink Holdings Inc. is the world leader in ePaper technology, engages in the research, development, manufacturing and sales of ePaper Display (EPD) /modules and Flat Panel Laminate (FPL) Film.

2. Percentage of Sales Revenue

Product Category \ Year	2019	
	Operating Income (Thousands NTD)	Percentage (%)
EPD/ module	10,742,725	78.98
FPL Film and other	2,858,951	21.02
Total	13,601,676	100.00

3. Major products and their applications
   Major products are EPD modules, and they can be applied in eReaders, Electronic Shelf Labels (ESL), eNotes, mobile devices, digital signage and etc.

4. New Products and Services in the Pipeline
   E Ink's current product development goes in the following five directions:
   A. Taking advantage of ePaper's paper-like quality and strengthening the product development for reading and pen-writing applications, e.g., eReaders, eNotes, etc.
   B. Taking advantage of ePaper's low-power consumption and strengthening the product development for IoT applications, e.g., ESLs, mobile devices, smart logistics, and digital signage.
   C. Continuing with the development of EPD evaluation kits -, and all-in-one Turnkey Solutions in order for customers to shorten their new product development cycle and create new applications.
   D. Introducing new materials and new manufacturing processes and enhancing ePaper's product performance and specifications to comply with market needs, and strengthening product competiveness.
   E. Reinforcing strategic cooperation and cross-industry alliances with domestic/overseas companies for joint investment in technologies and resources so as to develop the application of low-power ePaper display technology and build the foundation for sustainable management.

5.1.2 Industry Overview

1. Current Status and Development of EPD Industry

The ePaper development can be traced back to early 1970s. In 1996, the Massachusetts Institute of Technology solved the problem of dye particle coagulation with the Microcapsules technology, thereby affirming the development of Electrophoretic Display technology which contributes to what we know as Electronic Ink today. ePaper technology underwent a long period of continuous research and development, sample trials and trial production and finally, realized the mass production in 2008. In 2012, E Ink Holdings Inc. merged with SiPix Technology Inc. and acquired the Microcups® technology, not only to secure its consistently leading position in technology, to expand patent deployment, and to deeply cultivate in ePaper industry, but also to integrate global talents, technologies and resources from Taiwan, China, the US and Japan, in a bid to complete its deployment in the ePaper technologies..

ePaper is paper-thin, low-power, wide viewing angle, bi-stable, readable in direct sunlight and flexible In addition to eReader applications, ePaper's market potential is well-recognized as shown by the continued increase in demand for Electronic Shelf Labels (ESL). Major retailers in the US and Europe are now embracing the technology. ESL also complies with the trend in demand for low power consumption in IoT applications, and we can anticipate a future growth in demand.

Electronic notebooks (eNotes) between 4.3 ~ 13.3" (A7 ~ A4 size) in size with an emphasis on reading and writing can be applied in business and education markets. In addition to existing customers, new customers have recently been successfully commercialized their products such as Sharp, KINGJIM, iFlYTEK, moaan (Xiaomi eco-system), and Readmoo. New products are continuing to be released in the market and acceptance is growing.

EPD applications on digital signage and digital bulletin board come in two types: full color and black & white.

This has not only entailed a diverse evolution of conventional advertisement paper but also started a new market for green display technologies. Further, color changing film, E Ink Prism™, can be applied on the surfaces in all kinds of architectures, for instance, digital dynamic architectural sculptures.

As the ePaper technology's product applications and ecosystem continue to develop, E Ink plays a pivotal role in the overall supply chain and remains as the industry leader in terms of technology and production capacity via endless innovation and resources investment.

2. Correlations between the upstream, midstream and downstream of the industry

Upstream	Color Pigment, PET Film, TFT Substrate, PI Film, Driving IC, PCB, Front Light Module, Touch Panel
Midstream	FPL Film, EPD
Downstream	Display Module Manufacturers, System Manufacturers, Brand Customers

3. Product Development Trends

(1) eReader

E Ink performance in eReaders during 2019 can be summarized with the four following aspects. First, in response to the diversified development of market products, E Ink invested resources to upgrade product specifications such as adding front lightto aid reading experience, developing ultra-thin glass substrate, optimizing flexible substrates, and improving waterproofing to the IPx7 level. Key customers then upgraded their product specifications across the board to not only provide consumers with better products and also showed significant increase in market demand. Second, the increase in the number of eReader users led to a corresponding rapid increase in eReader demand. New brands have joined the market at competitive prices allowing more people to enjoy the fun of reading. A well-known Chinese brand launched a 6.0" eReader at a very competitive price in the second half of 2019 that triggered a quick jump in market share in the Chinese market. Third, eReader screens are continuing to increase in size. An eReader with a 10.3" flexible display was released in November 2019 in response to market demand. The larger dimension was not only very popular on the market but also enhanced reading comfort. Even electronic magazines and newspapers can now be read with ease. Fourth, E Ink continued to focus on the development of new ePaper technologies such as color ePaper. After extensive R&D and investment, color ePaper has finally been released. Color eReaders are expected to hit the market in 2020 Q2 with many customers all scheduled for launch. The expansion in user base and enhanced reading experience will undoubtedly make color ePaper all the rage.

(2) Electronic Shelf Label (ESL)

Thanks to the increasingly mature technology for smart retailing applications, merchandise management and price labeling in today's physical stores can rely on Electronic Shelf Labels (ESLs) for real-time updates. Compared with traditional paper tags, Electronic Shelf Labels take advantage of wireless data transmission that not only improves efficiency and speed but also eliminate errors due to pricing changes while allowing for more precise data updates. This not only lowers the likelihood of pricing errors but also helps stores by offering a fast response mechanism to price changes in a highly competitive market with real-time promotional dynamic pricing, while reducing labor cost in manually renewing the price tags. ESLs application can also be extended to smart inventory management for factories and hospitals. ESLs can be accessed remotely and wirelessly by massive quantity of data to facilitate inventory management and also may be configured to send automatic notifications when specific products are approaching their expiration dates. As an application for unmanned stores, ESLs placed on product shelves can be configured to dynamically update product prices in real-time to prevent human-errors in price updating. As a primary solution for product pricing and information display, ESLs is perfectly aligned with the Industry 4.0 trends for automation and smart management.

ePaper offers the advantages of being compact, lightweight and low power consumption. It closely mimics the visual effect of real paper. Through the integration of wireless data transmission and ESL, the solution makes it possible to perform real-time information update on ePaper display for the benefit of greater precision of prices. As far as product management at wholesale stores or cargo management at large warehouses, adopting ESL with ePaper technology is also in sync with the latest trends of automation and smart management. Using ePaper for ESL not only reduces the likelihood of pricing error but also enables retailers to quickly improve their efficiency at price updating process in a highly competitive market and also reduces the cost of manually replacement of price tags. ePaper based ESL is fast becoming an ideal choice for many retailers.

The bi-stablility property allows ePaper products to consume power only when data is being written and updated. No power is required to retain any images when not changing. It reduces the electricity cost for extensive ESLs uses in stores and meet the society trend of energy saving. Additionally, ePaper offers very wide viewing angle of nearly 180 degrees, allowing images or prices shown on ESL tags to be seen clearly from any angle. LCD based ESL tags cannot replicate the same viewing experience.

In response to different applications of electronic shelf labels, E Ink also developed low-temperature ePaper suitable for freezers and 3-color ePaper, allowing retailers to use either Red or Yellow to highlight their promotion and items on sale besides black & white ePaper,. Recent launches also include low voltage-driven ESLs solutions. Compared with the wireless transmission as required in large-scale malls, this battery-free solution is more suitable in small shops and neither interior reconstruction nor additional hardware installation are required. Only one mobile phone equipped with the Near Field Communication (NFC) function is able to update the label content anytime. In order to meet the expectations of the end market for color electronic paper, a new N-color ePaper technology that offers up to 7 different colors has been developed this year. We look forward to seeing more growth from this development.

(3) eNote

In addition to maintaining ePaper's original product niche of being comfortable to read and power-saving, eNotes come with pen-writing capability to truly live up to the read like paper, feel like paper and write like paper Further features like data editing, saving and management so that consumers will enjoy the ePaper advantages and upgrade the overall working efficiency at the same time. In particular, eNotes with flexible TFT backplane are lightand highly endurable. Even its maximum 13.3-inch (A4 size) is still light and easy to carry.

This product is targeted for professional and commercial applications in regions such as North America, Europe, Japan, and China initially. To date, the solution has established a solid foothold in the educational application market to gradually achieve our vision of replacing traditional pen and paper notebooks with eNote. eNote is also deeply supported by fans of new technologies and products.

For professional and commercial application market, smart office notebook that combines features including voice recognition, speech-to-text editing and handwriting recognition technology as a tool for keeping track of day-to-day work, this solution boosts productivity efficiency for business workers... Targeting the smart education market, E Ink integrates partner's digital handwriting technology with ePaper to deliver a solution that makes for fatigue-free reading, easy-writing and smart-learning possible. To satisfy the needs of color note-taking and annotations, Print Color ePaper was recently developed by E Ink to provide customers with another option while developing product and satisfy the needs of end users. In light of the steadily increasing number of students in fundamental education and trainees in on-the-job training around the world, and the rapid development of digital learning environments plus eNote's superior product advantages. eNote applications have already been implemented in China, India and Japan. eNotes are expected to have great potential in education market.

E Ink work hard to develop new technologies to improve product performance and increase functionality, expand product portfolio, and continue to cooperate with customers and partners to improve the software functions for enhancing the user experience. The incorporation of AI features such as handwriting and voice recognition not only makes for effective application in the market of smart education but has also been gradually introduced to smart office environments and conference room settings for academic and research institutions. At the same time, E Ink will also continue to promote smart paper-less applications by targeting such specialist sectors as law, finance, and healthcare as we expect the market for eNote to achieve stable growth.

(4) Smart Display Card

In recent years, consumption is heading towards online and mobile shopping, which has caused an increasing number of credit card fraud, damaging the finance and credibility of the credit card issuing agencies. The majority of credit card fraud comes from online shopping and card-less transaction in contact-free transaction services. Since 2006, the world's major financial security product and service providers have been developing functions like dynamic display or biometrics to enhance credit card security. In addition, the all-in-one smart cards can fuse credit cards, membership cards, or reward cards into one single card , and even could outfitted with discount barcode display to maximize product functionality, providing better value for users.

In order to combat the serious and rampant problem of credit card fraud, many financial institutions and credit card organizations have utilized specific software and hardware solution r to provide clients with safer credit card products. The Dynamic CVV (DCVV) credit card that developed by Oberthur (IDEMIA) and Gemalto (Thales) has feature of ePaper on the backside of credit card to dynamically display the DCVV number. It is expected that with the launch of DCVV cards embedded with ePaper Displays to display the motion code (3-digit number) on the backside of credit card can be synchronously updated with the bank every 30-60 minutes to prevent accidental loss caused by the motion code is copied and misappropriated while online and mobile transactions. Further, ePaper is light, compact, low-power, high-contrast and can endure folding and impact from falling, hence the most suitable for smart card applications. Responding to the prevalence of virtual currency in recent years, , to integrate the Cold Storage technology and ePaper display such as Bitcoin wallet is the product trend across times.

(5) Luggage/Logistic Tag

As ePaper displays are bi-stable, reflective, low-power consumption, wide view angle, readable in direct sunlight, flexible and durable, the aviation and logistic industry companies in Europe, US and Japan have been adopting electronic luggage and logistics tag solutions with EPD in recent years.

Taking the aviation industry for instance, the world's total air travel passengers have so far exceeded 3.5 billion people. Each year, the lost luggage cause the airlines to lose several billions of dollars. How to effectively track the luggage while lowering the expenditure in manpower, energy and paper has presently become the most urgent issue to be solved in the aviation industry.

System solutions that constructed today have been combine ePaper Display and wireless transmission technologies such as Bluetooth or Near Field Communication (NFC) to transmit and receive the luggage ID code corresponding to its flight details, passengers and flight details can be displayed on the tag to effectively track luggage and solve problems that may arise during the luggage delivery in the aviation industry.

Later on, there will be more companies in the aviation industry to join this system platform and work together to effectively improve the travel experience of the massive number of flight passengers. Likewise in the logistic industry, billions of paper tags are consumed per years. To save labor, energy, paper consumption and to enhance its environmental protection performance, many logistic companies are working on switching the current practice of traditional logistic tags to EPD logistic tag which equipped with wireless transmission systems as the solutions to control and monitor cargo status. Both luggage and logistics tags can reduce paper waste , energy consumption, the overhead to support frequent tag replacement , as well as enabling remote surveillance on the luggage and cargo. Therefore, the overall cost and delivery time are drastically improved. This has become the inevitable trend in global aviation and logistic industries.

(6) Mobile Device

For dual-screen application, Lenovo unveiled its innovative product at the 2018 IFA – the Yogabook C930, which incorporates EPD (ePaper display) into the innovative product sector of PC Convertibles, offering the new user experience of the 3-in-1 features: dynamic keyboards, pen-writing, and reading. This year, ePaper display is embedded into the exterior of the laptop to provide consumers with more novel experiences and once again receives great interest from the market. Not only that, single-screen ePaper enabled smart phone will also be launched soon as a product that leverages both the convenience of portability of smart phones and the characteristic of ease-to-read of ePaper display. Wearable products will continue to integrate ePaper attributes of always-on without power consumption and outdoor readability with conventional analog wrist watches for the Hybrid watch sector in a bid to pioneer new user experience. We expect to see a series of product launches in the second half of 2019, while Hybrid watches suitable for women will be released in 2020. Other leading brands will be drawn to release their products as well.

(7) ePaper Digital Signage

In the IoT world where information is ubiquitous, it is extremely valuable to provide useful and precise information at the right moment. Under such premises, ePaper digital signage with low power consumption, highly visible under bright sunlight and paper-like characteristics has secured a highly favorable position in the digital signage market.

Digital Signage can be widely applied in various public places and industries, e.g., public transportation, gas stations, retail stores, museums, libraries, smart education industry, and smart healthcare industry. ePaper Digital Signage system can be driven by solar power supply systems and images can be updated via existing wireless network without the need for cumbersome and costly construction. As such, ePaper digital signage is not only ideal for installations in urban areas but also suitable for installation in remote areas or places with no power grid. The environmental impact is an important consideration for commercial users and governmental agencies during their evaluation of digital signage installation. ePaper's attribute of exceptionally low power consumption makes ePaper digital signage a great green product regarding to environmental sustainability. The design of ePaper digital signage system is simple without the need for components such as fans or air conditioners and can be made thinner, lighter, and easier to install. Under certain circumstances, ePaper digital signage can even be installed onto existing infrastructures, offers immense benefits such as quick installation and reduced total installation and maintenance costs for end customers.

The lifetime of digital signage is mostly for years. Its Total Cost of Ownership (TCO) is the key factor that determines the Return on Investment (ROI). Owing to its extremely low electricity cost, low maintenance fee, easy installation and long-standing reliability, ePaper digital signage serves as a sustainable solution offering both low TCO and excellent outdoor readability. As the demand for digital signage continues to grow plus the product advantages of ePaper display, ePaper digital signage is expected to contribute significantly towards the revenue for the next few years.

Currently, the growing demand for digital signage can be seen mostly in Asia, Europe and North America. Most signs are still made from paper and rely on manual replacement. The need of replacing such paper based signs has propelled the growth of digital signage. In the meantime, ePaper digital signage has secured a great position in this continuously growing digital signage market.

Taking ePaper display as a core, E Ink's partners continue to add on values to ePaper digital signage. We expect the territory of ePaper digital signage will continue expanding, and we will work with customers in different market domains to enhance the visibility of ePaper products and business growth.

4. Competition Situation

E Ink has secured an absolute leading position in the global market of ePaper technology. In the market of eReader, E Ink's EPD owns more than 95% of the market share. The world's major eReader brands such as Amazon and Kobo, all choose E Ink's EPD. The application of ePaper on Electronic Shelf Labels is also gradually replacing LCD products in recent years due to the characteristics and advantages of electronic paper, the penetration rate is increasing year by year. For eNote application, E Ink has partnered with new customers such as Sharp, Kingjim, iFlytek, moaan (Xiaomi eco-system) and Readmoo to release a variety of new products that reinforce our leadership.

E Ink has the foundation of managing this type of markets for many years and excellent research and development teams, so E Ink has undoubtedly a great competitive edge in terms of technology research and product development in the future.

5.1.3 Research and Development Overview

E Ink continued its commitment in the development of EPD products and technologies. In addition to continuously advance the EPD module technology, we are also devoted to the innovation of color EPD technology. Leveraging the know-how of electronic tags, flexible display and touch panel, E Ink continuously offers the market new products. The new products received very positive market feedback. Meanwhile, we expanded the manufacturing capacity to maintain our leadership in the ePaper EPD market.

In 2018, 2019, and 2020 Q1, E Ink's consolidated research and development expense came to NT$ 2.07 billion, NT$ 2.37 billion, and NT$0.59 billion respectively.

(1) ePaper Technology

E Ink Carta™ is the latest generation of the mass-produced ePaper. E Ink Carta™ has the highest reflectivity to date, with 50% higher contrast ratio and 22% higher reflectivity compared to E Ink Pearl™, the previous E Ink ePaper film product. E Ink Carta™ is lightweight, environmentally friendly, and can be comfortably read on for extended periods of time, making it suitable display technology for eReaders, digital dictionaries, reference books, magazines, and other future products to replace the traditional printed paper. E Ink Carta™ allows readers to enjoy the convenience of digital products without sacrificing the reading experience provided by printed paper.

(2) Advanced Color ePaper (ACeP) Technology

E Ink launched ACeP, a high quality, full color reflective display. For the first time ever, an EPD can produce full color gamut without the use of a color filter array by having all the colored pigments in every pixel. ACeP sets a new standard for bright, reflective color achievable with EPDs. This eliminates the light attenuation, which can be quite significant. Like regular E Ink ePaper, ACeP maintains the ultra-low-power and paper-like readability under all lighting conditions.

(3) Three Pigment ePaper Technology

E Ink Spectra™ is a new generation of mass-produced multi-colored E Ink product. In addition to black and white pigments, E Ink Spectra™ includes an additional red or yellow pigment, making it suitable for the application of electronic shelf labels and advertising displays. Retailers can easily change the product prices and enabling dynamic pricing. Moreover, the electronic shelf labels can be remotely activated to display promotion and sale items dynamically. Combining with red or yellow backgrounds, the Spectra based electronic shelf labels can draw consumer's attention to enhance product marketability. E Ink Spectra™ supports both active matrix and segmented systems to meet different retailers' requirement. The three pigment EPD can also be employed for ID cards in industrial, smart card, and medical applications.

(3) Color Changing Film for Architecture and Art Design

E Ink Prism™ is the latest dynamic color display technology ideally suited for architecture and art design applications. Besides being a static display technology without consuming power, E Ink Prism™ can also support dynamic presentation. Coupled with motion sensing, E Ink Prism™ can completely transform a space into an interactive environment. This innovation enables architects and designers to express their ideas by presenting space and surroundings in a unique manner. The revolutionary way of applying E Ink Prism™ gives architects and designers more flexibility and freedom. In a commercial building, a hotel lobby, an airport, a transit station, or a stadium, architects and designers can change the appearance of the venue by E Ink Prism™ to enhance people's perception through color transformation.

(4) Flexible EPD

E Ink Mobius™ is a flexible EPD with flexible plastic backplanes of either amorphous silicon or organic TFT. The flexible display technology enables customers to integrate conformal element into product design, leading to end products with a unique design and function. The flexible EPD device has been mass-produced and introduced in the market. Using a plastic substrate, the flexible EPD module is thinner, lighter, and shatter proof compared to its glass counterpart. Such features become more important as the display grows larger.

We have collaborated with leading companies to develop and mass produce E Ink Mobius™ EPD products, which have received positive feedbacks from the market. Such eco-friendly and power saving E Ink Mobius™ EPD will have great potential to grow in the near future.

(5) Front Light and Touch Panel Technologies

Reading under dim light is a common requirement of eReader, which can be realized by integrating a front light on top of eReaders. In addition, we have developed a color-temperature-modulation technology of the front light, which allows consumers to adjust the color temperature of the eReader from a cooler color to a warmer color, or vice versa, depending on their personal preference.

In addition to the commonly adopted capacitive touch technology, we have been actively working with partners to develop touch panels for EPDs with different technologies and standards. These new touch panel modules not only maintain the reflectivity of EPD, but also offer other design benefits to support new product developments. Pen-writing enabled ePaper display module fulfills the need for annotation and digital note-taking. This feature offering much more convenience than pure eReader.

(6) EPD with Energy Harvesting Technology

The ultra-low power consumption feature of EPD makes it possible to adopt the wireless energy harvesting technology to drive a low-voltage EPD module. The small amount of the electricity generated by wireless transmission is sufficient to drive and refresh the EPD without the need of a battery. The technology supports both the Near Field Connection (NFC) at 13.56 MHz and the ultra-high frequency (UHF) at 915 MHz for short and long distance applications, respectively, which are in complete compliance with the mainstream wireless communication protocols.

For the short distance applications, the EPD modules can be used in eWallets, electronic IDs, as well as luggage tags and smart watches with an NFC receiver. For the long distance application, the EPD with the UHF RFID reader can be used in a transportation system, ESL, logistics tags, warehouse automation system, smart card, smart home, eBulletin, and Digital Signage.

5.1.4 Long-Term and Short-Term Sales Development Plan

1. Short-Term Sales Development Plan
   (1) To follow existing product plans, to promote standardized products, to upgrade the existing products' performance and to provide all-in-one systematic solutions.
   (2) To enhance product quality, to provide more comprehensive manufacturing services so as to win over the custom of more major international players.
   (3) To establish local support services for the US, Europe, China, and Japan, and strengthen distribution

channels.

2. Long-Term Sales Development Plan
   (1) To put research and development resources on ACeP, Flexible, Low-Power technologies and strengthen processing capabilities, while continuing to complete the patent deployment to maintain the leading position.
   (2) To continue promoting the new application market and cultivating on its ecosystem, to integrate the upstream and downstream industries and to jointly develop products and applications with more value and more features.
   (3) To build a highly-efficient marketing operation model, to combine marketing channels, products, research and development, and production for seamless team collaboration that will effectively support the commercial development and facilitate a win-win relationship between E Ink and customers.

5.2 Market, Manufacturing & Sales Overview

5.2.1 Supply, demand, and growth in the ePaper market

Emerging industries and policies in AIoT, cloud computing and 5G are continuing to shape the future of industry development and transformation. For the development of smart cities, new technologies and techniques in particular are driving advances in smart government, smart transport, finance, health, retail, education, logistics, and lifestyle.

ePaper falls under smart display interfaces in the high-tech industry and will continue to provide the optimal human-machine interface in the future as smart living continues to evolve. Being bistable and reflective, its advantages of power efficiency and easy-on-the-eyes will one day be found in all industries and societies around the world.

Demand from the end-user market and industry trends resulted in E Ink making significant business gains in 2019.

First, in terms of smart transport and transportation, the trend towards smart, sustainable cities around the world means E Ink is continuing to work with our ecosystem partners to implement e-paper smart bus stop signs and information displays in Europe, US, Japan, China, and Taiwan. New applications and successes are continuing to roll-in from around the world. Smart bus stop signs that use ePaper technology with its low power consumption can run on solar power alone. There is no need to run power cables to the bus stop, lowering the overall and maintenance costs. ePaper is also clearly legible under the sun so it has tremendous potential for outdoor digital signage.

For smart retail (new retail), demand for ESL is growing steadily with increased application in Europe, U.S., Japanese, and Chinese markets. Southeast Asia and emerging markets are beginning to introduce ESL solutions so the forecast on global market supply-and-demand is continuing to look promising.

At the same time, large and color ePaper signage for sales promotions in retail premises and other in-store promotions is a key business area in the retail vertical for E Ink. E Ink as the ePaper display module supplier and ecosystem partners to co-create front-end hardware such as ESL and ePaper signage. Data shown on ePaper display can be remotely updated over a wireless connection in order to synchronize online/offline prices and sales promotions while using less manpower. Generally speaking, we are very optimistic about the future growth potential of ePaper in the new retail sector.

New ePaper applications were created for smart logistics in 2019. Wireless connectivity, a new battery-free ePaper technology, and the introduction of flexible ePaper as luggage tags in the aviation industry not only boosted safety and efficiency but also delivered value-added benefits through the integration of hardware components and software solutions. An example of this is the ability to track luggage location. The solution is now being trailed by China Eastern airlines and will hopefully be rolled out to more airline customers in the future. Logistics applications such as logistics boxes and smart labels are now being to emerge as well. The vibrant development of the global e-commerce and logistics markets offers a very positive market outlook.

In terms of E Ink's strategy in health care applications, ePaper offers very low power consumption, no glowing light that may disturb patient rest, and easy of reading under different lighting conditions and over extended periods of time by health care workers. The ePaper enabled display systems have now been integrated with wireless technology for connecting to back-end management systems. A number of smart care products have now adopted ePaper as their display interface including ePaper patient information board, patient records, smart medicine cabinet labels, and large medical information display boards. Electronic health records ensures the accuracy of transmitted information and improves the administrative efficiency of medical workers. In addition, given the non-self-emitting nature of ePaper, ePaper based patient information signage provides comfort to patients in wards

For the consumer electronics market, the eReader and eNote markets are growing steadily. In addition to the shift towards larger and waterproof displays, eReaders and eNotes are boosting their competitiveness by providing support for audio books and online library borrowing and returns. In terms of regional markets, the Europe, U.S. markets are relatively mature. Other regional markets are benefiting from an explosive growth in eReader penetration rate that should lead to more eReader sales. Vendors from around the world are continuing to release new models. eNote is continuing to demonstrate its advantage among professional users and smart education applications. ePaper characteristics such as easy-on-the-eyes, realistic handwriting and ultra-low power consumption makes it a suitable display technology for learning and reading over extended periods of time. Its application to students' electronic school bags and exercise books can help reduce weight and comfort reading experience.

The innovative Print Color ePaper technology unveiled by E Ink in 2019 in particular may become a new solution for the e-book and education industry by overcoming the limitations of monochrome displays while retaining the comfort reading experience originally offered by ePaper display technology.

For the mobile consumer market, ePaper is making progress in laptops, mobile phones and smart watches. Its low power consumption, readability in sunlight and support for perforations has led to the creation of new product concepts and benefits in the terminal market.

Introducing ePaper into new industries and business verticals in response to the emerging of the IoT, E Ink worked with its partners to develop the E Ink Hardware TCON T1000 based on the standard MIPI DSI interface in 2019. The new ePaper controller simplifies the communication protocol between the system chipset and ePaper timing controller. A diversified market development strategy will continue to be followed for the optimization of customer and product portfolios.

During 2019, E Ink continued to follow a brand promotion strategy that combined the physical (offline) and digital (online) activities. Our promotional efforts encompassed not only ePaper technology and applications, but also involved working with supply chain, brand vendors, and vertical market customers to promote ePaper for smart applications in order to realize our vision for a sustainable smart city.

As part of our physical promotion strategy E Ink attended tech electronics tradeshows and showcased in CES, SID, Computex and Touch Taiwan. We also attended key vertical market exhibitions such as the China Educational Equipment Exhibition and DIDAC India that tie in closely with our business development. Our partners in the retail, education, transport, and medical fields were also invited to take part in E Inl's booth to promote the smart paperless applications of ePaper together.

For digital marketing and promotion, webinars and online white papers were used for global online promotion. Social networks such as WeChat Official Account, Facebook, LinkedIn, Twitter, and Instagram were also harnessed to promote knowledges of E Ink technology and its applications. We coordinated our promotional efforts with our customers' marketing resources as well to give the target customers and the general public a better understanding of ePaper technology and its applications' characteristics. The boost to recognition of our brand and technology served to drive our business growth.

5.2.2 Competitive niche

After years of research and refinement, E Ink has successfully carved out niche markets in retail, transport, public display, medical, and outdoor applications for itself based on ePaper's ultra-low power consumption, ability to continue to display content while powered off (bi-stability), and clarity when placed outdoors or under strong light. These are applications where LCD and LED display technologies do not enjoy an advantage. Since IoT established itself as a growing trend, the sheer number of IoT products has created a challenge for the global energy supply. Markets expectations on low-power product specifications have become particularly rigorous. ePaper can be used for extended periods of time with very low power consumption. Improvements in the technology can be integrated with green power supply and wireless power technologies to craft low-power ePaper products that enhance the advantage of ePaper products and lead to even more diverse applications in the future.

As a reflective display technology with no back-lighting, no glare, light, thin and flexible, the technical advantages offered by ePaper is drawing increasing attention in the education market. In addition to existing eReaders that have proven popular with the digital reading market and education industry, E Ink has continued to refine our eNote product to improve the pen-writing function in recent years and incorporate a newly developed color technology. The education industry can now enjoy both the convenience of an easy-on-the-eyes electronic school bag but also take advantage of digital color content. The result successfully differentiates our ePaper technology from backlit/self-emitting technologies such as LCD and OLED.

E Ink is continuing to invest in R&D resources. By pooling their expertise in materials, chemistry, electronics and machinery, our researchers overcame technical bottlenecks to develop color ePaper displays and batteryfree ePaper solutions, further expanding applications for ePaper. In the future, we will continue to invest in R&D to enhance the depth of E Ink's technology portfolio and maintain our leadership.

5.2.3 Favorable/Unfavorable factors for long-term development and countermeasures

The growth of IoT and smart city trends has led to the rapid proliferation of IoT devices in commercial and lifestyle settings. In an age of total connectivity, displays serve as the interface between humankind and devices. The bi-stability and reflective display technology of ePaper offers native and competitive advantages such as ultra-low power consumption, non-self-emitting, paper-like properties, readability under bright sunlight, and flexibility. The international education industry now recognizes that illuminated display technologies such as LCD and OLED cause eye fatigue after extended use. If they are used in learning devices for smart education applications, they can cause serious and unrecoverable damage to the eyesight of students who are still growing. Some countries such as China and France have therefore banned the smart phones in schools. China in particular has introduced stress-reducing measures for middle and elementary schools. The goal is to reduce the total number of myopia rate of children and youths throughout the country by 0.5% per year in 2023 compared to 2018. In response to regional policies and market requirements, ePaper from E Ink has a paper-like characteristics and is not illuminated. As the ePaper satisfies both e-learning and eye-comfort requirements it is well positioned for the educational applications market.

In addition, E Ink has leveraged the thin-film technology behind ePaper into new technologies such as JustPrintIt (reusable inkless printing technology), JustWrite (ePaper with pen-writing support) and JustTint (ePaper thin-film with controllable light transmission). These innovative technologies will be turned into new ePaper functions and novel applications.

In terms of unfavorable factors, the main challenge for E Ink was cost reduction in order to meet market expectations and achieve production quantities sufficient to meet demand. In addition to strengthening our internal research, development and design capabilities, E Ink deepens collaborations with our supply chain partners and customers during the early stages of products and related applications development. Such an approach helped to reduce the overall design and development costs. Production costs were reduced through greater use of automation. To increase the production output and yield of E Ink ePaper films, we strengthened our collaboration with material suppliers to ensure that our production capacity and quality could meet market requirements.

5.2.4 Application and production processes of key products

1. Application

E-Paper Display is primarily used as a display device designed for the delivery/presentation of information

2. Production process

FPL (Front Panel Laminate)

Pigments: pigment synthesis

Surface modification, polymer coating, dispersion, particle size screening, property measurement, testing
(preparation ofparticles in micron scale for subsequent processes)

Compounding: chemosynthesis

Compounding/weighing, mixing/reacting, defoaming, property measurement
(The materials used in each layer when producing FPL
Such as the External phase and Inertial phase)

FPL: coating and lamination

IP coating, Liner Lamination, Conversion
(Roll-to-roll FPL production to seal electrophoresis layer on the ITO-PET before it is laminated onto the adhesive and finally cropped into the required sizes)

EPD (E-Paper Display) Module

TFT substrate | FPL

+

Driver IC / OCA / Front Light / Touch Panel

Bonding, Lamination, Assembly
(Lamination, assembly, testing, inspection and relevant processes for different parts and components)

EPD module

5.2.5 Supply status of key raw materials

Key raw materials of EPD includes TFT backplane, touch panel and Driver IC. Each of these raw materials are sourced from no fewer than two primary suppliers, with whom the E Ink has maintained close relationship to ensure steady material supply after the raw materials have been accredited to pertinent standards and requirements. In addition to ensuring adequate supply of materials, E Ink has also implemented stringent measures for quality and delivery to minimize the risk of material shortages.

5.2.6 Major Suppliers and Clients

A. Major Suppliers in the Last Two Calendar Years

Unit: NT$ thousands

Item	2018				2019			
	Company Name	Amount	Percent	Relation with Issuer	Company Name	Amount	Percent	Relation with Issuer
1	E	833,327	12	Associate	A	1,053,529	16	Associate
2	D	811,611	12	None	D	666,407	10	None
3	A	743,538	11	None	E	575,542	9	None
4	Others	4,505,340	65		Others	4,333,666	65	
	Net Total Purchases	6,893,816	100		Net Total Purchases	6,629,144	100	

B. Major Clients in the Last Two Calendar Years

Unit: NT$ thousands

Item	2018				2019			
	Company Name	Amount	Percent	Relation with Issuer	Company Name	Amount	Percent	Relation with Issuer
1	I	4,476,536	32	None	I	3,211,841	24	None
2	P	2,511,470	18	None	F	2,513,417	18	None
3					P	2,052,854	15	None
4	Others	7,220,655	50		Others	5,823,564	43	
	Net Sales	14,208,661	100		Net Sales	13,601,676	100	

5.2.7 Production in the Last Two Years

Unit: NT$ thousands

Year / Output / Major Products	2018			2019		
	Capacity	Quantity	Amount	Capacity	Quantity	Amount
Monitors	30,603	17,139	6,707,032	39,595	17,385	7,115,273

5.2.8 Shipments and Sales in the Last Two Years

Unit: NT$ thousands

Year / Shipments & Sales / Major Products	2018				2019			
	Local		Export		Local		Export	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Monitors	1,053	1,840,872	19,357	12,367,789	727	1,181,943	23,535	12,419,733

5.3 Human Resources

Year		2018	2019	Data as of ending data in the current year
Number of Employees	Manager level	377	352	369
	IDL(non-manager)	1,168	1,125	1,086
	DL	1,064	998	931
	Total	2,609	2,475	2,386
Average Age		34.66	34.66	35.84
Average Years of Service		5.30	5.30	6.51
Education	Ph.D.	3.65%	3.8%	4.0%
	Masters	17.85%	18.1%	18.5%
	Bachelor's Degree	46.19%	38.9%	39.8%
	Senior High School	21.58%	33.7%	30.4%
	Below Senior High School	10.73%	5.4%	7.4%

5.4 Information on environmental protection expenditure

Loss from pollution to the environment (including the compensation) and penalty in the most recent year to the date this report was printed, explain the policy in response in the future (including corrective action plan) and possible expenses (including the estimated amount of possible loss, penalty and compensation due to the failure of the remedy. If estimation could not be reasonably estimated, explain with evidence):

5.4.1 Loss from pollution to the environment in the most recent year to the date this report was printed: nil.

5.4.2 Remedy and possible spending in the future: Intensify the matching between the environmental protection permission documents and the practice of environmental protection on shop floor, and implement the proper change in the management program for facilitating audits.

E Ink treasures issues pertinent to environmental protection. Further to the effort in anti-pollution, the Company also duly observes domestic laws governing the standard of emissions, retains qualified waste disposal and treatment plant for handling wastes, assures the proper classification of wastes, and upgrades the recycling rate of resourceful wastes. The Company also follows the environmental protection files in setting up facilities for the treatment of air and water pollutants in conformity to the emission standards governed by applicable laws in Taiwan. There is no other expense further to the aforementioned expenses incurred from the maintenance and operation of the environmental protection facilities.

5.5 Labor Relations

5.5.1 Employee welfare and benefits, training, development, retirement scheme and its implementation, labor-management agreements, and protection of employee rights:

1. Employee welfare and benefits
   (1) Employee benefits are managed by the Employee Welfare Committee. Social events are organized on a regular basis to help employees recover from the stress of work.
   (2) In addition to labor insurance, E Ink employees also receive group life, accident, medical and cancer-prevention insurance, national health insurance and regular health exams to provide them with additional layers of protection.
   (3) The company budgets for employee education and training every year to help employees improve their management and professional skills as well as provide employees with a personalized career development plan.
   (4) To build a people-centric management system, management rules are revised when necessary based on labor standards and changes in the business environment.
   (5) Reasonable compensation and incentives are provided to recruit competitive workers.
   (6) Clear channels of advancement are provided for outstanding personnel.
   (7) Regular labor-management meetings are convened to communicate with employees.
2. Employee education and training

   E Ink employees are considered the company's most important asset. A strong emphasis is placed on the cultivation and training of talent. Various education and training systems are offered to satisfy the learning requirements of employees. Comprehensive educational resources and a sound learning environment are provided so that employees can improve their own skills through education and training. The overall quality of company personnel will continue to increase.

   E Ink plans to introduce an "e-Learning System" that will develop a training map for people in each field and provide them with specialized training plans in 2018. The training courses will be divided into the six main categories:
   (1) Orientation course: Compulsory training for everyone in the company. The contents cover introduction to the company, corporate image, company products and principles, personnel management rules, employee benefits, business code of conduct (theory) and industrial safety education & training.
   (2) General knowledge course: Help teams develop their core competency and provide progressive learning courses for people of all ranks.
   (3) Professional course: Cultivate key talents and boost the competitiveness of the organization through talent development. Use e-learning platform for knowledge management and combined them with internal professional training conducted by each unit to pass on past experience and build an environment for continuous learning.
   (4) Management course: Design management training targeted at management weaknesses based on the results of performance evaluations. The education and training will include: innovative thinking, management skills, strategic goal management, unit performance management and execution management.
   (5) Group English course: To improve the ability of employees to communicate internationally in English, English requirements for promotions, group courses and TOIEC exam subsidies were integrated to create an environment conducive to English learning.
   (6) Production line personnel training: Provide technicians on the production line with the knowledge they need as well as the necessary exams to ensure they are licensed to operate the machinery. These include: Introduction to TFT/EPD Defects, front-end/back-end machine operations and certification training, training on ionizing free radiation, electro-static (ESD) prevention management, clean-room management rules and testing.
3. Employee Code of Conduct or Ethics

   E Ink has always embraced a philosophy of "putting people first." In addition to respecting our employees for their expertise, we also provide them with a stage where they can truly show-off their talents. HR must therefore provide new employees with the relevant company rules upon arrival and ask them to live by those rules.
4. Employee safety and health

   The "safety" and "health" of employees has always been a key issue for E Ink. We've not only received international certification on OHSAS 18001 Professional Safety and Health Management System but also received international certification on the ISO 14001 Environmental Management System. For employee health management, employee health exams are conducted on a regular basis as required by law. Coverage of the health exams exceeds mandatory protections for worker health.

5.5.2 Retirement scheme and its implementation.

The employee retirement rules were developed based on the "Labor Standards Act": and "Labor Pension Act." Monthly contributions are made to the pension preparatory fund at the Bank of Taiwan in accordance with the "Labor Standards Act". Employee pensions are paid directly to their personal account as required by the “Labor Pension Act." The new and old pension systems above are both carried out in accordance with the law.

5.5.3 Labor-Management Disputes:

The measures and rules regarding the implementation of labor relations shall be carried out in accordance with the relevant laws.

5.5.4 Estimation of current and potential future losses suffered by the company due to labor-management disputes in the last two years and up to the publication of this report, and the measures taken in response: Not applicable.

5.6 Important Contracts

Nature of contract	Counterparty	Contract start and end dates	Main details	Restrictive clauses
Technology and patent licensing	Company A	As specified in the contract	ePaper display related technology	Nil.
Reciprocal patent licensing	Company B	As specified in the contract	Reciprocal patent licensing	As specified in the reciprocal patent licensing agreement
Reciprocal patent licensing	Company C	As specified in the contract	Reciprocal patent licensing	As specified in the reciprocal patent licensing agreement
Reciprocal patent licensing	Company D	As specified in the contract	Reciprocal patent licensing	As specified in the reciprocal patent licensing agreement
Reciprocal patent licensing	Company E	As specified in the contract	Reciprocal patent licensing	As specified in the reciprocal patent licensing agreement
Reciprocal patent licensing	Company F	Confidentiality clause that prohibits public disclosure	Reciprocal patent licensing	As specified in the reciprocal patent licensing agreement
Land lease	Hsinchu Science Park Administration	2014/7/1~2033/12/31	Lease of plant land	Unless agreed by the Science Park Administration, the Company shall not sublet or in any way allow others to use part or all of the leased land, or use the land for non-agreed or illegal purposes.
Reciprocal patent licensing	Company G	Confidentiality clause that prohibits public disclosure	Reciprocal patent licensing	As specified in the reciprocal patent licensing agreement

VI. Financial Information

6.1 Five-Year Financial Summary

6.1.1 Stand-alone Condensed Balance Sheet – Based on IFRS

Unit: NT$ thousands

Year / Item		Financial Information for The Last Five Years (Note 1)					As of March 31,20120
		2015	2016	2017	2018	2019	
Current assets		5,719,032	5,811,675	7,259,317	6,919,381	6,469,248	Not Applicable
Property, Plant and Equipment		1,770,660	1,511,731	1,435,385	1,376,998	1,330,352	
Intangible assets		123,694	198,165	209,607	254,224	246,717	
Other non-current assets		25,598,659	25,291,037	25,327,895	26,783,798	29,620,847	
Total assets		33,212,045	32,812,608	34,232,204	35,334,401	37,667,164	
Current liabilities	Before distribution	6,507,735	5,666,215	7,194,655	7,259,294	7,695,999	
	After distribution	7,043,755	7,346,917	9,048,205	9,632,732	(Note 2)	
Non-current liabilities		24,499	56,378	105,051	146,462	971,026	
Total liabilities	Before distribution	6,532,234	5,722,593	7,299,706	7,405,756	8667,025	
	After distribution	7,068,254	7,403,295	9,153,256	9,779,194	(Note 2)	
Total equity		26,679,811	27,090,015	26,932,498	27,928,645	29,000,139	
Capital stock		11,404,677	11,404,677	11,404,677	11,404,677	11,404,677	
Share capital		10,071,578	10,071,683	10,108,119	10,243,293	10,306,993	
Retained earnings	Before distribution	4,122,865	5,485,499	5,621,362	6,721,050	7,428,382	
	After distribution	3,586,845	3,804,797	3,767,812	4,347,612	(Note 2)	
Other equity		1,080,691	488,620	106,609	(255,475)	(29,881)	
Treasury stock		-	(360,464)	(308,269)	(184,900)	(110,032)	
Non-controlling interests		-	-	-	-	-	
Total equity	Before distribution	26,679,811	27,090,015	26,932,498	27,928,645	29,000,139	
	After distribution	26,143,791	25,409,313	25,078,948	25,555,207	(Note 2)	

Note 1: Below financial information is based on the audited financial statements of the corresponding year.

Note 2: The appropriations of earnings for 2019 were approved by the board of directors and finalized after the resolution of the shareholders' meeting of 2020.

6.1.2 Consolidated Condensed Balance Sheet – Based on IFRS

Unit: NT$ thousands

Item \ Year		Financial Information for The Last Five Years (Note 1)					As of March 31, 2020 (Note 3)
		2015	2016	2017	2018	2019	
Current assets		13,730,805	14,707,222	17,747,740	18,870,925	21,634,060	20,132,830
Property, Plant and Equipment		6,497,167	5,319,822	4,752,982	4,521,441	4,104,317	4,028,806
Intangible assets		9,461,830	9,178,475	8,591,789	8,526,053	8,107,841	8,059,095
Other non-current assets		3,735,424	4,208,044	4,783,409	4,995,689	7,774,731	8,679,505
Total assets		33,425,226	33,413,563	35,875,920	36,914,108	41,620,949	40,900,236
Current liabilities	Before distribution	6,036,805	5,143,950	6,871,552	6,569,117	9,206,675	9,263,169
	After distribution	6,572,825	6,824,652	8,725,102	8,942,555	(Note2)	(Note 2)
Non-current liabilities		804,891	1,180,474	1,777,473	2,030,547	2,961,490	2,759,996
Total liabilities	Before distribution	6,841,696	6,324,424	8,649,025	8,599,664	12,168,165	12,023,165
	After distribution	7,377,716	8,005,126	10,502,575	10,973,102	(Note2)	(Note 2)
Total equity attributable to owners of the company		26,679,811	27,090,015	26,932,498	27,928,645	29,000,139	28,416,955
Share capital		11,404,677	11,404,677	11,404,677	11,404,677	11,404,677	11,404,677
Capital surplus		10,071,578	10,071,683	10,108,119	10,243,293	10,306,993	10,306,993
Retained earnings	Before distribution	4,122,865	5,485,499	5,621,362	6,721,050	7,428,382	8,215,642
	After distribution	3,586,845	3,804,797	3,767,812	4,347,612	(Note2)	(Note 2)
Other equity		1,080,691	488,620	106,609	(255,475)	(29,881)	(1,400,325)
Treasury stock		-	(360,464)	(308,269)	(184,900)	(110,032)	(110,032)
Non-controlling interests		(96,281)	(876)	294,397	385,799	452,645	460,116
Total equity	Before distribution	26,583,530	27,089,139	27,226,895	28,314,444	29,452,784	28,877,071
	After distribution	26,047,510	25,408,437	25,373,345	25,941,006	(Note2)	(Note 2)

Note 1: Below financial information is based on the audited financial statements of the corresponding year.

Note 2: The appropriations of earnings for 2019 were approved by the board of directors and finalized after the resolution of the shareholders' meeting of 2020.

Note 3: Below financial information is not based on the audited financial statements.

6.1.3 Stand-alone Condensed Statement of Comprehensive Income – Based on IFRS

Unit: NT$ thousands

Item / Year	Financial Information for The Last Five Years (Note 1)					As of March 31, 2020
	2015	2016	2017	2018	2019	
Operating revenue	12,501,126	13,112,855	13,905,359	12,773,679	12,860,810	Not Applicable
Gross profit	1,973,787	1,740,245	2,648,799	2,191,574	2,145,456	
Income from operations	511,724	130,769	934,774	256,550	94,492	
Non-operating income and expenses	122,021	1,830,786	1,297,179	2,410,833	3,041,011	
Income before income tax	633,745	1,961,555	2,231,953	2,667,383	3,135,503	
Net income (loss) for the year	539,330	1,907,939	2,078,065	2,613,673	3,083,789	
Other comprehensive income (loss) (income after tax)	(483,569)	(601,356)	(387,910)	(377,654)	222,575	
Total comprehensive income for the year	55,761	1,306,583	1,690,155	2,236,019	3,306,364	
Earnings per share (Note 2)	0.47	1.69	1.85	2.32	2.72	

Note 1: Below financial information is based on the audited financial statements of the corresponding year.

Note 2: Earnings per share are based on the weighted average number of shares outstanding of the corresponding year.

6.1.4 Consolidated Condensed Statement of Comprehensive Income – Based on IFRS

Unit: NT$ thousands

Item \ Year	Financial Information for The Last Five Years (Note 1)					As of March 31, 2020 (Note 3)
	2015	2016	2017	2018	2019	
Operating revenue	13,306,503	14,006,206	15,203,334	14,208,661	13,601,676	2,922,127
Gross profit	4,148,730	5,120,546	6,284,416	5,930,176	6,038,586	1,349,277
Income from operations	(449,217)	60,588	1,102,387	457,165	559,811	68,237
Non-operating income and expenses	3,196,182	2,347,936	2,235,624	2,802,103	3,161,656	820,376
Income before income tax	2,746,965	2,408,524	3,338,011	3,259,268	3,721,467	888,613
Net income from continuing operations	2,429,173	2,057,909	2,932,298	2,692,076	3,173,597	812,868
Loss from discontinued operations	(1,861,568)	(64,588)	(849,968)	-	-	-
Net income (loss) for the year	567,605	1,993,321	2,082,330	2,692,076	3,173,597	812,868
Other comprehensive income (loss) (income after tax)	(481,085)	(591,333)	(368,115)	(380,558)	199,613	(1,388,581)
Total comprehensive income for the year	86,520	1,401,988	1,714,215	2,311,518	3,373,210	(575,713)
Net income attributable to owners of the company	539,330	1,907,939	2,078,065	2,613,673	3,083,789	787,260
Net income attributable to non-controlling interests	28,275	85,382	4,265	78,403	89,808	25,608
Total comprehensive income attributable to owners of the company	55,761	1,306,583	1,690,155	2,236,019	3,306,364	(583,184)
Total comprehensive income attributable to non-controlling interests	30,759	95,405	24,060	75,499	66,846	7,471
Earnings per share (Note 2)	0.47	1.69	1.85	2.32	2.72	0.69

Note 1: Below financial information is based on the audited financial statements of the corresponding year.
Note 2: Earnings per share are based on the weighted average number of shares outstanding of the corresponding year.
Note 3: Below financial information is not based on the audited financial statements.

Auditors' Opinions from 2015 to 2019

Year	Accounting Firm	CPA	Audit Opinion
2015	Deloitte Touche Tohmatsu Limited	Ya-ling Weng /Chih-Ming Shao	unqualified opinion
2016	Deloitte Touche Tohmatsu Limited	Ya-ling Weng /Chih-Ming Shao	unqualified opinion
2017	Deloitte Touche Tohmatsu Limited	Ya-ling Weng /Chih-Ming Shao	unqualified opinion
2015	Deloitte Touche Tohmatsu Limited	Ya-ling Weng /Chih-Ming Shao	unqualified opinion
2019	Deloitte Touche Tohmatsu Limited	Huimin Huang /Chih-Ming Shao	unqualified opinion

6.2 Five-Year Financial Analysis

A. Financial Analysis — Unconsolidated-Based on IFRS

Item	Year	Financial Analysis for the Last Five Years					As of March 31, 2020
		2015	2016	2017	2018	2019	
Financial structure (%)	Debt Ratio	19.67	17.44	21.32	20.96	23.01	Not applicable
	Ratio of long-term capital to property, plant and equipment	1,508.16	1,795.72	1,883.64	2,038.86	2,252.87	
Solvency (%)	Current ratio	87.88	102.57	100.9	95.32	84.06	
	Quick ratio	71.17	84.73	72.88	70.64	61.54	
	Interest earned ratio (times)	11.14	117.73	229.42	187.41	83.98	
Operating performance	Accounts receivable turnover (times)	3.78	3.74	3.34	3.04	3.41	
	Average collection period	97	98	110	121	107	
	Inventory turnover (times)	11.61	12.87	7.95	5.89	6.42	
	Accounts payable turnover (times)	2.06	2.47	2.06	2.07	2.76	
	Average days in sales	32	29	46	62	57	
	Property, plant and equipment turnover (times)	6.64	7.99	9.44	9.08	9.50	
	Total assets turnover (times)	0.35	0.4	0.41	0.37	0.35	
Profitability	Return on total assets (%)	1.64	5.82	6.22	7.55	8.53	
	Return on stockholders' equity (%)	2.02	7.1	7.69	9.53	10.83	
	Pre-tax income to paid-in capital (%)	5.56	17.2	19.57	23.39	27.49	
	Profit ratio (%)	4.31	14.55	14.94	20.46	23.98	
	Earnings per share (NT$)	0.47	1.69	1.85	2.32	2.72	
Cash flow	Cash flow ratio (%)	-14.35	14.40	12.12	0.61	-0.91	
	Cash flow adequacy ratio (%)	56.34	14.18	-22.71	10.42	8.42	
	Cash reinvestment ratio (%)	-2.66	0.79	-2.37	-5.15	-6.72	
Leverage	Operating leverage	1.57	3.27	1.29	2.10	4.39	
	Financial leverage	1.14	1.14	1.01	1.06	1.67	

Analysis of financial ratio differences for the last two years. (Not required if the difference does not exceed 20%)

(1) The reduction in Interest Coverage Ratio was mainly due to the increase in short-term loans and the increase in interest payments.
(2) The increase in the Average Collection Turnover was mainly due to the decrease in the purchase volume in the fourth quarter of fiscal year 2019 which leading to average payables decreased
(3) The reduction in cash flow ratios is mainly due to the increase in operating expenses and capital expenditures.
(4) The increase in Degree of Operating Leverage is mainly due to the decrease in operating net profit.
(5) The increase in Degree of Financial Leverage is mainly due to a decrease in operating net profit and an increase in interest expenses

B. Consolidated Financial Analysis — Consolidated-Based on IFRS

Item	Year	Financial Analysis for the Last Five Years					As of March 31, 2020
		2015	2016	2017	2018	2019	
Financial structure (%)	Debt Ratio	20.47	18.93	24.11	23.3	29.24	29.40
	Ratio of long-term capital to property, plant and equipment	423.03	531.42	604.04	662.60	778.73	773.85
Solvency (%)	Current ratio	227.45	285.91	258.28	287.27	234.98	217.34
	Quick ratio	200.74	252.83	223.88	253.08	211.80	189.23
	Interest earned ratio (times)	10.68	76.18	103.14	114.94	48.07	31.80
Operating performance	Accounts receivable turnover (times)	6.62	8.77	8.36	6.68	6.32	5.65
	Average collection period	56	42	44	55	58	65
	Inventory turnover (times)	5.36	6.15	4.95	4.07	3.91	2.90
	Accounts payable turnover (times)	7.12	8.22	5.34	4.67	6.04	5.00
	Average days in sales	69	60	74	90	94	126
	Property, plant and equipment turnover (times)	1.71	2.37	3.02	3.06	3.15	2.87
	Total assets turnover (times)	0.37	0.42	0.44	0.39	0.35	0.28
Profitability	Return on total assets (%)	1.69	5.78	6.06	7.24	8.03	1.96
	Return on stockholders' equity (%)	2.02	7.10	7.69	9.53	10.83	2.74
	Pre-tax income to paid-in capital (%)	7.52	19.80	21.78	27.89	31.84	7.57
	Profit ratio (%)	4.05	13.62	13.67	18.39	22.67	26.94
	Earnings per share (NT$)	0.47	1.69	1.85	2.32	2.72	0.69
Cash flow	Cash flow ratio (%)	40.75	93.87	80.26	43.44	34.16	3.24
	Cash flow adequacy ratio (%)	156.12	236.02	310.34	222.13	165.17	127.69
	Cash reinvestment ratio (%)	7.12	12.20	11.31	2.81	2.15	0.86
Leverage	Operating leverage	-2.71	22.63	2.06	3.42	3.23	5.40
	Financial leverage	0.84	1.96	1.02	1.07	1.18	1.64

Analysis of financial ratio differences for the last two years. (Not required if the difference does not exceed 20%)

(1) The increase in the Debts ratio is mainly due to the increase in short-term loans.
(2) The reduction in Interest Coverage Ratio was mainly due to an increase in short-term loans and an increase in the number of interest payments.
(3) The increase in the Average Payables Turnover was mainly due to the decrease in purchases in the fourth quarter of fiscal year 2019, so the average payables decreased.
(4) The increase in Net Profit Margin is mainly due to the increase in profit in the fiscal year 2019.
(5) The reduction in various ratios of Cash Flow is mainly due to the increase in operating expenses and capital expenditure.

6.3 The Review Report of the Audit Committee on the financial statements covering the most recent year.

Review Report of the Audit Committee

We express our consent on the separate and consolidated financial statements compiled by the Board of Directors covering the year ended on December 31, 2019. These financial statements were audited by Hui-Min Huang and Chih-Ming Shao, CPAs of Deloitte Taiwan with the issuance of Auditors' Report.

The Board of Directors also presented the 2019 Business Report and Proposal for Distribution of Income of the year for our review. In our opinion, these reports and statements were fairly presented in accordance with applicable legal rules. We present the aforementioned statements and report to the Shareholders Meeting pursuant to Article 14-4 of the Securities and Exchange Act and Article 219 of the Company Act.

2020 Annual General Meeting of Stockholders Meeting

E INK HOLDINGS INC.

Convener of the Audit Committee: Ten Chung Chen

Date: March 18, 2020

6.4 The financial statements covering the last 2 years, including the Auditors' Report, Comparative Balance Sheets, Comparative income Comparative Comprehensive Income Statements, Comparative Statement of Changes in equity, and Comparative Statements of Cash Flows covering the last 2 years and the notes to financial statements: refer to Appendix.

6.5 Audited Separate financial Statements covering the most recent year, excluding the list of important accounting items: refer to Appendix.

6.6 Insolvency of the Company and its affiliates in the most recent year to the date this report was printed, and the influence on the financial position of the Company: nil.

VII. Review of Financial Conditions, Financial Performance, and Risk Management

7.1 Analysis of Financial Status

Unit: NT$ thousands

Year / Item	Dec. 31th, 2019	Dec. 31th,2018	Difference	
			Amount	%
Current assets	21,634,060	18,870,925	2,763,135	14.64%
Property, plant and equipment	4,104,317	4,521,441	-417,124	-9.23%
Intangible assets	8,107,841	8,526,053	-418,212	-4.91%
Other non-current assets	7,771,431	4,995,689	2,778,422	55.62%
Total assets	41,620,949	36,914,108	4,706,841	12.75%
Current liabilities	9,206,675	6,569,117	2,637,558	40.15%
Long-term borrowings	0	44,752	-44,752	-100.00%
Other non-current liabilities	2,961,490	1,985,795	975,695	49.13%
Total liabilities	12,168,165	8,599,664	3,568,501	41.50%
Total equity attributable to owners of the Company	29,000,139	27,928,645	1,071,494	3.84%
Share capital	11,404,677	11,404,677	0	0.00%
Capital surplus	10,306,993	10,243,293	63,700	0.62%
Retained earnings	7,428,382	6,721,050	707,332	10.52%
Other equity	-29,881	-255,475	225,594	-88.30%
Treasury shares	-110,032	-184,900	74,868	-40.49%
Total Net Income Attributable to Shareholders of the non-controlling interests	29,000,139	27,928,645	1,071,494	3.84%
Total Comprehensive Income Attributable to Shareholders of the Parent	452,645	385,799	66,846	17.33%
Total equity	29,452,784	28,314,444	1,138,340	4.02%

Analysis of changes in financial status:
(1) Debit Ratio decreased due to loan standing increased.

(2) Retained earnings increased mainly due to net profit increased.

(3) Other equity increased mainly due to market value fluctuation of the equity investments resulted to unrealized gain.

(4) Treasury shares decreased due to the distribution of shares to employees.

(5) Non-controlling interests raised mainly due to the increase of net profit from not 100% holding subsidiaries.

- **Effect of changes on the company's financial condition:** The Company's financial condition has not changed significantly.
- **Future response actions:** Not applicable.

7.2 Analysis of Operation Results

(1) Financial Analysis

Unit: NT$ thousands

Item \ Year	2019	2018	Difference	
			Amount	%
Operating revenue	13,601,676	14,208,661	-606,985	-4.27%
Operating costs	7,563,090	8,278,485	-715,395	-8.64%
Gross profit	6,038,586	5,930,176	108,410	1.83%
Operating expenses	5,478,775	5,473,011	5,764	0.11%
Income from operations	559,811	457,165	102,646	22.45%
Non-operating income and expenses	3,161,656	2,802,103	359,553	12.83%
Income before income tax from continuing operations	3,721,467	3,259,268	462,199	14.18%
Income tax expense	-547,870	-567,192	19,322	-3.41%
Net income	3,173,597	2,692,076	481,521	17.89%

Analysis of changes in financial ratios:

(1) The increase in Operating Net Profit is mainly due to the impact of product mix and cost optimization.

(2) The increase in Non-Operating Income and Expenses is mainly due to the increase in the income from disposal of Land Use Rights and interest income.

(3) The increase in Net Profit before Tax and the Net Income was mainly due to the increase in Operating Net Profit and Non-Operating Income.

(2) Expected sales volume and basis

The company sets the annual sales target based on the overall industry environment, market supply and demand situation and past operating performance.

(3) Future response actions:

The Company will adjust product portfolio and continue to focus on product optimization and innovation, maintaining technological leadership and product competitiveness in order to expand the market share and enhance the company's profitability.

7.3 Analysis of Cash Flow

7.3.1 Analysis of the changes in cash flows in the most recent year (2018)

Unit: NT$ thousands

Cash balance at the beginning of period ①	Cash flows from operating activities of the period ②	Cash flows from investing activities of the period ③	Cash flows from financing activities of the period ④	The influence of changes in the exchange rate on cash and cash equivalents ⑤	Amount of cash surplus (short) ①+②+③+④+⑤	Remedy for cash short	
						Investment plan	Financing plan
7,695,106	3,144,618	(4,140,829)	608,360	(260,149)	7,047,106	Not applicable	Not applicable

Analysis of the changes in cash flows in the most recent year (2019)

(1) Operating activities: Net cash inflow from operating activities is mainly due to the increase in income related to operating growth.

(2) Investing activities: Net cash outflow from investing activities was mainly due to the increase in Financial Products such as Time Deposits and Funds.

(3) Financing activities: Net cash inflow from financing activities was mainly due to the increase in short-term loans.

7.3.2 Cash Flow Analysis for the Coming Year

The Company expected the cash in book and net cash inflow from operating activities in 2020 is adequate for the retirement of bank loans and payment of cash dividend. Cash flow in the year ahead is strong.

7.4 Major Capital Expenditure Items

7.4.1 Major Capital Expenditure Items and Source of Capital

Unit: NT$ thousands

Project	Actual or Planned Source of Capital	Actual or Planned Date of Completion	Total Capital	Actual or Expected Capital Expenditure				
				2015	2016	2017	2018	2019
Long term equity investment	Equity	2015.06	9,800 (RMB'000)	9,800 (RMB'000)	-	-	-	
Long term equity investment	Equity	2016.01	37,500 (RMB'000)	-	37,500 (RMB'000)	-	-	
Long term equity investment	Equity	2016.06	36,000	-	36,000	-	-	
Long term equity investment	Equity	2016.06	9,800 (RMB'000)	-	9,800 (RMB'000)	-	-	
Long term equity investment	Equity	2017.06	15,000 (RMB'000)	-	-	15,000 (RMB'000)	-	
Long term equity investment	Equity	2017.08	24,000	-	-	24,000	-	
Long term equity investment	Equity	2017.09	340,200	-	-	340,200	-	
Long term equity investment	Equity	2018.01	9,000 (RMB'000)	-	-	-	9,000 (RMB'000)	
Long term equity investment	Equity	2018.06	916,630	-	-	-	916,630	
Long term equity investment	Equity	2019.06	2,942,500 (KRW'000)					2,942,500 (KRW'000)
Long term equity investment	Equity	2019.06	78,000					78,000

7.4.2 Expected Benefits

1. The Company established Linfiny Corporation as a joint venture with Sony Semiconductor Solutions as a long term business strategy. The new JV will leverage both E Ink's development and manufacturing technology for electronic paper displays and Sony's expertise in product development and marketing. It will aim to create new electronic paper display products and systems and grow the market of ePaper based solutions.
2. The Company subscribed shares of SES-imagotag as a reserved capital increase in attempt to strengthen its business through closer partnership with players in the smart retail ecosystem, and accelerate the collaboration with SES-imagotag to expand their common growth objectives in the retail Internet of Things (IoT) market. With SES-imagotag's worldwide, leading expertise on smart retail solutions, E Ink and SES-imagotag will expand the ePaper display applications in the smart retail sector together.
3. Plastic Logic is currently the only company in the industry capable of mass-producing OTFT panels and making use of printed CFA, which was why the Company had joined Plastic Logic in the founding of a joint venture called Plastic Logic HK Limited in 2019 in an attempt to secure additional source of OTFT substrate for the development of colored, flexible e-paper modules and thereby improve competitiveness of eReaders/eNotes. Through this collaboration, we hope to strengthen relationship between the two parties and tap into the R&D resources of Plastic Logic to bring OTFT substrates into mass production and diverse applications such as wearable device and garment, and thereby provide customers with broader selections.
4. In 2019, the Company invested into MiCareo as a venture into the field of non-display sector. By engaging in the production of lab-on-a-chip (LOC) and co-development of metallic molds, the Company may gain the exposure needed to grow OEM service for LOC and explore healthcare applications of its e-paper technology at the same time.

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

7.5.1 Investment Policy in the Last Year

1. Invest in EPD supply chain to reduce production cost and increase capacity for long term development of the Company.
2. The choices of investment targets are primarily determined by its potential contribution to the Company's business development and overseas business growth, with consideration of financial risks and return.

7.5.2 Main Causes for Profits or Losses

Invested businesses as a whole delivered NT$2,806,352,000 in profit in 2019, up NT$686,642,000 from 2018. This increase was mainly attributed to gain on financial instruments and gain on disposal of right-of-use of land by subsidiary.

7.5.3 Improvement Plans & Investment Plans for the Coming Year

Improve Plans: The Company will invest in financial products for hedge purpose to eliminate impact of foreign exchange fluctuation.

Investment Plans for the Coming Year:

The Company will continue to develop new EPD and its applications to expand EPD market share. In order to control investment risk, investment evaluation procedure is required for every equity investment by the Company and its subsidiaries, and investments exceed certain monetary threshold must be approved by the Board of Directors. The Company will work on improving transparency of long term equity investment. The investment targets will be focused on vertical integration, and the Company will strengthen post-investment management for higher return on investment.

7.6 Risks of the most recent year and as of the printing date of this annual report:

7.6.1 The influence of interest rate, exchange rate fluctuation, inflation on the income position of the Company, and the responses in the future:

1. Interest rate:

   The Company actively traded financial instruments in 2019 in response to the falling USD interest. As a result, net interest income increased compared to the previous year.

2. Exchange rate:

   Most of the assets and liabilities of the Company denominated in foreign currencies is in USD. The continued appreciation of US Dollar against Asian currencies resulted in exchange gain to the Company in 2019.

   Responses in the future: The Company insists on the pursuit of stable foreign exchange strategy for the dynamic adjustment of the position of assets and liabilities in foreign currencies matching with appropriate hedge tools to reduce the effect of exchange rate fluctuation on the overall operation of the Company.

3. Inflation:

   Most countries of the world still adopted the QE policy. Global inflation is still moderate that the influence on the profit position of the Company is only marginal.

7.6.2 Undertaking of high risk and high leverage investment, the policies of loaning of funds to a third party, and endorsement/guarantee, the main reason for profit or loss, and the response in the future:

The Company was not engaged in high risk and high leverage investment. In general, the Company does not finance a third party or undertake endorsement/guarantee in favor of a third party except to subsidiaries under the control of the Company or for business reasons. Loaning of funds and endorsement/guarantee shall be subject to review and evaluation in accordance with the “Procedure for Loaning of Funds and Endorsement/Guarantee” in processing. The Company engaged in derivative trade for hedge only and will proceed with the policies and measurement under the “Procedure for the Acquisition or Disposition of Assets” of the Company.

7.6.3 R&D Plan in the future and the projection of expenses for R&D:

The Company will continue the research and development on hand in 5 years ahead in the same direction and will target at large screen size, color, slim and light, touch control, writable and flexible product for ePaper in the area of display. In addition, the Company will continue the development of other displays, such as the Active Matrix OTFT component and invest in the development of backboard technology. With the technological advantages of different forms of displays, the Company will integrate with the specific product requirement of the niche group of customers and could maintain sustainable development in the display industry where keen competition is the order of the day.

Further to the application of the E-Read and the development of related technologies, the Company will broaden the application of ePaper to areas other than display. This will be the gravity and direction of the R&D team. Currently, the ePaper technology of E Ink has yielded result in the area of electronic tag. The R&D tea will respond to the needs of the market and launch related products to respond to the quick development of the area of electronic tag. Effort has also been made in the development of applications in other areas such as the Notebook PC system, IoT devices, smart card, double screen cell phones, and bulletin board. The R&D expenses incurred from the aforementioned programs in the year ahead will account for 15%~19% of the revenue.

7.6.4 The influence of the changes in major policies of the home governments and foreign governments, and the regulatory environment, on the financial position and operation of the Company, and the response:

The Company pays close attention to any change in policies and regulatory environment that may affect the operation of the Company and makes corresponding adjustment to its related internal system.

7.6.5 The influence of technological and industrial change on the financial position and operation of the Company, and the response:

The Company pays close attention to the technological development and change in the display industry and proceeds to evaluate and research and development. Technological change and industrial change did not significantly affect the financial position and operation so far.

7.6.6 The influence of the change in corporate image on corporate crisis management, and the response:

The core value of an enterprise is corporate image and reputation. The buildup of an image and accumulation of reputation was rested with the cornerstone of rapid and effective communication and sincerity. It is not only the responsibility of the enterprise but also the responsibility of all of the enterprise for the effective and efficient response to crisis of the enterprise and minimization of the damage. The officers of the Company are well aware of crisis management and amplify the effect of dissemination so that related agencies or the investors could keep abreast of the dynamic situation of the Company. The long-term support and trust of the investors will be an input to the sustainable development of the enterprise for yielding positive result.

7.6.7 The expected result of merger and acquisition and possible risk, and the response: nil.

7.6.8 The expected result from capacity expansion and possible risk:

Feasibility study has been conducted by a professional technology team on capacity expansion and new facilities of the Company before proceeding.

7.6.9 The risks of over concentration of sale and purchase, and the response:

The Company has pursued a diversification policy for avoiding the risk deriving from over concentration in purchase and sale.

7.6.10 The influence and risk from the massive transfer of equity shares or swap by the Directors, Supervisors, or shareholders holding more than 10% of the shares issued by the Company, and the response:

The Directors, Supervisors and dominant shareholders of the Company are highly convergence towards the Company with fair concentration of shareholding. The risk from the massive transfer of swap of shares is unlikely.

7.6.11 The influence and risk from change hand in ownership, and the response:

The Company has a strong team of professional managers. Change in ownership will unlikely affect the competitive advantage of the Company.

7.6.12 Legal actions or non-contentious matters shall be assured to include major legal actions, non-contentious matters or administrative appeals already trialed with sentence or in proceeding as stated in the financial statements covering the most recent year: nil.

7.6.13 Other major risks and response:

Disclosure of Information Security Risk Assessment

1. Risk prevention and continuity management for back-end information systems:
   (1) Server hardware architecture was designed for hardware redundancy. There is hardware redundancy for everything from server hardware and storage equipment to network architecture to prevent interruption to information system services due to hardware single point of failure.
   (2) The information system is equipped with round-the-clock monitoring and warning mechanism. Real-time monitoring has been introduced for all information systems. If there is a system problem then system administrators can be alerted to carry out troubleshooting ASAP.
   (3) The information system is provided with automated scheduling and off-site data backup mechanisms. The primary E-Ink data center is located at the Hsinchu plant while the backup center is at Linkou plant. Both plants have identical backup systems and mechanisms. Automated scheduling carries out a back-up of the information systems in their respective server rooms every day. Once the backup is complete, the backup system at each plant makes a copy of each other's data. The status of all backups and copies made within the last 24 hours are then automatically reported at 2PM each day.
   (4) There are off-site backup servers for the primary information system and database. The architecture of the primary information systems and databases such as the ERP system is designed to support off-site backup servers. When these systems suffer an unexpected disaster and services cannot be restored right away, the off-site backup servers can be activated to provide continuity of service. Limitations of database operations mean that the data on the live system and backup servers may be out of sync by one hour.
   (5) Data stored by off-site backup may be out of sync by one day. The copying mechanism for off-site data backup is a scheduled for automatic daily execution so the off-site backup may be out of sync by up to one day.

2. Emergency response and crisis management: E-Ink has defined a rigorous emergency response procedure for

system problems. A post-disaster recovery exercise is conducted for the primary systems every year to ensure that employees can handle emergencies in a calm and orderly manner without panicking. After each incident, a post-disaster recovery exercise review is also held and logged for future reference. The information is used to improve operator familiarity and minimize the time need for disaster recovery.

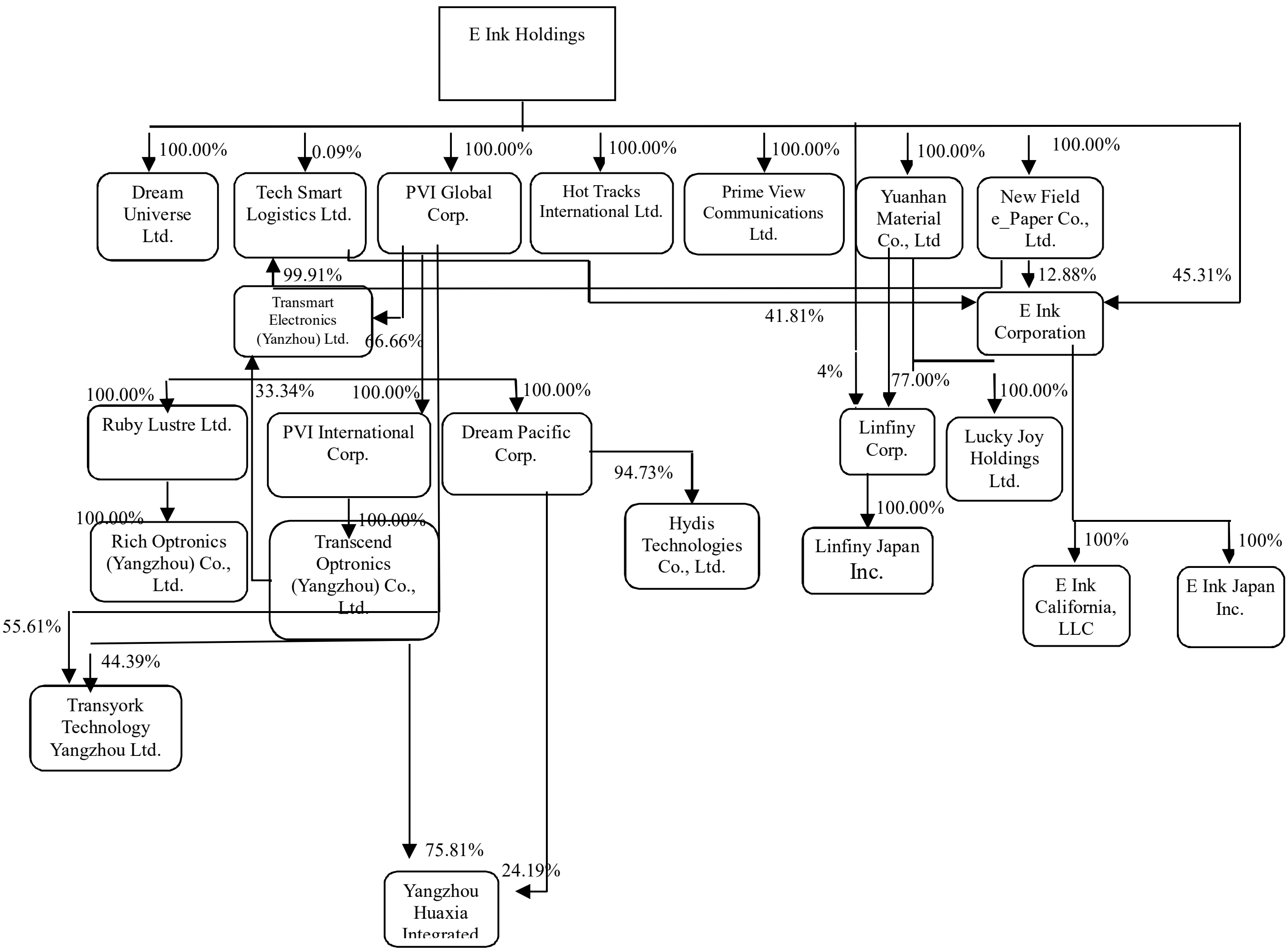
3. Continuity management and information security controls for front-end information equipment:
   (1) The wired network is equipped with network access security controls that prevent unauthorized computers from maliciously connecting to the internal network and accessing the internal company information.
   (2) Strict device and account authentication measures are in place for the wireless network to prevent unauthorized devices from accessing the internal network as well.
   (3) Strict information security controls are installed for computer terminals. In addition to hardware encryption, strict controls and application procedures have been put into place for USB ports, software installation, and the access of network or cloud storage devices.
   (4) The necessary security controls have been put into place for managing smart mobile devices used as mobile offices. These not only meet the mobile office needs of employees but also provide the necessary information security controls.
   (5) Devices with Internet access are equipped with online behavior management and virus protection mechanisms. The websites that employees can access are also filtered. The age of the system however means it may provide insufficient protection against constantly evolving web services, computer viruses, phishing attacks, hacker attacks and online scams.
   (6) An e-mail protection system has been set up to filter out computer viruses, phishing attacks, hacker attacks and online scams spread through e-mail.
   (7) Apart from the above system protections, the information security unit conducts educates employees to raise their awareness on potential threats and proper methods of use in order to reduce information security risks to the company.

IV. Special Disclosure

8.1 Summary of Affiliated Companies

8.1.1 Summary of Affiliated Companies

December 31, 2019



8.1.2 Basic Information of Affiliated Companies

December 31, 2019/In NT$'000 unless otherwise specified

Company Name	Date of Inception	Address	Registered Capital	Main Business or Production
Yuanhan Material Co., Ltd.	2000.05.29	15F, No. 51, Sec. 2, Chongqing S. Rd., Zhongzheng Dist., Taipei City 100, Taiwan	1,838,192	Sale & development of electronic components and material and EPD
New Field e_Paper Co., Ltd.	2009.06.01	No. 199 Huaya Road 2,Kweishan Taoyan Taiwan	6,710,323	Sale & distribution of electronic components and material
Linfiny Corporation	2017.04.11	No. 199 Huaya Road 2,Kweishan Taoyan Taiwan	420,000	Sale and Development of EPD
Linfiny Japan Inc.	2017.04.27	1-24-2, Taito, Taito District, Tokyo, Japan	20,000 (JPY'000)	Development of EPD
E Ink Corporation	1997.04.02	1000 Technology Park Drive, Billerica, Massachusetts, United States of America	US$2	Manufacturing and Development of EPD
E Ink California, LLC	2014.07	47485 Seabridge Dr., Fremont, CA, 94538, USA	190 (US$'000)	Sale and Development of EPD
E Ink Japan	2014.12.04	2F,Dai 12 Daitetsu Bldg., 3-12, Yotsuya 4-chome, Shinjuku-ku, Tokyo	10,000 (JPY'000)	Development of EPD
PVI Global Corp.	2002.04.30	Palm Grove House, P.O. BOX 438, Road Town, Tortola, British Virgin Islands	99,496 (US$'000)	Investment
PVI International Corp.	2002.04.30	Palm Grove House, P.O. BOX 438, Road Town, Tortola, British Virgin Islands	151,300 (US$'000)	International Trading
Prime View Communications Ltd.	2002.04.11	2/F., SHATIN INDUSTRIAL BUILDING, 22-28 WO SHUI STREET,FOTAN, SHATIN,N.T., HONG KONG	3,570 (HK$'000)	International Trading
Hot Tracks International Ltd.	2002.12.11	Palm Grove House, P.O. BOX 438, Road Town, Tortola, British Virgin Islands	50 (US$'000)	International Trading
Tech Smart Logistics Ltd.	2002.12.11	Palm Grove House, P.O. BOX 438, Road Town, Tortola, British Virgin Islands	151,550 (US$'000)	International Trading
Dream Universe Ltd.	2004.03.31	3rd Floor, Raffles Tower,19 Cybercity, Ebene, Republic of Mauritius	4,050 (US$'000)	International Trading
Ruby Lustre Ltd.	2003.01.03	Palm Grove House, P.O. BOX 438, Road Town, Tortola, British Virgin Islands	30,000 (US$'000)	Investment
Dream Pacific International Corp.	2004.03.31	Palm Grove House, P.O. BOX 438, Road Town, Tortola, British Virgin Islands	26,000 (US$'000)	Investment
Lucky Joy Holdings Ltd.	2007.02.05	Equity Trust Chambers, P.O.BOX 3269, Apia, Samoa	1,098 (US$'000)	Investment
Transcend Optronics (Yangzhou) Co., Ltd.	2002.04.30	NO.8,Wuzhou West Road, Economic and Technological Development Zone, YANGZHOU, P.R.China	151,300 (US$'000)	Assembly and sale of module
Rich Optronics (Yangzhou) Co., Ltd.	2004.03.31	NO.8,Wuzhou West Road, Economic and Technological Development Zone, YANGZHOU, P.R.China	30,000 (US$'000)	Assembly and sale of module

Company Name	Date of Inception	Address	Registered Capital	Main Business or Production
Yangzhou Huaxia Integrated O/E System Co., Ltd.	2002.11.18	No.518 South Yangzejiang Road, Yangzhou, P.R.China	18,600 (US$'000)	Sale and Manufacturing of LED
Hydis Technologies Co., Ltd.	2002.11.25	Urbanbench Building 9F, 325,Teheran-ro,Gangnam-gu, Seoul, Republic of Korea	19,967,175 (KRW'000)	Development of Display Devices and patent licensing
Transmart Electronics (Yangzhou) Ltd.	100.03.04	NO.8,Wuzhou West Road, Economic and Technological Development Zone, YANGZHOU, P.R.China	9,916 (US$'000)	Sale and Development of Display Devices
Transyork Technology Yangzhou Ltd.	100.03.04	No.9 South Yangzejiang Road, Yangzhou, P.R.China	71,931 (US$'000)	Assembly and sale of module

8.1.3 Shareholder information of affiliates to which the Company exercise control: None.

8.1.4 Industries covered by business of all affiliated companies

Company Name	Main Business or Production	Allocation of Function
Yuanhan Material Co., Ltd.	Sale & development of electronic components and material and EPD	Sale & development of Electronic Material
New Field e_Paper Co., Ltd.	Sale & distribution of electronic components and material	Not Applicable
Linfiny Corporation	Sale and Development of EPD	Sale and Development of Electronic Material
Linfiny Japan Inc.	Development of EPD	Development of Electronic Material
E Ink Corporation	Manufacturing and Development of EPD	Sale, Manufacturing and Development of Electronic Components
E Ink California, LLC	Sale and Development of EPD	Sale and Development of Electronic Material
E Ink Japan	Development of EPD	Development of Electronic Material
PVI Global Corp.	Investment	Not Applicable
PVI International Corp.	International Trading	Sale of Parent Company's Products
Prime View Communications Ltd.	International Trading	Sale of Parent Company's Products
Hot Tracks International Ltd.	International Trading	Not Applicable
Tech Smart Logistics Ltd.	International Trading	Not Applicable
Dream Universe Ltd.	International Trading	Not Applicable
Ruby Lustre Ltd.	Investment	Not Applicable
Dream Pacific International Corp.	Investment	Not Applicable
Lucky Joy Holdings Ltd.	Investment	Not Applicable
Transcend Optronics (Yangzhou) Co., Ltd.	Assembly and sale of module	Manufacturing and sale of Parent Company's Products
Rich Optronics (Yangzhou) Co., Ltd.	Assembly and sale of module	Manufacturing and sale of Parent Company's Products
Yangzhou Huaxia Integrated O/E System Co., Ltd.	Sale and Manufacturing of LED	Not Applicable
Hydis Technologies Co., Ltd.	Development of Display Devices and patent licensing	Development of Display Devices and patent licensing
Transmart Electronics (Yangzhou) Ltd.	Sale and Development of Display Devices	Sale and Development of Display Devices
Transyork Technology Yangzhou Ltd.	Assembly and sale of module	Manufacturing and sale of Parent Company's Products

8.1.5 Directors, statutory auditor(s) and President of each affiliated companies

Mar.31, 2020

Company Name	Title	Representatives	Ownership	
			Number of Shares	Percentage
Yuanhan Material Co., Ltd.	Director	Luke Chen, Johnson Lee, CC Tsai	183,819,268	100%
	Statutory Auditor	Patrick Chang		
New Field e_Paper Co., Ltd.	Director	Lloyd Chen, Johnson Lee, CC Tsai	671,032,318	100%
	Statutory Auditor	Patrick Chang		
Linfiny Corporation	Director	Johnson Lee, CC Tsai, FY Gan, Luke Chen, Jacqueline Wang , Kunihiro Shioura, Terushi Shimizu	34,020,000	81%
	Statutory Auditor	Patrick Chang		
Linfiny Japan Inc.	Director	Johnson Lee, Keisuke Hashimoto, Kunihiro Shioura	3,240	81%
	Statutory Auditor	Patrick Chang		
E Ink Corporation	Director	SC Ho, Johnson Lee, CC Tsai, Luke Chen, Paul Apen	2,282	100%
E Ink California, LLC	General Manager	FY Gan	27,400,000	100%
E Ink Japan, Inc.	Director	Naoki Sumita, Johnson Lee, Patrick Chang	200	100%
PVI Global Corp.	Director	Johnson Lee, Lloyd Chen	99,413,176	100%
PVI International Corp.	Director	Johnson Lee, Lloyd Chen	151,300,000	100%
Prime View Communications Ltd.	Director	Johnson Lee, Amanda Tseng	3,570,000	100%
Hot Tracks International Ltd.	Director	Johnson Lee, Amanda Tseng	50,000	100%
Tech Smart Logistics Ltd.	Director	Johnson Lee, Patrick Chang	1,749,801,748	100%
Dream Universe Ltd.	Director	Luke Chen, Patrick Chang	4,050,000	100%
Ruby Lustre Ltd.	Director	Luke Chen, Patrick Chang	30,000,000	100%
Dream Pacific International Corp.	Director	FY Gan, Patrick Chang	26,000,000	100%
Lucky Joy Holdings Ltd.	Director	FY Gan, Patrick Chang	1,097,892	100%
Transcend Optronics (Yangzhou) Co., Ltd.	Director	Johnson Lee, Luke Chen, Mano Lo	-	100%
	Statutory Auditor	Patrick Chang		
	General Manager	Peter Peng		
Rich Optronics (Yangzhou) Co., Ltd.	Director	Johnson Lee, Luke Chen, Peter Peng	-	100%
	Statutory Auditor	Patrick Chang		
	General Manager	Peter Peng		

Company Name	Title	Representatives	Ownership	
			Number of Shares	Percentage
Yangzhou Huaxia Integrated O/E System Co., Ltd.	Director	Johnson Lee, Luke Chen, Patrick Chang	-	100%
	Statutory Auditor	Selena Lien		
	General Manager	Patrick Chang		
Hydis Technologies Co., Ltd.	Director	Johnson Lee, FY Gan, Lloyd Chen, Cecil Liu	3,783,265	94.73%
	Statutory Auditor	Patrick Chang		
	General Manager	Cecil Liu		
Transmart Electronics (Yangzhou) Ltd.	Director	Johnson Lee, Luke Chen, Peter Peng	-	100%
	Statutory Auditor	Patrick Chang		
	General Manager	Peter Peng		
Transyork Technology Yangzhou Ltd.	Director	Johnson Lee, Luke Chen, Mano Lo	-	100%
	Statutory Auditor	Patrick Chang		
	General Manager	Peter Peng		

8.1.6 Operation Overview of Affiliated Companies

Company Name	Currency	Registered Capital	Total Assets	Total Liabilities	Net Asset Value	Revenue	Operating Profit/Loss	Net Profit/Loss	EPS
New Field e_Paper Co., Ltd.	NT$'000	6,710,323	5,477,194	551	5,476,644	0	(558)	(126,683)	(0.19)
E Ink Corporation	US$'000	2(US$)	166,492	77,321	89,171	109,587	(1,023)	2,060	902.72
E Ink California, LLC	US$'000	190	26,869	4,404	22,465	15,521	3,458	3,201	0.12
E Ink Japan Inc.	JP¥'000	10,000	145,514	97,317	48,197	361,045	17,556	17,905	89,525.00
PVI Global Corp.	US$'000	99,496	431,158	536	430,622	0	(1,297)	77,673	0.78
PVI International Corp.	US$'000	151,300	115,110	9,442	105,668	0	(4)	8,902	0.06
Prime View Communications Ltd.	HK$'000	3,570	131,337	124,146	7,191	0	(83)	101	0.03
Hot Tracks International Ltd.	US$'000	50	2	0	2	0	0	0	0.01
Tech Smart Logistics Ltd.	US$'000	151,550	148,359	5,248	143,111	0	(2)	(3,058)	(0.00)
Dream Universe Ltd.	US$'000	4,050	13,318	893	12,425	0	(3)	270	0.07
Ruby Lustre Ltd.	US$'000	30,000	25,952	0	25,952	0	0	192	0.01
Dream Pacific International Corp.	US$'000	26,000	259,230	8,163	251,067	0	(7)	65,017	2.50
Lucky Joy Holdings Ltd.	US$'000	1,098	0	0	0	0	0	0	0.00
Transcend Optronics (Yangzhou) Co., Ltd.	CN¥'000	1,040,392	1,782,434	1,046,789	735,645	1,965,024	12,097	62,501	N/A
Rich Optronics (Yangzhou) Co., Ltd.	CN¥'000	240,299	181,344	290	181,054	187	(3,296)	1,299	N/A
Yangzhou Huaxia Integrated O/E System Co., Ltd.	CN¥'000	143,058	49,878	224,872	(174,994)	0	(3,490)	23,770	N/A
Hydis Technologies Co., Ltd.	KR₩'000	19,967,175	410,461,160	91,109,489	319,351,671	0	(5,395,288)	77,478,750	19,400.07
Transmart Electronics (Yangzhou) Ltd.	CN¥'000	62,968	16,827	3,305	13,522	13,608	3,009	3,181	N/A
Transyork Technology Yangzhou Ltd.	CN¥'000	442,121	440,825	757	440,068	51,624	50,479	53,881	N/A
Linfiny Japan Inc.	JP¥'000	20,000	215,444	131,564	83,880	432,116	20,624	11,207	2,801.75
Linfiny Corporation	NT$'000	420,000	241,298	169,303	71,994	260,365	(105,137)	(103,411)	(2.46)
Yuanhan Material Co., Ltd.	NT$'000	1,838,193	5,352,816	1,272,925	4,079,891	408,277	177,176	156,083	0.85

Note: EPS is after-tax basis, with same currency unit.

8.1.7 Affiliated Parties Consolidated Financial Statements: Please refer to “Consolidated Financial Statements”.

8.1.8 Affiliated Parties Report: Not Applicable.

8.2 Internal Control System

8.2.1 Declaration on Internal Control System

E Ink Holdings Inc.

Declaration on Internal Control System

Date: March 18, 2020

The Company hereby declares the following in relation to its internal control system established in 2019 based on its own evaluation:

1. Knowing that the establishment, implementation and maintenance of internal control system are the responsibilities of the Company's board of directors and managers, the Company has established such system. The purpose of the system is to achieve reasonable assurance of effective and efficiency of operations (including profits, performance and safeguard of asset security), reliability, timeliness, transparency and regulatory compliance of reporting and compliance with applicable laws, regulations and bylaws.
2. An internal control system has inherent limits. However complete the design, an effective internal control system can only provide reasonable assurance for the achievement of the three objectives above. The effectiveness of the internal control system may also vary due to the change of environment and situation. However, the Company's internal control system includes an auto-supervisory mechanism. Once a deficiency is identified, the Company will be able to undertake corrective actions immediately.
3. The Company adopts the criteria for effectiveness of the internal control system under the Regulations Governing Establishment of Internal Control Systems by Public Companies (hereinafter the "Regulations") to determine whether the design and implementation of the internal control system are effective. The Regulations divide the internal control system into 5 constituent elements in the process of control: 1. Control environment, 2. Risk assessment, 3. Control procedure, 4. Information and communication, and 5. Supervision. Each constituent element also includes several items. For these items, please refer to the provisions of the Regulations.
4. The Company has adopted the above internal control system criteria to evaluate the effectiveness of the design and implementation of the internal control system.
5. Based on the results of the evaluation under the previous paragraph, the Company deems that, in relation to its internal control system as of December 31, 2019 (including supervision and management of subsidiaries), the design and implementation of the internal control system are effective, including an understanding of the level of achievement of the objectives of operational results and efficiency, reliability, timeliness, transparency and regulatory compliance of reporting and compliance with applicable laws, regulations and bylaws, and can reasonably ensure the achievement of these objectives.
6. This Declaration will become a main part of the Company's annual report and prospectus and will

be published. Any falsity of concealment of such publication will result in legal liabilities under Articles 20, 32, 171 and 174 of the Securities and Exchange Act.

7. This Declaration is approved by the board of directors of the Company on March 18, 2020. All 9 attending directors approved this Declaration, and no director voiced any objection. In witness hereof.

E Ink Holdings, Inc.

Chairman: Johnson Lee

President: FY Gan

8.2.2If CPAs are retained to conduct audit on the internal control system, disclose the Auditors' Report: nil.

8.3 The offering of securities through private placement in the most recent year to the date this report was printed: nil.

8.4 The holding or disposals of Company shares by subsidiaries in the most recent year to the date this report was printed: nil.

8.5 Additional Information: nil.

8.6 Incidents that caused significant influence on the shareholders equity or stock price of the Company as stated in Subparagraph3, Paragraph 2 in Article 36 of this law in the most recent year to the date this report was printed:

The former chairman of the company, Frank Ko has resigned on 2019.09.09. The company also convened an interim board of directors meeting on 2019.09.09 to elect the general manager, Johnson Lee, to act as the chairman and elect FY Gan as the general manager. This change has no significant impact on shareholders' equity or securities prices.

8.7 Major resolutions of the Shareholders Meeting and Board in the most recent year to the date this report was printed.

(1) Important resolutions and implementation of the shareholders' meeting

The 2019 Annual Shareholders' Meeting of the Company was held in the Meeting Room at the Allied Association for Science Park Industries on June 18, 2019. The attendance of the shareholders' resolutions and the implementation of the meeting were as follows:

Adoption / Discussion and Election Items		Implementation
I.	Adoption of the 2018 financial statements of the Company	Resolution passed.
II.	Adoption of the proposal for 2018 earnings distribution of the Company	Resolution passed. Paid on Sep. 24, 2019.
III.	Revise part of articles of the Company's Articles of Association.	Resolution passed.
IV.	Revise part of articles of the Company's "Procedures of Acquisition or Disposal of Asset".	Resolution passed.
V.	Revise part of articles of the Company's "Operating Procedures for Monetary Loan, Endorsement, or Provision of Guarantee".	Resolution passed.
VI.	Rescind the non-competition restriction on directors of the Company.	Resolution passed.
VII.	The by-election for the one seat of the tenth term of independent directors.	Po-Young Chu was elected as the 10th Independent Director.

(2) Important resolutions of the board of directors

The company convened 7 times of the board of directors in 2019 and as of the printing date. The important resolutions are as follows:

Date	Session	Resolution
2019.3.20	The 10th board The 11th meeting	1. Proposal to allocate employee and director remuneration from 2018 profits, and to determine details including the payment method and eligible payees 2. Presentation of the Company's 2018 year-end accounts 3. Proposal of the Company's 2018 earnings appropriation 4. Presentation of the Company's 2018 "Declaration of Internal Control System" 5. Proposal to apply for credit limits with banking partners 6. Proposal to designate the Company as co-drawer for subsidiary's credit limits maintained with banking partners 7. Proposal for partial amendments to the Company's Articles of Incorporation 8. Proposal for partial amendments to the Company's Asset Acquisition and Disposal Procedures 9. Proposal to remove restrictions imposed against the Company's directors for involving in competing businesses 10. Proposal to remove restrictions imposed against the Company's President for involving in competing businesses 11. Discussion for the time, venue and agenda of the Company's 2019 annual general meeting
2019.5.8	The 10th board The 12th meeting	1. 2019 salary adjustment 2. 2019 salary adjustment for managers of Assistant Vice President Grade and above 3. Partial amendments to Policy on Transfer of 3rd Share Repurchase to Employees 4. Partial adjustment to details regarding phase 3 transfer of the 3rd share repurchase to employees 5. Proposal to commence phase 4 transfer of the 3rd share repurchase to employees 6. Proposal to apply for credit limits with banking partners 7. Proposal of auditor remuneration for 2019 8. Proposal to appoint corporate governance officer for the Company 9. Establishment of Standard Operating Procedures for Resolving Directors' Requests 10. Background review of independent director candidates nominated by shareholders for the 10th board 11. Addition of reported issues to the 2019 annual general meeting agenda
2019.8.9	The 10th board The 13th meeting	1. Proposal to set dividend baseline date and adjust payout ratio for the Company's 2018 earnings appropriation plan 2. Proposal to apply for credit limits with banking partners 3. Proposal to designate the Company as co-drawer for subsidiary's credit limits maintained with banking partners 4. Proposal for partial amendments to Audit Committee Foundation Principles 5. Proposal for partial amendments to Board of Directors Conference Rules 6. Appointment of members for the Company's 3rd Remuneration Committee
2019.9.9	The 10th board The 14th meeting (extraordinary)	1. Election of chairperson for the extraordinary board meeting 2. Proposal to elect one of the directors to perform duties on the Chairman's behalf on a temporary basis
2019.11.7	The 10th board The 15th meeting	1. Presentation of the Company's 2020 "Audit Plan" 2. Proposal to apply for credit limits with banking partners 3. Proposal to designate the Company as co-drawer for subsidiary's credit limits maintained with banking partners 4. Proposal to remove restrictions imposed against the Company's directors for involving in competing businesses

Date	Session	Resolution
2019. 12.19	The 10th board The 16th meeting	1. Election of Chairman for the Company's 10th board of directors 2. Proposal to appoint Mr. FY Gan as the Company's President 3. Presentation of the Company's 2020 operational plan and budget 4. Proposal to apply for credit limits with banking partners 5. Discussion regarding expropriation of right-of-use over the 182.77-acre land plus superficies by Relocation and Accommodation Management Office of Yangzhou Economic Development Zone from the Company's subsidiary - "Yangzhou Huaxia Integrated O/E System Co., Ltd." (Yangzhou Huaxia) 6. Establishment of "Corporate Governance Code of Conduct" 7. Establishment of "Sustainability and Social Responsibility Code of Conduct" 8. Establishment of "Business Integrity Code of Conduct" 9. Establishment of "Board of Directors Performance Evaluation Policy" 10. Proposal to subsidize Director S.C. Ho (the "Applicant") for business-related litigation 11. Proposal to appoint Madam Yu-Ying Yuan as Chief Internal Auditor of the Company 12. Proposal to remove restrictions imposed against the Company's newly appointed President for involving in competing businesses 13. Reappointment of directors and election of Chairman for the Company's subsidiary - E Ink Corporation ("EIC")
2020. 03.18	The 10th board The 17th meeting	1 Proposal to allocate employee and director remuneration from 2018 profits, and to determine details including the payment method and eligible payees 2 Approval of the 2019 business report and financial statements. 3 Proposal of the Company's 2019 earnings appropriation. 4 Approval of the 2019"Internal Control System Statement". 5 Proposal to apply for credit limits with banking partners 6 Proposal to designate the Company as co-drawer for subsidiary's credit limits maintained with banking partners 7 Proposal to amendment to the company's approval authority table. 8 Proposal for partial amendments to Board of Directors Conference Rules 9 Proposal for compensation proposal for the Chairman of the company 10 Proposal for compensation proposal for the general manager of the company 11 Discussion for the time, venue and agenda of the Company's 2019 annual general meeting

E Ink Holdings Inc.

2019 Annual Report

No. 3, Li-Hsin Road One, HsinChu Science Park, HsinChu, Taiwan 300,
R.O.C.
Tel: 886 3 5643200
http://www.eink.com

Chairman Johnson Lee

E INK HOLDINGS INC.

No. 3, Li-Hsin Road One, HsinChu Science Park, HsinChu, Taiwan 300, R.O.C.
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E Ink Holdings Inc. and Subsidiaries

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

DECLARATION OF CONSOLIDATION OF FINANCIAL STATEMENTS OF AFFILIATES

The companies required to be included in the consolidated financial statements of affiliates in accordance with the Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises for the year ended December 31, 2019 are all the same as the companies required to be included in the consolidated financial statements of parent and subsidiary companies as provided in International Financial Reporting Standard No. 10, "Consolidated Financial Statements". Relevant information that should be disclosed in the consolidated financial statements of affiliates has all been disclosed in the consolidated financial statements of parent and subsidiary companies. Hence, we have not prepared a separate set of consolidated financial statements of affiliates.

Very truly yours,

E INK HOLDINGS INC.

By

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JOHNSON, LEE
Chairman

March 18, 2020

Deloitte.

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INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
E Ink Holdings Inc.

Opinion

We have audited the accompanying consolidated financial statements of E Ink Holdings Inc. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated balance sheets as of December 31, 2019 and 2018, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "consolidated financial statements").

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 International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

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

Key Audit Matter

A key audit matter is a matter that, in our professional judgment, was of most significance in our audit of the consolidated financial statements for the year ended December 31, 2019. This matter was 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 this matter.

The key audit matter for the Group's consolidated financial statements for the year ended December 31, 2019 is stated as follows:

Sales Revenue - Recognition of Sales Revenue of Electronic Shelf Labels Products

The Group mainly sells products, such as monitors and electronic shelf labels, which were affected by the changes in the end-market demand this year. The Group adjusted its product assortment to increase the overall gross profit margin and consequently increased the risk of the occurrence of sales revenue transactions from electronic shelf label products, which carried high gross profit margin. Therefore, the recognition of sales revenue of electronic shelf label products was identified as a key audit matter.

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

1. We understood and tested the design and operating effectiveness of relevant internal controls over the occurrence of sales revenue of electronic shelf label products.

2. We sampled the sales details of electronic shelf label products, inspected receipts signed by the customers or export declaration of overseas sales, and confirmed the receipt of payments.

3. We inspected subsequent significant sales returns and allowances.

Other Matter

We have also audited the financial statements of E Ink Holdings Inc. 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, IFRS, IAS, IFRIC, and SIC endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the 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.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or 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 a matter that was of most significance in the audit of the consolidated financial statements for the year ended December 31, 2019, and is therefore the key audit matter. We describe this matter 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 Hui-Min Huang and Chih-Ming Shao.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 18, 2020

Notice to Readers

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

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

E INK HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019		2018	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 4 and 6)	$ 7,047,106	17	$ 7,695,106	21
Financial assets at fair value through profit or loss (Notes 4 and 7)	2,455,299	6	1,840,835	5
Financial assets at amortized cost (Notes 4, 9 and 30)	7,526,246	18	4,379,385	11
Contract assets (Notes 4 and 21)	60,088	-	187,329	1
Accounts receivable (Notes 4, 10, 21 and 29)	2,059,829	5	2,243,412	6
Other receivables (Note 4)	216,253	1	223,850	1
Current tax assets (Notes 4 and 23)	22,011	-	44,850	-
Inventories (Notes 4 and 11)	1,941,702	5	1,926,990	5
Prepayments (Note 29)	192,732	-	318,982	1
Non-current assets held for sale (Notes 4 and 12)	109,745	-	10,166	-
Other current assets	3,049	-	20	-
Total current assets	21,634,060	52	18,870,925	51
NON-CURRENT ASSETS				
Financial assets at fair value through other comprehensive income (Notes 4 and 8)	4,474,517	11	3,431,736	9
Investments accounted for using the equity method (Note 4)	147,694	-	82,802	-
Property, plant and equipment (Notes 4, 14, 22 and 26)	4,104,317	10	4,521,441	12
Right-of-use assets (Notes 4, 15 and 22)	1,766,034	4	-	-
Goodwill (Notes 4 and 16)	6,720,745	16	6,781,244	19
Other intangible assets (Notes 4, 16, 22 and 29)	1,387,096	3	1,744,809	5
Deferred tax assets (Notes 4 and 23)	987,282	3	1,071,888	3
Other non-current assets (Notes 4, 7, 29 and 30)	399,204	1	409,263	1
Total non-current assets	19,986,889	48	18,043,183	49
TOTAL	$ 41,620,949	100	$ 36,914,108	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Notes 17 and 30)	$ 4,557,832	11	$ 1,480,000	4
Short-term bills payable (Note 17)	579,887	1	564,722	2
Contract liabilities (Notes 4 and 21)	1,298,608	3	1,573,002	4
Notes and accounts payable (Note 29)	1,156,039	3	1,347,676	4
Other payables (Notes 18 and 26)	1,263,755	3	1,351,759	4
Current tax liabilities (Notes 4 and 23)	146,121	-	128,343	-
Other current liabilities (Notes 4, 7, 12, 15 and 29)	204,433	1	123,615	-
Total current liabilities	9,206,675	22	6,569,117	18
NON-CURRENT LIABILITIES				
Contract liabilities (Notes 4 and 21)	1,024,259	3	1,761,719	5
Deferred tax liabilities (Notes 4 and 23)	120,854	-	110,299	-
Lease liabilities (Notes 4, 15 and 29)	1,721,654	4	-	-
Net defined benefit liabilities (Notes 4 and 19)	87,600	-	80,770	-
Other non-current liabilities (Notes 17 and 29)	7,123	-	77,759	-
Total non-current liabilities	2,961,490	7	2,030,547	5
Total liabilities	12,168,165	29	8,599,664	23
EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY (Notes 4, 20 and 25)				
Share capital	11,404,677	27	11,404,677	31
Capital surplus	10,306,993	25	10,243,293	28
Retained earnings				
Legal reserve	1,773,654	4	1,512,287	4
Special reserve	255,475	1	70,678	-
Unappropriated earnings	5,399,253	13	5,138,085	14
Total retained earnings	7,428,382	18	6,721,050	18
Other equity	(29,881)	-	(255,475)	(1)
Treasury shares	(110,032)	-	(184,900)	-
Total equity attributable to owners of the Company	29,000,139	70	27,928,645	76
NON-CONTROLLING INTERESTS (Note 20)	452,645	1	385,799	1
Total equity	29,452,784	71	28,314,444	77
TOTAL	$ 41,620,949	100	$ 36,914,108	100

The accompanying notes are an integral part of the consolidated financial statements.

E INK HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	**%**	**Amount**	**%**
OPERATING REVENUE (Notes 4, 21 and 29)	$ 13,601,676	100	$ 14,208,661	100
OPERATING COSTS (Notes 11, 22 and 29)	7,563,090	56	8,278,485	58
GROSS PROFIT	6,038,586	44	5,930,176	42
OPERATING EXPENSES (Notes 22 and 29)				
Selling and marketing expenses	755,050	6	796,893	6
General and administrative expenses	2,349,323	17	2,604,270	18
Research and development expenses	2,374,402	17	2,071,848	15
Total operating expenses	5,478,775	40	5,473,011	39
INCOME FROM OPERATIONS	559,811	4	457,165	3
NON-OPERATING INCOME AND EXPENSES				
Interest income	337,373	2	176,439	1
Royalty income (Notes 4 and 21)	2,240,251	16	2,360,815	17
Dividend income (Note 4)	184,437	1	136,225	1
Gains on sale of land use rights (Note 12)	153,500	1	-	-
Net gain on foreign currency exchange (Note 32)	223,994	2	310,568	2
Net gain on fair value change of financial assets and liabilities at fair value through profit or loss	83,444	1	6,413	-
Other income (Note 29)	122,738	1	120,649	1
Interest expenses (Notes 14 and 29)	(86,085)	(1)	(28,579)	-
Impairment loss (Notes 4 and 14)	(63,654)	-	(223,627)	(2)
Other expenses	(34,342)	-	(56,800)	-
Total non-operating income and expenses	3,161,656	23	2,802,103	20
INCOME BEFORE INCOME TAX FROM CONTINUING OPERATIONS	3,721,467	27	3,259,268	23
INCOME TAX EXPENSE (Notes 4 and 23)	(547,870)	(4)	(567,192)	(4)
NET INCOME FOR THE YEAR	3,173,597	23	2,692,076	19

(Continued)

E INK HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	**%**	**Amount**	**%**
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Notes 4 and 19)	$ (13,576)	-	$ (10,235)	-
Unrealized gain (loss) on investments in equity instruments at fair value through other comprehensive income	989,618	7	(432,897)	(3)
Income tax relating to items that will not be reclassified subsequently to profit or loss (Notes 4 and 23)	2,938	-	4,226	-
	978,980	7	(438,906)	(3)
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating the financial statements of foreign operations	(773,206)	(5)	59,248	-
Share of other comprehensive loss of associates and joint ventures accounted for using the equity method	(6,161)	-	(900)	-
	(779,367)	(5)	58,348	-
Other comprehensive income (loss) for the year, net of income tax	199,613	2	(380,558)	(3)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 3,373,210	25	$ 2,311,518	16
NET INCOME ATTRIBUTABLE TO:				
Owners of the Company	$ 3,083,789	23	$ 2,613,673	18
Non-controlling interests	89,808	-	78,403	1
	$ 3,173,597	23	$ 2,692,076	19
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:				
Owners of the Company	$ 3,306,364	24	$ 2,236,019	16
Non-controlling interests	66,846	1	75,499	-
	$ 3,373,210	25	$ 2,311,518	16

(Continued)

E INK HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	**%**	**Amount**	**%**
EARNINGS PER SHARE (Note 24)				
Basic	$ 2.72		$ 2.32	
Diluted	$ 2.71		$ 2.31	

The accompanying notes are an integral part of the consolidated financial statements. (Concluded)

E INK HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	Equity Attributable to Owners of the Company												
	Share Capital			Retained Earnings			Other Equity						
	Shares (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences on Translating the Financial Statements of Foreign Operations	Unrealized Gain (Loss) on Available-for-sale Financial Assets	Unrealized Gain (Loss) on Financial Assets at FVTOCI	Treasury Shares	Total	Non-controlling Interests	Total Equity
BALANCE AT JANUARY 1, 2018	1,140,468	$ 11,404,677	$ 10,108,119	$ 1,304,481	$ 70,678	$ 4,246,203	$ (242,623)	$ 349,232	$ -	$ (308,269)	$ 26,932,498	$ 294,397	$ 27,226,895
Effect of retrospective application	-	-	-	-	-	327,468	-	(349,232)	376,899	-	355,135	15,903	371,038
BALANCE AT JANUARY 1, 2018 AS RESTATED	1,140,468	11,404,677	10,108,119	1,304,481	70,678	4,573,671	(242,623)	-	376,899	(308,269)	27,287,633	310,300	27,597,933
Appropriation of 2017 earnings													
Legal reserve	-	-	-	207,806	-	(207,806)	-	-	-	-	-	-	-
Cash dividends	-	-	-	-	-	(1,853,550)	-	-	-	-	(1,853,550)	-	(1,853,550)
Unclaimed dividends extinguished by prescription	-	-	14	-	-	-	-	-	-	-	14	-	14
Net income for the year ended December 31, 2018	-	-	-	-	-	2,613,673	-	-	-	-	2,613,673	78,403	2,692,076
Other comprehensive income (loss) for the year ended December 31, 2018, net of income tax	-	-	-	-	-	(6,052)	61,295	-	(432,897)	-	(377,654)	(2,904)	(380,558)
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	2,607,621	61,295	-	(432,897)	-	2,236,019	75,499	2,311,518
Share-based payments	-	-	135,552	-	-	-	-	-	-	-	135,552	-	135,552
Disposal of investments in equity instruments at fair value through other comprehensive income	-	-	-	-	-	18,149	-	-	(18,149)	-	-	-	-
Treasury shares transferred to employees	-	-	(392)	-	-	-	-	-	-	123,369	122,977	-	122,977
BALANCE AT DECEMBER 31, 2018	1,140,468	11,404,677	10,243,293	1,512,287	70,678	5,138,085	(181,328)	-	(74,147)	(184,900)	27,928,645	385,799	28,314,444
Appropriation of 2018 earnings													
Legal reserve	-	-	-	261,367	-	(261,367)	-	-	-	-	-	-	-
Special reserve	-	-	-	-	184,797	(184,797)	-	-	-	-	-	-	-
Cash dividends	-	-	-	-	-	(2,373,438)	-	-	-	-	(2,373,438)	-	(2,373,438)
Unclaimed dividends extinguished by prescription	-	-	26	-	-	-	-	-	-	-	26	-	26
Net income for the year ended December 31, 2019	-	-	-	-	-	3,083,789	-	-	-	-	3,083,789	89,808	3,173,597
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	-	-	-	-	-	(10,697)	(756,459)	-	989,731	-	222,575	(22,962)	199,613
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	3,073,092	(756,459)	-	989,731	-	3,306,364	66,846	3,373,210
Share-based payments	-	-	63,912	-	-	-	-	-	-	-	63,912	-	63,912
Disposal of investments in equity instruments at fair value through other comprehensive income	-	-	-	-	-	7,678	-	-	(7,678)	-	-	-	-
Treasury shares transferred to employees	-	-	(238)	-	-	-	-	-	-	74,868	74,630	-	74,630
BALANCE AT DECEMBER 31, 2019	1,140,468	$ 11,404,677	$ 10,306,993	$ 1,773,654	$ 255,475	$ 5,399,253	$ (937,787)	$ -	$ 907,906	$ (110,032)	$ 29,000,139	$ 452,645	$ 29,452,784

The accompanying notes are an integral part of the consolidated financial statements.

E INK HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax from continuing operations	$ 3,721,467	$ 3,259,268
Adjustments for		
Depreciation expenses	784,768	683,786
Amortization expenses	463,395	420,594
Expected credit loss recognized (reversed) on accounts receivable	(6,401)	21,200
Net gain on fair value changes of financial assets and liabilities at fair value through profit or loss	(83,444)	(6,413)
Interest expenses	86,085	28,579
Interest income	(337,373)	(176,439)
Dividend income	(184,437)	(136,225)
Compensation costs of share-based payments	63,912	135,552
Share of loss of associates and joint ventures accounted for using the equity method	8,460	5,054
Net gain on disposal of property, plant and equipment	(2,746)	(796)
Gain on sale of land use rights	(153,500)	-
Net loss on disposal of investments	2,934	1,888
Impairment loss	63,654	223,627
Write-downs of inventories	134,739	204,382
Net unrealized loss (gain) on foreign currency exchange	(29,250)	4,458
Changes in operating assets and liabilities		
Financial assets mandatorily classified as at fair value through profit or loss	(24,934)	-
Contract assets	120,460	134,610
Accounts receivable	193,773	(224,772)
Other receivables	43,629	31,774
Inventories	(206,533)	80,370
Prepayments	124,885	(183,310)
Other current assets	(3,029)	27
Contract liabilities	(966,420)	105,027
Notes and accounts payable	(177,956)	(879,066)
Other payables	(75,658)	(359,033)
Other current liabilities	17,860	(550,246)
Net defined benefit liabilities	(5,983)	376
Cash generated from operations	3,572,357	2,824,272
Income tax received (paid)	(427,739)	29,534
Net cash generated from operating activities	3,144,618	2,853,806
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at fair value through other comprehensive income	(64,692)	(968,590)
Proceeds from disposal of financial assets at fair value through other comprehensive income	9,928	184,552

(Continued)

E INK HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019	2018
Proceeds from capital reduction of financial assets at fair value through other comprehensive income	$ -	$ 6,431
Acquisition of financial assets at amortized cost	(14,670,275)	(4,834,433)
Proceeds from disposal of financial assets at amortized cost	11,321,850	1,287,349
Acquisition of financial assets at fair value through profit or loss	(1,511,179)	(1,818,502)
Proceeds from sale of financial assets at fair value through profit or loss	823,402	-
Acquisition of associates	(79,513)	-
Disposal of subsidiaries	-	(713)
Acquisition of property, plant and equipment	(550,492)	(575,061)
Proceeds from disposal of property, plant and equipment	6,869	32,128
Acquisition of other intangible assets	(123,803)	(249,190)
Proceeds from disposal of land use rights	153,869	-
Decrease (increase) in other non-current assets	58,147	(154,318)
Interest received	300,623	172,454
Dividends received	184,437	136,225
Net cash used in investing activities	(4,140,829)	(6,781,668)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in short-term borrowings	3,091,036	1,101,625
Increase in short-term bills payable	15,165	564,722
Repayments of long-term borrowings	(43,169)	(118,148)
Repayment of the principal portion of lease liabilities	(75,899)	-
Increase (decrease) in other non-current liabilities	(788)	6,783
Cash dividends	(2,373,438)	(1,853,550)
Proceeds from treasury shares transferred to employees	74,630	122,977
Interest paid	(79,203)	(27,922)
Proceeds from unclaimed dividends extinguished by prescription	26	14
Net cash generated from (used in) financing activities	608,360	(203,499)
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH AND CASH EQUIVALENTS HELD IN FOREIGN CURRENCIES	(260,149)	(52,182)
NET DECREASE IN CASH AND CASH EQUIVALENTS	(648,000)	(4,183,543)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	7,695,106	11,878,649
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 7,047,106	$ 7,695,106

The accompanying notes are an integral part of the consolidated financial statements. (Concluded)

1. GENERAL INFORMATION

E Ink Holdings Inc. (the “Company”) was incorporated in June 1992 in the Hsinchu Science Park. The Company’s shares have been listed on the Taipei Exchange (TPEx) Mainboard since March 30, 2004. The Company mainly researches, develops, manufactures and sells electronic paper display panels.

The consolidated financial statements of the Company and its subsidiaries, collectively referred to as the “Group”, are presented in New Taiwan dollars, the functional currency of the Company.

2. AUTHORIZATION OF FINANCIAL STATEMENTS

The Group’s consolidated financial statements were approved by the Company’s board of directors on March 18, 2020.

3. APPLICATION OF NEW AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC) and SIC Interpretations (SIC) (collectively referred to as the “IFRSs”) endorsed and issued into effect by the Financial Supervisory Commission (FSC)

   Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Group’s accounting policies:

   <u>IFRS 16 “Leases”</u>

   IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessee and lessor. It supersedes IAS 17 “Leases”, IFRIC 4 “Determining whether an Arrangement contains a Lease”, and a number of related interpretations. Please refer to Note 4 for information relating to the relevant accounting policies.

   <u>Definition of a lease</u>

   The Group elects to apply the guidance of IFRS 16 in determining whether contracts are, or contain, a lease only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 are not reassessed and are accounted for in accordance with the transitional provisions under IFRS 16.

The Group as lessee

The Group recognizes right-of-use assets and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value asset and short-term leases are recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Group presents the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal and interest portion of lease liabilities are classified within financing activities. Prior to the application of IFRS 16, payments under operating lease contracts were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the consolidated statements of cash flows.

Lease liabilities were recognized on January 1, 2019 for leases previously classified as operating leases with the application of IAS 17. Lease liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets are measured at an amount equal to the lease liabilities. The Group applies IAS 36 to all right-of-use assets.

The Group also applies the following practical expedients:

1) The Group applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.

2) The Group accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

3) The Group excludes initial direct costs from the measurement of right-of-use assets on January 1, 2019.

4) The Group uses hindsight, such as in determining lease terms, to measure lease liabilities.

The weighted average lessee's incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 2.28%. The difference between the lease liabilities recognized and the future minimum lease payments of non-cancellable operating lease on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease on December 31, 2018	$ 1,033,653
Less: Recognition exemption for short-term leases	(7,774)
Undiscounted amounts on January 1, 2019	$ 1,025,879
Discounted amounts using the incremental borrowing rate on January 1, 2019	$ 915,733
Add: Adjustments as a result of extension options	976,612
Lease liabilities recognized on January 1, 2019	$ 1,892,345

The Group as lessor

The Group does not make any adjustments for leases in which it is a lessor, and it accounts for those leases with the application of IFRS 16 starting from January 1, 2019.

The impact on assets and liabilities as of January 1, 2019 from the initial application of IFRS 16 is set out as follows:

	As Originally Stated on January 1, 2019	Adjustments Arising from Initial Application	Restated on January 1, 2019
Right-of-use assets	$ -	$ 1,865,084	$ 1,865,084
Other non-current assets	409,263	(864)	408,399
Total effect on assets	$ 409,263	$ 1,864,220	$ 2,273,483
Other current liabilities	$ 123,615	$ (3,019)	$ 120,596
Lease liabilities - current	-	103,943	103,943
Other non-current liabilities	77,759	(25,106)	52,653
Lease liabilities - non-current	-	1,788,402	1,788,402
Total effect on liabilities	$ 201,374	$ 1,864,220	$ 2,065,594

b. The IFRSs endorsed by the FSC for application starting from 2020

New, Amended or Revised Standards and Interpretations	Effective Date Announced by IASB
Amendments to IFRS 3 “Definition of a Business”	January 1, 2020 (Note 1)
Amendments to IFRS 9, IAS 39 and IFRS 7 “Interest Rate Benchmark Reform”	January 1, 2020 (Note 2)
Amendments to IAS 1 and IAS 8 “Definition of Material”	January 1, 2020 (Note 3)

Note 1: The Group shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 2: The Group shall apply these amendments retrospectively for annual reporting periods beginning on or after January 1, 2020.

Note 3: The Group shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the consolidated financial statements were issued, the Group is continuously assessing the possible impact that the application of the above standards and interpretations will have on the Group’s consolidated financial position and consolidated financial performance and will disclose the relevant impact when the assessment is completed.

c. The IFRSs issued by IASB but not yet endorsed and issued into effect by the FSC

New, Amended or Revised Standards and Interpretations	Effective Date Announced by IASB (Note)
Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”	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

Note: Unless stated otherwise, the above New IFRSs are effective for annual reporting periods beginning on or after their respective effective dates.

As of the date the consolidated financial statements were issued, the Group is continuously assessing the possible impact that the application of the above standards and interpretations will have on the Group's consolidated financial position and consolidated financial performance and will disclose the relevant impact when the assessment is completed.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Statement of compliance

The consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and IFRSs as endorsed and issued into effect by the FSC.

b. Basis of preparation

The consolidated financial statements have been prepared on the historical cost basis except for the financial instruments which are measured at fair value and net defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

The fair value measurements, which are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and based on the significance of the inputs to the fair value measurement in its entirety, are described as follows:

1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and

3) Level 3 inputs are unobservable inputs for an asset or liability.

c. Classification of current and non-current assets and liabilities

Current assets include:

1) Assets held primarily for the purpose of trading;

2) Assets expected to be realized within 12 months after the reporting period; and

3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

2) Liabilities due to be settled within 12 months after the reporting period; and

3) Liabilities for which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

Assets and liabilities that are not classified as current are classified as non-current.

d. Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and the entities controlled by the Company (i.e., its subsidiaries). Income and expenses of subsidiaries acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the effective date of acquisition up to the effective date of disposal, as appropriate. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Company. All intra-group transactions, balances, income and expenses are eliminated in full upon consolidation. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

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

When the Group loses control of a subsidiary, a gain or loss is recognized in profit or loss and is calculated as the difference between (i) the aggregate of 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 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.

See Note 13 and Tables 8 and 9 for detailed information on subsidiaries (including the percentages of ownership and main business).

e. Business combinations

Acquisitions of businesses are accounted for using the acquisition method. Acquisition-related costs are generally recognized as expenses as they are incurred.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets. The choice of the measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value.

f. Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currency (i.e., foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the year in which they arise.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the year except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which cases, the exchange differences are also recognized directly in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction and are not retranslated.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Group’s foreign operations (including subsidiaries, associates and joint ventures in other countries that use currencies that are different from the currency of the Company) are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting year; and income and expense items are translated at the average exchange rates for the year. The resulting currency translation differences are recognized in other comprehensive income and attributed to the owners of the Company and non-controlling interests.

On a disposal of the Company’s entire interest in a foreign operation or a disposal involving loss of significant influence over a subsidiary that includes a foreign operation, all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

g. Inventories

Inventories consist of raw materials, semi-finished goods, finished goods and work in progress and are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except where it may be appropriate to group similar or related items. The net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. Inventories are recorded at the weighted-average cost on the balance sheet date.

h. Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence and which is neither a subsidiary nor an interest in a joint venture. A joint venture is a joint arrangement whereby the Group and other parties that have joint control of the arrangement have rights to the net assets of the arrangement.

The Group uses the equity method to account for its investments in associates and joint ventures.

Under the equity method, investments in an associate and a joint venture are initially recognized at cost and adjusted thereafter to recognize the Group’s share of the profit or loss and other comprehensive income of the associates and joint ventures. The Group also recognizes the changes in the Group’s share of equity of associates and joint ventures attributable to the Group.

Any excess of the cost of acquisition over the Group’s share of the net fair value of the identifiable assets and liabilities of an associate or a joint venture at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized.

When the Group subscribes for additional new shares of an associate and a joint venture at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Group's proportionate interest in the associate and joint venture. The Group records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus - changes in equity of associates and joint ventures accounted for using the equity method and investments accounted for using the equity method. If the Group's ownership interest is reduced due to the additional subscription of the new shares of the associate and joint venture, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate and joint venture is reclassified to profit or loss on the same basis as would be required if the investee had directly disposed of the related assets or liabilities. When the adjustment should be debited to capital surplus, but the capital surplus recognized from investments accounted for using the equity method is insufficient, the shortage is debited to retained earnings.

When the Group's share of losses of an associate and a joint venture equals or exceeds its interest in that associate and joint venture, the Group discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Group has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate and joint venture.

The entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized is not allocated to the goodwill and other assets that form part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Group discontinues the use of the equity method from the date on which its investment ceases to be an associate and a joint venture. Any retained investment is measured at fair value at that date and the fair value is regarded as its fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate and the joint venture attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate and the joint venture. The Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate and joint venture on the same basis as would be required if that associate had directly disposed of the related assets or liabilities.

When the Group transacts with its associates and joint ventures, profits and losses resulting from the transactions with the associates and joint ventures are recognized in the Group's consolidated financial statements only to the extent of interests in the associates and the joint ventures that are not related to the Group.

i. Property, plant and equipment

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are carried at cost, less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such assets are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended use.

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effects of any changes in estimates accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment, the difference between the sales proceeds and the carrying amount of the asset is recognized in profit or loss.

j. Goodwill

Goodwill arising from the acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment loss.

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units or groups of cash-generating units (referred to as "cash-generating units") that is expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the unit may be impaired, by comparing its carrying amount, including the attributed goodwill, with its recoverable amount. However, if the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual year, that unit shall be tested for impairment before the end of the current annual year. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent years.

If goodwill has been allocated to a cash-generating unit and the entity disposes of an operation within that unit, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal and is measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained.

k. Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful lives, residual value, and amortization methods are reviewed at the end of each reporting period, with the effects of any changes in estimates accounted for on a prospective basis.

2) Internally-generated intangible assets - research and development expenditures

Expenditures on research activities are recognized as expenses in the period in which they are incurred.

An internally-generated intangible asset arising from the development phase of an internal project is recognized if, and only if, all of the following have been demonstrated:

a) The technical feasibility of completing the intangible asset so that it will be available for use or sale;

b) The intention to complete the intangible asset and use or sell it;

c) The ability to use or sell the intangible asset;

d) How the intangible asset will generate probable future economic benefits;

e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

f) The ability to measure reliably the expenditures attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditures incurred from the date when such an intangible asset first meets the recognition criteria listed above. Subsequent to initial recognition, such intangible assets are measured on the same basis as intangible assets that are acquired separately.

3) Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognized separately from goodwill are initially recognized at their fair value at the acquisition date. Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

4) Derecognition of intangible assets

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

l. Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the smallest group of cash-generating units on a reasonable and consistent basis of allocation.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the corresponding asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount (net of amortization or depreciation) that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

m. Non-current assets held for sale

Non-current assets are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset is available for immediate sale in its present condition. To meet the criteria for the sale being highly probable, the appropriate level of management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within 1 year from the date of classification.

Non-current assets classified as held for sale are measured at the lower of their previous carrying amount and fair value less cost to sell. Recognition of depreciation of those assets would cease.

n. Financial instruments

Financial assets and financial liabilities are recognized when the Group becomes a party to the contractual provisions of the instruments.

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

1) Financial assets

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

   a) Measurement category

      Financial assets are classified into the following categories: Financial assets at fair value through profit or loss (FVTPL), financial assets at amortized cost and investments in equity instruments at FVTOCI.

      i. Financial assets at FVTPL

         Financial assets at FVTPL include mutual funds and investments in equity instruments which are not designated as at FVTOCI and are mandatorily measured at fair value subsequently, with any dividends, interest and gains or losses on remeasurement recognized in non-operating income and expenses. Fair value is determined in the manner described in Note 28.

      ii. Financial assets at amortized cost

         Financial assets that meet the following conditions are subsequently measured at amortized cost:

         i) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

         ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

         Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, accounts receivable and other receivables are measured at amortized cost, which equals to gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

         Cash equivalents include time deposits and repurchase agreements collateralized by notes, with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

      iii. Investments in equity instruments at FVTOCI

         On initial recognition, the Group may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income or loss and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, instead, they will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

b) Impairment of financial assets and contract assets

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable) and contract assets.

The Group always recognizes lifetime Expected Credit Loss (ECLs) for accounts receivable and contract assets. For all other financial instruments, the Group recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECLs represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represents the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date. The Group recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

c) Derecognition of financial assets

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

On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the cumulative gain or loss that had been recognized in other comprehensive income or loss is transferred directly to retained earnings, without reclassifying to profit or loss.

2) Equity instruments

The repurchase of the Company's own equity instruments is recognized in and deducted directly from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

3) Financial liabilities

a) Subsequent measurement

Except financial liabilities at FVTPL, all financial liabilities are carried at amortized cost using the effective interest method. Financial liabilities are classified as at FVTPL when such financial liabilities are held for trading and are stated at fair value, with any gain or loss arising on remeasurement recognized in profit or loss.

b) Derecognition of financial liabilities

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

4) Derivative financial instruments

The Group enters into a variety of derivative financial instruments, including foreign exchange forward contracts and interest rate swaps, to manage its exposure to interest rate and foreign exchange rate risks.

Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately. When the fair value of a derivative financial instrument is positive, the derivative is recognized as a financial asset; when the fair value of a derivative financial instrument is negative, the derivative is recognized as a financial liability.

Derivatives embedded in hybrid contracts that contain financial asset hosts within the scope of IFRS 9 are not separated; instead, the classification is determined in accordance with the entire hybrid contract. Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of IFRS 9 (e.g. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

o. Provisions

Provisions (included in other current liabilities) are measured at the best estimate of the discounted cash flows of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

Provisions for the expected cost of warranty obligations to assure that products comply with agreed-upon specifications are recognized on the date of sale of the relevant products at the best estimate by the management of the Group of the expenditures required to settle the Group's obligations.

p. Revenue recognition

The Group identifies the contracts with the customers, allocates the transaction price to the performance obligations, and recognizes revenue when performance obligations are satisfied.

1) Revenue from sale of goods

Sales of products are recognized as revenue when the goods are delivered to the customer's specific location because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods. Revenue and accounts receivable are recognized concurrently.

The Group does not recognize revenue on materials delivered to subcontractors because this delivery does not involve a transfer of control.

2) Licensing revenue

If the patented technology licensed by the Group can remain functional without any updates or technical support and the Group is not obliged to undertake activities that will change the functionality of the licensed patented technology, the licensed patented technology has significant stand-alone functionality and the Group recognizes revenue at the point in time at which the license of patented technology transfers. If the Group is obliged to undertake activities that will change the functionality of the licensed patented technology, the licensed patented technology does not have significant stand-alone functionality and the Group recognizes revenue on a straight-line basis over the life of the agreements. Royalty agreements that are based on sales are recognized by reference to the underlying agreements. Royalties receivable that the Group does not have a present right to payment of the royalties is recorded as contract assets and reclassified to accounts receivable after the Group fulfills the remainder of the performance obligation. Proceeds of royalties received but which have not met the conditions of revenue recognition are recorded as contract liabilities, current and non-current, respectively, based on the remaining contract periods.

q. Leases

<u>2019</u>

At the inception of a contract, the Group assesses whether the contract is, or contains, a lease.

1) The Group as lessor

Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases. Lease payments from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases.

2) The Group as lessee

The Group recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease, except for short-term leases and low-value asset leases accounted for applying a recognition exemption where lease payments are recognized as expenses on a straight-line basis over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the consolidated balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms.

Lease liabilities are initially measured at the present value of the lease payments. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses the lessee’s incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Group remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. Lease liabilities are presented on a separate line in the consolidated balance sheets.

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Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Operating lease payments are recognized as expenses on a straight-line basis over the lease term.

r. Borrowing costs

Borrowing costs directly attributable to an acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Other than stated above, all other borrowing costs are recognized in profit or loss in the year in which they are incurred.

s. Employee benefits

1) Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related services.

2) Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as expenses when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost and past service cost) and net interest on the net defined benefit liabilities are recognized as employee benefits expense in the year they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the year in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liabilities represent the actual deficit in the Group’s defined benefit plans.

t. Share-based payment arrangements

The fair value at the grant date of share-based payments is expensed on a straight-line basis over the vesting period, based on the Group’s best estimates of the number of shares or options that are expected to ultimately vest, with a corresponding increase in capital surplus - employee share options. It is recognized as an expense in full at the grant date if vested immediately. The grant date of treasury shares transferred to employees is the date on which the board of directors approves the transaction.

At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expenses reflect the revised estimate, with a corresponding adjustment to capital surplus - employee share options.

u. Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax. Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income, in which case, the current and deferred taxes are also recognized in other comprehensive income.

1) Current tax

According to the Income Tax Law, an additional tax of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain the earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused loss carryforwards to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profit against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the assets to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the year in which the liabilities are settled or the assets are realized, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, management is required to make judgments, estimations and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimations and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimations.

The estimations and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimations are recognized in the year in which the estimations are revised if the revisions affect only that year or in the year of the revisions and future years if the revisions affect both current and future years.

Impairment of Goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The calculation of the value in use requires management to estimate the future cash flows expected to arise from the cash-generating unit and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, a material impairment loss may arise.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2019	**2018**
Cash on hand	$ 579	$ 148,402
Checking accounts and demand deposits	1,570,259	2,003,246
Cash equivalents (investments with original maturities of less than 3 months)		
Time deposits	5,086,317	4,984,443
Repurchase agreements collateralized by notes	389,951	559,015
	$ 7,047,106	$ 7,695,106

The market rate intervals of demand deposits, time deposits and repurchase agreements collateralized by notes at the end of the reporting years were as follows:

	December 31	
	2019	**2018**
Demand deposits	0.01-1.15%	0.01-1.15%
Time deposits	0.45-2.9%	0.35-4%
Repurchase agreements collateralized by notes	2.2%	0.55-2.8%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2019	2018
Financial assets - current		
Non-derivative financial assets		
Mandatorily measured at FVTPL - mutual funds	$ 2,455,299	$ 1,840,835
Financial assets - non-current (included in other non-current assets)		
Hybrid financial assets		
Mandatorily measured at FVTPL - overseas unlisted shares	$ 60,285	$ -
Derivative financial liabilities (included in other current liabilities)		
Held for trading - foreign exchange forward contracts	$ -	$ 4,678

At the end of the reporting year, the outstanding foreign exchange forward contract not under hedge accounting was as follows:

	Currency	Maturity Date	Notional Amount (In Thousands)
December 31, 2018			
Buy	USD/KRW	2019.03	USD46,745/KRW52,434,480

The Group entered into foreign exchange forward contracts to manage exposures to exchange rate fluctuations of foreign currency denominated assets and liabilities. However, those contrasts did not meet the criteria of hedge effectiveness and, therefore, were not accounted for using hedge accounting.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	December 31	
	2019	2018
Investments in equity instruments - non-current		
Domestic listed shares and emerging market shares	$ 3,577,384	$ 2,923,732
Overseas listed shares	845,286	462,545
Domestic unlisted shares	34,014	35,351
Overseas unlisted shares	17,833	10,108
	$ 4,474,517	$ 3,431,736

The Group holds the above investments in equity instruments for long-term strategic purposes and expects to gain profit through long-term investments. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes.

9. FINANCIAL ASSETS AT AMORTIZED COST

	December 31 2019	December 31 2018
Current		
Time deposits with original maturities of more than 3 months (a)	$ 5,117,128	$ 3,430,920
Pledged time deposits (b)	1,616,260	518,848
Principal guaranteed wealth investment products (c)	792,858	429,617
	$ 7,526,246	$ 4,379,385

a. The market rate intervals for time deposits with original maturities of more than 3 months were 0.82%-4.57% and 0.84%-3.55% per annum, as of December 31, 2019 and 2018, respectively.

b. Refer to Note 30 for information relating to investments in financial assets at amortized cost pledged as security.

c. Principal guaranteed wealth investment products bought from banks by the Group may not be redeemed in advance during the term of the contracts. The expected rate of return intervals were 3.55%-4% and 3.9%-4% per annum, as of December 31, 2019 and 2018, respectively.

10. ACCOUNTS RECEIVABLE

	December 31 2019	December 31 2018
Accounts receivable from related parties (Note 29)	$ 136,794	$ 159,647
Gross carrying amount of accounts receivable	1,949,539	2,125,653
Less: Loss allowance	(26,504)	(41,888)
	1,923,035	2,083,765
	$ 2,059,829	$ 2,243,412

The Group recognizes impairment loss when there is actual credit loss from individual client. In addition, the Group recognizes impairment loss based on the rate of expected credit loss by reference to past default experience of the debtor, an analysis of the debtor's current financial position, general economic conditions of the industry in which the debtors operate and past due status.

The following table details the loss allowance for accounts receivable.

December 31, 2019

	Not Past Due	Past Due in 1-90 Days	Past Due over 90 Days	Total
Expected credit loss rate	0%	0%	70%	-
Gross carrying amount	$ 1,819,723	$ 92,091	$ 37,725	$ 1,949,539
Less: Loss allowance	-	-	(26,504)	(26,504)
Amortized cost	$ 1,819,723	$ 92,091	$ 11,221	$ 1,923,035

December 31, 2018

	Not Past Due	Past Due in 1-90 Days	Past Due over 90 Days	Total
Expected credit loss rate	0%	0%	93%	-
Gross carrying amount	$ 1,773,351	$ 307,407	$ 44,895	$ 2,125,653
Less: Loss allowance	-	-	(41,888)	(41,888)
Amortized cost	$ 1,773,351	$ 307,407	$ 3,007	$ 2,083,765

The movements of the loss allowance were as follows:

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 41,888	$ 28,611
Expected credit losses recognized (reversed)	(6,401)	21,200
Amounts written off	(8,124)	(7,609)
Foreign exchange translation gains and losses	(859)	(314)
Balance at December 31	$ 26,504	$ 41,888

Accounts receivable of the Group were mainly concentrated in Customers A, B, C, D and E. The accounts receivable from the foregoing customers, as of December 31, 2019 and 2018, respectively, were as follows:

	For the Year Ended December 31	
	2019	2018
Customer A	$ 427,363	$ 834,153
Customer B	330,287	-
Customer C	244,374	46,836
Customer D	215,435	87,050
Customer E	-	258,416
	$ 1,217,459	$ 1,226,455

11. INVENTORIES

	December 31	
	2019	2018
Finished goods	$ 584,583	$ 415,364
Semi-finished goods	264,023	292,747
Work in progress	67,271	29,009
Raw materials	1,025,825	1,189,870
	$ 1,941,702	$ 1,926,990

The cost of inventories recognized as cost of goods sold for the years ended December 31, 2019 and 2018 included write-downs of inventories of $134,739 thousand and $204,382 thousand, respectively.

12. NON-CURRENT ASSETS HELD FOR SALE

	December 31	
	2019	2018
Land use rights, plant and equipment held for sale	$ 109,745	$ 10,166
Liabilities directly associated with equipment held for sale	$ 17,642	$ 18,373

a. In November 2019, the subsidiary, Yangzhou Huaxia Integrated O/E System Co., Ltd. signed an expropriation compensation agreement with Yangzhou Economic and Technological Development Zone's Demolition Placement Management Office, disposing of the land use rights of 182.77 mus, along with the building and its accessories, at the amount of RMB328,986 thousand. The payment is expected to be received based on the actual delivery of the property ownership certificate and land use certificate, as well as the progress of local government funding. Since the sale price is expected to exceed the carrying amount of the related net assets, the Group did not recognize impairment loss when the land use rights, plant and equipment were reclassified as non-current assets held for sale.

   In addition, the Yangzhou Economic and Technological Development Zone's Demolition Placement Management Office had completed the expropriation of 19.8 mus of land use rights of the subsidiary, Yangzhou Huaxia Integrated O/E System Co., Ltd., at the amount of RMB35,640 thousand. Therefore, the Group recognized a gain on sale of land use rights of NT$153,500 thousand (RMB35,557 thousand).

b. The subsidiary, Transcend Optronics (Yangzhou) Co., Ltd., expected to dispose of a batch of equipment to a non-related party within the following 12 months. Transcend Optronics (Yangzhou) Co., Ltd. has received partial contract price of RMB4,105 thousand (included in other current liabilities) as of December 31, 2018 and 2019. The sale price is expected to exceed the carrying amount of the related net assets. Hence, the Group did not recognize impairment loss when the aforementioned equipment was reclassified as non-current assets held for sale

13. SUBSIDIARIES

Subsidiaries included in the consolidated financial statements are as follows:

			Proportion of Ownership (%) December 31		
Investor	Investee	Main Business	2019	2018	Remark
E Ink Holdings Inc.	PVI Global Corp.	Investment	100.00	100.00	
	E Ink Corporation	Manufacture and sale of electronic ink	45.31	45.31	
	YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Research, development and sale of electronic parts and electronic ink	100.00	100.00	a
	New Field e-Paper Co., Ltd.	Wholesale and sale of electronic parts	100.00	100.00	
	SiPix Technology Inc.	Manufacture and sale of electronic ink	-	100.00	a
	Dream Universe Ltd.	Trading	100.00	100.00	
	Prime View Communications Ltd.	Trading	100.00	100.00	
	Tech Smart Logistics Ltd.	Trading	0.09	0.09	
	Hot Tracks International Ltd.	Trading	100.00	100.00	
	Linfiny Corporation	Research, development and sale of electronic ink	4.00	-	c

(Continued)

Investor	Investee	Main Business	Proportion of Ownership (%) December 31 2019	Proportion of Ownership (%) December 31 2018	Remark
New Field e-Paper Co., Ltd.	E Ink Corporation	Manufacture and sale of electronic ink	12.88	12.88	
	Tech Smart Logistics Ltd.	Trading	99.91	99.91	
YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Lucky Joy Holdings Ltd.	Investment	100.00	100.00	
	Linfiny Corporation	Research, development and sale of electronic ink	77.00	77.00	
	YuanHan Materials Inc.	Manufacture and sale of electronic parts	-	100.00	a
SiPix Technology Inc.	Linfiny Corporation	Research, development and sale of electronic ink	-	4.00	c
Linfiny Corporation	Linfiny Japan Inc.	Research and development of electronic ink	100.00	100.00	
E Ink Corporation	E Ink California, LLC	Research, development and sale of electronic ink	100.00	100.00	
	E Ink Japan Inc.	Development of electronics ink products	100.00	100.00	
	E Ink Systems, LLC	Research and development of application software	-	100.00	d
PVI Global Corp.	PVI International Corp.	Trading	100.00	100.00	
	Ruby Lustre Ltd.	Investment	100.00	100.00	
	Dream Pacific International Corp.	Investment	100.00	100.00	
	Transyork Technology Yangzhou Ltd.	Assembly and sale of display panels	55.61	55.61	
	Transmart Electronics (Yangzhou) Ltd.	Research, development and sale of flat panels	66.66	66.66	
Tech Smart Logistics Ltd.	E Ink Corporation	Manufacture and sale of electronic ink	41.81	41.81	
Dream Universe Ltd.	Transyang Electronics (Yangzhou) Ltd.	Assembly of LCD flat panels	-	100.00	b
PVI International Corp.	Transcend Optronics (Yangzhou) Co., Ltd.	Assembly and sale of display panels	100.00	100.00	
Ruby Lustre Ltd.	Rich Optronics (Yangzhou) Co., Ltd.	Assembly and sale of display panels	100.00	100.00	
Dream Pacific International Corp.	Hydis Technologies Co., Ltd.	Research, development and licensing of monitors	94.73	94.73	
	Yangzhou Huaxia Integrated O/E System Co., Ltd.	Manufacture and sale of LED products	24.19	24.19	
Transcend Optronics (Yangzhou) Co., Ltd.	Yangzhou Huaxia Integrated O/E System Co., Ltd.	Manufacture and sale of LED products	75.81	75.81	
	Transyork Technology Yanzhou Ltd.	Assembly and sale of display panels	44.39	44.39	
	Transmart Electronics (Yangzhou) Ltd.	Research, development and sale of flat panels	33.34	33.34	

(Concluded)

a. To simplify the Group's organization management, integrate the utilization of resources and increase operational efficiency, the board of directors of the subsidiary, Yuen Yu Investment Co., Ltd., approved on April 19, 2019 to merge its subsidiary YuanHan Materials Inc. by absorption. The reference date of the merger was on June 1, 2019, with Yuen Yu Investment Co., Ltd. as the surviving company, which was renamed as YuanHan Materials Inc. after the merger. In addition, the board of directors of YuanHan Materials Inc. approved the issuance of new shares on August 16, 2019 to merge the subsidiary, SiPix Technology Inc. The reference date of the merger is set on October 1, 2019, with YuanHan Materials Inc. as the surviving company.

b. Transyang Electronics (Yangzhou) Ltd. has completed its liquidation process in May 2019.

c. To adjust the investment structure, the Company purchased 4% ownership of Linfiny Corporation from YuanHan Material Inc.

d. E Ink Systems, LLC has completed its liquidation process in December 2019.

14. PROPERTY, PLANT AND EQUIPMENT

	Buildings	Machinery	Other Equipment	Construction in Progress and Prepayments for Equipment	Total
Cost					
Balance at January 1, 2018	$ 3,771,839	$ 7,203,466	$ 5,084,702	$ 306,234	$ 16,366,241
Additions	13,345	157,765	170,848	273,527	615,485
Disposals	(1,020)	(112,762)	(280,535)	-	(394,317)
Reclassifications	146,543	(63,105)	1,092	(148,233)	(63,703)
Effects of foreign currency exchange differences	(24,688)	(22,107)	23,662	8,069	(15,064)
Balance at December 31, 2018	$ 3,906,019	$ 7,163,257	$ 4,999,769	$ 439,597	$ 16,508,642
Accumulated depreciation and impairment					
Balance at January 1, 2018	$ 2,059,447	$ 6,180,597	$ 3,373,215	$ -	$ 11,613,259
Depreciation expenses	115,437	278,622	289,727	-	683,786
Impairment losses recognized (reversed)	-	(3,660)	139,093	-	135,433
Disposals	(584)	(84,650)	(277,751)	-	(362,985)
Reclassifications	-	(53,346)	-	-	(53,346)
Effects of foreign currency exchange differences	(11,158)	(13,198)	(4,590)	-	(28,946)
Balance at December 31, 2018	$ 2,163,142	$ 6,304,365	$ 3,519,694	$ -	$ 11,987,201
Carrying amount at December 31, 2018	$ 1,742,877	$ 858,892	$ 1,480,075	$ 439,597	$ 4,521,441
Cost					
Balance at January 1, 2019	$ 3,906,019	$ 7,163,257	$ 4,999,769	$ 439,597	$ 16,508,642
Additions	78,902	178,000	117,066	171,981	545,949
Disposals	(2,908)	(138,975)	(134,156)	-	(276,039)
Reclassifications	(229,924)	(55,324)	(130,864)	(125,543)	(541,655)
Effects of foreign currency exchange differences	(65,483)	(71,648)	(110,428)	(8,933)	(256,492)
Balance at December 31, 2019	$ 3,686,606	$ 7,075,310	$ 4,741,387	$ 477,102	$ 15,980,405
Accumulated depreciation and impairment					
Balance at January 1, 2019	$ 2,163,142	$ 6,304,365	$ 3,519,694	$ -	$ 11,987,201
Depreciation expenses	140,436	311,760	248,380	-	700,576
Impairment losses recognized	-	34,334	29,320	-	63,654
Disposals	(1,346)	(138,250)	(132,909)	-	(272,505)
Reclassifications	(126,002)	(121,127)	(187,458)	-	(434,587)
Effects of foreign currency exchange differences	(33,523)	(51,673)	(83,055)	-	(168,251)
Balance at December 31, 2019	$ 2,142,707	$ 6,339,409	$ 3,393,972	$ -	$ 11,876,088
Carrying amount at December 31, 2019	$ 1,543,899	$ 735,901	$ 1,347,415	$ 477,102	$ 4,104,317

For part of the Group's equipment with no future use, the Group assessed its recoverable amount to be zero. It performed an assessment of the recoverable amount of property, plant and equipment and recognized an impairment loss of $63,654 thousand and $135,433 thousand for the years ended December 31, 2019 and 2018, respectively. The impairment loss is mainly from the segments of ROC and Asia.

Information about the capitalized interest is as follows:

	For the Year Ended December 31	
	2019	2018
Capitalized interest	$ 1,164	$ 497
Capitalization rate intervals	0.95-1.23%	0.91-2.11%

The above items of property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives as follows:

Buildings	
Main buildings	20-56 years
Clean rooms and plumbing construction	25-36 years
Employee dormitories	20 years
Others	2-16 years
Machinery	1-10 years
Other equipment	1-26 years

15. LEASE ARRANGEMENTS - 2019

a. Right-of-use assets

	December 31, 2019
Carrying amounts	
Land	$ 838,338
Buildings	925,449
Other equipment	2,247
	$ 1,766,034

	For the Year Ended December 31, 2019
Additions to right-of-use assets	$ 22,354
Depreciation of right-of-use assets	
Land	$ 24,880
Buildings	57,355
Other equipment	1,957
	$ 84,192

b. Lease liabilities

	December 31, 2019
Carrying amounts	
Current (included in other current liabilities)	$ 72,608
Non-current	$ 1,721,654

Discount rate intervals for lease liabilities are as follows:

	December 31, 2019
Land	1.56%
Buildings	0.8-3.84%
Other equipment	0.8-3.84%

c. Material lease-in activities and terms

The Group leased certain land in the Hsinchu Science Park from the Hsinchu Science Park Bureau of the Ministry of Science and Technology from July 1, 2014 to December 31, 2033. The rental amount is calculated on the basis of the mutual agreement. The lessor may adjust the rent at any time on the basis of changes in announced land values and related laws and regulations. At the end of the lease terms, the Group has renewal options if the Group does not violate the lease agreements during the rental period.

The Group also leased certain land and buildings as its plants and offices, with the lease term from 2 to 20 years. The lease contract for land located in Taoyuan specifies that lease payments will be adjusted every year on the basis of changes in announced land values, with the adjusted limitation of 3% and renewal options at the end of the lease terms. The lease contract for buildings in the United States contains extension options, which provide more operational flexibility for the Group. These terms are not reflected in measuring lease liabilities if the options are not reasonably certain to be exercised.

The Group does not have bargain purchase options to acquire the leasehold land and buildings at the end of the lease terms. In addition, without the lessors' consent, the Group is prohibited from subleasing or transferring all or any portion of the underlying assets, changing their use, or using illegally.

d. Other lease information

	For the Year Ended December 31, 2019
Expenses relating to short-term leases	$ 62,604
Expenses relating to low-value asset leases	$ 783
Total cash outflow for leases	$ 175,113

The Group leases other equipment which qualifies as short-term leases and low-value asset leases. The Group has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

16. GOODWILL AND OTHER INTANGIBLE ASSETS

	Goodwill	Patents	Others	Total
Balance at January 1, 2018	$ 6,702,636	$ 1,864,507	$ 24,646	$ 8,591,789
Additions	-	123,252	125,938	249,190
Amortization expenses	-	(395,765)	(24,829)	(420,594)
Effects of foreign currency exchange differences	78,608	27,162	(102)	105,668
Balance at December 31, 2018	6,781,244	1,619,156	125,653	8,526,053
Additions	-	50,546	73,257	123,803
Amortization expenses	-	(408,050)	(55,345)	(463,395)
Reclassifications	-	-	1,317	1,317
Effects of foreign currency exchange differences	(60,499)	(19,046)	(392)	(79,937)
Balance at December 31, 2019	$ 6,720,745	$ 1,242,606	$ 144,490	$ 8,107,841

The Group recognized goodwill in acquiring the patented technologies of electronic ink and electronic paper, which are mainly used in researching, developing, and manufacturing monitors and electronic shelf labels. The carrying amount of goodwill was allocated to the cash-generating units of these two products, and the recoverable amount of each cash-generating unit was determined based on a value in use calculation. The recoverable amount was determined by management based on financial budgets covering a 5-year period and discount rates of 12.67%-13.12% and 11.97%-12.42% per annum for the years ended December 31, 2019 and 2018, respectively. The cash flows beyond that 5-year period have been extrapolated using a steady annual growth rate. Other key assumptions included budgeted revenue and budgeted gross profit. Such assumptions were based on the past performance of the cash-generating unit and management's expectations of market development.

Other intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

Patents	6-17 years
Others	3-5 years

17. BORROWINGS

a. Short-term borrowings

	December 31	
	2019	2018
Unsecured borrowings	$ 3,214,696	$ 1,480,000
Secured borrowings (Note 30)	1,343,136	-
	$ 4,557,832	$ 1,480,000
Foreign currency included		
US$ (in thousands)	$ 44,802	$ -
JPY (in thousands)	$ 40,000	$ -
Interest rate intervals	0.95-2.59%	0.98-1.52%

b. Short-term bills payable

	December 31	
	2019	2018
Commercial paper	$ 580,000	$ 565,000
Less: Discounts on bills payable	113	278
	$ 579,887	$ 564,722
Interest rate intervals	0.61-0.79%	0.61-1.03%

c. Long-term borrowings (included in other non-current liabilities)

	December 31	
	2019	2018
Long-term payables	$ -	$ 44,752

Long-term payables on December 31, 2018 were interest-free infrastructure funds that Yangzhou Huaxia Integrated O/E System Co., Ltd. lent from Yangzhou Economic and Technological Development Zone Administration Committee. It has been repaid in November 2019.

18. OTHER PAYABLES

	December 31	
	2019	2018
Payables for salaries or bonuses	$ 787,812	$ 779,704
Payables for construction and equipment	123,125	127,906
Payable for professional service fees	49,921	45,911
Payables for utilities	40,367	30,018
Others	262,530	368,220
	$ 1,263,755	$ 1,351,759

19. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The Company and its subsidiary, YuanHan Materials Inc., adopted a pension plan under the Labor Pension Act (the “LPA”), which is a state-managed defined contribution plan. Under the LPA, each entity makes monthly contributions to employees’ individual pension accounts at 6% of monthly salaries and wages.

The employees of the Group’s subsidiaries in China are members of a state-managed retirement benefit plan operated by the government of China.

b. Defined benefit plans

The defined benefit plan adopted by the Company in accordance with the Labor Standards Law is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contributes amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Company assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor ("the Bureau"); the Company has no right to influence the investment policy and strategy.

The defined benefit plan adopted by Hydis Technologies Co., Ltd. in accordance with the law is operated by the government of South Korea.

The amounts included in the consolidated balance sheets in respect of the Group's defined benefit plans were as follows:

	December 31	
	2019	**2018**
Present value of defined benefit obligation	$ 153,393	$ 145,075
Fair value of plan assets	(65,793)	(64,305)
Net defined benefit liabilities	$ 87,600	$ 80,770

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation	**Fair Value of the Plan Assets**	**Net Defined Benefit Liabilities**
Balance at January 1, 2018	$ 128,201	$ (57,851)	$ 70,350
Current service cost	7,871	-	7,871
Net interest expense (income)	2,071	(824)	1,247
Recognized in profit or loss	9,942	(824)	9,118
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(1,465)	(1,465)
Actuarial loss - changes in demographic assumptions	2,705	-	2,705
Actuarial loss - changes in financial assumptions	4,059	-	4,059
Actuarial loss - experience adjustments	4,936	-	4,936
Recognized in other comprehensive income or loss	11,700	(1,465)	10,235
Contributions from the employer	-	(4,165)	(4,165)
Benefits paid	(4,577)	-	(4,577)
Exchange differences on foreign plans	(191)	-	(191)
Balance at December 31, 2018	145,075	(64,305)	80,770

(Continued)

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities
Current service cost	$ 6,571	$ -	$ 6,571
Net interest expense (income)	1,942	(747)	1,195
Recognized in profit or loss	8,513	(747)	7,766
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(2,101)	(2,101)
Actuarial loss - changes in demographic assumptions	4,755	-	4,755
Actuarial loss - changes in financial assumptions	6,339	-	6,339
Actuarial loss - experience adjustments	4,583	-	4,583
Recognized in other comprehensive income or loss	15,677	(2,101)	13,576
Contributions from the employer	-	(4,215)	(4,215)
Benefits paid	(15,108)	5,575	(9,533)
Exchange differences on foreign plans	(764)	-	(764)
Balance at December 31, 2019	$ 153,393	$ (65,793)	$ 87,600

(Concluded)

Through the defined benefit plans under the Labor Standards Law, the Group is exposed to the following risks:

1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

2) Interest risk: A decrease in the government bond interest rates will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plans’ debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salaries of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2019	2018
Discount rates	0.8-3.1%	1.1-3.2%
Expected rates of salary increase	2.8-3.3%	2.8-3.0%

If possible reasonable changes in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	December 31	
	2019	2018
Discount rates		
0.25-1% increase	$ (4,992)	$ (4,453)
0.25-1% decrease	$ 5,284	$ 4,687
Expected rates of salary increase		
0.25-1% increase	$ 5,124	$ 4,551
0.25-1% decrease	$ (4,876)	$ (4,354)

The sensitivity analysis presented above may not be representative of the actual changes in the present value of the defined benefit obligation as it is unlikely that changes in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2019	2018
Expected contributions to the plans for the next year	$ 4,541	$ 4,298
Average duration of the defined benefit obligation	5-12 years	3-12 years

20. EQUITY

a. Ordinary shares

	December 31	
	2019	2018
Number of shares authorized (in thousands)	2,000,000	2,000,000
Amount of shares authorized	$ 20,000,000	$ 20,000,000
Number of shares issued and fully paid (in thousands)	1,140,468	1,140,468
Amount of shares issued	$ 11,404,677	$ 11,404,677

b. Capital surplus

	December 31	
	2019	2018
May be used to offset a deficit, distributed as cash dividends or transferred to share capital (1)		
Issuance of shares	$ 9,494,322	$ 9,494,322
Conversion of bonds	525,200	525,200
Treasury share transactions	151,920	95,922

(Continued)

	December 31	
	2019	2018
<u>May only be used to offset a deficit</u>		
Expired employee share options	$ 50,346	$ 49,840
Changes in percentage of ownership interests in associates (2)	105	105
Unclaimed dividends extinguished by prescription	40	14
<u>May not be used for any purpose</u>		
Employee share options	85,060	77,890
	$ 10,306,993	$ 10,243,293

(Concluded)

1) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and once a year).

2) Such capital surplus arises from the effect of changes in ownership interest in associates resulting from equity transactions other than actual disposals or acquisitions, or from changes in capital surplus of associates accounted for using the equity method.

c. Retained earnings and dividends policy

Under the dividends policy as set forth in the Company's amended Articles of Incorporation, where the Company made a profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside a legal reserve of 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with at least 50% of any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders. For the policies on the distribution of employees' compensation and remuneration of directors after the amendment, refer to Note 22.

The Company's Articles of Incorporation also stipulate a dividends policy that allows previous accumulated undistributed earnings to be distributed. The distribution of dividends to shareholders is allowed to be in cash or by the issuance of shares. In principle, cash dividends should be at least 10% of the total dividends distributed.

The shareholders of the Company held their regular meeting on June 18, 2019 and in that meeting, resolved the amendments to the Company's Articles of Incorporation. The amendments explicitly stipulate that the board of directors are authorized to adopt a special resolution to distribute dividends and bonuses in cash and a report of such distribution should been submitted in the shareholder's meeting.

An appropriation of earnings to a legal reserve shall be made until the legal reserve equals the Company's paid-in capital. The legal reserve may be used to offset deficits. If the Company has no deficits and the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

Items referred to under Rule No. 1010012865 issued by the FSC and in the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Company.

The appropriations of earnings for 2018 and 2017 approved in the shareholders' meetings on June 18, 2019 and June 22, 2018, respectively, were as follows:

	Appropriation of Earnings		Dividends Per Share (NT$)	
	For the Year Ended December 31		For the Year Ended December 31	
	2018	2017	2018	2017
Legal reserve	$ 261,367	$ 207,806		
Special reserve	184,797	-		
Cash dividends	2,373,438	1,853,550	$ 2.10	$ 1.65

The appropriation of earnings for 2019 were proposed by the Company's board of directors on March 18, 2020. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT$)
Legal reserve	$ 308,077	
Reversal of special reserve	154,916	
Cash dividends	2,268,725	$2.00

The appropriation of earnings for 2019 is subject to resolution in the shareholders' meeting to be held on June 18, 2020.

d. Special reserve

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 70,678	$ 70,678
Appropriations in respect of Debits to other equity items	184,797	-
Balance at December 31	$ 255,475	$ 70,678

If a special reserve of $70,678 thousand appropriated on the first-time adoption of IFRSs relates to the exchange differences on translating the financial statements of foreign operations, the special reserve will be reversed proportionately on the Company's disposal of the foreign operations; on the Company's loss of significant influence; however, the entire special reserve will be reversed. An additional special reserve should be appropriated for the amount equal to the difference between the net debit balance of the reserves and the special reserve appropriated on the first-time adoption of IFRSs. Any special reserve appropriated may be reversed to the extent that the net debit balance reverses and may thereafter be distributed.

e. Other equity items

1) Exchange differences on translating the financial statements of foreign operations

	For the Year Ended December 31	
	2019	**2018**
Balance at January 1	$ (181,328)	$ (242,623)
Exchange differences on translating the financial statements of foreign operations	(753,232)	60,307
Share of associates and join ventures accounted for using the equity method	(6,161)	(900)
Disposal of subsidiaries	2,934	1,888
Balance at December 31	$ (937,787)	$ (181,328)

2) Unrealized gain (loss) on financial assets at FVTOCI

	For the Year Ended December 31	
	2019	**2018**
Balance at January 1	$ (74,147)	$ 376,899
Unrealized gain (loss) on equity instruments	989,731	(432,897)
Cumulative unrealized loss of equity instruments transferred to retained earnings due to disposal	(7,678)	(18,149)
Balance at December 31	$ 907,906	$ (74,147)

f. Non-controlling interests

	For the Year Ended December 31	
	2019	**2018**
Balance at January 1	$ 385,799	$ 310,300
Share of profit for the year	89,808	78,403
Remeasurement on defined benefit plans	59	43
Unrealized loss on financial assets at FVTOCI	(113)	-
Exchange difference on translating the financial statements of foreign operations	(22,908)	(2,947)
Balance at December 31	$ 452,645	$ 385,799

g. Treasury shares

Unit: Shares in Thousands

	For the Year Ended December 31	
	2019	**2018**
Number of shares at January 1	10,259	17,104
Transferred to employees	(4,154)	(6,845)
Number of shares at December 31	6,105	10,259

The board of directors of the Company resolved to repurchase 20,000 thousand shares of treasury shares on June 13, 2016, which was completed in August 2016, for the purpose of transferring to employees. Under the Securities and Exchange Act, the Company shall neither pledge treasury shares nor exercise shareholders' rights on these shares, such as the rights to dividends and to vote.

21. REVENUE

a. Revenue from contracts with customers

	For the Year Ended December 31	
Type of Revenue/Category by Product	**2019**	**2018**
Revenue from sale of goods		
Monitors	$ 10,742,725	$ 10,546,456
Electronic shelf labels	2,849,298	3,221,182
Others	9,653	441,023
	$ 13,601,676	$ 14,208,661
Royalty income	$ 2,240,251	$ 2,360,815

b. Contract balances

	December 31, 2019	December 31, 2018	January 1, 2018
Accounts receivable (Note 10)	$ 2,059,829	$ 2,243,412	$ 2,009,800
Contract assets-current			
Royalty	$ 60,088	$ 187,329	$ 192,775
Contract liabilities			
Royalty	$ 1,215,378	$ 1,423,203	$ 1,524,008
Sale of goods	83,230	149,799	128,842
Contract liabilities - current	1,298,608	1,573,002	1,652,850
Contract liabilities - non-current			
Royalty	1,024,259	1,761,719	1,481,910
	$ 2,322,867	$ 3,334,721	$ 3,134,760

The changes in the balances of contract assets and contract liabilities primarily result from the timing difference between the satisfaction of performance obligation and the customer's payment. Revenue recognized for the year from the beginning balance of the contract liabilities is as follows:

	For the Year Ended December 31	
Type of Revenue	**2019**	**2018**
Royalty income	$ 1,386,944	$ 1,586,796
Revenue from sale of goods	148,726	129,406
	$ 1,535,670	$ 1,716,202

22. NET INCOME

a. Depreciation and amortization

	For the Year Ended December 31	
	2019	2018
Property, plant and equipment	$ 700,576	$ 683,786
Other intangible assets	463,395	420,594
Rights-of-use assets	84,192	-
	$ 1,248,163	$ 1,104,380
An analysis of depreciation by function		
Operating costs	$ 332,070	$ 393,833
Operating expenses	452,698	289,953
	$ 784,768	$ 683,786
An analysis of amortization by function		
Operating costs	$ 3,673	$ 2,602
Operating expenses	459,722	417,992
	$ 463,395	$ 420,594

b. Employee benefits expense

	For the Year Ended December 31	
	2019	2018
Post-employment benefits (Note 19)		
Defined contribution plans	$ 74,082	$ 72,476
Defined benefit plans	7,766	9,118
	81,848	81,594
Share-based payments		
Equity-settled	63,912	135,552
Other employee benefits	3,608,196	3,485,230
Total employee benefits expense	$ 3,753,956	$ 3,702,376
An analysis of employee benefits expense by function		
Operating costs	$ 957,772	$ 1,114,021
Operating expenses	2,796,184	2,588,355
	$ 3,753,956	$ 3,702,376

c. Employees' compensation and remuneration of directors

According to the Articles of Incorporation of the Company, the Company accrued employees' compensation at the rates of no less than 1% and no higher than 10% as well as remuneration of directors at the rates of no higher than 1%, respectively, of net income before income tax, employees' compensation and remuneration of directors, net of accumulated deficit, if any. The employees' compensation and remuneration of directors for the years ended December 31, 2019 and 2018, which were approved by the Company's board of directors on March 18, 2020 and March 20, 2019, respectively, were as follows:

	For the Year Ended December 31	
	2019	**2018**
Employees' compensation	$ 31,900	$ 27,100
Remuneration of directors	$ 15,579	$ 12,238

If there is a change in the amounts after the annual consolidated financial statements were authorized for issue, the differences are recorded as a change in the accounting estimate in the following year.

There is no difference between the actual amounts of employees' compensation and remuneration of directors paid and the amounts recognized in the consolidated financial statements for the years ended December 31, 2018 and 2017.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2019 and 2018 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

23. INCOME TAXES

a. Major components of income tax expense recognized in profit or loss

	For the Year Ended December 31	
	2019	**2018**
Current tax		
In respect of the current year	$ 458,781	$ 212,311
Income tax on unappropriated earnings	6,682	-
Adjustments for the prior years	5,654	1,487
	471,117	213,798
Deferred tax		
In respect of the current year	76,753	384,431
Effect of tax rate changes	-	(31,037)
	76,753	353,394
Income tax expense recognized in profit or loss	$ 547,870	$ 567,192

A reconciliation of accounting profit and income tax expense is as follows:

	For the Year Ended December 31	
	2019	2018
Income before income tax from continuing operations	$ 3,721,467	$ 3,259,268
Income tax expense calculated at the statutory rate (20%)	$ 744,293	$ 651,854
Nondeductible expenses in determining taxable income	125,807	77,763
Tax-exempt income	(54,920)	(42,975)
Income tax on unappropriated earnings	6,682	-
Unrecognized loss carryforwards, deductible temporary differences and investment credits	(429,856)	(257,931)
Effect of tax rate changes	-	(31,037)
Effect of different tax rates of group entities operating in other jurisdictions	62,591	61,941
Adjustments for the prior years	5,654	1,487
Others	87,619	106,090
Income tax expense recognized in profit or loss	$ 547,870	$ 567,192

The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%. The effect of the change in tax rate on deferred tax benefit is recognized in full in the period in which the change in tax rate occurs. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings was reduced from 10% to 5%. The applicable tax rates used by subsidiaries in China and the United States are 25% and 21%, respectively. Tax rates used by other group entities operating in other jurisdictions are based on the tax laws in those jurisdictions.

In July 2019, the President of the ROC announced the amendments to the Statute for Industrial Innovation, which stipulate that the amounts of unappropriated earnings in 2018 and thereafter that are reinvested in the construction or purchase of certain assets or technologies are allowed as deduction when computing the income tax on unappropriated earnings.

b. Income tax recognized in other comprehensive income

	For the Year Ended December 31	
	2019	2018
Current tax - in respect of the current year	$ (2,938)	$ (2,014)
Deferred tax - effect of tax rate changes	-	(2,212)
Income tax benefit recognized in other comprehensive income	$ (2,938)	$ (4,226)

c. Current tax assets and liabilities

	December 31	
	2019	2018
Current tax assets		
Prepaid income tax	$ 20,230	$ 34,597
Tax refund receivable	1,781	10,253
	$ 22,011	$ 44,850
Current tax liabilities		
Income tax payable	$ 146,121	$ 128,343

d. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Exchange Differences	Closing Balance
Deferred tax assets					
Temporary differences					
Property, plant and equipment	$ 217,587	$ (104,361)	$ -	$ (2,273)	$ 110,953
Other payables	87,034	(22,093)	-	(1,567)	63,374
Inventories	198,805	7,636	-	(914)	205,527
Deferred revenue	33,924	(7,183)	-	(292)	26,449
Defined benefit plans	15,639	-	2,938	-	18,577
Prepayments	17,639	-	-	-	17,639
Others	32,936	7,996	-	(308)	40,624
	603,564	(118,005)	2,938	(5,354)	483,143
Loss carryforwards	266,049	(181,904)	-	(9,831)	74,314
Investment credits	202,275	239,615	-	(12,065)	429,825
	$ 1,071,888	$ (60,294)	$ 2,938	$ (27,250)	$ 987,282
Deferred tax liabilities					
Temporary differences					
Contract liabilities	$ 88,456	$ (10)	$ -	$ (4,995)	$ 83,451
Others	21,843	16,469	-	(909)	37,403
	$ 110,299	$ 16,459	$ -	$ (5,904)	$ 120,854

For the year ended December 31, 2018

	Opening Balance	Effect of Initial Application of IFRS 15	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Exchange Differences	Closing Balance
Deferred tax assets						
Temporary differences						
Property, plant and equipment	$ 241,833	$ -	$ (26,792)	$ -	$ 2,546	$ 217,587
Other payables	222,941	-	(136,963)	-	1,056	87,034
Inventories	148,247	-	49,673	-	885	198,805
Deferred revenue	43,380	-	(9,557)	-	101	33,924
Defined benefit plans	11,413	-	-	4,226	-	15,639
Prepayments	-	-	17,639	-	-	17,639
Others	19,355	-	13,560	-	21	32,936
	687,169	-	(92,440)	4,226	4,609	603,564
Loss carryforwards	505,023	-	(236,286)	-	(2,688)	266,049
Investment credits	233,057	-	(37,555)	-	6,773	202,275
	$ 1,425,249	$ -	$ (366,281)	$ 4,226	$ 8,694	$ 1,071,888
Deferred tax liabilities						
Temporary differences						
Contract liabilities	$ -	$ 94,843	$ (6,410)	$ -	$ 23	$ 88,456
Others	28,330	-	(6,477)	-	(10)	21,843
	$ 28,330	$ 94,843	$ (12,887)	$ -	$ 13	$ 110,299

e. Deductible temporary differences and unused loss carryforwards for which no deferred tax assets have been recognized in the consolidated balance sheets

	December 31	
	2019	**2018**
Loss carryforwards		
Expire in 2019	$ -	$ 84,399
Expire in 2020	1,017,102	1,080,637
Expire in 2021	50,191	52,244
Expire in 2022	1,011,974	1,035,450
Expire in 2023	343,647	370
Expire in 2024	290	290
Expire in 2025	316	761,124
Expire in 2026	17,263	17,262
Expire in 2027	156,218	495,540
Expire in 2028	94,453	351
Expire in 2029	109,495	460
Expire in 2030	26,338	26,984
	$ 2,827,287	$ 3,555,111
Deductible temporary differences	$ 887,029	$ 2,529,529

f. Information about unused loss carryforwards

Loss carryforwards as of December 31, 2019 comprised:

Unused Amount	**Expiry Year**
$ 1,059,803	2020
92,891	2021
1,054,674	2022
386,348	2023
42,990	2024
43,016	2025
43,601	2026
182,557	2027
120,791	2028
135,385	2029
26,338	2030
$ 3,188,394	

g. The aggregate amount of temporary difference associated with investments for which deferred tax liabilities have not been recognized

As of December 31, 2019 and 2018, the taxable temporary differences associated with investments in subsidiaries for which no deferred tax liabilities have been recognized were $10,744,914 thousand and $8,328,762 thousand, respectively.

h. Income tax assessments

Income tax assessments of the Group were as follows:

Company	Latest Assessment Year
The Company	2017
YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	2017
New Field e-Paper Co., Ltd.	2017
Linfiny Corporation	2017

24. EARNINGS PER SHARE

Unit: NT$ Per Share

	For the Year Ended December 31	
	2019	2018
Basic earnings per share	$ 2.72	$ 2.32
Diluted earnings per share	$ 2.71	$ 2.31

The earnings and weighted average number of ordinary shares outstanding used in the computation of earnings per share were as follows:

Net Income for the Year

	For the Year Ended December 31	
	2019	2018
Net income attributable to owners of the Company	$ 3,083,789	$ 2,613,673

Number of Shares

Unit: Shares in Thousands

	For the Year Ended December 31	
	2019	2018
Weighted average number of ordinary shares used in the computation of basic earnings per share	1,132,286	1,126,786
Effect of potentially dilutive ordinary shares		
Employees' compensation	1,178	1,010
Share-based payment arrangements	3,464	4,141
Weighted average number of ordinary shares used in the computation of diluted earnings per share	1,136,928	1,131,937

If the Group offered to settle compensation paid to employees in cash or shares, the Group assumed the entire amount of the compensation will be settled in shares and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares was included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

25. SHARE-BASED PAYMENT ARRANGEMENTS

The board of directors resolved on May 8, 2019, August 14, 2018, May 8, 2018 and March 22, 2017 to transfer treasury shares of 25 thousand shares, 5,885 thousand shares, 8,097 thousand shares and 7,289 thousand shares, respectively, to qualified employees of the Company and its subsidiaries. In compliance with the Company's Regulations Governing Share Repurchase and Transfer to Employees, the transfer price for each arrangements is the average of the actual acquisition price of the treasury shares.

Information about treasury shares transferred to employees is as follows:

For the year ended December 31, 2019

Unit: Shares in Thousands

Grant Date	Transferable Shares	Shares Transferred for the Year	Accumulated Shares Transferred	Expired Shares	Shares at December 31
May 8, 2019	25	25	25	-	-
August 14, 2018	5,885	40	40	509	5,336
May 8, 2018	8,097	3,889	7,913	184	-
March 22, 2017	7,289	200	5,917	1,372	-

For the year ended December 31, 2018

Grant Date	Transferable Shares	Shares Transferred for the Year	Accumulated Shares Transferred	Expired Shares	Shares at December 31
August 14, 2018	5,885	-	-	16	5,869
May 8, 2018	8,097	4,024	4,024	28	4,045
March 22, 2017	7,289	2,821	5,717	1,372	200

Treasury shares transferred to employees in 2018 and 2017 were priced using a Black-Scholes pricing model, while treasury shares transferred to employees in 2019 was measured using the difference between the grant date share price of $36.6 and the exercise price of $18.02, which fair value of the stock options was calculated as $18.58. Compensation costs recognized were $63,912 thousand and $135,552 thousand for the years ended December 31, 2019 and 2018, respectively. The inputs to the models are as follows:

	August 2018	May 2018	March 2017
Grant date share price (NT$)	$36.85	$31.55	$25.20
Exercise price (NT$)	$18.02	$18.02	$18.02
Expected volatility	53.23%	48.31-49.82%	30.53-40.29%
Expected life	0-1 year	0-1 year	0-2 years
Expected dividend yield	2.46%	2.46%	2.34%
Risk-free interest rate	0.91%	0.6-1.04%	0.63-1.08%
Weighted-average fair value of options granted (NT$)	$18.80	$13.55	$7.48

26. NON-CASH TRANSACTIONS

For the years ended December 31, 2019 and 2018, the Group entered into the following non-cash investing activities:

	For the Year Ended December 31	
	2019	2018
Acquisition of property, plant and equipment		
Increase in property, plant and equipment	$ 545,949	$ 615,485
Decrease (increase) in payables for construction and equipment (included in other payables)	4,543	(40,424)
Net cash paid	$ 550,492	$ 575,061

27. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximizing the return to shareholders through the optimization of the debt and equity balance. The Group's overall strategy remains unchanged in the future.

The Group's risk management committee reviews the capital structure on an annual basis. As part of this review, the committee considers the cost of capital and the risks associated with each class of capital. Based on the committee's recommendations, the Group expects to balance its capital structure through the payment of dividends, the issue of new shares and private ordinary shares or the payment of old debt.

28. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Non-derivative financial assets - mutual funds	$ 2,455,299	$ -	$ -	$ 2,455,299
Hybrid financial assets - overseas unlisted shares	-	-	60,285	60,285
	$ 2,455,299	$ -	$ 60,285	$ 2,515,584
Financial assets at FVTOCI				
Investments in equity instruments				
Domestic and overseas listed shares	$ 3,639,927	$ -	$ 782,743	$ 4,422,670
Domestic and overseas unlisted shares	-	-	51,847	51,847
	$ 3,639,927	$ -	$ 834,590	$ 4,474,517

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Non-derivative financial assets - mutual funds	$ 1,840,835	$ -	$ -	$ 1,840,835
Financial assets at FVTOCI				
Investments in equity instruments				
Domestic and overseas listed shares	$ 2,923,732	$ -	$ 462,545	$ 3,386,277
Domestic and overseas unlisted shares	-	-	45,459	45,459
	$ 2,923,732	$ -	$ 508,004	$ 3,431,736
Financial liabilities at FVTPL				
Derivative financial liabilities - foreign exchange forward contracts	$ -	$ 4,678	$ -	$ 4,678

There were no transfers between Levels 1 and 2 in the current and prior years.

2) Reconciliation of Level 3 fair value measurements of financial instruments

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 508,004	$ 264,501
Recognized in profit or loss	(17,715)	-
Recognized in other comprehensive income (loss)		
Unrealized gain (loss) on equity instruments	328,187	(534,558)
Exchange differences on translating the financial statements of foreign operations	(1,601)	(5,977)
	326,586	(540,535)
Purchases	78,000	968,590
Disposals	-	(184,552)
Balance at December 31	$ 894,875	$ 508,004

3) Valuation techniques and inputs applied for Level 2 fair value measurement

Derivatives - foreign exchange forward contracts were evaluated by to the discounted cash flow method. Future cash flows are estimated based on observable forward exchange rates and contracted exchange rates at the end of the reporting year, discounted at a rate that reflects the credit risk of each counterparties.

4) Valuation techniques and inputs applied for Level 3 fair value measurement

a) Domestic and overseas unlisted shares were evaluated by the market approach, referring to the market share prices and situations of companies with similar conditions. Unobservable input used by the Group was discount for lack of marketability, which was 20%-30% and 20% as of December 31, 2019 and 2018, respectively. If the discount for lack of marketability increased by 1% while all other variables were held constant, the fair value would have decreased $1,084 thousand and $126 thousand, respectively.

b) Overseas listed private shares were evaluated by the market approach, referring to the closing prices at the end of the reporting years with consideration of discount for lack of marketability. Unobservable input used by the Group was discount for lack of marketability, which was 15.18% and 16.6% as of December 31, 2019 and 2018, respectively. If the discount for lack of marketability increased by 1% while all other variables were held constant, the fair value would have decreased $9,228 thousand and $5,546 thousand, respectively.

b. Categories of financial instruments

	December 31	
	2019	**2018**
Financial assets		
FVTPL	$ 2,515,584	$ 1,840,835
Amortized cost (Note 1)	16,849,434	14,541,753
Equity instruments at FVTOCI	4,474,517	3,431,736
Financial liabilities		
FVTPL	-	4,678
Amortized cost (Note 2)	7,557,513	4,788,909

Note 1: The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents, accounts receivable and other receivables.

Note 2: The balances include financial liabilities measured at amortized cost, which comprise short-term borrowings, short-term bills payable, notes and accounts payable, other payables and long-term borrowings (included in other non-current liabilities).

c. Financial risk management objectives and policies

The Group’s major financial instruments include equity and debt investments, accounts receivable, notes and accounts payable, borrowings and lease liabilities. The Group’s Corporate Treasury function provides services to the business, monitors and manages the financial risks relating to the operations of the Group through internal risk reports that analyze exposures by degree and magnitude of risks. These risks include market risk, credit risk and liquidity risk.

1) Market risk

The Group’s activities exposed it primarily to foreign currency risk, interest rate risk and other price risk.

There have been no changes to the Group’s exposure to market risks or the manner in which these risks are managed and measured.

a) Foreign currency risk

Several subsidiaries of the Company had foreign-currency-denominated sales and purchases, which exposed the Group to foreign currency risk. Exchange rate exposures were managed within approved policy by utilizing foreign exchange forward contracts.

The carrying amounts of the Group's foreign-currency-denominated monetary assets and monetary liabilities (including those eliminated on consolidation) at the end of the reporting years are set out in Note 32.

Sensitivity analysis

The Group was mainly exposed to the U.S. dollar (USD).

The following table details the Group's sensitivity to a 1% increase and decrease in the New Taiwan dollar (NTD), renminbi (RMB) and South Korean Won (KRW) against USD. The sensitivity analysis included only outstanding foreign-currency-denominated monetary items and adjusts their translation at the end of the year for a 1% change in foreign currency rates. For a 1% strengthening of NTD, RMB and KRW against USD, pre-tax income would increase (decrease) as follows:

	NTD to USD For the Year Ended December 31		**RMB to USD For the Year Ended December 31**		**KRW to USD For the Year Ended December 31**	
	2019	**2018**	**2019**	**2018**	**2019**	**2018**
Profit or loss	$ (20,042)	$ (12,681)	$ (10,448)	$ (12,874)	$ (60,924)	$ (58,358)

b) Interest rate risk

The carrying amount of the Group's financial assets with exposure to interest rates at the end of the reporting years were as follows:

	December 31	
	2019	**2018**
Fair value interest rate risk		
Financial assets	$ 13,002,514	$ 9,922,843
Financial liabilities	$ 5,137,719	$ 2,089,474
Lease liabilities	$ 1,794,262	$ -
Cash flow interest rate risk		
Financial assets	$ 1,570,259	$ 2,003,246

Sensitivity analysis

The sensitivity analysis below was determined based on the Group's exposure to interest rates for non-derivative instruments at the end of the reporting years. A 50 basis point increase or decrease was used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates. The effective interest rates of floating rate financial assets will change when the market rates change, which will result in fluctuations in future cash flows.

If interest rates had been 50 basis points higher, the Group's pre-tax cash inflows for the years ended December 31, 2019 and 2018, would increase $7,851 thousand and $10,016 thousand, respectively, which was attributable to the Group's floating rate on its financial assets and if interest rates had been 50 basis points lower, there would be an equal and opposite impact on pre-tax cash flows.

c) Other price risk

The Group was exposed to instrument price risk and equity price risk through its investments in mutual funds and equity securities. Equity investments are held for strategic rather than for trading purposes, and the Group does not actively trade these investments.

Sensitivity analysis

The sensitivity analysis below was determined based on the exposure to price risk of mutual funds and equity securities at the end of the reporting years.

If prices in mutual funds and equity securities had been 5% higher/lower, the income before income tax for the years ended December 31, 2019 and 2018, would have increased/decreased by $125,779 thousand and $92,042 thousand, respectively, as a result of the changes in fair value of financial assets at FVTPL, and the other comprehensive income or loss before income tax for the years ended December 31, 2019 and 2018, would have increased/decreased by $223,726 thousand and $171,587 thousand, respectively, as a result of the changes in fair value of financial assets at FVTOCI.

The Group's sensitivity to investments in equity securities resulting from the fair value of equity securities increases.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. As at the end of the reporting years, the Group's maximum exposure to credit risk, which would cause a financial loss to the Group due to failure of counterparties to discharge an obligation and financial guarantees provided by the Group, could arise from:

a) The carrying amount of the respective recognized financial assets as stated in the consolidated balance sheets; and

b) The amount of contingent liabilities in relation to financial guarantees issued by the Group.

The Group adopted a policy of only dealing with creditworthy counterparties, evaluated potential customers through an internal credit rating system and set the credit limit of customers to grasp the credit status of the counterparties and effectively control the credit exposure.

3) Liquidity risk

The Group manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Group's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Group relies on bank borrowings as a significant source of liquidity. As of December 31, 2019 and 2018, the Group's unutilized short-term bank borrowing facilities were $3,019,934 thousand and $3,221,445 thousand, respectively.

The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The table has been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Group can be required to pay, including principal and estimated interest. Therefore, bank borrowings with a repayment on demand clause were included in the earliest time band regardless of the probability of the banks choosing to exercise their rights.

December 31, 2019

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Non-derivative financial liabilities					
Lease liabilities	$ 9,651	$ 19,303	$ 85,428	$ 368,373	$ 1,800,200
Fixed interest rate liabilities	3,941,755	1,206,956	-	-	-
	$ 3,951,406	$ 1,226,259	$ 85,428	$ 368,373	$ 1,800,200

Additional information about the maturity analysis for lease liabilities was as follows:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	$ 114,382	$ 368,373	$ 407,519	$ 388,659	$ 388,659	$ 615,363

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Non-derivative financial liabilities					
Fixed interest rate liabilities	$ 1,916,151	$ 130,321	$ -	$ -	$ -
Non-interest bearing liabilities	-	-	-	-	44,752
	$ 1,916,151	$ 130,321	$ -	$ -	$ 44,752

29. TRANSACTIONS WITH RELATED PARTIES

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note. Details of transactions between the Group and other related parties are disclosed below.

a. Related party name and category

Related Party Name	Related Party Category
NTX Electronics Yangzhou Co., Ltd.	Associate
Dihao Electronics (Yangzhou) Co., Ltd.	Associate
Plastic Logic HK Limited	Associate
PL Germany GmbH	Associate
Yuen Foong Yu Biotech Co., Ltd.	Associate
YFY Inc.	Investor with significant influence over the Group
YFY Investment Co., Ltd.	Subsidiary of investor with significant influence over the Group
Eihoyo Shoji Co., Ltd.	Subsidiary of investor with significant influence over the Group
Yuen Foong Paper Co., Ltd. (Nanjing)	Subsidiary of investor with significant influence over the Group
Yuen Foong Yu Paper Mfg. Co., Ltd. (Yangzhou)	Subsidiary of investor with significant influence over the Group
Arizon RFID Technology (Yangzhou) Co., Ltd.	Subsidiary of investor with significant influence over the Group
YFY Packaging Inc.	Subsidiary of investor with significant influence over the Group
Yuen Foong Yu Consumer Products Co., Ltd.	Subsidiary of investor with significant influence over the Group
YFY Holding Management Co., Ltd.	Subsidiary of investor with significant influence over the Group
Yuen Foong Yu Consumer Products (Yangzhou) Co., Ltd.	Subsidiary of investor with significant influence over the Group
Yuen Foong Yu Blue Economy Natural Resources (Yangzhou) Co., Ltd.	Subsidiary of investor with significant influence over the Group
Yeon Technologies (Yangzhou) Co., Ltd.	Subsidiary of investor with significant influence over the Group
China Color Printing Co., Ltd.	Subsidiary of investor with significant influence over the Group
LiVEBRiCKS Inc.	Subsidiary of investor with significant influence over the Group
Syntax Communication (H.K.) Limited	Subsidiary of investor with significant influence over the Group
YFY Jupiter US, Inc.	Subsidiary of investor with significant influence over the Group
Jupiter Prestige Group North America Inc.	Subsidiary of investor with significant influence over the Group
Spectiv Brands, LLC	Subsidiary of investor with significant influence over the Group
Johnson Lee	Key management personnel
Yuen Foong Yu Biotech (Kunshan) Co., Ltd.	Substantive related party

(Continued)

Related Party Name	Related Party Category
Yuen Foong Paper Co., Ltd.	Substantive related party
SinoPac Securities Corp.	Substantive related party
Hsin Yi Enterprise Co., Ltd.	Substantive related party
TGKW Management Limited	Substantive related party
Hsin Fan Precision Electronics (Yangzhou) Co., Ltd.	Substantive related party
Foongtone Technology Co., Ltd.	Substantive related party
Shen's Art Print Co., Ltd.	Substantive related party

(Concluded)

b. Sales of goods

Related Party Category	For the Year Ended December 31 2019	2018
Associate	$ 40,277	$ 7,327
Others	-	37
	$ 40,277	$ 7,364

c. Purchases of goods

Related Party Category	For the Year Ended December 31 2019	2018
Associate	$ 575,555	$ 833,327
Investor and its subsidiaries with significant influence over the Group	8,002	8,413
Substantive related party	31	31
	$ 583,588	$ 841,771

d. Manufacturing costs

Related Party Category	For the Year Ended December 31 2019	2018
Substantive related party	$ 52,989	$ 55,998
Others	513	89
	$ 53,502	$ 56,087

e. Operating expenses

Related Party Category	For the Year Ended December 31 2019	2018
Substantive related party	$ 24,384	$ 25,198
Associate	9,379	11,741
Investor and its subsidiaries with significant influence over the Group	6,509	6,219
	$ 40,272	$ 43,158

f. Non-operating income - other income

Related Party Category	For the Year Ended December 31	
	2019	2018
Associate	$ 6,023	$ 6,781
Subsidiary of investor with significant influence over the Group	3,430	14,407
Substantive related party	82	299
	$ 9,535	$ 21,487

g. Accounts receivable from related parties (included in accounts receivable)

Related Party Category/Name	December 31	
	2019	2018
Associate	$ 128,863	$ 136,033
Subsidiary of investor with significant influence over the Group	7,931	23,536
Substantive related party	-	78
	$ 136,794	$ 159,647

The outstanding accounts receivable from related parties were unsecured. For the years ended December 31, 2019 and 2018, no impairment loss was recognized for accounts receivable from related parties.

h. Accounts payable to related parties (included in notes and accounts payable)

Related Party Category	December 31	
	2019	2018
Associate	$ 27,219	$ 5,962
Substantive related party	4,682	5,439
Subsidiary of investor with significant influence over the Group	3,871	3,716
	$ 35,772	$ 15,117

The outstanding accounts payable to related parties were unsecured.

i. Prepayments and refundable deposits (included in other non-current assets)

Related Party Category/Name	December 31	
	2019	2018
Substantive related party		
Yuen Foong Yu Biotech (Kunshan) Co., Ltd.	$ 48,474	$ 50,480
Others	22	482
	$ 48,496	$ 50,962

j. Acquisitions of intangible assets

Related Party Category	Purchase Price December 31 2019	2018
Associate	$ 18,609	$ -

k. Lease arrangements

The Group leased offices from a subsidiary of investor with significant influence over the Group, with the lease term for 4 years. The related amounts were as follows:

Line Item	December 31, 2019
Lease liabilities	
Current (included in other current liabilities)	$ 3,001
Non-current	812
	$ 3,813

Line Item	For the Year Ended December 31, 2019
Interest expenses	$ 73

The lease contract between the Group and the related party was determined by reference to the market conditions and payment terms that were similar to those with the third parties.

l. Guarantee deposits received (included in other non-current liabilities)

Related Party Category	December 31 2019	2018
Key management personnel	$ 1,050	$ 1,050
Others	65	67
	$ 1,115	$ 1,117

m. Compensation of key management personnel

	For the Year Ended December 31 2019	2018
Short-term employee benefits	$ 128,004	$ 125,917
Post-employment benefits	1,566	1,426
Share-based payments	38,495	34,040
	$ 168,065	$ 161,383

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

30. ASSETS PLEDGED AS COLLATERAL

As of December 31, 2019 and 2018, the following demand deposits and time deposits included in financial asset at amortized cost and other non-current assets were provided as collateral for short-term borrowings, line of credit for derivative instrument trading, tariffs guarantee for imported inventories, lease deposits for plants and land, and deposits for provisional attachment:

	December 31	
	2019	**2018**
Current	$ 1,616,260	$ 518,848
Non-current	146,847	155,486
	$ 1,763,107	$ 674,334

31. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

Guaranteed notes issued for long-term and short-term borrowings and lines of credit for derivative instrument trading were $6,220,000 thousand and $4,670,000 thousand as of December 31, 2019 and 2018, respectively.

Letters of bank guarantees issued for tariff guarantee for imported inventories were $257,848 thousand and $89,506 thousand as of December 31, 2019 and 2018, respectively.

The board of directors of the subsidiary, Transcend Optronics (Yangzhou) Co., Ltd., approved in March 2020 for an investment plan for the next three to five years. The content of the investment plan includes the construction of R&D buildings, capacity expansion and fundamental operating expenses, with expected investment amount from US$50,000 thousand to US$55,000 thousand. The source of funds is from the parent company’s capital increase via cash and the subsidiary’s proprietary funds.

32. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The following information was aggregated by the foreign currencies other than functional currencies of the group entities and the exchange rates between foreign currencies and respective functional currencies were disclosed. The significant assets and liabilities denominated in foreign currencies were as follows:

December 31, 2019

	Foreign Currency	Exchange Rate	Carrying Amount
Foreign currency assets			
Monetary items			
USD	$ 203,216	1,145.587 (USD:KRW)	$ 6,092,416
USD	199,524	29.98 (USD:NTD)	5,981,730
USD	170,686	6.976 (USD:RMB)	5,117,166
USD	16,862	7.789 (USD:HKD)	505,523
			$ 17,696,835

(Continued)

	Foreign Currency	Exchange Rate	Carrying Amount
Non-monetary items			
Mutual funds			
USD	$ 81,897	1,145.587 (USD:KRW)	$ 2,455,299
Foreign currency liabilities			
Monetary items			
USD	132,673	29.98 (USD:NTD)	$ 3,977,537
USD	135,836	6.976 (USD:RMB)	4,072,363
USD	15,899	7.789 (USD:HKD)	476,652
			$ 8,526,552

(Concluded)

December 31, 2018

	Foreign Currency	Exchange Rate	Carrying Amount
Foreign currency assets			
Monetary items			
USD	$ 189,999	1,106.847 (USD:KRW)	$ 5,835,819
USD	183,199	30.715 (USD:NTD)	5,626,957
USD	131,188	6.863 (USD:RMB)	4,029,439
USD	34,289	7.834 (USD:HKD)	1,053,187
			$ 16,545,402
Non-monetary items			
Mutual funds			
USD	59,932	1,106.847 (USD:KRW)	$ 1,840,835
Foreign currency liabilities			
Monetary items			
USD	141,912	30.715 (USD:NTD)	$ 4,358,827
USD	89,275	6.863 (USD:RMB)	2,742,082
USD	33,340	7.834 (USD:HKD)	1,024,038
			$ 8,124,947

The Group’s net realized and unrealized gain on foreign currency exchange were $223,994 thousand and $310,568 thousand for the years ended December 31, 2019 and 2018, respectively. It is impractical to disclose net gain or loss on foreign currency exchange by each significant foreign currency due to the variety of the foreign currency transactions and the functional currency of each entity in the Group.

33. SEPARATELY DISCLOSED ITEMS

a. Information about significant transactions and investees:

1) Financing provided to others (Table 1)

2) Endorsements/guarantees provided (Table 2)

3) Marketable securities held (excluding investments in subsidiaries, associates and joint ventures) (Table 3)

4) Marketable securities acquired and disposed of at costs or prices of at least NT$300 million or 20% of the paid-in capital (Table 4)

5) Acquisition of individual real estate at costs of at least NT $300 million or 20% of the paid-in capital (None)

6) Disposal of individual real estate at prices of at least NT$300 million or 20% of the paid-in capital (Table 5)

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital (Table 6)

8) Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital (Table 7)

9) Trading in derivative instruments (Note 7)

10) Intercompany relationships and significant intercompany transactions (Table 10)

11) Information on investees (Table 8)

b. Information on investments in mainland China (Table 9)

1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income or loss, carrying amount of the investment at the end of the year, repatriations of investment income and limit on the amount of investment in the mainland China area.

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms and unrealized gains or losses:

a) The amount and percentage of purchases and the balance and percentage of the related payables at the end of the year.

b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the year.

c) The amount of property transactions and the amount of the resultant gains or losses.

d) The balance of negotiable instrument endorsements or guarantees or pledges of collateral at the end of the year and the purposes.

e) The highest balance, the end of year balance, the interest rate range and total current year interest with respect to financing of funds.

f) Other transactions that have a material effect on the profit or loss for the year or on the financial position, such as the rendering or receipt of services.

34. SEGMENT INFORMATION

Information reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance focuses on the breakdown by region. The Group’s reportable segments were classified into the ROC, Asia and Americas according to their geographic locations.

The profit or loss from the Group’s operating segments is primarily measured by the segment profit or loss, which is used for the basis for assessment of performance. In addition, there are no significant differences between the accounting standards applied by the segments and the summary of significant accounting policies as disclosed in Note 4.

a. Segment revenue and results

The following was an analysis of the Group’s revenue and results from operation by reportable segment:

	Segment Revenue	Segment Profit (Loss)
For the year ended December 31, 2019		
ROC	$ 14,557,163	$ 1,098,283
Asia	9,313,938	132,762
America	3,900,444	(310,162)
Adjustment and eliminations	(14,169,869)	-
	$ 13,601,676	920,883
Administration cost and remunerations to directors		(361,072)
Interest income		337,373
Royalty income		2,240,251
Dividend income		184,437
Interest expenses		(86,085)
Gain on sale of land use right		153,500
Net gain on foreign currency exchange		223,994
Net gain on fair value changes of financial assets and liabilities at FVTPL		83,444
Impairment loss		(63,654)
Other non-operating income and expenses, net		88,396
Income before income tax from continuing operations		$ 3,721,467

(Continued)

	Segment Revenue	Segment Profit (Loss)
For the year ended December 31, 2018		
ROC	$ 15,333,670	$ 1,287,665
Asia	10,279,307	(225,489)
America	4,014,081	(187,704)
Adjustment and eliminations	(15,418,397)	-
	$ 14,208,661	874,472
Administration cost and remunerations to directors		(417,307)
Interest income		176,439
Royalty income		2,360,815
Dividend income		136,225
Interest expenses		(28,579)
Net gain on foreign currency exchange		310,568
Net gain on fair value changes of financial assets and liabilities at FVTPL		6,413
Impairment loss		(223,627)
Other non-operating income and expenses, net		63,849
Income before income tax from continuing operations		$ 3,259,268

(Concluded)

Segment profit represented the income before income tax earned by each segment without allocation of administration costs and remuneration of directors, interest income, royalty income, dividend income, interest expenses, gain on sale of land use rights, net gain on foreign currency exchange, net gain on fair value changes of financial assets and liabilities at FVTPL, impairment loss, other non-operating income and expenses, and income tax expense, etc.

b. Revenue from major products

Category by Product	For the Year Ended December 31 2019	2018
Monitors	$ 10,742,725	$ 10,546,456
Electronic shelf labels	2,849,298	3,221,182
Others	9,653	441,023
	$ 13,601,676	$ 14,208,661

c. Geographical information

The Group operates in three principal geographical areas - ROC, Asia and Americas.

The Group's information about its non-current assets by location of assets is detailed below.

	Non-current Assets December 31	
	2019	2018
ROC	$ 3,356,754	$ 1,755,295
Asia	1,418,936	1,841,732
America	9,541,421	9,859,730
	$ 14,317,111	$ 13,456,757

Non-current assets include property, plant and equipment, right-of-use assets, goodwill, other intangible assets and other non-current assets and exclude non-current assets classified as financial assets at FVTOCI, financial assets at FVTPL (included in other non-current assets), investments accounted for using the equity method and deferred tax assets.

d. Information about major customers

Customers who contributed 10% or more to the Group's revenue, mainly from monitors, were as follows:

	For the Year Ended December 31	
	2019	2018
Customer A	$ 3,211,841	$ 4,476,536
Customer B	2,513,417	53,438
Customer C	2,052,854	2,511,470
	$ 7,778,112	$ 7,041,444

E INK HOLDINGS INC. AND SUBSIDIARIES

FINANCING PROVIDED TO OTHERS
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

No.	Financing Company	Counterparty	Financial Statement Account	Related Party	Maximum Balance for the Year (Note 1)	Ending Balance (Note 1)	Amount Actually Drawn (Note 1)	Interest Rate Intervals (%)	Nature of Financing	Business Transaction Amount	Reasons for Short-term Financing	Allowance for Impairment Loss	Collateral		Financing Limit for Each Borrowing Company (Note 2)	Aggregate Financing Limit (Note 2)
													Item	Value		
1	Transcend Optronics (Yangzhou) Co., Ltd.	Yangzhou Huaxia Integrated O/E System Co., Ltd.	Other receivables	Yes	$ 946,888 (RMB 206,222 thousand)	$ 886,234 (RMB 206,222 thousand)	$ 886,234 (RMB 206,222 thousand)	3.915	Short-term financing	$ -	Working capital	$ -	Right-of-use of land and buildings	$ 438,731 (RMB 102,090 thousand)	$ 3,161,412 (RMB 735,645 thousand)	$ 3,161,412 (RMB 735,645 thousand)
2	SiPix Technology Inc. (Note 3)	E Ink Holdings Inc.	Other receivables	Yes	250,000	-	-	1	Short-term financing	-	Working capital	-	-	-	-	-
3	Hydis Technologies Co., Ltd.	YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Other receivables	Yes	457,500 (US$ 15,000 thousand)	449,700 (US$ 15,000 thousand)	449,700 (US$ 15,000 thousand)	2	Short-term financing	-	Working capital	-	-	-	3,342,973 (KRW 127,740,668 thousand)	3,342,973 (KRW 127,740,668 thousand)

Note 1: The amounts are translated at the exchange rate of US$1=$29.98, RMB1=$4.29747, and KRW1=$0.02617 on December 31, 2019, except the maximum balance that is translated at the highest exchange rate at the end of each month for the year.

Note 2: The aggregate and individual financing limit of subsidiaries shall not exceed 40% of the financing company's net equity per its latest financial statement. The above restriction does not apply to Transcend Optronics (Yangzhou) Co., Ltd. when providing financing to the foreign subsidiaries whose voting shares are 100% owned, directly or indirectly, by the Company. Nonetheless, the aggregate and individual financing limit to these subsidiaries shall not exceed the financing company's net equity per its latest financial statements.

Note 3: SiPix Technology Inc. has been dissolved after merging with Yuanhan Materials Inc. on October 1, 2019. Refer to Note 13.

Note 4: The above intercompany transactions have been eliminated upon consolidation.

E INK HOLDINGS INC. AND SUBSIDIARIES

ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

No.	Endorsement/Guarantee Provider	Endorsed/Guaranteed Party		Limit on Endorsement/ Guarantee Amount Provided to Each Endorsed/ Guaranteed Party (Note 1)	Maximum Balance for the Year (Note 2)	Ending Balance (Note 2)	Amount Actually Drawn (Note 2)	Amount of Endorsement/ Guarantee Collateralized by Properties	Ratio of Accumulated Endorsement/ Guarantee to Net Equity per Latest Financial Statements (%)	Maximum Endorsement/ Guarantee Amount Allowable (Note 3)	Endorsement/ Guarantee Provided by Parent Company	Endorsement/ Guarantee Provided by Subsidiary	Endorsement/ Guarantee to Subsidiary in Mainland China
		Name	Relationship										
0	E Ink Holdings Inc.	E Ink Corporation	Subsidiary	$ 7,250,035	$ 884,800 (US$ 28,000 thousand)	$ 419,720 (US$ 14,000 thousand)	$ -	$ -	1.45	$ 29,000,139	Yes	No	No
		YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Subsidiary	7,250,035	850,000	850,000	373,500	-	2.93	29,000,139	Yes	No	No
		Linfiny Corporation	Subsidiary	7,250,035	410,000	410,000	101,040	-	1.41	29,000,139	Yes	No	No
1	Hydis Technologies Co., Ltd.	E Ink Holdings Inc.	Parent company	2,089,358 (KRW 79,837,918 thousand)	449,700 (US$ 15,000 thousand)	449,700 (US$ 15,000 thousand)	-	-	5.38	8,357,433 (KRW 319,351,671 thousand)	No	Yes	No

Note 1: The amount shall not exceed 25% of the Company's net equity.

Note 2: The amounts are translated at the exchange rate of US$1=29.98, and KRW1=0.02617 on December 31, 2019, except the maximum balance is translated at the highest exchange rate of the end of each month for the year.

Note 3: The amount shall not exceed the Company's net equity.

TABLE 3

E INK HOLDINGS INC. AND SUBSIDIARIES

MARKETABLE SECURITIES HELD
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019				Note
				Shares/Units (In Thousands)	Carrying Amount	Percentage of Ownership (%)	Fair Value	
E Ink Holdings Inc.	Ordinary shares							
	SinoPac Financial Holding Company Limited	Substantive related party	Financial assets at FVTOCI	90,451	$ 1,175,869	0.80	$ 1,175,869	
	YFY Inc.	Investor with significant influence over the Company	Financial assets at FVTOCI	7,814	105,099	0.47	105,099	
	Ultra Chip, Inc.	-	Financial assets at FVTOCI	2,638	80,448	4.13	80,448	
	IGNIS INNOVATION INC.	-	Financial assets at FVTPL - non-current	388	-	0.19	-	
	New Medical Imaging Co., Ltd.	-	Financial assets at FVTPL - non-current	109	-	2.37	-	
	Convertible preferred shares							
	MICAREO INC.	-	Financial assets at FVTPL - non-current	6,000	60,285	14.69	60,285	
YuanHan Materials Inc.	Ordinary shares							
	SinoPac Financial Holding Company Limited	Substantive related party	Financial assets at FVTOCI	146,432	1,903,620	1.30	1,903,620	
	YFY Inc.	Investor with significant influence over the parent company	Financial assets at FVTOCI	16	215	-	215	
	Netronix Inc.	One of its director	Financial assets at FVTOCI	5,309	211,041	6.40	211,041	
	SES-imagotag	-	Financial assets at FVTOCI	867	782,743	5.50	782,743	
	Fitipower Integrated Technology Inc.	-	Financial assets at FVTOCI	2,689	101,092	1.62	101,092	
	Formolight Technologies, Inc.	-	Financial assets at FVTOCI	2,228	16,120	10.93	16,120	
	Echem Solutions Corp.	-	Financial assets at FVTOCI	743	13,296	1.27	13,296	
	eCrowd Media Inc.	-	Financial assets at FVTOCI	1,010	4,598	6.62	4,598	
Transcend Optronics (Yangzhou) Co., Ltd.	Ordinary shares							
	Dalian DKE LCD Co., Ltd.	-	Financial assets at FVTOCI	837	RMB 4,150 thousand	3.52	RMB 4,150 thousand	
Hydis Technologies Co., Ltd.	Ordinary shares							
	Ssangyong Cement Industry Co., Ltd.	-	Financial assets at FVTOCI	423	KRW 2,397,860 thousand	0.08	KRW 2,397,860 thousand	
	Mutual funds							
	Term Liquidity Fund	-	Financial assets at FVTPL - current	771	KRW 94,135,529 thousand	-	KRW 94,135,529 thousand	

Note: Please refer to Tables 8 and 9 for information on investments in subsidiaries and associates.

E INK HOLDINGS INC. AND SUBSIDIARIES

MARKETABLE SECURITIES ACQUIRED AND DISPOSED AT COSTS OR PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of Each Foreign Currency)

Company Name	Type and Name of Marketable Securities	Financial Statement Account	Counterparty	Relationship	Beginning Balance		Acquisition		Disposal				Other Adjustments	Ending Balance	
					Units (In Thousands)	Amount	Units (In Thousands)	Amount	Units (In Thousands)	Prices	Carrying Amount	Gain on Disposal (Note 1)		Units (In Thousands)	Amount
Rich Optronics (Yangzhou) Co., Ltd.	Principal guaranteed wealth investment products														
	Su-Yin-Xi structured	Financial assets at amortized cost	Bank of Jiangsu	-	-	RMB 68,000 thousand	-	RMB 167,000 thousand	-	RMB 186,799 thousand	RMB 184,500 thousand	RMB 2,299 thousand	-	-	RMB 50,500 thousand
	China CITIC Bank structured	Financial assets at amortized cost	China CITIC Bank	-	-	-	-	RMB 79,000 thousand	-	RMB 79,484 thousand	RMB 79,000 thousand	RMB 484 thousand	-	-	-
	Principal guaranteed wealth investment products														
Transyork Technology Yangzhou Ltd.	Interest rate linked structured deposits	Financial assets at amortized cost	Bank of Nanjing	-	-	-	-	RMB 91,000 thousand	-	RMB 92,491 thousand	RMB 91,000 thousand	RMB 1,491 thousand	-	-	-
	Mutual Funds														
Hydis Technologies Co., Ltd.	Term Liquidity Fund	Financial assets at FVTPL - current	Citibank	-	578	KRW66,591,956 thousand	452	KRW53,715,200 thousand	259	KRW30,617,223 thousand	KRW30,109,200 thousand	KRW 508,023 thousand (Note 2)	KRW 3,937,573 thousand (Note 2)	771	KRW94,135,529 thousand
	Ordinary shares														
E Ink Holdings Inc.	SiPix Technology Inc.	Investment accounted for using the equity method	(Note 3)	Subsidiary	-	2,010,330	-	-	-	1,310,010	1,310,010	-	(700,320) (Note 4)	-	-
	Ordinary shares														
	YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Investment accounted for using the equity method	(Note 3)	Subsidiary	152,433	1,819,546	31,386	1,310,010	-	-	-	-	921,926 (Note 4)	183,819	4,051,482

Note 1: Included in interest income.

Note 2: Included in net gain on financial assets and liabilities at FVTPL.

Note 3: YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.) issued new shares to merge SiPix Technology Inc. in October 2019. Refer to Note 13.

Note 4: Changes in capital surplus, share of profit or loss of subsidiaries accounted for using the equity method, exchange differences on translating the financial statements of foreign operations, and unrealized gain (loss) on financial assets at FVTOCI, etc. are included.

E INK HOLDINGS INC. AND SUBSIDIARIES

DISPOSAL OF INDIVIDUAL REAL ESTATE AT PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of RMB)

Seller	Property	Event Date	Original Acquisition Date	Carrying Amount	Transaction Amount	Collection	Gain (Loss) on Disposal	Counterparty	Relationship	Purpose of Disposal	Price Reference	Other Terms
Yangzhou Huaxia Integrated O/E System Co., Ltd.	Land use rights, building and its accessories	November 27, 2019	February 2007 Acquisition of land use right	RMB 23,150 thousand	RMB 328,986 thousand	Based on the actual delivery of the property ownership certificate and land use certificate, as well as the progress of local government funding.	(Note)	Yangzhou Economic and Technological Development Zone's Demolition Placement Management Office	-	Cooperating with the government's regional expropriation plan of Yangzhou Economic and Technological Development Zone.	Reference to the appraisal result by Zhongzheng real estate appraisal cost Group Co., Ltd. and Jiangsu Zhong Run Assets Appraisal Co., Ltd., and the local government compensation regulations of land reserve and house demolition.	-

Note: The actual gain of disposal will be determined by the process of receipt of payment, delivery of the property ownership certificate and land use certificate, and will be adjusted by related tax expenses and recognized according to the regulations of IFRS.

TABLE 6

E INK HOLDINGS INC. AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Receivable (Payable)		Note
			Purchase/Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% of Total (Note 1)	
E Ink Holdings Inc.	Prime View Communications Ltd.	Subsidiary	Sale	$ (3,211,841)	(25)	By agreements	$ -	-	$ 476,392	18	
	PVI International Corp.	Subsidiary	Sale	(2,892,095)	(22)	By agreements	-	-	283,029	11	
	E Ink Corporation	Subsidiary	Purchase	3,414,694	36	By agreements	-	-	(445,237)	(18)	
	E Ink Japan Inc.	Subsidiary	Purchase	101,567	1	By agreements	-	-	(8,230)	-	
	SiPix Technology Inc. (Note 3)	Subsidiary	Sale	(557,840)	(4)	By agreements	-	-	-	-	
	YuanHan Materials Inc.	Subsidiary	Sale	(204,148)	(2)	By agreements	-	-	305,731	11	(Note 4)
	YuanHan Materials Inc.	Subsidiary	Purchase	125,211	1	By agreements	-	-	(20,893)	(1)	
	Transcend Optronics (Yangzhou) Co., Ltd.	Subsidiary	Purchase	1,256,895	13	By agreements	-	-	(1,321,897)	(52)	
	NTX Electronics Yangzhou Co., Ltd.	Associate	Purchase	459,777	5	By agreements	-	-	-	-	
SiPix Technology Inc. (Note 3)	E Ink Holdings Inc.	Parent company	Purchase	557,840	88	By agreements	-	-	-	-	
YuanHan Materials Inc.	E Ink Holdings Inc.	Parent company	Sale	(125,211)	(31)	By agreements	-	-	20,893	8	
	E Ink Holdings Inc.	Parent company	Purchase	204,148	72	By agreements	-	-	(305,731)	(100)	
Linfiny Corporation	Linfiny Japan Inc.	Subsidiary	Purchase	122,845	52	By agreements	-	-	(30,532)	(52)	
	NTX Electronics Yangzhou Co., Ltd.	Associate	Purchase	115,570	48	By agreements	-	-	(27,429)	(47)	
Linfiny Japan Inc.	Linfiny Corporation	Parent company	Sale	(122,845)	(100)	By agreements	-	-	30,532	100	
Prime View Communications Ltd.	E Ink Holdings Inc.	Parent company	Purchase	3,211,841	100	By agreements	-	-	(476,392)	(100)	
PVI International Corp.	E Ink Holdings Inc.	Parent company	Purchase	2,892,095	100	By agreements	-	-	(283,029)	(100)	
Transcend Optronics (Yangzhou) Co., Ltd.	E Ink Holdings Inc.	Parent company	Sale	(1,256,895)	(100)	By agreements	-	-	1,321,897	100	
E Ink Corporation	E Ink Holdings Inc.	Parent company	Sale	(3,414,694)	(98)	By agreements	-	-	445,237	93	
	E Ink California, LLC	Subsidiary	Purchase	479,714	50	By agreements	-	-	(323,096)	(96)	
E Ink California, LLC	E Ink Corporation	Parent company	Sale	(479,714)	(100)	By agreements	-	-	323,096	100	
E Ink Japan Inc.	E Ink Holdings Inc.	Parent company	Sale	(101,595)	(100)	By agreements	-	-	8,230	100	

Note 1: The calculation is based on each company's receivables from (payables to) related parties.

Note 2: The above intercompany transactions have been eliminated upon consolidation, except transactions with NTX Electronics Yangzhou Co., Ltd.

Note 3: SiPix Technology Inc. has been dissolved after merging with Yuanhan Materials Inc. on October 1, 2019. Refer to Note 13.

Note 4: The balance of accounts receivable includes accounts receivable of SiPix Technology Inc., which was merge into YuanHan Materials Inc.

TABLE 7

E INK HOLDINGS INC. AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate (Times)	Overdue		Amount Received in Subsequent Year	Allowance for Impairment Loss
					Amount	Actions Taken		
E Ink Holdings Inc.	Prime View Communications Ltd.	Subsidiary	$ 476,392	4.28	$ -	-	$ 412,167	$ -
	PVI International Corp.	Subsidiary	283,029	13.79	-	-	240,533	-
	YuanHan Materials Inc.	Subsidiary	305,731	1.34	2,304	Collected	98,721	-
	Transcend Optronics (Yangzhou) Co., Ltd.	Subsidiary	1,468,494	(Note 1)	168,126	Collected	734,535	-
YuanHan Materials Inc.	Transcend Optronics (Yangzhou) Co., Ltd.	Same ultimate parent company	236,462	(Note 1)	-	-	196,427	-
Tech Smart Logistics Ltd.	E Ink Holdings Inc.	Parent company	629,345	(Note 1)	629,345	In the process of collection	-	-
Dream Pacific International Corp.	Tech Smart Logistics Ltd.	Same ultimate parent company	157,325	(Note 1)	157,325	In the process of collection	-	-
PVI Global Corp.	Dream Pacific International Corp.	Subsidiary	203,864	(Note 2)	203,864	In the process of collection	-	-
Transcend Optronics (Yangzhou) Co., Ltd.	E Ink Holdings Inc.	Parent company	1,321,897	(Note 1)	1	Collected	580,184	-
E Ink Corporation	E Ink Holdings Inc.	Parent company	445,237	10.67	5,617	Collected	383,431	-
E Ink California, LLC	E Ink Corporation	Parent company	323,096	1.68	197,623	In the process of collection	76,910	-

Note 1: Other receivables from materials delivered to subcontractors.

Note 2: Cash dividends receivables.

Note 3: The above intercompany transactions have been eliminated upon consolidation.

TABLE 8

E INK HOLDINGS INC. AND SUBSIDIARIES

INFORMATION ON INVESTEES
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2019			Net Income (Loss) of Investee	Share of Profit (Loss) of Investee	Note
				December 31, 2019	December 31, 2018	Shares (In Thousands)	Percentage of Ownership (%)	Carrying Amount			
E Ink Holdings Inc.	PVI Global Corp.	British Virgin Islands	Investment	$ 3,090,254	$ 3,090,254	99,413	100.00	$ 12,910,061	$ 2,403,115	$ 2,403,115	(Note 1)
	New Field e-Paper Co., Ltd.	Taoyuan, Taiwan	Wholesale and sale of electronics parts	6,394,455	6,394,455	671,032	100.00	5,476,644	(126,683)	(126,683)	(Note 1)
	E Ink Corporation	Boston, USA	Manufacture and sale of electronic ink	4,911,303	4,911,303	1	45.31	4,184,838	109,334	(103,087)	(Note 1)
	YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Taipei, Taiwan	Research, development and sale of electronic parts and electronic ink	6,420,230	5,015,000	183,819	100.00	4,051,482	156,083	148,111	(Notes 1 and 2)
	SiPix Technology Inc.	Taoyuan, Taiwan	Manufacture and sale of electronic ink	-	1,405,230	-	-	-	477,108	477,108	(Notes 1 and 2)
	Dream Universe Ltd.	Mauritius	Trading	128,710	128,710	4,050	100.00	372,492	8,375	8,375	(Note 1)
	Prime View Communications Ltd.	Hong Kong	Trading	18,988	18,988	3,570	100.00	27,679	408	408	(Note 1)
	Entte K Co., Ltd.	Taichung, Taiwan	Manufacture and sale of consumer audio-visual systems	34,547	34,547	2,203	47.07	-	-	-	Under liquidation
	Tech Smart Logistics Ltd.	British Virgin Islands	Trading	49,267	49,267	1,550	0.09	3,861	(96,916)	(87)	(Note 1)
	Hot Tracks International Ltd.	British Virgin Islands	Trading	1,735	1,735	50	100.00	46	12	12	(Note 1)
	Linfiny Corporation	Taoyuan, Taiwan	Research, development and sale of electronic ink	16,800	-	1,680	4.00	2,880	(103,411)	(920)	(Note 1)
New Field e-Paper Co., Ltd.	Tech Smart Logistics Ltd.	British Virgin Islands	Trading	4,865,850	4,865,850	1,748,252	99.91	4,286,601	(96,916)	(96,828)	(Note 1)
	E Ink Corporation	Boston, USA	Manufacture and sale of electronic ink	1,618,500	1,618,500	-	12.88	1,189,598	109,334	(29,304)	(Note 1)
YuanHan Materials Inc.	Linfiny Corporation	Taoyuan, Taiwan	Research, development and sale of electronic ink	323,400	323,400	32,340	77.00	55,436	(103,411)	(79,627)	(Note 1)
	Lucky Joy Holdings Ltd.	Samoa	Investment	36,117	36,117	1,098	100.00	11	-	-	(Note 1)
	Yuen Foong Yu Biotech Co., Ltd.	Taipei, Taiwan	Cultivation, processing and sale of agriculture and restaurant management	36,000	36,000	3,600	36.00	-	(62,926)	-	
	Kyoritsu Optronics Co., Ltd.,	Taipei, Taiwan	Technology development, transfer and licensing of flat panels	18,860	18,860	1,050	25.65	-	-	-	
SiPix Technology Inc.	Linfiny Corporation	Taoyuan, Taiwan	Research, development and sale of electronic ink	-	16,800	-	-	-	(103,411)	(3,216)	(Note 1)
Linfiny Corporation	Linfiny Japan Inc.	Tokyo, Japan	Research and development of electronic ink	11,088	11,088	4	100.00	23,151	3,188	3,188	(Note 1)
E Ink Corporation	E Ink California, LLC	California, USA	Research, development and sale of electronic ink	US$ 29,100 thousand	US$ 29,100 thousand	27,400	100.00	US$ 30,312 thousand	US$ 3,201 thousand	US$ 1,154 thousand	(Note 1)
	E Ink Japan Inc.	Tokyo, Japan	Development of electronic ink products	US$ 86 thousand	US$ 86 thousand	-	100.00	US$ 444 thousand	US$ 163 thousand	US$ 163 thousand	(Note 1)
	E Ink Systems, LLC	California, USA	Research and development of application software	-	US$ 337 thousand	-	-	-	US$ 103 thousand	US$ 103 thousand	(Note 1)
Tech Smart Logistics Ltd.	E Ink Corporation	Boston, USA	Manufacture and sale of electronic ink	US$ 152,875 thousand	US$ 152,875 thousand	1	41.81	US$ 127,333 thousand	US$ 3,884 thousand	US$ (3,056) thousand	(Note 1)
PVI Global Corp.	PVI International Corp.	British Virgin Islands	Trading	US$ 151,300 thousand	US$ 151,300 thousand	151,300	100.00	US$ 105,668 thousand	US$ 8,902 thousand	US$ 8,902 thousand	(Note 1)
	Dream Pacific International Corp.	British Virgin Islands	Investment	US$ 1,000 thousand	US$ 1,000 thousand	26,000	100.00	US$ 251,067 thousand	US$ 65,017 thousand	US$ 65,017 thousand	(Note 1)
	Ruby Lustre Ltd.	British Virgin Islands	Investment	US$ 30,000 thousand	US$ 30,000 thousand	30,000	100.00	US$ 25,952 thousand	US$ 192 thousand	US$ 192 thousand	(Note 1)
	North Diamond International Co., Ltd.	British Virgin Islands	Investment	US$ 1,750 thousand	US$ 1,750 thousand	1,750	35.00	-	-	-	
	Rock Pearl International Corp.	British Virgin Islands	Investment	US$ 1,540 thousand	US$ 1,540 thousand	1,540	35.00	-	-	-	
Dream Pacific International Corp.	Hydis Technologies Co., Ltd.	South Korea	Research, development and licensing of monitors	US$ 27,612 thousand	US$ 27,612 thousand	3,783	94.73	US$ 259,838 thousand	US$ 67,053 thousand	US$ 64,638 thousand	(Note 1)
Hydis Technologies Co., Ltd.	Plastic Logic HK Limited	Hong Kong	Research, development and manufacture of electronic paper display panels	KRW 2,942,500 thousand	-	2,500	48.90	KRW 2,148,976 thousand	KRW(2,715,802) thousand	KRW (793,524) thousand	

Note 1: All intercompany transactions have been eliminated upon consolidation.

Note 2: YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.) issued new shares to merge SiPix Technology Inc. in October 2019. Refer to Note 13.

TABLE 9

E INK HOLDINGS INC. AND SUBSIDIARIES

INFORMATION ON INVESTMENTS IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Main Business and Product	Paid-in Capital (Note 1)	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2019 (Note 1)	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2019 (Note 1)	Net Income (Loss) of Investee (Note 2)	Direct or Indirect Percentage of Ownership (%)	Share of Profit (Loss) of Investee (Notes 2 and 3)	Carrying Amount as of December 31, 2019 (Note 1)	Accumulated Repatriation of Investment Income as of December 31, 2019
					Outward	Inward						
Transcend Optronics (Yangzhou) Co., Ltd.	Assembly and sale of display panels	$ 4,535,974 (US$ 151,300 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	$ 3,263,173 (US$ 108,845 thousand)	$ -	$ -	$ 3,263,173 (US$ 108,845 thousand)	$ 320,557 (US$ 10,370 thousand)	100.00	$ 274,406 (US$ 8,877 thousand)	$ 3,161,301 (US$ 105,447 thousand)	$ -
Rich Optronics (Yangzhou) Co., Ltd.	Assembly and sale of display panels	899,400 (US$ 30,000 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	899,400 (US$ 30,000 thousand)	-	-	899,400 (US$ 30,000 thousand)	5,935 (US$ 192 thousand)	100.00	5,935 (US$ 192 thousand)	778,041 (US$ 25,952 thousand)	-
Transyork Technology Yangzhou Ltd.	Assembly and sale of display panels	2,156,491 (US$ 71,931 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	-	-	-	-	188,100 (US$ 6,085 thousand)	100.00	245,163 (US$ 7,931 thousand)	1,891,108 (US$ 63,079 thousand)	-
Transmart Electronics (Yangzhou) Ltd.	Research, development and sale of flat panels	297,282 (US$ 9,916 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	198,168 (US$ 6,610 thousand)	-	-	198,168 (US$ 6,610 thousand)	27,388 (US$ 886 thousand)	100.00	14,127 (US$ 457 thousand)	58,101 (US$ 1,938 thousand)	-
Yangzhou Huaxia Integrated O/E System Co., Ltd.	Manufacture and sale of LED products	557,628 (US$ 18,600 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	89,940 (US$ 3,000 thousand)	-	-	89,940 (US$ 3,000 thousand)	103,802 (US$ 3,358 thousand)	100.00	103,802 (US$ 3,358 thousand)	(752,018) (US$ (25,084) thousand)	-
Dihao Electronics (Yangzhou) Co., Ltd. (Under liquidation)	Assembly of LCD backlight board display modules	149,900 (US$ 5,000 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	52,465 (US$ 1,750 thousand)	-	-	52,465 (US$ 1,750 thousand)	-	35.00	-	-	-
NTX Electronics Yangzhou Co., Ltd.	Manufacture and sale of flat panels	171,899 (RMB 40,000 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	-	-	-	-	25,822 (RMB 5,761 thousand)	49.00	12,363 (RMB 2,823 thousand)	91,639 (RMB 21,325 thousand)	-

(Continued)

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2019 (Note 1)	Investment Amount Authorized by Investment Commission, MOEA (Note 1)	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
$ 4,503,146 (US$ 150,205 thousand)	$ 8,364,750 (US$ 279,011 thousand)	$ 19,848,018

Note 1: The amounts are translated at the exchange rate of US$1＝NT$29.98 and RMB1＝NT$4.29747 on December 31, 2019.

Note 2: The amounts are translated at the average exchange rate of US$1＝NT$30.912 and RMB1＝NT$4.48214 for the year ended December 31, 2019.

Note 3: The amounts were calculated based on audited financial statements of the corresponding year.

Note 4: For information on the prices, payment terms and unrealized profit or loss of significant transactions with investee companies in mainland China, please refer to Tables 1, 6 and 7.

Note 5: The above intercompany transactions have been eliminated upon consolidation, except transactions with NTX Electronics Yangzhou Co., Ltd. and Dihao Electronics (Yangzhou) Co., Ltd.

(Concluded)

E INK HOLDINGS INC. AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

No	Company Name	Related Party	Relationship	Transaction Details			
				Financial Statement Account	Amount	Payment Terms	% of Total Sales or Assets
0	E Ink Holdings Inc.	Prime View Communications Ltd.	Subsidiary	Sales	$ 3,211,841	By agreements	23.6
		PVI International Corp.	Subsidiary	Sales	2,892,095	By agreements	21.3
		Tech Smart Logistics Ltd.	Subsidiary	Accounts payable to related parties	629,345	By agreements	1.5
		E Ink Corporation	Subsidiary	Cost of goods sold	3,414,694	By agreements	25.1
		SiPix Technology Inc. (Note 3)	Subsidiary	Sales	557,840	By agreements	4.1
		Transcend Optronics (Yangzhou) Co., Ltd.	Subsidiary	Accounts receivable from related parties	1,468,494	By agreements	3.5
		Transcend Optronics (Yangzhou) Co., Ltd.	Subsidiary	Accounts payable to related parties	1,321,897	By agreements	3.2
		Transcend Optronics (Yangzhou) Co., Ltd.	Subsidiary	Cost of goods sold	1,256,895	By agreements	9.2
1	Transcend Optronics (Yangzhou) Co., Ltd.	Yangzhou Huaxia Integrated O/E System Co., Ltd.	Subsidiary	Other receivables from related parties	964,780	By agreements	2.3

Note 1: The above intercompany transactions have been eliminated upon consolidation.

Note 2: Transactions amounts of $500 million or more are disclosed in this table.

Note 3: SiPix Technology Inc. has been dissolved after merging with Yuanhan Materials Inc. on October 1, 2019. Refer to Note 13.

E Ink Holdings Inc.

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

Deloitte.

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INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
E Ink Holdings Inc.

Opinion

We have audited the accompanying financial statements of E Ink Holdings Inc. (the "Company"), which comprise the balance sheets as of December 31, 2019 and 2018, and the statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

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

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

Key Audit Matter

A key audit matter is a matter that, in our professional judgment, was of most significance in our audit of the financial statements for the year ended December 31, 2019. This matter was 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 this matter.

The key audit matter for the Company's financial statements for the year ended December 31, 2019 is stated as follows:

<u>Sales Revenue - Recognition of Sales Revenue of Electronic Shelf Labels Products</u>

The Company mainly sells products, such as monitors and electronic shelf labels, which were affected by the changes in the end-market demand this year. The Company adjusted its product assortment to increase the group overall gross profit margin and consequently increased the risk of the occurrence of sales revenue transactions from electronic shelf label products, which carried high gross profit margin. Therefore, the recognition of sales revenue of electronic shelf label products was identified as a key audit matter.

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

1. We understood and tested the design and operating effectiveness of relevant internal controls over the occurrence of sales revenue of electronic shelf label products.

2. We sampled the sales details of electronic shelf label products, inspected receipts signed by the customers or export declaration of overseas sales, and confirmed the receipt of payments.

3. We inspected subsequent significant sales returns and allowances.

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

Those charged with governance, including members of the audit committee, are responsible for overseeing the Company's financial reporting process.

Auditors' Responsibilities for the Audit of the 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 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 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 override of internal control.

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

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

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related

disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the 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 entities or business activities within the Company to express an opinion on the 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 a matter that was of most significance in the audit of the financial statements for the year ended December 31, 2019, and is therefore the key audit matter. We describe this matter 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 Hui-Min Huang and Chih-Ming Shao.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 18, 2020

<u>*Notice to Readers*</u>

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

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

E INK HOLDINGS INC.

BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019		2018	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 4 and 6)	$ 1,021,441	3	$ 1,166,960	3
Accounts receivable (Notes 4 and 8)	985,790	3	676,905	2
Accounts receivable from related parties (Note 24)	2,665,187	7	3,210,369	9
Inventories (Notes 4 and 9)	1,663,656	4	1,676,864	5
Prepayments	69,725	-	114,487	-
Other current assets (Notes 4, 18, 24 and 25)	63,449	-	73,796	-
Total current assets	6,469,248	17	6,919,381	19
NON-CURRENT ASSETS				
Financial assets at fair value through profit or loss (Note 4)	60,285	-	-	-
Financial assets at fair value through other comprehensive income (Notes 4 and 7)	1,361,416	4	1,120,180	3
Investments accounted for using the equity method (Notes 4 and 10)	27,029,983	72	25,350,261	72
Property, plant and equipment (Notes 4, 11, 17 and 21)	1,330,352	3	1,376,998	4
Right-of-use assets (Notes 4, 12 and 17)	840,585	2	-	-
Other intangible assets (Notes 4, 17 and 24)	246,717	1	254,224	1
Deferred tax assets (Notes 4 and 18)	275,583	1	259,469	1
Other non-current assets	52,995	-	53,888	-
Total non-current assets	31,197,916	83	28,415,020	81
TOTAL	$ 37,667,164	100	$ 35,334,401	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Note 13)	$ 2,940,000	8	$ 1,230,000	4
Short-term bills payable (Note 13)	379,919	1	399,812	1
Contract liabilities (Notes 4 and 16)	150,411	-	203,605	1
Notes and accounts payable	885,690	2	1,181,788	3
Accounts payable to related parties (Note 24)	2,519,458	7	3,173,821	9
Other payables (Note 21)	582,861	2	588,257	2
Other payables to related parties (Notes 21 and 24)	8,763	-	257,880	1
Current tax liabilities (Notes 4 and 18)	45,598	-	93,272	-
Receipts in advance (Notes 4 and 24)	112,953	-	71,185	-
Other current liabilities (Notes 4 and 12)	70,346	-	59,674	-
Total current liabilities	7,695,999	20	7,259,294	21
NON-CURRENT LIABILITIES				
Contract liabilities (Notes 4 and 16)	67,087	-	65,806	-
Lease liabilities (Notes 4 and 12)	824,971	2	-	-
Net defined benefit liabilities (Notes 4 and 14)	76,941	1	64,818	-
Other non-current liabilities (Notes 4, 18 and 24)	2,027	-	15,838	-
Total non-current liabilities	971,026	3	146,462	-
Total liabilities	8,667,025	23	7,405,756	21
EQUITY (Notes 15 and 20)				
Share capital	11,404,677	30	11,404,677	33
Capital surplus	10,306,993	27	10,243,293	29
Retained earnings				
Legal reserve	1,773,654	5	1,512,287	4
Special reserve	255,475	1	70,678	-
Unappropriated earnings	5,399,253	14	5,138,085	15
Total retained earnings	7,428,382	20	6,721,050	19
Other equity	(29,881)	-	(255,475)	(1)
Treasury shares	(110,032)	-	(184,900)	(1)
Total equity	29,000,139	77	27,928,645	79
TOTAL	$ 37,667,164	100	$ 35,334,401	100

The accompanying notes are an integral part of the financial statements.

E INK HOLDINGS INC.

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	**%**	**Amount**	**%**
OPERATING REVENUE (Notes 4, 16 and 24)	$ 12,860,810	100	$ 12,773,679	100
OPERATING COSTS (Notes 9, 17 and 24)	10,715,354	83	10,582,105	83
GROSS PROFIT	2,145,456	17	2,191,574	17
UNREALIZED LOSS ON TRANSACTIONS WITH SUBSIDIARIES	-	-	(1,492)	-
REALIZED GROSS PROFIT	2,145,456	17	2,190,082	17
OPERATING EXPENSES (Notes 17 and 24)				
Selling and marketing expenses	393,693	3	381,269	3
General and administrative expenses	657,956	5	757,525	6
Research and development expenses	999,315	8	794,738	6
Total operating expenses	2,050,964	16	1,933,532	15
INCOME FROM OPERATIONS	94,492	1	256,550	2
NON-OPERATING INCOME AND EXPENSES				
Interest income	9,929	-	4,279	-
Royalty income (Notes 4 and 16)	248,388	2	241,696	2
Dividend income (Note 4)	66,208	-	51,892	-
Other income	40,007	-	42,744	-
Interest expenses (Notes 11 and 24)	(37,839)	-	(14,688)	-
Share of profit of subsidiaries accounted for using the equity method	2,806,352	22	2,119,710	17
Net gain (loss) on disposal of property, plant and equipment	6,011	-	(1,316)	-
Net gain (loss) on foreign currency exchange (Note 27)	(64,791)	(1)	56,663	-
Impairment loss (Notes 4 and 11)	(12,895)	-	(86,805)	-
Net loss on fair value change of financial assets and liabilities at fair value through profit or loss	(17,715)	-	-	-
Other expenses	(2,644)	-	(3,342)	-
Total non-operating income and expenses	3,041,011	23	2,410,833	19
INCOME BEFORE INCOME TAX	3,135,503	24	2,667,383	21
INCOME TAX EXPENSE (Notes 4 and 18)	(51,714)	-	(53,710)	-
NET INCOME FOR THE YEAR	3,083,789	24	2,613,673	21

(Continued)

E INK HOLDINGS INC.

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019 Amount	2019 %	2018 Amount	2018 %
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Notes 4 and 14)	$ (14,690)	-	$ (11,060)	-
Unrealized gain on investments in equity instruments at fair value through other comprehensive income	251,164	2	42,302	-
Share of other comprehensive income (loss) of subsidiaries accounted for using the equity method	739,622	6	(474,417)	(3)
Income tax relating to items that will not be reclassified subsequently to profit or loss (Notes 4 and 18)	2,938	-	4,226	-
	979,034	8	(438,949)	(3)
Items that may be reclassified subsequently to profit or loss:				
Share of other comprehensive income (loss) of subsidiaries accounted for using the equity method	(756,459)	(6)	61,295	-
	(756,459)	(6)	61,295	-
Other comprehensive income (loss) for the year, net of income tax	222,575	2	(377,654)	(3)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 3,306,364	26	$ 2,236,019	18
EARNINGS PER SHARE (Note 19)				
Basic	$ 2.72		$ 2.32	
Diluted	$ 2.71		$ 2.31	

The accompanying notes are an integral part of the financial statements. (Concluded)

E INK HOLDINGS INC.

STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	Share Capital			Retained Earnings			Other Equity				
	Shares (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences on Translating the Financial Statements of Foreign Operations	Unrealized Gain (Loss) on Available-for-sale Financial Assets	Unrealized Gain (Loss) on Financial Assets at FVTOCI	Treasury Shares	Total
BALANCE AT JANUARY 1, 2018	1,140,468	$ 11,404,677	$ 10,108,119	$ 1,304,481	$ 70,678	$ 4,246,203	$ (242,623)	$ 349,232	$ -	$ (308,269)	$ 26,932,498
Effect of retrospective application	-	-	-	-	-	327,468	-	(349,232)	376,899	-	355,135
BALANCE AT JANUARY 1, 2018 AS RESTATED	1,140,468	11,404,677	10,108,119	1,304,481	70,678	4,573,671	(242,623)	-	376,899	(308,269)	27,287,633
Appropriation of 2017 earnings											
Legal reserve	-	-	-	207,806	-	(207,806)	-	-	-	-	-
Cash dividends	-	-	-	-	-	(1,853,550)	-	-	-	-	(1,853,550)
Unclaimed dividends extinguished by prescription	-	-	14	-	-	-	-	-	-	-	14
Net income for the year ended December 31, 2018	-	-	-	-	-	2,613,673	-	-	-	-	2,613,673
Other comprehensive income (loss) for the year ended December 31, 2018, net of income tax	-	-	-	-	-	(6,052)	61,295	-	(432,897)	-	(377,654)
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	2,607,621	61,295	-	(432,897)	-	2,236,019
Share-based payments	-	-	135,552	-	-	-	-	-	-	-	135,552
Disposal of investments in equity instruments at fair value through other comprehensive income	-	-	-	-	-	18,149	-	-	(18,149)	-	-
Treasury shares transferred to employees	-	-	(392)	-	-	-	-	-	-	123,369	122,977
BALANCE AT DECEMBER 31, 2018	1,140,468	11,404,677	10,243,293	1,512,287	70,678	5,138,085	(181,328)	-	(74,147)	(184,900)	27,928,645
Appropriation of 2018 earnings											
Legal reserve	-	-	-	261,367	-	(261,367)	-	-	-	-	-
Special reserve	-	-	-	-	184,797	(184,797)	-	-	-	-	-
Cash dividends	-	-	-	-	-	(2,373,438)	-	-	-	-	(2,373,438)
Unclaimed dividends extinguished by prescription	-	-	26	-	-	-	-	-	-	-	26
Net income for the year ended December 31, 2019	-	-	-	-	-	3,083,789	-	-	-	-	3,083,789
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	-	-	-	-	-	(10,697)	(756,459)	-	989,731	-	222,575
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	3,073,092	(756,459)	-	989,731	-	3,306,364
Share-based payments	-	-	63,912	-	-	-	-	-	-	-	63,912
Disposal of investments in equity instruments at fair value through other comprehensive income	-	-	-	-	-	7,678	-	-	(7,678)	-	-
Treasury shares transferred to employees	-	-	(238)	-	-	-	-	-	-	74,868	74,630
BALANCE AT DECEMBER 31, 2019	1,140,468	$ 11,404,677	$ 10,306,993	$ 1,773,654	$ 255,475	$ 5,399,253	$ (937,787)	$ -	$ 907,906	$ (110,032)	$ 29,000,139

The accompanying notes are an integral part of the financial statements.

E INK HOLDINGS INC.

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	$ 3,135,503	$ 2,667,383
Adjustments for		
Depreciation expenses	273,394	240,682
Amortization expenses	47,314	39,643
Expected credit loss recognized (reversed) on accounts receivable	(230)	1,120
Net loss on fair value changes of financial assets and liabilities at fair value through profit or loss	17,715	-
Interest expenses	37,839	14,688
Interest income	(9,929)	(4,279)
Dividend income	(66,208)	(51,892)
Compensation costs of share-based payments	38,909	91,454
Share of profit of subsidiaries accounted for using the equity method	(2,806,352)	(2,119,710)
Net loss (gain) on disposal of property, plant and equipment	(6,011)	1,316
Impairment loss	12,895	86,805
Write-downs of inventories	102,850	217,212
Unrealized loss on transactions with subsidiaries	-	1,492
Net unrealized loss on foreign currency exchange	48,829	30,515
Royalty income	(248,388)	(241,696)
Changes in operating assets and liabilities		
Accounts receivable	(323,422)	(423,076)
Accounts receivable from related parties	464,918	1,106,122
Inventories	(89,642)	19,716
Prepayments	41,534	(102,474)
Other current assets	3,595	(12,313)
Contract liabilities	196,475	340,470
Notes and accounts payable	(288,933)	(638,927)
Accounts payable to related parties	(618,720)	(969,117)
Other payables	42,957	(46,591)
Receipts in advance	58,400	(90,006)
Other current liabilities	(6,414)	25,409
Net defined benefit liabilities	(2,567)	(2,134)
Cash generated from operations	56,311	181,812
Income tax paid	(126,704)	(137,519)
Net cash generated from (used in) operating activities	(70,393)	44,293
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from disposal of financial assets at fair value through other comprehensive income	9,928	-
Acquisition of financial assets at amortized cost	(34,666)	(36,835)
Proceeds from disposal of financial assets at amortized cost	36,835	36,678
Acquisition of financial assets at fair value through profit or loss	(78,000)	-
Acquisition of subsidiaries	(4,340)	-
Acquisition of property, plant and equipment	(261,619)	(176,100)

(Continued)

E INK HOLDINGS INC.

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019	2018
Proceeds from disposal of property, plant and equipment	$ 6,071	$ 72
Decrease in other receivables from related parties	4,474	26,481
Acquisition of other intangible assets	(36,581)	(67,646)
Decrease (increase) in other non-current assets	58	(674)
Interest received	9,899	4,171
Dividends received	1,188,712	798,083
Net cash generated from investing activities	840,771	584,230
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in short-term borrowings	1,710,000	999,900
Increase (decrease) in short-term bills payable	(19,893)	399,812
Increase (decrease) in other payables to related parties	(249,146)	244,802
Repayment of the principal portion of lease liabilities	(20,616)	-
Increase (decrease) in other non-current liabilities	329	(566)
Cash dividends	(2,373,438)	(1,853,550)
Proceeds from treasury shares transferred to employees	74,630	122,977
Interest paid	(37,789)	(14,311)
Proceeds from unclaimed dividends extinguished by prescription	26	14
Net cash used in financing activities	(915,897)	(100,922)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(145,519)	527,601
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	1,166,960	639,359
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 1,021,441	$ 1,166,960

The accompanying notes are an integral part of the financial statements.

(Concluded)

1. GENERAL INFORMATION

E Ink Holdings Inc. (the “Company”) was incorporated in June 1992 in the Hsinchu Science Park. The Company’s shares have been listed on the Taipei Exchange (TPEx) Mainboard since March 30, 2004. The Company mainly researches, develops, manufactures and sells electronic paper display panels.

The financial statements of the Company are presented in New Taiwan dollars, the functional currency of the Company.

2. AUTHORIZATION OF FINANCIAL STATEMENTS

The financial statements were approved by the Company’s board of directors on March 18, 2020.

3. APPLICATION OF NEW AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and SIC Interpretations (SIC) (collectively referred to as the “IFRSs”) endorsed and issued into effect by the Financial Supervisory Commission (FSC)

   Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Company’s accounting policies:

   IFRS 16 “Leases”

   IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessee and lessor. It supersedes IAS 17 “Leases”, IFRIC 4 “Determining whether an Arrangement contains a Lease”, and a number of related interpretations. Please refer to Note 4 for information relating to the relevant accounting policies.

   Definition of a lease

   The Company elects to apply the guidance of IFRS 16 in determining whether contracts are, or contain, a lease only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 are not reassessed and are accounted for in accordance with the transitional provisions under IFRS 16.

The Company as lessee

The Company recognizes right-of-use assets and lease liabilities for all leases on the balance sheets except for those whose payments under low-value asset and short-term leases are recognized as expenses on a straight-line basis. On the financial statements of comprehensive income, the Company presents the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the financial statements of cash flows, cash payments for the principal and interest portion of lease liabilities are classified within financing activities. Prior to the application of IFRS 16, payments under operating lease contracts were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the financial statements of cash flows.

Lease liabilities were recognized on January 1, 2019 for leases previously classified as operating leases with the application of IAS 17. Lease liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets are measured at an amount equal to the lease liabilities. The Company applies IAS 36 to all right-of-use assets.

The Company also applies the following practical expedients:

1) The Company applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.

2) The Company accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

3) The Company excludes initial direct costs from the measurement of right-of-use assets on January 1, 2019.

4) The Company uses hindsight, such as in determining lease terms, to measure lease liabilities.

The weighted average lessee's incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 1.56%. The difference between the lease liabilities recognized and the future minimum lease payments of non-cancellable operating lease on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease on December 31, 2018	$ 477,348
Less: Recognition exemption for short-term leases	(584)
Undiscounted amounts on January 1, 2019	$ 476,764
Discounted amounts using the incremental borrowing rate on January 1, 2019	$ 426,759
Add: Adjustments as a result of extension options	439,647
Lease liabilities recognized on January 1, 2019	$ 866,406

The Company as lessor

The Company does not make any adjustments for leases in which it is a lessor, and it accounts for those leases with the application of IFRS 16 starting from January 1, 2019.

The impact on assets and liabilities as of January 1, 2019 from the initial application of IFRS 16 is set out as follows:

	As Originally Stated on January 1, 2019	Adjustments Arising from Initial Application	Restated on January 1, 2019
Right-of-use assets	$ -	$ 867,223	$ 867,223
Other non-current assets	53,888	(817)	53,071
Total effect on assets	$ 53,888	$ 866,406	$ 920,294
Lease liabilities - current	$ -	$ 20,616	$ 20,616
Lease liabilities - non-current	-	845,790	845,790
Total effect on liabilities	$ -	$ 866,406	$ 866,406

b. The IFRSs endorsed by the FSC for application starting from 2020

New, Amended or Revised Standards and Interpretations	Effective Date Announced by IASB
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020 (Note 1)
Amendments to IFRS 9, IAS 39 and IFRS 7 "Interest Rate Benchmark Reform"	January 1, 2020 (Note 2)
Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020 (Note 3)

Note 1: The Company shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 2: The Company shall apply these amendments retrospectively for annual reporting periods beginning on or after January 1, 2020.

Note 3: The Company shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the financial statements were issued, the Company is continuously assessing the possible impact that the application of the above standards and interpretations will have on the Company's financial position and financial performance and will disclose the relevant impact when the assessment is completed.

c. The IFRSs issued by IASB but not yet endorsed and issued into effect by the FSC

New, Amended or Revised Standards and Interpretations	Effective Date Announced by IASB (Note)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	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

Note: Unless stated otherwise, the above New IFRSs are effective for annual reporting periods beginning on or after their respective effective dates.

As of the date the financial statements were issued, the Company is continuously assessing the possible impact that the application of the above standards and interpretations will have on the Company's financial position and financial performance and will disclose the relevant impact when the assessment is completed.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Statement of compliance

The financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

b. Basis of preparation

The financial statements have been prepared on the historical cost basis except for the financial instruments which are measured at fair value and net defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

The fair value measurements, which are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and based on the significance of the inputs to the fair value measurement in its entirety, are described as follows:

1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and

3) Level 3 inputs are unobservable inputs for an asset or liability.

When preparing the financial statements, the Company used the equity method to account for its investments in subsidiaries and associates. In order for the amounts of the net income for the year, other comprehensive income for the year and total equity in its financial statements to be the same as the amounts attributable to the owners of the Company in its consolidated financial statements, adjustments arising from the differences in accounting treatments between the parent company only basis and the consolidated basis were made to investments accounted for using the equity method, the share of profit or loss of subsidiaries and the share of other comprehensive income of subsidiaries in these financial statements.

c. Classification of current and non-current assets and liabilities

Current assets include:

1) Assets held primarily for the purpose of trading;

2) Assets expected to be realized within 12 months after the reporting period; and

3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

2) Liabilities due to be settled within 12 months after the reporting period; and

3) Liabilities for which the Company does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

Assets and liabilities that are not classified as current are classified as non-current.

d. Foreign currencies

In preparing the standalone financial statements of the Company, transactions in currencies other than the Company's functional currency (i.e., foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the year in which they arise.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the year except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which cases, the exchange differences are also recognized directly in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction and are not retranslated.

For the purposes of presenting financial statements, the assets and liabilities of the Company's foreign operations (including subsidiaries in other countries that use currencies that are different from the currency of the Company) are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting year; and income and expense items are translated at the average exchange rates for the year. The resulting currency translation differences are recognized in other comprehensive income or loss.

e. Inventories

Inventories consist of raw materials, semi-finished goods, finished goods and work in progress and are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except where it may be appropriate to group similar or related items. The net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. Inventories are recorded at the weighted-average cost on the balance sheet date.

f. Investment in subsidiaries

The Company uses the equity method to account for its investments in subsidiaries.

A subsidiary is an entity that is controlled by the Company.

Under the equity method, an investment in a subsidiary is initially recognized at cost and adjusted thereafter to recognize the Company's share of the profit or loss and other comprehensive income or loss of the subsidiary. The Company also recognizes the changes in the Company's share of other equity of subsidiaries.

Changes in the Company's ownership interest in a subsidiary that do not result in the Company losing control of the subsidiary are equity transactions. The Company recognizes directly in equity any difference between the carrying amount of the investment and the fair value of the consideration paid or received.

When the Company's share of losses of a subsidiary exceeds its interest in that subsidiary (which includes any carrying amount of the investment accounted for using the equity method and long-term interests that, in substance, form part of the Company's net investment in the subsidiary), the Company continues recognizing its share of further losses.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets and liabilities of a subsidiary at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognized immediately in profit for the year.

The Company assesses its investment for any impairment by comparing the carrying amount with the estimated recoverable amount as assessed based on the investee's financial statements as a whole. Impairment loss is recognized when the carrying amount exceeds the recoverable amount. If the recoverable amount of the investment subsequently increases, the Company recognizes a reversal of the impairment loss; the adjusted post-reversal carrying amount should not exceed the carrying amount that would have been recognized (net of amortization) had no impairment loss been recognized in prior years. An impairment loss recognized on goodwill cannot be reversed in subsequent years.

When the Company loses control of a subsidiary, it recognizes the investment retained in the former subsidiary at its fair value at the date when control is lost. The difference between the fair value of the retained investment plus any consideration received and the carrying amount of the previous investment at the date when control is lost is recognized in profit or loss for the year. Besides this, the Company accounts for all amounts previously recognized in other comprehensive income or loss in relation to that subsidiary on the same basis as would be required if the Company had directly disposed of the related assets or liabilities.

Profits or losses resulting from downstream transactions are eliminated in full in the financial statements. Profits and losses resulting from upstream transactions and transactions between subsidiaries are recognized in the financial statements only to the extent of interests in the subsidiaries that are not related to the Company.

g. Property, plant and equipment

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are carried at cost, less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such assets are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended use.

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effects of any changes in estimates accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment, the difference between the sales proceeds and the carrying amount of the asset is recognized in profit or loss.

h. Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful lives, residual value, and amortization methods are reviewed at the end of each reporting period, with the effects of any changes in estimates accounted for on a prospective basis.

2) Internally-generated intangible assets - research and development expenditures

Expenditures on research activities are recognized as expenses in the period in which they are incurred.

An internally-generated intangible asset arising from the development phase of an internal project is recognized if, and only if, all of the following have been demonstrated:

a) The technical feasibility of completing the intangible asset so that it will be available for use or sale;

b) The intention to complete the intangible asset and use or sell it;

c) The ability to use or sell the intangible asset;

d) How the intangible asset will generate probable future economic benefits;

e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

f) The ability to measure reliably the expenditures attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditures incurred from the date when such an intangible asset first meets the recognition criteria listed above. Subsequent to initial recognition, such intangible assets are measured on the same basis as intangible assets that are acquired separately.

3) Derecognition of intangible assets

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

i. Impairment of tangible and intangible assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the smallest group of cash-generating units on a reasonable and consistent basis of allocation.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the corresponding asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount (net of amortization or depreciation) that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

j. Financial instruments

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

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

1) Financial assets

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

a) Measurement category

Financial assets are classified into the following categories: Financial assets at fair value through profit or loss (FVTPL), financial assets at amortized cost and investments in equity instruments at FVTOCI.

i. Financial assets at FVTPL

Financial assets at FVTPL include investments in equity instruments which are not designated as at FVTOCI and are mandatorily measured at fair value subsequently, with any dividends, interest and gains or losses on remeasurement recognized in non-operating income and expenses. Fair value is determined in the manner described in Note 23.

ii. Financial assets at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

i) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, accounts receivable and other receivables are measured at amortized cost, which equals to gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Cash equivalents include repurchase agreements collateralized by notes, with original maturities within 3 months from the date of acquisition which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

iii. Investments in equity instruments at FVTOCI

On initial recognition, the Company may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income or loss and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, instead, they will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

b) Impairment of financial assets and contract assets

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable) and contract assets.

The Company always recognizes lifetime Expected Credit Loss (ECLs) for accounts receivable and contract assets. For all other financial instruments, the Company recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on a financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECLs represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represents the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date. The Company recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

c) Derecognition of financial assets

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

On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the cumulative gain or loss that had been recognized in other comprehensive income or loss is transferred directly to retained earnings, without reclassifying to profit or loss.

2) Equity instruments

The repurchase of the Company's own equity instruments is recognized in and deducted directly from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

3) Financial liabilities

a) Subsequent measurement

All financial liabilities are carried at amortized cost using the effective interest method.

b) Derecognition of financial liabilities

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

k. Provisions

Provisions (included in other current liabilities) are measured at the best estimate of the discounted cash flows of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

Provisions for the expected cost of warranty obligations to assure that products comply with agreed-upon specifications are recognized on the date of sale of the relevant products at the best estimate by the management of the Company of the expenditures required to settle the Company's obligations.

l. Revenue recognition

The Company identifies the contracts with the customers, allocates the transaction price to the performance obligations, and recognizes revenue when performance obligations are satisfied.

1) Revenue from sale of goods

Sales of products are recognized as revenue when the goods are delivered to the customer's specific location because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods. Revenue and accounts receivable are recognized concurrently.

The Company does not recognize revenue on materials delivered to subcontractors because this delivery does not involve a transfer of control.

2) Licensing revenue

If the patented technology licensed by the Company can remain functional without any updates or technical support and the Company is not obliged to undertake activities that will change the functionality of the licensed patented technology, the licensed patented technology has significant stand-alone functionality and the Company recognizes revenue at the point in time at which the license of patented technology transfers. If the Company is obliged to undertake activities that will change the functionality of the licensed patented technology, the licensed patented technology does not have significant stand-alone functionality and the Company recognizes revenue on a straight-line basis over the life of the agreements. Royalty agreements that are based on sales are recognized by reference to the underlying agreements. Royalties receivable that the Company does not have a present right to payment of the royalties is recorded as contract assets and reclassified to accounts receivable after the Company fulfills the remainder of the performance obligation. Proceeds of royalties received but which have not met the conditions of revenue recognition are recorded as contract liabilities, current and non-current, respectively, based on the remaining contract periods.

m. Leases

2019

At the inception of a contract, the Company assesses whether the contract is, or contains, a lease.

1) The Company as lessor

Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases. Lease payments from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases.

2) The Company as lessee

The Company recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease, except for short-term leases and low-value asset leases accounted for applying a recognition exemption where lease payments are recognized as expenses on a straight-line basis over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms.

Lease liabilities are initially measured at the present value of the lease payments. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Company uses the lessee’s incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Company remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. Lease liabilities are presented on a separate line in the balance sheets.

2018

Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Operating lease payments are recognized as expenses on a straight-line basis over the lease term.

n. Borrowing costs

Borrowing costs directly attributable to an acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Other than stated above, all other borrowing costs are recognized in profit or loss in the year in which they are incurred.

o. Employee benefits

1) Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related services.

2) Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as expenses when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost and past service cost) and net interest on the net defined benefit liabilities are recognized as employee benefits expense in the year they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the year in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liabilities represent the actual deficit in the Company's defined benefit plans.

p. Share-based payment arrangements

The fair value at the grant date of share-based payments is expensed on a straight-line basis over the vesting period, based on the Company's best estimates of the number of shares or options that are expected to ultimately vest, with a corresponding increase in capital surplus - employee share options. It is recognized as an expense in full at the grant date if vested immediately. The grant date of treasury shares transferred to employees is the date on which the board of directors approves the transaction.

At the end of each reporting period, the Company revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expenses reflect the revised estimate, with a corresponding adjustment to capital surplus - employee share options.

q. Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax. Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income, in which case, the current and deferred taxes are also recognized in other comprehensive income.

1) Current tax

According to the Income Tax Law, an additional tax of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain the earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused loss carryforwards to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profit against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting year and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the assets to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting year and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the year in which the liabilities are settled or the assets are realized, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Company's accounting policies, management is required to make judgments, estimations and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimations and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimations.

The estimations and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimations are recognized in the year in which the estimations are revised if the revisions affect only that year or in the year of the revisions and future years if the revisions affect both current and future years.

Impairment of Investments Accounted for Using the Equity Method

The Company immediately recognizes impairment loss on its investments accounted for using the equity method when there is any indication that an investment may be impaired and the carrying amount may not be recoverable. The Company's management evaluates such impairment based on the estimated future cash flows expected to be generated from the investments accounted for using the equity method. The Company also takes into consideration the market conditions and industry developments when evaluating the appropriateness of the relevant assumptions.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2019	2018
Cash on hand	$ 183	$ 183
Checking accounts and demand deposits	631,307	792,459
Cash equivalents - repurchase agreements collateralized by notes	389,951	374,318
	$ 1,021,441	$ 1,166,960

The market rate intervals of demand deposits and repurchase agreements collateralized by notes at the end of the reporting years were as follows:

	December 31	
	2019	2018
Demand deposits	0.01-0.55%	0.01-0.55%
Repurchase agreements collateralized by notes	2.2%	0.55-2.8%

7. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	December 31	
	2019	2018
Investments in equity instruments - non-current		
Domestic listed shares	$ 1,361,416	$ 1,120,180

The Company holds the above investments in equity instruments for long-term strategic purposes and expects to gain profit through long-term investments. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Company's strategy of holding these investments for long-term purposes.

8. ACCOUNTS RECEIVABLE

	December 31	
	2019	2018
Gross carrying amount of accounts receivable	$ 986,680	$ 678,025
Less: Loss allowance	(890)	(1,120)
	$ 985,790	$ 676,905

The Company recognizes impairment loss when there is actual credit loss from individual client. In addition, the Company recognizes impairment loss based on the rate of expected credit loss by reference to past default experience of the debtor, an analysis of the debtor's current financial position, general economic conditions of the industry in which the debtors operate and past due status.

The following table details the loss allowance for accounts receivable.

December 31, 2019

	Not Past Due	Past Due in 1-90 Days	Past Due over 90 Days	Total
Expected credit loss rate	0%	0%	30%	-
Gross carrying amount	$ 955,345	$ 28,375	$ 2,960	$ 986,680
Loss allowance	-	-	(890)	(890)
Amortized cost	$ 955,345	$ 28,375	$ 2,070	$ 985,790

December 31, 2018

	Not Past Due	Past Due in 1-90 Days	Past Due over 90 Days	Total
Expected credit loss rate	0%	0%	36%	-
Gross carrying amount	$ 375,290	$ 299,597	$ 3,138	$ 678,025
Loss allowance	-	-	(1,120)	(1,120)
Amortized cost	$ 375,290	$ 299,597	$ 2,018	$ 676,905

The movements of the loss allowance were as follows:

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 1,120	$ -
Expected credit losses recognized (reversed)	(230)	1,120
Balance at December 31	$ 890	$ 1,120

9. INVENTORIES

	December 31	
	2019	2018
Finished goods	$ 782,872	$ 680,395
Semi-finished goods	232,846	286,390
Work in progress	66,412	25,440
Raw materials	581,526	684,639
	$ 1,663,656	$ 1,676,864

The cost of inventories recognized as cost of goods sold for the years ended December 31, 2019 and 2018 included write-downs of inventories of $102,850 thousand and $217,212 thousand, respectively.

10. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	December 31	
	2019	2018
Investments in subsidiaries	$ 27,029,983	$ 25,350,261
Unlisted companies		
PVI Global Corp.	$ 12,910,061	$ 11,109,595
New Field e-Paper Co., Ltd.	5,476,644	5,701,683
E Ink Corporation	4,184,838	4,305,677
YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	4,051,482	1,819,546
Dream Universe Ltd.	372,492	371,562
Prime View Communications Ltd.	27,679	27,800
Tech Smart Logistics Ltd.	3,861	4,033
Linfiny Corporation	2,880	-
Hot Tracks International Ltd.	46	35
SiPix Technology Inc.	-	2,010,330
	$ 27,029,983	$ 25,350,261

	Proportion of Ownership and Voting Rights	
	December 31	
	2019	2018
PVI Global Corp. (Note 4)	100.00%	100.00%
New Field e-Paper Co., Ltd.	100.00%	100.00%
E Ink Corporation (Note 1)	45.31%	45.31%
YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.) (Note 2)	100.00%	100.00%
Dream Universe Ltd.	100.00%	100.00%
Prime View Communications Ltd.	100.00%	100.00%
Tech Smart Logistics Ltd. (Note 1)	0.09%	0.09%
Linfiny Corporation (Note 3)	4.00%	-
Hot Tracks International Ltd.	100.00%	100.00%
SiPix Technology Inc. (Note 2)	-	100.00%

Note 1: Although each of the Company’s equity interests in E Ink Corporation and Tech Smart Logistics Ltd. did not exceed 50%, respectively, the combined equity interests of the Company and its subsidiaries in the above companies were 100%. Therefore, E Ink Corporation and Tech Smart Logistics Ltd. are subsidiaries of the Company.

Note 2: To simplify the Group’s organization management, integrate the utilization of resources and increase operational efficiency, the board of directors of the subsidiary, Yuen Yu Investment Co., Ltd., approved on April 19, 2019 to merge its subsidiary YuanHan Materials Inc. by absorption. The reference date of the merger was on June 1, 2019, with Yuen Yu Investment Co., Ltd. as the surviving company, which was renamed as YuanHan Materials Inc. after the merger. In addition, the board of directors of YuanHan Materials Inc. approved the issuance of new shares on August 16, 2019 to merge the subsidiary, SiPix Technology Inc. The reference date of the merger is set on October 1, 2019, with YuanHan Materials Inc. as the surviving company.

Note 3: To adjust the investment structure, the Company purchased 4% ownership of Linfiny Corporation from YuanHan Material Inc. in October 2019 by $4,340 thousand. The combined equity interests of the Company and its subsidiaries in Linfiny Corporation exceeded 50%; therefore, it is a subsidiary of the Company.

Note 4: The board of directors of the PVI Global Corp.'s subsidiary, Transcend Optronics (Yangzhou) Co., Ltd., approved in March 2020 for an investment plan for the next three to five years. The content of the investment plan includes the construction of R&D buildings, capacity expansion and fundamental operating expenses, with expected investment amount from US$50,000 thousand to US$55,000 thousand. The source of funds is from the parent company's capital increase via cash and the subsidiary's proprietary funds.

These subsidiaries are included in the consolidated financial statements of the Company as of December 31, 2019 and 2018.

The investments in subsidiaries accounted for using the equity method and the share of profit or loss and other comprehensive income of those investments as of December 31, 2019 and 2018 are based on the subsidiaries' audited financial statements of the corresponding year.

11. PROPERTY, PLANT AND EQUIPMENT

	Buildings	Machinery	Other Equipment	Construction in Progress and Prepayments for Equipment	Total
Cost					
Balance at January 1, 2018	$ 1,970,594	$ 5,242,580	$ 1,271,648	$ 31,450	$ 8,516,272
Additions	3,409	15,379	23,336	156,845	198,969
Disposals	-	(83,239)	(175,060)	-	(258,299)
Reclassifications	9,936	10,321	47,761	(84,692)	(16,674)
Balance at December 31, 2018	$ 1,983,939	$ 5,185,041	$ 1,167,685	$ 103,603	$ 8,440,268
Accumulated depreciation and impairment					
Balance at January 1, 2018	$ 1,208,300	$ 4,941,476	$ 931,111	$ -	$ 7,080,887
Depreciation expenses	38,597	87,856	114,229	-	240,682
Impairment losses reversed	-	-	(1,388)	-	(1,388)
Disposals	-	(83,239)	(173,672)	-	(256,911)
Balance at December 31, 2018	$ 1,246,897	$ 4,946,093	$ 870,280	$ -	$ 7,063,270
Carrying amount at December 31, 2018	$ 737,042	$ 238,948	$ 297,405	$ 103,603	$ 1,376,998
Cost					
Balance at January 1, 2019	$ 1,983,939	$ 5,185,041	$ 1,167,685	$ 103,603	$ 8,440,268
Additions	1,039	8,785	41,911	164,496	216,231
Disposals	-	(64,149)	(5,315)	-	(69,464)
Reclassifications	4,216	25,069	86,188	(118,699)	(3,226)
Balance at December 31, 2019	$ 1,989,194	$ 5,154,746	$ 1,290,469	$ 149,400	$ 8,583,809
Accumulated depreciation and impairment					
Balance at January 1, 2019	$ 1,246,897	$ 4,946,093	$ 870,280	$ -	$ 7,063,270
Depreciation expenses	40,364	85,774	120,618	-	246,756
Impairment losses recognized	-	-	12,895	-	12,895
Disposals	-	(64,149)	(5,315)	-	(69,464)
Balance at December 31, 2019	$ 1,287,261	$ 4,967,718	$ 998,478	$ -	$ 7,253,457
Carrying amount at December 31, 2019	$ 701,933	$ 187,028	$ 291,991	$ 149,400	$ 1,330,352

For part of the Company's equipment with no future use, the Company assessed its recoverable amount to be zero. It performed an assessment of the recoverable amount of property, plant and equipment and recognized an impairment loss of $12,895 thousand for the year ended December 31, 2019. Since the Company disposed of the equipment which has been recognized as impairment losses before, its reversal of impairment loss was $1,388 thousand for the year ended December 31, 2018.

Information about the capitalized interest is as follows:

	For the Year Ended December 31	
	2019	**2018**
Capitalized interest	$ 1,164	$ 497
Capitalization rate intervals	0.95-1.23%	0.91-2.11%

The above items of property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives as follows:

Buildings	
Main buildings	56 years
Clean rooms and plumbing construction	25-36 years
Others	2-14 years
Machinery	1-9 years
Other equipment	1-26 years

12. LEASE ARRANGEMENTS - 2019

a. Right-of-use assets

	December 31, 2019
Carrying amounts	
Land	$ 838,338
Other equipment	2,247
	$ 840,585

	For the Year Ended December 31, 2019
Depreciation of right-of-use assets	
Land	$ 24,880
Other equipment	1,758
	$ 26,638

b. Lease liabilities

	December 31, 2019
Carrying amounts	
Current (included in other current liabilities)	$ 20,819
Non-current	$ 824,971

Discount rate intervals for lease liabilities are as follows:

	December 31, 2019
Land	1.56%
Other equipment	0.8-0.86%

c. Material lease-in activities and terms

The Company leased certain land in the Hsinchu Science Park from the Hsinchu Science Park Bureau of the Ministry of Science and Technology from July 1, 2014 to December 31, 2033. The rental amount is calculated on the basis of the mutual agreement. The lessor may adjust the rent at any time on the basis of changes in announced land values and related laws and regulations. At the end of the lease term, the Company has renewal options if the Company does not violate the lease agreements during the rental period.

The Company also leased land which is located at Taoyuan for the use of plants and offices, with the lease term of 20 years, and the lease payments will be adjusted every year on the basis of changes in announced land values, with the adjusted limitation of 3% and renewal options at the end of the lease term.

The Company does not have bargain purchase options to acquire the leasehold land and buildings at the end of the lease terms. In addition, without the lessors' consent, the Company is prohibited from subleasing or transferring all or any portion of the underlying assets, changing their use, or using illegally.

d. Other lease information

	For the Year Ended December 31, 2019
Expenses relating to short-term leases	$ 6,041
Total cash outflow for leases	$ 39,969

The Company leases other equipment which qualifies as short-term leases. The Company has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

13. BORROWINGS

a. Short-term borrowings

	December 31	
	2019	**2018**
Unsecured borrowings	$ 2,940,000	$ 1,230,000
Interest rate intervals	0.95-1.1%	0.98-1.04%

b. Short-term bills payable

	December 31	
	2019	**2018**
Commercial paper	$ 380,000	$ 400,000
Less: Discounts on bills payable	81	188
	$ 379,919	$ 399,812
Interest rate intervals	0.62-0.79%	0.62-0.82%

14. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The Company adopted a pension plan under the Labor Pension Act (the “LPA”), which is a state-managed defined contribution plan. Under the LPA, the Company makes monthly contributions to employees’ individual pension accounts at 6% of monthly salaries and wages.

b. Defined benefit plans

The defined benefit plan adopted by the Company in accordance with the Labor Standards Law is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contributes amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee’s name. Before the end of each year, the Company assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor (“the Bureau”); the Company has no right to influence the investment policy and strategy.

The amounts included in the balance sheets in respect of the Company’s defined benefit plans were as follows:

	December 31	
	2019	**2018**
Present value of defined benefit obligation	$ 142,734	$ 129,123
Fair value of plan assets	(65,793)	(64,305)
Net defined benefit liabilities	$ 76,941	$ 64,818

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities
Balance at January 1, 2018	$ 113,743	$ (57,851)	$ 55,892
Current service cost	1,291	-	1,291
Net interest expense (income)	1,564	(824)	740
Recognized in profit or loss	2,855	(824)	2,031
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(1,465)	(1,465)
Actuarial loss - changes in demographic assumptions	2,705	-	2,705
Actuarial loss - changes in financial assumptions	3,832	-	3,832
Actuarial loss - experience adjustments	5,988	-	5,988
Recognized in other comprehensive income or loss	12,525	(1,465)	11,060
Contributions from the employer	-	(4,165)	(4,165)
Balance at December 31, 2018	129,123	(64,305)	64,818
Current service cost	943	-	943
Net interest expense (income)	1,452	(747)	705
Recognized in profit or loss	2,395	(747)	1,648
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(2,101)	(2,101)
Actuarial loss - changes in demographic assumptions	4,775	-	4,775
Actuarial loss - changes in financial assumptions	6,002	-	6,002
Actuarial loss - experience adjustments	6,014	-	6,014
Recognized in other comprehensive income or loss	16,791	(2,101)	14,690
Contributions from the employer	-	(4,215)	(4,215)
Benefits paid	(5,575)	5,575	-
Balance at December 31, 2019	$ 142,734	$ (65,793)	$ 76,941

Through the defined benefit plans under the Labor Standards Law, the Company is exposed to the following risks:

1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

2) Interest risk: A decrease in the government bond interest rates will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plans' debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salaries of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2019	2018
Discount rates	0.8%	1.1%
Expected rates of salary increase	2.8%	2.8%

If possible reasonable changes in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	December 31	
	2019	2018
Discount rates		
0.25% increase	$ (4,162)	$ (3,897)
0.25% decrease	$ 4,338	$ 4,063
Expected rates of salary increase		
0.25% increase	$ 4,176	$ 3,925
0.25% decrease	$ (4,029)	$ (3,785)

The sensitivity analysis presented above may not be representative of the actual changes in the present value of the defined benefit obligation as it is unlikely that changes in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2019	2018
Expected contributions to the plans for the next year	$ 4,541	$ 4,298
Average duration of the defined benefit obligation	12 years	12 years

15. EQUITY

a. Ordinary shares

	December 31	
	2019	2018
Number of shares authorized (in thousands)	2,000,000	2,000,000
Amount of shares authorized	$ 20,000,000	$ 20,000,000
Number of shares issued and fully paid (in thousands)	1,140,468	1,140,468
Amount of shares issued	$ 11,404,677	$ 11,404,677

b. Capital surplus

	December 31	
	2019	2018
May be used to offset a deficit, distributed as cash dividends or transferred to share capital (1)		
Issuance of shares	$ 9,494,322	$ 9,494,322
Conversion of bonds	525,200	525,200
Treasury share transactions	151,920	95,922
May only be used to offset a deficit		
Expired employee share options	50,346	49,840
Changes in percentage of ownership interests in associates (2)	105	105
Unclaimed dividends extinguished by prescription	40	14
May not be used for any purpose		
Employee share options	85,060	77,890
	$ 10,306,993	$ 10,243,293

1) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and once a year).

2) Such capital surplus arises from the effect of changes in ownership interest in associates resulting from equity transactions other than actual disposals or acquisitions, or from changes in capital surplus of associates accounted for using the equity method.

c. Retained earnings and dividends policy

Under the dividends policy as set forth in the Company's amended Articles of Incorporation, where the Company made a profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside a legal reserve of 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with at least 50% of any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders. For the policies on the distribution of employees' compensation and remuneration of directors after the amendment, refer to Note 17.

The Company's Articles of Incorporation also stipulate a dividends policy that allows previous accumulated undistributed earnings to be distributed. The distribution of dividends to shareholders is allowed to be in cash or by the issuance of shares. In principle, cash dividends should be at least 10% of the total dividends distributed.

The shareholders of the Company held their regular meeting on June 18, 2019 and in that meeting, resolved the amendments to the Company's Articles of Incorporation. The amendments explicitly stipulate that the board of directors are authorized to adopt a special resolution to distribute dividends and bonuses in cash and a report of such distribution should been submitted in the shareholder's meeting.

An appropriation of earnings to a legal reserve shall be made until the legal reserve equals the Company's paid-in capital. The legal reserve may be used to offset deficits. If the Company has no deficits and the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

Items referred to under Rule No. 1010012865 issued by the FSC and in the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Company.

The appropriations of earnings for 2018 and 2017 approved in the shareholders' meetings on June 18, 2019 and June 22, 2018, respectively, were as follows:

	Appropriation of Earnings		Dividends Per Share (NT$)	
	For the Year Ended December 31		For the Year Ended December 31	
	2018	2017	2018	2017
Legal reserve	$ 261,367	$ 207,806		
Special reserve	184,797	-		
Cash dividends	2,373,438	1,853,550	$ 2.10	$ 1.65

The appropriation of earnings for 2019 were proposed by the Company's board of directors on March 18, 2020. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT$)
Legal reserve	$ 308,077	
Reversal of special reserve	154,915	
Cash dividends	2,268,725	$2.00

The appropriation of earnings for 2019 is subject to resolution in the shareholders' meeting to be held on June 18, 2020.

d. Special reserve

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 70,678	$ 70,678
Appropriations in respect of Debits to other equity items	184,797	-
Balance at December 31	$ 255,475	$ 70,678

If a special reserve of $70,678 thousand appropriated on the first-time adoption of IFRSs relates to the exchange differences on translating the financial statements of foreign operations, the special reserve will be reversed proportionately on the Company's disposal of the foreign operations; on the Company's loss of significant influence; however, the entire special reserve will be reversed. An additional special reserve should be appropriated for the amount equal to the difference between the net debit balance of the reserves and the special reserve appropriated on the first-time adoption of IFRSs. Any special reserve appropriated may be reversed to the extent that the net debit balance reverses and may thereafter be distributed.

e. Other equity items

1) Exchange differences on translating the financial statements of foreign operations

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (181,328)	$ (242,623)
Share of exchange differences of subsidiaries accounted for using the equity method	(756,459)	61,295
Balance at December 31	$ (937,787)	$ (181,328)

2) Unrealized gain (loss) on financial assets at FVTOCI

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (74,147)	$ 376,899
Unrealized gain on equity instruments		
Recognized for the year	251,164	42,302
Share from subsidiaries accounted for using the equity method	738,567	(475,199)
Cumulative unrealized loss of equity instruments transferred to retained earnings due to disposal		
Recognized for the year	(7,678)	-
Share from subsidiaries accounted for using the equity method	-	(18,149)
Balance at December 31	$ 907,906	$ (74,147)

f. Treasury shares

Unit: Shares in Thousands

	For the Year Ended December 31	
	2019	2018
Number of shares at January 1	10,259	17,104
Transferred to employees	(4,154)	(6,845)
Number of shares at December 31	6,105	10,259

The board of directors of the Company resolved to repurchase 20,000 thousand shares of treasury shares on June 13, 2016, which was completed in August 2016, for the purpose of transferring to employees. Under the Securities and Exchange Act, the Company shall neither pledge treasury shares nor exercise shareholders’ rights on these shares, such as the rights to dividends and to vote.

16. REVENUE

a. Revenue from contracts with customers

Type of Revenue/Category by Product	For the Year Ended December 31 2019	For the Year Ended December 31 2018
Revenue from sale of goods		
Monitors	$ 10,434,154	$ 10,095,884
Electronic shelf labels	2,229,753	2,221,692
Others	196,903	456,103
	$ 12,860,810	$ 12,773,679
Royalty income	$ 248,388	$ 241,696

b. Contract balances

	December 31 2019	December 31 2018	January 1 2018
Accounts receivable (Note 8)	$ 985,790	$ 676,905	$ 256,077
Contract liabilities			
Royalty	$ 89,286	$ 86,845	$ 88,871
Sale of goods	61,125	116,760	51,736
Contract liabilities - current	150,411	203,605	140,607
Contract liabilities - non-current			
Royalty	67,087	65,806	30,030
	$ 217,498	$ 269,411	$ 170,637

The changes in the balances of contract liabilities primarily result from the timing difference between the satisfaction of performance obligation and the customer’s payment. Revenue recognized for the year from the beginning balance of the contract liabilities is as follows:

Type of Revenue	For the Year Ended December 31 2019	For the Year Ended December 31 2018
Royalty income	$ 86,845	$ 88,871
Revenue from sale of goods	116,760	51,736
	$ 203,605	$ 140,607

17. NET INCOME

a. Depreciation and amortization

	For the Year Ended December 31	
	2019	2018
Property, plant and equipment	$ 246,756	$ 240,682
Other intangible assets	47,314	39,643
Right-of-use assets	26,638	-
	$ 320,708	$ 280,325
An analysis of depreciation by function		
Operating costs	$ 136,725	$ 134,763
Operating expenses	136,669	105,919
	$ 273,394	$ 240,682
An analysis of amortization by function		
Operating expenses	$ 47,314	$ 39,643

b. Employee benefits expense

	For the Year Ended December 31	
	2019	2018
Post-employment benefits (Note 14)		
Defined contribution plans	$ 44,591	$ 42,218
Defined benefit plans	1,648	2,031
	46,239	44,249
Share-based payments		
Equity-settled	38,909	91,454
Other employee benefits	1,197,985	1,112,700
Total employee benefits expense	$ 1,283,133	$ 1,248,403
An analysis of employee benefits expense by function		
Operating costs	$ 219,684	$ 198,082
Operating expenses	1,063,449	1,050,321
	$ 1,283,133	$ 1,248,403

	For the Year Ended December 31					
	2019			2018		
	Amount of Operating Costs	Amount of Operating Expenses	Total	Amount of Operating Costs	Amount of Operating Expenses	Total
Salaries	$ 183,949	$ 913,555	$ 1,097,504	$ 165,696	$ 909,946	$ 1,075,642
Labor and health insurance	16,083	60,301	76,384	13,794	56,103	69,897
Pension	7,559	38,680	46,239	7,241	37,008	44,249
Director’s emoluments	-	16,657	16,657	-	13,273	13,273
Other employee benefits	12,093	34,256	46,349	11,351	33,991	45,342
Total employee benefits expense	$ 219,684	$ 1,063,449	$ 1,283,133	$ 198,082	$ 1,050,321	$ 1,248,403

As of December 31, 2019 and 2018, the Company had 930 and 908 employees on average, respectively, among which were 5 and 4 non-employee directors, and the basis of calculation of their benefits expense was consistent with the employee benefits expense.

For the years ended December 31, 2019 and 2018, the average employee benefits were $1,369 thousand and $1,366 thousand, respectively, and the average employee salaries were $1,186 thousand and $1,190 thousand, respectively. The changes in average employee salaries were adjusted by (0.34%).

c. Employees' compensation and remuneration of directors

According to the Articles of Incorporation of the Company, the Company accrued employees' compensation at the rates of no less than 1% and no higher than 10% as well as remuneration of directors at the rates of no higher than 1%, respectively, of net income before income tax, employees' compensation and remuneration of directors, net of accumulated deficit, if any. The employees' compensation and remuneration of directors for the years ended December 31, 2019 and 2018, which were approved by the Company's board of directors on March 18, 2020 and March 20, 2019, respectively, were as follows:

	For the Year Ended December 31	
	2019	**2018**
Employees' compensation	$ 31,900	$ 27,100
Remuneration of directors	$ 15,579	$ 12,238

If there is a change in the amounts after the annual financial statements were authorized for issue, the differences are recorded as a change in the accounting estimate in the following year.

There is no difference between the actual amounts of employees' compensation and remuneration of directors paid and the amounts recognized in the financial statements for the years ended December 31, 2018 and 2017.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2019 and 2018 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

18. INCOME TAXES

a. Major components of income tax expense recognized in profit or loss

	For the Year Ended December 31	
	2019	**2018**
Current tax		
In respect of the current year	$ 67,665	$ 106,753
Income tax on unappropriated earnings	6,682	-
Adjustments for the prior years	4,683	249
	79,030	107,002
Deferred tax		
In respect of the current year	(27,316)	(22,255)
Effect of tax rate changes	-	(31,037)
	(27,316)	(53,292)
Income tax expense recognized in profit or loss	$ 51,714	$ 53,710

A reconciliation of accounting profit and income tax expense is as follows:

	For the Year Ended December 31	
	2019	2018
Income before income tax	$ 3,135,503	$ 2,667,383
Income tax expense calculated at the statutory rate	$ 627,101	$ 533,477
Nondeductible expenses in determining taxable income	3,654	5,596
Tax-exempt income	(574,512)	(434,320)
Income tax on unappropriated earnings	6,682	-
Unrecognized loss carryforwards, deductible temporary differences and investment credits	(15,894)	(20,255)
Effect of tax rate changes	-	(31,037)
Adjustments for the prior years	4,683	249
Income tax expense recognized in profit or loss	$ 51,714	$ 53,710

The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings was reduced from 10% to 5%.

In July 2019, the President of the ROC announced the amendments to the Statute for Industrial Innovation, which stipulate that the amounts of unappropriated earnings in 2018 and thereafter that are reinvested in the construction or purchase of certain assets or technologies are allowed as deduction when computing the income tax on unappropriated earnings.

b. Income tax recognized in other comprehensive income

	For the Year Ended December 31	
	2019	2018
Current tax - in respect of the current year	$ (2,938)	$ (2,212)
Deferred tax - effect of tax rate changes	-	(2,014)
Income tax benefit recognized in other comprehensive income or loss	$ (2,938)	$ (4,226)

c. Current tax assets and liabilities

	December 31	
	2019	2018
Current tax assets (included in other current assets)		
Tax refund receivable	$ 1,775	$ 1,775
Current tax liabilities		
Income tax payable	$ 45,598	$ 93,272

d. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities (included in other non-current liabilities) were as follows:

For the year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Temporary differences				
Inventories	$ 165,559	$ 3,531	$ -	$ 169,090
Property, plant and equipment	26,336	(3,115)	-	23,221
Prepayments	17,639	-	-	17,639
Defined benefit plans	15,639	-	2,938	18,577
Deferred revenue	14,535	8,816	-	23,351
Others	19,761	3,944	-	23,705
	$ 259,469	$ 13,176	$ 2,938	$ 275,583
Deferred tax liabilities				
Temporary differences				
Other	$ 14,664	$ (14,140)	$ -	$ 524

For the year ended December 31, 2018

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Temporary differences				
Inventories	$ 126,686	$ 38,873	$ -	$ 165,559
Property, plant and equipment	26,564	(228)	-	26,336
Prepayments	-	17,639	-	17,639
Defined benefit plans	11,413	-	4,226	15,639
Deferred revenue	27,706	(13,171)	-	14,535
Others	12,307	7,454	-	19,761
	$ 204,676	$ 50,567	$ 4,226	$ 259,469
Deferred tax liabilities				
Temporary differences				
Other	$ 17,389	$ (2,725)	$ -	$ 14,664

e. The aggregate amount of temporary difference associated with investments for which deferred tax liabilities have not been recognized

As of December 31, 2019 and 2018, the taxable temporary differences associated with investments in subsidiaries for which no deferred tax liabilities have been recognized were $10,735,435 thousand and $8,322,470 thousand, respectively.

f. Income tax assessments

The income tax returns of the Company through 2017 have been assessed by the tax authorities.

19. EARNINGS PER SHARE

Unit: NT$ Per Share

	For the Year Ended December 31	
	2019	**2018**
Basic earnings per share	$ 2.72	$ 2.32
Diluted earnings per share	$ 2.71	$ 2.31

The earnings and weighted average number of ordinary shares outstanding used in the computation of earnings per share were as follows:

	For the Year Ended December 31	
	2019	**2018**
Net income for the year	$ 3,083,789	$ 2,613,673

Number of Shares

Unit: Shares in Thousands

	For the Year Ended December 31	
	2019	**2018**
Weighted average number of ordinary shares used in the computation of basic earnings per share	1,132,286	1,126,786
Effect of potentially dilutive ordinary shares		
Employees' compensation	1,178	1,010
Share-based payment arrangements	3,464	4,141
Weighted average number of ordinary shares used in the computation of diluted earnings per share	1,136,928	1,131,937

If the Company offered to settle compensation paid to employees in cash or shares, the Company assumed the entire amount of the compensation will be settled in shares and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares was included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

20. SHARE-BASED PAYMENT ARRANGEMENTS

The board of directors resolved on May 8, 2019, August 14, 2018, May 8, 2018 and March 22, 2017 to transfer treasury shares of 25 thousand shares, 5,885 thousand shares, 8,097 thousand shares and 7,289 thousand shares, respectively, to qualified employees of the Company and its subsidiaries. In compliance with the Company's Regulations Governing Share Repurchase and Transfer to Employees, the transfer price for each arrangements is the average of the actual acquisition price of the treasury shares.

Information about treasury shares transferred to employees is as follows:

For the year ended December 31, 2019

Unit: Shares in Thousands

Grant Date	Transferable Shares	Shares Transferred for the Year	Accumulated Shares Transferred	Expired Shares	Shares at December 31
May 8, 2019	25	25	25	-	-
August 14, 2018	5,885	40	40	509	5,336
May 8, 2018	8,097	3,889	7,913	184	-
March 22, 2017	7,289	200	5,917	1,372	-

For the year ended December 31, 2018

Unit: Shares in Thousands

Grant Date	Transferable Shares	Shares Transferred for the Year	Accumulated Shares Transferred	Expired Shares	Shares at December 31
August 14, 2018	5,885	-	-	16	5,869
May 8, 2018	8,097	4,024	4,024	28	4,045
March 22, 2017	7,289	2,821	5,717	1,372	200

Treasury shares transferred to employees in 2018 and 2017 were priced using a Black-Scholes pricing model, while treasury shares transferred to employees in 2019 was measured using the difference between the grant date share price of $36.6 and the exercise price of $18.02, which fair value of the stock options was calculated as $18.58. Compensation costs recognized were $38,909 thousand and $91,454 thousand for the years ended December 31, 2019 and 2018, respectively. The inputs to the models are as follows:

	August 2018	May 2018	March 2017
Grant date share price (NT$)	$36.85	$31.55	$25.20
Exercise price (NT$)	$18.02	$18.02	$18.02
Expected volatility	53.23%	48.31-49.82%	30.53-40.29%
Expected life	0-1 year	0-1 year	0-2 years
Expected dividend yield	2.46%	2.46%	2.34%
Risk-free interest rate	0.91%	0.6-1.04%	0.63-1.08%
Weighted-average fair value of options granted (NT$)	$18.80	$13.55	$7.48

21. NON-CASH TRANSACTIONS

For the years ended December 31, 2019 and 2018, the Company entered into the following non-cash investing activities:

	For the Year Ended December 31	
	2019	2018
Acquisition of property, plant and equipment		
Increase in property, plant and equipment	$ 216,231	$ 198,969
Increase (decrease) in payables for construction and equipment (Note)	45,388	(22,869)
Net cash paid	$ 261,619	$ 176,100

Note: Included in other payables and other payables to related parties.

22. CAPITAL MANAGEMENT

The Company manages its capital to ensure that the Company will be able to continue as a going concern while maximizing the return to shareholders through the optimization of the debt and equity balance. The Company's overall strategy remains unchanged in the future.

The Company's risk management committee reviews the capital structure on an annual basis. As part of this review, the committee considers the cost of capital and the risks associated with each class of capital. Based on the committee's recommendations, the Company expects to balance its capital structure through the payment of dividends, the issue of new shares and private ordinary shares or the payment of old debt.

23. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Hybrid financial assets - overseas unlisted shares	$ -	$ -	$ 60,285	$ 60,285
Financial assets at FVTOCI				
Investments in equity instruments				
Domestic and overseas listed shares	$ 1,361,416	$ -	$ -	$ 1,361,416

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Investments in equity instruments				
Domestic listed shares	$ 1,120,180	$ -	$ -	$ 1,120,180

There were no transfers between Levels 1 and 2 in the current and prior years.

2) Reconciliation of Level 3 fair value measurements of financial instruments

	For the Year Ended December 31, 2019
Balance at January 1	$ -
Recognized in profit or loss	(17,715)
Purchases	78,000
Balance at December 31	$ 60,285

3) Valuation techniques and inputs applied for Level 3 fair value measurement

Overseas unlisted shares were evaluated by the market approach, referring to the market share prices and situations of companies with similar conditions. Unobservable input used by the Company was discount for lack of marketability, which was 30% as of December 31, 2019. If the discount for lack of marketability increased by 1% while all other variables were held constant, the fair value would have decreased $861 thousand.

b. Categories of financial instruments

	December 31	
	2019	2018
Financial assets		
FVTPL	$ 60,285	$ -
Amortized cost (Note 1)	4,732,515	5,125,174
Equity instruments at FVTOCI	1,361,416	1,120,180
Financial liabilities		
Amortized cost (Note 2)	7,316,691	6,831,558

Note 1: The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents, accounts receivable (including related parties) and other receivables (including related parties) (included in other current assets).

Note 2: The balances include financial liabilities measured at amortized cost, which comprise short-term borrowings, short-term bills payable, notes and accounts payable (including related parties) and other payables (including related parties).

c. Financial risk management objectives and policies

The Company's major financial instruments include equity and debt investments, accounts receivable, notes and accounts payable, borrowings and lease liabilities. The Company's Corporate Treasury function provides services to the business, monitors and manages the financial risks relating to the operations of the Company through internal risk reports that analyze exposures by degree and magnitude of risks. These risks include market risk, credit risk and liquidity risk.

1) Market risk

The Company's activities exposed it primarily to the financial risks of changes in foreign currency risk, interest rate risk and other price risk.

There have been no changes to the Company's exposure to market risks or the manner in which these risks are managed and measured.

a) Foreign currency risk

The Company had foreign-currency-denominated sales and purchases, which exposed the Company to foreign currency risk.

The carrying amounts of the Company's foreign-currency-denominated monetary assets and monetary liabilities at the end of the reporting years are set out in Note 27.

Sensitivity analysis

The Company was mainly exposed to the U.S. dollar (USD).

The following details the Company's sensitivity to a 1% increase and decrease in the New Taiwan dollar (NTD) against USD. The sensitivity analysis included only outstanding foreign-currency-denominated monetary items and adjusts their translation at the end of the year for a 1% change in foreign currency rates. For a 1% strengthening of NTD against USD, pre-tax income for the years ended December 31, 2019 and 2018 would decrease by $12,735 thousand and $5,628 thousand, respectively. For a 1% weakening of NTD against USD, there would be an equal and opposite impact on pre-tax income.

b) Interest rate risk

The carrying amount of the Company's financial assets and lease liabilities with exposure to interest rates at the end of the reporting years were as follows:

	December 31	
	2019	**2018**
Fair value interest rate risk		
Financial assets	$ 389,951	$ 374,318
Financial liabilities	$ 3,319,919	$ 1,629,812
Lease liabilities	$ 845,790	$ -
Cash flow interest rate risk		
Financial assets	$ 631,307	$ 792,459

Sensitivity analysis

The sensitivity analysis below was determined based on the Company's exposure to interest rates for non-derivative instruments at the end of the reporting years. A 50 basis point increase or decrease was used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates. The effective interest rates of floating rate financial assets will change when the market rates change, which will result in fluctuations in future cash flows.

If interest rates had been 50 basis points higher, the Company's pre-tax cash inflows for the years ended December 31, 2019 and 2018 would increase $3,157 thousand and $3,962 thousand, respectively, which was attributable to the Group's floating rate on its financial assets and if interest rates had been 50 basis points lower, there would be an equal and opposite impact on pre-tax cash flows.

c) Other price risk

The Company was exposed to equity price risk through its investments in equity securities. Equity investments are held for strategic rather than for trading purposes, and the Company does not actively trade these investments.

Sensitivity analysis

The sensitivity analysis below was determined based on the exposure to price risk of equity securities at the end of the reporting years.

If the price in equity securities had been 5% higher/lower, the income before income tax for the year ended December 31, 2019 would have increased/decreased by $3,014 thousand, as a result of the change in fair value of financial assets at FVTPL, and the other comprehensive income or loss before income tax for the years ended December 31, 2019 and 2018 would have increased/decreased by $68,071 thousand and $56,009 thousand, respectively, as a result of the charges in fair value of financial assets at FVTOCI.

The Company's sensitivity to investments in equity securities resulting from the fair value of equity securities increases.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company. As at the end of the reporting years, the Company's maximum exposure to credit risk, which would cause a financial loss to the Company due to failure of counterparties to discharge an obligation and financial guarantees provided by the Company, could arise from:

a) The carrying amount of the respective recognized financial assets as stated in the balance sheets; and

b) The amount of contingent liabilities in relation to financial guarantees issued by the Company.

The Company adopted a policy of only dealing with creditworthy counterparties, evaluated potential customers through an internal credit rating system and set the credit limit of customers to grasp the credit status of the counterparties and effectively control the credit exposure.

The Company transacts with a large number of unrelated customers; therefore, no concentration of credit risk was observed.

3) Liquidity risk

The Company manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Company's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Company relies on bank borrowings as a significant source of liquidity. As of December 31, 2019 and 2018, the Company's unutilized short-term bank borrowing facilities were $2,479,700 thousand and $2,945,870 thousand, respectively.

The following table details the Company's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The table has been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Company can be required to pay, including principal and estimated interest. Therefore, bank borrowings with a repayment on demand clause were included in the earliest time band regardless of the probability of the banks choosing to exercise their rights.

December 31, 2019

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Non-derivative financial liabilities					
Lease liabilities	$ 2,827	$ 5,655	$ 25,336	$ 129,251	$ 922,998
Fixed interest rate liabilities	3,321,983	200,447	-	-	-
	$ 3,324,810	$ 206,102	$ 25,336	$ 129,251	$ 922,998

Additional information about the maturity analysis for lease liabilities was as follows:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	$ 33,818	$ 129,251	$ 160,808	$ 160,808	$ 160,808	$ 440,574

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Non-derivative financial liabilities					
Fixed interest rate liabilities	$ 1,500,907	$ 130,321	$ -	$ -	$ -

24. TRANSACTIONS WITH RELATED PARTIES

Besides information disclosed elsewhere in other notes, details of transactions between the Company and other related parties are disclosed below.

a. Related party name and category

Related Party Name	Related party Category
SiPix Technology Inc.	Subsidiary
YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd., please refer to Note 10)	Subsidiary
New Field e-Paper Co., Ltd.	Subsidiary
YuanHan Materials Inc. (please refer to Note 10)	Subsidiary
Linfiny Corporation	Subsidiary
Linfiny Japan Inc.	Subsidiary
Transyork Technology Yangzhou Ltd.	Subsidiary
Transcend Optronics (Yangzhou) Co., Ltd.	Subsidiary
Transmart Electronics (Yangzhou) Ltd.	Subsidiary
Tech Smart Logistics Ltd.	Subsidiary
PVI International Corp.	Subsidiary
Prime View Communications Ltd.	Subsidiary
Hydis Technologies Co., Ltd.	Subsidiary
Hot Tracks International Ltd.	Subsidiary
E Ink Corporation	Subsidiary
E Ink California, LLC	Subsidiary
E Ink Japan Inc.	Subsidiary
NTX Electronics Yangzhou Co., Ltd.	Associate
Plastic Logic HK Limited	Associate
PL Germany GmbH	Associate
Yuen Foong Yu Biotech Co., Ltd.	Associate
YFY Inc.	Investor with significant influence over the Company
LiVEBRiCKS Inc.	Subsidiary of investor with significant influence over the Company
YFY Holding Management Co., Ltd.	Subsidiary of investor with significant influence over the Company
Yuen Foong Yu Consumer Products Co., Ltd.	Subsidiary of investor with significant influence over the Company
YFY Packaging Inc.	Subsidiary of investor with significant influence over the Company
China Color Printing Co., Ltd.	Subsidiary of investor with significant influence over the Company
Johnson Lee	Key management personnel
TGKW Management Limited	Substantive related party
Hsin Yi Enterprise Co., Ltd.	Substantive related party
Shen's Art Print Co., Ltd.	Substantive related party
Yuen Foong Paper Co., Ltd.	Substantive related party
SinoPac Securities Corp.	Substantive related party
Foongtone Technology Co., Ltd.	Substantive related party

b. Sales of goods

Related Party Category/Name	For the Year Ended December 31 2019	2018
Subsidiary		
Prime View Communications Ltd.	$ 3,211,841	$ 4,476,536
PVI International Corp.	2,892,095	1,582,887
Others	779,699	1,170,210
	6,883,635	7,229,633
Associate	40,277	7,327
Others	-	37
	$ 6,923,912	$ 7,236,997

c. Purchases of goods

Related Party Category/Name	For the Year Ended December 31 2019	2018
Subsidiary		
E Ink Corporation	$ 3,414,694	$ 3,380,747
Transcend Optronics (Yangzhou) Co., Ltd.	1,256,895	898,466
Transyork Technology Yangzhou Ltd.	9,636	1,442,485
Others	182,217	22,572
	4,863,442	5,744,270
Associate	459,790	627,823
Others	31	89
	$ 5,323,263	$ 6,372,182

d. Manufacturing cost (included in operating costs)

Related Party Category	For the Year Ended December 31 2019	2018
Subsidiary	$ 956,043	$ 613,702

e. Operating expenses

Related Party Category	For the Year Ended December 31 2019	2018
Subsidiary	$ 129,645	$ 120,777
Substantive related party	17,678	17,819
Associate	5,388	5,780
Investor and its subsidiaries with significant influence over the Company	1,398	1,422
	$ 154,109	$ 145,798

f. Receivables from related parties

Line Items	Related Party Category/Name	December 31 2019	December 31 2018
Accounts receivable from related parties	Subsidiary		
	Transcend Optronics (Yangzhou) Co., Ltd.	$ 1,468,494	$ 1,794,006
	Prime View Communications Ltd.	476,392	1,023,776
	YuanHan Materials Inc.	305,731	-
	PVI International Corp.	283,029	136,546
	Others	3,220	120,817
		2,536,866	3,075,145
	Associate	128,321	135,200
	Others	-	24
		$ 2,665,187	$ 3,210,369
Other receivables (include in other current assets)	Subsidiary	$ 159	$ 4,715

The outstanding receivables from related parties were unsecured. For the years ended December 31, 2019 and 2018, no impairment loss was recognized for receivables from related parties.

g. Payables to related parties

Line Items	Related Party Category/Name	December 31 2019	December 31 2018
Accounts payable to related parties	Subsidiary		
	Transcend Optronics (Yangzhou) Co., Ltd.	$ 1,321,897	$ 1,166,467
	Tech Smart Logistics Ltd.	629,345	660,143
	E Ink Corporation	445,237	194,736
	Transyork Technology Yangzhou Ltd.	87,325	1,107,113
	Others	35,510	44,785
		2,519,314	3,173,244
	Others	144	577
		$ 2,519,458	$ 3,173,821
Other payables to related parties	Subsidiary		
	E Ink Japan Inc.	$ 8,231	$ 7,298
	Others	532	582
		$ 8,763	$ 7,880

The outstanding payables to related parties were unsecured.

h. Receipts in advance

Related Party Category/Name	December 31 2019	December 31 2018
Subsidiary		
Transcend Optronics (Yangzhou) Co., Ltd.	$ 112,953	$ 56,078
Transyork Technology Yangzhou Ltd.	-	15,107
	$ 112,953	$ 71,185

i. Acquisition of intangible assets

Related Party Category	Purchase Price December 31 2019	Purchase Price December 31 2018
Associate	$ 18,609	$ -

j. Guarantee deposits received (included in other non-current liabilities)

Related Party Category	December 31 2019	December 31 2018
Key management personnel	$ 1,050	$ 1,050
Others	3	-
	$ 1,053	$ 1,050

k. Loan from related parties (include in other payables to related parties)

Related Party Category/Name	December 31 2019	December 31 2018
Subsidiary		
SiPix Technology Inc.	$ -	$ 250,000

Interest expense

Related Party Category	For the Year Ended December 31 2019	For the Year Ended December 31 2018
Subsidiary	$ -	$ 267

The Company obtained loans at rates comparable to market interest rates for the loans from related parties.

l. Endorsements and guarantees provided by related parties

Related Party Category/Name	December 31 2019	December 31 2018
Subsidiary		
YuanHan Materials Inc.	$ 850,000	$ 800,000
E Ink Corporation	419,720	860,020
Linfiny Corporation	410,000	360,000
	$ 1,679,720	$ 2,020,020

m. Compensation of key management personnel

	For the Year Ended December 31 2019	For the Year Ended December 31 2018
Short-term employee benefits	$ 104,603	$ 103,764
Post-employment benefits	1,459	1,318
Share-based payments	31,611	27,939
	$ 137,673	$ 133,021

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

25. ASSETS PLEDGED AS COLLATERAL

Assets amounting to $34,666 thousand and $36,835 thousand (included in other current assets) as of December 31, 2019 and 2018, respectively, were provided as tenancy deposits for renting plants and land and as guarantees of tariffs of imported goods.

26. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

Guaranteed notes issued for long-term and short-term borrowings and lines of credit for derivative instrument trading were $6,220,000 thousand and $4,370,000 thousand as of December 31, 2019 and 2018, respectively.

27. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The following information was aggregated by the foreign currencies other than functional currencies of the Company and the exchange rates between foreign currencies and respective functional currencies were disclosed. The significant assets and liabilities denominated in foreign currencies were as follows:

December 31, 2019

	Foreign Currency	Exchange Rate	Carrying Amount
Foreign currency assets			
Monetary items			
USD	$ 152,364	29.98	$ 4,567,873
Non-monetary items			
Investments accounted for using the equity method			
USD	483,581	29.98	$ 14,497,749
Foreign currency liabilities			
Monetary items			
USD	109,885	29.98	$ 3,294,352

December 31, 2018

	Foreign Currency	Exchange Rate	Carrying Amount
Foreign currency assets			
Monetary items			
USD	$ 154,954	30.715	$ 4,759,412
Non-monetary items			
Investments accounted for using the equity method			
USD	413,088	30.715	$ 12,687,988
Foreign currency liabilities			
Monetary items			
USD	136,632	30.715	$ 4,196,652

The Company's net realized and unrealized gain (loss) on foreign currency exchange were $(64,791) thousand and $56,663 thousand for the years ended December 31, 2019 and 2018, respectively. It is impractical to disclose net gain or loss on foreign currency exchange by each significant foreign currency due to the variety of the foreign currency transactions and the functional currency.

28. SEPARATELY DISCLOSED ITEMS

a. Information about significant transactions and investees:

1) Financing provided to others (Table 1)

2) Endorsements/guarantees provided (Table 2)

3) Marketable securities held (excluding investment in subsidiaries) (Table 3)

4) Marketable securities acquired and disposed of at costs or prices of at least NT$300 million or 20% of the paid-in capital (Table 4)

5) Acquisitions of individual real estate at costs of at least NT$300 million or 20% of the paid-in capital (None)

6) Disposals of individual real estate at prices of at least NT$300 million or 20% of the paid-in capital (Table 5)

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital (Table 6)

8) Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital (Table 7)

9) Trading in derivative instruments (None)

10) Information on investees (Table 8)

b. Information on investments in mainland China (Table 9)

1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income or loss, carrying amount of the investment at the end of the year, repatriations of investment income and limit on the amount of investment in the mainland China area

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms, and unrealized gains or losses:

a) The amount and percentage of purchases and the balance and percentage of the related payables at the end of the year

b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the year

c) The amount of property transactions and the amount of the resultant gains or losses

d) The balance of negotiable instrument endorsements or guarantees or pledges of collateral at the end of the year and the purposes

e) The highest balance, the end of year balance, the interest rate range, and total current year interest with respect to financing of funds

f) Other transactions that have a material effect on the profit or loss for the year or on the financial position, such as the rendering or receipt of services

TABLE 1

E INK HOLDINGS INC. AND SUBSIDIARIES

FINANCING PROVIDED TO OTHERS
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

No.	Financing Company	Counterparty	Financial Statement Account	Related Party	Maximum Balance for the Year (Note 1)	Ending Balance (Note 1)	Amount Actually Drawn (Note 1)	Interest Rate Intervals (%)	Nature of Financing	Business Transaction Amount	Reasons for Short-term Financing	Allowance for Impairment Loss	Collateral		Financing Limit for Each Borrowing Company (Note 2)	Aggregate Financing Limit (Note 2)
													Item	Value		
1	Transcend Optronics (Yangzhou) Co., Ltd.	Yangzhou Huaxia Integrated O/E System Co., Ltd.	Other receivables	Yes	$ 946,888 (RMB 206,222 thousand)	$ 886,234 (RMB 206,222 thousand)	$ 886,234 (RMB 206,222 thousand)	3.915	Short-term financing	$ -	Working capital	$ -	Buildings and right-of-use of land and buildings	$ 438,731 (RMB 102,090 thousand)	$ 3,161,412 (RMB 735,645 thousand)	$ 3,161,412 (RMB 735,645 thousand)
2	SiPix Technology Inc. (Note 3)	E Ink Holdings Inc.	Other receivables	Yes	250,000	-	-	1.00	Short-term financing	-	Working capital	-	-	-	-	-
3	Hydis Technologies Co., Ltd.	YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Other receivables	Yes	457,500 (US$ 15,000 thousand)	449,700 (US$ 15,000 thousand)	449,700 (US$ 15,000 thousand)	2.00	Short-term financing	-	Working capital	-	-	-	3,342,973 (KRW127,740,668 thousand)	3,342,973 (KRW127,740,668 thousand)

Note 1: The amounts are translated at the exchange rate of US$1=$29.98, RMB1=$4.29747, and KRW1=$0.02617 on December 31, 2019, except the maximum balance that is translated at the highest exchange rate at the end of each month for the year.

Note 2: The aggregate and individual financing limit of subsidiaries shall not exceed 40% of the financing company's net equity per its latest financial statement. The above restriction does not apply to Transcend Optronics (Yangzhou) Co., Ltd. when providing financing to the foreign subsidiaries whose voting shares are 100% owned, directly or indirectly, by the Company. Nonetheless, the aggregate and individual financing limit to these subsidiaries shall not exceed the financing company's net equity per its latest financial statements.

Note 3: SiPix Technology Inc. has been dissolved after merging with Yuanhan Materials Inc. on October 1, 2019. Refer to Note 10.

E INK HOLDINGS INC. AND SUBSIDIARIES

ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

No.	Endorsement/Guarantee Provider	Endorsed/Guaranteed Party		Limit on Endorsement/ Guarantee Amount Provided to Each Endorsed/ Guaranteed Party (Note 1)	Maximum Balance for the Year (Note 2)	Ending Balance (Note 2)	Amount Actually Drawn (Note 2)	Amount of Endorsement/ Guarantee Collateralized by Properties	Ratio of Accumulated Endorsement/ Guarantee to Net Equity per Latest Financial Statements (%)	Maximum Endorsement/ Guarantee Amount Allowable (Note 3)	Endorsement/ Guarantee Provided by Parent Company	Endorsement/ Guarantee Provided by Subsidiary	Endorsement/ Guarantee to Subsidiary in Mainland China
		Name	Relationship										
0	E Ink Holdings Inc.	E Ink Corporation	Subsidiary	$ 7,250,035	$ 884,800 (US$ 28,000 thousand)	$ 419,720 (US$ 14,000 thousand)	$ -	$ -	1.45	$ 29,000,139	Yes	No	No
		YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Subsidiary	7,250,035	850,000	850,000	373,500	-	2.93	29,000,139	Yes	No	No
		Linfiny Corporation	Subsidiary	7,250,035	410,000	410,000	101,040	-	1.41	29,000,139	Yes	No	No
1	Hydis Technologies Co., Ltd.	E Ink Holdings Inc.	Parent company	2,089,358 (KRW 79,837,918 thousand)	449,700 (US$ 15,000 thousand)	449,700 (US$ 15,000 thousand)	-	-	5.38	8,357,433 (KRW 319,351,671 thousand)	No	Yes	No

Note 1: The amount shall not exceed 25% of the Company’s net equity.

Note 2: The amounts are translated at the exchange rate of US$1=29.98, and KRW1=0.02617 on December 31, 2019, except the maximum balance is translated at the highest exchange rate of the end of each month for the year.

Note 3: The amount shall not exceed the Company’s net equity.

E INK HOLDINGS INC. AND SUBSIDIARIES

MARKETABLE SECURITIES HELD
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019				Note
				Shares/Units (In Thousands)	Carrying Amount	Percentage of Ownership (%)	Fair Value	
E Ink Holdings Inc.	Ordinary shares							
	SinoPac Financial Holding Company Limited	Substantive related party	Financial assets at FVTOCI	90,451	$ 1,175,869	0.80	$ 1,175,869	
	YFY Inc.	Investor with significant influence over the Company	Financial assets at FVTOCI	7,814	105,099	0.47	105,099	
	Ultra Chip, Inc.	-	Financial assets at FVTOCI	2,638	80,448	4.13	80,448	
	IGNIS INNOVATION INC.	-	Financial assets at FVTPL - non-current	388	-	0.19	-	
	New Medical Imaging Co., Ltd.	-	Financial assets at FVTPL - non-current	109	-	2.37	-	
	Convertible preferred shares							
	MICAREO INC.	-	Financial assets at FVTPL - non-current	6,000	60,285	14.69	60,285	
YuanHan Materials Inc.	Ordinary shares							
	SinoPac Financial Holding Company Limited	Substantive related party	Financial assets at FVTOCI	146,432	1,903,620	1.30	1,903,620	
	YFY Inc.	Investor with significant influence over the parent company	Financial assets at FVTOCI	16	215	-	215	
	Netronix Inc.	One of its director	Financial assets at FVTOCI	5,309	211,041	6.40	211,041	
	SES-imagotag	-	Financial assets at FVTOCI	867	782,743	5.50	782,743	
	Fitipower Integrated Technology Inc.	-	Financial assets at FVTOCI	2,689	101,092	1.62	101,092	
	Formolight Technologies, Inc.	-	Financial assets at FVTOCI	2,228	16,120	10.93	16,120	
	Echem Solutions Corp.	-	Financial assets at FVTOCI	743	13,296	1.27	13,296	
	eCrowd Media Inc.	-	Financial assets at FVTOCI	1,010	4,598	6.62	4,598	
Transcend Optronics (Yangzhou) Co., Ltd.	Ordinary shares							
	Dalian DKE LCD Co., Ltd.	-	Financial assets at FVTOCI	837	RMB 4,150 thousand	3.52	RMB 4,150 thousand	
Hydis Technologies Co., Ltd.	Ordinary shares							
	Ssangyong Cement Industry Co., Ltd.	-	Financial assets at FVTOCI	423	KRW 2,397,860 thousand	0.08	KRW 2,397,860 thousand	
	Mutual funds							
	Term Liquidity Fund	-	Financial assets at FVTPL - current	771	KRW 94,135,529 thousand	-	KRW 94,135,529 thousand	

Note: Please refer to Tables 8 and 9 for information on investments in subsidiaries and associates.

E INK HOLDINGS INC. AND SUBSIDIARIES

MARKETABLE SECURITIES ACQUIRED AND DISPOSED AT COSTS OR PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of Each Foreign Currency)

Company Name	Type and Name of Marketable Securities	Financial Statement Account	Counterparty	Relationship	Beginning Balance		Acquisition		Disposal				Other Adjustments	Ending Balance	
					Units (In Thousands)	Amount	Units (In Thousands)	Amount	Units (In Thousands)	Prices	Carrying Amount	Gain on Disposal (Note 1)		Units (In Thousands)	Amount
Rich Optronics (Yangzhou) Co., Ltd.	Principal guaranteed wealth investment products														
	Su-Yin-Xi structured	Financial assets at amortized cost	Bank of Jiangsu	-	-	RMB 68,000 thousand	-	RMB 167,000 thousand	-	RMB 186,799 thousand	RMB 184,500 thousand	RMB 2,299 thousand	$ -	-	RMB 50,500 thousand
	China CITIC Bank structured	Financial assets at amortized cost	China CITIC Bank	-	-	-	-	RMB 79,000 thousand	-	RMB 79,484 thousand	RMB 79,000 thousand	RMB 484 thousand	-	-	-
Transyork Technology Yangzhou Ltd.	Principal guaranteed wealth investment products														
	Interest rate linked structured deposits	Financial assets at amortized cost	Bank of Nanjing	-	-	-	-	RMB 91,000 thousand	-	RMB 92,491 thousand	RMB 91,000 thousand	RMB 1,491 thousand	-	-	-
Hydis Technologies Co., Ltd.	Mutual Funds														
	Term Liquidity Fund	Financial assets at FVTPL - current	Citibank	-	578	KRW66,591,956 thousand	452	KRW53,715,200 thousand	259	KRW30,617,223 thousand	KRW30,109,200 thousand	KRW 508,023 thousand (Note 2)	KRW 3,937,573 thousand (Note 2)	771	KRW94,135,529 thousand
E Ink Holdings Inc.	Ordinary shares														
	SiPix Technology Inc.	Investment accounted for using the equity method	(Note 3)	Subsidiary	-	2,010,330	-	-	-	1,310,010	1,310,010	-	(700,320) (Note 4)	-	-
	Ordinary shares														
	YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Investment accounted for using the equity method	(Note 3)	Subsidiary	152,433	1,819,546	31,386	1,310,010	-	-	-	-	921,926 (Note 4)	183,819	4,051,482

Note 1: Included in interest income.

Note 2: Included in net gain on financial assets and liabilities at FVTPL.

Note 3: YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.) issued new shares to merge SiPix Technology Inc. in October 2019. Refer to Note 10.

Note 4: Changes in capital surplus, share of profit or loss of subsidiaries accounted for using the equity method, exchange differences on translating the financial statements of foreign operations, and unrealized gain (loss) on financial assets at FVTOCI, etc. are included.

TABLE 5

E INK HOLDINGS INC. AND SUBSIDIARIES

DISPOSAL OF INDIVIDUAL REAL ESTATE AT PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of RMB)

Seller	Property	Event Date	Original Acquisition Date	Carrying Amount	Transaction Amount	Collection	Gain (Loss) on Disposal	Counterparty	Relationship	Purpose of Disposal	Price Reference	Other Terms
Yangzhou Huaxia Integrated O/E System Co., Ltd.	Land use rights, building and its accessories	November 27, 2019	February 2007 Acquisition of land use rights	RMB 23,150 thousand	RMB 328,986 thousand	Based on the actual delivery of the property ownership certificate and land use certificate, as well as the progress of local government funding.	(Note)	Yangzhou Economic and Technological Development Zone’s Demolition Placement Management Office	-	Cooperating with the government’s regional expropriation plan of Yangzhou Economic and Technological Development Zone.	Reference to the appraisal result by Zhongzheng real estate appraisal cost Group Co., Ltd. and Jiangsu Zhong Run Assets Appraisal Co., Ltd., and the local government compensation regulations of land reserve and house demolition.	-

Note: The actual gain of disposal will be determined by the process of receipt of payment, delivery of the property ownership certificate and land use certificate, and will be adjusted by related tax expenses and recognized according to the regulations of IFRS.

TABLE 6

E INK HOLDINGS INC. AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Receivable (Payable)		Note
			Purchase/Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% of Total (Note 1)	
E Ink Holdings Inc.	Prime View Communications Ltd.	Subsidiary	Sale	$ (3,211,841)	(25)	By agreements	$ -	-	$ 476,392	18	
	PVI International Corp.	Subsidiary	Sale	(2,892,095)	(22)	By agreements	-	-	283,029	11	
	E Ink Corporation	Subsidiary	Purchase	3,414,694	36	By agreements	-	-	(445,237)	(18)	
	E Ink Japan Inc.	Subsidiary	Purchase	101,567	1	By agreements	-	-	(8,230)	-	
	SiPix Technology Inc. (Note 2)	Subsidiary	Sale	(557,840)	(4)	By agreements	-	-	-	-	
	YuanHan Materials Inc.	Subsidiary	Sale	(204,148)	(2)	By agreements	-	-	305,731	11	(Note 3)
	YuanHan Materials Inc.	Subsidiary	Purchase	125,211	1	By agreements	-	-	(20,893)	(1)	
	Transcend Optronics (Yangzhou) Co., Ltd.	Subsidiary	Purchase	1,256,895	13	By agreements	-	-	(1,321,897)	(52)	
	NTX Electronics Yangzhou Co., Ltd.	Associate	Purchase	459,777	5	By agreements	-	-	-	-	
SiPix Technology Inc. (Note 2)	E Ink Holdings Inc.	Parent company	Purchase	557,840	88	By agreements	-	-	-	-	
YuanHan Materials Inc.	E Ink Holdings Inc.	Parent company	Sale	(125,211)	(31)	By agreements	-	-	20,893	8	
	E Ink Holdings Inc.	Parent company	Purchase	204,148	72	By agreements	-	-	(305,731)	(100)	
Linfiny Corporation	Linfiny Japan Inc.	Subsidiary	Purchase	122,845	52	By agreements	-	-	(30,532)	(52)	
	NTX Electronics Yangzhou Co., Ltd.	Associate	Purchase	115,570	48	By agreements	-	-	(27,429)	(47)	
Linfiny Japan Inc.	Linfiny Corporation	Parent company	Sale	(122,845)	(100)	By agreements	-	-	30,532	100	
Prime View Communications Ltd.	E Ink Holdings Inc.	Parent company	Purchase	3,211,841	100	By agreements	-	-	(476,392)	(100)	
PVI International Corp.	E Ink Holdings Inc.	Parent company	Purchase	2,892,095	100	By agreements	-	-	(283,029)	(100)	
Transcend Optronics (Yangzhou) Co., Ltd.	E Ink Holdings Inc.	Parent company	Sale	(1,256,895)	(100)	By agreements	-	-	1,321,897	100	
E Ink Corporation	E Ink Holdings Inc.	Parent company	Sale	(3,414,694)	(98)	By agreements	-	-	445,237	93	
	E Ink California, LLC	Subsidiary	Purchase	479,714	50	By agreements	-	-	(323,096)	(96)	
E Ink California, LLC	E Ink Corporation	Parent company	Sale	(479,714)	(100)	By agreements	-	-	323,096	100	
E Ink Japan Inc.	E Ink Holdings Inc.	Parent company	Sale	(101,595)	(100)	By agreements	-	-	8,230	100	

Note 1: The calculation is based on each company’s receivables from (payables to) related parties.

Note 2: SiPix Technology Inc. has been dissolved after merging with Yuanhan Materials Inc. on October 1, 2019. Refer to Note 10.

Note 3: The balance of accounts receivable includes accounts receivable of SiPix Technology Inc., which was merged into YuanHan Materials Inc.

TABLE 7

E INK HOLDINGS INC. AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate (Times)	Overdue		Amount Received in Subsequent Year	Allowance for Impairment Loss
					Amount	Actions Taken		
E Ink Holdings Inc.	Prime View Communications Ltd.	Subsidiary	$ 476,392	4.28	$ -	-	$ 412,167	$ -
	PVI International Corp.	Subsidiary	283,029	13.79	-	-	240,533	-
	YuanHan Materials Inc.	Subsidiary	305,731	1.34	2,304	Collected	98,721	-
	Transcend Optronics (Yangzhou) Co., Ltd.	Subsidiary	1,468,494	(Note 1)	168,126	Collected	734,535	-
YuanHan Materials Inc.	Transcend Optronics (Yangzhou) Co., Ltd.	Same ultimate parent company	236,462	(Note 1)	-	-	196,427	-
Tech Smart Logistics Ltd.	E Ink Holdings Inc.	Parent company	629,345	(Note 1)	629,345	In the process of collection	-	-
Dream Pacific International Corp.	Tech Smart Logistics Ltd.	Same ultimate parent company	157,325	(Note 1)	157,325	In the process of collection	-	-
PVI Global Corp.	Dream Pacific International Corp.	Subsidiary	203,864	(Note 2)	203,864	In the process of collection	-	-
Transcend Optronics (Yangzhou) Co., Ltd.	E Ink Holdings Inc.	Parent company	1,321,897	(Note 1)	1	Collected	580,184	-
E Ink Corporation	E Ink Holdings Inc.	Parent company	445,237	10.67	5,617	Collected	383,431	-
E Ink California, LLC	E Ink Corporation	Parent company	323,096	1.68	197,623	In the process of collection	76,910	-

Note 1: Other receivables from materials delivered to subcontractors.

Note 2: Cash dividends receivables.

E INK HOLDINGS INC. AND SUBSIDIARIES

INFORMATION ON INVESTEES
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2019			Net Income (Loss) of Investee	Share of Profit (Loss) of Investee	Note
				December 31, 2019	December 31, 2018	Shares (In Thousands)	Percentage of Ownership (%)	Carrying Amount			
E Ink Holdings Inc.	PVI Global Corp.	British Virgin Islands	Investment	$ 3,090,254	$ 3,090,254	99,413	100.00	$ 12,910,061	$ 2,403,115	$ 2,403,115	
	New Field e-Paper Co., Ltd.	Taoyuan, Taiwan	Wholesale and sale of electronics parts	6,394,455	6,394,455	671,032	100.00	5,476,644	(126,683)	(126,683)	
	E Ink Corporation	Boston, USA	Manufacture and sale of electronic ink	4,911,303	4,911,303	1	45.31	4,184,838	109,334	(103,087)	
	YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.)	Taipei, Taiwan	Research, development and sale of electronic parts and electronic ink	6,420,230	5,015,000	183,819	100.00	4,051,482	156,083	148,111	(Notes)
	SiPix Technology Inc.	Taoyuan, Taiwan	Manufacture and sale of electronic ink	-	1,405,230	-	-	-	477,108	477,108	(Notes)
	Dream Universe Ltd.	Mauritius	Trading	128,710	128,710	4,050	100.00	372,492	8,375	8,375	
	Prime View Communications Ltd.	Hong Kong	Trading	18,988	18,988	3,570	100.00	27,679	408	408	
	Entte K Co., Ltd.	Taichung, Taiwan	Manufacture and sale of consumer audio-visual systems	34,547	34,547	2,203	47.07	-	-	-	Under liquidation
	Tech Smart Logistics Ltd.	British Virgin Islands	Trading	49,267	49,267	1,550	0.09	3,861	(96,916)	(87)	
	Hot Tracks International Ltd.	British Virgin Islands	Trading	1,735	1,735	50	100.00	46	12	12	
	Linfiny Corporation	Taoyuan, Taiwan	Research, development and sale of electronic ink	16,800	-	1,680	4.00	2,880	(103,411)	(920)	
New Field e-Paper Co., Ltd.	Tech Smart Logistics Ltd.	British Virgin Islands	Trading	4,865,850	4,865,850	1,748,252	99.91	4,286,601	(96,916)	(96,828)	
	E Ink Corporation	Boston, USA	Manufacture and sale of electronic ink	1,618,500	1,618,500	-	12.88	1,189,598	109,334	(29,304)	
YuanHan Materials Inc.	Linfiny Corporation	Taoyuan, Taiwan	Research, development and sale of electronic ink	323,400	323,400	32,340	77.00	55,436	(103,411)	(79,627)	
	Lucky Joy Holdings Ltd.	Samoa	Investment	36,117	36,117	1,098	100.00	11	-	-	
	Yuen Foong Yu Biotech Co., Ltd.	Taipei, Taiwan	Cultivation, processing and sale of agriculture and restaurant management	36,000	36,000	3,600	36.00	-	(62,926)	-	
	Kyoritsu Optronics Co., Ltd.,	Taipei, Taiwan	Technology development, transfer and licensing of flat panels	18,860	18,860	1,050	25.65	-	-	-	
SiPix Technology Inc.	Linfiny Corporation	Taoyuan, Taiwan	Research, development and sale of electronic ink	-	16,800	-	-	-	(103,411)	(3,216)	
Linfiny Corporation	Linfiny Japan Inc.	Tokyo, Japan	Research and development of electronic ink	11,088	11,088	4	100.00	23,151	3,188	3,188	
E Ink Corporation	E Ink California, LLC	California, USA	Research, development and sale of electronic ink	US$ 29,100 thousand	US$ 29,100 thousand	27,400	100.00	US$ 30,312 thousand	US$ 3,201 thousand	US$ 1,154 thousand	
	E Ink Japan Inc.	Tokyo, Japan	Development of electronic ink products	US$ 86 thousand	US$ 86 thousand	-	100.00	US$ 444 thousand	US$ 163 thousand	US$ 163 thousand	
	E Ink Systems, LLC	California, USA	Research and development of application software	-	US$ 337 thousand	-	-	-	US$ 103 thousand	US$ 103 thousand	
Tech Smart Logistics Ltd.	E Ink Corporation	Boston, USA	Manufacture and sale of electronic ink	US$ 152,875 thousand	US$ 152,875 thousand	1	41.81	US$ 127,333 thousand	US$ 3,884 thousand	US$ (3,056) thousand	
PVI Global Corp.	PVI International Corp.	British Virgin Islands	Trading	US$ 151,300 thousand	US$ 151,300 thousand	151,300	100.00	US$ 105,668 thousand	US$ 8,902 thousand	US$ 8,902 thousand	
	Dream Pacific International Corp.	British Virgin Islands	Investment	US$ 1,000 thousand	US$ 1,000 thousand	26,000	100.00	US$ 251,067 thousand	US$ 65,017 thousand	US$ 65,017 thousand	
	Ruby Lustre Ltd.	British Virgin Islands	Investment	US$ 30,000 thousand	US$ 30,000 thousand	30,000	100.00	US$ 25,952 thousand	US$ 192 thousand	US$ 192 thousand	
	North Diamond International Co., Ltd.	British Virgin Islands	Investment	US$ 1,750 thousand	US$ 1,750 thousand	1,750	35.00	-	-	-	
	Rock Pearl International Corp.	British Virgin Islands	Investment	US$ 1,540 thousand	US$ 1,540 thousand	1,540	35.00	-	-	-	
Dream Pacific International Corp.	Hydis Technologies Co., Ltd.	South Korea	Research, development and licensing of monitors	US$ 27,612 thousand	US$ 27,612 thousand	3,783	94.73	US$ 259,838 thousand	US$ 67,053 thousand	US$ 64,638 thousand	
Hydis Technologies Co., Ltd.	Plastic Logic HK Limited	Hong Kong	Research, development and manufacture of electronic paper display panels	KRW 2,942,500 thousand	-	2,500	48.90	KRW 2,148,976 thousand	KRW(2,715,802) thousand	KRW (793,524) thousand	

Note: YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.) issued new shares to merge SiPix Technology Inc. in October 2019. Refer to Note 10.

TABLE 9

E INK HOLDINGS INC. AND SUBSIDIARIES

INFORMATION ON INVESTMENTS IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Main Business and Product	Paid-in Capital (Note 1)	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2019 (Note 1)	Remittance of Funds: Outward	Remittance of Funds: Inward	Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2019 (Note 1)	Net Income (Loss) of Investee (Note 2)	Direct or Indirect Percentage of Ownership (%)	Share of Profit (Loss) of Investee (Notes 2 and 3)	Carrying Amount as of December 31, 2019 (Note 1)	Accumulated Repatriation of Investment Income as of December 31, 2019
Transcend Optronics (Yangzhou) Co., Ltd.	Assembly and sale of display panels	$ 4,535,974 (US$ 151,300 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	$ 3,263,173 (US$ 108,845 thousand)	$ -	$ -	$ 3,263,173 (US$ 108,845 thousand)	$ 320,557 (US$ 10,370 thousand)	100.00	$ 274,406 (US$ 8,877 thousand)	$ 3,161,301 (US$ 105,447 thousand)	$ -
Rich Optronics (Yangzhou) Co., Ltd.	Assembly and sale of display panels	899,400 (US$ 30,000 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	899,400 (US$ 30,000 thousand)	-	-	899,400 (US$ 30,000 thousand)	5,935 (US$ 192 thousand)	100.00	5,935 (US$ 192 thousand)	778,041 (US$ 25,952 thousand)	-
Transyork Technology Yangzhou Ltd.	Assembly and sale of display panels	2,156,491 (US$ 71,931 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	-	-	-	-	188,100 (US$ 6,085 thousand)	100.00	245,163 (US$ 7,931 thousand)	1,891,108 (US$ 63,079 thousand)	-
Transmart Electronics (Yangzhou) Ltd.	Research, development and sale of flat panels	297,282 (US$ 9,916 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	198,168 (US$ 6,610 thousand)	-	-	198,168 (US$ 6,610 thousand)	27,388 (US$ 886 thousand)	100.00	14,127 (US$ 457 thousand)	58,101 (US$ 1,938 thousand)	-
Yangzhou Huaxia Integrated O/E System Co., Ltd.	Manufacture and sale of LED products	557,628 (US$ 18,600 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	89,940 (US$ 3,000 thousand)	-	-	89,940 (US$ 3,000 thousand)	103,802 (US$ 3,358 thousand)	100.00	103,802 (US$ 3,358 thousand)	(752,018) (US$ (25,084) thousand)	-
Dihao Electronics (Yangzhou) Co., Ltd. (Under liquidation)	Assembly of LCD backlight board display modules	149,900 (US$ 5,000 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	52,465 (US$ 1,750 thousand)	-	-	52,465 (US$ 1,750 thousand)	-	35.00	-	-	-
NTX Electronics Yangzhou Co., Ltd.	Manufacture and sale of flat panels	171,899 (RMB 40,000 thousand)	The Company indirectly owns the investee through an investment company registered in a third region	-	-	-	-	25,822 (RMB 5,761 thousand)	49.00	12,363 (RMB 2,823 thousand)	91,639 (RMB 21,325 thousand)	-

(Continued)

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2019 (Note 1)	Investment Amount Authorized by Investment Commission, MOEA (Note 1)	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
$ 4,503,146 (US$ 150,205 thousand)	$ 8,364,750 (US$ 279,011 thousand)	$ 19,848,018

Note 1: The amounts are translated at the exchange rate of US$1＝NT$29.98 and RMB1＝NT$4.29747 on December 31, 2019.

Note 2: The amounts are translated at the average exchange rate of US$1＝NT$30.912 and RMB1＝NT$4.48214 for the year ended December 31, 2019.

Note 3: The amounts were calculated based on audited financial statements of the corresponding year.

Note 4: For information on the prices, payment terms and unrealized profit or loss of significant transactions with investee companies in mainland China, please refer to Tables 1, 6 and 7.

(Concluded)

E INK HOLDINGS INC.

THE CONTENTS OF STATEMENTS OF IMPORTANT ACCOUNTING ITEMS

E INK HOLDINGS INC.

STATEMENT OF CASH AND CASH EQUIVALENTS
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Item	Period	Rate	Amount
Cash on hand (Note)		-	$ 183
Checking accounts and demand deposits (Note)			
Checking accounts		-	9
Demand deposits		0.01%-0.55%	631,298
			631,307
Repurchase agreements collateralized by notes (Note)	2019.12.25-2020.01.06	2.2%	389,951
			$ 1,021,441

Note: Including US$30,697 thousand and JPY110,006 thousand, which are translated at the exchange rate of US$1=NT$29.98 and JPY1=NT$0.276, respectively.

E INK HOLDINGS INC.

STATEMENT OF INVENTORIES
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Item	Amount: Cost	Amount: Net Realizable Value
Finished goods	$ 1,114,405	$ 1,638,233
Semi-finished goods	312,778	301,608
Work in progress	66,684	65,685
Raw materials	980,209	1,089,138
	2,474,076	$ 3,094,664
Less: Allowance for write-downs of inventories (Note)	(810,420)	
	$ 1,663,656	

Note: Including allowance for obsolete inventories.

E INK HOLDINGS INC.

STATEMENT OF CHANGES IN FINANCIAL ASSETS AT FVTOCI - NON-CURRENT
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Except Unit Price)

	Balance, January 1, 2019		Decrease in 2019 (Note 1)		Unrealized	Fair Value on December 31, 2019 (Note 2)			
Type and Name of Marketable Securities	Shares (In Thousands)	Amount	Shares (In Thousands)	Amount	Gain (Loss) on Financial Assets	Shares (In Thousands)	Percentage of Ownership (%)	Unit Price	Amount
Shares									
SinoPac Financial Holding Company Limited	90,451	$ 931,650	-	$ -	$ 244,219	90,451	0.80	$ 13.00	$ 1,175,869
YFY Inc.	7,814	87,908	-	-	17,191	7,814	0.47	13.45	105,099
Ultra Chip, Inc.	2,863	100,622	(225)	(9,928)	(10,246)	2,638	4.13	30.50	80,448
		$ 1,120,180		$ (9,928)	$ 251,164				$ 1,361,416

Note 1: Including the gain of the disposal of the equity investment amounting to $7,678 thousand and was transferred to retained earnings.

Note 2: Calculated based on the closing price on December 31, 2019.

E INK HOLDINGS INC.

STATEMENT OF CHANGES IN INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

	Balance, January 1, 2019		Increase (Decrease) in 2019		Share of Profit (Loss) of Subsidiaries Accounted for Using the Equity Method (Note 1)	Equity Adjustments (Note 2)	Balance, December 31, 2019		
Investee Company	Shares (In Thousands)	Amount	Shares (In Thousands)	Amount			Shares (In Thousands)	Percentage of Ownership (%)	Amount
PVI Global Corp.	99,413	$ 11,109,595	-	$ -	$ 2,403,115	$ (602,649)	99,413	100.00	$ 12,910,061
New Field e-Paper Co., Ltd.	671,032	5,701,683	-	-	(126,683)	(98,356)	671,032	100.00	5,476,644
E Ink Corporation	1	4,305,677	-	-	(103,087)	(17,752)	1	45.31	4,184,838
SiPix Technology Inc. (Note 3)	-	2,010,330	-	(2,426,179)	477,108	(61,259)	-	-	-
YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.) (Note 3)	152,433	1,819,546	31,386	1,310,010	148,111	773,815	183,819	100.00	4,051,482
Dream Universe Ltd.	4,050	371,562	-	-	8,375	(7,445)	4,050	100.00	372,492
Prime View Communications Ltd.	3,570	27,800	-	-	408	(529)	3,570	100.00	27,679
Tech Smart Logistics Ltd.	1,550	4,033	-	-	(87)	(85)	1,550	0.09	3,861
Linfiny Corporation (Note 4)	-	-	1,680	4,340	(920)	(540)	1,680	4.00	2,880
Hot Tracks International Ltd.	50	35	-	-	12	(1)	50	100.00	46
Entte K Co., Ltd. (under liquidation)	2,203	-	-	-	-	-	2,203	47.07	-
		$ 25,350,261		$ (1,111,829)	$ 2,806,352	$ (14,801)			$ 27,029,983

Note 1: The amounts were calculated based on audited financial statements of the corresponding year.

Note 2: Equity adjustments included capital surplus, exchange differences on translating the financial statements of foreign operations, unrealized gain or loss on financial assets at FVTOCI and retained earnings.

Note 3: YuanHan Materials Inc. (originally named Yuen Yu Investment Co., Ltd.) issued new shares to merge SiPix Technology Inc. in October 2019. Refer to Note 10. The decrease of the amount of SiPix Technology Inc. in 2019 included the distribution of cash dividends of $1,122,504 thousand before the merger.

Note 4: The Company acquired 4% shares of Linfiny Corporation from YuanHan Materials Inc. on October 1, 2019 due to the adjustment of investment structure.

E INK HOLDINGS INC.

STATEMENT OF SHORT-TERM BORROWINGS
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Type	Contract Period	Interest Rate (%)	Amount	Loan Commitments
Credit borrowings				
Taishin International Bank	2019.12-2020.01	1.04	$ 700,000	$ 800,000
Citibank Taiwan Ltd.	2019.12-2020.01	0.98	690,000	690,000
KGI Commercial Bank Co., Ltd.	2019.12-2020.01	1.05	500,000	500,000
Fubon Commercial Bank Co., Ltd.	2019.12-2020.03	0.95-0.97	450,000	450,000
Entie Commercial Bank, Ltd.	2019.12-2020.01	1.00	280,000	300,000
Taiwan Shin Kong Commercial Bank Co., Ltd.	2019.12-2020.01	1.10	270,000	300,000
Far Eastern International Bank Co., Ltd.	2019.12-2020.01	1.02	50,000	300,000
			$ 2,940,000	

STATEMENT 6

E INK HOLDINGS INC.

STATEMENT OF NOTES AND ACCOUNTS PAYABLE
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Vendor Name	Amount
Vendor A	$ 92,356
Vendor B	73,037
Vendor C	54,884
Vendor D	49,295
Vendor E	45,801
Others (Note)	570,317
	$ 885,690

Note: The amount of individual vendor included in “Others” does not exceed 5% of the account balance.

E INK HOLDINGS INC.

STATEMENT OF OPERATING REVENUE
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Item	Shipping Units (In Thousands)	Amount
Revenue from sale of goods		
Monitors	9,882	$ 10,618,220
Electronic shelf labels	13,462	2,260,489
Others	290	203,916
		13,082,625
Less: Sales returns and discounts		(221,815)
Operating revenue, net		$ 12,860,810

STATEMENT 8

E INK HOLDINGS INC.

STATEMENT OF OPERATING COSTS
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Item	Amount
Raw materials balance, beginning of year	$ 1,074,365
Add: Raw materials purchased	9,458,130
Less: Sales of raw materials	(353,531)
Transferred to other accounts	(152,276)
Raw materials, end of year	(980,209)
Usage of direct raw materials	9,046,479
Direct labor	36,581
Manufacturing expenses	1,112,582
Manufacturing cost	10,195,642
Add: Work in progress and semi-finished goods balance, beginning of year	385,508
Semi-finished goods purchased	344
Less: Sales of semi-finished goods	(727,843)
Transferred to other accounts	(53,897)
Work in progress and semi-finished goods balance, end of year	(379,462)
Cost of finished goods	9,420,292
Add: Finished goods balance, beginning of year	924,561
Finished goods purchased	1,326
Less: Transferred to other accounts	(67,430)
Finished goods balance, end of year	(1,114,405)
Cost of finished goods sold	9,164,344
Add: Cost of raw materials sold	353,531
Cost of semi-finished goods sold	727,843
Loss on idle capacity	223,113
Loss on scrapped inventories	143,673
Write-downs of inventories	102,850
Total operating costs	$ 10,715,354

E INK HOLDINGS INC.

STATEMENT OF OPERATING EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Item	Selling and Marketing Expenses	General and Administrative Expenses	Research and Development Expenses	Total
Employee benefits expense	$ 213,985	$ 410,989	$ 438,475	$ 1,063,449
Material expense	9,320	8,223	223,861	241,404
Professional service fee	105,855	39,189	47,859	192,903
Depreciation expense	913	43,308	92,448	136,669
Testing and experimental expense	186	1,084	104,385	105,655
Travelling expense	23,860	15,319	14,013	53,192
Others (Note)	39,574	139,844	78,274	257,692
	$ 393,693	$ 657,956	$ 999,315	$ 2,050,964

Note: The amount of each item included in "Others" does not exceed 5% of the account balance.

E Ink Holdings Inc.

2019 Annual Report

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