UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

	FORM 20-F
(Ma □	rk One) REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
\boxtimes	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the fiscal year ended December 31, 2019
	OR
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
	SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	Date of event requiring this shell company report
	For the transition period from to
	Commission file number 1-32238

LG Display Co., Ltd.

(Exact name of Registrant as specified in its charter)

LG Display Co., Ltd.

(Translation of Registrant's name into English)

The Republic of Korea (Jurisdiction of incorporation or organization)

LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea (Address of principal executive offices)

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Facsimile No.: +82-2-3777-0793 (Name, telephone, e-mail and/or facsimile number and address of company contact person)

Securities registered or to be registered pursuant to Section 12(b) of the Act. Trading Name of each exchange Title of each class Symbol on which registered American Depositary Shares, each representing LPL New York Stock Exchange one-half of one share of Common Stock Common Stock, par value \\ \psi_5,000 \text{ per share} LPL New York Stock Exchange* Not for trading, but only in connection with the registration of the American Depositary Shares. Securities registered or to be registered pursuant to Section 12(g) of the Act. Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. None Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report. 357,815,700 shares of common stock, par value \(\prec{\psi}{5},000\) per share Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. 🛛 Yes 🗀 No If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934. ☐ Yes ⊠ No Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

✓ Yes

✓ No Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ⊠ Yes □ No Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer \boxtimes Accelerated filer Non-accelerated filer Emerging growth company If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13 (a) of the Exchange Act. \square † The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012. Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. \boxtimes Yes \square No Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing: U.S. GAAP □ International Financial Reporting Standards as issued Other by the International Accounting Standards Board \boxtimes If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected

to follow.

Item 17

Item 18

☐ Yes ⊠ No	 	

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PRESENTATION OF FINANCIAL AND OTHER INFORMATION

In this annual report, the terms "we," "us," "our" and "LG Display" refer to LG Display Co., Ltd. and, unless otherwise indicated or required by context, our consolidated subsidiaries. Notwithstanding the foregoing, in the context of any legal proceedings or governmental investigations, "LG Display" refers to LG Display Co., Ltd. and does not include any of its subsidiaries, or any other entities or persons.

The financial statements included in this annual report are prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. As such, we make an explicit and unreserved statement of compliance with IFRS, as issued by the IASB, with respect to our consolidated financial statements as of December 31, 2018 and 2019 and for each of the years ended in the three-year period ended December 31, 2019 included in this annual report.

Unless expressly stated otherwise, all financial data included in this annual report are presented on a consolidated basis.

All references to "Korean Won," "Won" or " \mathbb{W} " in this annual report are to the currency of the Republic of Korea, all references to "U.S. dollars" or "US\$" are to the currency of the United States, all references to "Japanese Yen," "Yen" or " \mathbb{Y} " are to the currency of Japan, all references to "CNY" or "Chinese Yuan" are to the currency of the People's Republic of China, all references to "NT\$" are to the currency of Taiwan, all references to "Euro" or " \mathbb{Y} " are to the official currency of the European Economic and Monetary Union, all references to "PLN" are to the currency of the Republic of Poland, all references to "R\$" are to the currency of Brazil, all references to "SG\$" are to the currency of Singapore, and all references to "VND" are to the currency of Vietnam.

Any discrepancies in any table between the totals and the sums of the amounts listed are due to rounding.

For your convenience, this annual report contains translations of Won amounts into U.S. dollars at the noon buying rate in New York City for cable transfers in Korean Won as certified by the Federal Reserve Bank of New York for customs purposes in effect on December 31, 2019, which was \$1,155.46 = US\$1.00.

FORWARD-LOOKING STATEMENTS

We have made forward-looking statements in this annual report. Our forward-looking statements contain information regarding, among other things, our financial condition, future plans and business strategy. Words such as "contemplate," "seek to," "anticipate," "believe," "estimate," "expect," "intend," "plan" and similar expressions, as they relate to us, are intended to identify a number of these forward-looking statements. These forward-looking statements reflect management's present expectations and projections about future events and are not a guarantee of future performance. Although we believe that these expectations and projections are reasonable, such forward-looking statements are inherently subject to risks, uncertainties and assumptions about us, including, among other things:

- the cyclical nature of our industry;
- our dependence on introducing new products on a timely basis;
- our dependence on growth in the demand for our products;
- our ability to compete effectively;
- our dependence on a select group of key customers;
- our ability to successfully manage our capacity expansion and allocation in response to changing industry and market conditions;
- our dependence on key personnel;
- general economic and political conditions, including those related to the display panel industry;
- possible disruptions in commercial activities caused by events such as natural disasters, health epidemics, terrorist activity and armed conflict;
- fluctuations in foreign currency exchange rates; and
- those other risks identified in the "Risk Factors" section of this annual report.

Except as required by law, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the events discussed in the forward-looking statements in this annual report might not occur and our actual results could differ materially from those anticipated in these forward-looking statements.

All subsequent forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

PART I

Item 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

Item 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

Item 3. KEY INFORMATION

Item 3.A. Selected Financial Data

The selected consolidated financial data set forth below as of and for the years ended December 31, 2015, 2016, 2017, 2018 and 2019 have been derived from our consolidated financial statements and the related notes, which have been prepared under IFRS as issued by the IASB. Our audited consolidated financial statements as of December 31, 2018 and 2019 and for each of the years in the three-year period ended December 31, 2019 and the related notes are included in this annual report.

The information set forth below is not necessarily indicative of the results of future operations and should be read in conjunction with "Item 5. Operating and Financial Review and Prospects" and our consolidated financial statements and related notes included in this annual report.

In addition to preparing financial statements in accordance with IFRS as issued by the IASB included in this annual report, we also prepare financial statements in accordance with Korean International Financial Reporting Standards, or K-IFRS, as adopted by the Korean Accounting Standards Board, or KASB, which we are required to file with the Financial Services Commission and the Korea Exchange under the Financial Investment Services and Capital Markets Act of Korea. See "Item 10.B. Memorandum and Articles of Association—Business Report." English translations of such financial statements are furnished to the SEC on Form 6-K, which are not incorporated by reference to this or any of our previous annual reports on Form 20-F. The operating profit or loss presented in the consolidated statements of comprehensive income or loss prepared in accordance with K-IFRS for the years ended December 31, 2018 and 2019 included in the Form 6-K furnished to the SEC on February 27, 2020 is a profit of \text{\$\psi 93\$} billion and a loss of \text{\$\psi 1,359} billion, respectively. For further information, please see the Form 6-K furnished to the SEC on February 27, 2020, which is not incorporated by reference to this annual report.

Pursuant to the IFRS as issued by IASB, we are not required to separately present operating profit or loss in our consolidated statements of comprehensive income or loss prepared in accordance with IFRS. Therefore, the financial statements included in this annual report, which are prepared in accordance with IFRS as issued by IASB, do not present operating profit or loss as a separate line item.

Consolidated statements of comprehensive income (loss) data

	Year ended December 31,											
	2015	2016	2017	2018	2019 (1)	2	2019 (2)					
		<i>a</i> 1 6					s of US\$, except					
			Won, except for pe				share data)					
Revenue	₩ 28,384	₩ 26,504	₩ 27,790	₩ 24,337	₩ 23,476	US\$	20,317					
Cost of sales	(24,070)	(22,754)	(22,425)	(21,251)	(21,607)		(18,700)					
Gross profit	4,314	3,750	5,366	3,085	1,868		1,617					
Selling expenses	(878)	(695)	(994)	(834)	(1,058)		(916)					
Administrative expenses	(593)	(610)	(696)	(938)	(948)		(820)					
Research and development expenses	(1,218)	(1,134)	(1,213)	(1,221)	(1,222)		(1,058)					
Profit (loss) before income tax	1,434	1,316	2,333	(91)	(3,344)		(2,894)					
Income tax (expense) benefit	(411)	(385)	(396)	(88)	472		408					
Profit (loss) for the year	1,023	931	1,937	(179)	(2,872)		(2,486)					
Total comprehensive income (loss) for the												
year	1,003	953	1,700	(195)	(2,668)		(2,309)					
Basic earnings (loss) per share (Won, US\$)	₩ 2,701	₩ 2,534	₩ 5,038	₩ (579)	₩ (7,908)	US\$	(7)					
Diluted earnings (loss) per share (Won, US\$)	₩ 2,701	₩ 2,534	₩ 5,038	₩ (579)	₩ (7,908)	US\$	(7)					

Consolidated statements of financial position data

	As of December 31,									
	2015	2016	2017	2018	2019 (1)	2019 (2)				
			(in billions of Won))		(in millions of US\$)				
Cash and cash equivalents	₩ 752	₩ 1,559	₩ 2,603	₩ 2,365	₩ 3,336	US\$ 2,887				
Deposits in banks	1,772	1,164	758	78	79	68				
Trade accounts and notes receivable, net	4,098	4,958	4,325	2,829	3,154	2,730				
Inventories	2,352	2,288	2,350	2,691	2,051	1,775				
Total current assets	9,532	10,484	10,474	8,800	10,248	8,869				
Property, plant and equipment, net	10,546	12,031	16,202	21,600	22,088	19,116				
Total assets	22,577	24,884	29,160	33,176	35,575	30,789				
Trade accounts and notes payable	2,765	2,877	2,875	3,087	2,618	2,266				
Current financial liabilities	1,416	668	1,453	1,554	1,977	1,711				
Other accounts payable	1,500	2,450	3,170	3,567	4,397	3,805				
Total current liabilities	6,607	7,058	8,979	9,954	10,985	9,507				
Non-current financial liabilities	2,808	4,111	4,150	7,031	11,613	10,051				
Long-term advance received	_	_	830	1,114	321	278				
Total liabilities	9,872	11,422	14,718	18,289	23,086	19,980				
Share capital and share premium	4,040	4,040	4,040	4,040	4,040	3,496				
Retained earnings	8,159	9,004	10,622	10,240	7,503	6,494				
Total equity	12,705	13,462	14,982	14,886	12,488	10,808				

Other financial data

			Year	ended December 31	1,		
	2015	2016	2017	2018	2019	(2)	
	(in b	illions of Won, exc	(in millions of for percentag share o	ges and per			
Gross margin (3)	15.2%	14.1%	19.3%	12.7%	8.0%		8.0%
Net margin (4)	3.6%	3.5%	7.0%	(0.7)%	(12.2)%		(12.2)%
EBITDA (5)	₩ 4,880	₩ 4,410	₩ 5,579	₩ 3,476	W 471	US\$	408
Capital expenditures	2,365	3,736	6,592	7,942	6,927		5,995
Depreciation and amortization (6)	3,376	3,022	3,215	3,555	3,695		3,198
Net cash provided by operating activities	2,727	3,641	6,764	4,484	2,707		2,343
Net cash used in investing activities	(2,732)	(3,189)	(6,481)	(7,675)	(6,755)		(5,846)
Net cash provided by (used in) financing							
activities	(174)	308	862	2,953	4,988		4,317
Dividends declared per share (Won, US\$) ⁽⁷⁾	₩ 500	₩ 500	₩ 500	_	_		_

- (1) We have adopted IFRS No. 16 "Leases" from January 1, 2019 using the modified retrospective approach, under which the cumulative effect of initial application is recognized in our retained earnings at January 1, 2019. Accordingly, the comparative information presented for 2015, 2016, 2017 and 2018 has not been restated. See Note 3(1) of the notes to our consolidated financial statements.
- (2) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of \(\prec{\psi}1,155.46\) to US\$1.00, the noon buying rate in effect on December 31, 2019 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.
- (3) Gross margin represents gross profit divided by revenue.
- 4) Net margin represents profit (loss) for the year divided by revenue.
- EBITDA is defined as profit (loss) for the year excluding interest expense, income tax expense, depreciation and amortization of intangible assets and interest income. EBITDA is a key financial measure used by our senior management to internally evaluate the performance of our business and for other required or discretionary purposes. Specifically, because our significant capital assets are in different stages of depreciation, our senior management uses EBITDA internally to measure the performance of these assets on a comparable basis. We also believe that the presentation of EBITDA will enhance an investor's understanding of our operating performance as we believe it is commonly reported and widely used by analysts and investors in our industry. It also provides useful information for comparison on a more comparable basis of our operating performance and those of our competitors, who follow different accounting policies. For example, depreciation on most of our equipment is made based on a four- or five-year useful life while most of our competitors use different depreciation schedules from our own. EBITDA is not a measure determined in accordance with IFRS. EBITDA should not be considered as an alternative to gross profit, cash flows from operating activities or profit (loss) for the year, as determined in accordance with IFRS. Our calculation of EBITDA may not be comparable to similarly titled measures reported by other companies. A reconciliation of profit (loss) for the year to EBITDA is as follows:

	Year ended December 31,									
	2015	2015 2016		2017 2018		20	19 ⁽¹⁾			
		(i	n billions of Wo	n)		(in milli	ons of US\$)			
Profit (loss) for the year	₩ 1,023	₩ 931	₩ 1,937	₩ (179)	W(2,872)	US\$	(2,486)			
Interest income	(57)	(42)	(60)	(69)	(53)		(46)			
Interest expense	128	115	91	81	173		150			
Income tax expense (benefit)	411	385	396	88	(472)		(408)			
Depreciation and amortization	3,375	3,021	3,215	3,555	3,695		3,198			
EBITDA	₩ 4,880	₩ 4,410	₩ 5,579	₩ 3,476	₩ 471	US\$	408			

(6) Includes amortization of intangible assets.

(7) Dividends declared per share represent cash dividends declared for the year divided by outstanding shares of common stock as of December 31.

Operating data

		Year ended December 31,						
	2015	2016	2017	2018	2019			
	<u> </u>	(in thousands)				
Number of panels sold by product category:								
Televisions	55,319	52,916	52,108	51,966	44,833			
Notebook computers	45,509	39,672	26,999	30,471	28,983			
Desktop monitors ⁽¹⁾	41,912	40,001	37,000	36,693	34,807			
Tablet computers	31,476	24,957	26,255	25,015	23,167			
Mobile and other applications ⁽²⁾	216,565	173,166	146,162	105,142	99,569			
Total	390,781	330,712	288,524	249,287	231,359			

(1) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.

(2) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.

	Year ended December 31,											
		2015		2016		2017		2018		2019	2)19 ⁽⁴⁾
					(in bill	ions of Won)				(in milli	ons of US\$)
Revenue by product category:												
Televisions	₩	10,854	W	10,133	W	11,718	₩	9,727	W	7,998	US\$	6,922
Notebook computers		2,509		2,384		2,244		2,837		2,784		2,409
Desktop monitors ⁽¹⁾		4,553		4,035		4,393		4,040		4,028		3,486
Tablet computers		2,510		2,696		2,370		1,991		2,251		1,948
Mobile and other applications ⁽²⁾		7,919		7,216		7,020		5,699		6,374		5,516
Total sales of goods	W	28,345	W	26,464	₩	27,745	W	24,294	W	23,435	US\$	20,281
Royalties		19		17		20		18		14		12
Others		20		23		25		25		26		23
Revenue	W	28,384	W	26,504	₩	27,790	₩	24,337	W	23,476	US\$	20,316

(1) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.

(2) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.

(3) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of \(\foat{\psi}\)1,155.46 to US\$1.00, the noon buying rate in effect on December 31, 2019 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

Item 3.B. Capitalization and Indebtedness

Not applicable.

Item 3.C. Reasons for the Offer and Use of Proceeds

Not applicable.

Item 3.D. Risk Factors

You should carefully consider the risks described below.

Risks Relating to Our Industry

The display panel industry is subject to cyclical fluctuations, including recurring periods of capacity increases, that may adversely affect our results of operations.

Most of the global supply of display panels is currently manufactured based on thin-film transistor liquid crystal display, or TFT-LCD, technology. Display panel manufacturers are vulnerable to cyclical market conditions. Intense competition and expectations of growth in demand across the display panel industry may cause manufacturers to make additional investments in manufacturing capacity on similar schedules, resulting in a surge in capacity when production is ramped up at new fabrication facilities. During such surges in capacity growth, as evidenced by past experiences, customers can exert strong downward pricing pressure, resulting in sharp declines in average selling prices and significant fluctuations in the panel manufacturers' gross margins. Conversely, demand surges and fluctuations in the supply chain can lead to price increases.

From time to time, we have been affected by overcapacity in the display panel industry relative to the general demand for such panels which, together with uncertainties in the current global economic environment, has contributed to a general decline in the average selling prices of a number of our display panel products. We attempt to counteract, at least in part, the effects of overcapacity in the industry by increasing the proportion of high margin, differentiated specialty products based on newer technologies in our product mix, including products that utilize organic light-emitting diode, or OLED, technology, which are relatively less affected by the industry-wide overcapacity problems affecting display panel products using older technologies, while also engaging in cost reduction efforts. We also address overcapacity issues by, in the short-term, adjusting the utilization rates of our existing fabrication facilities based on our assessment of industry inventory levels and demand for our products and, in the mid- to long-term, by fine-tuning our investment strategies relating to product development and capacity growth in light of our assessment of future market conditions.

Our average revenue per square meter of net display area, which is derived by dividing our total revenue by total square meters of net display area shipped, decreased by 13.6% from \text{\$\frac{4}667,726}\$ in 2017 to \text{\$\frac{4}576,817}\$ in 2018, which was largely driven by an increase in the supply capacity of global display panel manufacturers that applied downward pricing pressure, but increased by 5.9% to \text{\$\frac{4}610,716}\$ (US\$529) in 2019, which primarily reflected a depreciation of the Korean Won against the U.S. dollar during 2019 as well as our ongoing efforts to increase in our product mix the proportion of OLED panels (including OLED television panels and plastic OLED panels), which generally have higher selling prices than TFT-LCD panels, in light of the continued overcapacity in the global TFT-LCD market and further capital investments by other suppliers, particularly from China, as well as in response to an increase in market demand for OLED products.

While we believe that overcapacity and other cyclical issues in the industry are best addressed by increasing the proportion of high margin, differentiated specialty products based on newer technologies (such as OLED technology) in our product mix that are tailored to our customers' evolving needs, we cannot provide any assurance that an increase in demand, which helped to mitigate the impact of industry-wide overcapacity in the past, will recur in the near future or can be sustained in future periods. We will therefore continue to closely monitor the overcapacity issues in the industry and respond accordingly. However, construction of new fabrication facilities and other capacity expansion projects in the display panel industry are undertaken with a multi-year time horizon based on expectations of future market trends. Therefore, even if overcapacity issues persist in the industry, there may be continued capacity expansion in the near future due to pre-committed capacity expansion projects in the industry that were undertaken in past years. Any significant industry-wide capacity increases that are not accompanied by a sufficient increase in demand could further drive down the average selling price of our panels, which would negatively affect our gross margin. Any decline in prices may be further compounded by a seasonal weakening in demand growth for end products such as personal computer products, consumer electronics products and mobile and other application products. Furthermore, once the differentiated products that had a positive impact on our performance mature in their technology cycle, if we are not able to develop and commercialize newer products to offset the price erosion of such maturing products in a timely manner, our ability to counter the impact of cyclical market conditions on our gross margins would be further limited. We cannot provide assurance that any future downturns resulting from any large increases in capacity or other factors affecting the industry would not have a material adverse e

A global economic downturn may result in reduced demand for our products and adversely affect our profitability.

In recent years, adverse conditions and volatility in the worldwide financial markets, fluctuations in oil and commodity prices and the general weakness of the global economy have contributed to the uncertainty of global economic prospects in general and have adversely affected, and may continue to adversely affect, the Korean economy. Global economic downturns in the past have adversely affected demand for consumer products manufactured by our customers in Korea and overseas, including televisions, notebook computers, desktop monitors, tablet computers and mobile and other application products utilizing display panels, which in turn led them to reduce or plan reductions of their production.

The overall prospects for the global economy remain uncertain, especially in light of the ongoing global pandemic of a new strain of coronavirus referred to as "COVID-19," which is likely to have a significant negative effect on the global economy. See "—Risks Relating to Our Company—Earthquakes, tsunamis, floods, severe health epidemics (including the ongoing global COVID-19 pandemic and any possible recurrence of other types of widespread infectious diseases) and other natural calamities could materially adversely affect our business, results of operations or financial condition." We cannot provide any assurance that demand for our products can be sustained at current levels in future periods or that the demand for our products will not decrease again in the future due to such economic downturns, which may adversely affect our profitability.

We may decide to adjust our production levels in the future subject to market demand for our products, the production outlook of the global display panel industry, any significant disruptions in our supply chain and global economic conditions in general. For example, as part of our continued efforts to increase the proportion of higher-margin OLED panels in our product mix, we have been reducing the production level of less profitable types of TFT-LCD panels in recent years, and in January 2020, we announced our plans to cease the production of TFT-LCD television display panels in Korea by the end of 2020 in light of continued overcapacity in the market and our increased focus on producing OLED panels. Any decline in demand for display panel products may adversely affect our business, results of operations and/or financial condition.

Our industry continues to experience steady declines in the average selling prices of display panels irrespective of cyclical fluctuations in the industry, and our margins would be adversely impacted if prices decrease faster than we are able to reduce our costs.

The average selling prices of display panels have declined in general and are expected to continually decline with time irrespective of industry-wide cyclical fluctuations as a result of, among other factors, technological advancements and cost reductions. Although we may be able to take advantage of the higher selling prices typically associated with new products and technologies when they are first introduced in the market, such prices decline over time, and in certain cases, very rapidly, as a result of market competition or otherwise. If we are unable to effectively anticipate and counter the price erosion that accompanies our products, or if the average selling prices of our display panels decrease faster than the speed at which we are able to reduce our manufacturing costs, our gross margin would decrease and our results of operations and financial condition may be materially and adversely affected.

We operate in a highly competitive environment and we may not be able to sustain our current market position.

The display panel industry is highly competitive. We have experienced pressure on the prices and margins of our major products due largely to additional capacity from panel makers in Korea, Taiwan, China and Japan. Our main competitors in the industry include Samsung Display, Innolux, AU Optronics, BOE, China Star Optoelectronics Technology, CEC Panda, HKC, JDI and Sharp.

Some of our competitors may currently, or at some point in the future, have greater financial, sales and marketing, manufacturing, research and development or technological resources than we do. In addition, our competitors may be able to manufacture panels on a larger scale or with greater cost efficiencies than we do, and we anticipate increases in production capacity in the future by other display panel manufacturers using similar display panel technologies as ours. Any price erosion resulting from strong global competition or additional industry capacity may materially adversely affect our financial condition and results of operations.

Consolidation within the industry in which we operate may result in increased competition as the entities emerging from such consolidation may have greater financial, manufacturing, research and development and other resources than we do, especially if such mergers or consolidations result in vertical integration and operational efficiencies. Increased competition resulting from such mergers or consolidations may lead to decreased margins, which may have a material adverse effect on our financial condition and results of operations.

Our ability to compete successfully also depends on factors both within and outside our control, including product pricing, performance and reliability, our relationship with customers, successful and timely investment and product development, success or failure of our end-brand customers in marketing their brands and products, newly established industry standards, component and raw material supply costs, and general economic and industry conditions. We cannot provide assurance that we will be able to maintain a competitive advantage with respect to all these factors and, as a result, we may be unable to sustain our current market position.

Our operating results fluctuate from period to period, so you should not rely on period-to-period comparisons to predict our future performance.

Our industry is affected by market conditions that are often outside the control of manufacturers. Our results of operations may fluctuate significantly from period to period due to a number of factors, including seasonal variations in consumer demand, capacity ramp-up by competitors, industry-wide technological changes, the loss of a key customer and the postponement, rescheduling or cancellation of large orders by a key customer, any of which may or may not reflect a continued trend from one period to the next. As a result of these factors and other risks discussed in this section, you should not rely on period-to-period comparisons to predict our future performance.

Risks Relating to Our Company

Our financial condition may be adversely affected if we cannot introduce new products to adapt to rapidly evolving customer needs on a timely basis.

Our success will depend greatly on our ability to respond quickly to rapidly evolving customer requirements and to develop and efficiently manufacture new and differentiated products in anticipation of future demand. A failure or delay on our part to develop and efficiently manufacture products of such quality and technical specifications that meet our customers' evolving needs may adversely affect our business.

Close cooperation with our customers to gain insights into their product needs and to understand general trends in the end-product market is a key component of our strategy to produce successful products. In addition, when developing new products, we often work closely with equipment suppliers to design equipment that will make our production processes for such new products more efficient. If we are unable to work together with our customers and equipment suppliers, or to sufficiently understand their respective needs and capabilities or general market trends, we may not be able to introduce or efficiently manufacture new products in a timely manner, which may have a material adverse effect on our financial situation.

In addition, product differentiation, especially the ability to develop and market differentiated specialty products that command higher premiums in a timely manner, has become a key competitive strategy in the display panel market. This is in part due to trends in consumer electronics and other markets, such as televisions, tablet computers and mobile devices, where the growth in demand is led by end products employing newer technologies with specifications tailored to deliver enhanced performance, convenience and user experience in a cost-efficient and timely manner. Accordingly, we have focused our efforts on developing and marketing differentiated specialty products, such as OLED display panels for televisions and public displays including "Wallpaper" OLED panels, "Cinematic Sound OLED" sound integrated panels, rollable OLED display panels and transparent OLED display panels. We also strive to deliver differentiated values to meet our consumers' demand for various display panels including (i) panels utilizing ultra-high definition, or Ultra HD, technology with oxide TFT backplanes, (ii) Advanced High-Performance In-Plane Switching, or AH-IPS, panels for tablet computers, mobile devices, notebook computers, desktop monitors, and (iii) plastic OLED display panels for smartphones, automotive products and wearable devices. We have also focused our efforts on cost reductions in the production process, in particular of panels with newer technologies, such as OLED, in order to improve or maintain our profit margins while offering competitive prices to our customers.

We have developed differentiated sales and marketing strategies to promote our panels for differentiated specialty products as part of our strategy to grow our operations to meet increasing demand for new applications in consumer electronics and other markets. However, we cannot provide assurance that the differentiated products we develop and market will be responsive to our end customers' needs nor that our products will be successfully incorporated into end products or new applications that lead market growth in consumer electronics or other markets.

Problems with product quality, including defects, in our products could result in a decrease in customers and sales, unexpected expenses and loss of market share.

Our products are manufactured using advanced, and often new, technology and must meet stringent quality requirements. Products manufactured using advanced and new technology, such as our OLED technology, may contain undetected errors or defects, especially when first introduced. For example, our latest display panels may contain defects that are not detected until after they are shipped or installed because we cannot test for all possible scenarios. Such defects could cause us to incur significant re-designing costs, divert the attention of our technology personnel from product development efforts and significantly affect our customer relations and business reputation. In addition, future product failures could cause us to incur substantial expense to repair or replace defective products. We recognize a provision for warranty obligations based on the estimated costs that we expect to incur under our basic limited warranty for our products, which covers defective products and is normally valid for 18 to 36 months from the date of purchase by our customers. The warranty provision is largely based on historical and anticipated rates of warranty claims, and therefore we cannot provide assurance that the provision would be sufficient to cover any surge in future warranty expenses that significantly exceed historical and anticipated rates of warranty claims. In addition, if we deliver products with errors or defects, or if there is a perception that our products contain errors or defects, our credibility and the market acceptance and sales of our products could be harmed. Widespread product failures may damage our market reputation, and/or reduce our market share and cause our sales to decline.

We sell our products to a select group of key customers, including our largest shareholder and its affiliates, and any significant decrease in their order levels or material deterioration in their financial condition will negatively affect our financial condition and results of operations.

A substantial portion of our sales is attributable to a limited group of end-brand customers and their designated system integrators. Sales attributed to our end-brand customers are for their end-brand products and do not include sales to these customers for their system integration activities for other end-brand products, if any. Our top ten end-brand customers, including LG Electronics Inc., our largest shareholder, together accounted for a substantial majority of our sales in each of 2017, 2018 and 2019.

We benefit from the strong collaborative relationships we maintain with our end-brand customers by participating in the development of their products and gaining insights about levels of future demand for our products and other industry trends. Customers look to us for a dependable supply of quality products, even during downturns in the industry, and we benefit from the brand recognition of our customers' end products. The loss of these end-brand customers, as a result of their entering into strategic supplier arrangements with our competitors or otherwise, would thus result not only in reduced sales, but also in the loss of these benefits. We cannot provide assurance that a select group of key end-brand customers, including our largest shareholder, will continue to place orders with us in the future at the same levels as in prior periods, or at all.

We expect that we will continue to be dependent upon LG Electronics and its affiliates for a significant portion of our revenue for the foreseeable future. See "Item 7.B. Related Party Transactions" for a description of these related party transactions with LG Electronics and its affiliates. Our results of operations and financial condition could therefore be affected by the overall performance of LG Electronics and its affiliates.

Furthermore, although we have not experienced any material problems relating to customer payments to date, as a result of our significant dependence on a concentrated group of end-brand customers and their designated system integrators, as well as the sales we make to our affiliated trading company, LG International Corp., and its subsidiaries, we are exposed to credit risks associated with these entities.

Consolidation and other changes at our end-brand customers could cause sales of our products to decline.

Mergers, acquisitions, divestments or consolidations involving our end-brand customers can present risks to our business, as management at the new entity may change the way they do business, including their transactions with us, or may decide not to use us as one of their suppliers of display panels. In addition, we cannot provide assurance that a combined entity resulting from a merger, acquisition or consolidation or a newly formed entity resulting from a divestment will continue to purchase display panels from us at the same level, if at all, as each entity purchased in the aggregate when they were separate companies or that a divested company will purchase panels from us at the same level, if at all, as prior to the divestment.

Our results of operations depend on our ability to keep pace with changes in technology.

Advances in technology typically lead to rapid declines in sales volumes for products made with older technologies and may lead to these products becoming less competitive in the marketplace, or even obsolete. As a result, we will likely be required to make significant expenditures to develop or acquire new process and product technologies, along with corresponding manufacturing capabilities. For example, we plan to finalize our preparations for the commencement of operation at our CO fabrication facility, located in Guangzhou, China, within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors. In addition to introducing large-sized display panels utilizing OLED technology, we have also developed OLED panels with embedded sound systems that function as speakers while maintaining a slim design. Furthermore, we began production of plastic OLED panels for mobile and other applications on our E5 production line (which has since been integrated into our AP3 fabrication facility to be collectively referred to as "AP3") and E6 production line (which has since been integrated into our AP4 fabrication facility to be collectively referred to as "AP4") in August 2017 and July 2019, respectively.

With the addition of "8K" 88-inch OLED televisions to the line-up of available products in 2019, following the prior launch of 55-inch, 65-inch and 77-inch OLED televisions, we are continuing to deploy greater resources into OLED panel fabrication capabilities in order to maintain our competitive edge in the OLED television panel market. We are also deploying significant resources into plastic OLED panels for mobile and other applications (especially automotive products) in order to expand our market presence. Our ability to develop differentiated products with new display technologies and utilize advanced manufacturing processes to increase production yields while lowering production cost will be critical to our sustained competitiveness. However, we cannot provide assurance that we will be able to continue to successfully develop new products or manufacturing processes through our research and development efforts or through obtaining technology licenses, or that we will keep pace with technological changes in the marketplace.

Our revenue depends on continuing demand for televisions, notebook computers, desktop monitors, tablet computers and mobile and other application products with panels of the type we produce. Our sales may not grow at the rate we expect if consumers do not purchase these products.

Currently, our total sales are derived principally from customers who use our products in televisions, notebook computers, desktop monitors, tablet computers and mobile and other application products with display devices. In particular, a substantial percentage of our sales is derived from end-brand customers, or their designated system integrators, who use our panels in their televisions, which accounted for 42.2%, 40.0% and 34.1% of our total revenue in 2017, 2018 and 2019, respectively. A substantial portion of our sales is also derived from end-brand customers, or their designated system integrators, who use our panels in their notebook computers, which accounted for 8.1%, 11.7% and 11.9% of our total revenue in 2017, 2018 and 2019, respectively, those who use our panels in their desktop monitors, which accounted for 15.8%, 16.6% and 17.2% of our total revenue in 2017, 2018 and 2019, respectively, and those who use our panels in their mobile and other applications, which accounted for 25.3%, 23.4% and 27.2% of our total revenue in 2017, 2018 and 2019, respectively. Although the degree to which our total sales are dependent on sales of television panels has declined in recent years, television panels remain our largest product category in terms of revenue and we will therefore continue to be dependent on continuing demand from the television industry. In addition, we will continue to be dependent on continuing demand from the personal computer industry, the tablet computer industry and the mobile device industry for a substantial portion of our sales. Any downturn in any of those industries in which our customers operate would result in reduced demand for our products, which may in turn result in reduced revenue, lower average selling prices and/or reduced margins.

Earthquakes, tsunamis, floods, severe health epidemics (including the ongoing global COVID-19 pandemic and any possible recurrence of other types of widespread infectious diseases) and other natural calamities could materially adversely affect our business, results of operations or financial condition.

If earthquakes, tsunamis, floods, severe health epidemics or any other natural calamities were to occur in the future in any area where any of our assets, suppliers or customers are located, our business, results of operations or financial condition could be adversely affected. A number of suppliers of our raw materials, components and manufacturing equipment, as well as customers of our products, are located in countries which have historically suffered natural calamities from time to time, such as China, Japan and Taiwan, as well as Korea. Any occurrence of such natural calamities in countries where our suppliers are located may lead to shortages or delays in the supply of raw materials, components or manufacturing equipment. In addition, natural calamities in areas where our customers are located, including China, the United States, Europe, Korea and Japan, may cause disruptions in their businesses, which in turn could adversely impact their demand for our products.

In particular, COVID-19, an infectious disease caused by severe acute respiratory syndrome coronavirus 2 that is known to have been first transmitted to humans in November 2019 and has spread globally, has materially and adversely affected the global economy and financial markets in recent months as well as disrupted our business operations, including temporary suspension of operations at certain of our manufacturing facilities. See "—If we cannot maintain high capacity utilization rates, our profitability will be adversely affected." The World Health Organization declared the COVID-19 as a pandemic in March 2020.

Risks associated with a prolonged outbreak of COVID-19 or other types of widespread infectious diseases include:

- an increase in unemployment among, and/or decrease in disposable income of, consumers who purchase the products manufactured by our end-brand customers and a decline in overall consumer confidence and spending levels, which in turn may decrease demand for our products;
- disruption in the normal operations of the businesses of our customers, which in turn may decrease demand for our products;
- disruption in the supply of raw materials, components and equipment from our vendors;
- disruption in the delivery of our products to our customers;
- disruption in the normal operations of our business resulting from contraction of COVID-19 by our employees, which may necessitate our employees to be quarantined and/or our manufacturing facilities or offices to be temporarily shut down;
- disruption resulting from the necessity for social distancing, including implementation of temporary adjustment of work arrangements
 requiring employees to work remotely and restriction on overseas and domestic business travel, which may lead to a reduction in labor
 productivity;
- depreciation of the Won against major foreign currencies, which in turn may increase the cost of imported raw materials, components and equipment;
- unstable global and Korean financial markets, which may adversely affect our ability to meet our funding needs on a timely and costeffective basis; and
- decreases in the fair value of our investments in companies that may be adversely affected by the pandemic.

It is not possible to predict the duration or full magnitude of harm from COVID-19. In the event that COVID-19 or other types of widespread infectious diseases cannot be effectively and timely contained, our business, financial condition and results of operations may be materially adversely affected.

The emergence of OLED technology as an alternative to panels with TFT-LCD technology may erode sales of our TFT-LCD panels, which may have a material adverse effect on our financial condition and results of operations.

While our revenue and sales volume is predominantly derived from the sale of display panels with TFT-LCD technology, new display technologies, such as OLED technology, are at various stages of development and production by us and other display panel makers. OLED technology is widely seen in the display industry as a successor technology to TFT-LCD technology and is gaining wider market acceptance for use in display panels for televisions, smartphones and tablet computers, and industrial and other applications, including public displays, entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment. We have recognized the importance and potential of OLED technology and have in recent years engaged in research and development and invested in production facilities to develop and commercialize OLED panels for small-, medium- and large-sized products. We have been producing OLED panels for televisions at our OP1 fabrication facility since 2013, and OLED panels for smartphones at our AP2 fabrication facility since 2013. We also began production of plastic OLED panels at our AP3 and AP4 fabrication facilities in August 2017 and July 2019, respectively, in each case for mobile and other applications. Furthermore, we plan to finalize our preparations for the commencement of operation at our CO fabrication facility within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors.

Our early efforts in developing and commercializing OLED technology were recognized by the Society for Information Display, a display panel industry group, when we were awarded the Display of the Year Award for our 65-inch Wallpaper OLED television panels and our Ultra HD Cinematic Sound OLED technology in May 2017 and May 2018, respectively. In addition, our 65-inch rollable OLED television panels received multiple awards at the 2019 Consumer Electronics Show in January 2019 as well as the Presidential Award at the 2019 Korea Tech Show. While we strive to maintain our early competitive edge in the market for OLED panels, the market for OLED panels is still relatively small compared to the market for TFT-LCD panels, and we expect competition will intensify in the future. In addition, the speed at which we achieve cost reduction for our OLED technology-based new products or at which significant demand for such products develops may be slower than our current expectations.

As OLED panels continue to gain market acceptance as an alternative to TFT-LCD panels, if we are unable to continue to develop and commercialize OLED technology in a commercially viable and timely manner to offset declining sales of our TFT-LCD panels, or if customers prefer panels developed and manufactured by our competitors utilizing competing technologies to OLED technology, this would have a material adverse effect on our financial condition and results of operations. See also "—We operate in a highly competitive environment and we may not be able to sustain our current market position." above.

We will have significant capital requirements in connection with our business strategy and if capital resources are not available we may not be able to implement our strategy and future plans.

In connection with our strategy to further enhance the diversity and capacity of our display panel production, we anticipate that we will continue to incur significant capital expenditures for the construction of new production facilities and the maintenance and enhancement of existing production facilities, particularly in connection with our continued investments in OLED technology. Our significant recent and pending capital expenditures include the following:

- In response to and in anticipation of growing demand in the China market, in July 2017, we announced our plan to establish a joint venture with the government of Guangzhou to construct a new fabrication facility to manufacture next generation large-sized OLED panels, which was established under the name of LG Display High-Tech (China) Co., Ltd., in July 2018. We currently hold a 75% ownership interest in the joint venture and the government of Guangzhou holds the remaining 25% ownership interest. We have invested approximately \(\formsigmu 5.0\) trillion in capital expenditures for the joint venture, and we plan to finalize our preparations for the commencement of operation at the new CO fabrication facility within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors.
- In July 2017, we announced plans to make investments in an aggregate amount of up to \$\psi\$7.8 trillion in new large-size OLED and plastic production lines in Paju, Korea, including our new AP4 fabrication facility, which commenced mass production of plastic OLED panels in July 2019. In July 2019, we announced plans to make additional investments of \$\psi\$3.0 trillion in the previously announced new large-size OLED production lines. We are in the process of developing and assessing the specifics of such planned investments, including the timing.

In 2019, our total capital expenditure on a cash out basis amounted to \(\foware \)46.9 trillion. We currently expect that, in 2020, our total capital expenditures on a cash out basis will be lower compared to 2019 and will be used primarily to continue to fund our previously announced investments related to facilities for OLED panels. Such expected capital expenditures are subject to periodic assessment, and we cannot provide any assurance that such expected capital expenditures may not change materially after assessment.

These capital expenditures will be made well in advance of any additional sales that will be generated from these expenditures. However, in the event of adverse market conditions, or if our actual expenditures far exceed our planned expenditures, our external financing activities combined with our internal sources of liquidity may not be sufficient to carry out our current and future operational plans, and we may decide not to expand the capacity of certain of our facilities or construct new production facilities as scheduled or at all. Our ability to obtain additional financing will depend upon a number of factors outside our control, including general economic, financial, competitive, regulatory and other considerations.

In the past, difficulties affecting the global financial sectors, adverse conditions and volatility in the worldwide credit and financial markets, fluctuations in oil and commodity prices and the general weakness of the global economy have increased the uncertainty of global economic prospects in general and have adversely affected the global and Korean economies. Because we rely on financing both within and outside of Korea from time to time, difficulties affecting the global and Korean economies, including any increase in market volatility and their lingering effects (including those in relation to the ongoing global COVID-19 pandemic), could adversely affect our ability to obtain sufficient financing on commercially reasonable terms. The failure to obtain sufficient financing on commercially reasonable terms to complete our expansion plans could delay or impair our ability to pursue our business strategy, which could materially and adversely affect our business and results of operations.

Our manufacturing processes are complex and periodic improvements to increase efficiency can expose us to potential disruptions in operations.

The manufacturing processes for TFT-LCD, OLED and other display products are highly complex, requiring sophisticated and costly equipment that is periodically modified and upgraded to improve manufacturing yields and product performance, and reduce unit manufacturing costs. These updates expose us to the risk that from time to time production difficulties will arise that could cause delivery delays, reduced output or both. We cannot provide assurance that we will not experience manufacturing problems in achieving acceptable output, product delivery delays or both as a result of, among other factors, construction delays, difficulties in upgrading or modifying existing production lines or building new plants, difficulties in modifying existing or adopting new manufacturing line technologies or processes or delays in equipment deliveries, any of which could constrain our capacity and adversely affect our results of operations.

We may be unable to successfully execute our growth strategy or manage and sustain our growth on a timely basis, if at all, and, as a result, our business may be harmed.

We have experienced, and expect to continue to experience, rapid growth in the scope and complexity of our operations due to the building of new fabrication facilities and the expansion and conversion of existing fabrication facilities to meet the evolving and anticipated demands of our customers. For example, we established our E5 production line (which has since been integrated into and combined with our AP3 fabrication facility) and AP4 fabrication facility and commenced mass production of plastic OLED panels for mobile and other applications in August 2017 and July 2019, respectively. See "Item 4.D. Property, Plants and Equipment—Current Facilities." With respect to our overseas facilities in recent years, we commenced mass production of large-sized TFT-LCD panels at our CA fabrication facility in Guangzhou, China in September 2014. In response to and in anticipation of growing demand in the China market, in July 2018, we established and acquired a majority ownership interest in, a joint venture with the government of Guangzhou to construct a fabrication facility to manufacture next generation large-sized OLED panels in Guangzhou, China. We have invested approximately \(\pi\)5.0 trillion in capital expenditures for the joint venture, and we plan to finalize our preparations for the commencement of operation at the new CO fabrication facility within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors. See also "—We will have significant capital requirements in connection with our business strategy and if capital resources are not available we may not be able to implement our strategy and future plans." above.

Sustained growth in the scope and complexity of our operations may strain our managerial, financial, manufacturing and other resources. We may experience manufacturing difficulties in starting new production lines, upgrading existing facilities or building new plants as a result of cost overruns, construction delays or shortages of, or quality problems with, materials, labor or equipment, any of which could result in a loss of future revenue. We may also incur opportunity costs if we misjudge the anticipated demand for certain display panel products and allocate our limited resources in increasing production capacity for such display panel products at the cost of maintaining existing or increasing production capacity of other display panel products that turn out to be more popular. In addition, failure to keep up with our competitors in future investments in next-generation panel fabrication facilities or in the upgrading of manufacturing capacity of existing facilities would impair our ability to effectively compete within the display panel industry. Failure to obtain intended economic benefits from expansion projects could adversely affect our business, financial condition and results of operations.

If we cannot maintain high capacity utilization rates, our profitability will be adversely affected.

The production of display panels entails high fixed costs resulting from considerable expenditures for the construction of complex fabrication and assembly facilities and the purchase of costly equipment, particularly for productions involving new technologies, such as OLED. We aim to maintain high capacity utilization rates so that we can allocate these fixed costs over a greater number of panels produced and realize a higher gross margin. However, due to any number of reasons, including fluctuating demand for our products, overcapacity in the display industry or a significant disruption in the supply chain of raw materials, equipment and labor, we may need to reduce or delay the production of our products, resulting in lower-than-optimal capacity utilization rates. For example, we expect that the ongoing global COVID-19 pandemic will likely have an adverse effect on the demand for our products. In addition, as a result of the pandemic, we have experienced minor temporary suspensions in production at certain of our manufacturing facilities, and we may experience further disruptions in our production or supply chain in the future if the pandemic continues for a prolonged period of time. See "—Earthquakes, tsunamis, floods, severe health epidemics (including the ongoing global COVID-19 pandemic and any possible recurrence of other types of widespread infectious diseases) and other natural calamities could materially adversely affect our business, results of operations or financial condition." As such, we cannot provide assurance that we will be able to sustain our capacity utilization rates in the future nor can we provide assurance that we will not reduce our utilization rates in the future as market and industry conditions change.

Limited availability of raw materials, components and manufacturing equipment could materially and adversely affect our business, results of operations or financial condition.

Our production operations depend on obtaining adequate supplies of quality raw materials and components on a timely basis. As a result, it is important for us to control our raw material and component costs and reduce the effects of fluctuations in price and availability. In general, we source most of our raw materials as well as key components, such as glass substrates, driver integrated circuits and polarizers used in both our TFT-LCD and OLED products, backlight units and liquid crystal materials used in our TFT-LCD products and hole transport materials and emission materials used in our OLED products, from two or more suppliers for each key component. However, we may establish a working relationship with a single supplier if we believe it is advantageous to do so due to performance, quality, support, delivery, capacity, price or other considerations. We may experience shortages in the supply of these key components, as well as other components or raw materials, as a result of, among other things, anticipated capacity expansion in the display industry, our dependence on a limited number of suppliers or temporary disruptions in the supply chain thereof due to factors outside of our control (such as the ongoing global COVID-19 pandemic). Our results of operations would be adversely affected if we were unable to obtain adequate supplies of high-quality raw materials or components in a timely manner or make alternative arrangements for such supplies in a timely manner.

Furthermore, we may be limited in our ability to pass on increases in the cost of raw materials and components to our customers. We do not typically enter into binding long-term contracts with our customers, and even in those cases where we do enter into long-term agreements with certain of our major end-brand customers, the price terms are contained in the purchase orders which are generally placed by them several weeks in advance of delivery. Except under certain special circumstances, the price terms in the purchase orders are not subject to change. Prices for our products are generally determined through negotiations with our customers, based generally on the complexity of the product specifications and the labor and technology involved in the design or production processes. However, if we become subject to any significant increase in the cost of raw materials or components that were not anticipated when negotiating the price terms after the purchase orders have been placed, we may be unable to pass on such cost increases to our customers.

We have purchased, and expect to purchase, a substantial portion of our equipment from a limited number of qualified foreign and local suppliers. From time to time, increased demand for new equipment may cause lead times to extend beyond those normally required by the equipment vendors. The unavailability of equipment, delays in the delivery of equipment, or the delivery of equipment that does not meet our specifications, could delay implementation of our expansion plans and impair our ability to meet customer orders. This could result in a loss of revenue and cause financial stress on our operations.

Advance purchase orders from our customers vary in volume from period to period, and we operate with a modest inventory, which may make it difficult for us to efficiently allocate capacity on a timely basis in response to changes in demand.

Our major customers and their designated system integrators provide us with advance rolling forecasts of their product requirements. However, firm orders are not placed until negotiations on purchase prices are subsequently finalized a few weeks prior to delivery. As a result, firm orders may be less than anticipated based on these prior forecasts. Due to the cyclicality of the display industry, purchase order levels from our customers have varied from period to period. Although we typically operate with an inventory level estimated for several weeks, it may be difficult for us to adjust production costs or to allocate production capacity in a timely manner to compensate for any such volatility in order volumes. Our inability to respond quickly to changes in overall demand for display products as well as changes in product mix and specifications may result in lost revenue, which would adversely affect our results of operations.

We may experience losses on inventories.

Frequent new product introductions in the computer and consumer electronics industries can result in a decline in the average selling prices of our display panels and the obsolescence of our existing display panel inventory. This can result in a decrease in the stated value of our panel inventory, which we value at the lower of cost or market value.

We manage our inventory based on our customers' and our own forecasts and typically operate with an inventory level estimated for several weeks. Although adjustments are regularly made based on market conditions, we typically deliver our goods to the customers within several weeks after a firm order has been placed. While we maintain open channels of communication with our major customers to avoid unexpected decreases in firm orders or subsequent changes to placed orders, and try to minimize our inventory levels, such actions by our customers may have an adverse effect on our inventory management.

Unfavorable outcomes in investigations and proceedings against us and other TFT-LCD panel producers for possible anti-competitive activities may have a direct and indirect material impact on our operations.

Since 2006, we and certain other TFT-LCD panel producers have been subject to an investigation by the U.S. Department of Justice, various and separate claims brought by direct and indirect purchasers, and a number of legal proceedings brought by attorneys general of various states in the United States, with respect to possible anti-competitive activities in the TFT-LCD industry. We have since settled and resolved the investigation and various subsequent legal proceedings, with the exception of the attorney general of the Commonwealth of Puerto Rico. The settlements were duly approved by the applicable courts and, in the case of the state attorneys general actions, by their respective state governments. As of April 21, 2020, we have not been served with the complaint from the attorney general of the Commonwealth of Puerto Rico.

We have also been subject to investigations outside of the United States, including by the European Commission, with respect to the same subject matter. We have since settled, resolved, and/or paid fines for such actual investigations brought by the relevant competition authorities. Following the European Commission's decision, various follow-on claims were initiated in the United Kingdom by various claimants alleging damages as a result of violation of European competition laws. We have since reached settlements with each of the claimants, with the exception of a follow-on damages claim filed by Granville Technology Group and others ("Granville") in the U.K. in December 2016. As of April 21, 2020, we are vigorously defending ourselves against claims by Granville.

In addition, in December 2013, a class action complaint was filed by Hatzlacha, a consumer organization, on behalf of Israeli consumers against LG Display and other defendants in the Central District in Israel. As of April 21, 2020, we have not been served with the complaint from Hatzlacha.

See "Item 8.A. Consolidated Statements and Other Financial Information—Legal Proceedings—Antitrust and Others" for a more detailed description of these matters as well as other legal proceedings that we are involved in.

In each of the foregoing matters that are ongoing, we are continually evaluating the merits of the respective claims and vigorously defending ourselves. Irrespective of the validity or the successful assertion of the claims described above, we may incur significant costs with respect to litigating or settling any or all of the asserted claims. While we continue to vigorously defend the various ongoing proceedings that we are involved in, it is possible that one or more proceedings may result in cash outflow to settle or resolve these claims. We recognize provisions with respect to those legal claims in which our management has concluded that there is a present or constructive obligation arising from a past event, it is more likely than not that an outflow of resources will result to settle the obligation, and a reliable estimate can be made of the amount of the obligation. As of December 31, 2019, we did not recognize any provisions with respect to any legal claims based on our management's assessment of the likely outcomes. However, the actual outcomes may be different from those estimated as of December 31, 2019 and may have an adverse effect on our operating results or financial condition.

We need to observe certain financial and other covenants under the terms of our debt obligations, the failure to comply with which would put us in default under such debt obligations.

We are subject to financial and other covenants, including maintenance of credit ratings and debt-to-equity ratios, under certain of our debt obligations. The documentation for such debt also contains negative pledge provisions limiting our ability to provide liens on our assets as well as cross-default and cross-acceleration clauses, which give related creditors the right to accelerate the amounts due under such debt if an event of default or acceleration has occurred with respect to our existing or future indebtedness, or if any material part of our indebtedness or indebtedness of our subsidiaries is capable of being declared payable before the stated maturity date. In addition, such covenants restrict our ability to raise future debt financing.

If we breach the financial or other covenants contained in the documentation governing our debt obligations, our financial condition will be adversely affected to the extent we are not able to cure such breaches, obtain a waiver from the relevant lenders or debtholders or repay the relevant debt.

We may be adversely affected by changes in LIBOR reporting practices or the method in which LIBOR is determined.

Certain financings extended to us are made at variable rates that use London Interbank Offered Rate ("LIBOR") as a benchmark for establishing the applicable interest rates. As of December 31, 2019, \(\mathbb{W}408\) billion (US\$353\) million) of our outstanding short-term borrowings, \(\mathbb{W}3,197\) billion (US\$2,767\) million) of our outstanding long-term borrowings (including current portions thereof) and \(\mathbb{W}116\) billion (US\$100\) million) of our outstanding bonds were indexed to LIBOR.

In July 2017, the Financial Conduct Authority of the United Kingdom ("FCA"), which has regulatory authority with respect to LIBOR, announced that it does not intend to continue to encourage, or use its power to compel, panel banks to provide rate submissions for the determination of LIBOR beyond the end of 2021. It is possible that panel banks will continue to provide rate submissions, and that the ICE Benchmark Administration as the independent administrator of LIBOR will continue to determine and announce LIBOR, on the current basis after 2021, if they are willing and able to do so. However, there is no guarantee that LIBOR will be determined and announced after 2021 on the current basis, or at all.

Currently, it is not possible to predict future developments with respect to LIBOR or their timing or impact. Any such developments, including as a result of international, national or other initiatives for reform or the adoption of successor or alternative benchmark reference rates in the international debt capital markets, could have a material adverse effect on our financing costs. In particular, to the extent LIBOR is discontinued or is no longer quoted, the interest rates on our short-term and long-term borrowings and bonds indexed to LIBOR will be determined using various alternative methods. Any of such alternative methods may result in interest payment obligations that are higher than, or that do not otherwise correlate over time with, the payments that would have been made on such borrowings if LIBOR were available in its current form.

Our results of operations are subject to exchange rate fluctuations.

There has been considerable volatility in foreign exchange rates in recent years, including rates between the Korean Won and the U.S. dollar, between the Korean Won and the Chinese Yuan and between the Korean Won and the Japanese Yen. To the extent that we incur costs in one currency and make sales in another, our profit margins may be affected by changes in the exchange rates between the two currencies.

Our sales of display panels are denominated mainly in U.S. dollars, whereas our purchases of raw materials are denominated mainly in U.S. dollars and Japanese Yen. The largest proportion of our expenditures on capital equipment are denominated in U.S. dollars and Chinese Yuan. Accordingly, fluctuations in exchange rates, in particular between the U.S. dollar and the Korean Won, between the Chinese Yuan and the Korean Won as well as between the Japanese Yen and the Korean Won, affect our pre-tax income, and in recent years, the value of the Won relative to the U.S. dollar, Chinese Yuan and Japanese Yen has fluctuated widely. Although a depreciation of the Korean Won against the U.S. dollar increases the Korean Won value of our export sales and enhances the price-competitiveness of our products in foreign markets in U.S. dollar terms, it also increases the cost of imported raw materials and components in Korean Won terms and our cost in Korean Won of servicing our U.S. dollar denominated debt. A depreciation of the Korean Won against the Chinese Yuan or Japanese Yen increases the Korean Won cost of our Chinese Yuan- or Japanese Yen-denominated purchases of equipment, raw materials or components, as applicable, and, to the extent we have any debt denominated in Chinese Yuan or Japanese Yen, our cost in Korean Won of servicing such debt, but has relatively little impact on our sales as most of our sales are denominated in U.S. dollars. In addition, continued exchange rate volatility may also result in foreign exchange losses for us. Although a depreciation of the Korean Won against the U.S. dollar, in general, has a net positive impact on our results of operations that more than offsets the net negative impact caused by a depreciation of the Korean Won against the Chinese Yuan or Japanese Yen, we cannot provide assurance that the exchange rate of the Korean Won against foreign currencies will not be subject to significant fluctuations, or that the impact of such fluctuations will not adversely affect the results of

Our business relies on our patent rights which may be narrowed in scope or found to be invalid or otherwise unenforceable.

Our success will depend, to a significant extent, on our ability to obtain and enforce our patent rights both in Korea and worldwide. The coverage claimed in a patent application can be significantly reduced before a patent is issued, either in Korea or abroad. Consequently, we cannot provide assurance that any of our pending or future patent applications will result in the issuance of patents. Patents issued to us may be subjected to further proceedings limiting their scope and may not provide significant proprietary protection or competitive advantage. Our patents also may be challenged, circumvented, invalidated or deemed unenforceable. In addition, because patent applications in certain countries generally are not published until more than 18 months after they are first filed, and because publication of discoveries in scientific or patent literature often lags behind actual discoveries, we cannot be certain that we were, or any of our licensors was, the first creator of inventions covered by pending patent applications, that we or any of our licensors will be entitled to any rights in purported inventions claimed in pending or future patent applications, or that we were, or any of our licensors was, the first to file patent applications on such inventions.

Furthermore, pending patent applications or patents already issued to us or our licensors may become subject to dispute, and any dispute could be resolved against us. For example, we may become involved in re-examination, reissue or interference proceedings and the result of these proceedings could be the invalidation or substantial narrowing of our patent claims. We also could be subject to court proceedings that could find our patents invalid or unenforceable or could substantially narrow the scope of our patent claims. In addition, depending on the jurisdiction, statutory differences in patentable subject matter may limit the protection we can obtain on some of our inventions.

Failure to protect our intellectual property rights could impair our competitiveness and harm our business and future prospects.

We believe that developing new products and technologies that can be differentiated from those of our competitors is critical to the success of our business. We take active measures to obtain international protection of our intellectual property by obtaining patents and undertaking monitoring activities in our major markets. However, we cannot assure you that the measures we are taking will effectively deter competitors from improper use of our proprietary technologies. Our competitors may misappropriate our intellectual property, disputes as to ownership of intellectual property may arise and our intellectual property may otherwise become known or independently developed by our competitors.

Any failure to protect our intellectual property could impair our competitiveness and harm our business and future prospects.

Our rapid introduction of new technologies and products may increase the likelihood that third parties will assert claims that our products infringe upon their proprietary rights.

The rapid technological changes that characterize our industry require that we quickly implement new processes and components with respect to our products. Often with respect to recently developed processes and components, a degree of uncertainty exists as to who may rightfully claim ownership rights in such processes and components. Uncertainty of this type increases the risk that claims alleging that such components or processes infringe upon third party rights may be brought against us. Although we take and will continue to take steps to ensure that our new products do not infringe upon third party rights, if our products or manufacturing processes are found to infringe upon third party rights, we may be subject to significant liabilities and be required to change our manufacturing processes or be prohibited from manufacturing certain products, which could have a material adverse effect on our operations and financial condition.

We may be required to defend against charges of infringement of patent or other proprietary rights of third parties. Although patent and other intellectual property disputes in our industry have often been settled through licensing or similar arrangements, such defense could require us to incur substantial expense and to divert significant resources of our technical and management personnel, and could result in our loss of rights to develop or make certain products or require us to pay monetary damages or royalties to license proprietary rights from third parties. Furthermore, we cannot be certain that the necessary licenses would be available to us on acceptable terms, if at all. Accordingly, an adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing and selling certain of our products. Any such litigation, whether successful or unsuccessful, could result in substantial costs to us and diversions of our resources, either of which could adversely affect our business.

In April 2019, Solas OLED Ltd. filed complaints against us and certain television set manufacturers in the United States and Germany alleging patent infringement by the defendants. In each of these cases, the amount being sought has not been determined. A court hearing for the case in Germany and a pre-trial hearing for the case in the United States have been scheduled for May 2020. As of December 31, 2019, we have not recognized any provisions with respect to such legal claims based on our management's assessment of the likely outcomes. However, the actual outcomes may be different from those estimated as of December 31, 2019 and may have an adverse effect on our operating results or financial condition.

We rely on technology provided by third parties and our business will suffer if we are unable to renew our licensing arrangements with them.

From time to time, we have obtained licenses for patent, copyright, trademark and other intellectual property rights to process and device technologies used in the production of our display panels. We have entered into key licensing arrangements with third parties, for which we have made, and continue to make, periodic license fee payments. In addition, we also have cross-license agreements with certain other third parties. These agreements terminate upon the expiration of the respective terms of the patents. See "Item 5.C. Research and Development, Patents and Licenses, etc. —Intellectual Property—License Agreements."

If we are unable to renew our technology licensing arrangements on acceptable terms, we may lose the legal protection to use certain of the processes we employ to manufacture our products and be prohibited from using those processes, which may prevent us from manufacturing and selling certain of our products, including our key products. In addition, we could be at a disadvantage if our competitors obtain licenses for protected technologies on more favorable terms than we do.

In the future, we may also need to obtain additional patent licenses for new or existing technologies. We cannot provide assurance that these license agreements can be obtained or renewed on acceptable terms or at all, and if not, our business and operating results could be adversely affected.

We rely upon trade secrets and other unpatented proprietary know-how to maintain our competitive position in the display panel industry and any loss of our rights to, or unauthorized disclosure of, our trade secrets or other unpatented proprietary know-how could negatively affect our business.

We also rely upon trade secrets, unpatented proprietary know-how and information, as well as continuing technological innovation in our business. The information we rely upon includes price forecasts, core technology and key customer information. We enter into confidentiality agreements with each of our employees and consultants upon the commencement of an employment or consulting relationship. These agreements generally provide that all inventions, ideas, discoveries, improvements and copyrightable material made or conceived by the individual arising out of the employment or consulting relationship and all confidential information developed or made known to the individual during the term of the relationship is our exclusive property. We cannot provide assurance that these types of agreements will be fully enforceable, or that they will not be breached. We also cannot be certain that we will have adequate remedies for any such breach. The disclosure of our trade secrets or other know-how as a result of such a breach could adversely affect our business. Also, our competitors may come to know about or determine our trade secrets and other proprietary information through a variety of methods. Disputes may arise concerning the ownership of intellectual property or the applicability or enforceability of our confidentiality agreements, and there can be no assurance that any such disputes would be resolved in our favor. Furthermore, others may acquire or independently develop similar technology, or if patents are not issued with respect to technologies arising from our research, we may not be able to maintain information pertinent to such research as proprietary technology or trade secrets and that could have an adverse effect on our competitive position within the display panel industry.

If our cybersecurity is breached, we may incur significant legal and financial exposure, damage to our reputation and a loss of confidence of our customers.

Our business involves the storage and transmission of confidential information relating to us as well as our customers and suppliers, and any breach in our cybersecurity could expose us to a risk of loss, the improper use or disclosure of such information, ensuing potential liability or litigation, any of which could harm our reputation and adversely affect our business. Although there has been no material instance where an unauthorized party was able to obtain access to our data or our customers' data, there can be no assurance that we will not be vulnerable to cyber-attacks in the future.

Our cybersecurity measures may also fail due to employee error, malfeasance or otherwise. Instituting appropriate access controls and safeguards across our information technology infrastructure is challenging. Furthermore, outside parties may attempt to fraudulently induce employees to disclose sensitive information in order to gain access to our data or our customers' data or accounts or may otherwise obtain access to such data or accounts. Because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. If an actual or perceived breach of our cybersecurity occurs or the market perception of the effectiveness of our cybersecurity measures is adversely affected, we may incur significant legal and financial exposure, including legal claims and regulatory fines and penalties, damage to our reputation and a loss of confidence of our customers, which could have an adverse effect on our business, financial condition and results of operations.

We rely on key researchers and engineers, senior management and production facility operators, and the loss of the services of any such personnel or the inability to attract and retain them may negatively affect our business.

Our success depends to a significant extent upon the continued service of our research and development and engineering personnel, and on our ability to continue to attract, retain and motivate qualified researchers and engineers, especially during periods of rapid growth. In particular, our focus on leading the market in introducing new products and advanced manufacturing processes has meant that we must aggressively recruit research and development personnel and engineers with expertise in cutting-edge technologies.

We also depend on the services of experienced key senior management, and if we lose their services, it would be difficult to find and integrate replacement personnel in a timely manner, if at all. We also employ highly skilled line operators at our various production facilities.

The loss of the services of any of our key research and development and engineering personnel, senior management or skilled operators without adequate replacement, or the inability to attract new qualified personnel, would have a material adverse effect on our operations.

The interests of LG Electronics, our largest shareholder, and any directors or officers nominated by it, may differ from or conflict with those of us or our other shareholders.

When exercising its rights as our largest shareholder, LG Electronics may take into account not only our interests but also its interests and the interests of its affiliates. LG Electronics' interests may at times conflict with ours in a number of areas relating to our business, including potential acquisitions of businesses or properties, incurrence of indebtedness, financial commitments, sales and marketing functions, indemnity arrangements, service arrangements and the exercise by LG Electronics of significant influence over our management and affairs. See "Item 6.A. Directors and Senior Management" for a description of the composition of our current board of directors and senior management.

Labor unrest may disrupt our operations.

As of December 31, 2019, more than half of our employees based in Korea were union members, and production employees accounted for substantially all of these members. We have a collective bargaining arrangement with our labor union, which is negotiated once a year. Any deterioration in our relationship with our employees or labor unrest resulting in a work stoppage or strike may have a material adverse effect on our financial condition and results of operations.

We are subject to strict safety and environmental regulations and we may be subject to fines or restrictions that could cause our operations to be interrupted.

Our manufacturing processes involve hazardous materials and generate chemical waste, waste water and other industrial waste at various stages in the manufacturing process, and we are subject to a variety of laws and regulations relating to the use, storage, discharge and disposal of such chemical by-products and waste substances. We have enacted safety measures, engaged in employee education on handling such materials and installed various types of safety and anti-pollution equipment, consistent with industry standards, for the treatment of chemical waste and equipment for the recycling of treated waste water at our various facilities. See "Item 4.B. Business Overview—Environmental Matters" for a description of the anti-pollution equipment that we have installed in our various facilities. However, we cannot provide assurance that our protocols will always be followed and safety or environmental related claims will not be brought against us or that the local or national governments will not take steps toward adopting more stringent safety or environmental standards.

Any failure on our part to comply with any present or future safety and environmental regulations could result in the assessment of damages or imposition of fines against us, suspension of production or a cessation of operations. Since 2017, we and certain of our employees have received and paid aggregate fines of approximately \(\pi\)34 million and are currently undergoing proceedings relating to fines of \(\pi\)6 million in connection with violations of safety and environmental regulations under the Industrial Safety and Health Act, the Waste Management Act and the Air Quality Management Act. We have also implemented certain measures to facilitate future compliance with such regulations. In addition, safety and environmental regulations could require us to acquire costly equipment or to incur other significant compliance expenses that may materially and negatively affect our financial condition and results of operations.

Risks Relating to our American Depositary Shares, or ADSs, or our Common Stock

Future sales of shares of our common stock or convertible securities in the public market may depress our stock price and make it difficult for you to recover the full value of your investment in our common stock or our ADSs.

We cannot predict the effect, if any, that market sales of shares of our common stock or other securities that may be converted into shares of our common stock or the availability of such shares or securities for sale will have on the market price of our common stock prevailing from time to time. Our largest shareholder, LG Electronics, currently owns 37.9% of our voting stock. There is no assurance that LG Electronics will not sell all or a part of its ownership interest in us.

Any future sales by LG Electronics or any future issuance by us of a significant number of shares of our common stock or other securities that may be converted into shares of our common stock in the public market, or the perception that any of these events may occur, could cause the market price of our common stock to decrease or to be lower than it might be in the absence of these events or perceptions.

Our public shareholders may have more difficulty protecting their interests than they would as shareholders of a U.S. corporation.

Our corporate affairs are governed by our articles of incorporation and by the laws governing Korean corporations. The rights and responsibilities of our shareholders and members of our board of directors under Korean law may be different from those that apply to shareholders and directors of a U.S. corporation. For example, minority shareholder rights afforded under Korean law often require the minority shareholder to meet minimum shareholding requirements in order to exercise certain rights. In the case of public companies, a shareholder must own, individually or collectively with other shareholders, at least 0.01% of our common stock for at least six consecutive months in order to file a derivative suit on our behalf. While the facts and circumstances of each case will differ, the duty of care required of a director under Korean law may not be the same as the fiduciary duty of a director of a U.S. corporation. Therefore, holders of our common stock or our ADSs may have more difficulty protecting their interests against actions of our management, members of our board of directors or largest shareholders than they would as shareholders of a U.S. corporation.

You may be limited in your ability to deposit or withdraw the common stock underlying the ADSs, which may adversely affect the value of your investment.

Under the terms of our deposit agreement, holders of common stock may deposit such common stock with the depositary's custodian in Korea and obtain ADSs, and holders of ADSs may surrender ADSs to the depositary and receive common stock. However, to the extent that a deposit of common stock exceeds the difference between:

- the aggregate number of shares of common stock we have consented to allow to be deposited for the issuance of ADSs (including deposits in connection with offerings of ADSs and stock dividends or other distributions relating to ADSs); and
- the number of shares of common stock on deposit with the custodian for the benefit of the depositary at the time of such proposed deposit,

such common stock will not be accepted for deposit unless (1) our consent, subject to governmental authorization, with respect to such deposit has been obtained or (2) such consent is no longer required under Korean laws and regulations.

Under the terms of the deposit agreement, no consent is required if the shares of common stock are obtained through a dividend, free distribution, rights offering or reclassification of such stock. The current limit on the number of shares that may be deposited into our ADR facility is 68,095,700 as of April 21, 2020. The number of shares issued or sold in any subsequent offering by us or our major shareholders, subject to government authorization, raises the limit on the number of shares that may be deposited into the ADR facility, except to the extent such deposit is prohibited by applicable laws or violates our articles of incorporation, or we decide with the ADR depositary to limit the number of shares of common stock so offered that would be eligible for deposit under the deposit agreement in order to maintain liquidity for the shares in Korea as may be requested by the relevant Korean authorities. We might not consent to the deposit of any additional shares of common stock. As a result, if a holder surrenders ADSs and withdraws common stock, it may not be able to deposit the common stock again to obtain ADSs.

Holders of ADSs will not have preemptive rights in some circumstances.

The Korean Commercial Code, as amended, and our articles of incorporation require us, with some exceptions, to offer shareholders the right to subscribe for new shares of our common stock in proportion to their existing shareholding ratio whenever new shares are issued, except under certain circumstances as provided in our articles of incorporation. Accordingly, if we issue new shares to non-shareholders based on such exception, a holder of our ADSs may experience dilution in its holdings. Furthermore, if we offer any right to subscribe for additional shares of our common stock or any rights of any other nature to existing shareholders subject to their preemptive rights, the depositary, after consultation with us, may make the rights available to holders of our ADSs or use reasonable efforts to dispose of the rights on behalf of such holders and make the net proceeds available to such holders. The depositary, however, is not required to make available to holders any rights to purchase any additional shares of our common stock unless it deems that doing so is lawful and feasible and

- a registration statement filed by us under the U.S. Securities Act of 1933, as amended, is in effect with respect to those shares; or
- the offering and sale of those shares is exempt from or is not subject to the registration requirements of the Securities Act.

We are under no obligation to file any registration statement with the SEC or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, a holder of our ADSs may be unable to participate in our rights offerings and may experience dilution in its holdings. If a registration statement is required for a holder of our ADSs to exercise preemptive rights but is not filed by us or is not declared effective, the holder will not be able to exercise its preemptive rights for additional ADSs and it will suffer dilution of its equity interest in us. If the depositary is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or feasible, it will allow the rights to lapse, in which case the holder will receive no value for these rights.

Holders of ADSs will not be able to exercise dissent and appraisal rights unless they have withdrawn the underlying shares of our common stock and become our direct shareholders.

In some limited circumstances, including the transfer of the whole or any significant part of our business and our merger or consolidation with another company, dissenting shareholders have the right to require us to purchase their shares under Korean law. However, a holder of our ADSs will not be able to exercise such dissent and appraisal rights if the depositary refuses to do so on their behalf. Our deposit agreement does not require the depositary to take any action in respect of exercising dissent and appraisal rights. In such a situation, holders of our ADSs must initiate the withdrawal of the underlying common stock from the ADS facility (and incur charges relating to that withdrawal) by the day immediately following the date of public disclosure of our board of directors' resolution of a merger or other events triggering appraisal rights and become our direct shareholder prior to the record date of the shareholders' meeting at which the relevant transaction is to be approved, in order to exercise dissent and appraisal rights.

Dividend payments and the amount you may realize upon a sale of our common stock or ADSs that you hold will be affected by fluctuations in the exchange rate between the U.S. dollar and the Korean Won.

Cash dividends, if any, in respect of the shares represented by our ADSs will be paid to the depositary in Korean Won and then converted by the depositary into U.S. dollars, subject to certain conditions. Accordingly, fluctuations in the exchange rate between the Korean Won and the U.S. dollar will affect, among other things, the amounts a holder will receive from the depositary in respect of dividends, the U.S. dollar value of the proceeds that a holder would receive upon sale in Korea of the shares of our common stock obtained upon surrender of ADSs and the secondary market price of ADSs. Such fluctuations will also affect the U.S. dollar value of dividends and sales proceeds received by holders of our common stock.

Risks Relating to Korea

If economic conditions in Korea deteriorate, our current business and future growth could be materially and adversely affected.

We are incorporated in Korea, and a substantial portion of our operations and assets are located in Korea. As a result, we are subject to political, economic, legal and regulatory risks specific to Korea. The economic indicators in Korea in recent years have shown mixed signs, and future growth of the Korean economy is subject to many factors beyond our control, including developments in the global economy.

In recent years, adverse conditions and volatility in the worldwide financial markets, fluctuations in oil and commodity prices and the general weakness of the global economy have contributed to the uncertainty of global economic prospects in general and have adversely affected, and may continue to adversely affect, the Korean economy. The value of the Won relative to major foreign currencies has also fluctuated significantly and, as a result of changing global and Korean economic conditions, there has been volatility in the stock prices of Korean companies in recent years. Future declines in the Korea Composite Stock Price Index (the "KOSPI") and large amounts of sales of Korean securities by foreign investors and subsequent repatriation of the proceeds of such sales may adversely affect the value of the Won, the foreign currency reserves held by financial institutions in Korea and the ability of Korean companies to raise capital. Any future deterioration of the Korean or global economy could adversely affect our business, financial condition and results of operations.

Developments that could have an adverse impact on Korea's economy include:

- declines in consumer confidence and a slowdown in consumer spending;
- deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy (such as the ongoing trade disputes with Japan);
- adverse conditions or developments in the economies of countries and regions that are important export markets for Korea, such as China, the United States, Europe and Japan, or in emerging market economies in Asia or elsewhere, including as a result of deteriorating economic and trade relations between the United States and China and increased uncertainties resulting from the United Kingdom's exit from the European Union;
- the occurrence of severe health epidemics in Korea and other parts of the world (such as the ongoing global outbreak of COVID-19, which has been characterized as a pandemic by The World Health Organization);
- adverse changes or volatility in foreign currency reserve levels, commodity prices (including oil prices), exchange rates (including fluctuation of the U.S. dollar, Euro or Japanese Yen exchange rates or revaluation of the Chinese Yuan), interest rates, inflation rates or stock markets;
- increased sovereign default risk in select countries and the resulting adverse effects on the global financial markets;
- a deterioration in the financial condition or performance of small- and medium-sized enterprises and other companies in Korea due to the Korean government's policies to increase minimum wages and limit working hours of employees;
- investigations of large Korean business groups and their senior management for possible misconduct;
- a continuing rise in the level of household debt and increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers in Korea;
- social and labor unrest;
- decreases in the market prices of Korean real estate;

- the economic impact of any pending or future free trade agreements or of any changes to existing free trade agreements;
- a decrease in tax revenue or a substantial increase in the Korean government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programs that would lead to an increased government budget deficit;
- financial problems or lack of progress in the restructuring of Korean business groups, other large troubled companies, their suppliers or the financial sector:
- loss of investor confidence arising from corporate accounting irregularities or corporate governance issues concerning certain Korean companies;
- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;
- geo-political uncertainty and risk of further attacks by terrorist groups around the world;
- natural or man-made disasters that have a significant adverse economic or other impact on Korea or its major trading partners;
- political uncertainty or increasing strife among or within political parties in Korea;
- hostilities or political or social tensions involving oil producing countries in the Middle East (including a potential escalation of hostilities between the U.S. and Iran) and Northern Africa and any material disruption in the global supply of oil or sudden increase in the price of oil:
- increased reliance on exports to service foreign currency debts, which could cause friction with Korea's trading partners;
- the continued growth of the Chinese economy, to the extent its benefits (such as increased exports to China) are outweighed by its costs (such as competition in export markets or for foreign investment and the relocation of manufacturing bases from Korea to China);
- political or social tensions involving Russia and any resulting adverse effects on the global supply of oil or the global financial markets;
 and
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

Escalations in tensions with North Korea could have an adverse effect on us and the market value of our common stock and ADSs.

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and ballistic missile programs as well as its hostile military actions against Korea. Some of the significant incidents in recent years include the following:

North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted six rounds of nuclear tests since October 2006, including claimed detonations of hydrogen bombs and warheads that can be mounted on ballistic missiles. Over the years, North Korea has continued to conduct missile tests, including ballistic missiles launched from submarines and intercontinental ballistic missiles that it claims can reach the United States mainland. In response, the Korean government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. In February 2016, the Korean government also closed the inter-Korea Gaesong Industrial Complex in response to North Korea's fourth nuclear test in January 2016. Internationally, the United Nations Security Council has passed a series of resolutions condemning North Korea's actions and significantly expanding the scope of sanctions applicable to North Korea, most recently in December 2017 in response to North Korea's intercontinental ballistic missile test in November 2017. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.

• In March 2010, a Korean naval vessel was destroyed by an underwater explosion, killing many of the crewmen on board. The Korean government formally accused North Korea of causing the sinking, while North Korea denied responsibility. Moreover, in November 2010, North Korea fired more than one hundred artillery shells that hit Korea's Yeonpyeong Island near the Northern Limit Line, which acts as the de facto maritime boundary between Korea and North Korea on the west coast of the Korean peninsula, causing casualties and significant property damage. The Korean government condemned North Korea for the attack and vowed stern retaliation should there be further provocation.

North Korea's economy also faces severe challenges, which may further aggravate social and political pressures within North Korea.

Although bilateral summit meetings were held between the two Koreas in April, May and September 2018 and between the United States and North Korea in June 2018, February 2019 and June 2019, there can be no assurance that the level of tensions affecting the Korean peninsula will not escalate in the future. Any increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between Korea or the United States and North Korea break down or further military hostilities occur, could have a material adverse effect on the Korean economy and on our business, financial condition and results of operations and the market value of our common stock and ADSs.

If the Korean government deems that emergency circumstances are likely to occur, it may restrict holders of our ADSs and the depositary from converting and remitting dividends and other amounts in U.S. dollars.

Under the Korean Foreign Exchange Transaction Law, if the Korean government deems that certain emergency circumstances, including sudden fluctuations in interest rates or exchange rates, extreme difficulty in stabilizing the balance of payments or substantial disturbance in the Korean financial and capital markets, are likely to occur, it may impose any necessary restrictions as requiring Korean or foreign investors to obtain prior approval from the Minister of Strategy and Finance for the acquisition of Korean securities or the repatriation of interest, dividends or sales proceeds arising from disposition of such securities or other transactions involving foreign exchange. See "Item 10.D. Exchange Controls."

Item 4. INFORMATION ON THE COMPANY

Item 4.A. History and Development of the Company

We are a leading innovator of TFT-LCD, OLED and other display panel technologies. We manufacture display panels in a broad range of sizes and specifications primarily for use in televisions, notebook computers, desktop monitors, tablet computers and various other applications, including mobile devices.

The origin of our display business, which first started with TFT-LCD panels, can be traced to the TFT-LCD research that began in 1987 at the Goldstar R&D Center, which was then part of LG Electronics Inc. TFT-LCD research continued at the Anyang R&D Center, a research and development center established by LG Electronics in 1990 in Anyang, Korea, which was subsequently moved to our Paju Display Cluster in 2008, and which today continues to lead our technology innovation efforts. In 1993, the TFT-LCD business division was launched within LG Electronics, and in September 1995 mass production of TFT-LCD panels began at P1, its first fabrication facility, producing mainly TFT-LCD panels for notebook computers and other applications. In December 1997, LG Semicon Inc., a subsidiary of LG Electronics, began mass production at P2, producing mainly TFT-LCD panels for notebook computers.

We were incorporated in 1985 under the laws of the Republic of Korea under the original name of Goldstar Software Co., Ltd., a subsidiary of LG Electronics whose main business was the development and marketing of software, which changed its name to LG Software, Ltd. in January 1995 and subsequently to LG Soft, Ltd. in January 1997. At the end of 1998, LG Electronics and LG Semicon transferred their respective TFT-LCD-related businesses to LG Soft, which, as part of the business transfer, changed its name to LG LCD Co., Ltd.

In July 1999, LG Electronics entered into a joint venture agreement with Koninklijke Philips Electronics N.V., pursuant to which Philips Electronics acquired a 50% interest in LG LCD. In connection with this transaction, LG LCD transferred its existing software-related business to LG Electronics in order to focus solely on the TFT-LCD business. The joint venture, which was renamed LG.Philips LCD Co., Ltd., was officially launched in August 1999. In July 2004, we completed our initial public offering and listed shares of our common stock on the Korea Exchange under the identifying code "034220" and our ADSs on the New York Stock Exchange under the symbol "LPL". Prior to the listings, LG Electronics and Philips Electronics terminated the joint venture agreement and entered into a shareholders' agreement to reflect new arrangements between them as controlling shareholders. The shareholders' agreement automatically terminated upon Philips Electronics' sale of all of its remaining ownership interest in us in March 2009. Effective March 3, 2008, we changed our name from LG.Philips LCD Co., Ltd. to LG Display Co., Ltd. in order to reflect the expansion of our business scope and shift in business model, fully expressing our commitment to the future.

We launched our OLED Business Unit in June 2008 in anticipation of future growth of the OLED business. The origin of our OLED business began with our acquisition of LG Electronics' active matrix OLED, or AMOLED, business in January 2008 by way of taking over its inventory, intellectual property rights and employees related to the AMOLED business. In 2012, partly in recognition of the growing importance of OLED to the future of our business, especially in connection with large-sized products, we restructured our internal organization relating to our OLED business, breaking up the OLED Business Unit and transferring our mobile-related business (including OLED products for mobile and other applications) to the newly created IT/Mobile Business Division and transferring our OLED television panel business to the Television Business Division. We were the first in the world to commence mass production of 55-inch OLED television panels in 2013. In December 2014, we established a separate OLED Business Division to strengthen our OLED business and solidify our competitive advantages. In December 2016, partly in an effort to expand our OLED business across our display panel applications (including mobile products and other applications), we restructured our internal organization by product type, and integrated the capabilities of our OLED business into the Television Business Division, the IT Business Division and the Mobile Business Division. Our principal executive offices are located at LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336 and our telephone number is +82-2-3777-1010. Our website address is http://www.lgdisplay.com.

We have continued to develop our manufacturing process technologies and expand our production facilities. Each successive generation of our fabrication facilities has been designed to process increasingly larger-size glass substrates, which allows us to cut a larger number of panels, sometimes with larger sizes, from each glass substrate. The ability to process larger glass substrates allows us to produce a larger variety of display sizes to accommodate evolving business and consumer demands. In addition, due to the large number of fabrication facilities we operate, we have the flexibility to make strategic decisions based on market demand to convert existing production lines housed within a fabrication facility to manufacture display panels based on newer technologies.

As part of our ongoing expansion plans, we have constructed several manufacturing facilities for OLED panels in Korea in recent years, including our E5 production line (which has since been integrated into and combined with our AP3 fabrication facility) and AP4 fabrication facility for plastic OLED panels for mobile and other applications, which commenced mass production in August 2017 and July 2019, respectively. Furthermore, in response to and in anticipation of growing demand in the China market, in July 2017, we announced our plan to establish a joint venture with the government of Guangzhou to construct a new fabrication facility to manufacture next generation large-sized OLED panels, which was established under the name of LG Display High-Tech (China) Co., Ltd., in July 2018. We currently hold a 75% ownership interest in the joint venture and the government of Guangzhou holds the remaining 25% ownership interest. We have invested approximately \(\pi\)5.0 trillion in capital expenditures for the joint venture, and we plan to finalize our preparations for the commencement of operation at the new CO fabrication facility within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors. Each of our on-going expansion projects are generally subject to market conditions and any changes in our investment timetable. See "Item 4.D. Property, Plants and Equipment—Capital Expenditures."

With respect to our assembly facilities, from 1995 to early 2003, we assembled all panels in our Gumi assembly facility adjacent to our P1 facility. Since 2003, in order to better serve the needs of our global customers, we have commenced operations at various assembly facilities in Korea and several other countries. For more information on our module assembly facilities, see "Item 4.D. Property, Plants and Equipment—Current Facilities."

For a description of cash outflows relating to our capital expenditures in the past three fiscal years, see "Item 5.A. Operating Results—Overview—Manufacturing Productivity and Costs."

The U.S. Securities and Exchange Commission, or the SEC, maintains a website (http://www.sec.gov), which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Item 4.B. Business Overview

Overview

We manufacture TFT-LCD and OLED technology-based display panels in a broad range of sizes and specifications primarily for use in televisions, notebook computers, desktop monitors, tablet computers and mobile devices, including smartphones, and we are one of the world's leading suppliers of Ultra HD television panels. We also manufacture display panels for industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment. In 2019, we sold a total of 136.7 million display panels that are nine inches or larger. According to IHS Technology, we had a global market share for display panels of nine inches or larger of approximately 27.2% based on sales revenue in 2019.

We currently operate fabrication facilities, which include separately designated sets of fabrication production lines housed in certain facilities, located in our Display Clusters in Gumi and Paju, Korea and in Guangzhou, China. We also operate module assembly facilities in Korea and abroad. For a full description of our current facilities, see "Item 4.D. Property, Plants and Equipment—Current Facilities."

We seek to build our market position based on collaborative relationships with our customers and suppliers, a focus on high-end differentiated specialty display products and manufacturing productivity. Our end-brand customers include many of the world's leading manufacturers of televisions, notebook computers, desktop monitors, tablet computers and mobile phones such as LG Electronics. For a description of our sales to LG Electronics, our largest shareholder, see "Item 7.B. Related Party Transactions."

At the direction of our end-brand customers, we typically ship our display panels to their original equipment manufacturers, known as "system integrators," who use our display panels in products they assemble on a contract basis for our end-brand customers. We engage in direct sales (including through our overseas subsidiaries), as well as indirect sales through our affiliated trading company, LG International and its subsidiaries, to end-brand customers and their system integrators. For a description of our sales arrangements with LG International, see "Item 7.B. Related Party Transactions."

Our sales were \(\pi\)27,790 billion in 2017, \(\pi\)24,337 billion in 2018 and \(\pi\)23,476 billion (US\(\pi\)20,317 million) in 2019.

Technology Description

TFT-LCD Technology

A TFT-LCD panel consists of two thin glass substrates and polarizer films between which a layer of liquid crystals is deposited and behind which a light source called a backlight unit is mounted. The frontplane glass substrate is fitted with a color filter, while the backplane glass substrate, also called a TFT array, has many thin film transistors, or TFT, formed on its surface. The liquid crystals are normally aligned to allow the polarized light from the backlight unit to pass through the two glass panels. When voltage is applied to the transistors on the TFT array, the liquid crystals change their alignment and alter the amount of light that passes through them. Meanwhile, the color filter on the frontplane glass substrate gives each pixel its own color. The combination of these pixels in different colors and levels of brightness forms the image on the panel.

The process for manufacturing a TFT-LCD panel consists of four steps:

- TFT array process involves fabricating a large number of thin film transistors on the backplane glass substrate. The number of transistors corresponds to the number of pixels on the screen. The process is similar to the process for manufacturing semiconductor chips, except that transistors are fabricated on large glass substrates instead of silicon wafers. Unlike in the semiconductor industry, however, the number of transistors per glass substrate is not a primary driver of the manufacturing costs for TFT-LCDs. Once the TFT array process on glass substrates is completed, the substrates are cut into panel-sized pieces;
- Color filter process involves fabricating a large number of color regions on the frontplane glass substrate that will overlay the TFT array
 prior to the cell process. The colored dots of red, green and blue combine to form various colors. The process is similar to the TFT array
 process but involves depositing colored dyes instead of transistors;

- Cell process involves joining together the backplane glass substrate that is arrayed with transistors and the frontplane glass substrate that is patterned with a color filter. The space between the two glass substrates is filled with liquid crystal materials. The resulting panel is called a cell; and
- Module assembly process involves connecting additional components, such as driver integrated circuits and backlight units, to the cell.

The TFT array, color filter and cell processes are capital-intensive and require highly automated production equipment and are the primary determinants of fixed manufacturing cost. In contrast, the module assembly process involves semi-automated production equipment and manual labor to assemble the various components. Materials are the primary drivers of variable manufacturing cost.

IPS Technology

In-Plane Switching, or IPS, is a liquid crystal switching technology that was developed to address commonly faced problems with TFT-LCD panels that utilized other liquid crystal technologies, namely narrow viewing angles, inconsistent picture uniformity and slow response times. Unlike other liquid crystal technologies where the liquid crystals are aligned vertically or at an angle in relation to the glass substrate, with IPS technology, the liquid crystals are aligned horizontally in parallel to the glass substrate, which allows for wider viewing angles, greater picture uniformity and faster response times. Our TFT-LCD display panels, including our TFT-LCD television panels, utilize IPS technology.

Advanced High Performance IPS, or AH-IPS, is an IPS technology that integrates ultra-fine pitch technology and high transmittance technology, which allows for ultra-high resolution imagery, increased luminance and greater energy efficiency. AH-IPS is currently utilized in our smartphone panels and other mobile display products, as well as certain of our panels for notebook computers, tablet computers and desktop monitors.

OLED Technology

An OLED panel consists of a thin film of organic material encased between anode and cathode electrodes. When a current is applied, light is emitted directly from the organic material. Because a separate backlight is not needed, OLED panels can be lighter and thinner compared to TFT-LCD panels, which require a separate backlight. In addition, images projected on OLED panels have higher contrast ratios and more realistic color reproduction compared to images projected on TFT-LCD panels.

We utilize different types of sub-pixel and backplane technologies in our OLED panels. Under the RGB sub-pixel structure, a combination of red, green and blue sub-pixels without color filters or white sub-pixels are used to produce a range of colors. While we, along with most of our competitors, utilize RGB sub-pixel technology for small- and medium-sized products, there are various technical challenges in scaling RGB sub-pixel technology for large-sized products, such as television panels. For our OLED television panels, we have overcome these challenges by opting to utilize our WRGB sub-pixel structure, whereby red, green and blue color filters are placed over white OLED sub-pixels to produce a range of colors and began production of OLED television panels at our OP1 fabrication facility in 2013. Mass production of our plastic OLED panels for mobile and other applications began at our AP3 and AP4 fabrication facilities in August 2017 and July 2019, respectively. We also plan to finalize our preparations for the commencement of operation at our CO fabrication facility within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors. As for backplane technology, our large-sized OLED products are produced using oxide TFT backplane technology as compared to our smaller-sized OLED products which utilize low-temperature polycrystalline oxide ("LTPO"), backplane technology, as described in greater detail below.

Backplane Technology

Oxide TFT

We use oxide TFT technology to produce backplanes for use in our large-sized OLED panels, such as the panels used in OLED television products. The traditional amorphous silicon-based TFT, or a-Si TFT, backplane technology has certain limitations that render it unsuitable for producing backplanes for use in large-sized OLED panels with high resolutions and fast refresh rates. For example, in larger and higher-resolution display panels, a-Si TFT backplanes consume increased rates of power and experience a decrease in the rate at which each transistor is able to switch between images, or the rate of mobility.

As an alternative to a-Si TFT backplane technology, we have successfully adopted a metal oxide-based TFT, or simply oxide TFT, backplane technology. In place of the amorphous silicon-based semiconductors used in a-Si TFT backplanes, oxide TFT backplanes utilize metal oxide-based semiconductors, which consume less energy, have a higher rate of mobility and allow for construction of display panels with narrower bezels as compared to display panels with traditional a-Si TFT backplanes.

We were the first company in the display industry to successfully adopt oxide TFT technology in large-sized OLED products, which has been a key factor in reducing the costs of manufacturing large-sized OLED panels in large quantities. Because the manufacturing process of oxide TFT-based OLED panels is similar to the process used to manufacture TFT-LCD panels, we are able to use our existing TFT-based production lines with relatively little modification to mass produce large-sized OLED panels.

LTPS and LTPO

LTPS backplanes have superior current-driving capacity and produce brighter images, while consuming less energy compared to a-Si TFT or oxide TFT backplanes, due to their higher mobility rates. However, due to a complex manufacturing process, LTPS backplanes have relatively higher production costs compared to a-Si TFT or oxide TFT backplanes, making it uneconomical to use in the production of large-sized panels. As a result, we generally utilize LTPS backplanes in the production of smaller-sized panels, particularly in TFT-LCD and OLED smartphone panels.

For our wearable devices, we also use LTPO backplane technology, which combines elements of both LTPS and oxide TFT technologies to produce backplanes with greater energy savings than LTPS backplanes.

Products

We manufacture display panels of various specifications that are integrated by our customers into principally the following products:

- Televisions, which utilize large-sized display panels ranging from 21.5 inches to 98 inches in size, including "8K" Ultra HD television panels, which have four times the number of pixels compared to conventional HD television panels;
- Notebook computers, which utilize display panels ranging from 11.6 inches to 17.3 inches in size;
- Desktop monitors, which utilize large-sized display panels ranging from 15.6 inches to 49 inches in size;
- Tablet computers, which utilize display panels ranging from 7.85 inches to 12.9 inches in size; and
- Mobile and other applications, which utilize a wide array of display panel sizes, including smartphones and other types of mobile phones
 and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical
 diagnostic equipment.

Unless otherwise specified, when we refer to panels in this annual report, we mean assembled cells with added components, such as driver integrated circuits and backlight units.

We design and manufacture our panels to meet the various size and performance specifications of our customers, including specifications relating to thinness, weight, resolution, color quality, power consumption, response times and viewing angles. The specifications vary from product to product. For television panels, a premium is placed on faster response times, wider viewing angles, higher resolution and greater color fidelity. Notebook computer panels require an emphasis on thinness, light weight and power efficiency, while desktop monitor panels demand a greater focus on brightness, color brilliance, faster response times and wide viewing angles. For mobile panels, particularly smartphones, an emphasis is placed on brightness and power efficiency.

In addition to manufacturing and selling display panels, we also manufacture and sell desktop monitors through our joint venture companies. See "—Joint Ventures."

Televisions

Our television display panels range from 21.5 inches to 98 inches in size. We began mass production of television display panels in 2001. Our sales of display panels for televisions were \pm 11,718 billion, or 42.2% of our total revenue, in 2017, \pm 9,727 billion, or 40.0% of our total revenue, in 2018 and \pm 7,998 billion (US\$6,922 million), or 34.1% of our total revenue, in 2019 and constituted our largest product category in each of the past three years. In 2019, our principal products in this category in terms of sales revenue consisted of 55-inch and 65-inch display panels. Our sales of television display panels have declined in recent years, as we have reduced, and continue to reduce, our production level of TFT-LCD panels (which have historically comprised a substantial majority of our television display panels) in light of the increase in downward pricing pressure primarily resulting from capacity expansion by, and increased competition from, our global competitors, particularly from China. In light of the foregoing market conditions in the TFT-LCD television panel market, we have also increased the proportion of OLED television panels in our product mix in recent years.

Brand manufacturers of televisions and their distribution channels prefer long-term arrangements with a limited number of display panel suppliers that can offer a full product line, and we believe that we will continue to be well positioned to meet their requirements with our strengths in technology, manufacturing scale and efficiency as well as the breadth of our product portfolio.

Notebook Computers

Our display panels for notebook computers range from 11.6 inches to 17.3 inches in size in a variety of display formats. Revenue from sales of our display panels for notebook computers was \(\pmu_2,244\) billion, or 8.1% of our total revenue, in 2017, \(\pmu_2,837\) billion, or 11.7% of our total revenue, in 2018 and \(\pmu_2,784\) billion (US\$2,409 million), or 11.9% of our total revenue, in 2019. In 2019, our principal products in terms of sales revenue in this category ranged between 12.3 inches and 15.6 inches in size.

Consumer demand for notebook computers has steadily declined in recent years due in part from competition from tablet computers and smartphones that are more economical and convenient to use compared to notebook computers while offering similar levels of computing functionality. However, there has been an increase in demand for high resolution notebook displays, which has helped the competitiveness of our AH-IPS technology-based display panels.

Desktop Monitors

Our desktop monitor display panels range from 15.6 inches to 49 inches in size in a variety of display resolutions and formats. Revenue from sales of our display panels for desktop monitors was \(\frac{\pmathbf{W}}{4}\),393 billion, or 15.8% of our total revenue, in 2017, \(\frac{\pmathbf{W}}{4}\),040 billion, or 16.6% of our total revenue, in 2018 and \(\frac{\pmathbf{W}}{4}\),028 billion (US\$3,486 million), or 17.2% of our total revenue, in 2019 and constituted our third largest product category in each of the past three years.

In 2019, our principal products in terms of sales revenue in this category were 23.8-inch and 27-inch display panels. While overall customer demand for desktop monitors has generally plateaued in recent years, demand for products with higher specifications such as increased color brilliance and faster response times has increased, as specialized market segments such as gaming monitors continue to grow.

Tablet Computers

After experiencing steady growth in consumer demand for tablet computers since they were first introduced, consumer demand has generally declined in recent years. In 2019, our principal products in terms of sales revenue in this category were 7.85-inch and 10.2-inch display panels.

Mobile and Other Applications

Our product portfolio also includes panels for mobile and other applications, which utilize a wide array of display panel sizes, including smartphones and other types of mobile phones and industrial and other applications, including automotive displays, entertainment systems, portable navigation devices and medical diagnostic equipment. Display panels that are nine inches and smaller are referred to as small- and medium-sized panels.

While this was our fastest growing category of products in terms of revenue growth in recent years, driven largely by an increase in demand for increasingly larger-sized smartphone panels, the market for smartphones recorded a negative growth for the first time in 2018, according to data published by Counterpoint, and has generally plateaued in 2019 compared to 2018, according to data published by Strategy Analytics Inc. Revenue from sales of our display panels for mobile and other applications was \(\pi\)7,020 billion, or 25.3% of our total revenue, in 2017, \(\pi\)5,699 billion, or 23.4% of our total revenue, in 2018 and \(\pi\)6,374 billion (US\$5,516 million), or 27.2% of our total revenue, in 2019. In 2019, sales of panels for smartphones constituted a significant majority in terms of both sales revenue and sales volume in the mobile and other applications category. In recent years, we have increased the proportion of OLED panels (including plastic OLED panels) for mobile and other applications that command relatively higher prices in our product mix.

Some of the panels we produce for industrial products, such as medical diagnostic equipment and automotive products, are highly specialized niche products manufactured and designed to the specifications of our clients, while others, such as industrial controllers, may be manufactured by slightly modifying a standard product design for our other products, such as desktop monitors. Display panels for these other applications broaden our sales base and product mix. They are also often a good channel through which we can commercialize a particular technology that we have developed. We generally determine the production level and specification of our display panels for mobile and other applications by assessing various business opportunities as they arise.

Sales and Marketing

Customer Profile

Our display panels are included primarily in televisions, notebook computers, desktop monitors, tablet computers and mobile and other applications sold by our global end-brand customers, including LG Electronics. LG Electronics is our largest shareholder, and the terms of our sales to LG Electronics are negotiated based on then-prevailing market prices as adjusted for LG Electronics' requirements, including volume and specifications. See "Item 7.B. Related Party Transactions" for further description of our sales to LG Electronics.

We negotiate directly with our end-brand customers concerning the terms and conditions of the sales, but typically ship our display panels to designated system integrators at the direction of these end-brand customers. Sales data to end-brand customers include direct sales to these end-brand customers as well as sales to their designated system integrators, including through our affiliated trading company, LG International, and its subsidiaries, as further discussed below under "—Sales."

A substantial portion of our sales is attributable to a limited number of our end-brand customers. Our top ten end-brand customers together accounted for a significant majority of our sales in each of 2017, 2018 and 2019. Of our top ten end-brand customers, two of them accounted for more than 10% of our sales on an individual basis for each of the past three years. For example, sales to LG Electronics, including as a system integrator, amounted to approximately 23%, 21% and 19% of our sales in 2017, 2018 and 2019 respectively.

In addition to our top ten end-brand customers, we sell a portion of our display panels to a variety of other manufacturers of computers and electronic products.

The following table sets forth for the years indicated the geographic breakdown of our sales based on the location of our customers. The figures below reflect orders from our end-brand customers, their system integrators and our affiliated trading company, LG International, and its subsidiaries:

	Year ended December 31,								
	201	7	201	8					
	Sales	%	Sales	%	Sales	Sales (3)	%		
	(in	billions of	Won and mi	llions of US	\$, except for	r percentages)			
Korea	₩ 1,996	7.2%	₩ 1,589	6.5%	₩ 1,265	US\$ 1,094	5.4%		
China	18,091	65.1	15,243	62.6	15,433	13,356	65.7		
Asia (excluding China) (1)	2,383	8.6	2,481	10.2	2,405	2,081	10.2		
United States (2)	2,725	9.8	2,463	10.1	1,940	1,679	8.3		
Europe (excluding Poland)	1,433	5.2	1,496	6.1	1,476	1,277	6.3		
Poland	1,162	4.2	1,064	4.4	957	829	4.1		
Total (3)	W 27,790	100.0%	W 24,337	100.0%	W 23,476	US\$20,317	100.0%		

- (1) Includes Oceania, Africa and the Middle East.
- (2) Includes other countries in North and South America.
- For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of \(\frac{\psi}{4}\)1,155.46 to US\$1.00, the noon buying rate in effect on December 31, 2019 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

Sales

Our sales and marketing departments seek to maintain and strengthen relationships with our current customers in existing markets as well as expand our business in new markets and with new customers. We currently have wholly-owned sales subsidiaries in the United States, Japan, Germany, Taiwan, China and Singapore.

The focus of our sales activities is on strengthening our relationships with large end-brand customers, with whom we maintain strong collaborative relationships. Customers look to us for a reliable supply of a wide range of display products. We believe our reliability and scale as a supplier helps support our customers' product positions. We view our relationships with our end-brand customers as important to their product development strategies, and we collaborate with our end-brand customers in the design and development stages of their new products. In addition, our sales teams coordinate closely with our end-brand customers' designated system integrators to ensure timely delivery. For each key customer, we appoint an account manager who is primarily responsible for our relationship with that specific customer, complemented by a product development team consisting of engineers who participate in meetings with that customer to understand the customer's specific needs.

We do not typically enter into binding long-term contracts with our customers. However, we have in place long-term supply and purchase agreements with certain major end-brand customers, whereby we and our end-brand customers agree on general volume parameters and, in some cases, product specifications and delivery terms. These agreements serve as an indication of the size and key components of a customer's order, and neither party is committed to supply or purchase any products until a firm purchase order is issued.

We engage in direct sales (including through our overseas subsidiaries), as well as indirect sales through our affiliated trading company, LG International and its subsidiaries, to end-brand customers and their system integrators. Our sales subsidiaries procure purchase orders from, and distribute our products to, system integrators and end-brand customers located in their region. In regions where we do not have a sales subsidiary, or where doing so is consistent with local market practices, we sell our products to LG International and its subsidiaries. These subsidiaries of LG International process orders from and distribute products to customers located in their region. Sales to LG International and its subsidiaries amounted to 2.7% in 2019. See "Item 7.B. Related Party Transactions" for further discussion of these sales arrangements.

Our end-brand customers or their system integrators generally place purchase orders with us a few weeks prior to delivery based on our non-binding supply and purchase agreements with them. Generally, the head office of an end-brand customer provides us with advance rolling forecasts, which, together with our own forecasts, enable us to plan our production schedule in advance. Our customers usually issue monthly purchase orders containing prices we have negotiated with the end-brand customer a few weeks prior to delivery, at which point the customer becomes committed to the order at the volumes and prices indicated in the purchase orders. Under certain special circumstances, however, a negotiated price may be subject to change during the committed period prior to delivery.

Prices for our products are generally determined based on negotiations with our end-brand customers. Pricing of our display panel products is generally market-driven, based on the complexity of the product specifications and the labor and technology involved in the design or production processes.

We generally provide a limited warranty to our end-brand customers, including the provision of replacement parts and warranty services for our products. Costs incurred under our warranty liabilities consist primarily of repairs. We set aside a warranty reserve based on our historical experience and future expectations as to the rate and cost of claims under our warranties.

Where system integrators located in certain regions are invoiced directly, we have established certain measures, such as factoring arrangements and accounts receivable insurance programs, to protect us from excessive exposure to credit risks.

Competition

The display panel industry is highly competitive. Due to the capital intensive nature of the display panel industry and the high production volumes required to achieve economies of scale, the international market for display devices is characterized by significant barriers to entry, but the competition among the relatively small number of major producers is intense. In the case of TFT-LCD panel manufacturers, currently almost all of them are located in Asia, and we compete principally with manufacturers from Korea, Taiwan, China and Japan.

The principal elements of competition for customers in the display panel market include:

- product portfolio range and availability;
- product specifications and performance;
- price
- capacity allocation and reliability;
- · customer service, including product design support; and
- logistics support and proximity of regional stocking facilities.

Our principal competitors are:

- Samsung Display in Korea;
- Innolux and AU Optronics in Taiwan;
- · JDI and Sharp in Japan; and
- BOE, China Star Optoelectronics Technology, CEC Panda and HKC in China.

According to IHS Technology, in 2019, Korean display panel manufacturers had a market share of 36.7% of the 9-inch or larger panel market based on revenue, Chinese manufacturers had 33.3%, Taiwanese manufacturers had 24.3% and Japanese manufacturers had 5.7%. Our market share of the 9-inch or larger panel market based on revenue was approximately 27.2%.

Components, Raw Materials and Suppliers

Components and raw materials accounted for approximately 65%, 63% and 63% of our sales in 2017, 2018 and 2019 respectively. The key components and raw materials of our display products include glass substrates, driver integrated circuits and polarizers used in both our TFT-LCD and OLED products, backlight units and liquid crystal materials used in our TFT-LCD products, and hole transport materials and emission materials used in our OLED products. We source these components and raw materials from outside sources, although, unlike many other display panel manufacturers, we produce a substantial portion of the color filters we use. With respect to glass substrates, Paju Electric Glass Co., Ltd., a joint venture company in which we own a 40% equity interest, provides us with a stable supply at competitive prices.

We generally negotiate non-binding master supply agreements with our suppliers several times a year, but pricing terms are negotiated on a quarterly basis, or if necessary, on a monthly basis. Firm purchase orders are issued generally six weeks prior to the scheduled delivery, except in the case of purchase orders for driver integrated circuits, which are issued generally six to ten weeks prior to the scheduled delivery. We purchase our components and raw materials based on forecasts from our end-brand customers as well as our own assessments of our end-brand customers' needs.

In order to reduce our component and raw material costs and our dependence on any one supplier, we generally develop compatible components and raw materials and purchase our components and raw materials from more than one source. However, we source certain key components and raw materials from a limited group of suppliers in order to ensure timely supply and consistent quality. Also, in order to facilitate implementation of our cost reduction strategies, we continually review for potential cost savings in sourcing our components and raw materials from suppliers based in Korea and those based abroad, including competitiveness of the prices offered by such suppliers and any potential for reduction in logistics and transportation costs. We perform periodic evaluations of our component and raw material suppliers based on a number of factors, including the quality and price of the components, delivery and response time, the quality of the services and the financial health of the suppliers. We reassess our supplier pool accordingly.

We maintain a strategic relationship with many of our material suppliers, and from time to time, we make equity investments in our material suppliers as part of our efforts to secure a stable supply of key components and raw materials.

In addition to components and raw materials, the manufacturing of our products requires significant quantities of electricity and water. In order to obtain and maintain reliable electric power and water supplies, we have our own back-up power generation facilities and water storage tanks as well as easy access to nearby water sources.

Equipment, Suppliers and Third Party Processors

We depend on a limited number of equipment manufacturers for equipment tailored to specific requirements. Since our manufacturing processes depend on the quality and technological capacity of our equipment, we work closely with the equipment manufacturers in the design process to ensure that the equipment meets our specifications. The principal types of equipment we use to manufacture display panels include deposition equipment, steppers, developers and coaters.

We purchase equipment from a small number of qualified vendors to ensure consistent quality, timely delivery and performance. We maintain strategic relationships with many equipment manufacturers as part of our efforts to ensure quality while reducing costs.

Historically, we have relied on a small number of overseas vendors for equipment purchases, but in recent years, we have diversified and localized our equipment purchases by shifting some of our purchases to Korean vendors. As a result of such efforts, most of our equipment for our facilities in Korea in 2019 was purchased from Korean vendors on an invoiced basis.

Our engineers begin discussions with equipment manufacturers far in advance of the planned installation of equipment in a new fabrication facility, and we typically execute a letter of intent with the vendors in advance of our planned installation to ensure timely delivery of main equipment with long-term delivery schedules. Engineers from our vendors typically accompany the new equipment to our fabrication facilities to assist in the installation process to ensure proper operation. In addition, we outsource certain manufacturing processes to third party processers from time to supplement our processing capacity, and in certain cases, we maintain strategic relationships with such third party processors.

Quality Control

We believe that our advanced production capabilities and our reputation for high quality and reliable products have been important factors in attracting and retaining key customers. We have implemented quality inspection and testing procedures at all of our fabrication facilities and assembly facilities. Our quality control procedures are carried out at three stages of the manufacturing process:

- incoming quality control with respect to components and raw materials;
- in-process quality control, which is conducted at a series of control points in the manufacturing process; and
- outgoing quality control, which focuses on packaging, delivery and post-delivery services to customers.

With respect to incoming quality control, we perform quality control procedures for the raw materials and components that we purchase. These procedures include testing samples of large batches, obtaining vendor testing reports and testing to ensure compatibility with other components and raw materials, as well as vendor qualification and vendor rating. Our in-process quality control includes various programs designed to detect, as well as prevent, quality deviations, reduce manufacturing costs, ensure on-time delivery, increase in-process yields and improve field reliability of our products. We perform outgoing quality control based on burn-in testing and final visual inspection of our products and accelerated life testing of samples. We inspect and test our completed display panels to ensure that they meet our high production standards. We also provide post-delivery services to our customers, and maintain warranty exchange inventories in regional hubs to meet our customers' needs.

Our quality assurance team works to ensure effective and consistent application of our quality control procedures, which include six-sigma quality control procedures, and to introduce new methodologies that could further enhance our quality control procedures. Our quality assurance programs have received accredited ISO/IATF 16949 certifications. The ISO/IATF certification process involves subjecting our manufacturing processes and quality management systems to reviews and observation for various fixed periods. ISO/IATF certification is required by certain European countries and the United States in connection with sales of industrial products in those countries, and provides independent verification to our customers regarding the quality control measures employed in our manufacturing and assembly processes.

Insurance

We currently have property insurance coverage, including business interruption coverage, for our production facilities in Gumi and Paju, Korea, for up to \(\mathbb{W}\)2.7 trillion in the aggregate, and for our panel fabrication facilities located in Guangzhou, China for up to CNY 12.2 billion in the aggregate. We also have insurance coverage for work-related injuries to our employees, accidents during overseas business travel, damage during construction, damage to products and equipment during shipment, damage to equipment during installation at our fabrication facilities, automobile accidents, bodily injury and property damage from gas accidents, as well as mandatory unemployment insurance for our workers and director and officer liability insurance. In addition, we maintain general and product liability, employment practice liability, aviation product liability and world-wide cargo insurance. Our dormitories in Gumi and Paju, Korea, have fire insurance coverage for up to approximately \(\mathbb{W}\)0.5 trillion in the aggregate. Our subsidiaries also have insurance coverage for damage to office fixtures and equipment and life and disability insurance for their employees. All of our overseas manufacturing subsidiaries also carry property insurance, business interruption insurance and commercial general liability insurance.

Environmental Matters

Our production processes generate various forms of chemical and other industrial waste, waste water and greenhouse gas emissions at various stages in the manufacturing process. We have installed various types of anti-pollution equipment for the treatment and recycling of such waste products and aggressively engage in greenhouse gas emission reduction and energy conservation efforts.

As a member of the World Display device Industry Cooperation Committee, or WDICC, a TFT-LCD industry organization focusing on environmental issues, we have voluntarily agreed to reduce emission of greenhouse gases, such as nitrogen trifluoride, or NF3, and sulfur hexafluoride, or SF6, gases, by developing and adopting cost-effective abatement technologies and systems and increasing the number of abatement systems installed in our facilities. We installed NF3 abatement systems at all of our production lines when the production facilities were being constructed. In addition, we have voluntarily installed SF6 abatement systems in P61 and P7, and we have voluntarily developed processes that utilize substitute gases with lower global warming potential than SF6 and have applied such processes in P62, P8 and P9.

In the case of the European Union's Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU, with the adoption of Directive (EU) 2015/863 in 2016, four additional substances (four phthalate substances) were added to the six already restricted substances, which additional restrictions became effective as of July 22, 2019. In order to address the latent risk elements of the four phthalate substances that became restricted in 2019 and to establish a more stable management system, we implemented in 2016 a preemptive response process with respect to such four phthalate substances. In implementing this process, we collaborated with external agencies to ascertain regulatory trends and establish our response strategy, and we formulated and applied effective management measures through the collaborative efforts of our development, procurement and quality teams. Beryllium (Be) was not designated internationally as a mandatorily restricted substance but has continued to be the subject of discussion for restriction, and certain of our customers have designated it as a restricted substance not to be used in products. Accordingly, we have completed verification of the parts used in products for customers who have banned the use of beryllium. We have also conducted verification of the parts used in products for all customers who are expected to implement a ban and we have established a beryllium verification process for parts in development. Through such efforts, we have established a voluntary hazardous substance response process that can be expanded to products for all customers, not only those who have requested a response. For the more efficient operation of our waste water treatment equipment, we have also entered into an agreement with Techcross Environmental Services Inc. for the operation of our water treatment system.

Operations at our manufacturing plants are subject to regulation and periodic scheduled and unscheduled on-site inspections by the Korean Ministry of Environment and local environmental protection authorities. We believe that we have adopted adequate anti-pollution measures for the effective maintenance of environmental protection standards consistent with local industry practice, and that we are in compliance in all material respects with the applicable environmental laws and regulations in Korea, including the Framework Act on Low Carbon, Green Growth, the Korean government, under which we are required to submit periodic greenhouse gas emission and energy usage statements, performance reports and greenhouse gas emission and energy usage reduction plans to the Korean government. Expenditures related to such compliance may be substantial and are generally included in capital expenditures. As required by Korean law, we employ licensed environmental specialists for each environmental area, including air quality, water quality, toxic materials and radiation.

We have been certified by the Korean Ministry of Environment as a "Green Company", with respect to our environmental record for our P1 facility in Gumi. In addition, we have received ISO 14001 and ISO 50001 certifications from the International Organization for Standardization with respect to our energy management systems for our P1 through P9 facilities and our Gumi and Paju module production plants. Our module production plants in Nanjing, Yantai and Guangzhou, China have also received ISO 14001 certification. Our GP1 plant (within our CA fabrication facility) was the first plant in China to receive the "Green Plant" designation under China's Green China Policy, Our GP1 plant has also received ISO 14001 and OHSAS 18001 certifications. Furthermore, in recognition of our continued water conservation activities (reuse system investments, etc.) and greenhouse gas emission reduction activities (process gas and energy reduction, etc.), we attained the highest level, Leadership A, and received the grand prize award at the CDP Water Korea Best Awards in 2016 from the Carbon Disclosure Project, which was presided over by the Carbon Disclosure Project Korea Committee. We also attained a Leadership A in the climate change information technology sector and received a Carbon Management Honors award in both 2016 and 2017. In 2017, in recognition of efficient control, management and operating systems implemented in our manufacturing facilities, we received the top-level certification, Level 1, under the Factory Energy Management System evaluation presided by the Korea Energy Agency. Furthermore, in November 2017, we received the highest commendation, the Presidential Award, in the Korean Energy Efficiency Awards presided by the Korean Ministry of Industry, Trade and Energy in recognition of our energy management practices and energy saving measures, and we also obtained a certificate of excellence in the Energy Management System Evaluation from the same ministry. In May 2018, we received the Clean Energy Ministerial Insight Award, presented at the Clean Energy Ministerial Meetings, and also received certification for our energy business management (Energy Champion) presided by the Ministry of Trade, Industry and Technology and the Korea Energy Agency in November 2018. Additionally, in 2018, we became the first display panel company to receive the "Green Technology Certification" from the Korean Ministry of Science and ICT for improving the light efficiency technology of OLED to promote energy savings.

Joint Ventures

We consider joint ventures an important part of our business, both operationally and strategically. We have used joint ventures to enter into new geographic markets, in particular China, to gain new customers and/or strengthen positions with existing customers and to procure certain components and raw materials. When entering new geographic markets where we do not have substantial local experience and infrastructure, teaming up with a local partner can reduce capital investment by leveraging the pre-existing infrastructure of local partners. In addition, local partners in these markets can provide knowledge and insight into local customs and practices and access to local suppliers of raw materials and components. All of these advantages can reduce the risk, and thereby enhance the prospects for the success, of an entry into a new geographic market. If the partner of the joint venture already has an established customer base, it can also be an effective means to acquire such new customers. Joint venture arrangements also allow us to access technology we would otherwise have to develop independently, thereby reducing the time and cost of development. They can also provide the opportunity to create synergies and applications of technology that would not otherwise be possible.

From time to time, we have pursued a number of joint venture initiatives. For example, in September 2012, we entered into a joint venture agreement with Guangzhou GET Technologies Development Co., Ltd., or GET Tech, and Shenzhen SKYWORTH-RGB Electronic Co., Ltd., or Skyworth, establishing LG Display (China) Co., Ltd., which owns and operates our CA fabrication facility in Guangzhou, China. See "Item 4.D. Property, Plants and Equipment— Current Facilities." We acquired a 70.0% equity interest in LG Display (China) and invested a total of approximately US\$927 million over a period of two years from the date of incorporation of LG Display (China). Each of GET Tech and Skyworth owns a 20.0% and 10.0% equity interest in LG Display (China), respectively. In addition, in July 2018, we established and acquired a 69% ownership interest in a joint venture with the government of Guangzhou, LG Display High-Tech (China) Co., Ltd., to construct a fabrication facility to manufacture next generation large-sized OLED panels in Guangzhou, China. We currently own a 75% equity interest in LG Display High-Tech (China) and have invested approximately \tilde{W}5.0 trillion in capital expenditures for the joint venture, and we plan to finalize our preparations for the commencement of operation at the new CO fabrication facility within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors.

We intend to continue to seek strategic acquisition and joint venture opportunities and conduct feasibility studies with respect to establishing new manufacturing subsidiaries in strategic locations to deepen our market penetration, achieve economies of scale, increase our customer base, expand our geographical reach and reduce costs.

Subsidiaries

The following table sets forth summary information for our subsidiaries as of December 31, 2019:

Subsidiary	Main Activities	Jurisdiction of Organization	Date of Organization	Investme of the	al Equity nt (in millions applicable rrency)	Percentage of Our Ownership Interest	Percentage of Our Voting Power
LG Display Taiwan Co., Ltd.	Sales	Taiwan	April 1999	NT\$	116	100%	100%
LG Display America, Inc.	Sales	U.S.A.	September 1999	US\$	411	100%	100%
LG Display Japan Co., Ltd.	Sales	Japan	October 1999	¥	95	100%	100%
LG Display Germany GmbH	Sales	Germany	November 1999	€	960	100%	100%
LG Display Nanjing Co., Ltd.	Manufacturing	China	July 2002	CNY	3,020	100%	100%
LG Display Shanghai Co., Ltd.	Sales	China	January 2003	CNY	4	100%	100%
LG Display Poland Sp. zo.o. (1)	Manufacturing	Poland	September 2005	PLN	511	100%	100%
LG Display Guangzhou Co., Ltd.	Manufacturing	China	June 2006	CNY	1,655	100%	100%
LG Display Shenzhen Co., Ltd.	Sales	China	August 2007	CNY	4	100%	100%
LG Display Singapore Pte. Ltd.	Sales	Singapore	January 2009	US\$	1	100%	100%
LG Display Yantai Co., Ltd.	Manufacturing	China	April 2010	CNY	1,008	100%	100%
L&T Display Technology (Fujian) Ltd.	Manufacturing						
	and sales	China	January 2010	CNY	59	51%	51%
Nanumnuri Co., Ltd.	Workplace		-				
	services	Korea	March 2012	W	800	100%	100%
LG Display (China) Co., Ltd.	Manufacturing						
	and sales	China	December 2012	CNY	5,763	70%	70%
Unified Innovative Technology, LLC	Managing intellectual property	U.S.A.	March 2014	US\$	9	100%	100%
Global OLED Technology LLC	Managing intellectual property	U.S.A.	December 2009	US\$	138	100%	100%
LG Display Guangzhou Trading Co., Ltd.	Sales	China	April 2015	CNY	1,224	100%	100%
20 Display Guangenea Trading Co., 2tal	Sures	Cimia	110111 2010	VND	2,187,870	10070	100,0
				,,,,	2,107,070		
LG Display Vietnam Haiphong Co., Ltd.	Manufacturing	Vietnam	May 2016	US\$	500	100%	100%
Suzhou Lehui Display Co., Ltd.	Manufacturing					,	
The state of the s	and sales	China	July 2016	CNY	637	100%	100%
LG Display Fund I LLC	Investing in new emerging companies	U.S.A.	July 2018	US\$	6	100%	100%
	companies	C.D.7 1.	July 2010	Ουψ	O	100/0	100/0

Subsidiary	Main Activities	Jurisdiction of Organization	Date of Organization	Total Equity Investment (in millions of the applicable currency)		Percentage of Our Ownership Interest	Percentage of Our Voting Power
LG Display High-Tech (China) Co., Ltd.	Manufacturing and sales	China	July 2018	CNY	10.920	75%	75%
Money Market Trust	Money market	Cillia	Not	CNI	10,920	7370	7370
	trust	Korea	applicable	₩	34,700	100%	_

⁽¹⁾ We commenced a liquidation process of LG Display Poland Sp. zo.o. in July 2019.

N.B. See Note 1(b) of the notes to our financial statements for changes to our subsidiaries during the year ended December 31, 2019.

Item 4.C. Organizational Structure

These matters are discussed under Item 4.B. where relevant.

Item 4.D. Property, Plants and Equipment

Current Facilities

The following table sets forth the size, location and primary use of our current fabrication facilities.

Fabrication Facility	Generation(1)	Mass Production Commencement	Location	Gross Floor Area (in square meters)	Primary Types of Panels Produced
Korea					
P5 (2)					TFT-LCD for notebook computer, mobile and other
	5	May 2003	Gumi, Korea	93,227	applications
P62					TFT-LCD for notebook computer, desktop monitor, and
	6	April 2009	Gumi, Korea	101,617	television
AP3 (3)	6	February 2014	Gumi, Korea	288,634	Plastic OLED for mobile and other applications
P7 (4)	7	January 2006	Paju, Korea	310,890	TFT-LCD for television and desktop monitor
P8 (5)	8	March 2009	Paju, Korea	538,052	TFT-LCD for television and desktop monitor
AP2 (6)	4	July 2010	Paju, Korea	See P8 above	Plastic OLED for mobile and other applications
OP1 (7)	8	January 2013	Paju, Korea	See P8 above	OLED for television
P9 (8)					TFT-LCD for desktop monitor, notebook computer, tablet
	8	June 2012	Paju, Korea	485,534	computer
AP4 (9)	6	July 2019	Paju, Korea	See P9 above	Plastic OLED for mobile and other applications
Overseas					
CA (10)	8	September 2014	Guangzhou, China	245,159	TFT-LCD for television
CO	8	N.A. (11)	Guangzhou, China	446,539	OLED for television

⁽¹⁾ Based on internal reference to evolutions in facility design, material flows and input substrate sizes. There are several definitions of "generations" in the display industry. There has been no consensus in the display industry on a uniform definition. References to generations made in this annual report are based on our current definition of generations as indicated in the table below.

Substrate Sizes (in millimeters)	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8
	680 x 880	1,000 x 1,200	1,500 x 1,800	1,870 x 2,200	2,200 x 2,500
	730 x 920	1,100 x 1,250	1,500 x 1,850	1,950 x 2,250	
		1,100 x 1,300			
		1,200 x 1,300			

- (2) Gross floor area of P5 fabrication facility includes gross floor area of OLED light production lines.
- (3) Includes the production line formerly referred to as E5, which began mass production in August 2017.
- (4) We plan to cease production at P7 facility by the end of 2020.
- (5) Gross floor area of P8 fabrication facility includes the gross floor area of AP2 and OP1 fabrication facilities, which are located in the same complex.
- (6) Includes the production line formerly referred to as E2. The gross floor area of this fabrication facility is included within the P8 fabrication facility.
- (7) Includes the production lines formerly referred to as E3 and E4. The gross floor area of this fabrication facility is included within the P8 fabrication facility.
- (8) Gross floor area of P9 fabrication facility includes the gross floor area of AP4 fabrication facility, which is located in the same complex.

- (9) Includes the production line formerly referred to as E6. The gross floor area of this fabrication facility is included within the P9 fabrication facility.
- (10) Gross floor area of CA fabrication facility includes the gross floor area of GP1, GP2 and extended facilities.
- (11) We plan to finalize our preparations for the commencement of operations at our CO fabrication facility within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors.

For input substrate size, initial design capacity and year-end input capacity as a result of ramp-up for each of our fabrication facilities, please see "Item 5.A. Operating Results—Overview—Manufacturing Productivity and Costs."

We also operate module assembly facilities in China (Nanjing, Guangzhou and Yantai), Korea (Gumi and Paju) and Vietnam (Haiphong). In addition, we operate a research and development facility in Paju, Korea, which we refer to as the R&D Center. We opened the R&D Center in April 2012 to consolidate our research and development efforts for next-generation display technologies. The following table sets forth the size of our R&D Center and module assembly facilities.

	Gross Floor Area	
Facility	(in square meters)	Mass Production Commencement
R&D Center	71,696	Not applicable (opened in April 2012)
Gumi assembly facility	301,779	January 1995
Nanjing assembly facility	150,760	May 2003
Paju assembly facility	226,758	January 2006
Wroclaw assembly facility (1)	N/A	February 2007
Guangzhou assembly facility	139,095	December 2007
Yantai assembly facility	81,256	May 2010
Haiphong assembly facility	347,100	July 2017

⁽¹⁾ We ceased production and closed our Wroclaw assembly facility in July 2019. During the year ended December 31, 2019, we completed the sale of the assets of such facility to LG Chem Poland Sp. zo.o., an affiliate of LG Corp., and recognized a gain of \(\formsymbol{W}\)8 billion from such disposal as other income.

Capital Expenditures

As part of our ongoing expansion plans, we have commenced mass production of plastic OLED panels at our AP3 and AP4 fabrication facilities beginning in August 2017 and July 2019, respectively. In July 2017, we announced plans to make investments in an aggregate amount of up to \text{\$\psi}7.8\$ trillion in new large-size OLED and plastic OLED fabrication facilities in Paju, Korea, including our new AP4 fabrication facility, and in July 2019, we further announced plans to make additional investments of \text{\$\psi}3.0\$ trillion in the previously announced new large-size OLED production lines. We are in the process of developing and assessing the specifics of such planned investments, including the timing. In response to and in anticipation of growing demand in the China market, in July 2017, we announced our plan to establish a joint venture with the government of Guangzhou to construct a fabrication facility to manufacture next generation large-sized OLED panels, which was established under the name of LG Display High-Tech (China) Co., Ltd., in July 2018. We currently hold a 75% ownership interest in the joint venture and the government of Guangzhou holds the remaining 25% ownership interest. We have invested approximately \text{\$\psi}5.0\$ trillion in capital expenditures for the joint venture, and we plan to finalize our preparations for the commencement of operation at the new CO fabrication facility within the first half of 2020, while the expected timing for commencing mass production of large-sized OLED panels at such facility remains subject to the state of the ongoing global COVID-19 pandemic, among other factors.

We currently expect that, in 2020, our total capital expenditures on a cash out basis will be lower compared to 2019 and will be used primarily to continue to fund our previously announced investments related to facilities for OLED panels. Such expected capital expenditures are subject to periodic assessment, and we cannot provide any assurance that such expected capital expenditures may not change materially after assessment. We may undertake further expansion projects in the future with respect to our existing facilities as our overall business strategy may require.

Item 4A. UNRESOLVED STAFF COMMENTS

We do not have any unresolved comments from the SEC staff regarding our periodic reports under the Exchange Act.

Item 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

Item 5.A. Operating Results

Overview

Our results of operations are affected principally by overall market conditions, our manufacturing productivity and costs, and our product mix.

Market Conditions

The display industry in which we operate is affected by market conditions that are often outside the control of individual manufacturers. Our results of operations might fluctuate significantly from period to period due to market factors, such as seasonal variations in demand, global economic conditions, external factors that impact the supply chain, surges in production capacity by competitors and changes in technology. Over the past decade, the display industry has grown significantly as a result of cost reductions and product improvements that stimulated demand for TFT-LCD and OLED panels. With respect to the TFT-LCD industry, the industry grew from 527 million units in 2009 to 2,618 million units in 2019 and market revenue grew from US\$64 billion to US\$81 billion during the same period according to IHS Technology.

While TFT-LCD panels are still predominant in the display industry, the industry in recent years has witnessed the introduction of alternative display panels based on new technologies, such as OLED panels. In particular, we and some of our competitors already engage in mass production of OLED panels. Currently, small-sized panels for use in mobile devices such as smartphones make up the bulk of the OLED panel market, accounting for almost 91.5% of industry revenue from global sales of OLED panels in 2019. However, as of 2019, the OLED market was relatively small compared to the TFT-LCD market. We believe, however, that the market may change rapidly as a growing array of OLED panels for various applications and sizes are introduced to the market and advances in the related technology and manufacturing processes enable mass production in a cost-efficient manner. In 2014, we commenced mass production of 55-inch, 65-inch and 77-inch Ultra HD OLED television panels earlier than our competitors at our OP1 fabrication facility. In August 2017 and July 2019, we commenced mass production of plastic OLED panels for mobile and other applications at our AP3 and AP4 fabrication facilities, respectively.

While the display industry has grown rapidly, it has also experienced business cycles with significant and rapid price declines from time to time. Historically, display panel manufacturers have increased display area fabrication capacity rapidly. Capacity expansion occurs especially rapidly when several manufacturers ramp-up new factories at the same time. During such surges in the rate of supply growth, our customers are able to exert downward pricing pressure, leading to sharp declines in average selling prices and significant fluctuations in our gross margin. In addition, regardless of relative capacity expansion, we expect average selling prices of our existing products to decline as the cost of manufacturing declines due to technology advances and component cost reductions. Conversely, constraints in the industry supply chain or increased demand for new technology products have led to increased prices for display panels in some past periods.

According to IHS Technology, the display industry for panels that are nine inches or larger contracted in 2019 compared to 2018, with total market revenue decreasing from US\$63 billion in 2018 to US\$56 billion in 2019. The average selling price of those panels decreased during the same period by approximately 9% from approximately US\$81 in 2018 to US\$73 in 2019.

We strive to mitigate the effect of industry cyclicality and the resulting price fluctuations by planning capacity expansions and capacity allocations, or shifting our product mix, to capture premium prices in specific emerging product categories. As part of our strategy, we have been proceeding with the construction of new fabrication facilities and additional investments to upgrade and convert existing facilities and production lines to produce differentiated specialty display panels based on newer technologies that command higher premiums. See "Item 4.D. Property, Plants and Equipment—Capital Expenditures."

In addition, we are vigorously pursuing our strategy to develop differentiated specialty products and technologies that better address our customers' needs, thereby delivering greater value to our customers. In many cases, these efforts go hand-in-hand with our efforts to develop products based on new technologies that allow us to realize greater premiums. For example, we have allocated significant resources to the development and production of specialized OLED panels for television and public displays (such as our "Wallpaper" OLED panels, "Cinematic Sound OLED" sound integrated panels, rollable OLED display panels and transparent OLED display panels), display panels utilizing Ultra HD and AH-IPS technology for various tablet computers, mobile devices, notebook computers, desktop monitors and plastic OLED technology for smartphones, automotive products and wearable devices. In particular, we are deploying greater resources into large-sized OLED television panels in order to maintain our early competitive edge in such market, and into small- and medium-sized plastic OLED panels for various applications in order to expand our market presence.

Another key aspect of our strategy is to foster close cooperation with our customers and build on our strategic relationships with many of our key suppliers. Success of a new product depends on, among other things, working closely with our customers to gain insights into their product needs and to understand general trends in the market. At the same time, we often work with our equipment suppliers to design equipment that can enhance the efficiency of our production processes for such new products.

The overall prospects for the global economy and, in turn, the market conditions for the display panel industry, remain uncertain, especially in light of the ongoing global COVID-19 pandemic, which is likely to have a significant negative effect on the global economy. See "Item 3.D. Risk Factors—Risks Relating to Our Industry—A global economic downturn may result in reduced demand for our products and adversely affect our profitability" and "Item 3.D. Risk Factors—Risks Relating to Our Company—Earthquakes, tsunamis, floods, severe health epidemics (including the ongoing global COVID-19 pandemic and any possible recurrence of other types of widespread infectious diseases) and other natural calamities could materially adversely affect our business, results of operations or financial condition." In part due to negative effects of COVID-19 (including temporary disruptions in our production and supply chains and a decrease in demand for the products of our end-brand customers partly resulting from disruptions and/or suspensions of retail activities in major global markets) as well as our ongoing efforts to reduce the production level of less profitable types of TFT-LCD panels in recent years (including through our plans to cease the production of TFT-LCD television display panels in Korea by the end of 2020), we experienced a material decrease in our revenue and an increase in our net loss for the first three months of 2020 compared to the first three months of 2019. We also expect that COVID-19 will continue to adversely impact demand for our products during the second quarter of 2020, as disruptions and/or suspensions in retail activities in the global markets continue, which will likely have an adverse effect on our revenue and profitability. We cannot provide any assurance that demand for our products can be sustained at current levels in future periods or that the demand for our products will not decrease again in the future due to such economic downturns, which may adversely affect our profitability.

Manufacturing Productivity and Costs

We seek to continually enhance our manufacturing productivity and thereby reduce the cost of producing each panel. We have significantly expanded our production capacity by investing in fabrication facilities that can process increasingly larger-size glass substrates. The following table shows the input substrate size, initial design capacity and year-end input capacity as a result of ramp-up for each of our fabrication facilities as of the dates indicated:

	Primary Input Substrates Size	Year-end Input Capacity (1)			
Facility	(in millimeters)	2017	2018	2019	
	· ·	(in input	substrates per	month)	
AP2	730 x 920	56,815	12,732	7,182	
AP3	1,500 x 925	5,700	8,943	7,400	
AP4 ⁽²⁾	1,500 x 925	N/A	N/A	11,290	
OP1	2,200 x 2,500	55,320	72,720	80,820	
P5	1,100 x 1,250	69,000	76,000	72,000	
P62	1,500 x 1,850	49,000	45,000	46,000	
P7 ⁽³⁾	1,950 x 2,250	230,100	229,455	222,750	
P8	1,950 x 2,500	277,436	236,180	217,030	
P9	2,200 x 2,500	68,276	81,830	82,632	
CA	2,200 x 2,500	211,000	213,000	216,000	

N/A = Not applicable.

- (1) Year-end input capacity is the total input substrates for the month that had the highest monthly input substrates during the fiscal year.
- (2) Commenced operation in July 2019.
- (3) We plan to cease production at our P7 fabrication facility by the end of 2020.

Our cash outflows for capital expenditures amounted to \$\pmu6,592\$ billion in 2017, \$\pmu7,942\$ billion in 2018 and \$\pmu6,927\$ billion (US\$5,995 million) in 2019. Such capital expenditures relate mainly to investments in Guangzhou, China (primarily the construction of the CO fabrication facility for the production of large-sized OLED display panels in a joint venture with the government of Guangzhou) and investments in our AP3 and AP4 fabrication facilities for the production of plastic OLED display panels in each of these years. Capital expenditures were also incurred for the acquisition of new equipment during the same period. Our depreciation expense as a percentage of revenue increased from 10.0% in 2017 to 12.8% in 2018 and to 13.9% in 2019. Such increase in 2019 compared to 2018 was a result of an increase in our depreciation expense, which in turn was mainly attributable to an increase in our property, plant and equipment, while our revenue decreased over the same period of time. We currently expect that, in 2020, our total capital expenditures on a cash out basis will be lower compared to 2019 and will be used primarily to continue to fund our previously announced investments related to facilities for OLED panels. Such expected capital expenditures are subject to periodic assessment, and we cannot provide any assurance that such expected capital expenditures may not change materially after assessment.

Since our inception, we have designed our fabrication facilities in-house and co-developed most equipment sets with our suppliers. These efforts have enabled us to gain valuable experience in designing and operating next-generation fabrication facilities capable of processing increasingly larger-size glass substrates. We have been able to leverage this experience to achieve and maintain high production output and yields at our fabrication facilities, thereby lowering costs. In addition, in recent years, we have substituted a portion of our equipment purchased from overseas vendors with purchases from local vendors to diversify our supply source and reduce costs.

We also continue to make various process improvements at our fabrication facilities, including enhancing the performance of process equipment, efficiency of material flows and quality of process and product designs. For example, we have reduced the number of mask steps in the TFT process from four to three with respect to certain models, thereby enabling us to process a higher number of substrates in a given period of time. Such process improvements result in increased unit output of our fabrication facilities without significant capital investment, thus enabling us to reduce fixed costs on a per panel basis. In addition, in commencing mass production of large-sized OLED products, we have made modifications to certain of our existing TFT-LCD production lines to convert them into OLED panel production lines. Because our large-sized OLED panels employ oxide TFT backplane technology, which can be produced using manufacturing processes similar to the processes used to manufacture TFT-LCD panels, relatively little modification has been necessary, thereby reducing the costs of additional investments needed for the conversion of our production lines.

Raw materials comprise the largest component of our costs. We monitor the prices at which we can procure raw materials from suppliers and to the extent overseas suppliers are able to provide raw materials at competitive prices, we have diversified our supplier base by procuring raw materials from such overseas suppliers. We have also been able to leverage our scale and leading industry position to obtain competitive prices from our suppliers.

The size of our operations has also expanded considerably in recent years, enabling us to benefit from economies of scale. As a result of the above factors, our cost of sales per square meter of net display area, which is derived by dividing total costs of sales by total square meters of net display area shipped, decreased by 6.5% from 2017 to 2018. However, in 2019, our cost of sales per square meter of net display area increased by 11.6% mainly due to the depreciation of the Korean Won against the U.S. dollar during 2019 as well as an increase in our product mix of the proportion of OLED panels, which are generally more costly to manufacture than TFT-LCD panels, in light of the continued overcapacity in the global TFT-LCD market and further capital investments by other suppliers, particularly from China, as well as in response to an increase in market demand for OLED products.

Our cost reduction efforts in recent years also include our decision to discontinue the production of TFT-LCD television panels in Korea by the end of 2020 and the implementation of voluntary retirement programs in 2018 and 2019.

Product Mix

Our product mix reflects our strategic capacity allocation among various product markets, and is continually reviewed and adjusted based on the demand for, and our assessment of the profitability of, display panels in different markets and size categories. In recent years, we believe market demand has been shaped by a shift toward larger-sized panels, especially in the television, desktop and smartphone panel markets, and a shift toward differentiated specialty products based on newer technologies, including OLED technology, especially in the display panel markets for Ultra HD televisions, ultra-thin notebooks, tablet computers and mobile and other applications. In response to such market trends, we have increased our production capacity and sales of OLED panels and have also developed and commercialized differentiated specialty products for a variety of applications. For example, with respect to our television display panel product portfolio, the proportion of sales of our 65-inch, 77-inch, 86-inch and 98-inch television panels in our product mix increased between 2017 and 2019. In addition, with respect to our desktop monitor products, we have expanded our product portfolio to offer panels with Full HD resolution primarily ranging from 21.5 inches to 49 inches in a variety of screen aspect ratios, including 21:9 screen aspect ratio for ultra-widescreen monitors, and additional features such as borderless bezels and curved displays, in order to capture the market for large-size desktop monitors. In early 2019, as part of our efforts to further broaden the range of sizes of our desktop monitor products, we showcased sample larger-sized monitors, including our 55-inch OLED desktop monitor, through collaboration with our strategic customers. We have also increased our production capacity of mobile panels for large-screen smartphones, which constitutes a part of our mobile and other applications segment, with specialty features and newer technologies, including full screen displays, flexible displays and Ultra HD technology utilizing WRGB sub-pixel structure. At the same time, in response to increasing market demand for differentiated specialty products, we have developed and commercialized, for example, panels for tablet computers utilizing AH-IPS technology with increasingly higher resolution and other features, panels for smartphones, automotive products and wearable devices utilizing plastic OLED technology and panels for large-sized television utilizing our Ultra HD and OLED technologies.

As part of our continued efforts to increase the proportion of higher-margin OLED panels in our product mix, we have been reducing the production level of less profitable types of TFT-LCD panels in recent years, and in January 2020, we announced our plans to cease the production of TFT-LCD television display panels in Korea by the end of 2020 in light of continued overcapacity in the market and our increased focus on producing OLED panels.

The following table sets forth our revenue by product category for the years indicated and revenue in each product category as a percentage of our total revenue:

Year ended December 31,							
2017	'	2018		2019		<u>, </u>	
Sales	%	Sales	%	Sales	Sales (3)	%	
	(in billion	s of Won and n	nillions of US	\$, except for po	ercentages)		
₩11,718	42.2%	₩ 9,727	40.0%	₩ 7,998	US\$ 6,922	34.1%	
2,244	8.1	2,837	11.7	2,784	2,409	11.9	
4,393	15.8	4,040	16.6	4,028	3,486	17.2	
2,370	8.5	1,991	8.2	2,251	1,948	9.6	
7,020	25.3	5,699	23.4	6,374	5,516	27.2	
W 27,745	99.8%	W 24,294	99.8%	W 23,435	US\$ 20,281	99.8%	
45	0.2	43	0.2	41	35	0.2	
W 27,790	100.0%	W 24,337	100.0%	W 23,476	US\$ 20,316	100.0%	
	Sales W11,718 2,244 4,393 2,370 7,020 W27,745 45	\text{\text{\text{(in billion}}} \text{\text{\text{(in billion}}} \text{\text{\text{(in billion}}} \text{\text{\text{2.2\%}}} \\ \text{2.2\%} \\ \text{2.2\%} \\ \text{2.2\%} \\ \text{2.3\%}	2017 2018 Sales % (in billions of Won and not with the property) ₩11,718 42.2% ₩ 9,727 2,244 8.1 2,837 4,393 15.8 4,040 2,370 8.5 1,991 7,020 25.3 5,699 ₩27,745 99.8% ₩24,294 45 0.2 43	2017 2018 Sales % Sales % (in billions of Won and millions of US ₩11,718 42.2% ₩ 9,727 40.0% 2,244 8.1 2,837 11.7 4,393 15.8 4,040 16.6 2,370 8.5 1,991 8.2 7,020 25.3 5,699 23.4 ₩27,745 99.8% ₩24,294 99.8% 45 0.2 43 0.2	2017 2018 Sales % Sales Sales Sales Sales W11,718 42.2% W 9,727 40.0% W 7,998 2,244 8.1 2,837 11.7 2,784 4,393 15.8 4,040 16.6 4,028 2,370 8.5 1,991 8.2 2,251 7,020 25.3 5,699 23.4 6,374 W27,745 99.8% W24,294 99.8% W23,435 45 0.2 43 0.2 41	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

- (1) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.
- (2) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.
- (3) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of \(\frac{\pmathbf{W}}{1,155.46}\) to US\$1.00, the noon buying rate in effect on December 31, 2019 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

The following table sets forth our sales volume by product category for the years indicated and as a percentage of our total panels sold:

	Year ended December 31,					
	2017		2018		2019	· · · · · · · · · · · · · · · · · · ·
	Number of		Number of		Number of	
Panels for	Panels	%	Panels	%	Panels	%
		(in thou	isands, except	for percent	ages)	
Televisions	52,108	18.1%	51,966	20.8%	44,833	19.4%
Notebook computers	26,999	9.4	30,471	12.2	28,983	12.5
Desktop monitors (1)	37,000	12.8	36,693	14.7	34,807	15.0
Tablet computers	26,255	9.1	25,015	10.0	23,167	10.0
Mobile and other applications (2)	146,162	50.7	105,142	42.2	99,569	43.0
Total	288,524	100.0%	249,287	100.0%	231,359	100.0%

- (1) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.
- (2) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.

Average Selling Prices

Our product mix has an impact on our average selling prices. In addition to business cycles, industry-wide supply and demand balances and other market- or industry-wide variables, our product cost and price vary with the product display area, as well as the technology and specification of such product. Therefore, the average selling price of our products can vary over time as a result of business cycles and the choices we make in capacity allocation for specific products. The overall average selling price of our display panels can fluctuate significantly. Our average selling price per panel, which is derived by dividing total sales of goods by the total number of panels sold, increased by 1.3% from \text{W96,162} in 2017 to \text{W97,454} in 2018 and further increased by 3.9% to \text{W101,293} (US\$88) in 2019. In 2018 compared to 2017, our average selling price increased primarily due to an increase in the average selling price of panels for notebook computers and mobile and other applications, which in turn was mainly attributable to an increase in the average selling price for tablet computers and mobile and other applications, which in turn was mainly attributable to increases in the proportion of tablet display panels that feature directly bonded protective cover glass and the proportion of plastic OLED panels for mobile and other applications, which generally have higher selling prices.

The following table sets forth our average selling price per panel by markets for the years indicated:

		Average Selling Price (3)					
		Year ended December 31,					
	2017	2017 2018 2		9 (4)			
Televisions	W 224,879	W 187,180	W 178,395	US\$154			
Notebook computers	83,114	93,105	96,056	83			
Desktop monitors (1)	118,730	110,103	115,724	100			
Tablet computers	90,269	79,592	97,164	84			
Mobile and other applications (2)	48,029	54,203	64,016	55			
All panels	96,162	97,454	101,293	88			

- (1) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.
- (2) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.
- (3) Average selling price for each market represents revenue per market divided by unit sales per market.
- (4) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of \(\frac{\pmathbf{W}}{1,155.46}\) to US\$1.00, the noon buying rate in effect on December 31, 2019 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

Our average revenue per square meter of net display area, which is derived by dividing our total revenue by total square meters of net display area shipped, decreased by 13.6% from \\ \psi 667,726 in 2017 to \\ \psi 576,817 in 2018. In 2019, our average revenue per square meter of net display area shipped increased by 5.9% to \\ \psi 610,716 (US\\$529).

Critical Accounting Policies

We have prepared our consolidated financial statements in accordance with IFRS as issued by the IASB. These accounting principles require us to make certain estimates and judgments that affect the reported amounts in our consolidated financial statements. Our estimates and judgments are based on historical experience, forecasted future events and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may differ under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis. We believe the critical accounting policies discussed below are the most important to the portrayal of our financial condition and results of operations. Each of them is dependent on projections of future market conditions and they require us to make the most difficult, subjective or complex judgments. For a further description of the significant accounting policies and methods used in the preparation of our consolidated financial statements and new standards and amendments not yet adopted, see Note 3 of the notes to our financial statements.

Inventories

We state our inventory at the lower of cost and net realizable value. We make adjustments to reduce the cost of inventory to its net realizable value, if required, for estimated excess, obsolescence or impaired balances. Factors influencing these adjustments include changes in demand, technological changes, product life cycle, component cost trends, product pricing, and physical deterioration. Revisions to these adjustments would be required if these factors differ from our estimates. If future demand or market conditions for our products are less favorable than forecasted, we may be required to recognize additional write-downs, which would negatively affect our results of operations in the period in which the write-downs are recognized. The write-downs of inventories increased from \text{\text{\$\text{\$W}}}206 billion in 2017 to \text{\text{\$\text{\$W}}}313 billion in 2018 and to \text{\text{\$\text{\$W}}}473 billion (US\$409 million) in 2019. The increase as of December 31, 2019 compared to December 31, 2018 was due primarily to an increase in our inventory of plastic OLED panels. The amount of any such adjustment is recognized as cost of sales in the period for which the assessment relates.

In 2018, we reclassified mask and mold, which had previously been classified as inventories, as part of our property, plant and equipment, due to our expectation that such materials will be used for a period exceeding one year. As a result of such change, the amount of our inventories as of January 1, 2018 decreased by \text{\psi}111 billion while property, plant and equipment increased by the same amount. See "—Long-Lived Assets: Useful Lives, Valuation and Impairment."

Income Taxes

We have significant deferred income tax assets that may be used to reduce future income taxes. Our ability to utilize deferred income tax assets is dependent on our ability to generate future taxable income sufficient to utilize these deferred income tax assets before their expiration. Changes in estimates of our ability to realize our deferred tax assets are generally recognized in earnings as a component of our income tax (benefit) expense. At each reporting date, we review our deferred tax assets for recoverability considering historical profitability, projected future taxable income, the expected timing of reversals of existing temporary differences and expiration of unused tax losses and tax credits. If we are unable to generate sufficient future taxable income, or if we are unable to identify suitable tax planning strategies, the deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized. An increase in unrecognized deferred tax assets would result in an increase in our effective tax rate and could materially adversely impact our operating results in years we record a positive net profit. Conversely, if conditions improve and we determine that previously unrecognized deferred tax assets should be recognized because of changes in estimates of future taxable income or other conditions that affect our expected recovery of deferred tax assets, this would result in an increase in reported earnings in such period. In 2017, we reversed \(\prec{\psi}\)12 billion of such previously unrecognized tax credit carryforwards as it became probable that sufficient taxable profit would be available in light of improved market conditions. In 2018 and 2019, we did not recognize \(\psi 65\) billion and \(\psi 333\) billion (US\$288\) million), respectively, of deferred tax assets comprising tax credit carryforwards as it was no longer probable that such deferred tax assets would be utilized due to changes in estimates of future taxable income. See Note 23 of the notes to our financial statements. If the unrecognized deferred tax assets are recognized as deferred tax assets in a future period, the effective tax rate for the period could decrease in years we record a positive net profit. In estimating projected future taxable income, we considered a variety of factors, including recent overcapacity issues in the display industry and the industry-wide response to scale back capacity expansion plans and adjust utilization rates, as well as trends in demand for display products.

Provisions - Warranty Obligations

We recognize a provision for warranty obligations based on the estimated costs that we expect to incur under our basic limited warranty for our products. This warranty covers defective products and is normally valid for 18 to 36 months from the date of purchase by our customers. These liabilities are accrued when product revenue is recognized. Warranty costs primarily include raw materials and labor costs. Factors that affect our warranty liability include historical and anticipated rates of warranty claims on repairs, calculated based on our sales volume and cost per claim to satisfy our warranty obligation. There were no changes in assumptions or methods used which had a significant impact on the amount of warranty obligations from 2017 to 2019. As these factors are impacted by actual experience and future expectations, we periodically assess the adequacy of our recorded warranty liabilities and adjust the amounts as necessary. We recognized warranty obligations amounting to \text{\psi}102 billion, \text{\psi}122 billion and \text{\psi}230 billion (US\$199 million) as of December 31, 2017, 2018 and 2019, respectively. Warranty expenses decreased from \text{\psi}251 billion in 2017 to \text{\psi}235 billion in 2018, but significantly increased to \text{\psi}419 billion (US\$363 million) in 2019. The decrease from 2017 to 2018 was due primarily to a decrease in our sales revenue. The increase from 2018 to 2019 was due primarily to higher quality expectations for display panel products and the increase in the proportion of OLED panels, which generally have higher selling prices and require more sophisticated manufacturing technology than TFT-LCD panels, in our product mix.

Long-Lived Assets: Useful Lives, Valuation and Impairment

Property, plant and equipment are recorded at cost less accumulated depreciation and impairment over the estimated useful lives of the individual assets, with depreciation calculated on a straight line basis. The determination of an asset's useful life and salvage value requires judgment based on our historical and anticipated use of the asset. All of our new machinery is currently depreciated on a straight-line basis over four or five years. For goodwill and other intangible assets that have indefinite useful lives or that are not yet available for use, as the case may be, the recoverable amount is estimated each year at the same time irrespective of whether there is any indication of impairment.

We review the carrying amounts of long-lived assets or, if it is not possible to estimate the recoverable amount of an individual asset, cashgenerating units (which represents the smallest group of assets that includes the asset and generates cash inflows that are largely independent of the cash inflows from other assets of the group of assets) at each reporting date to determine whether there is any indication of impairment. Cash-generating units are determined through business interdependencies related to production facilities as we monitor our operations and make decisions about continuing or disposing of any assets or operations. If any indication of impairment exists, then the recoverable amount of the relevant asset or cash-generating unit is estimated. If circumstances require that a long-lived asset or cash-generating unit be tested for possible impairment, and the carrying value of such longlived asset or cash-generating unit is considered impaired after such test, an impairment charge is recorded for the amount by which the carrying value of the long-lived asset or cash-generating unit exceeds its estimated recovery value. The recoverable amount of a long-lived asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. Revenue and operating expenditures for the forecast period, growth rates for the subsequent years and the discount rate are used to estimate the value in use for impairment assessment, which assumptions generally have a significant effect on our impairment assessment. Fair value is determined by employing a variety of valuation techniques as necessary, including discounted cash flow models, quoted market values and third-party independent appraisals. The determination of the value in use and the fair value requires our judgments and assumptions about future operations. The determination of an asset's useful life, and the potential impairment of our long-lived assets could have a material effect on our results of operations. We recognized net impairment losses on property, plant and equipment of nil in 2017, W44 billion in 2018 and \(\prec{\psi}_1,550\) billion (US\$1,342\) million) in 2019. With respect to intangible assets, we recognized net impairment loss of \(\prec{\psi}_2\) billion in 2017, net reversal of impairment loss of \(\foating 0.3\) billion in 2018 and net impairment loss of \(\foating 249\) billion (US\$216\) million) in 2019. Such significant increases in impairment losses in 2019 were primarily attributable to a decrease in the estimated recovery value of our property, plant and equipment and intangible assets relating to our "Display (AD PO)" business (which refers to our business relating to the production of certain of the plastic OLED panels) and, to a much smaller extent, OLED light business, each of which has been determined as a separate cash generating unit, in light of the prevailing and anticipated future market conditions for these businesses and the determination of our plan to discontinue our production of OLED light products. Specifically, the business outlook for plastic OLED smartphones was more positive in 2018, when we were continuing to make capital investments on such business, than in 2019, as we began to experience a stagnant high-end smartphone market as well as a slowdown in smartphone replacement cycles while the level of our mass production of plastic OLED panels significantly increased during such year. We have accounted for such factors, among others, in recognizing our impairment loss for 2019. See Note 10(e) of the notes to our financial statements for further discussion of our assessment of impairment with respect to our plastic OLED and OLED light businesses.

In 2018, we reclassified mask and mold, which had previously been classified as inventories, as part of our property, plant and equipment, due to our expectation that such materials will be used for a period exceeding one year. Accordingly, we changed our estimate of the useful lives of mask and mold to two years. As a result of such change, the amount of our property, plant and equipment as of January 1, 2018 increased by \text{\text{W}}111 billion. Such change also had the effect of decreasing our depreciation expense by \text{\text{\text{W}}}110 billion in 2018.

Employee Benefits

Our accounting for employee benefits, which mainly consists of our defined benefit plan, involves judgments about uncertain events including, but not limited to, discount rates, life expectancy and future pay inflation. The discount rates are determined by reference to the yield at the reporting date on high quality corporate bonds that have maturity dates approximating the terms of our benefits obligations and that are denominated in the same currency in which the benefits are expected to be paid. Due to changing market and economic conditions, the underlying key assumptions may differ from actual developments and may lead to significant changes in our defined benefit plan. We immediately recognize all actuarial gains and losses arising from defined benefit plans in retained earnings.

Recent Accounting Changes

For a discussion of new standards, interpretations and amendments to existing standards that have been published, see Note 3 of the notes to our financial statements.

IFRS No. 9 "Financial Instruments"

IFRS No. 9 "Financial Instruments" regulates requirements for measurement and recognition of financial assets, financial liabilities and certain contracts in relation to non-financial items. It replaces the existing guidance in IAS No. 39 "Financial Instruments: Recognition and Measurement." We initially applied IFRS No. 9 "Financial Instruments" for the year beginning on January 1, 2018.

The standard was applied retrospectively with some exemptions allowing an entity to avoid restating the comparative information for prior periods in relation to classification and measurement (including impairment) changes. We have applied such exemptions. While certain categories of our financial assets were reclassified in accordance with applicable categories under IFRS No. 9 with no changes to their carrying amounts, there was no effect resulting from the initial application of IFRS No. 9 on the balance of our retained earnings as of the date of such initial application.

IFRS No. 15 "Revenue from Contracts with Customers"

IFRS No. 15 "Revenue from Contracts with Customers" provides a comprehensive framework for determining the timing, measurement and recognition of revenue. It replaces existing revenue recognition guidance, including IAS No. 18 "Revenue," IAS No. 11 "Construction Contracts," SIC No. 31 "Revenue-Barter transactions involving advertising services," IFRIC No. 13 "Customer Loyalty Programs," IFRIC No. 15 "Agreements for the construction of real estate," and IFRIC No. 18 "Transfers of assets from customers." We initially applied IFRS No. 15 "Revenue from Contracts with Customers" for the year beginning on January 1, 2018 by recognizing the cumulative impact of applying the revenue standard as of January 1, 2018 on the opening balance of our retained earnings as of January 1, 2018, the period of initial application.

IFRS 15 requires us to recognize certain refund liabilities and the resulting rights to recover returned goods. As a result, our provisions, which constitute a part of our current liabilities, and other current assets, each increased by \text{W10} billion as of January 1, 2018 and by \text{W7} billion as of December 31, 2018. There was no impact on the opening balance of our retained earnings as of January 1, 2018. There was also no significant impact on our consolidated statements of comprehensive income and our cash flows for the year ended December 31, 2018.

IFRS No. 16 "Leases"

IFRS No. 16 "Leases," which provides a single, on-balance sheet lease accounting model for lessees, replaces IAS No. 17 "Leases", IFRIC No. 4 "Determining whether an Arrangement contains a Lease," SIC-15 "Operating Leases—Incentives" and SIC-27, "Evaluating the Substance of Transactions Involving the Legal Form of a Lease." Under IFRS No. 16, a lessee recognizes a right-of-use asset representing its right to use the underlying asset and a lease liability representing the present value of its obligation to make future lease payments. We initially adopted IFRS No. 16 from January 1, 2019, applying the modified retrospective approach, which allows us to recognize the cumulative impact of applying IFRS No. 16 as an adjustment to the opening balance of our retained earnings as of January 1, 2019 without retrospectively adjusting the comparative information for prior periods.

IFRS No. 16 requires us, as a lessee, to recognize right-of-use assets and lease liabilities related to substantially all of our lease arrangements except for certain short-term and low-value items. As a result, we recognized right-of-use assets (as part of our property, plant and equipment) of \times 142 billion and \times 113 billion (US\$98 million) and lease liabilities (as part of our financial liabilities) of \times 115 billion and \times 89 billion (US\$77 million), in each case as of January 1, 2019 and December 31, 2019, respectively. In 2019, we also recognized depreciation expenses of \times 51 billion (US\$44 million) relating to our right-of-use assets and \times 4 billion (US\$4 million) of interest expenses relating to our lease liabilities.

For a further discussion of our leases and accounting policies relating thereto, see Notes 3(1) and 27 of the notes to our financial statements.

Operating Results

The following presents our consolidated results of operation information and as a percentage of our revenue for the years indicated:

	Year ended December 31,						
	2017	%	2018	%	2019	2019 (1)	%
		(in billion	s of Won and in	millions of U	S\$, except for pe	rcentages)	
Revenue	₩ 27,790	100.0%	₩ 24,337	100.0%	₩ 23,476	US\$ 20,317	100.0%
Cost of sales	(22,425)	80.7	(21,251)	87.3	(21,607)	(18,700)	92.0
Gross profit	5,366	19.3	3,085	12.7	1,868	1,617	8.0
Selling expenses	(994)	3.6	(834)	3.4	(1,058)	(916)	4.5
Administrative expenses	(696)	2.5	(938)	3.9	(948)	(820)	4.0
Research and development expenses	(1,213)	4.4	(1,221)	5.0	(1,222)	(1,058)	5.2
Other income	1,082	3.9	1,004	4.1	1,267	1,097	5.4
Other expenses	(1,230)	4.4	(1,115)	4.6	(3,098)	(2,681)	13.2
Finance income	279	1.0	254	1.0	277	240	1.2
Finance costs	(269)	1.0	(327)	1.3	(443)	(383)	1.9
Equity income on investments, net	10	0.0	1	0.0	12	10	0.1
Profit (loss) before income tax	2,333	8.4	(91)	0.4	(3,344)	(2,894)	(14.2)
Income tax (expense) benefit	(396)	1.4	(88)	0.4	472	408	(2.0)
Profit (loss) for the year	1,937	7.0	(179)	0.7	(2,872)	(2,486)	(12.2)

⁽¹⁾ For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of \(\pi\)1,155.46 to US\$1.00, the noon buying rate in effect on December 31, 2019 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

Comparison of 2019 to 2018

Revenue

Our revenue decreased by 3.5% from \(\pi\)24,337 billion in 2018 to \(\pi\)23,476 billion (US\(\pi\)20,317 million) in 2019. The decrease in revenue resulted from a decrease in revenue derived from sales of panels for televisions, and to a lesser extent, decreases in revenue derived from sales of panels for notebook computers and desktop monitors, which were in turn mainly due to decreases in the number of panels sold for televisions, notebook computers and desktop monitors, respectively, offset in part by an increase in revenue derived from sales of panels for mobile and other applications and tablet computers.

Revenue attributable to sales of panels for televisions decreased by 17.8% from \(\psi\)9,727 billion in 2018 to \(\psi\)7,998 billion (US\\$6,922 million) in 2019, resulting from a decrease in the number of units sold of panels in this category in 2019 compared to 2018, accompanied by a decrease in the average selling price of panels in this category in 2019 compared to 2018. The total unit sales of panels for televisions decreased by 13.8% from 52.0 million panels in 2018 to 44.8 million panels in 2019, and the average selling price of panels in this category decreased by 4.7% from \(\psi\)187,180 in 2018 to \(\psi\)178,395 (US\\$154) in 2019. The decrease in the sales volume of panels for television panels reflected a decrease in the sales volume of our TFT-LCD television panels, primarily reflecting our continued strategic focus to increase the proportion of higher-value OLED television panels while decreasing the proportion of TFT-LCD television panels in our product mix. The decrease in the average selling price of television panels was mainly due to a continued increase in downward pricing pressure resulting from capacity expansion by and increased competition from our competitors, mainly in China, in 2019 compared to 2018, which was partially offset by the depreciation of the Korean Won against the U.S. dollar during 2019, as well as an increase in the proportion of OLED television panels, which generally command higher selling prices than TFT-LCD television panels, in our product mix.

Revenue attributable to sales of panels for notebook computers decreased by 1.9% from \(\psi_2,837\) billion in 2018 to \(\psi_2,784\) billion (US\\$2,409\) million) in 2019, resulting from a decrease in the number of units sold of panels in this category in 2019 compared to 2018, partially offset by an increase in the average selling price of panels in this category in 2019 compared to 2018. The total unit sales of panels for notebook computers decreased by 4.9% from 30.5 million panels in 2018 to 29.0 million panels in 2019, whereas the average selling price of panels in this category increased by 3.2% from \(\psi_93,105\) in 2018 to \(\psi_96,056\) (US\\$83) in 2019. The decrease in the sales volume of panels for notebook computers primarily reflected increased competition from our competitors leading to our strategic decision to decrease the production of certain models of lower profitability. The increase in the average selling price of our notebook computer panels was mainly attributable to the depreciation of the Korean Won against the U.S. dollar during 2019 as well as the continued increase in the proportion of panels with differentiated specialty features that command higher selling prices, such as high resolution and AH-IPS, in our product mix for panels for notebook computers.

Revenue attributable to sales of panels for desktop monitors decreased slightly by 0.3% from \$\text{W4},040\$ billion in 2018 to \$\text{W4},028\$ billion (US\$3,486 million) in 2019, resulting from a decrease in the number of units sold of panels in this category in 2019 compared to 2018, mostly offset by an increase in the average selling price of panels in this category in 2019 compared to 2018. The total unit sales of panels for desktop monitors decreased by 5.2% from 36.7 million panels in 2018 to 34.8 million panels in 2019, whereas the average selling price of panels for desktop monitors increased by 5.1% from \$\text{W110},103\$ in 2018 to \$\text{W115},724\$ (US\$100) in 2019. The decrease in the sales volume of panels for desktop monitors primarily resulted from a decrease in market demand for the desktop monitor products of our end-brand customers. The increase in the average selling price of desktop monitor panels was primarily attributable to the depreciation of the Korean Won against the U.S. dollar during 2019 as well as an increase in the proportion of larger panels with differentiated specialty features, such as ultra-slim bezel borderless designs and Quad-HD resolution, that command higher selling prices in our product mix for panels for desktop monitors.

Revenue attributable to sales of panels for tablet computers increased by 13.1% from \\ \Psi\ 1,991\ billion in 2018 to \\ \Psi\ 2,251\ billion (US\\$1,948\ million) in 2019, resulting from a significant increase in the average selling price of panels in this category in 2019 compared to 2018, partially offset by a decrease in the number of units sold of panels in this category in 2019 compared to 2018. The average selling price of panels for tablet computers increased by 22.1% from \\ \Psi\ 7,592\ in 2018\ to \\ \Psi\ 97,164\ (US\\$84)\ in 2019, whereas the total unit sales of panels in this category decreased by 7.2% from 25.0 million panels in 2018 to 23.2 million panels in 2019. The increase in the average selling price of our tablet computer panels was attributable to the depreciation of the Korean Won against the U.S. dollar during 2019 as well as an increase in the proportion of tablet display panels that feature directly bonded protective cover glass, which generally have higher selling prices. The decrease in the sales volume of panels in this category mainly reflected the continued maturing of the consumer market and plateauing of demand for tablet computers in general.

Revenue attributable to sales of panels for mobile and other applications increased by 11.8% from \(\pi\)5,699 billion in 2018 to \(\pi\)6,374 billion (US\$5,516 million) in 2019, resulting from a significant increase in the average selling price of panels in this category in 2019 compared to 2018, partially offset by a decrease in the number of units sold of panels in this category in 2019 compared to 2018. The average selling price of panels for mobile and other applications increased by 18.1% from \(\pi\)54,203 in 2018 to \(\pi\)64,016 (US\$55) in 2019, whereas the total unit sales of panels in this category decreased by 5.2% from 105.1 million in 2018 to 99.6 million in 2019. The increase in the average selling price of panels for mobile and other applications was attributable to the depreciation of the Korean Won against the U.S. dollar during 2019, the further increase in the proportion of panels with differentiated specialty features and larger panels, as well as an increase in the proportion of higher-margin OLED panels for smartphones, automotive products and wearable devices, in our product mix for panels in this category. The decrease in the sales volume of panels in this category primarily resulted from a decrease in demand for TFT-LCD products and our corresponding shift in strategy to focus on higher-end OLED products and reduce the production output of lower-end TFT-LCD products.

In addition, our revenue attributable to royalty and others decreased by 7.0% from \u20143 billion in 2018 to \u201441 billion (US\u201435 million) in 2019. The decrease was due to a decrease in royalties from \u201418 billion in 2018 to \u201441 billion (US\u201412 million) in 2019, while other revenue, consisting primarily of sales of sample products and certain raw materials and components, increased by 4.0% from \u2014225 billion in 2018 to \u201426 billion (US\u201423 million) in 2019.

Cost of Sales

Cost of sales increased by 1.7% from \(\pi\)21,251 billion in 2018 to \(\pi\)21,607 billion (US\$18,700 million) in 2019. The increase in our cost of sales in 2019 compared to 2018 was attributable primarily to a change in the value of our inventories due in part to the strengthening of the U.S. Dollar, in which 86.1% of our raw materials and component part purchases were denominated in 2019, against the Korean Won in 2019 as a whole, compared to 2018 as a whole. In addition, an increase in raw materials and component costs mainly relating to the increased share of high-end products in our product mix, contributed to the increase in costs on a per unit basis during the same period.

As a percentage of our total cost of sales, raw materials and component costs, labor costs, overhead costs, depreciation and amortization costs and change in inventory costs constituted 62.9%, 10.7%, 14.2%, 13.6% and (1.4)%, respectively, in 2018 and 62.8%, 9.8%, 13.4%, 13.5% and 0.5%, respectively, in 2019.

As a percentage of revenue, cost of sales increased from 87.3% in 2018 to 92.0% in 2019. The increase in our cost of sales as a percentage of revenue in 2019 compared to 2018 was attributable mainly to the continued increase in downward pricing pressure in the global display panel industry, particularly in relation to TFT-LCD panels.

Cost of sales per square meter of net display area, which is derived by dividing total cost of sales by total square meters of net display area shipped, increased by 11.6% from \wodeling 503,631 in 2018 to \wodeling 562,112 (US\$486) in 2019. Cost of sales per panel sold, which is derived by dividing total cost of sales by total number of panels sold, increased by 9.6% from \wodeling 85,247 in 2018 to \wodeling 93,392 (US\$81) in 2019 due in part to increases in the proportion within each of our product categories of panel units with differentiated specialty features and newer technologies, such as OLED panels (including plastic OLED panels for mobile and other applications), which generally have higher cost of sales per panel relative to other panel units within each product category, sold in our product mix during the same period.

Gross Profit and Gross Margin

As a result of the cumulative effect of the reasons explained above, our gross profit decreased by 39.4% from \(\pi\)3,085 billion in 2018 to \(\pi\)1,868 billion (US\$1,617 million) in 2019, and our gross margin decreased from 12.7% in 2018 to 8.0% in 2019. The continued shift in our product mix toward higher-end products in 2019 resulted in increases in both the average selling price and cost of sales per panel sold in 2019 compared to 2018, but the increase in cost of sales per panel sold outpaced the increase in average selling price mainly due to a continued increase in the production capacity of the industry that applied downward pricing pressure.

Selling and Administrative Expenses

Selling and administrative expenses increased by 13.2% from \(\mathbb{W}\)1,772 billion in 2018 to \(\mathbb{W}\)2,006 billion (US\\$1,736 million) in 2019. As a percentage of revenue, our selling and administrative expenses increased from 7.3% in 2018 to 8.5% in 2019. The increase in selling and administrative expenses in 2019 compared to 2018 was attributable primarily to increases in:

- warranty expenses, resulting mainly from higher quality expectations for our OLED panel products;
- advertising expenses, resulting primarily from an increase in our marketing activities in 2019 related to the promotion of our OLED panel products; and
- depreciation expenses, resulting mainly from an increase in, as well as the effects of our adoption of IFRS 16 with respect to, our leased non-manufacturing assets, which was partially offset by a corresponding decrease in rent expense with respect to such assets.

The following are the major components of our selling and administrative expenses for each of the years in the two-year period ended December 31, 2019:

	Year	Year ended December 31		
	2018	2019		
	(in	billions of Won)		
Salaries	₩ 5	01 W 5	515	
Expenses related to defined benefit plan		31	29	
Other employee benefits		90	78	
Shipping costs	2	00 1	163	
Fees and commissions	2	21 2	220	
Depreciation	1	75 2	226	
Taxes and dues		66	50	
Advertising	1	12 1	193	
Warranty expenses	2	35 4	119	
Rent		27	3	
Insurance		12	11	
Travel		25	24	
Training		13	12	
Others		64	64	
Total	₩ 1,7	₩ 2,0)06	

Research and Development Expenses

Research and development expenses remained relatively constant at \$1,222 billion (US\$1,058 million) in 2019 compared to \$1,221 billion in 2018. As a percentage of revenue, our research and development expenses increased from 5.0% in 2018 to 5.2% in 2019. The research and development expenses in 2019 were incurred mainly in relation to research and development activities related to OLED and next generation technologies and products.

Other Income (Expense), Net

Other income includes primarily foreign currency gains from operating activities, and other expenses include primarily impairment loss on property, plant and equipment and foreign currency losses from operating activities. Our total net other expense increased significantly from \$\pmu112\$ billion in 2018 to \$\pmu1,830\$ billion (US\$1,584 million) in 2019. Such increase was primarily due to a significant increase in net impairment loss on property, plant and equipment from \$\pmu44\$ billion in 2018 to \$\pmu1,550\$ billion (US\$1,342 million) in 2019. In addition, we incurred net impairment loss on intangible assets of \$\pmu249\$ billion (US\$216 million) in 2019 compared to a net reversal of impairment loss on intangible assets of \$\pmu0.3\$ billion in 2018. Such significant increases in impairment losses in 2019 were primarily attributable to a decrease in the estimated recoverable amount of our property, plant and equipment and intangible assets relating to the Display (AD PO) cash generating unit and, to a much smaller extent, OLED lights cash generating unit in light of the prevailing and anticipated future market conditions and the determination of our plan to discontinue our production of OLED light products. See "—Critical Accounting Policies—Long-Lived Assets; Useful Lives, Valuation and Impairment."

Finance Income (Costs), Net

Our total net finance costs increased by 128.8% from \Psi 73 billion in 2018 to \Psi 167 billion (US\$145 million) in 2019. Such increase was mainly attributable to:

- a 113.6% increase in interest expense from \text{\$\text{W}}81 billion in 2018 to \text{\$\text{\$\text{W}}}173 billion (US\$150 million) in 2019, which was mainly due to an increase in the average amount of interest-bearing financial liabilities outstanding as well as a decrease in capitalized interest in 2019 compared to 2018; and
- loss on valuation of financial liabilities at fair value through profit or loss of \(\pi\)56 billion in 2019 compared to no such loss in 2018, which primarily reflected the increase in the fair value of our outstanding U.S. dollar-denominated convertible bonds, which were issued in August 2019 and are accounted for as financial liabilities at fair value through profit or loss.

We recognized net foreign currency losses of ± 23 billion in 2018 and ± 19 billion in 2019, as the Won generally depreciated against the U.S. dollar over these periods. Against such fluctuations, we recognized a net gain on valuation of derivatives of ± 42 billion in 2019 compared to a net loss on valuation of derivatives of ± 14 billion in 2018, as well as net gains on transaction of derivatives of ± 2 billion in 2018 and ± 20 billion in 2019.

Income Tax Expense (Benefit)

We recognized an income tax benefit of W472 billion (US\$408 million) in 2019 compared to an income tax expense of W88 billion in 2018, resulting from a decrease in current tax expense and an increase in deferred tax benefit in 2019 compared to 2018. Our current tax expense decreased by 36.8% from W250 billion in 2018 to W158 billion (US\$137 million) in 2019, and our deferred tax benefit increased significantly from W162 billion in 2018 to W630 billion (US\$545 million) in 2019, primarily due to a significant increase in our loss before income tax from W91 billion in 2018 to W3,344 billion (US\$2,894 million) in 2019. Our effective tax rates were not calculated in 2018 and 2019 due to the loss before income tax we recorded in such years. See Note 23 of the notes to our financial statements.

Loss for the Year

As a result of the cumulative effect of the reasons explained above, our loss for the year increased significantly from ± 179 billion in 2018 to $\pm 2,872$ billion (US\$2,486 million) in 2019. Our loss for the year as a percentage of revenue was (0.7)% in 2018 and (12.2)% in 2019.

Comparison of 2018 to 2017

Revenue

Our revenue decreased by 12.4% from \(\mathbb{W}\)27,790 billion in 2017 to \(\mathbb{W}\)24,337 billion in 2018. The decrease in revenue resulted from decreases in revenue derived from sales of panels for televisions, mobile and other applications, tablet computers and desktop monitors, which were in turn mainly due to decreases in the average selling price of panels for televisions, tablet computers and desktop monitors and a decrease in the number of panels sold for mobile and other applications, offset in part by an increase in revenue derived from sales of panels for notebook computers.

Revenue attributable to sales of panels for televisions decreased by 17.0% from \text{\text{W11,718}} billion in 2017 to \text{\text{W9,727}} billion in 2018, resulting from a decrease in the average selling price of panels in this category, accompanied by a small decrease in the number of units sold of panels in this category in 2018 compared to 2017. The average selling price of panels for televisions decreased by 16.8% from \text{\text{W224,879}} in 2017 to \text{\text{W187,180}} in 2018, and the total unit sales of panels in this category slightly decreased by 0.2% from 52.1 million panels in 2017 to 52.0 million panels in 2018. The decrease in the average selling price of television panels was mainly due to increased downward pricing pressure resulting from capacity expansion by and increased competition from our competitors, mainly in China, in 2018 compared to 2017, which was partially offset by an increase in the proportion of OLED television panels, which generally command higher prices than TFT-LCD television panels, in our product mix. The decrease in the sales volume of panels for television panels reflected a decrease in the sales volume of our TFT-LCD television panels, primarily reflecting a shift in our strategic focus to increase the proportion of larger-size TFT-LCD panels and higher-value OLED panels while decreasing the proportion of smaller-size TFT-LCD panels in our product mix.

Revenue attributable to sales of panels for notebook computers increased by 26.4% from \(\pi_2,244\) billion in 2017 to \(\pi_2,837\) billion in 2018, resulting from increases in both the number of units sold and average selling price of panels in this category in 2018 compared to 2017. The total unit sales of panels for notebook computers increased by 13.0% from 27.0 million panels in 2017 to 30.5 million panels in 2018, and the average selling price of panels in this category increased by 12.0% from \(\pi_83,114\) in 2017 to \(\pi_93,105\) in 2018. The increase in the sales volume of panels for notebook computers primarily reflected growth in demand for notebook computers with high performance features, including high resolution and AH-IPS. The increase in the average selling price of our notebook computer panels was mainly attributable to the continued increase in the proportion of panels with differentiated specialty features that command higher selling prices, such as high resolution and AH-IPS, in our product mix for panels for notebook computers.

Revenue attributable to sales of panels for desktop monitors decreased by 8.0% from \$\pm4,393\$ billion in 2017 to \$\pm4,040\$ billion in 2018, resulting from a decrease in the average selling price of panels in this category, accompanied by a small decrease in the number of units sold of panels in this category in 2018 compared to 2017. The average selling price of panels for desktop monitors decreased by 7.3% from \$\pm4118,730\$ in 2017 to \$\pm4110,103\$ in 2018, and the total unit sales of panels in this category decreased slightly by 0.8% from 37.0 million panels in 2017 to 36.7 million panels in 2018. The decrease in the average selling price of desktop monitor panels was primarily attributable to downward pricing pressures in the TFT-LCD panel market. The slight decrease in the sales volume of panels for desktop monitors primarily resulted from our strategic decision to reduce the production of certain models with lower profitability.

Revenue attributable to sales of panels for tablet computers decreased by 16.0% from \(\foat \text{W2},370\) billion in 2017 to \(\foat \text{W1},991\) billion in 2018, resulting from a decrease in the average selling price of panels in this category as well as a decrease in the number of units sold of panels in this category in 2018 compared to 2017. The average selling price of panels for tablet computers decreased by 11.8% from \(\foat \text{W90},269\) in 2017 to \(\foat \text{W79},592\) in 2018, and the total unit sales of panels in this category decreased by 4.9% from 26.3 million panels in 2017 to 25.0 million panels in 2018. The decreases in the average selling price and the sales volume of tablet computer panels both mainly reflected the continued maturing of the consumer market and plateauing of demand for tablet computers in general.

Revenue attributable to sales of panels for mobile and other applications decreased by 18.8% from \(\foatstyre{W}\),020 billion in 2017 to \(\foatstyre{W}\)5,699 billion in 2018, resulting from a significant decrease in the number of units sold of panels in this category in 2018 compared to 2017, partially offset by an increase in the average selling price of panels in this category in 2018 compared to 2017. The total unit sales of panels in this category decreased significantly by 28.1% from 146.2 million in 2017 to 105.1 million in 2018, whereas the average selling price of panels in this category increased by 13.0% from \(\foatstyre{W}\)48,029 in 2017 to \(\foatstyre{W}\)54,203 in 2018. The decrease in the sales volume of panels for mobile and other applications primarily resulted from a decrease in demand for TFT-LCD products and our corresponding shift in strategy to focus on higher-end OLED products and more efficient manufacturing processes and reduce the production output of lower-end TFT-LCD products. The increase in the average selling price of panels in this category was attributable to the further increase in the proportion of panels with differentiated specialty features and larger panels, as well as an increase in the proportion of higher margin OLED panels for mobile and wearable devices, in our product mix for panels in this category.

In addition, our revenue attributable to royalty and others decreased by 4.4% from \text{W45} billion in 2017 to \text{W43} billion in 2018. The decrease was due to a decrease in royalties from \text{W20} billion in 2017 to \text{W18} billion in 2018, while other revenue, consisting primarily of sales of raw materials on-sold to our customers for module assembly purposes and sales of components to third party warranty service providers, remained relatively stable at \text{W25} billion in both 2017 and 2018.

Cost of Sales

Cost of sales decreased by 5.2% from \(\foatsu22,425\) billion in 2017 to \(\foatsu21,251\) billion in 2018. The decrease in our cost of sales in 2018 compared to 2017 was attributable primarily to decreases in raw materials and component costs mainly related to selling fewer panel units overall in 2018 compared to 2017, partially offset by the increased share of high-end products in our product mix which contributed to the increase in costs on a per unit basis during the same period. In addition, change in inventories due in part to the weakening of the U.S. Dollar, in which 85.6% of our raw materials and component part purchases were denominated in 2018, against the Korean Won in 2018 as a whole, compared to 2017 as a whole, contributed to the decrease in cost of sales in 2018 compared to 2017.

As a percentage of our total cost of sales, raw materials and component costs and labor costs decreased from 64.6% and 10.9%, respectively, in 2017 to 62.9% and 10.7%, respectively, in 2018, while overhead costs and depreciation and amortization costs increased from 13.7% and 12.1%, respectively, in 2017 to 14.2% and 13.6%, respectively, in 2018.

As a percentage of revenue, cost of sales increased from 80.7% in 2017 to 87.3% in 2018, as the proportion of our cost of sales accounted for by fixed costs such as depreciation and overhead, increased while our sales volume and revenue decreased.

Cost of sales per square meter of net display area, which is derived by dividing total cost of sales by total square meters of net display area shipped, decreased by 6.5% from \wx538,806 in 2017 to \wx503,631 in 2018. Cost of sales per panel sold, which is derived by dividing total cost of sales by total number of panels sold, increased by 9.7% from \wx77,723 in 2017 to \wx85,247 in 2018 due in part to increases in the proportion within each of our product categories of panel units with differentiated specialty features and newer technologies, such as OLED panels, which generally have higher cost of sales per panel relative to other panel units within each product category, sold in our product mix during the same period.

Gross Profit and Gross Margin

As a result of the cumulative effect of the reasons explained above, our gross profit decreased by 42.5% from \text{W}5,366 billion in 2017 to \text{W}3,085 billion in 2018, and our gross margin decreased from 19.3% in 2017 to 12.7% in 2018. The continued shift in our product mix toward higher-end products in 2018 resulted in increases in both the average selling price and cost of sales per panel sold in 2018 compared to 2017, but the increase in cost of sales per panel sold outpaced the increase in average selling price mainly due to an increase in the production capacity of the industry that applied downward pricing pressure.

Selling and Administrative Expenses

Selling and administrative expenses increased by 4.8% from \(\mathbb{W}\)1,691 billion in 2017 to \(\mathbb{W}\)1,772 billion in 2018. As a percentage of revenue, our selling and administrative expenses increased from 6.1% in 2017 to 7.3% in 2018. The increase in selling and administrative expenses in 2018 compared to 2017 was attributable primarily to increases in:

- salaries, which resulted mainly from a one-time retirement allowance incurred in connection with our voluntary retirement program implemented in 2018 in order to optimize our workforce; and
- depreciation expenses, which was primarily due to the recognition in 2018 of depreciation expenses relating to certain of our idle
 manufacturing facilities that previously constituted part of our cost of sales as part of our selling and administrative expenses, as well as
 increases in our other non-manufacturing property, plant and equipment.

The effects of such increases were partially offset by a significant decrease in our advertising expenses, as the level of our marketing activities were generally reduced in 2018 compared to 2017, as we had engaged in enhanced marketing activities to promote our OLED display panels in 2017.

The following are the major components of our selling and administrative expenses for each of the years in the two-year period ended December 31, 2018:

	Year ended December 3			131,
	2	017	2	018
	(in billions of Won))
Salaries	W	327	₩	501
Expenses related to defined benefit plan		27		31
Other employee benefits		95		90
Shipping costs		215		200
Fees and commissions		197		221
Depreciation		139		175
Taxes and dues		46		66
Advertising		236		112
Warranty expenses		251		235
Rent		27		27
Insurance		12		12
Travel		28		25
Training		16		13
Others		73		64
Total	W	1,691	W	1,772

Research and Development Expenses

Research and development expenses increased slightly by 0.7% from \(\psi\)1,213 billion in 2017 to \(\psi\)1,221 billion in 2018. As a percentage of revenue, our research and development expenses increased from 4.4% in 2017 to 5.0% in 2018. The increase in research and development expenses in 2018 compared to 2017 was attributable to increases in research and development activities related to OLED and next generation technologies and products and in the average number of research and development employees over the same period.

Other Income (Expense), Net

Other income includes primarily foreign currency gains from operating activities, and other expenses include primarily foreign currency losses from operating activities and impairment loss on property, plant and equipment. Our total net other expense decreased by 24.8% from W149 billion in 2017 to W112 billion in 2018. Such decrease was primarily due to a significant decrease in net foreign currency loss from W220 billion in 2017 to W60 billion in 2018, reflecting the strengthening of the U.S. Dollar against the Korean Won in 2018 compared to the weakening of the same in 2017, offset in part by a net loss on disposal of property, plant and equipment of W8 billion in 2018 compared to a net gain on disposal of property, plant and equipment of W81 billion in 2017, which was due mainly to the effects of the one-time gain we recognized from the sale of equipment following the closure of our P4 manufacturing facility in 2017, compared to no such significant disposal of property, plant and equipment in 2018.

Finance Income (Costs), Net

Finance income recognized in profit or loss includes primarily interest income and foreign currency gains. Finance cost recognized in profit or loss includes primarily interest expense and foreign currency loss. We recorded total net finance cost of \(\mathbb{W}\)73 billion in 2018 compared to total net finance income of \(\mathbb{W}\)10 billion in 2017.

Our finance income decreased by 9.0% from \text{\$\text{\$\text{\$W254}}\$ billion in 2018, attributable primarily to a decrease in foreign currency gain by 23.7% from \text{\$\text{\$\text{\$W211}}\$ billion in 2017 to \text{\$\text{\$\text{\$W161}}\$ billion in 2018, which was partially offset by an increase in interest income by 15.0% from \text{\$\text{\$\text{\$\text{\$\text{\$W60}}\$ billion in 2017 to \text{\$\text{\$\text{\$\text{\$\text{\$W60}}\$ billion in 2018. The decrease in foreign currency gain in 2018 compared to 2017 was due to a decrease in the range of fluctuation in value of the Korean Won relative to the U.S. dollar over the same period. The increase in interest income resulted primarily from an increase in our average amounts of interest-earning financial assets outstanding as well as the applicable interest rates on such financial assets in 2018 compared to 2017.

Our finance costs increased by 21.6% from \(\foat \) 4269 billion in 2017 to \(\foat \) 327 billion in 2018 mainly due to an increase in foreign currency loss by 44.9% from \(\foat \) 127 billion in 2017 to \(\foat \) 184 billion in 2018, partially offset by a significant decrease in loss on disposal of investments in equity accounted investees from \(\foat \) 42 billion in 2017 to \(\foat \) 1 billion in 2018. The increase in foreign currency loss was primarily due to an increase in the balance of our borrowings denominated in foreign currency, which are exposed to foreign exchange fluctuations. The decrease in loss on disposal of investments in equity accounted investees in 2018 compared to 2017 was primarily due to the one-time losses we recognized in connection with the sale of our 46% equity interest in New Optics Co., Ltd. and our 23% equity interest in Narenanotech Corporation, each in 2017, compared to no losses of similar significance in 2018.

Income Tax Expense

Our income tax expense decreased by 77.8% from \w396 billion in 2017 to \w88 billion in 2018, primarily due to our recording of a loss before income tax of \w91 billion in 2018 compared to a profit before income tax of \w2,333 billion in 2017. Our income tax expense using the statutory tax rate of each country in which we pay income tax decreased by 94.5% from \w666 billion in 2017 to \w31 billion in 2018. Our actual income tax expense was reduced by tax credits of \w248 billion in 2017 and \w107 billion in 2018. Our effective tax rate was not calculated in 2018 due to the loss before income tax we recorded in such year, whereas our effective tax rate was 17.0% in 2017. See Note 23 of the notes to our financial statements.

Profit (loss) for the Year

As a result of the cumulative effect of the reasons explained above, we recorded a profit for the year of \$41,937 billion in 2017 but recorded a loss for the year of \$41,937 billion in 2018. Our profit for the year as a percentage of revenue was 7.0% in 2017 and our loss for the year as a percentage of revenue was (0.7)% in 2018.

Item 5.B. Liquidity and Capital Resources

Our principal sources of liquidity have been net cash flows generated from our operating activities and debt financing activities. We had cash and cash equivalents of \(\pmu_2,603\) billion, \(\pmu_2,365\) billion and \(\pmu_3,336\) billion (US\\$2,887\) million) as of December 31, 2017, 2018 and 2019, respectively. We also had short-term deposits in banks of \(\pmu_758\) billion, \(\pmu_758\) billion and \(\pmu_79\) billion (US\\$68\) million), respectively, as of December 31, 2017, 2018 and 2019. Our primary use of cash has been to fund capital expenditures related to the expansion and improvement of our production capacity with respect to existing and newly developed products, including the construction and ramping-up of new, or in certain cases, expansion or conversion of existing, fabrication facilities and production lines and the acquisition of new equipment. We also use cash flows from operations for our working capital requirements and servicing our debt payments. We expect our cash requirements for 2020 to be primarily for capital expenditures and repayment of maturing debt.

As of December 31, 2017, we had current assets of \(\pi\)10,474 billion and current liabilities of \(\pi\)8,979 billion, resulting in working capital of \(\pi\)1,495 billion. As of December 31, 2018, we had current assets of \(\pi\)8,800 billion and current liabilities of \(\pi\)9,954 billion, resulting in a working capital deficit of \(\pi\)1,154 billion. As of December 31, 2019, we had current assets of \(\pi\)10,248 billion (US\$8,869 million) and current liabilities of \(\pi\)10,985 billion (US\$9,507 million), resulting in a working capital deficit of \(\pi\)737 billion (US\$6,38 million). The working capital deficit as of December 31, 2018, compared to a working capital surplus as of December 31, 2017, was primarily attributable to a \(\pi\)1,496 billion decrease in net trade accounts and notes receivable, which was mainly caused by decreases in our revenue and sales of trade accounts and notes receivable in 2018, as well as a \(\pi\)680 billion decrease in our deposits in banks mainly as a result of general reduction in our cash levels in 2018 compared to 2017 and a \(\pi\)640 billion increase in advances received mainly as a result of payments we received in 2018 pursuant to long-term supply agreements entered into with certain of our customers. The decrease in working capital deficit as of December 31, 2019 compared to December 31, 2018 was primarily attributable to a \(\pi\)971 billion increase in cash and cash equivalents in response to an increase in uncertainty in the financial markets and our business environment, as well as a \(\pi\)469 billion decrease in trade accounts and notes payable mainly as a result of the effects of the timing of the settlement of trade accounts and notes payable prior to the year-end and a \(\pi\)325 billion increase in net trade accounts and notes receivable, which was mainly caused by a decrease in sales of trade accounts and notes receivable in 2019 and the effects of the depreciation of the Korean Won against the U.S. dollar as of the end of 2019 compared to the end of

Our management constantly monitors our working capital, and we have historically been able to satisfy our cash requirements from cash flows from operations and debt financing. Although we had a working capital deficit as of December 31, 2019, we believe that we have sufficient sources of working capital, including in the form of debt, for our present requirements. In 2019, we issued domestic debentures in the aggregate principal amount of \wodesign 338 million), foreign currency denominated bonds in the aggregate principal amount of U\$\$100 million (\widetilde{W}116 billion) and foreign currency convertible bonds in the aggregate principal amount of U\$\$688 million (\widetilde{W}795 billion), and we entered into a number of short-term and long-term facility loan agreements, from which we have drawn down the full aggregate principal amount of U\$\$353 million (\widetilde{W}408 billion) and CNY1,737 million (\widetilde{W}288 billion) as of December 31, 2019 in short-term loans and \widetilde{W}630 billion (U\$\$545 million), U\$\$1,070 million (\widetilde{W}1,236 billion) and CNY14,800 million (\widetilde{W}2,453 billion) in long-term loans, in each case as of December 31, 2019, primarily to fund our capital expenditures and refinance our existing borrowings maturing in 2020.

Our ability to satisfy our cash requirements from cash flows from operations and financing activities will be affected by our ability to maintain and improve our margins and, in the case of external financing, market conditions, which in turn may be affected by various factors outside of our control. Therefore, we re-evaluate our capital requirements regularly in light of our cash flows from operations, the progress of our expansion plans and market conditions. To the extent that we do not generate sufficient cash flows from our operations to meet our capital requirements, we may rely on other financing activities, such as external borrowings and securities offerings, including the issuance of equity, equity-linked and other debt securities.

Our net cash provided by operating activities amounted to \$\pi6,764\$ billion in 2017, \$\precequiv4,484\$ billion in 2018 and \$\precequiv2,707\$ billion (US\$2,343 million) in 2019. The decrease in net cash provided by operating activities in 2018 compared to 2017 was mainly due to (i) a decrease in cash collected from our customers, primarily as a result of a decrease in our sales revenue, (ii) an increase in other current assets, mainly due to an increase in value added taxes refundable and (iii) an increase in inventory mainly due to an increase in the proportion of more expensive, higher value-added products in our inventory, in each case in 2018 compared to 2017. The decrease in net cash provided by our operating activities in 2018 compared to 2017 was offset in part by our sales of certain of our trade accounts and notes receivable to financial institutions in 2018 compared to no such sales in 2017. The decrease in net cash provided by our operating activities in 2019 compared to 2018 was mainly due to (i) a decrease in cash collected from our customers, primarily as a result of a decrease in our sales revenue, (ii) a decrease in cash inflow from trade accounts and notes receivable primarily resulting from a decrease in sales of trade accounts and notes receivable and (iii) a decrease in long-term advances received pursuant to long-term supply agreements, in each case in 2019 compared to 2018.

The cyclical market conditions that are characteristic of our industry, as well as the regular ramp-up of our new fabrication facilities and production lines and our cost reduction measures, contribute to the fluctuations in our inventory levels from period to period. In 2018, our inventory levels increased by 14.5% from year-end 2017. In 2019, our inventory levels decreased by 23.7% from year-end 2018.

Inventories consisted of the following for the dates indicated:

		As of December 31,				
	2017	2018	2019	2019(1)		
		(in billions of W	on and millions of U	S\$)		
Finished goods	₩ 90	66 ₩ 1,084	₩ 730	US\$ 632		
Work in process	74	19 856	5 757	655		
Raw materials	34	555	5 406	351		
Supplies	29	196	5 159	138		
Total	₩ 2,35	₩ 2,691	₩ 2,051	US\$1,776		

(1) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of \(\pi\)1,155.46 to US\\$1.00, the noon buying rate in effect on December 31, 2019 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

Our net cash used in investing activities amounted to \$46,481 billion in 2017, \$47,675 billion in 2018 and \$46,755 billion (US\$5,846 million) in 2019. Net cash used in investing activities primarily reflected the substantial capital expenditures we have made in connection with the expansion and improvement of our production capacity in recent years, mainly relating to construction of our new, or in certain cases, expansion or conversion of existing, fabrication and module assembly facilities and acquisition of new equipment. These cash outflows from capital expenditures amounted to \$46,592 billion, \$47,942 billion and \$46,927 billion (US\$5,995 million) in 2017, 2018 and 2019, respectively. We intend to fund our capital requirements associated with our expansion and construction projects with cash flows from operations and financing activities, such as external long-term borrowings and bond issuances.

We currently expect that, in 2020, our total capital expenditures on a cash out basis will be lower compared to 2019 and will be used primarily to continue to fund our previously announced investments related to facilities for OLED panels. However, our overall expenditure levels and our allocation among projects are subject to many uncertainties. We review the amount of our capital expenditures and may make adjustments from time to time based on cash flows from operations, the progress of our expansion plans and market conditions.

Our net cash provided by financing activities amounted to \wxi2 billion in 2017, \wxi2,953 billion in 2018 and \wxi4,988 billion (US\$4,317 million) in 2019. The net cash provided by financing activities in 2017 reflects primarily the net proceeds from long-term borrowings as well as a decrease in repayment of current portion of long-term borrowings and bonds compared to 2016. The net cash provided by financing activities in 2018 reflects primarily an increase in net proceeds from long-term borrowings and debentures compared to 2017, partially offset by an increase in our repayment of current portion of long-term borrowings and bonds compared to 2017. The net cash provided by financing activities in 2019 reflects primarily an increase in net proceeds from short-term borrowings in 2019 compared to 2018, as well as an increase in net proceeds from issuance of convertible bonds and long-term borrowings in 2019 compared to 2018, partially offset by an increase in our repayment of short-term borrowings in 2019 compared to 2018.

At our annual general meeting of shareholders held on March 23, 2017, we declared a cash dividend of \text{\$\psi\$179 billion to our shareholders of record as of December 31, 2016 and distributed the cash dividend to such shareholders on April 13, 2017. On March 15, 2018, we declared a cash dividend of \text{\$\psi\$179 billion to our shareholders of record as of December 31, 2017 and distributed the cash dividend to such shareholders on April 12, 2018. At our annual general meetings of shareholders on March 15, 2019 and March 20, 2020, we did not declare any cash dividend to our shareholders.

As of December 31, 2019, we maintained accounts receivable sales negotiating facilities with several banks for up to an aggregate amount of US\$1,360 million at the parent company level in connection with our export sales transaction with our subsidiaries. In addition, we and our subsidiaries have also entered into various other accounts receivable sales negotiating facilities in Korean Won and foreign currencies for up to aggregate amounts of W220 billion and US\$2,840 million, respectively. For further information regarding these facilities, please see Note 15 of the notes to our financial statements.

As of December 31, 2019, we had outstanding long-term debt including current portion in the amount of \(\pm\)12,794 billion (US\$11,073 million), consisting of \(\pm\)1,840 billion of Korean Won denominated debentures, US\$400 million of U.S. dollar denominated debentures, US\$2,767 million of U.S. dollar denominated long-term loans, CNY18,699 million of CNY denominated long-term loans and \(\pm\)3,331 billion of Korean Won denominated long-term loans. As of December 31, 2019, we also had US\$741 million of outstanding U.S. dollar denominated convertible bonds (as measured by their fair value as of such date), which are accounted for as financial liabilities at fair value through profit or loss. Such convertible bonds, which were issued on August 22, 2019 at an aggregated principal value of US\$687.8 billion and will mature on August 22, 2024, may be converted into shares of our common stock during the period between August 23, 2020 and August 12, 2024 at the conversion price of \(\pm\)19,845 per share, subject to adjustment in the case of certain dilutive events. The terms of such convertible bonds also include provisions for early redemption at our option or the bondholders' option. For further information on our outstanding convertible bonds as of December 31, 2019, see Note 11(f) of the notes to our financial statements.

The terms of some of our long-term debt contain provisions that would trigger a requirement for early repayment. The principal and interest under these obligations may be accelerated if there is a default, including defaults triggered by failure to comply with financial covenants and cross defaults triggered under our other debt obligations. We believe we were in compliance with the covenants under our debt obligations at December 31, 2019. For further information about our short- and long-term debt obligations as of December 31, 2019, see Note 11 of the notes to our financial statements.

As of December 31, 2019, we have entered into eight agreements to guarantee the payment obligations in the aggregate amount of US\$1.4 billion of our subsidiary LG Display Vietnam Haiphong Co., Ltd. under credit facilities and payables facilities with various financial institutions, including BNP Paribas, Sumitomo Mitsui Banking Corporation, Standard Chartered Bank, Citibank, Export-Import Bank of Korea and Bank of Australia and New Zealand, among other lenders.

Set forth below are the aggregate amounts, as of December 31, 2019, of our future contractual financing and licensing obligations under our existing debt and other contractual arrangements:

	Payments Due by Period				
		Less than			More than
Contractual Obligations	Total	1 year	1-3 years	3-5 years	5 years
		(iı	n billions of Wo	n)	
Unsecured bank borrowings	₩11,515	₩1,898	W 4,535	W4 ,110	₩ 971
Unsecured bond issues	3,307	483	2,288	400	136
Trade accounts and notes payable	2,618	2,618	_	_	_
Other accounts payable	2,069	2,069	_	_	_
Other accounts payable (enterprise procurement cards) ⁽¹⁾	2,353	2,353	_	_	_
Long-term other accounts payable	1	_	1	_	_
Securities deposits received	11	9	2	_	_
Lease Liabilities	98	41	35	11	10
Derivatives	(13)		(7)	(6)	
Total	₩21,959	W 9,472	W 6,854	W4,516	₩ 1,117

⁽¹⁾ Represents the amount of utility expenses and other expenses paid using the enterprise procurement cards. For further information, please see Note 26 of the notes to our financial statements.

In addition to fixed license payments listed above that we are obligated to make under certain technology license agreements, we also have continuing obligations to make cash royalty payments under our technology license agreements, the amount of which are generally determined based on a percentage of sales of our display products.

Expenses relating to our license fees and royalty payments under existing license agreements were \(\mathbb{W}\)107 billion in 2017, \(\mathbb{W}\)117 billion in 2018 and \(\mathbb{W}\)122 billion (US\$106 million) in 2019, representing 6.4%, 6.7% and 6.9% of our research and development related expenditures in 2017, 2018 and 2019, respectively, in each case based on our current method of recognizing our research and development related expenditures, which was revised in 2019. We expect to make additional license fee payments as we enter into new technology license agreements from time to time with third parties.

Taxation

In 2019, the statutory corporate income tax rate applicable to us was 11.0% (including local income surtax) for the first \(\pi\)200 million of our taxable income, 22.0% (including local income surtax) for our taxable income between \(\pi\)200 million and \(\pi\)20 billion, 24.2% (including local income surtax) for our taxable income between \(\pi\)200 billion, and 27.5% (including local income surtax) for our taxable income in excess of \(\pi\)300 billion.

Tax Credits

We are entitled to a number of tax credits relating to certain investments in productivity enhancement and technology. For example, in 2019, under the Restriction of Special Taxation Act, we were entitled to a tax credit of 1% (which percentage has been increased to 2% for 2020) of our capital investments in facilities for enhancing productivity through process improvement, automation and advanced technology. Under the same law, we are also entitled to a tax credit on a percentage of our research and development expenses incurred for procuring certain "new growth engine and source technologies," which include OLED display technology. The applicable amount of such tax credit is calculated by multiplying the applicable research and development expenses by the sum of (x) 20% and (y) three times the proportion of such research and development expenses as a percentage of revenue.

Tax credits not utilized in the fiscal year during which the relevant investment was made may be carried forward over the next five years in the case of capital investments and five years in the case of investments relating to technology and human resources development. As of December 31, 2019, we had recognized deferred tax assets related to these credits of \(\pi 38\) billion (US\\$33\) million), which may be utilized against future income tax liabilities through 2024. In addition, we also had unused tax credit carryforwards of \(\pi 549\) billion (US\\$475\) million) as of December 31, 2019 for which no deferred tax asset was recognized.

Item 5.C. Research and Development, Patents and Licenses, etc.

Research and Development

The display panel industry is subject to rapid technological changes. We believe that effective research and development is essential to maintaining our position as one of the industry's leading technology innovators.

To meet the demands of the future trends, we have formulated a long-term research and development strategy aimed at enhancing the process, device and design aspects of the existing products and diversifying the use of display panels as new opportunities arise with the development of communication systems and information technology. The following are examples of products and technologies that have been developed through our research and development activities in recent years:

- In 2017, we unveiled a 77-inch flexible and transparent Ultra HD OLED display panel with a transparency level of 40% and a radius curvature of 80mm. In addition, we introduced an 88-inch ultra-stretch TFT-LCD panel for commercial use. For monitors, we produced a 31.5 inch TFT-LCD panel with "8K" resolution. With respect to smartphones, we released a 5.7-inch Quad HD-plus full vision TFT-LCD display and a 6-inch Quad HD plastic OLED panel for smartphone products. With respect to automotive displays, we successfully developed and commenced production of in-TOUCH TFT-LCD panels equipped with touch sensors inside the LCD cells for a thinner and lighter design.
- In 2018, we developed and introduced display panels for 65-inch rollable OLED TV and ultra-large 88-inch 8K OLED TV products, which was the world's largest product of such type. For TFT-LCD monitors, we introduced a four-sided borderless curved monitor with a 1900R curvature radius. With respect to TFT-LCD smartphones, we developed our first 5.8-inch Ultra HD Mobile product by applying WRGB sub-pixel structure to achieve high luminance, low power consumption and HDR support. We also developed a full-screen TFT-LCD panel for smartphones with a camera notch concept. In addition, we released a TFT-LCD video-wall product with very thin bezels. For automotive displays, we introduced a 12.3-inch FHD glassless 3D TFT-LCD product.
- In 2019, we commenced mass production of display panels for 88-inch 8K OLED TV products. We also produced 55-inch FHD transparent commercial OLED display panels and 55-inch UHD OLED gaming monitor display panels. In addition, we developed OLED panels for automotive products with a 7.2-inch control pad, 14.2-inch cluster and 16.9-inch infotainment screen. For TFT-LCD commercial products, we produced a 50-inch Ultra HD in-TOUCH panel (equipped with touch sensors inside the LCD cells for a thinner and lighter design), which is the first in-TOUCH panel that is 50-inches or larger.

As the product life cycle of display panels using certain of the existing TFT-LCD technology is approaching maturity, we plan to further focus on OLED and other newer display technologies, while also exploring new growth opportunities in the application of display panels, such as in smartphones, public displays and automotive displays.

In order to maintain our position as one of the industry's technology leaders, we believe it is important not only to increase direct spending on research and development, but also to manage our research and development capability effectively in order to successfully implement our long-term strategy. In connection with our efforts to enhance our research and development capability with respect to next-generation display technologies, we opened the R&D Center in Paju, Korea in April 2012. In addition, we have further expanded our research and development resources by allocating some of our research and development personnel to the newly-opened LG Science Park, which is located in western Seoul and commenced its operations in December 2017. LG Science Park accommodates researchers from various LG Group-affiliated companies with expertise in a broad range of disciplines, including electronics, chemistry, nanotechnology, display, fabrication, life sciences and new materials, to focus on developing and testing innovative new technologies.

We complement our in-house research and development capability with collaborations with universities and other third parties. For example, we provide project-based funding to both domestic and overseas universities as a means to recruit promising engineering students and to research and develop new technologies. In April 2016, we entered into an agreement with Pohang University of Science and Technology, or POSTECH, to establish the LGD-POSTECH Cooperation Center within the university's Research Institute of Electrical Circuit, Algorithm and Advanced Materials to conduct research into display panel technologies, including OLED technology. We also enter into joint research and development agreements from time to time with third parties for the development of technologies in specific fields. In addition, we belong to several display industry consortia, and we receive annual government funding to support our research and development efforts. As of December 31, 2019, we employed over 4,978 engineers, researchers, designers, technicians and support personnel in connection with our research and development activities.

While we primarily rely on our own capacity for the development of new technologies in the display panel design and manufacturing process, we rely on third parties for certain key technologies to enhance our technology leadership, as further described in "—Intellectual Property" below.

Intellectual Property

Overview

Our business has benefited from our patent portfolio, which includes patents for display technologies, manufacturing processes, products and applications related to the production of TFT-LCD and OLED panels. We hold a large number of patents in Korea and in other countries, including in the United States, China, Japan, Germany, France, Great Britain, Taiwan, India and Vietnam. These patents will expire at various dates upon the expiration of their respective terms ranging from 2020 to 2039. In March 2014, we formed Unified Innovative Technology, LLC in the United States, a limited liability company solely owned by us for the purpose of patent portfolio management.

As part of our ongoing efforts to prevent infringements on our intellectual property rights and to keep abreast of critical technology developments by our competitors, we closely monitor patent applications in Korea and various other countries in which we sold our products. We intend to continue to file patent applications, where appropriate, to protect our proprietary technologies. We also enter into confidentiality agreements with each of our employees and consultants upon the commencement of an employment or consulting relationship. These agreements generally provide that all inventions, ideas, discoveries, improvements and copyrightable material made or conceived by the individual arising out of the employment or consulting relationship and all confidential information developed or made known to the individual during the term of the relationship are our exclusive property. In addition, we have increased our efforts to safeguard our propriety information by engaging in in-house information protection awareness activities with our employees.

License Agreements

We enter into license or cross-license agreements from time to time with third parties with respect to various device and process technologies to complement our in-house research and development. We engage in regular discussions with third parties to identify potential areas for additional licensing of key technologies.

Expenses relating to our license fees and royalty payments under existing license agreements were \text{\pi}107 billion in 2017, \text{\pi}117 billion in 2018 and \text{\pi}122 billion (US\$106 million) in 2019, representing 6.4%, 6.7% and 6.9% of our research and development related expenditures in 2017, 2018 and 2019, respectively, in each case based on our current method of recognizing our research and development related expenditures, which was revised in 2019. We recognized royalty income in the amount of \text{\pi}20 billion in 2017, \text{\pi}18 billion in 2018 and \text{\pi}14 billion (US\$12 million) in 2019. The following are examples of license agreements we have entered into:

- We have a license agreement with each of Columbia University, Penn State University, Honeywell International, Honeywell Intellectual Properties, Plasma Physics Corporation and Fergason Patent Properties. Each license agreement provides for a non-exclusive license under certain patents relating to TFT-LCD technologies.
- We have a license agreement with Semiconductor Energy Laboratory which provides for a non-exclusive license under certain patents relating to TFT-LCD and AMOLED technologies.
- We have a cross-license agreement with each of Hitachi, HannStar and Hydis for a non-exclusive license under certain patents relating to display technologies.
- We have separate cross-license agreements with each of NEC and AU Optronics in connection with the settlement of certain patent
 infringement lawsuits. Under the agreements, each party grants the other party a license under certain patents relating to TFT-LCD
 technologies.
- We are licensed to use certain patents for our TFT-LCD products pursuant to a cross-license agreement between Philips Electronics and Toshiba Corporation.

In addition to the above, we have also entered into license or cross-license agreements with other third parties in the course of our business operations in connection with certain patents, which such third parties own or control.

As well as licensing key technologies from third parties, we aim to benefit from our own patents and other intellectual property rights by granting licenses to third parties from time to time in return for royalty payments. We have also entered into certain patent purchase and license agreements with third parties, where we receive a portion of the license payments.

Item 5.D. Trend Information

These matters are discussed under Item 5.A. and Item 5.B. above where relevant.

Item 5.E. Off-Balance Sheet Arrangements

For a discussion of our off-balance sheet arrangements, please see "— Factoring and securitization of accounts receivable", "— Letters of credit" and "— Payment guarantees" in Note 15 of the notes to our financial statements.

Item 5.F. Tabular Disclosure of Contractual Obligations

Presented in Item 5.B. above.

Item 5.G. Safe Harbor

See "Forward-Looking Statements."

Item 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

Item 6.A. Directors and Senior Management

Board of Directors

Our board of directors has the ultimate responsibility for the management of our business affairs. Our articles of incorporation provide for a board consisting of between five and seven directors, more than half of whom must be outside directors. Our shareholders elect all directors at a general meeting of shareholders. Under the Korean Commercial Code, a representative director of a company established in Korea is authorized to represent and act on behalf of such company and has the power to bind such company. James (Hoyoung) Jeong is currently our sole representative director.

The term of office for our directors shall not exceed the closing of the annual general meeting of shareholders convened in respect of the last fiscal year within three years after they take office. Our board must meet at least once every quarter, and may meet as often as the chairman of the board of directors or the person designated by the regulation of the board of directors deem necessary or advisable.

The tables below set forth information regarding our current directors and executive officers. The business address of all of the directors and executive officers is LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Korea.

Our Outside Directors

Our current outside directors are set out in the table below. Each of our outside directors meets the applicable independence standards set forth under the rules of the Korean Commercial Code and also meets the applicable independence criteria set forth under Rule 10A-3 of the Exchange Act.

Name	Date of Birth	Position	First Elected/ Appointed	Term Expires	Principal Occupation Outside of LG Display
Sung Sik Hwang	July 24, 1956	Director	January 2015	March 2021	Professor, Business Administration, Gachon University
Kun Tai Han	October 30, 1956	Director	March 2016	March 2022	Chief Executive Officer, Hans Consulting
Byoung Ho Lee	July 6, 1964	Director	March 2018	March 2021	Professor, Electrical and Computer Engineering, Seoul National University
Chang-Yang Lee	September 20, 1962	Director	March 2019	March 2022	Professor, Economics and Public Policy, Korea Advanced Institute of Science and Technology

Our Non-Outside Directors

Our current non-outside directors are set out in the table below:

Name	Date of Birth	Position	First Elected/ Appointed	Term Expires	Principal Occupation Outside of LG Display
James (Hoyoung) Jeong	November 2, 1961	President, Chief Executive Officer, Representative Director	March 2020	March 2023	_
Donghee Suh	February 28, 1964	Senior Vice President, Chief Financial Officer, Director	March 2019	March 2023	_
Youngsoo Kwon	February 6, 1957	Chairman of the Board, Director	March 2019	March 2022	Representative Director and Vice Chairman, LG Corp.

Our Non-Director Executive Officers

Our current non-director executive officers are set out in the table below:

Name	Position	Responsibility and Division	Age
Hyung Seok Choi	Executive Vice President	Head of IT Business Unit	58
Sang Mun Shin	Executive Vice President	Chief Production Officer	60
In Byeong Kang	Executive Vice President	Chief Technology Officer	56
Yong Min Ha	Executive Vice President	Head of Mobile Development Group	53
Myoung Kyu Kim	Executive Vice President	Head of Mobile Business Unit	57

Jae Hoon Yang	Executive Vice President	Head of Business Support Group	56
Chang Ho Oh	Executive Vice President	Head of TV Business Unit	54
Youngkwon Song	Senior Vice President	Head of Strategy Group	57
Yeong Giu Hong	Senior Vice President	Head of Auditing & Management Consulting Division	57
Sang Yeol Kim	Senior Vice President	Head of TV Product Planning Division	57
Byeong Koo Kim	Senior Vice President	Head of Mobile Advanced Project	52
Joo Hong Lee	Senior Vice President	Head of Quality Management Center	54
Jung Sik Shin	Senior Vice President	Head of Automotive Business	57
Kang Yeol Oh	Senior Vice President	Head of Mobile Sales Group	55
Tae Seung Kim	Senior Vice President	Head of PO Technology Division	55
Yung Keun Choi	Senior Vice President	Head of Purchasing Group	58
Won Ho Cho	Senior Vice President	Head of Mobile Manufacture Center	56
Jong Woo Kim	Senior Vice President	Head of TV Manufacture Center	54
Soo Young Yoon	Senior Vice President	Head of Display Laboratory	54
Hyun Chul Choi	Senior Vice President	Head of Foundation Technology Laboratory	52
Sunghyun Kim	Senior Vice President	Head of Finance & Risk Management Division	52
Yoong Ki Min	Senior Vice President	Head of IT Sales/Marketing Group	55
Young Sang Byun	Senior Vice President	Head of LCD Manufacture Center	54
Jong Sun Park	Senior Vice President	Head of TV Sales Group	54
J. Kenneth Oh	Senior Vice President	Head of Intellectual Property Division	52
Han Seop Kim	Senior Vice President	Head of TV Development Group	54
Bum Soon Kim	Senior Vice President	Head of Legal/Compliance Division	52
Sang Ho Song	Senior Vice President	Head of HR Group	51
Jeong Ki Park	Senior Vice President	Head of IT Development Group	51
Young Seok Choi	Senior Vice President	Head of Production Technology Center	52
Yong Jun Choi	Vice President	Head of Management Innovation Task Force	55
Hyeon Woo Lee	Vice President	Head of TV CoP Innovation Task Force	52
Min Su Park	Vice President	Head of LG Display Guangzhou Co., Ltd.	54
Min Kim	Vice President	Head of Business Innovation Division	56
Hee Yeon Kim	Vice President	Head of BI/IR Division	50
Kwang Hee Cho	Vice President	Head of Automotive Planning & Management Division	54
Calvin Lee	Vice President	Head of TV Division 1	54
Woo Sup Shin	Vice President	Head of OLED Process Integration Division	50
Jeom Jae Kim	Vice President	Head of LCD TV Development Division	51
Jang Sig Kim	Vice President	Head of TV Planning & Management Division	57
Seung Min Lim	Vice President	Head of Corporate Planning Division	53
Wan Seop Kim	Vice President	Head of Mobile Planning & Management Division	54
Je Bong Kim	Vice President	Head of Outsourcing Division	54
Jin Kyu Lee	Vice President	Head of Process Innovation Group	50
Seong Hee Kim	Vice President	Head of OLED TFT Division	51
Jae Hong Park	Vice President	Head of Mobile Product Development Division 2	51

Kwang Jin Kim	Vice President	Head of OLED Space Project	51
Andy Kim	Vice President	Head of Global Operation Group	53
Kyu Young Ko	Vice President	Head of China Promotion Division	53
Soon Kwang Hong	Vice President	Head of Mobile Product Development Division 1	49
Sang Gul Lee	Vice President	Leader of Future Mobile Device Task Force	52
Seung Mo Ahn	Vice President	Head of TV Division 3	51
Ki Yung Kim	Vice President	Head of IT Planning & Management Division	52
Jong Seong Kim	Vice President	Head of Mobile2 Factory	52
Chang Han Kim	Vice President	Head of TV Strategy/Marketing Division	51
Keuk Sang Kwon	Vice President	Head of Auto Product Development Division 1	49
Kwon Shik Park	Vice President	Head of Device Process Research Division	50
Hyun Joo Kim	Vice President	Head of HRD Division	52
Hyo Dae Bae	Chief Research Fellow	Head of S-Top Task Force	55
Chang Wook Han	Chief Research Fellow	Head of OC Device Technology Department	55
Dong Eun Lee	Vice President	Head of China Business Management Division	52
Hae Cheol Lee	Vice President	Head of Global Business Support Division	53
Kyung Soo Park	Vice President	Head of IT Division 3	52
Chang Sub Choi	Vice President	Head of TV Division 2	53
Yoo Seok Park	Vice President	Head of LG Display (China) Co., Ltd.	49
Chang Hoon Choi	Vice President	Head of Gumi LCD Factory	50
Jin Nam Park	Vice President	Head of Purchasing Division 2	48
Doo Jong Jin	Vice President	Head of Purchasing Competitiveness Reinforcement Task Force	52
Bu Yeol Lee	Vice President	Head of R&D Strategy Division	48
Chang Mog Jo	Vice President	Head of Equipment Technology Division	54
Yu Taek Huh	Vice President	Head of Safety & Health Division	50
Jin Gu Jeung	Vice President	Head of LGDCA Factory	50
Chae Woo Choi	Vice President	Head of Commercial Business Division	50
Sang Yoon Park	Vice President	Head of IT Product Development Division 2	51
Hong Sung Song	Vice President	Head of OLED TV Product Development Division 1	52
Eun Kuk Kyung	Vice President	Head of Accounting Division	50
Young Dall Park	Vice President	Head of HRM Division	49
Yong In Park	Vice President	Head of Mobile Panel Advanced Development Division	50
Seung Jun Han	Vice President	Head of Convergence Technology Research Division	51
Hoon Jeong	Vice President	Head of IT Panel Development Division	47
Myung Su Suk	Vice President	Head of LG Display Vietnam Haiphong Co., Ltd.	49
Jong Seo Yoon	Vice President	Head of IT Product Planning Division	49
Teddy Hwang	Vice President	Head of Mobile Panel Development Division	45
Seung Ho Kwon	Vice President	Head of OLED Cell Division	49
Tae Rim Lee	Vice President	Head of OLED TV Performance Improvement Task Force	45
In Hyuk Song	Vice President	Head of POLED Panel Research Division	42
Tae Shick Kim	Chief Research Fellow	Head of OC TV Devices Department	52
Seong Hoon Chun	Vice President	Head of Business Development Division	49

Sung Chun Kang	Vice President	Head of Panel Factory 9	51
Joon Young Yang	Vice President	Head of OLED Panel Research Division	50
Tae Hyung Lim	Vice President	Head of IT Division 1	51
Kyung Joon Kwon	Vice President	Head of Mobile Driving Technology Division	45

Item 6.B. Compensation

The aggregate remuneration and benefits-in-kind we paid in 2019 to our directors was \displays 2.2 billion (US\$1.9 million). This included \displays 1,541 million (US\$1.3 million) in salary paid to Sang Beom Han, our former chief executive officer, and \displays 359 million (US\$0.3 million) in salary paid to Donghee Suh, our chief financial officer.

The aggregate remuneration and benefits-in-kind we paid in 2019 to our non-director executive officers was \(\prec{\psi}\)40.5 billion (US\$34.2 million).

The compensation of the five individuals who received the highest compensation among those who received total annual compensation exceeding \$\psi_500\$ million in 2019 was as follows:

		Composition of Total Compensation				
				Retirement	7	Γotal
Name	Position	Salary	Bonus ⁽¹⁾	Benefits	Comp	pensation
			(in m	illions of Won)		
Sang Beom Han	Former Chief Executive Officer	₩ 1,541	_	_	W	1,541
Yong Kee Hwang (2)	Advisor	₩ 624	_	₩ 2,455	W	3,079
Yu Seoung Yin (2)	Advisor	₩ 277	_	₩ 1,549	W	1,826
Soo Youle Cha (2)	Advisor	₩ 344		₩ 1,449	W	1,793
Yong Bum Kim (3)	Former Vice President	₩ 211	_	₩ 542 ⁽⁴⁾	₩	753

- (1) Based on our performance in 2018.
- (2) Former officer who retired from his position as of March 31, 2019.
- (3) Former officer who retired from his position as of August 10, 2019.
- (4) Includes other earned income of \(\prec{\ppsi}\)115 million, which represented the amount of retirement benefits in excess of the relevant limit.

Our articles of incorporation provide for a stock option plan to aid retention of executives and key staff and to provide an incentive to meet strategic objectives. All of the stock options we have previously granted have expired and none are currently outstanding. In addition, remuneration for our directors is determined by shareholder resolution, and severance payments to our directors are made in accordance with our regulations on severance payments adopted by our shareholders. We also maintain a cash-based incentive plan for our executive officers and other key managerial employees adopted by our board of directors. Incentive payments are determined based on various long-term performance criteria and paid annually, subject to our cash resources and performance in such year. In addition, our executive officers and other key managerial employees are also eligible for bonuses payable under our employee profit sharing plan if certain performance criteria are met.

We carry liability insurance for the benefit of our directors and officers against certain liabilities incurred by them in their official capacities. This insurance covers our directors and officers, as well as those of our subsidiaries, against certain claims, damages, judgments and settlements, including related legal costs, arising from a covered individual's actual or alleged breaches of duty, neglect or other errors, arising in connection with such individual's performance of his or her official duties. The insurance protection also extends to claims, damages, judgments and settlements, including related legal costs, arising out of shareholders' derivative actions or otherwise relating to our securities. Policy exclusions include, but are not limited to, claims relating to fraud, willful misconduct or criminal acts, as well as the payment of punitive damages. In 2019, we paid a premium of approximately US\$1.2 million in respect of this insurance policy.

Item 6.C. Board Practices

See "Item 6.A. Directors and Senior Management" above for information concerning the terms of office and contractual employment arrangements with our directors and executive officers.

Committees of the Board of Directors

We currently have three committees that serve under our board of directors:

• Audit Committee;

- Outside Director Nomination Committee; and
- Management Committee

Under our articles of incorporation, our board of directors may establish other committees if they deem them necessary. Our board of directors appoint each member of these committees except that candidates for the Audit Committee will first be elected by our shareholders at the general meeting of shareholders.

Audit Committee

Under Korean law and our articles of incorporation, we are required to have an Audit Committee. Our Audit Committee is currently comprised of three outside directors: Sung Sik Hwang, Kun Tai Han and Chang-Yang Lee. The chairman is Sung Sik Hwang. Members of the Audit Committee are elected by our shareholders at the annual general meeting of shareholders and all members must meet the applicable independence criteria set forth under the rules and regulations of the Sarbanes-Oxley Act of 2002 and the Korean Commercial Code. The committee reviews all audit and compliance-related matters and makes recommendations to our board of directors. The Audit Committee's primary responsibilities include the following:

- engaging or dismissing independent auditors;
- approving independent audit fees;
- approving audit and non-audit services;
- reviewing annual and interim financial statements;
- reviewing audit results and reports, including management comments and recommendations;
- reviewing our system of controls and policies, including those covering conflicts of interest and business ethics;
- assessing compliance with disclosure and filing obligations;
- considering significant changes in accounting practices; and
- examining improprieties or suspected improprieties.

In addition, in connection with general meetings of shareholders, the committee examines the agenda for, and financial statements and other reports to be submitted by, the board of directors at each general meeting of shareholders. Our external auditor reports directly to the Audit Committee. Our external auditor is invited to attend meetings of this committee when needed or when matters pertaining to the audit are discussed.

The committee holds regular meetings at least once each quarter, and more frequently as needed.

Outside Director Nomination Committee

Under Korean law and our articles of incorporation, we are required to have an Outside Director Nomination Committee for the nomination of outside directors. Our Outside Director Nomination Committee is currently comprised of two outside directors, Chang-Yang Lee and Kun Tai Han, and one non-outside director, Youngsoo Kwon. The Outside Director Nomination Committee reviews the qualifications of potential candidates for outside directors and proposes nominees to serve on our board of directors.

The committee holds meetings as necessary for the nomination of outside directors.

Management Committee

The Management Committee is comprised of two non-outside directors, James (Hoyoung) Jeong and Donghee Suh. The chairman is James (Hoyoung) Jeong. The committee's primary responsibilities include making recommendations regarding matters relating to our operation and other matters delegated to the committee by our board of directors.

The committee holds meetings from time to time as needed.

Item 6.D. Employees

As of December 31, 2019, we had 60,429 employees, including 33,762 employees in our overseas subsidiaries. The following table provides a breakdown of our employees by function as of December 31, 2017, 2018 and 2019:

	As	As of December 31,	
Employees ⁽¹⁾	2017	2018	2019
Production	44,898	49,541	49,575
Technical ⁽²⁾	8,459	8,431	8,198
Sales & Marketing	1,545	1,610	1,615
Management & Administration	992	1,033	1,041
Total	55,894	60,615	60,429

- (1) Includes employees of our subsidiaries.
- (2) Includes research and development and engineering personnel.

To recruit promising engineering students at leading Korean universities, we work with these universities on research projects where these students can gain exposure to our research and development efforts. We also provide on-the-job training for our new employees and develop training programs to identify and promote new leaders.

As of December 31, 2019, more than half of our employees based in Korea were union members, and production employees accounted for substantially all of these members. We have a collective bargaining arrangement with our labor union, which is negotiated once a year. We consider our relationship with our employees to be good.

The salaries of our employees are reviewed annually. Salaries are adjusted based on individual and team performance, industry standards and inflation. As an incentive, discretionary bonuses may be paid based on the performance of individuals, and a portion of our profits may be paid to our employees under our profit sharing plan if certain performance criteria are achieved. We also provide a wide range of benefits to our employees including medical insurance, employment insurance, workers compensation, free medical examinations, child tuition and education fee reimbursements and low-cost housing for certain employees.

Under the Guarantee of Workers' Retirement Benefits Act, employees with one year or more of service are entitled to receive, upon termination of their employment, a lump-sum severance payment based on the length of their service and their average wage during the last three months of employment. As of December 31, 2019, the fair value of our defined benefit obligations amounted to ¥1,481 billion (US\$1,282 million), while the fair value of our benefit plan assets amounted to ¥1,607 billion (US\$1,391 million), including amounts relating to employees of our foreign subsidiaries. See Note 12 of the notes to our financial statements for a discussion on the method of calculating our recognized liabilities for defined benefit obligations.

As of December 31, 2019, our employee stock ownership association owned approximately 0.00008% of our common stock.

Item 6.E. Share Ownership

Common Stock

The persons who are currently our executive officers held, as a group, 48,355 shares of our common stock as of April 21, 2020 the most recent date for which this information is available. Our executive officers acquired our shares of common stock through our employee stock ownership association and pursuant to open market purchases on the Korea Exchange. Due to Korean law restrictions, our chief executive officer and chief financial officer do not participate in the employee stock ownership association. Each of our directors and executive officers beneficially owns less than one percent of our common stock on an individual basis.

Starting in 2013, where bonus and incentive payments exceed certain thresholds, our executive officers and certain other key managerial employees are required to use a certain percentage of their bonus and incentive payments to purchase our shares of common stock, which are then required to be held until their resignation or termination.

In addition, our articles of incorporation provide for a stock option plan to aid retention of executives and key staff and to provide an incentive to meet strategic objectives. All of the stock options we have previously granted have expired and none are currently outstanding.

Item 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

Item 7.A. Major Shareholders

The following table sets forth information regarding beneficial ownership of our common stock by each person or entity known to us as of April 21, 2020 to own beneficially more than 5% of our outstanding shares:

	Number of Shares	
Beneficial Owner	of Common Stock	Percentage
LG Electronics	135,625,000	37.9%
National Pension Service	28,115,952	7.9%

Other than as set forth above, no other person or entity known by us to be acting in concert, directly or indirectly, jointly or severally, owned more than 5% or more of our outstanding common stock or exercised control or could exercise control over us as of April 21, 2020. None of our major shareholders identified above has voting rights different from those of our other shareholders.

Item 7.B. Related Party Transactions

We engage from time to time in a variety of transactions with related parties, including the sale of our products to, and the purchase of raw materials and components from, such related parties. See Notes 8 and 29 of the notes to our financial statements. We have conducted our transactions with related parties based on arm's length negotiations taking into account such considerations as we would in comparable transactions with a non-related party.

From time to time, we provide payment guarantees for the benefit of certain of our subsidiaries. For a discussion of such payment guarantee obligations, please see "Item 5.B. Liquidity and Capital Resources."

Transactions with Companies in the LG Group

Sales to LG Electronics

We sell display panels, primarily large-sized panels for televisions, notebook computers and desktop monitors and small-sized panels for tablet computers and mobile and other applications, to LG Electronics and its subsidiaries on a regular basis, as both an end-brand customer and as a system integrator for use in products they assemble on a contract basis for other end-brand customers. Pricing and other principal terms of the sales to LG Electronics are negotiated based on then-prevailing market terms and prices as adjusted for LG Electronics' requirements such as volume and product specifications and our internal projections regarding market trends, which are the same considerations that we take into account when negotiating pricing and principal terms of sales to our non-affiliated end-brand customers.

Sales to LG International

We sell our products to certain subsidiaries of LG International, our affiliated trading company, in regions where doing so is consistent with local market practices. These subsidiaries of LG International process orders from and distribute products to customers located in their region.

Sales to LG International and its subsidiaries amounted to \W626 billion (US\$542 million), or 2.7% of our sales, in 2019. We sell our products to these subsidiaries of LG International at such prices and on terms determined based on then-prevailing market terms and prices as adjusted for LG International's requirements such as volume and our internal projections regarding market trends.

Purchases from LG Electronics

We purchase equipment, printed circuit boards, photo masks, raw materials, components and certain services, such as waste water management and transportation, warehousing and other related logistics services, from LG Electronics and its subsidiaries. Our purchases from LG Electronics and its subsidiaries amounted to \(\mathbb{W}\)1,311 billion (US\\$1,135 million), or 7.3\% of our total purchases, in 2019.

Purchases from LG International

We procure a portion of our production materials, supplies and services, from LG International and its subsidiaries. We use LG International and its subsidiaries in order to take advantage of their relationships with vendors, experience in negotiations and logistics as well as their ability to obtain volume discounts. Purchase prices we pay to these subsidiaries of LG International and other terms of our transactions with them are negotiated based on then-prevailing market terms and prices as adjusted for our requirements such as volume and specifications and our internal projections regarding market trends. We expect to continue to utilize LG International's overseas subsidiaries for the procurement of a portion of our production materials, supplies and services.

Our purchases, including purchases of materials, supplies and services, from LG International and its subsidiaries, amounted to \\ \Psi 174 \text{ billion} (US\\$151 \text{ million}), or 1.0\% of our total purchases, in 2019.

Other Purchases

Under a master purchase agreement, we procure, on an "as-needed" basis, certain of the raw materials, components and other materials necessary for our production process from other companies in the LG Group. Our purchases of raw materials, such as polarizers, from LG Chem, an affiliate of LG Corp., amounted to ¥1,124 billion (US\$973 million), or 6.2% of our total purchases, in 2019.

Our total purchases, including purchases of materials, supplies and services, from companies in the LG Group, excluding LG Electronics, LG International and LG Chem and their respective subsidiaries, amounted to \(\pmu 2,347\) billion (US\$2,031\) million), or 13.0% of our total purchases, in 2019.

Other Sales

In 2019, we commenced a liquidation process of our subsidiary, LG Display Poland Sp. zo.o., which owned and operated our Wroclaw assembly facility, and disposed of certain of its assets to LG Chem Poland Sp. zo.o., which is a subsidiary of LG Chem, and recognized a gain of \(\pi \)8 billion from such disposal as other non-operating income.

Intellectual Property Related Agreements with LG Corp. and LG Electronics

We have entered into successive trademark license agreements with LG Corp., the holding company of the LG Group, for use of the "LG" name. Under the terms of the current agreement, we are required to make monthly payments to LG Corp. in the aggregate amount per year of 0.2% of our sales after deducting advertising expenses. As of April 21, 2020, we have made all monthly payments required to be made to LG Corp. in accordance with the terms of the current agreement.

In addition, we benefit from certain licenses extended to us from license or cross-license agreements between LG Electronics and third parties. Under the terms of the joint venture agreement establishing LG.Philips LCD Co., Ltd., LG Electronics had assigned most of its patents relating to the development, manufacture and sale of TFT-LCD products to us and we had agreed to maintain joint ownership of those patents that were not assigned to us. Pursuant to a grantback agreement entered into with LG Electronics in July 2004, in the event of any intellectual property dispute between LG Electronics and a third party relating to those patents jointly owned by LG Electronics and us, we intend to allow LG Electronics to assert ownership in those patents for all non TFT-LCD applications and to license or grant other rights in such patents for use by the licensee in non-TFT-LCD applications in order to settle such disputes.

Transactions with Directors and Officers

Certain of our directors and executive officers also serve as executive officers of companies with which we do business. None of our directors or executive officers has or had any interest in any of our business transactions that are or were unusual in their nature or conditions or significant to our business.

Item 7.C. Interests of Experts and Counsel

Not applicable.

Item 8. FINANCIAL INFORMATION

Item 8.A. Consolidated Statements and Other Financial Information

See "Item 18. Financial Statements" and pages F-1 through F-113.

Legal Proceedings

We are involved from time to time in certain routine legal actions incidental to our business. However, except for the ongoing proceedings described below, we are not currently involved in any material litigation or other proceedings the outcome of which we believe might, individually or taken as a whole, have a material adverse effect on our results of operations or financial condition. In addition, except as described below, we are not aware of any other material pending or threatened litigation against us.

Antitrust and Others

In December 2006, LG Display received notices of investigation by the U.S. Department of Justice, the European Commission, the Korea Fair Trade Commission and the Japan Fair Trade Commission with respect to possible anti-competitive activities in the TFT-LCD industry. Subsequently, the Competition Bureau of Canada, the Secretariat of Economic Law of Brazil, the Taiwan Fair Trade Commission, and the Federal Competition Commission of Mexico announced investigations regarding the same. Between November 2008 and June 2014, each of such investigations and subsequent legal proceedings brought by the relevant competition authorities was settled or resolved, and we have paid fines of US\$400 million pursuant to our November 2008 settlement agreement with the U.S. Department of Justice, €210 million pursuant to a December 2010 decision by the European Commission and R\$33.9 million pursuant to an August 2014 settlement agreement with the Secretariat of Economic Law of Brazil.

After the commencement of the U.S. Department of Justice investigation, various class action complaints and separate claims by direct and indirect purchasers of our products were filed against us and other TFT-LCD panel manufacturers in the United States and Canada, alleging violations of respective antitrust and related laws. In addition, from 2010 to 2012, the attorneys general of Arkansas, California, Florida, Illinois, Michigan, Mississippi, Missouri, New York, Oklahoma, Oregon, South Carolina, Washington, West Virginia and Wisconsin filed complaints against us, alleging similar antitrust violations. In June 2018, the attorney general of the Commonwealth of Puerto Rico filed a complaint against us and other TFT-LCD panel manufacturers alleging unjust enrichment in connection with the aforementioned U.S. Department of Justice investigation. Since then, we have reached settlements with each of the plaintiff classes and separate plaintiffs, as well as with the aforementioned state attorneys general, with the exception of the attorney general of the Commonwealth of Puerto Rico, which settlements were duly approved by the applicable courts and, in the case of the state attorneys general actions, by their respective state governments. As of April 21, 2020, we have not been served with the complaint from the attorney general of the Commonwealth of Puerto Rico.

A number of claims alleging damages were filed against LG Display and other entities in the United Kingdom as follow-on claims from the above-described European Commission's decision in December 2010. Claimants iiyama (UK) Limited and its affiliates ("iiyama") filed in December 2014, claimants Argos Limited and others ("Argos"), Ingram Micro and others ("Ingram") and Granville, each filed in December 2016. Ingram discontinued its claims against LG Display in June 2017, and we have reached settlements with Argos in November 2018 and with iiyama in August 2019. As of April 21, 2020, we are vigorously defending ourselves against claims by Granville.

In December 2013, a class action complaint was filed by Hatzlacha, a consumer organization, on behalf of Israeli consumers against LG Display and other defendants in the Central District in Israel. As of April 21, 2020, we have not been served with the complaint from Hatzlacha.

In April 2019, Solas OLED Ltd. filed complaints against us and certain television set manufacturers in the United States and Germany alleging patent infringement by the defendants. In each of these cases, the amount being sought has not been determined. A court hearing for the case in Germany and a pre-trial hearing for the case in the United States have been scheduled for May 2020. As of December 31, 2019, we have not recognized any provisions with respect to such legal claims based on our management's assessment of the likely outcomes. However, the actual outcomes may be different from those estimated as of December 31, 2019.

In each of the foregoing matters that are ongoing, we are continually evaluating the merits of the respective claims and vigorously defending ourselves. Irrespective of the validity or the successful assertion of the claims described above, we may incur significant costs with respect to litigating or settling any or all of the asserted claims. While we continue to vigorously defend the various ongoing proceedings that we are involved in, it is possible that one or more proceedings may result in cash outflow to settle or resolve these claims. We recognize provisions with respect to those legal claims in which our management has concluded that there is a present or constructive obligation arising from a past event, it is more likely than not that an outflow of resources will result to settle the obligation, and a reliable estimate can be made of the amount of the obligation. As of December 31, 2019, we did not recognize any provisions with respect to any legal claims based on our management's assessment of the likely outcomes. However, the actual outcomes may be different from those estimated as of December 31, 2019 and may have an adverse effect on our operating results or financial condition.

Dividends

Annual dividends must be approved by the shareholders at the annual general meeting of shareholders and interim dividends must be approved by the board of directors. Cash dividends may be paid out of retained earnings that have not been appropriated to statutory reserves.

At our annual general meeting of shareholders that was held on March 23, 2017, we declared a cash dividend of \(\pm\)500 per share of common stock, amounting to a total cash dividend of \(\pm\)179 billion, to our shareholders of record as of December 31, 2016 and distributed the cash dividends to such shareholders on April 13, 2017. On March 15, 2018, we declared a cash dividend of \(\pm\)500 per share of common stock, amounting to a total cash dividend of \(\pm\)179 billion to our shareholders of record as of December 31, 2017 and distributed the cash dividends to such shareholders on April 12, 2018. At our annual general meetings of shareholders on March 15, 2019 and March 20, 2020, we did not declare any cash dividend to our shareholders.

Item 8.B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

Item 9. THE OFFER AND LISTING

Item 9.A. Offer and Listing Details.

Principal Trading Market

The principal trading market for our common stock is the Korea Exchange. Our common stock, which is in registered form and has a par value of \$\psi_5,000\$ per share of common stock, has been listed on the Korea Exchange since July 23, 2004 under the identifying code 034220. As of December 31, 2019, 357,815,700 shares of common stock were outstanding. Our common stock is also listed on the New York Stock Exchange in the form of ADSs. The ADSs have been issued by Citibank as ADS depositary and have been listed on the New York Stock Exchange under the ticker symbol "LPL" since July 22, 2004. One ADS represents one-half of one share of common stock. As of December 31, 2019, 19,545,920 ADSs were outstanding.

Item 9.B. Plan of Distribution

Not applicable.

Item 9.C. Markets

See "Item 9.A. Offering and Listing Details."

Item 9.D. Selling Shareholders

Not applicable.

Item 9.E. Dilution

Not applicable.

Item 9.F. Expenses of the Issue

Not applicable.

Item 10. ADDITIONAL INFORMATION

Item 10.A. Share Capital

Not applicable.

Item 10.B. Memorandum and Articles of Association

Description of Capital Stock

This section provides information relating to our capital stock, including brief summaries of material provisions of our current articles of incorporation, the Financial Investment Services and Capital Markets Act and the Korean Commercial Code. The following summaries are subject to, and are qualified in their entirety by reference to, our articles of incorporation and the applicable provisions of the Financial Investment Services and Capital Markets Act and the Korean Commercial Code.

General

Under our articles of incorporation, which was last amended in March 2019, the total number of shares authorized to be issued by us is 500,000,000 shares, which consists of shares of common stock and non-voting preferred stock, both with par value of \(\pi\)5,000 per share. We are authorized to issue preferred stock of up to 40,000,000 shares. As of December 31, 2019, 357,815,700 shares of common stock were issued. All of the issued and outstanding shares are fully-paid and non-assessable and are in registered form.

Our articles of incorporation reflect the adoption of the electronic securities system that launched in September 2019, pursuant to the Act on Electronic Registration of Stocks, Bonds, Etc. (the "Electronic Registration Act"). Accordingly, following the launch of such system, in lieu of issuing share certificates or certificates of preemptive rights, we electronically register the shares that would otherwise be indicated on certificates of preemptive rights on an electronic registry of an electronic registration institution.

Dividends

We distribute dividends to our shareholders in proportion to the number of shares owned by each shareholder. The shares represented by the ADSs have the same dividend rights as other outstanding shares.

Holders of preferred shares are entitled to receive dividends in priority to the holders of common stock. The amount of dividends for preferred shares is determined by our board of directors within a range of 1% to 10% of par value at the time the shares are issued, provided that if the dividend amount on the shares of common stock exceeds that on the preferred shares, holders of preferred shares will also participate in the distribution of the excess dividend amount in the same proportion as holders of common stock. If the amount available for dividends is less than the aggregate amount of such minimum dividend, the holders of preferred shares will be entitled to receive the accumulated unpaid dividends in priority to the holders of common stock from the dividends payable in respect of the next fiscal year.

We declare dividends annually at the annual general meeting of shareholders which is held within three months after the end of the fiscal year. We pay the annual dividend shortly after the annual general meeting to the shareholders of record as of the end of the preceding fiscal year. We may distribute the annual dividend in cash or in shares. However, a dividend of shares must be distributed at par value. If the market price of the shares is less than their par value, dividends in shares may not exceed one-half of the annual dividend. We have no obligation to pay any annual dividend unclaimed for five years from the payment date.

Under the Korean Commercial Code, we may pay an annual dividend only out of the excess of our net assets, on a non-consolidated basis, over the sum of (1) our stated capital and (2) the total amount of our capital surplus reserve and legal reserve accumulated up to the end of the relevant dividend period. We may not pay an annual dividend unless we have set aside a legal reserve in an amount equal to at least 10% of the cash portion of the annual dividend or unless we have accumulated a legal reserve of not less than one-half of our stated capital. We may not use legal reserves to pay cash dividends but may transfer amounts from legal reserves to capital stock or use legal reserves to reduce an accumulated deficit.

Also, we may pay an interim dividend in accordance with a resolution of the board of directors to our shareholders who are registered in the shareholders' register as of July 1 of the relevant fiscal year, and such an interim dividend shall be made in cash.

Distribution of Free Shares

In addition to paying dividends in shares out of our retained or current earnings, we may also distribute to our shareholders an amount transferred from our capital surplus or legal reserve to our stated capital in the form of free shares. Free shares are shares newly issued to existing shareholders without consideration, much like stock dividends, except that in the case of free shares a portion of the reserves, as opposed to earnings, is transferred to capital. We must distribute such free shares to all of our shareholders in proportion to their existing shareholdings. We may distribute free shares when we determine that our capital surplus or legal reserves are too large relative to our paid-in capital.

Preemptive Rights and Issuance of Additional Shares

We may issue authorized but unissued shares at the times and, unless otherwise provided in the Korean Commercial Code, on the terms our board of directors may determine. All of our shareholders are generally entitled to subscribe for any newly issued shares in proportion to their existing shareholdings. We must offer new shares on uniform terms to all shareholders who have preemptive rights and are listed on our shareholders' register as of the relevant record date. However, under the Korean Commercial Code, we may vary the specific terms of these preemptive rights for different classes of shares without shareholder approval. To the extent that such different terms result in placing any particular class of shareholders at a disadvantage relative to other classes, a special resolution by that disadvantaged class of shareholders is necessary.

We must give public notice of the preemptive rights regarding new shares and their transferability at least two weeks before the relevant record date. Our board of directors may determine how to distribute shares for which preemptive rights have not been exercised or where fractions of shares occur.

Under our articles of incorporation, we may issue new shares pursuant to a board resolution to persons other than existing shareholders, who however will not have preemptive rights, if the new shares are, among others:

- publicly offered pursuant to the Financial Investment Services and Capital Markets Act;
- issued to members of our employee stock ownership association;
- represented by depositary receipts;
- issued upon exercise of stock options granted to our officers and employees;
- issued to corporations, institutional investors or domestic or overseas financial institutions to achieve our operational objectives; or
- issued for the purpose of drawing foreign investment when we deem it necessary for our business needs;

provided that the aggregate number of shares so issued do not exceed 20% of the total number of issued and outstanding shares.

In addition, we may issue convertible bonds or bonds with warrants, respectively, up to an aggregate face amount of ± 2.5 trillion to persons other than existing shareholders. The classes of shares to be issued upon conversion of bonds or exercise of warrants shall be common stock. In addition, since September 2019, pursuant to the Electronic Registration Act, in lieu of issuing bond or warrant certificates, we electronically register the bonds and warrant rights that would otherwise be indicated on warrant certificates on an electronic registry of an electronic registration institution.

Members of our employee stock ownership association, whether or not they are our shareholders, generally have a preemptive right to subscribe for up to 20% of the shares publicly offered pursuant to the Financial Investment Services and Capital Markets Act. As of December 31, 2019, approximately 0.00008% of our common stock was held by our employee stock ownership association.

General Meeting of Shareholders

We hold the annual general meeting of shareholders within three months after the end of each fiscal year. Subject to a board resolution or court approval, we may hold an extraordinary general meeting of shareholders:

- as necessary;
- at the request of holders of an aggregate of 3% or more of our outstanding shares;
- at the request of shareholders holding an aggregate of 1.5% or more of our outstanding shares for at least six consecutive months; or
- at the request of our audit committee.

Holders of preferred shares may request a general meeting of shareholders only after the preferred shares become entitled to vote or are enfranchised, as described under "—Voting Rights" below.

We must give shareholders written notice setting out the date, place and agenda of the meeting at least two weeks before the date of the general meeting of shareholders. However, for holders of less than 1% of the total number of issued and outstanding voting shares, we may provide such notice by public notice, either to be made at least twice in *Maeil Business Newspaper* and *The Chosun Ilbo*, both daily newspapers of general circulation published in Seoul, or through the electronic disclosure system operated by the Financial Supervisory Service of Korea or the Korea Exchange.

Shareholders not on the shareholders' register as of the record date are not entitled to receive notice of the general meeting of shareholders, attend or vote at the meeting. Holders of non-voting preferred shares, unless enfranchised, are not entitled to receive notice of general meetings of shareholders.

The place of our general meetings of shareholders is decided by our board of directors, which can be held in our head office, our Paju Display Cluster or any other place as designated by our board of directors.

Directors

Under the Korean Commercial Code and our articles of incorporation, any director wishing to enter into a transaction with us or our subsidiaries in his or her capacity is required to obtain prior approval from the board of directors, and any director with an interest in the transaction may not vote at the meeting of the board of directors to approve the transaction.

Voting Rights

Holders of our common stock are entitled to one vote for each share of common stock, except that voting rights may not be exercised with respect to shares of common stock held by us or by a corporate shareholder in which we own, directly or indirectly, more than 10% of its voting stock. The Korean Commercial Code permits cumulative voting, under which voting method each shareholder would have multiple voting rights corresponding to the number of directors to be appointed in the voting and may exercise all voting rights cumulatively to elect one director. However, our articles of incorporation prohibit cumulative voting.

According to our current articles of incorporation, our shareholders may adopt resolutions at a general meeting by an affirmative majority vote of the voting shares present or represented at the meeting, where the affirmative votes also represent at least one-fourth of our total voting shares then issued and outstanding. However, under the Korean Commercial Code and our articles of incorporation, the following matters, among others, require approval by the holders of at least two-thirds of the shares present or represented at a meeting, where the affirmative votes also represent at least one-third of our total voting shares then issued and outstanding:

- amending our articles of incorporation;
- removing a director;
- effecting any dissolution, merger or consolidation of us;
- transferring the whole or any significant part of our business;
- effecting our acquisition of all of the business of any other company;
- effecting our acquisition of a part of the business of any other company that has a material effect on our business; or
- issuing any new shares at a price lower than their par value.

In general, holders of preferred shares are not entitled to vote on any resolution or receive notice of any general meeting of shareholders. However, in the case of amendments to our articles of incorporation, any merger or consolidation involving us, capital reductions or in certain other cases in which the rights or interests of the preferred shares are affected, approval of the holders of preferred shares is required. We may obtain such approval by a resolution of holders of at least two-thirds of the preferred shares present or represented at a class meeting of the holders of preferred shares, where the affirmative votes also represent at least one-third of our total issued and outstanding preferred shares. In addition, if we are unable to pay dividends on preferred shares as provided in our articles of incorporation, the holders of preferred shares will become enfranchised and will be entitled to exercise voting rights until those dividends are paid. The holders of enfranchised preferred shares have the same rights as holders of common stock to request, receive notice of, attend and vote at a general meeting of shareholders.

Shareholders may exercise their voting rights by proxy.

Holders of ADRs exercise their voting rights through the ADR depositary, an agent of which is the record holder of the underlying shares. Subject to the provisions of the deposit agreement, ADR holders are entitled to instruct the ADR depositary how to vote the shares underlying their ADSs.

Rights of Dissenting Shareholders

In some limited circumstances, including the transfer of all or any significant part of our business and our merger or consolidation with another company, dissenting shareholders have the right to require us to purchase their shares. To exercise this right, shareholders must submit to us a written notice of their intention to dissent before the general meeting of shareholders. Within 20 days after the relevant resolution is passed at such meeting, the dissenting shareholders must make a request to us in writing to purchase their shares. We are obligated to purchase the shares of dissenting shareholders no later than one month after the end of such 20-day period. The purchase price for the shares is required to be determined through negotiation between the dissenting shareholders and us. If we cannot agree on a price through negotiation, the purchase price will be the average of (1) the weighted average of the daily closing prices of shares on the Korea Exchange for the one-month period before the date of the adoption of the relevant board resolution, (2) the weighted average of the daily closing price of shares on the Korea Exchange for the one-week period before the date of the adoption of the relevant board resolution. If we or the dissenting shareholders that had requested the purchase of their shares do not accept the purchase price, we or the dissenting shareholders may request a court to determine the purchase price. Holders of ADSs will not be able to exercise dissenter's rights unless they have withdrawn the underlying common stock and become our direct shareholders.

Register of Shareholders and Record Dates

Our transfer agent, Korea Securities Depository, maintains the register of our shareholders at its office in Seoul, Korea. It will register transfers of shares on the register of shareholders on presentation of the share certificates.

The record date for annual dividends is December 31. For the purpose of determining the shareholders entitled to annual dividends, the register of shareholders may be closed for the period from January 1 to January 15 of each year. Further, for the purpose of determining the shareholders entitled to some other rights pertaining to the shares, we may, on at least two weeks' public notice, set a record date and/or close the register of shareholders for not more than three months.

Business Report

At least one week before the annual general meeting of shareholders, we must make our business report and audited consolidated Korean IFRS financial statements available for inspection at our principal office and at all of our branch offices. In addition, copies of business reports, the audited consolidated Korean IFRS financial statements and any resolutions adopted at the general meeting of shareholders will be available to our shareholders.

Under the Financial Investment Services and Capital Markets Act, we must file with the Financial Services Commission and the Korea Exchange (1) a yearly report (including audited non-consolidated financial statements and audited consolidated financial statements) within 90 days after the end of our fiscal year and (2) interim reports with respect to the three-month period, six-month period and nine-month period from the beginning of each fiscal year within 45 calendar days following the end of each such period. Copies of these reports will be available for public inspection at the Financial Services Commission and the Korea Exchange.

Transfer of Shares

Under the Korean Commercial Code, the transfer of shares is effected by delivery of share certificates. However, to assert shareholders' rights against us, the transferee must have his name and address registered on our register of shareholders. For this purpose, a shareholder is required to file his name, address and seal with us. A non-Korean shareholder may file a specimen signature in place of a seal, unless he is a citizen of a country with a sealing system similar to that of Korea. In addition, a non-resident shareholder must appoint an agent authorized to receive notices on his behalf in Korea and file a mailing address in Korea. The above requirements do not apply to the holders of ADSs.

However, the Electronic Registration Act requires listed securities to be automatically converted into electronic securities as of the business day immediately preceding the effective date of the Electronic Registration Act. The Electronic Registration Act also provides that, with respect to the transfer of electronically registered shares, the effect of transfer will occur upon the completion of the electronic registration of such transfer, and therefore, no entry of change will be required.

Under current Korean regulations, the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and internationally recognized custodians may act as agents and provide related services for foreign shareholders. Certain foreign exchange controls and securities regulations apply to the transfer of shares by non-residents or non-Koreans. See "Item 10.D. Exchange Controls."

Acquisition of Shares by Us

Under the Korean Commercial Code, we may acquire our own shares pursuant to a resolution adopted at a general meeting of shareholders through either (i) purchases on a stock exchange or (ii) with respect to shares other than any redeemable shares as set forth in Article 345, Paragraph (1) of the Korean Commercial Code, purchases from each shareholder in proportion to such shareholder's existing shareholding ratio through the methods set forth in the Presidential Decree, provided that the aggregate purchase price does not exceed the amount of our profit that may be distributed as dividends in respect of the immediately preceding fiscal year.

In addition, pursuant to the Financial Investment Services and Capital Markets Act, we may acquire shares through purchases on the Korea Exchange or through a tender offer. We may also acquire interests in our own shares through agreements with trust companies or retrieve our own shares from a trust company upon termination of the trust agreement. The aggregate purchase price for shares purchased through such means may not exceed the total amount available for distribution of dividends at the end of the preceding fiscal year, subject to certain procedural requirements.

Liquidation Rights

In the event of our liquidation, after payment of all debts, liquidation expenses and taxes, our remaining assets will be distributed among shareholders in proportion to their shareholdings. Holders of preferred shares have no preference in liquidation.

Item 10.C. Material Contracts

We have not entered into any material contracts during the two years immediately preceding the date of this annual report, other than in the ordinary course of our business. For information regarding our agreements and transactions with certain related parties, see "Item 7.B. Related Party Transactions." For descriptions of certain agreements related to our capital commitments and obligations and certain agreements related to our joint ventures, which we believe were not material to our results of operations and financial condition in the periods in which such agreements were entered, see "Item 5.B. Liquidity and Capital Resources" and "Item 4.B. Business Overview—Joint Ventures", respectively.

Item 10.D. Exchange Controls

The Foreign Exchange Transaction Act of Korea and the Presidential Decree and regulations under that Act and Decree, which we refer to collectively as the Foreign Exchange Transaction Laws, regulate investments in Korean securities by non-residents and issuances of securities outside Korea by Korean companies. Non-residents may invest in Korean securities pursuant to the Foreign Exchange Transaction Laws. The Financial Services Commission has also adopted, pursuant to its authority under the Financial Investment Services and Capital Markets Act, regulations that restrict investments by foreigners in Korean securities and regulate issuances of securities outside Korea by Korean companies.

Subject to certain limitations, the Ministry of Strategy and Finance has the authority to take the following actions under the Foreign Exchange Transaction Laws:

- if the government deems it necessary on account of war, armed conflict, natural disaster or grave and sudden and significant changes in domestic or foreign economic circumstances or similar events or circumstances, the Ministry of Strategy and Finance may temporarily suspend performance under any or all foreign exchange transactions, in whole or in part, to which the Foreign Exchange Transaction Laws apply (including suspension of payment and receipt of foreign exchange) or impose an obligation to deposit, safe-keep or sell any means of payment to The Bank of Korea or certain other governmental agencies, foreign exchange equalization funds or financial institutions; and
- if the government concludes that the international balance of payments and international financial markets are experiencing or are likely to experience significant disruption or that the movement of capital between Korea and other countries is likely to adversely affect the Korean Won, exchange rates or other macroeconomic policies, the Ministry of Strategy and Finance may take action to require any person who intends to effect a capital transaction to obtain permission or to require any person who effects a capital transaction to deposit a portion of the means of payment acquired in such transactions with The Bank of Korea, foreign exchange equalization funds or financial institutions.

Government Review of Issuance of ADSs

In order for us to issue ADSs outside Korea, we are required to submit a report to the Ministry of Strategy and Finance or our designated foreign exchange bank (depending on the aggregate issue amount) with respect to the issuance of the ADSs. No further governmental approval is necessary for the offering and issuance of the ADSs.

Under current Korean laws and regulations and the terms of the deposit agreement, the depositary is required to obtain our consent for the number of shares of common stock to be deposited in any given proposed deposit that exceeds the difference between:

- (1) the aggregate number of shares of our common stock deposited by us for the issuance of our ADSs (including deposits in connection with the initial issuance and all subsequent offerings of our ADSs and stock dividends or other distributions related to these ADSs); and
- (2) the number of shares of our common stock on deposit with the depositary at the time of such proposed deposit.

We can give no assurance that we would, subject to governmental authorization, grant our consent, if our consent is required. Therefore, a holder of ADRs who surrenders ADRs and withdraws shares may not be permitted subsequently to deposit those shares and obtain ADRs.

Reporting Requirements for Holders of Substantial Interests

Under the Financial Investment Services and Capital Markets Act, any person whose direct or beneficial ownership of our common stock with voting rights, whether in the form of shares of common stock or ADSs, certificates representing the rights to subscribe for shares and equity-related debt securities including convertible bonds, bonds with warrants and exchangeable bonds, which we refer to collectively as equity securities, together with the equity securities directly or beneficially owned by certain related persons or by any person acting in concert with the person, accounts for 5% or more of our total outstanding equity securities, is required to report the status and purpose (in terms of whether the purpose of the shareholding is to participate in the management of the issuer) of the holdings to the Financial Services Commission and the Korea Exchange within five business days after reaching the 5% ownership interest. In addition, any change (i) in the ownership interest subsequent to the report that equals or exceeds 1% of the total outstanding equity securities from the previous report or (ii) in the shareholding purpose, is required to be reported to the Financial Services Commission and the Korea Exchange within five business days from the date of the change (or, in the case of a person with no intent to seek management control or an institutional investor prescribed by the Financial Services Commission, within ten days of the end of the month in which the change occurred).

Violation of these reporting requirements may subject a person to criminal sanctions such as fines or imprisonment and/or prohibition on the exercise of voting rights with respect to the ownership of equity securities exceeding the reported number of shares. Furthermore, the Financial Services Commission may order the disposal of the unreported equity securities.

When a person's shareholding ratio reaches or exceeds ten percent or more of the company's issued and outstanding shares with voting rights, the person must file a report to the Securities and Futures Commission and to the Korea Exchange within five business days following the date on which the person reached such shareholding limit. In addition, such person must file a report to the Securities and Futures Commission and to the Korea Exchange regarding any subsequent change in his/her shareholding. These subsequent reports on changes in shareholding are required within five business days after the relevant change has occurred. Violation of these reporting requirements may subject a person to criminal sanctions such as fines or imprisonment.

Restrictions Applicable to ADSs

No Korean governmental approval is necessary for the sale and purchase of our ADSs in the secondary market outside Korea or for the withdrawal of shares of our common stock underlying the ADSs and the delivery inside Korea of shares in connection with the withdrawal, provided, that a foreigner who intends to acquire the shares must obtain an investment registration card from the Financial Supervisory Service as described below. The acquisition of the shares by a foreigner must be immediately reported to the governor of the Financial Services Commission, either by the foreigner or by his standing proxy in Korea.

Persons who have acquired shares of our common stock as a result of the withdrawal of shares underlying our ADSs may exercise their preemptive rights for new shares, participate in free distributions and receive dividends on shares without any further Korean governmental approval.

Restrictions Applicable to Shares

As a result of amendments to the Foreign Exchange Transaction Laws and Financial Services Commission regulations, adopted in connection with the stock market opening from January 1992, which we refer to collectively as the Investment Rules, after that date, foreigners may invest, with limited exceptions and subject to procedural requirements, in shares of all Korean companies listed on the KRX KOSPI Market or the KRX KOSDAQ Market unless prohibited by specific laws. Foreign investors may trade shares listed on the KRX KOSPI Market or the KRX KOSDAQ Market only through the KRX KOSPI Market or the KRX KOSDAQ Market, except in limited circumstances, including:

- odd-lot trading of shares;
- acquisition of shares, which we refer to as converted shares, by exercise of warrants, conversion rights or exchange rights under bonds with warrants, convertible bonds or exchangeable bonds or withdrawal rights under depositary receipts issued outside of Korea by a Korean company;
- acquisition of shares as a result of inheritance, donation, bequest or exercise of shareholders' rights, including preemptive rights or rights to participate in free distributions and receive dividends;
- subject to certain exceptions, over-the-counter transactions between foreigners of a class of shares for which the ceiling on aggregate acquisition by foreigners, as explained below, has been reached or exceeded;
- shares acquired by way of direct investment and/or the disposal of such shares by the investor;
- the disposal of shares pursuant to the exercise of appraisal rights of dissenting shareholders;
- the disposal of shares in connection with a tender offer;
- the acquisition of shares by a foreign depositary in connection with the issuance of depositary receipts;
- the acquisition and disposal of shares through an overseas stock exchange market if such shares are simultaneously listed on the KRX KOSPI Market or the KRX KOSDAQ Market and such overseas stock exchange; and
- arm's-length transactions between foreigners, if all of such foreigners belong to the investment group managed by the same person.

For over-the-counter transactions of shares between foreigners outside the KRX KOSPI Market or the KRX KOSDAQ Market for shares with respect to which the limit on aggregate foreign ownership has been reached or exceeded, a financial investment company with a brokerage license in Korea must act as an intermediary. Odd-lot trading of shares outside the KRX KOSPI Market or the KRX KOSDAQ Market must involve a financial investment company with a dealing license in Korea as the other party. Foreign investors are prohibited from engaging in margin transactions by borrowing shares from financial investment companies with respect to shares that are subject to a foreign ownership limit.

The Investment Rules require a foreign investor who wishes to invest in shares on the KRX KOSPI Market or the KRX KOSDAQ Market (including converted shares and shares being issued for initial listing on the KRX KOSPI Market or the KRX KOSDAQ Market) to register its identity with the Financial Supervisory Service prior to making any such investment unless it has previously registered. However, the registration requirement does not apply to foreign investors who acquire converted shares (including upon conversion of ADSs into shares and upon exercise of conversion rights of convertible bonds) with the intention of selling such converted shares within three months from the date of acquisition of the converted shares. Upon registration, the Financial Supervisory Service will issue to the foreign investor an investment registration card, which must be presented each time the foreign investor opens a brokerage account with a financial investment company with a brokerage license. Foreigners eligible to obtain an investment registration card include foreign nationals who have not been residing in Korea for a consecutive period of six months or more, foreign governments, foreign municipal authorities, foreign public institutions, international financial institutions or similar international organizations, corporations incorporated under foreign laws and any person in any additional category designated by a decree promulgated under the Financial Investment Services and Capital Markets Act. All Korean branch offices of a foreign corporation as a group are treated as a separate foreigner from the offices of the corporation located outside of Korea for the purpose of investment registration. However, a foreign corporation or depositary issuing depositary receipts may obtain one or more investment registration cards in its name in certain circumstances as described in the relevant regulations.

Upon a foreign investor's purchase of shares through the KRX KOSPI Market or the KRX KOSDAQ Market, no separate report by the investor is required because the investment registration card system is designed to control and oversee foreign investment through a computer system. However, a foreign investor's acquisition or sale of shares outside the KRX KOSPI Market or the KRX KOSDAQ Market (as discussed above) must be reported by the foreign investor or his standing proxy to the governor of the Financial Supervisory Service at the time of each such acquisition or sale; provided, however, that a foreign investor must ensure that any acquisition or sale by it of shares outside the KRX KOSPI Market or the KRX KOSDAQ Market in the case of trades in connection with a tender offer, odd-lot trading of shares or trades of a class of shares for which the aggregate foreign ownership limit has been reached or exceeded, is reported to the governor of the Financial Supervisory Service by the financial investment company engaged to facilitate such transaction. A foreign investor may appoint a standing proxy from among the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and internationally recognized custodians which will act as a standing proxy to exercise shareholders' rights or perform any matters related to the foregoing activities if the foreign investor does not perform these activities itself. Generally, a foreign investor may not permit any person, other than its standing proxy, to exercise rights relating to its shares or perform any tasks related thereto on its behalf. However, a foreign investor may be exempted from complying with these standing proxy rules with the approval of the governor of the Financial Supervisory Service in cases deemed inevitable by reason of conflict between the laws of Korea and the home country of the foreign investor.

Certificates evidencing shares of Korean companies must be kept in custody with an eligible custodian in Korea. Only the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and internationally recognized custodians are eligible to act as a custodian of shares for a non-resident or foreign investor; provided, however, that a foreign investor may have the certificate evidencing shares released from such custody when it is necessary to exercise its rights to such shares or to inspect and confirm the presence of the certificate(s) of such shares. A foreign investor must ensure that its custodian deposits its shares with the Korea Securities Depository. However, a foreign investor may be exempted from complying with this deposit requirement with the approval of the governor of the Financial Supervisory Service in circumstances where compliance with that requirement is made impracticable, including cases where compliance would contravene the laws of the home country of such foreign investor.

Under the Investment Rules, with certain exceptions, foreign investors may acquire shares of a Korean company without being subject to any foreign investment ceiling. As one such exception, unless otherwise stated in their articles of incorporation, designated public corporations are subject to a 40% ceiling on the acquisition of shares by foreigners in the aggregate. Furthermore, an investment by a foreign investor in 10% or more of the outstanding shares with voting rights of a Korean company is defined as a foreign direct investment under the Foreign Investment Promotion Act of Korea. Generally, a foreign direct investment must be reported to the foreign exchange bank designated by the Ministry of Trade, Industry & Energy or the Korea Trade-Investment Promotion Agency prior to such investment (within 30 days from the date of such investment, if the company is listed on the Korea Exchange). The acquisition of shares of a Korean company by a foreign investor may also be subject to certain foreign or other shareholding restrictions in the event that the restrictions are prescribed in a specific law that regulates the business of the Korean company.

Under the Foreign Exchange Transaction Laws, a foreign investor who intends to acquire shares must designate a foreign exchange bank at which he must open a foreign currency account and a Korean Won account exclusively for stock investments. No approval is required for remittance into Korea and deposit of foreign currency funds in the foreign currency account. Foreign currency funds may be transferred from the foreign currency account at the time required to place a deposit for, or settle the purchase price of, a stock purchase transaction to a Korean Won account opened at a financial investment company with a securities dealing or brokerage license. Funds in the foreign currency account may be remitted abroad without any Korean governmental approval.

Dividends on shares of Korean companies are paid in Korean Won. No Korean governmental approval is required for foreign investors to receive dividends on, or the Korean Won proceeds of the sale of, any shares to be paid, received and retained in Korea. Dividends paid on, and the Korean Won proceeds of the sale of, any shares held by a non-resident of Korea must be deposited either in a Korean Won account with the investor's financial investment company or in his Korean Won account. Funds in the investor's Korean Won account may be transferred to his foreign currency account or withdrawn for local living expenses, provided that any withdrawal of local living expenses in excess of a certain amount is reported to the Financial Supervisory Service by the foreign exchange bank at which the Won account is maintained. Funds in the Korean Won account may also be used for future investment in shares or for payment of the subscription price of new shares obtained through the exercise of preemptive rights.

Financial investment companies with a securities dealing, brokerage or collective investment license are allowed to open foreign currency accounts with foreign exchange banks exclusively for accommodating foreign investors' stock investments in Korea. Through these accounts, such financial investment companies may enter into foreign exchange transactions on a limited basis, such as conversion of foreign currency funds and Korean Won funds, either as a counterparty to or on behalf of foreign investors, without the investors having to open their own accounts with foreign exchange banks.

Item 10.E. Taxation

The following summary is based upon the tax laws of the United States and the Republic of Korea as in effect on the date of this annual report, and is subject to any change in U.S. or Korean law that may come into effect after such date. Investors in the shares of common stock or ADSs are advised to consult their own tax advisers as to the United States, Korean or other tax consequences of the purchase, ownership and disposition of such securities, including the effect of any national, state or local tax laws.

Korean Taxation

The following summary of Korean tax considerations applies to you so long as you are not:

- a resident of Korea;
- · a corporation having its head office, principal place of business or place of effective management in Korea (i.e., a Korean corporation); or
- engaged in a trade or business in Korea through a permanent establishment or a fixed base to which the relevant income is attributable or with which the relevant income is effectively connected.

Taxation of Dividends on Shares of Common Stock or ADSs

We will deduct Korean withholding tax from dividends (whether in cash or in shares) paid to you at a rate of 22% (including local income surtax). If you are a beneficial owner of the dividends and a qualified resident in a country that has entered into a tax treaty with Korea, you may qualify for a reduced rate of Korean withholding tax. See "—Tax Treaties" below for a discussion of treaty benefits. If we distribute to you free shares representing a transfer of certain capital reserves or asset revaluation reserves into paid-in capital, that distribution may be subject to Korean withholding tax.

Taxation of Capital Gains from Transfer of Shares of Common Stock or ADSs

As a general rule, capital gains earned by non-residents upon transfer of shares of our common stock or ADSs are subject to Korean withholding tax at the lower of (1) 11% (including local income surtax) of the gross proceeds realized or (2) subject to the production of satisfactory evidence of acquisition costs and certain direct transaction costs of the shares or ADSs, 22% (including local income surtax) of the net realized gain, unless exempt from Korean income taxation under the applicable Korean tax treaty with the non-resident's country of tax residence. See "—Tax Treaties" below for a discussion on treaty benefits. Even if you do not qualify for an exemption under a tax treaty, you will not be subject to the foregoing withholding tax on capital gains if you qualify under the relevant Korean domestic tax law exemptions discussed in the following paragraphs.

With respect to shares of our common stock, you will not be subject to Korean income taxation on capital gains realized upon the transfer of such shares through the Korea Exchange if you (1) have no permanent establishment in Korea and (2) did not own or have not owned (together with any shares owned by any entity with which you have a certain special relationship and possibly including the shares represented by the ADSs) 25% or more of our total issued and outstanding shares at any time during the calendar year in which the sale occurs and during the five calendar years prior to the calendar year in which the sale occurs.

Under the Korean tax laws for capital gains recognized or to be recognized from disposition of ADSs, ADSs are viewed as shares of stock for capital gains tax purposes. Accordingly, capital gains from sale or disposition of ADSs are taxed (if taxable) as if such gains are from sale or disposition of shares of our common stock. It should be noted that (i) capital gains earned by you (regardless of whether you have a permanent establishment in Korea) from a transfer of ADSs outside Korea will generally be exempt from Korean income taxation by virtue of the Special Tax Treatment Control Law of Korea, or the STTCL, provided that the issuance of ADSs is deemed to be an overseas issuance under the STTCL, but (ii) in the case where an owner of the underlying shares of stock transfers ADSs after conversion of the underlying shares into ADSs, the exemption under the STTCL described in (i) will not apply. In the case where an owner of the underlying shares of stock transfers the ADSs after conversion of the underlying shares of stock into ADSs, such person is obligated to file corporate income tax returns and pay tax unless a purchaser or a financial investment company with a brokerage license, as applicable, withholds and pays the tax on capital gains derived from transfer of ADSs, as discussed below.

If you are subject to tax on capital gains with respect to the sale of ADSs, or of shares of common stock which you acquired as a result of a withdrawal, the purchaser or, in the case of the sale of shares of common stock on the Korea Exchange or through a financial investment company with a brokerage license in Korea, the financial investment company, is required to withhold Korean tax from the sales price in an amount equal to the lower of (i) 11% (including local income surtax) of the gross realization proceeds and (ii) subject to the production of satisfactory evidence of acquisition costs and certain direct transaction costs of the shares or ADSs, 22% (including local income surtax) of the net realized gain, and to make payment of these amounts to the Korean tax authority, unless you establish your entitlement to an exemption under an applicable tax treaty or domestic tax law. See the discussion under "—Tax Treaties" below for an additional explanation of claiming treaty benefits.

Tax Treaties

Korea has entered into a number of income tax treaties with other countries, including the United States, which reduce or exempt Korean withholding tax on dividend income and capital gains on transfer of shares of common stock or ADSs. For example, under the Korea-U.S. income tax treaty, reduced rates of Korean withholding tax on dividends of 16.5% or 11%, respectively (including local income surtax), depending on your shareholding ratio, and an exemption from Korean withholding tax on capital gains are available to residents of the United States that are beneficial owners of the relevant dividend income or capital gains. However, under Article 17 (Investment or Holding Companies) of the Korea-U.S. income tax treaty, such reduced rates and exemption do not apply if (1) you are a U.S. corporation, (2) by reason of any special measures, the tax imposed on you by the United States with respect to such dividends or capital gains is substantially less than the tax generally imposed by the United States on corporate profits, and (3) 25% or more of your capital is held of record or is otherwise determined, after consultation between competent authorities of the United States and Korea, to be owned directly or indirectly by one or more persons who are not individual residents of the United States. Also, under Article 16 (Capital Gains) of the Korea-U.S. income tax treaty, the exemption on capital gains does not apply if you are an individual, and (a) you maintain a fixed base in Korea for a period or periods aggregating 183 days or more during the taxable year and your ADSs or shares of common stock giving rise to capital gains are effectively connected with such fixed base or (b) you are present in Korea for a period or periods of 183 days or more during the taxable year. You should inquire for yourself whether you are entitled to the benefit of an income tax treaty with Korea. It is the responsibility of the party claiming the benefits of an income tax treaty in respect of dividend payments or capital gains to submit to us, the purchaser or the financial investment company, as applicable, a certificate as to his tax residence. In the absence of sufficient proof, we, the purchaser or the financial investment company, as applicable, must withhold tax at the normal rates.

Furthermore, in order for you to claim the benefit of a tax rate reduction or tax exemption on certain Korean source income (e.g., dividends and capital gains) under an applicable tax treaty, subject to certain exceptions, Korean tax law requires you (or your agent) as the beneficial owner of such Korean source income to submit the relevant application (Application for Entitlement to Reduced Tax Rate or Application for Tax Exemption, as the case may be) along with a certificate of your tax residency issued by a competent authority of your country of tax residence ("BO Application"). Such application should be submitted to the withholding agent prior to the payment date of such Korean source income. Subject to certain exceptions, where the Korean source income is paid to an overseas investment vehicle that is not the beneficial owner of such income ("OIV"), a beneficial owner claiming the benefit of an applicable tax treaty with respect to the Korean source income must submit its BO application to such OIV, which must submit an OIV report and a schedule of beneficial owners to the withholding agent prior to the payment date of such Korean source income. In the case of an application for tax exemption, the withholding agent is required to submit the application (together with the applicable OIV report in the case of income paid to an OIV) to the relevant district tax office by the ninth day of the month following the date of the payment of such income.

Inheritance Tax and Gift Tax

If you die while holding an ADS or donate an ADS, it is unclear whether, for Korean inheritance and gift tax purposes, you will be treated as the owner of the shares of common stock underlying the ADSs. If the tax authority interprets depositary receipts as the underlying share certificates, you may be treated as the owner of the shares of common stock and your heir or the donee (or in certain circumstances, you as the donor) will be subject to Korean inheritance or gift tax presently at the rate of 10% to 50% based on the value of the ADSs or shares of common stock and the identity of the individual against whom the tax is assessed.

If you die while holding a share of common stock or donate a share of common stock, your heir or donee (or in certain circumstances, you as the donor) will be subject to Korean inheritance or gift tax at the same rate as indicated above.

At present, Korea has not entered into any tax treaty relating to inheritance or gift taxes.

Securities Transaction Tax

If you transfer shares of common stock on the Korea Exchange, you will be subject to securities transaction tax at the rate of 0.1% and an agriculture and fishery special surtax at the rate of 0.15% of the sale price of the shares of common stock. If your transfer of the shares of common stock is not made on the Korea Exchange, subject to certain exceptions, you will be subject to a securities transaction tax at the rate of 0.45% and will not be subject to an agriculture and fishery special surtax.

Depositary receipts, which the ADSs constitute, are included in the scope of securities the transfers of which are subject to securities transaction tax. However, transfer of depositary receipts listed on a foreign securities exchange similar to that of Korea (e.g., the New York Stock Exchange or the Nasdaq Stock Market) will not be subject to the securities transaction tax.

In principle, the securities transaction tax, if applicable, must be paid by the transferor of the shares or certain rights including rights to subscribe to each shares. When the transfer is effected through a securities settlement company in Korea, such settlement company is generally required to withhold and pay the tax to the tax authorities. When such transfer is made through a financial investment company only, such financial investment company is required to withhold and pay the tax. Where the transfer is effected by a non-resident without a permanent establishment in Korea, other than through a securities settlement company or a financial investment company, the transferee is required to withhold the securities transaction tax.

Non-reporting or under-reporting of securities transaction tax will generally result in penalties equal to 20% to 60% of the non-reported tax amount or 10% to 60% of the under-reported tax amount, respectively. Also, a failure to timely pay securities transaction tax will result in a penalty equal to 9.125% per annum of the due but unpaid tax amount. The penalties are imposed on the party responsible for paying the securities transaction tax or, if such tax is required to be withheld, on the party that has the obligation to withhold.

United States Taxation

This summary describes certain material U.S. federal income tax consequences for a U.S. holder (as defined below) of acquiring, owning, and disposing of shares of common stock or ADSs. This summary applies to you only if you hold shares of common stock or ADSs as capital assets for tax purposes. This summary does not apply to you if you are a member of a class of holders subject to special rules, such as:

- a dealer in securities or currencies:
- a trader in securities that elects to use a mark-to-market method of accounting for securities holdings;
- a bank or financial institution;

- a life insurance company;
- a tax-exempt organization;
- an entity treated as a partnership (and partners therein) or other pass-through entity for U.S. federal income tax purposes;
- a person that holds shares of common stock or ADSs that are a hedge or that are hedged against interest rate or currency risks;
- a person that holds shares of common stock or ADSs as part of a straddle or conversion transaction for tax purposes;
- a person whose functional currency for tax purposes is not the U.S. dollar; or
- a person that owns or is deemed to own 10% or more of our stock (by vote or by value).

This summary is based on the Internal Revenue Code of 1986, as amended, its legislative history, existing and proposed regulations promulgated thereunder, published rulings and court decisions, all as currently in effect. These laws are subject to change, possibly on a retroactive basis.

In addition, this summary does not discuss the application of the Medicare net investment income tax or the alternative minimum tax. Please consult your own tax advisers concerning the consequences of purchasing, owning, and disposing of shares of common stock or ADSs in your particular circumstances, including the possible application of state, local, non-U.S. or other tax laws.

For purposes of this summary, you are a "U.S. holder" if you are a beneficial owner of a share of common stock or an ADS and you are:

- a citizen or resident of the United States;
- a U.S. domestic corporation; or
- otherwise subject to U.S. federal income tax on a net income basis with respect to income from the share of common stock or ADS.

In general, if you are the beneficial owner of ADSs, you will be treated as the beneficial owner of the common stock represented by those ADSs for U.S. federal income tax purposes, and no gain or loss will be recognized if you exchange an ADS for the common stock represented by that ADS.

Dividends

The gross amount of cash dividends that you receive (prior to deduction of Korean taxes) generally will be subject to U.S. federal income taxation as foreign source dividend income. Dividends paid in Korean Won will be included in your income in a U.S. dollar amount calculated by reference to the exchange rate in effect on the date that you receive the dividend (or the date of the depositary's receipt of the dividend, in the case of ADSs), regardless of whether the payment is in fact converted into U.S. dollars. If such a dividend is converted into U.S. dollars on the date of receipt, you generally should not be required to recognize foreign currency gain or loss in respect of the dividend income.

Subject to certain exceptions for short-term (60 days or less) and hedged positions, the U.S. dollar amount of "qualified dividends" received by an individual U.S. holder in respect of ADSs generally will be subject to taxation at a lower rate than other ordinary income. Dividends paid on the ADSs will be treated as qualified dividends if (i) the ADSs are readily tradable on an established securities market in the United States and (ii) we were not, in the year prior to the year in which the dividend was paid, and are not, in the year in which the dividend is paid, a passive foreign investment company (a "PFIC"). The ADSs are listed on the New York Stock Exchange and will qualify as readily tradable on an established securities market in the United States so long as they are so listed. Based on our audited financial statements and relevant market and shareholder data, we believe that we were not treated as a PFIC for U.S. federal income tax purposes with respect to our 2019 taxable year. In addition, based on our current expectations regarding the value and nature of our assets, the sources and nature of our income, and relevant market and shareholder data, we do not anticipate becoming a PFIC for our 2020 taxable year.

Distributions of additional shares in respect of shares of common stock or ADSs that are made as part of a pro-rata distribution to all of our shareholders generally will not be subject to U.S. federal income tax, unless you have the right to receive cash or property, in which case you will be treated as if you received cash equal to the fair market value of the distribution.

Sale or Other Disposition

For U.S. federal income tax purposes, gain or loss you realize on the sale or other disposition of shares of common stock or ADSs will be treated as U.S. source capital gain or loss, and will be long-term capital gain or loss if the shares of common stock or ADSs were held for more than one year. Your ability to offset capital losses against ordinary income is limited. Long-term capital gain recognized by an individual U.S. holder generally is subject to taxation at a reduced rate.

Foreign Tax Credit Considerations

You should consult your own tax advisers to determine whether you are subject to any special rules that limit your ability to make effective use of foreign tax credits, including the possible adverse impact of failing to take advantage of benefits under the income tax treaty between the United States and Korea. If no such rules apply, you may claim a credit against your U.S. federal income tax liability for Korean taxes withheld from cash dividends on the shares of common stock or ADSs, so long as you have owned the shares of common stock or ADSs (and not entered into specified kinds of hedging transactions) for at least a 16-day period that includes the ex-dividend date. Instead of claiming a credit, you may, at your election, deduct such Korean taxes in computing your taxable income, subject to generally applicable limitations under U.S. tax law. Foreign tax credits will not be allowed for withholding taxes imposed in respect of certain short-term or hedged positions in securities and may not be allowed in respect of arrangements in which a U.S. holder's expected economic profit is insubstantial.

Any Korean securities transaction tax or agriculture and fishery special surtax that you pay will not be creditable for foreign tax credit purposes.

The calculation of foreign tax credits and, in the case of a U.S. holder that elects to deduct foreign taxes, the availability of deductions involve the application of complex rules that depend on a U.S. holder's particular circumstances. You should consult your own tax advisers regarding the creditability or deductibility of such taxes.

Specified Foreign Financial Assets

Certain U.S. holders that own "specified foreign financial assets" with an aggregate value in excess of US\$50,000 on the last day of the taxable year or US\$75,000 at any time during the taxable year are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer (which would include shares of common stock or ADSs) that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria. U.S. holders who fail to report the required information could be subject to substantial penalties. Prospective investors should consult their own tax advisors concerning the application of these rules to their investment in shares of common stock or ADSs, including the application of the rules to their particular circumstances.

U.S. Information Reporting and Backup Withholding Rules

Payments of dividends and sales proceeds that are made within the United States or through certain U.S. related financial intermediaries are subject to information reporting and may be subject to backup withholding unless the holder (i) establishes that it is a corporation or other exempt recipient or (ii) provides a taxpayer identification number and certifies that no loss of exemption from backup withholding has occurred.

Holders that are not U.S. persons generally are not subject to information reporting or backup withholding. However, such a holder may be required to provide a certification of its non-U.S. status in connection with payments received within the United States or through a U.S. related financial intermediary.

Item 10.F. Dividends and Paying Agents

Not applicable.

Item 10.G. Statements by Experts

Not applicable.

Item 10.H. Documents on Display

We are subject to the information requirements of the Exchange Act and, in accordance therewith, are required to file reports, including annual reports on Form 20-F, and other information with the SEC. These materials, including this annual report and the exhibits thereto, may be inspected and copied at the SEC's public reference rooms in Washington, D.C., New York, New York and Chicago, Illinois. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. As a foreign private issuer, we are also required to make filings with the SEC by electronic means. Any filings we make electronically will be available to the public over the Internet at the SEC's web site at http://www.sec.gov.

Item 10.I. Subsidiary Information

Not applicable.

Item 11. OUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Overview

Market risk is the risk of loss related to adverse changes in market prices, including interest rates and foreign exchange rates, of financial instruments. We are exposed to various financial market risks in our ordinary course of business transactions, primarily from changes in interest rates and foreign exchange rates, and we utilize financial derivatives to mitigate these risks. We also used various derivative instruments, principally forward contracts with maturities of one year or less, to manage our exposure associated with net asset and liability positions and cash flows denominated in foreign currencies. We have used, and intend to continue to use, these financial derivatives only for hedging purposes and not for speculative purposes.

Our primary market risk exposures relate to interest rate movements on floating rate borrowings and exchange rate movements on foreign currency denominated accounts receivable, as well as foreign currency denominated future cash flows from sales, mostly denominated in U.S. dollars and foreign currency denominated accounts payable for purchases of raw materials and supplies, primarily denominated in U.S. dollars and Japanese Yen. The fair value of our financial instruments has been determined as the price, as of the applicable measurement date, that we would receive when selling an asset or that we would pay when transferring a liability, in an orderly transaction between market participants. Fair value is based on quoted market prices where available.

For a further discussion of our market risk and fair value of our financial assets and liabilities, see Note 26 of the notes to our financial statements.

Interest Rate Risks

Our exposure to interest rate risks relates primarily to our short-term and long-term debt obligations, which are typically incurred to fund capital expenditures and repay maturing debt, as well as for working capital and other general corporate purposes. As of December 31, 2019, we had outstanding short-term and long-term debt, including current portion, in the aggregate amount of \(\pm\)13,491 billion (US\$11,676 million).

From time to time, we may enter into interest rate swap contracts to hedge against the effects of interest rate fluctuations of certain of our floating rate long-term debt. As of December 31, 2019, we did not have any outstanding interest rate swap contracts.

We may be exposed to interest rate risks on additional debt financing that we may periodically undertake to fund capital expenditures required for our capacity expansion. Upward fluctuations in interest rates increase the cost of new debt. The interest rate that we will be able to obtain in a new debt financing will depend on market conditions at that time and may differ from the rates we have secured on our current debt.

As of December 31, 2019, we had US\$353 million aggregate principal amount of U.S. dollar denominated short-term loans, US\$2,767 million aggregate principal amount of U.S. dollar denominated long-term loans, CNY1,737 million aggregate principal amount of CNY denominated short-term loans and CNY18,699 million aggregate principal amount of CNY denominated long-term loans. The interest rates for our U.S. dollar denominated loans are set based on three-month U.S. dollar LIBOR plus 0.75% to 1.70%, six-month U.S. dollar LIBOR plus 1.25% to 1.35% or twelve-month U.S. dollar LIBOR plus 0.78% to 0.88%. The interest rates for our CNY denominated loans are set based on 95% to 105% of the rate published by the People's Bank of China or the rate published by the People's Bank of China minus 0.05%. The table below provides information about our financial instruments that are sensitive to changes in interest rates. The risk associated with fluctuating interest expense is principally limited to our U.S. dollar denominated and CNY denominated term loans, and we do not believe that a near-term 10% change of the effective interest rate would have a significant impact on our cash flows.

	Expected Maturity Dates				Fair Value at December 31,			
	2020	2021	2022	2023	2024	Thereafter	Total	2019
Debt obligations			(III DIIIIOIIS O	f Won, except for i	interest rate per	centages)		
Fixed rate (W)	W 1,048.0	W 1,237.6	₩ 981.5	₩1,141.5	₩ 93.6	₩ 368.4	W 4,870.6	₩ 4,964.9
Average interest rate	2.43%	2.64%	2.64%	3.02%	2.47%	3.35%		
Variable rate (W)	_	₩ 100.0	_	₩ 200.0	_	_	₩ 300.0	₩ 300.0
Average interest rate	_	2.94%	_	2.53%	_	_		
Variable rate (CNY)	₩ 288.2	₩ 635.1	₩ 634.0	₩ 551.9	₩551.9	₩ 725.9	₩3,387.0	₩ 3,387.0
Average interest rate	4.40%	5.06%	5.09%	5.15%	5.15%	5.15%		
Fixed rate (US\$)	_	₩ 347.3	_	_	₩858.4	_	₩1,205.7	₩ 1,219.5
Average interest rate	_	3.88%	_	_	1.50%	_		
Variable rate (US\$)	₩ 603.8	₩ 451.1	₩1,000.2	₩ 733.9	₩810.1	₩ 128.6	₩3,727.8	₩ 3,727.8
Average interest rate	3.41%	2.94%	3.17%	3.26%	3.53%	3.04%		

For a further discussion of our interest rate risk exposures, including a further sensitivity analysis on our interest rate risk exposures, see Notes 11 and 26 of the notes to our financial statements.

Foreign Currency Risk

The primary foreign currency to which we are exposed is the U.S. dollar. We are also exposed, to a lesser extent, to other foreign currencies, including the Chinese Yuan, the Japanese Yen and the Euro. As of December 31, 2019, we had U.S. dollar denominated sales-related trade accounts and notes receivable, net of US\$2,485 million, which represented approximately 91% of our trade accounts and notes receivable, and U.S. dollar denominated sales-related trade accounts payable of US\$628 million, which represented approximately 28% of our trade accounts payable, net.

As of December 31, 2019, we also had CNY denominated sales-related trade accounts and notes receivable of CNY550 million, which represented approximately 3% of our trade accounts and notes receivable, net, and Japanese Yen denominated sales-related trade accounts and notes receivable of ¥19 million. In addition, we had CNY denominated sales-related trade accounts payable of CNY2,289 million and Japanese Yen denominated sales-related trade accounts payable of ¥9,043 million, which represented approximately 14% and 4% of our trade accounts and notes payable, net, respectively.

From time to time, we hedge against the effect of exchange rate fluctuations of the U.S. dollar against the Korean Won on our U.S. dollar debt exposure using cross-currency swap contracts. As of December 31, 2019, US\$2,085 million of our US\$2,852 million aggregate principal amount of U.S dollar denominated bonds and floating rate short-term and long-term borrowings were hedged against foreign exchange rate and interest rate fluctuations through cross-currency swap contracts.

Cross Currency Interest Rate Swap Contracts:

Contracts to sell Korean (Won)/buy US\$:

Aggregate contract amount	US\$	2,085 million
Average contractual exchange rate	(Won)	1,137.15/US\$
Change in fair value	(Won)	41.8 billion

In addition to relying on natural hedges created by foreign currency payables and receivables, we enter into short-term foreign currency forward contracts with major financial institutions to minimize the impact of foreign currency fluctuations on our results of operations. Gains and losses on foreign currency forward contracts are recorded in the period of the exchange rate changes as foreign exchange gain or loss or other comprehensive income. As of December 31, 2019, we did not have any outstanding foreign currency forward contracts.

Based on our overall foreign currency exposure as of December 31, 2019, a short-term 10% appreciation or depreciation of the U.S. dollar against the Korean Won may have a material effect on our short-term financial condition, results of operations or cash flows.

For a further discussion of our foreign currency risk exposures, including a sensitivity analysis on our currency risk exposures, see Note 26 of the notes to our financial statements.

Other Risks

We are exposed to credit risk in the event of non-performance by the counterparties under our foreign currency forward contracts at maturity. In order to minimize this risk, we limit the transaction amount with any one party and continually monitor the credit quality of the counterparties to these financial instruments. We do not anticipate any material losses from these contracts, and we believe the risk of non-performance by the counterparties under these contracts is remote.

A substantial portion of our sales is attributable to a limited number of our end-brand customers. Our top ten end-brand customers, including our largest shareholder as an end-brand customer, together accounted for a substantial majority of our sales in each of 2017, 2018 and 2019. While we negotiate directly with our end-brand customers concerning the price and quantity of the sales, for some sales transactions we invoice the end-brand customers' designated system integrators. In addition, a portion of our sales to end-brand customers and their system integrators located in certain regions are sold through LG International's overseas subsidiaries. Although our sales to LG International and its subsidiaries only accounted for 2.7% of our sales in 2019, in the past we have sold a significantly greater amount to these entities. As a result of our significant dependence on a concentrated group of end-brand customers and their designated system integrators, as well a significant amount of sales we may make to our affiliated trading company, LG International, and its subsidiaries, we are exposed to credit risks associated with these entities. We have established certain measures, such as factoring arrangements and requirement of credit insurance from customers, to protect us from excessive exposure to such credit risks.

We manage our accounts receivable and credit exposure to customers by establishing credit limits for each customer to whom we supply products on an open account basis in accordance with our internal credit guidelines. We assess credit risk through quantitative and qualitative analysis, and based on this analysis, we establish credit limits and determine whether we will seek to use one or more credit support devices, such as obtaining some form of third-party guaranty or stand-by letter of credit, obtaining credit insurance or through factoring of all or part of accounts receivables. Our credit policy does not require credit limits on accounts receivable created on letters of credit. To date, we have not experienced any material problems relating to customer payments. For a further discussion of our credit risk exposures, see Note 26 of the notes to our financial statements.

According to the Korean Statistical Information Service, the rate of inflation in Korea was 1.9% in 2017, 1.5% in 2018 and 0.4% in 2019. Inflation has not had a material impact on our results of operations in recent years.

Item 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Fees and Charges

Under the terms of the deposit agreement, as a holder of our ADSs, you are required to pay the following service fees to the depositary:

Services	Fees
Issuance of ADSs	Up to US\$0.05 per ADS issued
Cancellation of ADSs	Up to US\$0.05 per ADS canceled
Distribution of cash dividends or other cash distributions	Up to US\$0.02 per ADS held
Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions or (ii) exercise of rights to purchase additional ADSs	Up to US\$0.02 per ADS held
Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to US\$0.05 per ADS held
Other ADS services	Up to US\$0.02 per ADS held

As a holder of our ADSs, you are also responsible for paying certain fees and expenses incurred by the depositary and certain taxes and governmental charges such as the following:

- Fees for the transfer and registration of shares charged by the registrar and transfer agent for the shares in Korea (i.e., upon deposit and withdrawal of shares).
- Expenses incurred for converting foreign currency into U.S. dollars.
- Expenses for cable, telex and fax transmissions and for delivery of securities.
- Taxes and duties upon the transfer of securities (i.e., when shares are deposited or withdrawn from deposit).
- Fees and expenses incurred in connection with the delivery or servicing of shares on deposit.

Depositary fees payable upon the issuance and cancellation of ADSs are typically paid to the depositary by the brokers (on behalf of their clients) receiving the newly issued ADSs from the depositary and by the brokers (on behalf of their clients) delivering the ADSs to the depositary for cancellation. The brokers in turn charge these fees to their clients. Depositary fees payable in connection with distributions of cash or securities to ADS holders and the depositary services fee are charged by the depositary to the holders of record of ADSs as of the applicable ADS record date.

The depositary fees payable for cash distributions are deducted from the cash being distributed. In the case of distributions other than cash (i.e., stock dividend, rights), the depositary charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or uncertificated in direct registration), the depositary sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts (via the Depository Trust Company, or DTC), the depositary collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients' ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depositary.

In the event of refusal to pay the depositary fees, the depositary may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary fees from any distribution to be made to such holder of ADSs.

Note that the fees and charges you may be required to pay may vary over time and may be changed by us and by the depositary. You will receive prior notice of such changes.

Fees and Payments from the Depositary to Us

In 2019, we received the following payments, after deduction of applicable U.S. taxes, from the depositary:

Reimbursement of proxy process expenses (printing, postage and distribution)	US\$	39,641.93
Contributions towards our investor relations efforts (i.e. non-deal roadshows, investor		
conferences and IR agency fees) and legal expenses incurred in connection with the		
preparation of our Form 20-F for the fiscal year 2018	US\$	733,225.43

PART II

Item 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not applicable.

Item 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable.

Item 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management has evaluated, with the participation of our chief executive officer and chief financial officer, the effectiveness of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of December 31, 2019. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon our evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures were effective as of such date. Our disclosure controls and procedures are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms, and that it is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) under the Exchange Act. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2019. The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by our independent registered public accounting firm, as stated in its attestation report which is included in Item 18 of this Form 20-F.

Changes in Internal Control Over Financial Reporting

Beginning January 1, 2019, we adopted IFRS No. 16 and implemented significant new systems, processes and internal controls over lease accounting to assist us in the application of IFRS No. 16. Other than as discussed above, there has been no change in our internal control over financial reporting during 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 16. [RESERVED]

Item 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Sung Sik Hwang qualifies as an "audit committee financial expert" and is independent within the meaning of this Item 16A.

Item 16B. CODE OF ETHICS

We have adopted a code of ethics, as defined in Item 16B of Form 20-F under the Exchange Act. Our Code of Ethics applies to our chief executive officer, chief financial officer and persons performing similar functions as well as to our non-executive directors and other officers and employees. Our Code of Ethics is available on our website at www.lgdisplay.com. If we amend the provisions of our Code of Ethics that apply to our chief executive officer and chief financial officer and persons performing similar functions, or if we grant any waiver of such provisions, we will disclose such amendment or waiver on our website at the same address.

Item 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the fees billed to us by our independent registered public accounting firm, KPMG Samjong Accounting Corp., a member firm of KPMG International, and their respective affiliates, which we collectively refer to as KPMG, during the fiscal years ended December 31, 2018 and 2019:

		Year ended December 31, 2018 2019 (in millions of Won)		
Audit fees	₩	3,956	W	4,264
Audit-related fees		50		132
Tax fees		96		98
All other fees				_
Total fees	₩	4,102	₩	4,494

Audit fees in the above table are the aggregate fees billed by KPMG in connection with the audit of our annual financial statements and the review of our interim financial statements.

Audit-related fees in the above table are fees billed by KPMG for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under "Audit fees." In 2018, this category comprised fees billed for services which are related to the issuance of comfort letters in connection with our issuance of foreign currency-denominated bonds. In 2019, this category comprised fees billed for services which are related to the issuance of comfort letters in connection with our issuance of convertible debt securities.

Tax fees in the above table are fees billed by KPMG for tax compliance services.

All other fees in the above table are fees billed by KPMG that are non-audit or audit-related.

Audit Committee Pre-Approval Policies and Procedures

Under our Audit Committee's pre-approval policies and procedures, all audit and non-audit services to be provided to us by our independent auditors must be pre-approved by our Audit Committee on a case-by-case basis. Our Audit Committee does not pre-approve any audit or non-audit services that are prohibited from being provided to us by an independent registered public accounting firm under the rules of the SEC and applicable law. In 2019, no fees were approved pursuant to the *de minimis* exception.

Item 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

Item 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Neither we nor any "affiliated purchaser," as defined in Rule 10b-18(a)(3) of the Exchange Act, purchased any of our equity securities during the period covered by this annual report.

Item 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

Item 16G. CORPORATE GOVERNANCE

The following is a summary of the significant differences between the New York Stock Exchange's corporate governance standards and those that we follow under Korean law.

Director Independence

Listed companies must have a majority of independent directors.

Nomination/Corporate Governance Committee

Listed companies must have a nomination/corporate governance committee composed entirely of independent directors. The committee must have a charter that addresses the purpose, responsibilities (including development of corporate governance guidelines) and annual performance evaluation of the committee.

Compensation Committee

Listed companies must have a compensation committee composed entirely of Under Korean law, we are not required to establish a compensation independent directors. The committee must have a charter that addresses the purpose, responsibilities and annual performance evaluation of the committee. The charter must be made available on the company's website. In addition, in accordance with the U.S. Securities and Exchange Commission rules adopted pursuant to Section 952 of the Dodd-Frank Act, the New York Stock Exchange listing standards were amended to expand the factors relevant in determining whether a committee member has a relationship with the company that will materially affect that member's duties to the compensation committee.

Executive Session

Non-management directors of listed companies must meet in regularly scheduled executive sessions without management. Independent directors should meet alone in an executive session at least once a year.

Audit Committee

Listed companies must have an audit committee that satisfies the requirements of Rule 10A-3 under the Exchange Act. All members must be independent. The committee must have a charter addressing the committee's purpose, an annual performance evaluation of the committee, and the duties and responsibilities of the committee. The charter must be made available on the company's website.

Audit Committee Additional Requirements

Listed companies must have an audit committee that is composed of at least three directors.

Shareholder Approval of Equity Compensation Plan

Listed companies must allow its shareholders to exercise their voting rights with respect to any material revision to the company's equity compensation plan.

The majority of our board of directors is independent (as defined in accordance with the New York Stock Exchange's standards), as four out of seven directors are outside directors.

Although we have not established a separate nomination/corporate governance committee, we maintain an Outside Director Nomination Committee composed of two outside directors and one non-outside director.

committee. Accordingly, we do not currently have a compensation committee, and our board of directors is directly responsible for matters relating to salaries and incentive compensation for our directors and executive officers.

We do not normally hold executive sessions solely attended by non-management directors as that is not required under Korean law but we may elect to do so at the discretion of the directors.

We maintain an Audit Committee composed of three outside directors who meet the applicable independence criteria set forth under Rule 10A-3 of the Exchange Act.

Our Audit Committee has three directors, as described above.

We currently have two equity compensation plans: one providing for the grant of stock options to officers and key employees and an Employee Stock Ownership Plan, or ESOP.

Stock options to officers and key employees may be granted pursuant to a resolution of the shareholders in an amount not to exceed 15% of the total number of our issued and outstanding shares. However, the board of directors may grant stock options to non-director officers and employees up to 1% of the total number of our issued and outstanding shares, which grant must be approved by a resolution of the subsequent general meeting of shareholders.

All material matters related to the granting of stock options are provided in our articles of incorporation, and any amendments to the articles of incorporation are subject to shareholders' approval. Matters related to the ESOP are not subject to shareholders' approval under Korean law.

Shareholder Approval of Equity Offerings

Listed companies must allow its shareholders to exercise their voting rights with respect to equity offerings that do not qualify as public offerings for cash, and offerings of equity of related parties.

The Korean Commercial Code and our articles of incorporation provide that any and all terms and conditions for the issuance of new shares of the company shall be determined by a resolution of the board of directors. The company may allot new shares by a resolution of the board of directors to persons other than its shareholders when certain requirements are satisfied, including where new shares are issued by way of general public offering, and are issued to corporations, institutional investors, domestic and foreign financial institutions and others to further a management objective such as strengthening the company's financials (provided, however, that such allotment of new shares to persons other than shareholders may only be made up to 20% of the total number of issued and outstanding shares of the company).

Corporate Governance Guidelines

Listed companies must adopt and disclose corporate governance guidelines.

We do not maintain formal corporate governance guidelines. Our board of directors is responsible for overseeing our policies, practices and procedures in the area of corporate governance.

Code of Business Conduct and Ethics

Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers.

We have adopted a Code of Ethics for all directors, officers and employees. A copy of our Code of Ethics is available on our website at www.lgdisplay.com.

Item 16H. MINE SAFETY DISCLOSURE

Not applicable.

PART III

Item 17. FINANCIAL STATEMENTS

Not applicable.

Item 18. FINANCIAL STATEMENTS

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Item 19. EXHIBITS

Number	Description
1.1*	Amended and Restated Articles of Incorporation (translation in English) (incorporated by reference to Exhibit 1.1 to the Registrant's Annual Report (No. 001-32238) on Form 20-F, filed on April 30, 2019)
2.1*	Form of Common Stock Certificate (translation in English) (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement (No. 333-116819) on Form F-1, filed on July 13, 2004)
2.2*	Deposit Agreement (including Form of American Depositary Receipt) (incorporated by reference to Exhibit (a) to the Registrant's Registration Statement (No. 333-147661) on Form F-6, filed on November 28, 2007)
2.3*	Form of Amendment No. 1 to Deposit Agreement (including Form of American Depositary Receipt) (incorporated by reference to Exhibit (a)(i) to the Registration Statement (No. 333-147661) on Post Effective Amendment No. 1 to Form F-6, filed on July 30, 2014)
2.4*	Letter from Citibank, N.A., as depositary, dated as of November 29, 2007, to the Registrant relating to the direct registration system for the American depositary receipts (incorporated by reference to Exhibit 2.3 to the Registrant's Annual Report (No. 001-32238) on Form 20-F, filed on April 16, 2008)
2.5	Description of LG Display Co., Ltd.'s Capital Stock (see Item 10.B. Memorandum and Articles of Association)
2.6	Description of LG Display Co., Ltd.'s American Depositary Shares
8.1	List of subsidiaries of LG Display Co., Ltd. (see Note 1 of the notes to the consolidated financial statements of LG Display Co., Ltd. included in this annual report)
12.1	Section 302 certification of the Chief Executive Officer
12.2	Section 302 certification of the Chief Financial Officer
13.1	Section 906 certification of the Chief Executive Officer
13.2	Section 906 certification of the Chief Financial Officer
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

^{*} Filed previously.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

LG DISPLAY CO., LTD.

(Registrant)

/s/ JAMES (HOYOUNG) JEONG

(Signature)

Name: James (Hoyoung) Jeong

Title: Representative Director, President and Chief

Executive Officer

/s/ DONGHEE SUH

(Signature)

Name: Donghee Suh

Title: Senior Vice President and Chief Financial Officer

Date: April 29, 2020

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders LG Display Co., Ltd.:

Opinions on the Consolidated Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of LG Display Co., Ltd. and subsidiaries (the Group) as of December 31, 2018 and 2019, the related consolidated statements of comprehensive income (loss), changes in equity and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, consolidated financial statements). We also have audited the Group's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Group as of December 31, 2018 and 2019, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019 based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Adoption of New Accounting Standards

As discussed in note 3 to the consolidated financial statements, the Group has changed its method of accounting for leases as of January 1, 2019 due to the adoption of IFRS 16, *Leases*.

Basis for Opinions

The Group's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Group's consolidated financial statements and an opinion on the Group's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

(i) Determination of cash generating unit (CGU) and impairment assessment for Display (AD PO) CGU and Display CGU

As discussed in notes 3 (k), 9 and 10, the Group's non-financial assets mainly consist of property, plant and equipment and intangible assets and amount to \(\pmu22,961,093\) million as of December 31, 2019. The Group changed its identification of CGU from one CGU to three CGUs, namely, Display CGU, Display (AD PO) CGU and Lighting CGU, as a result of change in business in 2019. During the year ended December 31, 2019, the Group recognized impairment losses of \(\pmu1,395,655\) million relating to the Display (AD PO) CGU. The Group concluded that Display CGU was not impaired as of December 31, 2019. The recoverable amount used in impairment tests for the CGUs is value in use based on discounted cash flow model.

We identified determination of CGU and impairment assessment for Display (AD PO) CGU and Display CGU as a critical audit matter. Determination of CGU requires subjective and challenging auditor judgment in assessing the smallest identifiable group of assets that generates cash inflows that are largely independent of those from other assets or group of assets. In addition, revenue and operating expenditures for the forecast period, growth rates for subsequent years ("terminal growth rate"), and discount rate used to estimate value in use for impairment assessment of Display (AD PO) CGU and Display CGU were challenging to test as minor changes to those assumptions would have a significant effect on the Group's impairment assessment of those CGUs.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Group's non-financial assets impairment assessment process, including controls related to determination of CGU, and development of the revenue and operating expenditures forecast, terminal growth rates and discount rates assumptions for Display (AD PO) CGU and Display CGU. We evaluated the Group's determination of CGU by assessing the basis for identifying the smallest identifiable group of assets that generates cash inflows that are largely independent of those from other assets or group of assets and considering the relevant factors specified by relevant accounting standards.

We tested the Group's businesses inter-dependencies analysis, by inspection of supporting document as to how the Group monitors operations and makes decisions about continuing or disposing of assets and operations. For the impairment assessment of Display (AD PO) CGU and Display CGU, we compared the Group's historical revenue and operating expenditures forecasts to actual results to assess the Group's ability to accurately forecast. We evaluated the revenue and operating expenditures forecast used to determine the value in use by comparison with the financial budgets approved by the board of directors. We performed sensitivity analysis over the terminal growth rates and discount rates assumptions to assess their impact on the Group's impairment assessment. We involved our valuation professionals with specialized skills and knowledge who assisted us in the following:

- testing discount rates by comparing them against independently developed rates using publicly available market data for comparable entities; and
- testing revenue, operating expenditures forecasts and terminal growth rates by comparing them against analyst reports and industry reports.

(ii) Assessment of recognition of deferred tax assets

As discussed in note 3 (s) and 24 to the consolidated financial statements, the Group had \(\pi\)1,715,912 million of deferred tax assets and \(\pi\)549,056 million of unrecognized tax credit carryforwards as of December 31, 2019, primarily related to Korea. The deferred tax assets are recognized to the extent that it is probable that future taxable income will be available against which the deductible temporary differences, unused tax losses and unrecognized tax credit carryforwards can be utilized.

We identified the assessment of the recognition of the deferred tax assets as a critical audit matter because it involves high degree of subjective auditor judgment in assessing the forecasted revenue and expenses which are the key assumptions in estimating future taxable income within the periods before the tax credit carryforwards expire and the feasibility of planned tax strategies.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls relating to the Group's deferred tax assets recognition process, including controls related to the development of assumptions in determining the future taxable income for each year. We analyzed the Group's estimates of taxable income, including analyzing the Group's forecasted revenue and expenses by comparing them with the financial budgets approved by the board of directors and historical performance. We compared the forecasts of taxable income and timing of utilization of tax losses and tax credit carryforwards in prior years to actual results to assess the Group's ability to accurately forecast. We also evaluated the Group's history of utilizing deferred tax assets before the expiration of unused tax losses and tax credit carryforwards. We involved tax professionals with specialized skills and knowledge who assisted in assessing the feasibility of planned tax strategies when recognizing deferred tax assets.

/s/ KPMG Samjong Accounting Corp.

We have served as the Group's auditor since 2008.

Seoul, Korea April 29, 2020

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES Consolidated Statements of Financial Position

As of December 31, 2018 and 2019

(In millions of won)	Note	December 31, 2018	December 31, 2019
Assets			
Cash and cash equivalents	4, 26	₩ 2,365,022	3,336,003
Deposits in banks	4, 26	78,400	78,757
Trade accounts and notes receivable, net	5, 15, 26 29	2,829,163	3,154,080
Other accounts receivable, net	5, 26	169,313	474,048
Other current financial assets	6, 26	46,301	70,945
Inventories	7	2,691,203	2,051,155
Prepaid income taxes		4,516	114,143
Non-current assets held for sale	31	70,161	_
Other current assets	5	546,048	969,184
Total current assets		8,800,127	10,248,315
Deposits in banks	4, 26	11	11
Investments in equity accounted investees	8	113,989	109,611
Other non-current accounts receivable, net	5, 26	11,448	9,072
Other non-current financial assets	6, 26	144,214	111,510
Property, plant and equipment, net	9, 17, 27	21,600,130	22,087,645
Intangible assets, net	10, 17	987,642	873,448
Deferred tax assets	24	1,136,166	1,727,122
Defined benefit assets, net	12	_	127,252
Other non-current assets	5	381,983	280,577
Total non-current assets		24,375,583	25,326,248
Total assets		₩ 33,175,710	35,574,563

See accompanying notes to the consolidated financial statements.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES Consolidated Statements of Financial Position, Continued

As of December 31, 2018 and 2019

(In millions of won)	Note	December 31, 2018	December 31, 2019
Liabilities			
Trade accounts and notes payable	26, 29	₩ 3,087,461	2,618,261
Current financial liabilities	11, 26, 27	1,553,907	1,977,084
Other accounts payable	26	3,566,629	4,397,121
Accrued expenses		633,346	675,270
Income tax payable		105,900	120,034
Provisions	13	98,254	189,525
Advances received	15	834,010	925,662
Other current liabilities	14	74,976	82,019
Total current liabilities		9,954,483	10,984,976
Non-current financial liabilities	11, 26, 27	7,030,628	11,612,910
Non-current provisions	13	32,764	67,118
Defined benefit liabilities, net	12	45,360	1,338
Long-term advances received	15	1,114,316	320,582
Deferred tax liabilities	24	15,087	11,210
Other non-current liabilities	14	96,826	88,148
Total non-current liabilities		8,334,981	12,101,306
Total liabilities		18,289,464	23,086,282
Equity			
Share capital	16	1,789,079	1,789,079
Share premium		2,251,113	2,251,113
Retained earnings		10,239,965	7,503,312
Reserves	16	(300,968)	(203,021)
Total equity attributable to owners of the Controlling Company		13,979,189	11,340,483
Non-controlling interests		907,057	1,147,798
Total equity		14,886,246	12,488,281
Total liabilities and equity		₩ 33,175,710	35,574,563

 $See\ accompanying\ notes\ to\ the\ consolidated\ financial\ statements.$

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Comprehensive Income (Loss)

For the years ended December 31, 2017, 2018 and 2019

(In millions of won, except earnings per share)	Note	2017	2018	2019
Revenue	17, 29	W 27,790,216	24,336,571	23,475,567
Cost of sales	7, 18, 29	(22,424,661)	(21,251,305)	(21,607,240)
Gross profit		5,365,555	3,085,266	1,868,327
Selling expenses	19	(994,483)	(834,062)	(1,057,753)
Administrative expenses	19	(696,022)	(938,214)	(947,978)
Research and development expenses		(1,213,432)	(1,221,198)	(1,221,978)
Other income	21	1,081,746	1,004,137	1,267,251
Other expenses	21	(1,230,455)	(1,115,233)	(3,097,743)
Finance income	22	279,019	254,131	276,732
Finance costs	22	(268,856)	(326,893)	(443,247)
Equity in income of equity accounted investees, net	8	9,560	700	12,147
Profit (loss) before income tax		2,332,632	(91,366)	(3,344,242)
Income tax expense (benefit)	23	395,580	88,077	(472,164)
Profit (loss) for the year		1,937,052	(179,443)	(2,872,078)
Other comprehensive income (loss)				
Items that will never be reclassified to profit or loss				
Remeasurements of net defined benefit liabilities	12, 23	(16,260)	5,690	128,640
Other comprehensive income (loss) from associates		441	20	238
Related income tax	12, 23	9,259	(1,169)	(35,235)
		(6,560)	4,541	93,643

See accompanying notes to the consolidated financial statements.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES Consolidated Statements of Comprehensive Income (Loss), Continued

For the years ended December 31, 2017, 2018 and 2019

(In millions of won, except earnings per share)	Note	2017	2018	2019
Items that are or may be reclassified to profit or loss				
Foreign currency translation differences for foreign operations	22, 23	(231,738)	(19,987)	106,690
Other comprehensive income from associates	23	905	37	3,925
		(230,833)	(19,950)	110,615
Other comprehensive income (loss) for the year, net of income tax		(237,393)	(15,409)	204,258
Total comprehensive income (loss) for the year		₩1,699,659	(194,852)	(2,667,820)
Profit (loss) attributable to:				
Owners of the Controlling Company		1,802,756	(207,239)	(2,829,705)
Non-controlling interests		134,296	27,796	(42,373)
Profit (loss) for the year		₩1,937,052	(179,443)	(2,872,078)
Total comprehensive income (loss) attributable to:				
Owners of the Controlling Company		1,596,394	(215,386)	(2,636,948)
Non-controlling interests		103,265	20,534	(30,872)
Total comprehensive income (loss) for the year		W 1,699,659	(194,852)	(2,667,820)
Earnings (loss) per share (in won)				
Basic and diluted earnings (loss) per share	25	₩ 5,038	(579)	(7,908)

See accompanying notes to the consolidated financial statements.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES Consolidated Statements of Changes in Equity

For the years ended December 31, 2017, 2018 and 2019

	Attributable to owners of the Controlling Company						
(In millions of won)	Share capital	Share premium	Retained earnings	Reserves	Sub-total	Non-controlling interests	Total equity
Balances at January 1, 2017	₩1,789,079	2,251,113	9,004,283	(88,478)	12,955,997	506,391	13,462,388
Total comprehensive income (loss) for the year							
Profit for the year	_	_	1,802,756	_	1,802,756	134,296	1,937,052
Other comprehensive loss			(6,560)	(199,802)	(206,362)	(31,031)	(237,393)
	₩ —		1,796,196	(199,802)	1,596,394	103,265	1,699,659
Transaction with owners, recognized directly in							
equity							
Dividends to share holders	_	_	(178,908)	_	(178,908)	_	(178,908)
Subsidiaries' dividends distributed to							
non-controlling interests	_				_	(5,929)	(5,929)
Capital contribution from non-controlling							
interests						4,300	4,300
Balances at December 31, 2017	₩1,789,079	2,251,113	10,621,571	(288,280)	14,373,483	608,027	14,981,510
Balances at January 1, 2018	W 1,789,079	2,251,113	10,621,571	(288,280)	14,373,483	608,027	14,981,510
Total comprehensive income (loss) for the year							
Profit (loss) for the year	_	_	(207,239)	_	(207,239)	27,796	(179,443)
Other comprehensive income (loss)	_		4,541	(12,688)	(8,147)	(7,262)	(15,409)
	W —		(202,698)	(12,688)	(215,386)	20,534	(194,852)
Transaction with owners, recognized directly in							
equity							
Dividends to share holders	_	_	(178,908)	_	(178,908)	_	(178,908)
Subsidiaries' dividends distributed to							
non-controlling interests	_				_	(53,107)	(53,107)
Capital contribution from non-controlling							
interests						331,603	331,603
Balances at December 31, 2018	₩1,789,079	2,251,113	10,239,965	(300,968)	13,979,189	907,057	14,886,246

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES Consolidated Statements of Changes in Equity, Continued

For the years ended December 31, 2017, 2018 and 2019

	Attributable to owners of the Controlling Company						
(In millions of won)	Share capital	Share premium	Retained earnings	Reserves	Sub-total	Non-controlling interests	Total equity
Balances at January 1, 2019	W 1,789,079	2,251,113	10,239,965	(300,968)	13,979,189	907,057	14,886,246
Total comprehensive income (loss) for the year							
Loss for the year	_		(2,829,705)		(2,829,705)	(42,373)	(2,872,078)
Other comprehensive income			93,643	99,114	192,757	11,501	204,258
	W —		(2,736,062)	99,114	(2,636,948)	(30,872)	(2,667,820)
Transaction with owners, recognized directly in 6	equity						
Subsidiaries' dividends distributed to							
non-controlling Interests	_	_	_		_	(6,541)	(6,541)
Capital contribution from non-controlling							
interests			(591)	(1,167)	(1,758)	278,154	276,396
Balances at December 31, 2019	W 1,789,079	2,251,113	7,503,312	(203,021)	11,340,483	1,147,798	12,488,281

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

For the years ended December 31, 2017, 2018 and 2019

(In millions of won)	Note	2017	2018	2019
Cash flows from operating activities:				
Profit (loss) for the year		₩1,937,052	(179,443)	(2,872,078)
Adjustments for:				
Income tax expense (benefit)	23	395,580	88,077	(472,164)
Depreciation and amortization	9,10,18	3,214,576	3,554,565	3,695,051
Gain on foreign currency translation		(187,558)	(84,643)	(103,460)
Loss on foreign currency translation		174,919	138,452	171,966
Expenses related to defined benefit plans	12,20	198,241	179,880	162,997
Gain on disposal of property, plant and equipment		(101,227)	(6,620)	(35,788)
Loss on disposal of property, plant and equipment		20,030	15,048	40,897
Impairment loss on property, plant and equipment		_	43,601	1,550,430
Impairment loss on inventories		206,127	313,180	472,885
Bad debt expense (reversal)		144	(1,155)	(17)
Gain on disposal of intangible assets		(308)	(239)	(552)
Loss on disposal of intangible assets		30		139
Impairment loss on intangible assets		1,809	82	249,450
Reversal of impairment loss on intangible assets		(35)	(348)	(960)
Impairment loss on other assets				3,602
Gain on disposal of non-current assets held for sale		_	_	(8,353)
Expense on increase of provisions		251,131	234,928	419,720
Finance income		(202,591)	(101,313)	(186,707)
Finance costs		142,591	173,975	338,419
Equity in income of equity method accounted investees, net	8	(9,560)	(700)	(12,147)
Other income		(16,812)	(3,310)	(20,416)
Other expenses		1,870	593	4,451
		6,026,009	4,364,610	3,397,365

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES Consolidated Statements of Cash Flows, Continued

For the years ended December 31, 2017, 2018 and 2019

(In millions of won)	Note	2017	2018	2019
Changes in:				
Trade accounts and notes receivable		₩ 484,448	1,306,118	(1,007,356)
Other accounts receivable		(3,004)	(56,870)	(49,443)
Inventories		(262,106)	(763,081)	159,474
Lease receivables		_	_	6,617
Other current assets		180,844	(249,968)	(288,770)
Other non-current assets		(119,002)	(61,164)	(38,608)
Trade accounts and notes payable		113,590	267,358	(394,564)
Other accounts payable		106,930	(111,053)	2,035,750
Accrued expenses		181,509	(194,394)	11,787
Provisions		(210,973)	(217,984)	(294,096)
Other current liabilities		(585)	78,849	(214,675)
Defined benefit liabilities, net		(261,966)	(224,335)	(65,681)
Long-term advances received		1,020,470	948,276	63,672
Other non-current liabilities		5,974	24,510	7,045
Cash generated from operating activities		7,262,138	5,110,872	3,328,517
Income taxes paid		(416,794)	(486,549)	(252,812)
Interests received		55,340	71,819	47,276
Interests paid		(136,483)	(212,019)	(416,436)
Net cash provided by operating activities		₩6,764,201	4,484,123	2,706,545

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES Consolidated Statements of Cash Flows, Continued

For the years ended December 31, 2017, 2018 and 2019

(In millions of won)	Note	2017	2018	2019
Cash flows from investing activities:				
Dividends received		₩ 8,639	5,272	7,502
Increase in deposits in banks		(1,803,718)	(775,239)	(114,557)
Proceeds from withdrawal of deposits in banks		2,206,148	1,454,561	114,200
Acquisition of financial assets at fair value through profit or loss		_	(431)	(708)
Proceeds from disposal of financial asset at fair value through profit or loss				452
Acquisition of financial assets at fair value through other comprehensive income		_	_	(21)
Proceeds from disposal of financial assets at fair value through other comprehensive income		_	6	107
Acquisition of available-for-sale financial assets		(273)	_	_
Proceeds from disposal of available-for-sale financial assets		917		_
Acquisition of investments in equity accounted investees		(20,309)	(14,732)	_
Proceeds from disposal of investments in equity accounted investees		13,128	4,527	16,738
Acquisition of property, plant and equipment		(6,592,435)	(7,942,210)	(6,926,985)
Proceeds from disposal of property, plant and equipment		160,252	142,088	335,446
Acquisition of intangible assets		(454,448)	(480,607)	(540,996)
Proceeds from disposal of intangible assets		1,674	960	2,468
Government grants received		1,859	1,210	248,124
Proceeds from disposal of non-current assets held for sale		_	_	81,351
Receipt from settlement of derivatives		2,592	2,026	21,752
Increase in short-term loans		_	(7,700)	(8,725)
Proceeds from collection of short-term loans		1,118	15,968	19,881
Increase in long-term loans		(13,930)	(36,580)	(6,465)
Increase in deposits		(2,648)	(58,794)	(30,680)
Decrease in deposits		4,272	4,136	5,307
Proceeds from disposal of emission rights		6,090	10,200	20,416
Net cash used in investing activities		₩(6,481,072)	(7,675,339)	(6,755,393)

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

LG DISPLAY CO., LTD. AND SUBSIDIARIES Consolidated Statements of Cash Flows, Continued

For the years ended December 31, 2017, 2018 and 2019

(In millions of won)	Note	2017	2018	2019
Cash flows from financing activities:	28			
Proceeds from short-term borrowings		₩ —	552,164	1,841,008
Repayments of short-term borrowings		(105,864)	(552,884)	(1,154,911)
Proceeds from issuance of bonds		497,959	828,169	1,323,251
Proceeds from long-term borrowings		1,195,415	3,882,958	4,341,087
Repayments of current portion of long-term borrowings and bonds		(544,731)	(1,859,098)	(1,567,818)
Payment of lease liabilities		_	_	(64,570)
Capital contribution from non-controlling interests		4,300	331,603	276,396
Subsidiaries' dividends distributed to non-controlling interests		(5,929)	(51,085)	(6,541)
Dividends paid		(178,908)	(178,908)	
Net cash provided by financing activities		862,242	2,952,919	4,987,902
Net increase (decrease) in cash and cash equivalents		1,145,371	(238,297)	939,054
Cash and cash equivalents at January 1		1,558,696	2,602,560	2,365,022
Effect of exchange rate fluctuations on cash held		(101,507)	759	31,927
Cash and cash equivalents at December 31		W 2,602,560	2,365,022	3,336,003

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

1. Reporting Entity

(a) Description of the Controlling Company

LG Display Co., Ltd. (the "Controlling Company") was incorporated in February 1985 and the Controlling Company is a public corporation listed in the Korea Exchange since 2004. The main business of the Controlling Company and its subsidiaries (the "Group") is to manufacture and sell displays and its related products. As of December 31, 2019, the Group is operating Thin Film Transistor Liquid Crystal Display ("TFT-LCD") and Organic Light Emitting Diode ("OLED") panel manufacturing plants in Gumi, Paju and China and TFT-LCD and OLED module manufacturing plants in Gumi, Paju, China, and Vietnam. The Controlling Company is domiciled in the Republic of Korea with its address at 128 Yeouidae-ro, Yeongdeungpo-gu, Seoul, the Republic of Korea. As of December 31, 2019, LG Electronics Inc., a major shareholder of the Controlling Company, owns 37.9% (135,625,000 shares) of the Controlling Company's common stock.

The Controlling Company's common stock is listed on the Korea Exchange under the identifying code 034220. As of December 31, 2019, there are 357,815,700 shares of common stock outstanding. The Controlling Company's common stock is also listed on the New York Stock Exchange in the form of American Depository Shares ("ADSs") under the symbol "LPL". One ADS represents one-half of one share of common stock. As of December 31, 2019, there are 19,545,920 ADSs outstanding.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

1. Reporting Entity, Continued

(b) <u>Consolidated Subsidiaries as of December 31, 2019</u>

(In millions)							
Subsidiaries	Location	Percentage of ownership	Fiscal year end	Date of incorporation	Business	Capita	l stocks
LG Display America, Inc.	San Jose, U.S.A.	100%	December 31	September 24, 1999	Sell display products	USD	411
LG Display Germany GmbH	Eschborn, Germany	100%	December 31	November 5, 1999	Sell display products	EUR	1
LG Display Japan Co., Ltd.	Tokyo, Japan	100%	December 31	October 12, 1999	Sell display products	JPY	95
LG Display Taiwan Co., Ltd.	Taipei, Taiwan	100%	December 31	April 12, 1999	Sell display products	NTD	116
LG Display Nanjing Co., Ltd.	Nanjing, China	100%	December 31	July 15, 2002	Manufacture display products	CNY	3,020
LG Display Shanghai Co., Ltd.	Shanghai, China	100%	December 31	January 16, 2003	Sell display products	CNY	4
LG Display Poland Sp. z o.o. (*1).	Wroclaw, Poland	100%	December 31	September 6, 2005	Manufacture display products	PLN	511
LG Display Guangzhou Co., Ltd.	Guangzhou, China	100%	December 31	June 30, 2006	Manufacture display products		1,655
LG Display Shenzhen Co., Ltd.	Shenzhen, China	100%	December 31	August 28, 2007	Sell display products	CNY	4
LG Display Singapore Pte. Ltd.	Singapore	100%	December 31	January 12, 2009	Sell display products	USD	1.1
L&T Display Technology (Fujian) Limited	Fujian, China	51%	December 31	January 5, 2010	Manufacture and sell LCD module and LCD monitor sets	CNY	116
LG Display Yantai Co., Ltd.	Yantai, China	100%	December 31	April 19, 2010	Manufacture display products	CNY	1,008
Nanumnuri Co., Ltd.	Gumi, South Korea	100%	December 31	March 21, 2012	Provide janitorial services	KRW	800
LG Display (China) Co., Ltd.	Guangzhou, China	70%	December 31	December 10, 2012	products	CNY	8,232
Unified Innovative Technology, LLC	Wilmington, U.S.A.	100%	December 31	March 12, 2014	Manage intellectual property	USD	9
LG Display Guangzhou Trading Co., Ltd.	Guangzhou, China		December 31	April 28, 2015	Sell display products	CNY	1.2
Global OLED Technology, LLC	Sterling, U.S.A.	100%	December 31	December 18, 2009	Manage OLED intellectual property	USD	138
LG Display Vietnam Haiphong Co., Ltd. (*2)	Haiphong Vietnam	100%	December 31	May 5, 2016	Manufacture display products	USD	600
Suzhou Lehui Display Co., Ltd.	Suzhou, China	100%	December 31	July 1, 2016	Manufacture and sell LCD module and LCD monitor sets	CNY	637
LG DISPLAY FUND I LLC(*3)	Wilmington, U.S.A.	100%	December 31	May 1, 2018	Invest in venture business and acquire technologies	USD	6
LG Display High-Tech (China) Co., Ltd.(*4)	Guangzhou, China	75%	December 31	July 11, 2018	Manufacture and sell display products		14,570
Money Market Trust	Seoul, South Korea	100%	December 31	_	Money market trust	KRW:	34,700

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

1. Reporting Entity, Continued

- (b) Consolidated Subsidiaries as of December 31, 2019, Continued
- (*1) On July 1, 2019, LG Display Poland Sp. z o.o. commenced the liquidation process.
- (*2) For the year ended December 31, 2019, the Controlling Company contributed \(\psi 342,680\) million in cash for the capital increase of LG Display Vietnam Haiphong Co., Ltd. ("LGDVN").
- (*3) For the year ended December 31, 2019, the Controlling Company contributed \(\psi_4,073\) million in cash for the capital increase of LG DISPLAY FUND I LLC.
- (*4) For the year ended December 31, 2019, the Controlling Company contributed \(\mathbb{W}\)1,045,393 million in cash for the capital increase of LG Display High-Tech (China) Co., Ltd. ("LGDCO"). Meanwhile, additional contribution from LG Display Guangzhou Co., Ltd. and non-controlling interest amounted to \(\mathbb{W}\)32,329 million and \(\mathbb{W}\)276,396 million, respectively. The Group's ownership percentage in LGDCO increased from 69% to 75% as a result of these additional investments.

₩603,493 million, ₩90,281 million and ₩11,120 million, respectively, are attributable to the Controlling Company over the distributed dividends from consolidated subsidiaries for the years ended December 31, 2017, 2018 and 2019.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

2. Basis of Presenting Financial Statements

(a) Statement of Compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs") as issued by the International Accounting Standards Board.

The consolidated financial statements were authorized for issuance by the Board of Directors on January 30, 2020.

(b) Basis of Measurement

The consolidated financial statements have been prepared on the historical cost basis except for the following material items in the consolidated statements of financial position:

- derivative financial instruments at fair value, financial assets at fair value through profit or loss ("FVTPL"), financial assets at fair value through other comprehensive income ("FVOCI"), financial liabilities at fair value through profit or loss("FVTPL"), and
- net defined benefit liabilities (defined benefit assets) recognized at the present value of defined benefit obligations less the fair value of plan assets

(c) Functional and Presentation Currency

Each subsidiary's financial statements within the Group are presented in the subsidiary's functional currency, which is the currency of the primary economic environment in which each subsidiary operates. The consolidated financial statements are presented in Korean won, which is the Controlling Company's functional currency.

(d) <u>Use of Estimates and Judgments</u>

The preparation of the consolidated financial statements in conformity with IFRSs requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements is included in the following notes:

- Financial instruments (note 3(f))
- Intangible assets (note 3(j), 10)

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

2. Basis of Presenting Financial Statements, Continued

(d) <u>Use of Estimates and Judgments, Continued</u>

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next 12 months is included in the following notes:

- Provisions (note 3(m), 13)
- Inventories (note 3(e), 7)
- Property, Plant and Equipment (note 9)
- Intangible assets (note 10)
- Employee benefits (note 12)
- Deferred tax assets and liabilities (note 24)

3. Summary of Significant Accounting Policies

The significant accounting policies followed by the Group in the preparation of its consolidated financial statements are as follows:

(a) Changes in Accounting Policies

The Group has initially applied IFRS 16, *Leases*, from January 1, 2019. A number of other new standards are effective from January 1, 2019 but they do not have a material effect on the Group's consolidated financial statements.

In application of IFRS 16, *Leases*, from January 1, 2019, the Group used the modified retrospective approach, under which right-of-use assets and lease liabilities are recognized in equal amount. Accordingly, the comparative information presented for 2017 and 2018 are presented, as previously reported, under IFRS 17 and relative interpretations. The disclosure requirements in IFRS 16 have not been applied to comparative information. Details of the changes in accounting policies are disclosed below.

i) Definition of a lease

Previously, the Group determined at contract inception whether an arrangement was or contained a lease under IFRIC 4, *Determining Whether an Arrangement contains a Lease*. For contracts entered into on or after January 1, 2019, the Group assesses whether a contract is or contains a lease based on the definition of a lease under IFRS 16 as described in note 27.

On adoption of IFRS 16, as of January 1, 2019, the Group applied the practical expedient to grandfather the assessment of which transactions are leases for existing contracts. The Group applied IFRS 16 only to contracts that were previously identified as leases.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(a) Changes in Accounting Policies, Continued

ii) Accounting as a lessee

As a lessee, the Group leases buildings, vehicles, machinery, equipment and others. The Group previously classified leases as operating or finance leases based on its assessment of whether the lease transferred significantly all of the risks and rewards incidental to ownership of the underlying asset to the Group. Under IFRS 16, the Group recognizes right-of-use assets and lease liabilities for most of these leases on the consolidated statement of financial position.

At commencement or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease and non-lease component on the basis of its relative stand-alone price.

Leases classified as operating lease under IAS 17

The Group classified its leases of buildings, vehicles, machinery, equipment and others as operating leases under IAS 17. On adoption of IFRS 16, for these leases, lease liabilities were measured at the present value of the remaining lease payments, discounted at the Group's incremental borrowing rate as at January 1, 2019 (see note 27). Right-of-use assets are measured at an amount equal to the lease liability, adjusted by the amount of any prepaid lease payments.

The Group used following practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17:

- did not recognize right-of-use assets and liabilities for leases for which the lease term ends within 12 months of the date of initial
 application;
- did not recognize right-of-use assets and liabilities for leases of low value assets;
- excluded initial direct costs from the measurement of the right-of-use asset at the date of initial application; and
- used hindsight when determining the remaining lease term.

iii) Accounting as a lessor

The Group leases out its own property and right-of-use assets. The Group classified these leases as operating leases or finance leases based on their characteristics.

The Group is not required to make any adjustments on transition for leases as a lessor, except for sub-lease provided with the right-of-use assets.

Under IAS 17, the head lease and sub-lease contracts were classified as operating leases. On adoption of IFRS 16, the right-of-use assets recognized from the head leases are presented in property, plant and equipment, and measured at fair value at that date. The Group assessed the classification of the sub-lease contracts with reference to the underlying asset, and concluded that they are finance leases.

The Group applied IFRS 15 to allocate consideration in the contract to each lease and non-lease component.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(a) Changes in Accounting Policies, Continued

iv) Impact on the consolidated financial statements

Impacts on adoption

On adoption of IFRS 16, the Group recognized additional right-of-use assets and additional lease liabilities as below:

(In millions of won)

	January 1, 2019
Right-of-use assets presented in property, plant and equipment	₩ 142,040
Prepaid expenses	(61,570)
Lease receivable	34,649
Lease liabilities	115,119

When measuring lease liabilities at January 1, 2019 for leases that were classified as operating leases in accordance with IAS 17, the Group discounted lease payments using its incremental borrowing rate at January 1, 2019. The weighted-average discount rate applied is 3.36%.

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(In millions of won)

	<u>Janu</u>	ary 1, 2019
Amount of operating lease commitments at December 31, 2018	W	119,659
Discounted using the incremental borrowing rate at January 1, 2019		115,614
Finance lease liabilities recognized as at December 31, 2018		
- Recognition exemption for lease of low-value assets		(262)
- Recognition exemption for leases with less than 12 months of lease term		
at adoption		(233)
Lease liabilities recognized at January 1, 2019		115,119

v) Enforceable period and determination of the lease term

In December 2019, International Financial Reporting Interpretations Committee ("IFRIC") issued its final agenda decision with interpretations that the concept of loss or penalty that should be considered in determining the enforceable period of a lease contract under IFRS 16, Leases, shall be determined considering the broader economic losses of the lease contract, and not only contractual termination payments. Such agenda decision also makes an interpretation that a lease is no longer enforceable when each of the parties has the right to terminate the lease without permission from the other party by making no more than an insignificant amount of termination payment.

As of December 31, 2019, the Group assesses the lease term based on the assumption that the right to extend or terminate the lease is no longer enforceable if a lease contract requires the counterparty's consent to be extended. Applying the foregoing interpretations by IFRIC may change the judgment on enforceable period for certain of the Group's lease contracts.

The Group determined that there has not been sufficient time or information to analyze and apply the impact of the foregoing interpretations by IFRIC in these consolidated financial statements, given the number and complexity of lease contracts to which the Group is a party. Therefore, as permitted under the related agenda decision by the Due Process Oversight Committee, the Group plans to analyze and apply the impact of the foregoing interpretations by IFRIC in 2020, if any, as changes in accounting policies.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(b) Consolidation

(i) Business Combinations

The Group accounts for business combinations using the acquisition method except for a combination of entities or businesses under common control. The consideration transferred in the acquisition is generally measured at fair value, as are the identifiable net assets acquired. If the aggregate sum of consideration transferred and non-controlling interest exceeds the fair value of identifiable net asset, the Group recognizes goodwill; if not, then the Group recognizes gain on a bargain purchase. Any goodwill that arises is tested annually for impairment. Transaction costs are expensed as incurred, except if related to the issue of debt or equity securities in accordance with IAS 32 and IFRS 9. The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognized in profit or loss.

(ii) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed, or has right to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

(iii) Non-controlling interests

Non-controlling interests ("NCI") are measured at their proportionate share of the acquiree's identifiable net assets at the acquisition date. Profit or loss and other comprehensive income (loss) of subsidiaries are attributed to owners of the Controlling Company and non-controlling interests.

Changes in the Group's interest in subsidiaries that do not result in a loss of control are accounted for as equity transactions.

(iv) Loss of Control

If the Controlling Company loses control of subsidiaries, the Controlling Company derecognizes the assets and liabilities of the former subsidiaries from the consolidated statement of financial position and recognizes the gain or loss associated with the loss of control attributable to the former controlling interest. Meanwhile, the Controlling Company recognizes any investment retained in the former subsidiaries at its fair value when control is lost.

(v) Associates and joint ventures (equity method investees)

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the parties have joint control, whereby the parties has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Investments in associates and joint ventures are initially recognized at cost and subsequently accounted for using the equity method of accounting. The carrying amount of investments in associates and joint ventures is increased or decreased to recognize the Group's share of the profits or losses and changes in the Group's proportionate interest of the investee after the date of acquisition. Distributions received from an investee reduce the carrying amount of the investment.

If an associate or a joint venture uses accounting policies different from those of the Controlling Company for like transactions and events in similar circumstances, appropriate adjustments are made to the consolidated financial statements. As of and during the periods presented in the consolidated financial statements, no adjustments were made in applying the equity method.

When the Group's share of losses exceeds its interest in an equity accounted investee, the carrying amount of that interest, including any long-term investments, is reduced to nil, and the recognition of further losses is discontinued except to the extent that the Group has an obligation or has made payments on behalf of the investee.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(vi) Transactions eliminated on consolidation

Intra-group balances and transactions, including income and expenses and any unrealized income and expenses and balance of trade accounts and notes receivable and payable arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

(c) Foreign Currency Transaction and Translation

Transactions in foreign currencies are translated to the respective functional currencies of the Group at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency at the exchange rate on the reporting date. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date that the fair value was originally determined. Foreign currency differences arising on retranslation are recognized in profit or loss, except for differences arising on an investment in equity securities designated as at FVOCI and a financial asset and liability designated as a cash flow hedge, which are recognized in other comprehensive income. Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition are recognized in profit or loss in the period in which they arise. Foreign currency differences arising from assets and liabilities in relation to the investing and financing activities including loans, bonds and cash and cash equivalents are recognized in finance income (costs) in the consolidated statement of comprehensive income (loss) and foreign currency differences arising from assets and liabilities in relation to activities other than investing and financing activities are recognized in other income (expenses) in the consolidated statement of comprehensive income (loss). Foreign currency differences are presented in gross amounts in the consolidated statement of comprehensive income (loss).

If the presentation currency of the Group is different from a foreign operation's functional currency, the financial position and financial performance of the foreign operation are translated into the presentation currency using the following methods. The assets and liabilities of foreign operations, whose functional currency is not the currency of a hyperinflationary economy are translated to the Group's functional currency at exchange rates at the reporting date. The income and expenses of foreign operations are translated to the Group's functional currency at exchange rates at the dates of the transactions and foreign currency differences are recognized in other comprehensive income (loss). Relevant proportionate shares of foreign currency differences are allocated to the controlling interests and non-controlling interests. When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. If the Group disposes part of its interest in a subsidiary but retains control, then the relevant proportion of the cumulative amount is reattributed to NCI. When the Group disposes of only part of an associate or joint venture while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(c) Foreign Currency Transaction and Translation, Continued

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation is treated as assets and liabilities of the foreign operation. Thus, they are expressed in the functional currency of the foreign operation and translated at the at each reporting date's exchange rate.

(d) Cash and cash equivalents

Cash and cash equivalents include all cash balances and short-term highly liquid investments with an original maturity of three months or less that are readily convertible into known amounts of cash.

(e) <u>Inventories</u>

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on the weighted-average method, and includes expenditures incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated selling expenses. In the case of manufactured inventories and work-in-process, cost includes an appropriate share of production overheads based on the actual capacity of production facilities. However, the normal capacity is used for the allocation of fixed production overheads if the actual level of production is lower than the normal capacity.

(f) Financial Instruments

(i) Non-derivative financial assets

Recognition and initial measurement

Trade receivables and debt securities issued are initially recognized when they are originated. All other financial assets are recognized in statement of financial position when, and only when, the Group becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

Classification and subsequent measurement

i) Financial assets: Policy applicable from January 1, 2018

On initial recognition, a financial asset is classified as measured at: amortized cost; FVOCI – debt investment; FVOCI – equity investments; or FVTPL. Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the subsequent reporting period following the change in the business model.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(f) Financial Instruments, Continued

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

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

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

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

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

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

ii) Financial assets: business model: Policy applicable from January 1, 2018

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice (these include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realizing cash flows through the sale of the assets);
- how the performance of the portfolio is evaluated and reported to the Group's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed; and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transaction that do not qualify for derecognition are not considered sale for this purpose.

A financial asset that is held for trading or is managed and whose performance is evaluated on a fair value basis is measured at FVTPL.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(f) Financial Instruments, Continued

iii) Financial assets: Assessment whether contractual cash flows are solely payments of principal and interest: Policy applicable from January 1, 2018

For the purpose of the assessment, "principal" is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and cost (e.g. liquidity risk and administrative costs), as well as profit margin.

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

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

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest or the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract.

Additionally, for a financial asset acquired at a discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued but unpaid contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

iv) Financial assets: Subsequent measurement and gains and losses: Policy applicable from January 1, 2018

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

income, are recognized in profit of loss

Financial assets at amortized cost using the effective interest method. The amortized amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are

recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

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

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(f) Financial Instruments, Continued

v) Financial assets: Policy applicable before January 1, 2018

The Group has classified financial assets into one of the following categories

- · loans and receivables
- · available-for-sale
- at FVTPL
- vi) Financial assets: subsequent measurement, gains and losses: Policy applicable before January 1, 2018

Financial assets at FVTPL Measured at fair value and changes therein, including any interest or dividend income, were recognized in

profit or loss.

Loans and receivables Measured at amortized cost using the effective interest method.

Available-for-sale Measured at fair value and changes therein, other than impairment losses, interest income and foreign currency differences on debt instruments, were recognized in OCI and accumulated in the fair value reserves. When

these assets were derecognized, the gain or loss accumulated in equity was classified to profit or loss.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(f) Financial Instruments, Continued

Derecognition

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, it transfers the rights to receive the contractual cash flows of the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred, or it transfers or does not retain substantially all the risks and rewards of ownership of a transferred asset, and does not retain control of the transferred asset.

If the Group has retained substantially all the risks and rewards of ownership of the transferred asset, the Group continues to recognize the transferred asset.

Offset

Financial assets and liabilities are offset and the net amount is presented in the consolidated statement of financial position when, and only when, the Group has a legal right to offset the amounts and intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

(ii) Non-derivative financial liabilities

The Group classifies financial liabilities into two categories, financial liabilities at FVTPL and other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities, and recognizes them in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial liabilities at FVTPL include financial liabilities held for trading or designated as such upon initial recognition at FVTPL. After initial recognition, financial liabilities at FVTPL are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the issuance of financial liabilities are recognized in profit or loss as incurred.

Non-derivative financial liabilities other than financial liabilities classified as at FVTPL are classified as other financial liabilities and measured initially at fair value minus transaction costs that are directly attributable to the issuance of financial liabilities. Subsequent to initial recognition, these financial liabilities are measured at amortized cost using the effective interest method. As of December 31, 2019, non-derivative financial liabilities comprise borrowings, bonds, trade accounts and notes payable, other accounts payable and others.

The Group derecognizes a financial liability when its contractual obligations are discharged, cancelled or expired.

(iii) Share Capital

The Group issued common stocks and they are classified as equity. Incremental costs directly attributable to the issuance of common stocks are recognized as a deduction from equity, net of tax effects. Capital contributed in excess of par value upon issuance of common stocks is classified as share premium within equity.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(f) Financial Instruments, Continued

(iv) Derivative financial instruments

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

Hedge Accounting

If necessary, the Group designates derivatives as hedging items to hedge the risk of changes in the fair value of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge).

On initial designation of the hedge, the Group's management formally designates and documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction, together with the methods that will be used to assess the effectiveness of the hedging relationship, both at the inception of the hedge relationship as well as on an ongoing basis.

i) Fair value hedges

Change in the fair value of a derivative hedging instrument designated as a fair value hedge and the hedged item is recognized in profit or loss, respectively. The gain or loss from remeasuring the hedging instrument at fair value and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss in the same line item of the statement of comprehensive income (loss). The Group discontinues fair value hedge accounting if it does not designate the derivative hedging instrument and the hedged item as the hedge relationship between them anymore; if the hedging instrument expires or is sold, terminated or exercised; or if the hedge no longer meets the criteria for hedge accounting.

ii) Cash flow hedges

When a derivative designated as a cash flow hedging instrument meets the criteria of cash flow hedge accounting, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income and the ineffective portion of changes in the fair value of the derivative is recognized in profit or loss. The Group discontinues cash flow hedge accounting if it does not designate the derivative hedging instrument and the hedged item as the hedge relationship between them anymore; if the hedging instruments expires or is sold, terminated or exercised; or if the hedge no longer meets the criteria for hedge accounting. The cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income is reclassified to profit or loss in the periods during which the forecasted transaction occurs. If the forecasted transaction is no longer expected to occur, then the balance in other comprehensive income is recognized immediately in profit or loss.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(f) Financial Instruments, Continued

Embedded derivative

Embedded derivatives are separated from the host contract and accounted for separately if the host contract is not a financial asset and certain criteria are met.

Other derivative financial instruments

Other derivative financial instruments are measured at fair value and changes of their fair value are recognized in profit or loss.

(g) Property, Plant and Equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes an expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labor, any costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located and borrowing costs on qualifying assets.

The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item and recognized in other income or other expenses.

(ii) Subsequent costs

Subsequent expenditure on an item of property, plant and equipment is recognized as part of its cost only if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The costs of the day-to-day servicing of property, plant and equipment are recognized in profit or loss as incurred.

(iii) Depreciation

Depreciation is recognized in profit or loss on a straight-line basis, reflecting the pattern in which the asset's future economic benefits are expected to be consumed by the Group. The residual value of property, plant and equipment is zero.

Estimated useful lives of the assets are as follows:

	Useful lives (years)
Buildings and structures	20, 40
Machinery	4, 5
Furniture and fixtures	4
Equipment, tools and vehicles	2, 4, 12
Right-of-use assets	(*)

(*) The Group depreciates the right-of-use assets from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term on a straight-line basis.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(h) <u>Borrowing Costs</u>

The Group capitalizes borrowing costs, which includes interests and exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs, directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale. To the extent that the Group borrows funds specifically for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing the period less any investment income on the temporary investment of those borrowings. The Group immediately recognizes other borrowing costs as an expense.

(i) Government Grants

In case there is reasonable assurance that the Group will comply with the conditions attached to a government grant, the government grant is recognized as follows:

(i) Grants related to the purchase or construction of assets

A government grant related to the purchase or construction of assets is deducted in calculating the carrying amount of the asset. The grant is recognized in profit or loss over the life of a depreciable asset as a reduced depreciation expense and cash related to grant received is presented in investing activities in the statement of cash flows.

(ii) Grants for compensating the Group's expenses incurred

A government grant that compensates the Group for expenses incurred is recognized in profit or loss as a deduction from relevant expenses on a systematic basis in the periods in which the expenses are recognized.

(iii) Other government grants

A government grant that becomes receivable for the purpose of giving immediate financial support to the Group with no compensation for expenses or losses already incurred or no future related costs is recognized as income of the period in which it becomes receivable.

(i) Intangible Assets

Intangible assets are initially measured at cost. Subsequently, intangible assets are measured at cost less accumulated amortization and accumulated impairment losses.

(i) Goodwill

Goodwill arising from business combinations is recognized as the excess of the acquisition cost of investments in subsidiaries, associates and joint ventures over the Group's share of the net fair value of the identifiable assets acquired and liabilities assumed. Any deficit is a bargain purchase that is recognized in profit or loss. Goodwill is measured at cost less accumulated impairment losses.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(j) <u>Intangible Assets, Continued</u>

(ii) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognized in profit or loss as incurred. Development activities involve a plan or design of the production of new or substantially improved products and processes. Development expenditure is capitalized as intangible assets only if the Group can demonstrate all of the following:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale,
- its intention to complete the intangible asset and use or sell it,
- its ability to use or sell the intangible asset,
- how the intangible asset will generate probable future economic benefits (among other things, the Group can demonstrate the usefulness of the intangible asset by existence of a market for the output of the intangible asset or the intangible asset itself if it is to be used internally),
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset, and
- its ability to measure reliably the expenditure attributable to the intangible asset during its development.

The expenditure capitalized includes the cost of materials, direct labor and overhead costs that are directly attributable to preparing the asset for its intended use, and borrowing costs on qualifying assets.

(iii) Other intangible assets

Other intangible assets include intellectual property rights, software, customer relationships, technology, memberships and others.

(iv) Subsequent costs

Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific intangible asset to which they relate. All other expenditures, including expenditures on internally generated goodwill and brands, are recognized in profit or loss as incurred.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(j) <u>Intangible Assets, Continued</u>

(v) Amortization

Amortization is calculated on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use. The residual value of intangible assets is zero. However, as there are no foreseeable limits to the periods over which condominium and golf club memberships are expected to be available for use, these intangible assets are regarded as having indefinite useful lives and not amortized.

	Estimated useful lives (years)
Intellectual property rights	5, 10
Rights to use electricity, water and gas supply facilities	10
Software	4
Customer relationships	7, 10
Technology	10
Development costs	(*)
Condominium and golf club memberships	Not amortized

(*) Capitalized development costs are amortized over the useful lives considering the life cycle of the developed products. Amortization of capitalized development costs are recognized in research and development expenses in the consolidated statement of comprehensive income (loss).

Amortization periods and the amortization methods for intangible assets with finite useful lives are reviewed at each financial year-end. The useful lives of intangible assets that are not being amortized are reviewed each period to determine whether events and circumstances continue to support indefinite useful life assessments for those assets. If appropriate, the changes are accounted for as changes in accounting estimates.

(k) Impairment

(i) Financial assets

Financial instruments and contract assets

The Group recognizes loss allowance for financial assets measured at amortized cost and debt investments at FVOCI at the 'expected credit loss' (ECL).

The Group recognizes a loss allowance for the life-time expected credit losses except for following, which are measured at 12-month ECLs:

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

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

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(k) Impairment, Continued

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

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

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

Estimation of expected credit losses: Policy applicable from January 1, 2018

Expected credit losses are a probability-weighted estimate of credit losses. Credit losses are measured using the present value of the difference between the contractual cash flows and the expected contractual cash flows. The expected credit losses are discounted using effective interest rate of the financial assets.

Credit-impaired financial assets: Policy applicable from January 1, 2018

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

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the issuer or the borrower;
- the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- it is probable that the borrower will enter bankruptcy or other financial reorganization; or
- the disappearance of an active market for a security because of financial difficulties.

Presentation of loss allowance for ECL in the statement of financial position: Policy applicable from January 1, 2018

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the loss allowance is charged to profit or loss and is recognized in OCI instead of reducing the carrying amount of financial assets in the consolidated statement of financial position.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(k) Impairment, Continued

Write-off: Policy applicable from January 1, 2018

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations for recovering the financial asset in its entirety or a portion thereof. The Group assess whether there are reasonable expectations of recovering the contractual cash flows from customers and individually assess the timing and amount of write-off. The Group expects no significant recovery from the amount written-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

Non-derivative financial assets: Policy applicable before January 1, 2018

Financial assets not classified as at FVTPL were assessed at each reporting date to determine whether there was objective evidence of impairment.

Objective evidence that financial assets were impaired included:

- default or delinquency by a debtor;
- · restructuring of an amount due to the Group on terms that the Group would not consider otherwise
- indications that a debtor or issuer would enter bankruptcy
- adverse changes in the payment status of borrowers or issuers;
- the disappearance of an active market for a security because of financial difficulties
- · observable data indicating that there was measurable decrease in the expected cash flows from a group of financial assets.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(k) Impairment, Continued

For an investment in an equity instrument, objective evidence of impairment include a significant or prolonged decline in its fair value below its cost.

Financial assets at amortized cost

The Group considered evidence of impairment for these assets at both collective level and individual asset. All individual significant assets were individually assessed for impairment. Those found not to be impaired were then collectively assessed for any impairment that had been incurred but not yet individually identified. Assets that were not individually significant were collectively assessed for impairment. Collective assessment was carried out by grouping together assets with similar risk characteristics.

In assessing collective impairment, the Group used historical information on the timing of recoveries and the amount of loss incurred and made an adjustment if current economic and credit conditions were such that the actual losses were likely to be greater or lesser than suggested by historical trends.

An impairment loss was calculated as the difference between an asset's carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses were recognized in profit or loss and reflected in an allowance account.

For financial assets such as equity instruments which the carrying amount would be the cost, the impairment loss is the difference between the carrying value and the present value of estimated future cash receipts of a similar financial instruments discounted at current market rate. The impairment loss is recognized as profit and losses and would be not reversed as profit and losses.

For the financial assets classified as available-for-sale which its decrease in the fair value has been recognized as other comprehensive income, the loss which has been recognized as other comprehensive income would be reclassified from other comprehensive income to profit and losses less the amount already recognized as profit and losses.

Available-for-sale financial assets

If the fair value of an impaired available-for-sale debt security subsequently increased and the increase was related objectively to an event occurring after the impairment loss was recognized, then the impairment loss was reversed through profit or loss. Impairment losses recognized in profit or loss for an investment in an equity instrument classified as available-for-sale were not reversed through profit or loss.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(k) Impairment, Continued

(ii) Non-financial assets

The carrying amounts of the Group's non-financial assets, other than assets arising from employee benefits, inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For goodwill, and intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, the recoverable amount is estimated each year.

Recoverable amount is estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the Group determines the recoverable amount of the cash-generating unit to which the asset belongs. The cash-generating unit ("CGU") is the smallest group of assets that includes the asset and generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Goodwill arising from a business combination is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination. The recoverable amount of an asset or cash-generating unit is determined as the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. Fair value less costs to sell is based on the best information available to reflect the amount that the Group could obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the costs of disposal.

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss. Impairment losses recognized in respect of a CGU are allocated first to reduce the carrying amount of any goodwill allocated to the unit, and then to reduce the carrying amounts of the other assets in the unit on a pro rata basis.

In respect of assets other than goodwill, impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of accumulated depreciation or amortization, if no impairment loss had been recognized from the acquisition cost. An impairment loss in respect of goodwill is not reversed.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(l) Leases

The Group applied IFRS 16 using the modified retrospective approach and therefore the comparative information is not restated and continues to be reported applying IAS 17 and IFRIC 4.

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in IFRS 16.

The policy is applied to contracts entered into or changed, on or after January 1, 2019.

(i) As a lessee

At commencement or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease and non-lease component on the basis of its relative stand-alone price. For certain leases, the Group accounts for the lease and non-lease components as a single lease component by applying the practical expedient not to separate non-lease components.

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

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case, the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

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

The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(l) Lease, Continued

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

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, if the Group changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured, the Group recognizes the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset. However, if the carrying amount of the right-of-use asset is reduced to zero and there is a further reduction in the measurement of the lease liability, the Group recognizes any remaining amount of the remeasurement in profit or loss.

The Group presents right-of-use assets in 'property, plant and equipment' and lease liabilities in 'financial liabilities' in the consolidated statement of financial position.

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

(ii) As a lessor

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

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

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

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

Lease, Continued

If an arrangement contains lease and non-lease components, then the Group applies IFRS 15 to allocate the consideration in the contract.

At the commencement date, the Group recognizes assets held under a finance lease in its statement of financial position and present them as a receivable at an amount equal to the net investment in the lease and recognize finance income over the lease term, based on a pattern reflecting a constant periodic rate of return on the lessor's net investment in the lease.

The Group recognizes lease payments received under operating leases as income on a straight-line basis over the lease term as part of 'other revenue'.

The accounting policies applicable to the Group as a lessor in the comparative period are not different from IFRS 16 except for the classification of the sub-lease entered into during current reporting period that resulted in a finance lease classification.

(m) Provisions

A provision is recognized as a result of a past event, if the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

The risks and uncertainties that inevitably surround events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows. The unwinding of the discount is recognized as finance cost.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

The Group recognizes a liability for warranty obligations based on the estimated costs expected to be incurred under its basic limited warranty. This warranty covers defective products and is normally applicable for 18~36 months from the date of purchase. These liabilities are accrued when product revenues are recognized. Factors that affect the Group's warranty liability include historical and anticipated rates of warranty claims on those repairs and cost per claim to satisfy the Group's warranty obligation. Warranty costs primarily include raw materials and labor costs. As these factors are impacted by actual experience and future expectations, management periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary. Accrued warranty obligations are included in the current and non-current provisions.

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, penalties and other sources, are recorded when it is probable that a liability has been incurred and the amount of the assessment and/or remediation can be reasonably estimated.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(n) Non-current Assets Held for Sale

Non-current assets, or disposal groups comprising assets and liabilities, are classified as held-for-sale if it is highly probable that they will be recovered primarily from sale rather than through continuing use. In order to be classified as held for sale, the asset (or disposal group) is available for immediate sale in its present condition and its sale is highly probable. The assets (or disposal groups) that are classified as non-current assets held for sale are measured at the lower of their carrying amount and fair value less costs to sell on initial classification. The Group recognizes an impairment loss for any subsequent decrease in fair value of the asset (or disposal group) for which an impairment loss was recognized on initial classification as held-for-sale and a gain for any subsequent increase in fair value in profit or losses, up to the cumulative impairment loss previously recognized.

The Group does not depreciate a non-current asset while it is classified as held for sale or while it is part of a disposal group classified as held for sale.

(o) Employee Benefits

(i) Short-term employee benefits

Short-term employee benefits that are due to be settled within twelve months after the end of the period in which the employees render the related service are recognized in profit or loss on an undiscounted basis. The expected cost of profit-sharing and bonus plans and others are recognized when the Group has a present legal or constructive obligation to make payments as a result of past events and a reliable estimate of the obligation can be made.

(ii) Other long-term employee benefits

The Group's net obligation in respect of long-term employee benefits other than pension plans is the amount of future benefit that employees have earned in return for their service in the current and prior periods.

(iii) Defined contribution plan

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognized as an employee benefit expense in profit or loss in the period during which services are rendered by employees.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(o) Employee Benefits, Continued

(iv) Defined benefit plan

A defined benefit plan is a post-employment benefit plan other than defined contribution plans. The Group's net obligation in respect of its defined benefit plan is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The fair value of any plan assets is deducted.

The calculation is performed annually by an independent actuary using the projected unit credit method. The discount rate is the yield at the reporting date on high quality corporate bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The Group recognizes all actuarial gains and losses arising from defined benefit plans in retained earnings immediately.

The Group determines the net interest expense (income) on the net defined benefit liability (defined benefit asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (defined benefits asset), taking into account any changes in the net defined benefit liability (defined benefit asset) during the period as a result of contributions and benefit payments. Consequently, the net interest on the net defined benefit liability (defined benefit asset) now comprises: interest cost on the defined benefit obligation, interest income on plan assets, and interest on the effect on the asset ceiling.

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

(v) Termination benefits

The Group recognizes expense for termination benefits at the earlier of the date when the entity can no longer withdraw the offer of those benefits and when the entity recognizes costs for a restructuring involving the payment of termination benefits. If the termination benefits are not expected to be settled wholly before twelve months after the end of the annual reporting period, the Group measures the termination benefit with present value of future cash payments.

(p) Revenue from contracts with customers

Revenue from the sale of goods in the course of ordinary activities is measured at the fair value of the consideration received or receivable, net of estimated returns, trade discounts, volume rebates and other cash incentives paid to customers.

The Group recognizes revenue according to the five stage revenue recognition model (① Identifying the contract \rightarrow ② Identifying performance obligations \rightarrow ③ Determining transaction price \rightarrow ④ Allocating the transaction price to performance obligations \rightarrow ⑤ Recognizing revenue for performance obligations).

The Group generates revenue primarily from sale of display panels. Product revenue is recognized when a customer obtains control over the Group's products, which typically occurs upon shipment or delivery depending on the terms of the contracts with the customer.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(p) Revenue from contracts with customers, Continued

The Group includes return option in the sales contract of display panels with its customers and the consideration receivable from the customer is subject to change due to returns. The Group estimates an amount of variable consideration by using the expected value method which the Group expects to better predict the amount of consideration. The Group includes in the transaction price an amount of variable consideration estimated only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur during the return period when the uncertainty associated with the variable consideration is subsequently resolved. The Group recognizes a refund liability and an asset for its right to recover products from customers if the Group receives consideration from a customer and expects to refund some or all of that consideration to the customer. Sales taxes or value-added taxes collected from customers and remitted to governmental authorities are accounted for on a net basis and are excluded from revenues in the consolidated statement of comprehensive income (loss).

(q) Operating Segments

An operating segment is a component of the Group that: 1) engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with other components of the group, 2) whose operating results are reviewed regularly by the Group's chief operating decision maker ("CODM") in order to allocate resources and assess its performance, and 3) for which discrete financial information is available. Management has determined that the CODM of the Group is the Board of Directors. The CODM does not receive and therefore does not review discrete financial information for any component of the Group. Consequently, no operating segment information is included in these consolidated financial statements. Entity wide disclosures of geographic and product revenue information are provided in note 17 to these consolidated financial statements.

(r) Finance Income and Finance Costs

Finance income comprises interest income on funds invested (including debt instruments measured at FVOCI), dividend income, gains on disposal of debt instruments measured at FVOCI, changes in fair value of financial assets at FVTPL, and gains on hedging instruments that are recognized in profit or loss. Interest income is recognized as it accrues in profit or loss, using the effective interest method. Dividend income is recognized in profit or loss on the date that the Group's right to receive payment is established.

Finance costs comprise interest expense on borrowings, unwinding of the discount on provisions, gain and losses from financial assets measured at FVTPL, impairment losses recognized on financial assets, and losses on hedging instruments that are recognized in profit or loss. Borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(s) Income Tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

(i) Current tax

Current tax comprises the expected tax payable or receivable on the taxable profit or loss for the year, using tax rates enacted or substantively enacted at the reporting date and any adjustment to tax payable in respect of previous years. The amount of current tax payable or receivable is the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. The taxable profit is different from the accounting profit for the period since the taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit (tax loss) of future periods, and non-taxable or non-deductible items from the accounting profit.

(ii) Deferred tax

Deferred tax is recognized, using the asset and liability method, in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The deferred tax assets are recognized to the extent that it is probable that future taxable income will be available against which the deductible temporary differences, unused tax losses and unrecognized tax credit carryforwards can be utilized. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, 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 deferred tax 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.

The Group recognizes a deferred tax liability for all taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future. A deferred tax asset is recognized for all deductible temporary differences to the extent that it is probable that the differences relating to investments in subsidiaries, associates and joint ventures will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

The Group offsets deferred tax assets and deferred tax liabilities if, and only if the Group has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

3. Summary of Significant Accounting Policies, Continued

(t) Earnings (Loss) Per Share

The Controlling Company presents basic and diluted earnings (loss) per share ("EPS") data for its common stocks. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Controlling Company by the weighted average number of common stocks outstanding during the period. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of common stocks outstanding, adjusted for the effects of all dilutive potential common stocks such as convertible bonds and others.

(u) New Standards and Amendments Not Yet Adopted

A number of new standards are effective for annual periods beginning after January 1, 2019 and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these consolidated financial statements:

The following amended standards and interpretations are not expected to have a significant impact on the Group's consolidated financial statements:

- Amendments to References to Conceptual Framework in IFRS Standards.;
- Definition of a Business (Amendments to IFRS 3, Business Combinations);
- Definition of Material (Amendments to IAS 1, Presentation of Financial Statements and IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors); and
- IFRS 17, Insurance Contracts.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

4. Cash and Cash Equivalents and Deposits in Banks

Cash and cash equivalents and deposits in banks as of December 31, 2018 and December 31, 2019 are as follows:

(In millions of won)			
	Dece	mber 31, 2018	December 31, 2019
Current assets			
Cash and cash equivalents			
Demand deposits	₩	2,365,022	3,336,003
Deposits in banks			
Time deposits	₩	4,318	1,500
Restricted deposits(*)		74,082	77,257
	₩	78,400	78,757
Non-current assets			
Deposits in banks			
Restricted deposits(*)	₩	11	11
	W	2,443,433	3,414,771

(*) Includes funds deposited under agreements on mutually beneficial cooperation to aid LG Group companies' suppliers, restricted deposits pledged to enforce the Group's investment plans upon the receipt of grants from Gumi city and Gyeongsangbuk-do, and others.

5. <u>Receivables and Other Assets</u>

(a) Trade accounts and notes receivable as of December 31, 2018 and December 31, 2019 are as follows:

(In millions of won)

	December 31, 2018	December 31, 2019
Due from third parties	W 2,305,368	2,576,391
Due from related parties	523,795	577,689
	₩ 2,829,163	3,154,080

(b) Other accounts receivable as of December 31, 2018 and December 31, 2019 are as follows:

 $(In \ millions \ of \ won)$

	December 3	31, 2018 December 31, 2019
Current assets		
Non-trade receivable, net	₩ 15	59,238 463,614
Accrued income	1	10,075 10,434
	₩ 16	59,313 474,048
Non-current assets		
Long-term non-trade receivable	1	11,448 9,072
	₩ 18	80,761 483,120

Due from related parties included in other accounts receivable, as of December 31, 2018 and 2019 are \(\pi\)39,092 million and \(\pi\)19,431 million, respectively.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

5. Receivables and Other Assets, Continued

(c) The aging of trade accounts and notes receivable, and other accounts receivable as of December 31, 2018 and December 31, 2019 are as follows:

(In millions of won)	December 31, 2018					
	Book va	Allowance for impairment				
	Trade accounts and notes receivable	Other accounts receivable	Trade accounts and notes receivable	Other accounts receivable		
Current	W 2,807,598	177,689	(473)	(816)		
Past due 1-15 days	21,558	3,148	(4)	(26)		
Past due 16-30 days	454	441	_	(4)		
Past due 31-60 days	30	96	_	(1)		
Past due more than 60 days	<u> </u>	668	_	(434)		
	₩ 2,829,640	182,042	(477)	(1,281)		

(In millions of won)	December 31, 2019					
	Book value			Allowance for impairment		
	Trade accounts and notes receivable	Other accounts receivable	Trade accounts and notes receivable	Other accounts receivable		
Current	₩ 3,119,914	208,086	(454)	(3,292)		
Past due 1-15 days	34,626	3,512	(6)	(1)		
Past due 16-30 days	_	598	_	(4)		
Past due 31-60 days	_	61	_	_		
Past due more than 60 days	_	274,185	_	(25)		
	W 3,154,540	486,442	(460)	(3,322)		

The movement in the allowance for impairment in respect of trade accounts and notes receivable and other accounts receivable for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won) Trade accounts and			eivable
	2017	2018	2019
Balance at the beginning of the year	₩ 1,488	1,632	477
(Reversal of) bad debt expense	144	(1,155)	(17)
Balance at the end of the year	₩ 1,632	477	460

(In millions of won)	Other a	Other accounts receivable		
	2017	2018	2019	
Balance at the beginning of the year	₩1,116	1,311	1,281	
(Reversal of) bad debt expense	195	(30)	2,041	
Balance at the end of the year	₩1,311	1,281	3,322	

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

5. Receivables and Other Assets, Continued

(d) Other assets as of December 31, 2018 and December 31, 2019 are as follows:

(In millions of won)	Decen	nber 31, 2018	December 31, 2019
Current assets			
Advanced payments	W	13,259	6,203
Prepaid expenses		89,110	114,145
Value added tax refundable		436,190	826,730
Right to recover returned goods		7,489	22,106
	W	546,048	969,184
Non-current assets			
Long-term prepaid expenses	W	381,983	272,835
Long-term advanced payments		_	7,742
	W	381,983	280,577

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

6. Other Financial Assets

Other financial assets as of December 31, 2018 and 2019 are as follows:

(In millions of won)	December 31, 2018		December 31, 2019
Current assets			
Financial assets at fair value through profit or loss			
Derivatives(*)	W	13,059	34,036
Financial assets at fair value through other comprehensive income			
Debt instruments			
Government bonds	₩	106	6
Financial asset carried at amortized cost			
Deposits	₩	17,020	9,585
Short-term loans		16,116	21,623
Lease receivables			5,695
	W	33,136	36,903
	W	46,301	70,945
Non-current assets			
Financial assets at fair value through profit or loss			
Equity instruments			
Intellectual Discovery, Ltd.	₩	4,598	1,104
Kyulux, Inc.		2,460	1,889
Fineeva Co., Ltd.		286	4
ARCH Venture Fund VIII, L.P.		6,337	6,302
Sierra Ventures Fund XII, L.P.		_	580
	W	13,681	9,879
Convertible bonds	W	1,327	1,544
Derivatives(*)			15,640
233733.730()	W	15,008	27,063
Financial assets at fair value through other comprehensive income	_		
Debt instruments			
Government bonds	W	55	70
Financial assets carried at amortized cost			, 0
Deposits	W	74,103	21,451
Long-term loans		55,048	40,827
Lease receivables			22,099
	W	129,151	84,377
	W	144,214	111,510

^(*) Represents valuation gain from currency interest rate swap contracts related to foreign currency denominated borrowings and bonds. The contracts are not designated as hedging instruments.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

6. Other Financial Assets, Continued

Other financial assets of related parties as of December 31, 2018 is \pm2,000 million.

7. <u>Inventories</u>

Inventories as of December 31, 2018 and 2019 are as follows:

(In millions of won)

	December 31, 2018	December 31, 2019
Finished goods	₩ 1,084,297	730,009
Work-in-process	856,388	756,744
Raw materials	554,720	405,854
Supplies	195,798	158,548
	₩ 2,691,203	2,051,155

For the years ended December 31, 2017, 2018 and 2019, the amount of inventories recognized as cost of sales and inventory write-downs included in cost of sales are as follows:

(In millions of won)

	2017	2018	2019
Inventories recognized as cost of sales	₩22,424,661	21,251,305	21,607,240
Including: inventory write-downs	206,127	313,180	472,885

There were no significant reversals of inventory write-downs recognized during 2017, 2018 and 2019.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

8. <u>Investments in Equity Accounted Investees</u>

(a) Associates at the reporting date are as follows:

					20	18	20	19
Associates	Location	Fiscal year end	Date of incorporation	Business	Percentage of ownership	Carrying amount	Percentage of ownership	Carrying amount
Paju Electric Glass Co., Ltd.	Paju, South Korea	December 31	January 2005	Manufacture glass for display	40%	₩ 47,823	40%	₩ 50,697
INVENIA Co., Ltd.(*1)	Seongnam, South Korea	December 31	January 2001	Develop and manufacture equipment for display manufacture	13%	4,166	_	_
WooRee E&L Co., Ltd. (*2)	Ansan, South Korea	December 31	June 2008	Manufacture LED back light unit packages	14%	4,746	14%	7,310
YAS Co., Ltd.	Paju, South Korea	December 31	April 2002	Develop and manufacture deposition equipment for OLEDs	15%	16,308	15%	19,424
AVATEC Co., Ltd.(*3)	Daegu, South Korea	December 31	August 2000	Process and sell glass for display	17%	23,441	14%	19,929
Arctic Sentinel, Inc.	Los Angeles, U.S.A.	March 31	June 2008	Develop and manufacture tablet for kids	10%	_	10%	_
Cynora GmbH (*4)	Bruchsal, Germany	December 31	March 2003	Develop organic emitting materials for displays and lighting devices	14%	8,668	12%	4,714

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

Investments in Equity Accounted Investees, Continued

				2018		2019		
Associates	Location	Fiscal year end	Date of incorporation	Business	Percentage of ownership	Carrying amount	Percentage of ownership	Carrying amount
Material Science Co., Ltd.(*5)	Seoul, South Korea	December 31	January 2014	Develop, manufacture, and sell materials for display	10%	₩ 3,346	10%	₩ 2,354
Nanosys Inc.(*6)	Milpitas, U.S.A.	December 31	July 2001	Develop, manufacture, and sell materials for display	4%	5,491	4%	5,183
						W 113,989		₩ 109,611

- (*1) During 2019, the Controlling Company disposed of the entire investments, 3,000,000 shares of common stock, in INVENIA Co., Ltd and recognized \(\fomathbf{W}4,324\) million of gain on disposal as finance income.
- (*2) During 2019, the Controlling Company recognized a reversal of impairment loss of \(\psi\)1,535 million as finance income for the investments in WooRee E&L Co., Ltd.
- (*3) During 2019, the Controlling Company disposed of 650,000 shares of common stock in AVATEC Co., Ltd. As of December 31, 2019, the Controlling Company's ownership percentage in AVATEC Co., LTD. is 14% and the Controlling Company recognized \(\forall \)207 million of gain on disposal as finance income.
- (*4) During 2019, the Controlling Company recognized an impairment loss of \(\mathbb{W}\)3,954 million as finance cost for the investments in Cynora GmbH. As of December 31, 2019, the Controlling Company's ownership percentage in Cynora GmbH decreased from 14% to 12% as the Controlling Company did not participate in the capital increase of Cynora GmbH.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

8. Investments in Equity Accounted Investees, Continued

- (*5) During 2019, the Controlling Company recognized an impairment loss of \(\pi\)736 million as finance cost for the investments in Material Science Co., Ltd.
- (*6) During 2019, the Controlling Company recognized a reversal of impairment loss of \(\pi\)209 million as finance income for the investments in Nanosys Inc.

Although the Controlling Company's respective share interests in WooRee E&L Co., Ltd., YAS Co., Ltd., AVATEC Co., Ltd., Arctic Sentinel, Inc., Cynora GmbH, Material Science Co., Ltd. and Nanosys Inc. are below 20%, the Controlling Company is able to exercise significant influence through its right to appoint a director to the board of directors of each investee. Accordingly, the investments in these investees have been accounted for using the equity method.

As of December 31, 2019, the market value of the Group's share in WooRee E&L Co., Ltd., YAS Co., Ltd., and AVATEC Co., Ltd., all of which are listed in KOSDAQ, are \(\pi\)7,310 million, \(\pi\)39,300 million and \(\pi\)15,380 million, respectively.

Dividends income recognized from equity method investees for the years ended December 31, 2017, 2018 and 2019 amounted to \wx8,639 million, \wx5,272 million and \wx7,502 million, respectively.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

8. <u>Investments in Equity Accounted Investees, Continued</u>

- (b) Summary of financial information of the significant associate as of December 31, 2018 and 2019 and for the years ended December 31, 2017, 2018 and 2019 is as follows:
 - (i) Paju Electric Glass Co., Ltd.

(In millions of won)	December 31, 2018	December 31, 2019
Total assets	W 194,021	195,815
Current assets	128,788	126,314
Non-current assets	65,233	69,501
Total liabilities	72,686	66,017
Current liabilities	66,797	51,625
Non-current liabilities	5,889	14,392

(In millions of won)	2017	2018	2019
Revenue	W4 08,846	384,144	346,434
Profit for the year	12,327	12,744	13,672
Other comprehensive income (loss)	(9,366)	2,612	9,933
Total comprehensive income	2,961	15,356	23,605

- (c) Reconciliation from financial information of the significant associate to its carrying value in the consolidated financial statements as of December 31, 2018 and 2019 is as follows:
 - (i) As of December 31, 2018

(In millions of won)

(Net asset (applying			
	Net	Ownership	ownership		Intra-group	
Company	asset	interest	interest)	Goodwill	transaction	Book value
Pain Electric Glass Co. Ltd	W121 335	40%	48 534		(711)	47 823

(ii) As of December 31, 2019

			Net asset				
			(applying				
		Ownership	ownership		Intra-group	Impairment	Book
Company	Net asset	interest	interest)	Goodwill	transaction	loss	value
Paiu Electric Glass Co., Ltd.	W129.798	40%	51.919		(789)	(433)	50,697

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

8. <u>Investments in Equity Accounted Investees, Continued</u>

- (d) Book value of other associates, in aggregate, as of December 31, 2018 and 2019 is as follows:
 - (i) As of December 31, 2018

(In millions of won)

		Net profit of associates (applying ownership interest)					
		Profit for the	Other comprehensive	Total comprehensive			
	Book value	year	income	income			
Other associates	₩66,166	(3,739)	(988)	(4,727)			

(ii) As of December 31, 2019

		Net profit (loss) of associates (applying ownership interest)					
		Profit (loss) for	Other comprehensive	Total comprehensive			
	Book value	the year	income (loss)	income (loss)			
Other associates	W 58,914	6,756	190	6,946			

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

8. <u>Investments in Equity Accounted Investees, Continued</u>

(e) Changes in investments in associates accounted for using the equity method for the years ended December 31, 2018 and 2019 are as follows:

(In millions of won)

(In militario o)	,					2018			
						Equity income	Other		
Company		т.	1	Acquisition/	Dividends	(loss) on	comprehensive	Other	D
Company		J	anuary 1	Disposal	received	investments	income (loss)	gain (loss)	December 31
Associates	Paju Electric Glass Co., Ltd.	₩	46,511	_	(4,172)	4,439	1,045	_	47,823
	Others		75,996	12,592	(1,100)	(3,739)	(988)	(16,595)	66,166
		W	122,507	12,592	(5,272)	700	57	(16,595)	113,989

(III IIIIIII of well)				2019			
		Acquisition/	Dividends	Equity income (loss) on	Other comprehensive	Other	
Company	January 1	Disposal	received	investments	income (loss)	gain (loss)	December 31
Associates Paju Electric Glass Co., Ltd.	₩ 47,823	_	(6,057)	5,391	3,973	(433)	50,697
Others	66,166	(9,807)	(1,445)	6,756	190	(2,946)	58,914
	₩ 113,989	(9,807)	(7,502)	12,147	4,163	(3,379)	109,611

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

9. Property, Plant and Equipment

Acquisition cost as of December 31, 2018

Accumulated depreciation as of December 31, 2018

Accumulated impairment loss as of December 31,

(In millions of won)

2018

(a) Changes in property, plant and equipment for the year ended December 31, 2018 are as follows:

Buildings Machinery Furniture Construction and and and -in-progress Land structures equipment fixtures (*1)Others Total Acquisition cost as of January 1, 2018 W460,511 38,901,158 772,824 205,475 52,851,330 6,539,506 5,971,856 Accumulated depreciation as of January 1, 2018 (2,678,970)(631,482)(148,753)(36,645,323)(33,186,118)(1,757)Accumulated impairment loss as of January 1, 2018 (2,290)(4,047)Book value as of January 1, 2018 W460,511 3,858,779 5,712,750 141,342 5,971,856 56,722 16,201,960 Additions 8,605,551 8,605,551 Depreciation (169,739)(3,123,659)(2,568,335)(67,274)(318,311)(112,752)Disposals (15)(311)(2,971)(161)(116,210)Impairment loss (25,711)(17,890)(43,601)Others(*2)1,332 55,430 1,959,645 68,177 (2,357,412)380,278 107,450 Effect of movements in exchange rates 9,809 14,520 359 15,010 40,010 312 Government grants received (1,029)(181)(1,210)Reclassification to assets held-for-sale (69,758)(37)(365)(70,161)(1) W461,828 3,535,788 4,979,087 142,256 12,216,934 264,237 21,600,130 Book value as of December 31, 2018

6,528,939

(2,991,445)

(1,706)

39,825,070

(34,817,982)

(28,001)

834,628

(692,372)

12,234,824

(17,890)

633,220

(368,983)

60,518,509

(38,870,782)

(47,597)

W

W461,828

^(*1) As of December 31, 2018, construction-in-progress mainly relates to construction of manufacturing facilities.

^(*2) Others are mainly amounts transferred from construction-in-progress.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

9. Property, Plant and Equipment, Continued

(b) Changes in property, plant and equipment for the year ended December 31, 2019 are as follows:

(In millions of won)	Land	Buildings and structures	Machinery and equipment	Furniture and fixtures	Construction -in-progress (*1)	Right-of- use asset	Others	Total
Acquisition cost as of January 1, 2019	W4 61,828	6,528,939	39,825,070	834,628	12,234,824	_	633,220	60,518,509
Accumulated depreciation as of January 1, 2019	_	(2,991,445)	(34,817,982)	(692,372)	_	_	(368,983)	(38,870,782)
Accumulated impairment loss as of								
January 1, 2019		(1,706)	(28,001)		(17,890)			(47,597)
Book value as of January 1, 2019	W4 61,828	3,535,788	4,979,087	142,256	12,216,934		264,237	21,600,130
Recognition of right-of-use assets on initial application of IFRS No. 1116	_	_	_	_	_	142,040	_	142,040
Adjusted book value as of January 1, 2019	W4 61,828	3,535,788	4,979,087	142,256	12,216,934	142,040	264,237	21,742,170
Additions					5,878,369	29,733		5,908,102
Depreciation	_	(302,157)	(2,609,205)	(66,592)	<u> </u>	(51,063)	(239,762)	(3,268,779)
Disposals	(7,861)	(4,958)	(559,616)	(1,622)	_	(3,594)	(16,953)	(594,604)
Impairment loss (*2)	_	(125,687)	(1,212,215)	(8,278)	(171,439)	(4,302)	(28,509)	(1,550,430)
Others (*3)	68	1,064,123	6,958,793	70,140	(8,373,047)	—	279,923	_
Government grants received		(83,200)	(17,028)		(180,448)	_		(280,676)
Effect of movements in exchange								
rates		21,984	30,957	884	75,958	436	1,643	131,862
Book value as of December 31, 2019	W 454,035	4,105,893	7,570,773	136,788	9,446,327	113,250	260,579	22,087,645
Acquisition cost as of December 31, 2019	W 454,035	7,381,156	43,604,721	899,053	9,618,256	169,133	823,101	62,949,455
Accumulated depreciation as of December 31, 2019	₩ <u> </u>	(3,154,387)	(34,810,300)	(753,987)		(51,581)	(534,013)	(39,304,268)
Accumulated impairment loss as of December 31, 2019	<u>w</u>	(120,876)	(1,223,648)	(8,278)	(171,929)	(4,302)	(28,509)	(1,557,542)

^(*1) As of December 31, 2019, construction-in-progress mainly relates to construction of manufacturing facilities.

^(*2) During 2019, Display (AD PO) and Lighting CGUs were assessed for impairment, and impairment losses amounting to \(\psi\)1,491,292 million (\(\psi\)1,369,371 million and \(\psi\)121,921 million for Display (AD PO) and Lighting CGUs, respectively) were recognized as other expenses. Details of the impairment loss are explained in note 10(e).

^(*3) Others are mainly amounts transferred from construction-in-progress.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

9. Property, Plant and Equipment, Continued

(c) Capitalized borrowing costs and capitalization rate for the years ended December 31, 2017, 2018 and 2019 are as follows:

		2018	2019
Capitalized borrowing costs	W 47,686	146,607	283,525
Capitalization rate	1.92%	2.80%	3.74%

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

10. Intangible Assets and Non-current Asset Impairment

(a) Changes in intangible assets for the year ended December 31, 2018 are as follows:

(In millions of won)										
	Intellectual property rights	Software	Member- ships	Development costs	Construction -in-progress (software)	Customer relationships	Technology	Good- will	Others (*2)	Total
Acquisition cost as of	*** ***			4 = 60 000	••••	-0.4-6	44.0=4	100010		2026200
January 1, 2018	₩ 895,721	898,278	54,985	1,769,998	30,933	59,176	11,074	103,048	13,077	3,836,290
Accumulated amortization as of January 1, 2018	(648,755)	(736,788)	_	(1,473,238)	_	(31,337)	(8,490)	_	(13,076)	(2,911,684)
Accumulated impairment loss as of January 1, 2018	_	_	(11,785)	_	_	_	_	_	_	(11,785)
Book value as of January 1, 2018	₩ 246,966	161,490	43,200	296,760	30,933	27,839	2,584	103,048	1	912,821
Additions - internally	,	,		,		,	,	,		Í
developed	_	_	_	372,835	_	_	_	_	_	372,835
Additions - external										
purchases	24,596	_	2,844	_	100,820	_		_	_	128,260
Amortization(*1)	(43,437)	(80,159)	_	(302,685)	_	(3,517)	(1,107)	_	(1)	(430,906)
Disposals		_	(721)	_		_			_	(721)
Impairment loss	_	_	(82)	_	_	_	_	_	_	(82)
Reversal of impairment										
loss	_	_	348	_	_	_		_	_	348
Transfer from										
construction-in-progress	· —	95,028	449	_	(95,028)	_	_	_	_	449
Effect of movements in										
exchange rates	1,896	1,240	1		238			1,263		4,638
Book value as of December 31, 2018	₩ 230,021	177,599	46,039	366,910	36,963	24,322	1,477	104,311		987,642
Acquisition cost as of December 31, 2018	₩ 926,969	992,139	57,560	2,142,832	36,963	59,176	11,075	104,311	13,077	4,344,102
Accumulated amortization as of December 31, 2018	W (696,948)	(814,540)		(1,775,922)		(34,854)	(9,598)		(13,077)	(3,344,939)
Accumulated impairment loss as of December 31, 2018	W —		(11,521)							(11,521)

^(*1) The Group has classified the amortization as manufacturing overhead costs, selling expenses, administrative expenses and research and development expenses.

^(*2) Others mainly consist of rights to use electricity and gas supply facilities.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

10. Intangible Assets and non-current asset impairment, Continued

(b) Changes in intangible assets for the year ended December 31, 2019 are as follows:

(In millions of won)	Intellectual property rights	Software	Member-	Development costs	Construction -in-progress (software)	Customer relationships	Technology	Good- will	Others (*2)	Total
Acquisition cost as of										
January 1, 2019	₩ 926,969	992,139	57,560	2,142,832	36,963	59,176	11,075	104,311	13,077	4,344,102
Accumulated amortization as	,									
of January 1, 2019	(696,948)	(814,540)		(1,775,922)		(34,854)	(9,598)		(13,077)	(3,344,939)
Accumulated impairment loss										
as of January 1, 2019			(11,521)							(11,521)
Book value as of January 1,										
2019	₩ 230,021	177,599	46,039	366,910	36,963	24,322	1,477	104,311		987,642
Additions - internally										
developed	_	_	_	437,945	_	_	_	_	_	437,945
Additions - external	20.205		0.46		00.260				2	110 615
purchases	28,397	(02.01.6)	846	(205.050)	90,369	(2.625)	(1.100)		3	119,615
Amortization (*1)	(42,550)	(82,016)		(297,959)	_	(2,637)	(1,108)	_	(2)	(426,272)
Disposals	(20.152)	(239)	(1,816)	(121.712)		(21 (07)		(57,005)		(2,055)
Impairment loss (*3)(*4)	(29,152)	(8,905)	_	(131,713)	_	(21,685)	_	(57,995)	_	(249,450)
Reversal of impairment			0.60							060
loss Transfer from			960					_		960
		111,359			(112.150)					(900)
construction-in-progres Effect of movements in	s —	111,339	_	_	(112,159)	_	_	_	_	(800)
exchange rates	4,318	347	23		72			1,103		5,863
Book value as of December 31		347			12			1,103		3,803
2019	, ₩ 191,034	198,145	46,052	375,183	15,245		369	47,419	1	873,448
	191,034	196,143	40,032	3/3,183	13,243		309	47,419		8/3,446
Acquisition cost as of	*** 0 *0 *0*					-0.4-6			4.000	
December 31, 2019	₩ 959,683	1,097,290	56,612	2,580,777	15,245	59,176	11,074	105,414	13,080	4,898,351
Accumulated amortization as										
of December 31, 2019	$\frac{\mathbf{W}(739,498)}{\mathbf{W}(739,498)}$	(890,281)		(2,073,881)		(37,491)	(10,705)		(13,079)	(3,764,935)
Accumulated impairment loss										
as of December 31, 2019	₩ (29,151)	(8,864)	(10,560)	(131,713)	_	(21,685)	_	(57,995)		(259,968)

^(*1) The Group has classified the amortization as manufacturing overhead costs, selling expenses, administrative expenses and research and development expenses.

^(*2) Others mainly consist of rights to use electricity and gas supply facilities.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

- 10. Intangible Assets and non-current asset impairment, Continued
- (*3) During 2019, Display(AD PO) and Lighting CGUs were assessed for impairment, and the impairment losses amounting to \(\pi\)131,628 million (\(\pi\)26,284 and \(\pi\)105,344 million for Display(AD PO) and Lighting CGUs, respectively) were recognized as other expenses. The impairment amount is recognized in goodwill, customer relationships and others. Details of the impairment loss are explained in note 10(e)).
- (*4) The Group recognized an impairment loss amounting to \w117,822 million in connection with development projects that were terminated after the impairment review.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

10. Intangible Assets and non-current asset impairment, Continued

- (c) Development of new projects are divided into research activities and development activities. Expenditures on research activities are recognized in profit or loss and qualifying development expenditures are capitalized, respectively.
- (d) Development costs as of December 31, 2018 and 2019 are as follows:
 - (i) As of December 31, 2018

(In millions of won and in years)

Classification	Product	Book Value	Remaining Useful life
	Mobile	W 108,467	0.5
Development completed	TV	28,001	0.5
Development completed	Notebook	4,458	0.6
	Others	9,475	0.5
		W 150,401	
	Mobile	W 144,679	_
Davidonment in macross	TV	55,580	_
Development in process	Notebook	9,639	
	Others	6,611	
		W 216,509	
		W 366,910	

(ii) As of December 31, 2019

(In millions of won and in years)

Classification	Product	Book Value	Remaining Useful life
	Mobile	₩ 53,350	0.4
Development completed	TV	22,597	0.4
Development completed	Notebook	14,464	0.4
	Others	12,370	0.7
		W 102,781	
	Mobile	W 157,483	_
Davidonment in process	TV	42,587	_
Development in process	Notebook	46,167	_
	Others	26,165	_
		W 272,402	
		W 375,183	

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

10. Intangible Assets and non-current asset impairment, Continued

- (e) Impairment assessment
 - (i) During 2019, the Group has distinguished Display (AD PO) and Lighting businesses as separate CGUs from the existing Display CGU due to the initiation of independent factory production of Display (AD PO) business and the decision of Lighting business planned discontinuance in response to business environmental changes. As of December 31, 2019, goodwill allocated to the Display CGU amounts to \(\frac{\text{W47.419}}{\text{million}}\).
 - (ii) Impairment on assets belonging to all of the CGUs was assessed due to the decision of planned discontinuance of Lighting business and adverse changes in the business environment of Display (AD PO). The recoverable amount of each CGU is estimated based on its value in use. Value in use is calculated using the estimated pre-tax cash flow based on 5-year business plan approved by management. The estimated sales of the Group's products used in the forecast was determined considering external sources and the Group's past experience. Management estimated the future pre- tax cash flow based on its past performance and forecasts on market growth. The key assumptions used in the estimation of value in use for Display (AD PO) CGU and Display CGU include revenue and operating expenditures for the forecast period, growth rates for subsequent years ("terminal growth rate"), and discount rate. For all of the CGUs, the terminal growth rate and the discount rate in the estimation of value in use as of December 31, 2019 are as follows

	Lighting(*2)	Display (AD PO)(*3)	Display(*4)
Discount rate(*1)	6.1%	6.1%	6.1%
Terminal growth rate	N/A	0.0%	1.0%

- (*1) The discount rate was calculated using the weighted average cost of equity capital and debt, and the beta of equity capital was calculated as the average of five global listed companies in the same industry and the Group. Cost of debt was calculated by the interest rate of the Group's publicly issued bonds and debt ratio was determined using the average of the debt ratios of the five global listed companies in the same industry with the Group.
- (*2) As a result of impairment test, the carrying amount of Lighting CGU which produces OLED lighting products was fully impaired with impairment loss of \(\pm\)230,867 million recognized as other expenses for the year ended December 31, 2019.
- (*3) As a result of impairment test, the carrying amount of Display(AD PO) CGU which produces plastic OLED mobile products and commenced mass production in 2019, exceeds the recoverable amount of \(\pm\)1,729,209 million and an impairment loss of \(\pm\)1,395,655 million was recognized as other expenses for the year ended December 31, 2019. The value in use determined for this CGU is sensitive to the discount rate and terminal growth rate used in the discounted cash flow model. If the discount rate increases by 0.5%, the value in use would have decreased by \(\pm\)259,221 million (15.0%). If the terminal growth rate decreases by 0.5%, the value in use would have decreased by \(\pm\)169,626 million (9.8%).
- (*4) As a result of impairment test for Display CGU, the recoverable amount exceeds the carrying amount by \(\mathbb{W}\)3,568,588 million. The value in use determined for this CGU is sensitive to the discount rate and terminal growth rate used in the discounted cash flow model. The discount rate and terminal growth rate would need to increase by 1.06% and decrease by 1.39%, individually (holding all the other assumptions constant) for the estimated recoverable amount to be equal to the carrying amount.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

11. Financial Liabilities

(a) Financial liabilities at the reporting date are as follows:

(In millions of won)

	December 31, 2018	December 31, 2019
Current		
Short-term borrowings	₩ —	696,793
Current portion of long-term borrowings and bonds	1,553,907	1,242,904
Lease liabilities		37,387
	₩ 1,553,907	1,977,084
Non-current		
Won denominated borrowings	₩ 2,700,608	2,692,560
Foreign currency denominated borrowings	2,531,663	6,107,117
Bonds	1,772,599	2,741,516
Derivatives(*)	25,758	20,592
Lease liabilities		51,125
	₩ 7,030,628	11,612,910

- (*) Represents currency interest rate swap contracts entered by the Group to hedge interest rate risks with respect to foreign currency denominated borrowings and bonds.
 - (b) Foreign currency denominated short-term borrowings as of December 31, 2019 are as follows. There are none as of December 31, 2018.

(In millions of won and USD, CNY)

	Annual interest rate as of		
Lender	December 31, 2019 (%)(*)	Decemb	er 31, 2019
Standard Chartered Bank Korea Limited	12ML + 0.78~0.88	W	347,340
Standard Chartered Bank Vietnam and others	$3ML + 0.80 \sim 0.90$		61,613
Standard Chartered Bank (China) Limited and others	PBOC x 1.05		
	PBOC - 0.05		287,840
Foreign currency equivalent		USD	353
		CNY	1,737
		W	696,793

(*) ML represents Month LIBOR (London Inter-Bank Offered Rates) and PBOC represents the benchmark interest rate of People's Bank of China.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

11. Financial Liabilities, Continued

(c) Won denominated long-term borrowings at the reporting date are as follows:

(In millions of won)

(in millions of won)				
Lender	Annual interest rate as of December 31, 2019 (%)(*)	Do	ecember 31, 2018	December 31, 2019
Woori Bank	2.75	W	1,259	608
Korea Development Bank and others	CD rate (91days) +		2 950 000	2 220 000
	1.00~1.39, 2.21~3.25		2,850,000	3,330,000
Less current portion of long-term borrowings			(150,651)	(638,048)
		W	2,700,608	2,692,560

(*) CD represents Certificate of Deposit.

(d) Foreign currency denominated long-term borrowings at the reporting date are as follows:

(In millions of won and USD, CNY)

Lender	Annual interest rate as of December 31, 2019 (%)	Dec	cember 31, 2018		mber 31, 2019
The Export-Import Bank of Korea	3ML+0.75~1.70 6ML+1.25~1.35	₩	955,975	1	,696,177
China Construction Bank and others	USD: 3ML+0.80~1.43 CNY: PBOC X (0.95~1.05)		2,419,286		1,606,094
Foreign currency equivalent		USD	, -	USD CNY	2,767 18,699
Less current portion of long-term borrowings		W	(843,598) 2,531,663	((195,154) 5,107,117

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

11. Financial Liabilities, Continued

(e) Details of bonds issued and outstanding at the reporting date are as follows:

		Annual interest rate as of	December 31,	December 31,
	Maturity	December 31, 2019 (%)	2018	2019
Won denominated bonds(*1)				
Publicly issued bonds	May 2020 ∼			
	February 2024	1.95~2.95	₩ 1,900,000	1,730,000
Privately issued bonds	May 2025 ∼			
	May 2033	3.25~4.25	110,000	110,000
Less discount on bonds			(3,949)	(3,404)
Less current portion			(559,658)	(409,702)
			₩ 1,446,393	1,426,894
Foreign currency denominated				
bonds(*2)				
Publicly issued bonds	November 2021	3.88	₩ 335,430	347,340
Privately issued bonds	April 2023	3ML + 1.47	_	115,780
Foreign currency equivalent			USD 300	USD 400
Less discount on bonds			(9,224)	(6,883)
			₩ 326,206	456,237
Financial liabilities at fair value				
through profit or loss				
Foreign currency convertible bonds	August 2024	1.50	₩ —	858,385
Foreign currency equivalent				USD 741
			W 1,772,599	2,741,516

^(*1) Principal of the won denominated bonds is to be repaid at maturity and interests are paid quarterly.

^(*2) Principal of the foreign currency denominated bonds is to be repaid at maturity and interests are paid quarterly or semi-annually.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

11. Financial Liabilities, Continued

(f) Details of the convertible bonds issued and outstanding as of December 31, 2019 are as follows:

(In won, USD)

Type Issuance amount Annual interest rate (%) Issuance date Maturity date Interest payment

Principal redemption

Conversion price

Conversion period

Redemption at the option of the issuer (Call option)

Redemption at the option of the bondholders (Put option)

Description

Unsecured foreign currency denominated convertible bonds

USD 687,800,000

1.50

August 22, 2019

August 22, 2024

Payable semi-annually in arrear until maturity date in equal installments commencing on issuance

1. Redemption at maturity:

Redeemed on the maturity date, at their outstanding principal amount, which has not been early redeemed or converted.

2. Advanced redemption:

The Controlling Company has a right to redeem in advance (call option) and the bondholders have a right to require the Controlling Company to redeem in advance (put option). At exercise, the outstanding principal amount together with accrued but unpaid interest are to be redeemed.

₩ 19,845 per common share (subject to adjustment based on diluted effects of certain events)

From August 23, 2020 to August 12, 2024

- On or at any time after 3 years from the issuance, if the closing price of the shares for any 20 trading days out of the 30 consecutive trading days is at least 130% of the applicable conversion price
- The aggregate principal amount of the convertible bonds outstanding is less than 10% of the aggregate principal amount originally issued, or
- In the event of certain changes in laws and other directives resulting in additional taxes for the holders

On the day of 3 years from the issuance

The Controlling Company designated the convertible bonds as financial liabilities at fair value through profit of loss and recognized the change in fair value in profit or loss. The Controlling Company measures the convertible bond at fair value using the market price of convertible bonds disclosed on Bloomberg. The number of convertible shares as of December 31, 2019 is as follows:

(In won and No. of shares)

	December 31, 2019
Aggregate outstanding amount of the convertible bonds	W 813,426,670,000
Conversion price	W 19,845
Number of common shares to be issued at conversion	40,988,998

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

12. Employee Benefits

The Controlling Company and certain subsidiaries' defined benefit plans provide a lump-sum payment to an employee based on final salary rates and length of service at the time the employee leaves the Controlling Company or certain subsidiaries.

The defined benefit plans expose the Group to actuarial risks, such as the risk associated with expected periods of service, interest rate risk, market (investment) risk, and others.

(a) Net defined benefit liabilities (defined benefit assets) recognized at the reporting date are as follows:

(In millions of won) December 31, 2018 December 31, 2019 Present value of partially funded defined benefit obligations 1,595,423 1,481,339 (1,607,253) Fair value of plan assets (1,550,063)W (125,914)45,360 W 45,360 1,338 Defined benefit liabilities, net ₩ Defined benefit assets 127,252

(b) Changes in the present value of the defined benefit obligations for the years ended December 31, 2018 and 2019 are as follows:

(In millions of won)		
	2018	2019
Opening defined benefit obligations	W 1,562,424	1,595,423
Current service cost	204,668	194,469
Past service cost	(25,749)	(32,006)
Interest cost	49,145	42,360
Remeasurements (before tax)	(27,885)	(137,464)
Benefit payments	(88,562)	(95,675)
Curtailment of plans	(74,459)	(80,470)
Net transfers from (to) related parties	(4,217)	(5,349)
Others	58	51
Closing defined benefit obligations	₩1,595,423	1,481,339

Weighted average remaining maturity of defined benefit obligations as of December 31, 2018 and 2019 are 14.4 years and 15.1 years, respectively.

(c) Changes in fair value of plan assets for the years ended December 31, 2018 and 2019 are as follows:

(In millions of won)		
	2018	2019
Opening fair value of plan assets	W 1,466,977	1,550,063
Expected return on plan assets	48,184	41,826
Remeasurements (before tax)	(22,195)	(8,824)
Contributions by employer directly to plan assets	212,224	186,641
Benefit payments	(80,690)	(82,266)
Net transfers from (to) related parties	_	280
Curtailment of plans	(74,437)	(80,467)
Closing fair value of plan assets	W 1,550,063	1,607,253

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

12. Employee Benefits, Continued

(d) Plan assets at the reporting date are as follows:

(In millions of won)

	December 31, 2018	December 31, 2019
Guaranteed deposits in banks	₩ 1,550,063	1,607,253

As of December 31, 2019, the Group maintains the plan assets primarily with Mirae Asset Daewoo Co., Ltd., KB Insurance Co., Ltd. and others.

(e) Expenses recognized in profit or loss for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won)

	2017	2018	2019
Current service cost	W 195,850	204,668	194,469
Past service cost	_	(25,749)	(32,006)
Net interest cost	2,391	961	534
	₩198,241	179,880	162,997

Expenses are recognized in the following line items in the consolidated statements of comprehensive income (loss):

(In millions of won)

	2017	2018	2019
Cost of sales	W 158,418	134,879	119,147
Selling expenses	11,114	11,045	10,600
Administrative expenses	16,287	19,472	18,360
Research and development expenses	12,422	14,484	14,890
	W 198,241	179,880	162,997

(f) Remeasurements of net defined benefit liabilities (assets) included in other comprehensive income (loss) for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won)	2017	2018	2019
Balance at January 1	W (163,950)	(170,510)	(165,969)
Remeasurements			
Actuarial profit or loss arising from:			
Experience adjustment	(48,890)	56,225	43,644
Demographic assumptions	(7,702)	(15,379)	(19,952)
Financial assumptions	56,706	(12,961)	113,772
Return on plan assets	(16,374)	(22,195)	(8,824)
Group's share of associates regarding remeasurements	441	20	238
	W (15,819)	5,710	128,878
Income tax	₩ 9,259	(1,169)	(35,235)
Balance at December 31	W (170,510)	(165,969)	(72,326)

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

12. Employee Benefits, Continued

(g) Principal actuarial assumptions at the reporting date (expressed as weighted averages) are as follows:

	2018	2019
Expected rate of salary increase	4.3%	3.4%
Discount rate for defined benefit obligations	2.8%	2.4%

Assumptions regarding future mortality are based on published statistics and mortality tables. The current mortality underlying the values of the liabilities in the defined benefit plans are as follows:

		December 31, 2018	December 31, 2019
Teens	Males	0.01%	0.00%
Teens	Females	0.00%	0.00%
Typontias	Males	0.01%	0.01%
Twenties	Females	0.00%	0.00%
Thirties	Males	0.01%	0.01%
Tillues	Females	0.01%	0.00%
Forties	Males	0.03%	0.02%
ronies	Females	0.02%	0.01%
Fifties	Males	0.05%	0.04%
rities	Females	0.02%	0.02%

(h) Reasonably possible changes to respective relevant actuarial assumptions would have affected the defined benefit obligations by the following amounts as of December 31, 2019:

(In millions of won)	Defined benef	it obligation
	1% increase	1% decrease
Discount rate for defined benefit obligations	W (194,432)	237,364
Expected rate of salary increase	233,106	(194,965)

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

13. <u>Provisions</u>

(a) Changes in provisions for the year ended December 31, 2018 are as follows:

(In millions of won)

	Litigations and claims	Warranties(*)	Others	Total
Balance at January 1, 2018	₩ 43	102,450	1,835	104,328
Adjustment from adoption of IFRS 15	_	_	9,789	9,789
Additions (reversals)	_	234,928	(2,694)	232,234
Usage	(43)	(215,290)		(215,333)
Balance at December 31, 2018	W —	122,088	8,930	131,018
Current	W —	89,324	8,930	98,254
Non-current	₩ —	32,764	_	32,764

(b) Changes in provisions for the year ended December 31, 2019 are as follows:

(In millions of won)

	Litigations and claims	Warranties (*)	Others	Total
Balance at January 1, 2019	W —	122,088	8,930	131,018
Additions	3,073	418,942	17,451	439,466
Usage	(3,073)	(310,768)		(313,841)
Balance at December 31, 2019	W	230,262	26,381	256,643
Current	₩ —	163,144	26,381	189,525
Non-current	₩ —	67,118	_	67,118

(*) The provision for warranties on defective products is normally applicable for 18~36 months from the date of purchase. The provision is calculated by using historical and anticipated rates of warranty claims, and costs per claim to satisfy the Group's warranty obligation.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

14. Other Liabilities

Other liabilities at the reporting date are as follows:

	Decem	ber 31, 2018	December 31, 2019
Current liabilities			
Withholdings	W	30,970	28,376
Unearned revenues		43,841	44,333
Security deposits		165	9,310
	W	74,976	82,019
Non-current liabilities	-		
Long-term accrued expenses	W	80,817	78,537
Long-term other accounts payable		3,103	1,069
Long-term advances received		2,116	6,852
Security deposits		10,790	1,690
	W	96,826	88,148

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

15. Contingent Liabilities and Commitments

(a) Legal Proceedings

Anti-trust litigations

Some individual claimants filed "follow-on" damages claims against the Group and other TFT-LCD manufacturers alleging violations of EU competition law. While the Group continues its vigorous defense of the various pending proceedings described above, as of December 31, 2019, the Group cannot reliably estimate the timing and amount of outflows of resources embodying economic benefits relating to the proceedings.

Solas OLED Ltd. Litigations

In April 2019, Solas OLED Ltd. filed patent infringement actions against the Controlling Company and television manufacturers in the United States District Court for the Western District of Texas as well as the Controlling Company and its subsidiary, LG Display Germany GmbH, and television manufactures in Mannheim District Court in Germany. As of December 31, 2019, the Group cannot reliably estimate the timing and amount of outflows of resources embodying economic benefits relating to the proceedings.

Others

The Group is involved in various disputes in addition to pending proceedings described above. The Group cannot reliably estimate the timing and amount of outflows of resources embodying economic benefits relating to the disputes.

(b) Commitments

Factoring and securitization of accounts receivable

The Controlling Company has agreements with Korea Development Bank and several other banks for accounts receivable sales negotiating facilities of up to an aggregate of USD 1,360 million (\pmu1,574,608 million) in connection with the Controlling Company's export sales transactions with its subsidiaries. As of December 31, 2019, there are no outstanding short-term borrowings that are past due in connection with these agreements. In connection with all of the contracts in this paragraph, the Controlling Company has sold its accounts receivable with recourse.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

15. Contingent Liabilities and Commitments, Continued

The Controlling Company and overseas subsidiaries entered into agreements with financial institutions for accounts receivables sales negotiating facilities. The respective maximum amount of accounts receivables that could be sold under the agreement and the amount of sold, but not yet due, accounts receivables by contract are as follows:

(In millions of USD and KRW)

Classification	Financial institutions	Credit	limit	Not yo	
		Contractual KRW amount equivalent		Contractual amount	KRW equivalent
Controlling Company	Shinhan Bank	KRW 90,000	90,000		
, , , , , , , , , , , , , , , , , , ,		USD 25	28,945	_	_
	Sumitomo Mitsui Banking				
	Corporation	USD 20	23,156		
	Bank of Tokyo-Mitsubishi UFJ	KRW 130,000	130,000	_	_
		USD 70	81,046	USD 4	4,640
	BNP Paribas	USD 125	144,725	USD 18	20,888
	ING Bank	USD 150	173,670	_	_
		USD 390		USD 22	
		KRW 220,000	671,542	_	25,528
Subsidiaries					
LG Display Singapore Pte. Ltd.	Standard Chartered Bank	USD 300	347,340	_	_
LG Display Taiwan Co., Ltd.	BNP Paribas	USD 15	17,367	_	
	Australia and New Zealand Banking		.,		
	Group Ltd.	USD 70	81,046		
	Taishin International Bank	USD 280	324,184	USD 20	23,157
LG Display Germany GmbH	Citibank	USD 80	92,624		
1 3	BNP Paribas	USD 75	86,835	_	_
	DZ Bank AG	USD 4	4,229	USD 2	1,859
	Commerzbank AG	USD 3	4,030	USD 4	4,142
	UniCredit Bank	USD 23	26,099	USD 3	3,827
LG Display America, Inc.	Hong Kong & Shanghai Banking				
1 2	Corp.	USD 800	926,240	USD 749	867,424
	Standard Chartered Bank	USD 600	694,680		_
	Sumitomo Mitsui Banking		•		
	Corporation	USD 200	231,560	_	
	•	USD 2,450	2,836,234	USD 778	900,409
		USD 2,840		USD 800	
		KRW 220,000	3,507,776	_	925,937
			= ,= = . , . , .		,

In connection with all of the contracts in the above table, the Group has sold its accounts receivable without recourse.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

Contingent Liabilities and Commitments, Continued

Letters of credit

As of December 31, 2019, the Controlling Company has agreements in relation to the opening of letters of credit up to USD 150 million (\mathbb{W}173,670 million) with KEB Hana Bank, USD 50 million (\mathbb{W}57,890 million) with Sumitomo Mitsui Banking Corporation, USD 100 million (\mathbb{W}115,780 million) with Industrial Bank of Korea and USD 100 million (\mathbb{W}115,780 million) with Industrial and Commercial Bank of China.

Payment guarantees

The Controlling Company obtained payment guarantees amounting to USD 1,075 million (\(\psi\)1,244,635 million) from KEB Hana Bank and others for advances received related to the long-term supply agreements. The Controlling Company also obtained payment guarantees amounting to USD 306 million (\(\psi\)354,070 million) from Korea Development Bank for foreign currency denominated bonds.

LG Display (China) Co., Ltd. and others are provided with payment guarantees from the China Construction Bank and other various banks amounting to CNY 778 million (\(\pmu\)128,863 million), JPY 900 million (\(\pmu\)9,571 million), EUR 2.5 million (\(\pmu\)3,244 million), VND 46,394 million (\(\pmu\)2,320 million) and USD 0.5 million (\(\pmu\)579 million), respectively, for their local tax payments and utility payments.

License agreements

As of December 31, 2019, the Group has technical license agreements with Hitachi Display, Ltd. and others in relation to its LCD business and patent cross license agreement with Universal Display Corporation in relation to its OLED business. Also, the Group has a trademark license agreement with LG Corp. as of December 31, 2019.

Long-term supply agreement

As of December 31, 2019, in connection with long-term supply agreements with customers, the Controlling Company recognized USD 875 million (\Psi1,013,075 million) in advances received. The advances received will be offset against outstanding accounts receivable balances after a given period of time, as well as those arising from the supply of products thereafter. The Controlling Company received payment guarantees amounting to USD 1,075 million (\Psi1,244,635 million) from KEB Hana Bank and other various banks relating to advances received (see note 15(b) payment guarantees).

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

16. Capital and Reserves

(a) Share capital

The Controlling Company is authorized to issue 500,000,000 shares of capital stock (par value \,\mathbb{W}5,000), and as of December 31, 2018 and December 31, 2019, the number of issued common shares is 357,815,700. There have been no changes in the capital stock from January 1, 2017 to December 31, 2019.

(b) Reserves

Reserves consist mainly of the following:

Translation reserve

The translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

Other comprehensive income (loss) from associates

The other comprehensive income (loss) from associates comprises the amount related to change in equity of investments in equity accounted investees.

Reserves at the reporting date are as follows:

(In millions of won)

	Decer	nber 31, 2018	December 31, 2019
Foreign currency translation differences for foreign operations	W	(272,474)	(178,452)
Other comprehensive loss from associates (excluding			
remeasurements of net defined benefit liabilities)		(28,494)	(24,569)
	W	(300,968)	(203,021)

The movement in reserves for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won) Foreign currency Other comprehensive income translation differences (loss) from associates for foreign operations (excluding remeasurements) Total January 1, 2017 (59,042)(29,436)(88,478)(200,707)Change in reserves 905 (199,802)(259,749)(28,531)December 31, 2017 (288, 280)January 1, 2018 (259,749)(28,531)(288, 280)Change in reserves (12,725)(12,688)December 31, 2018 (272,474)(28,494)(300,968)(272,474)(28,494)(300,968)January 1, 2019 3,925 Change in reserves 94,022 97,947 (178,452)(24,569)(203,021)December 31, 2019

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

17. Geographic and Other Information

The following is a summary of the Group's revenue by region based on the location of customers for the years ended December 31, 2017, 2018 and 2019.

(a) Revenue by geography

(In millions of won)

	2017	2018	2019
Domestic	₩ 1,996,183	1,589,452	1,264,639
Foreign			
China	18,090,974	15,242,533	15,432,503
Asia (excluding China)	2,383,390	2,481,112	2,404,739
United States	2,724,714	2,462,918	1,940,321
Europe (excluding Poland)	1,433,126	1,496,138	1,475,942
Poland	1,161,829	1,064,418	957,423
	25,794,033	22,747,119	22,210,928
	W 27,790,216	24,336,571	23,475,567

Sales to Company A and Company B amount to \$8,494,720 million and \$4,501,790 million, respectively, for the year ended December 31, 2019 (2017: \$9,027,165 million and \$6,511,961 million, 2018: \$7,262,255 million and \$5,171,354 million). The Group's top ten end-brand customers together accounted for 80% of sales for the year ended December 31, 2019 (2017: 81%, 2018: 77%).

(b) Non-current assets by geography

(In millions of won)

	December 3	December 31, 2018		December 31, 2019	
	Property, plant and equipment	Intangible assets	Property, plant and equipment	Intangible assets	
Domestic	W 14,984,688	816,808	12,764,240	708,047	
Foreign					
China	5,049,216	12,332	7,391,279	34,337	
Others	1,566,226	158,502	1,932,126	131,064	
	₩ 6,615,442	170,834	9,323,405	165,401	
	W 21,600,130	987,642	22,087,645	873,448	

(c) Revenue by product and services

	2017	2018	2019
Televisions	W 11,717,982	9,727,260	7,998,137
Desktop monitors	4,393,482	4,040,025	4,028,007
Tablet products	2,369,634	1,990,766	2,251,049
Notebook computers	2,244,088	2,836,888	2,783,718
Mobile and others	7,065,030	5,741,632	6,414,656
	W 27,790,216	24,336,571	23,475,567

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

18. The Nature of Expenses and Others

The classification of expenses by nature for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won)

(· · · · · · · · · · · · · · · · · · ·	2017	2018	2019
Changes in inventories	W (62,299)	(341,120)	640,048
Purchases of raw materials, merchandise and others	13,548,848	12,863,812	12,580,796
Depreciation and amortization	3,214,576	3,554,565	3,695,051
Outsourcing	771,697	825,393	865,935
Labor	3,258,427	3,222,110	3,072,877
Supplies and others	1,239,915	1,010,352	813,262
Utility	865,347	899,075	896,112
Fees and commissions	692,125	722,134	695,245
Shipping	249,820	240,288	196,002
Advertising	236,440	112,400	193,436
Warranty	251,131	234,928	418,942
Travel	92,976	104,009	95,074
Taxes and dues	91,806	123,210	109,473
Impairment loss on property, plant, and equipment	_	43,601	1,550,430
Impairment loss on intangible assets	1,809	82	249,450
Others	917,242	713,990	625,504
	W 25,369,860	24,328,829	26,697,637

Total expenses consist of cost of sales, selling, administrative, research and development expenses and other expenses, excluding foreign exchange differences.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

19. Selling and Administrative Expenses

Details of selling and administrative expenses for the years ended December 31, 2017, 2018, and 2019 are as follows:

(In millions of won)

2017	2018	2019
W 327,288	500,610	514,736
27,401	30,724	29,018
94,740	90,348	77,690
214,866	200,434	162,509
197,070	221,050	219,784
138,711	174,575	225,909
46,317	65,621	49,826
236,440	112,400	193,436
251,131	234,928	418,942
26,711	26,691	2,887
12,459	11,584	11,386
27,879	24,659	23,594
16,311	13,309	12,215
73,181	65,343	63,799
₩1,690,505	1,772,276	2,005,731
	₩ 327,288 27,401 94,740 214,866 197,070 138,711 46,317 236,440 251,131 26,711 12,459 27,879 16,311 73,181	₩ 327,288 500,610 27,401 30,724 94,740 90,348 214,866 200,434 197,070 221,050 138,711 174,575 46,317 65,621 236,440 112,400 251,131 234,928 26,711 26,691 12,459 11,584 27,879 24,659 16,311 13,309 73,181 65,343

- (*1) Expenses recognized in relation to employee termination benefits for the years ended December 31, 2018 and 2019 amount to \(\mathbb{W}\)184,941 million and \(\mathbb{W}\)218,826 million, respectively.
- (*2) Expenses recognized in relation to employee defined contribution plan for the years ended December 31, 2018 and 2019 amount to \widetilde{W}111 million and \widetilde{W}58 million, respectively.

20. Personnel Expenses

Details of personnel expenses for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won)

	2017	2018	2019
Salaries and wages	W 2,704,217	2,720,014	2,553,485
Other employee benefits	483,704	500,169	473,916
Contributions to National Pension plan	73,061	75,668	73,148
Expenses related to defined benefit plan and defined contribution plan(*)	198,241	180,737	163,757
	₩3,459,223	3,476,588	3,264,306

(*) Expenses recognized in relation to employee defined contribution plan for the years ended December 31, 2018 and 2019 amount to \widetilde{W}857 million and \widetilde{W}760 million, respectively.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

21. Other Income and Other Expenses

(a) Details of other income for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won)

	2017	2018	2019
Foreign currency gain	₩ 969,425	970,306	1,174,376
Gain on disposal of property, plant and equipment	101,227	6,620	35,788
Gain on disposal of intangible assets	308	239	552
Reversal of impairment loss on intangible assets	35	348	960
Rental income	2,212	3,584	3,098
Gain on disposal of non-current assets held for sales	_	_	8,353
Others	8,539	23,040	44,124
	W 1,081,746	1,004,137	1,267,251

(b) Details of other expenses for the years ended December 31, 2017, 2018 and 2019 are as follows:

	2017	2018	2019
Foreign currency loss	₩1,189,193	1,030,084	1,235,054
Other bad debt expenses	1,798	4	1,379
Loss on disposal of property, plant and equipment	20,030	15,048	40,897
Impairment loss on property, plant and equipment	_	43,601	1,550,430
Loss on disposal of intangible assets	30	_	139
Impairment loss on intangible assets	1,809	82	249,450
Donations	17,152	7,698	693
Others	443	18,716	19,701
	₩1,230,455	1,115,233	3,097,743

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

22. <u>Finance Income and Finance Costs</u>

(a) Finance income and costs recognized in profit or loss for the years ended December 31, 2017, 2018 and 2019 are as follows:

(in millions of won)	2017	2018	2019
Finance income			
Interest income	₩ 60,106	69,020	53,378
Foreign currency gain	210,890	160,989	135,006
Gain on disposal of investments in equity accounted investees	3,669		4,531
Reversal of impairment loss of investments in equity accounted investees	_	802	1,744
Gain on transaction of derivatives	3,106	2,075	21,752
Gain on valuation of derivatives	1,070	13,059	59,781
Gain on disposal of available-for-sale financial assets	8		
Gain on disposal of financial asset at fair value through profit or loss	_	_	138
Gain on valuation of financial asset at fair value through profit or loss	170	8,186	402
	₩279,019	254,131	276,732
Finance costs			
Interest expense	₩ 90,538	80,517	172,750
Foreign currency loss	126,642	184,309	154,421
Loss on disposal of investments in equity accounted investees	42,112	595	
Loss on impairment of investments in equity accounted investees	4,234	17,397	5,123
Loss on sale of trade accounts and notes receivable	784	13,361	19,728
Loss on transaction of derivatives	514	49	_
Loss on valuation of derivatives	_	26,600	17,999
Loss on impairment of available-for-sale financial assets	1,948	_	_
Loss on valuation of financial asset at fair value through profit or loss	_	225	4,630
Loss on valuation of financial liabilities at fair value through profit or loss	_		56,384
Others	2,084	3,840	12,212
	₩268,856	326,893	443,247

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

22. Finance Income and Finance Costs, Continued

(b) Finance income and costs recognized in other comprehensive income or loss for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won)

	2017	2018	2019
Foreign currency translation differences for foreign operations	W (231,738)	(19,987)	106,690
Finance income (costs) recognized in other comprehensive income (loss) after tax	₩ (231,738)	(19,987)	106,690

23. <u>Income Taxes</u>

(a) Details of income tax expense (benefit) for the years ended December 31, 2017, 2018 and 2019 are as follows:

	2017	2018	2019
Current tax expense			
Current year	₩ 512,123	167,394	193,691
Adjustment for prior years	_ <u></u>	82,225	(35,787)
	₩ 512,123	249,619	157,904
Deferred tax expense (benefit)			
Origination and reversal of temporary differences	W (104,835)	(226,360)	(963,385)
Change in unrecognized deferred tax assets	(11,708)	64,818	333,317
	W (116,543)	(161,542)	(630,068)
Income tax expense (benefit)	₩ 395,580	88,077	(472,164)
Adjustment for prior years Deferred tax expense (benefit) Origination and reversal of temporary differences Change in unrecognized deferred tax assets	₩ 512,123 ₩(104,835) (11,708) ₩(116,543)	82,225 249,619 (226,360) 64,818 (161,542)	(35,7 157,9 (963,3 333,3 (630,0

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

23. <u>Income Taxes, Continued</u>

(b) Income taxes recognized directly in other comprehensive income or loss for the years ended December 31, 2017, 2018, and 2019 are as follows:

(In millions of won)			
		2017	
	Before tax	Tax benefit	Net of tax
Remeasurements of net defined benefit liabilities (assets)	₩ (16,260)	9,259	(7,001)
Foreign currency translation differences for foreign operations	(231,738)	_	(231,738)
Change in equity of equity method investee	1,346	<u> </u>	1,346
	W (246,652)	9,259	(237,393)
(In millions of won)			
		2018	
	Before tax	Tax expense	Net of tax
Remeasurements of net defined benefit liabilities (assets)	₩ 5,690	(1,169)	4,521
Foreign currency translation differences for foreign operations	(19,987)	_	(19,987)
Change in equity of equity method investee	57		57
	W (14,240)	(1,169)	(15,409)
(In millions of won)		2019	
	Before tax		N-4 -64
Demographements of not defined honefit lightilities (essets)		Tax expense	Net of tax
Remeasurements of net defined benefit liabilities (assets)	₩128,640	(35,235)	93,405
Foreign currency translation differences for foreign operations	106,690		106,690
Change in equity of equity method investee	4,163		4,163
	W 239,493	(35,235)	204,258

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

Income Taxes, Continued

(c) Reconciliation of the actual effective tax rate for the years ended December 31, 2017, 2018, and 2019 is as follows:

(In millions of won)

	2017		2018		2	019
Profit (loss) before income taxes	W	2,332,632		(91,366)		(3,344,242)
Income tax expense (benefit) using each country's tax rate	28.54%	665,733	(33.60%)	30,695	23.94%	(800,660)
Non-deductible expenses	2.72%	63,416	(40.07%)	36,608	(0.95%)	31,649
Tax credits	(10.64%)	(248,191)	117.27%	(107,146)	1.47%	(49,269)
Change in unrecognized deferred tax assets	(0.50%)	(11,708)	(70.94%)	64,818	(9.97%)	333,318
Adjustment for prior years(*1)	_	_	(90.00%)	82,225	1.07%	(35,787)
Effect on change in tax rate	(3.10%)	(72,376)	15.68%	(14,326)	(0.40%)	13,353
Others	(0.06%)	(1,294)	5.25%	(4,797)	(1.05%)	35,232
Actual income tax expense (benefit)	₩	395,580		88,077		(472,164)
Actual effective tax rate		16.96%		(*2)		(*2)

- (*1) Consist of changes in tax credits in amended tax returns and expected amount of income tax adjustment in relation to the transfer price investigation and others
- (*2) Actual effective tax rate are not calculated due to loss before income tax for 2018 and 2019.
 - (d) Tax uncertainties

In June 2019, LG Display Guangzhou Co., Ltd, LG Display Yantai Co., Ltd. and LG Display Nanjing Co., Ltd., subsidiaries of the Controlling Company, were imposed of additional taxes amounting to \W127.1 billion, in aggregate, by the Chinese tax authorities in connection with the transfer price investigation initiated in 2015.

OECD Guidelines, the Korea-China tax treaty, and the domestic tax laws of both countries stipulate mutual agreements to resolve double taxation. In July 2019, the Controlling Company registered an application form to initiate a mutual agreement on the estimated amount of \times 109.2 billion corporate tax adjustment from the Korea National Tax Service. The application was officially registered as a mutual agreement and the two tax authorities held their first meeting in November 2019 and further consultation will be conducted in 2020.

Meanwhile, the Controlling Company expects that the mutual agreement between tax authorities will be processed and be resolved within a reasonable period and the Controlling Company recognized the estimated income tax refund as current tax asset as of December 31, 2019.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

24. <u>Deferred Tax Assets and Liabilities</u>

(a) Unrecognized deferred tax liabilities

As of December 31, 2019, in relation to the taxable temporary differences on investments in subsidiaries amounting to \$469,758 million, the Controlling Company did not recognize deferred tax liabilities since the Controlling Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary differences will not reverse in the foreseeable future.

(b) Unused tax credit carryforwards for which no deferred tax asset is recognized

Realization of deferred tax assets related to tax credit carryforwards which are primarily related to Korea is dependent on whether sufficient taxable income will be generated prior to their expiration. As of December 31, 2019, the amount of unused tax credit carryforwards for which no deferred tax asset is recognized and their expiration dates are as follows:

		December 31,				
	Total	2020	2021	2022	2023	2024
Tax credit carryforwards	W 549.056	44,692	70,646	220,135	114.845	98,738

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

24. <u>Deferred Tax Assets and Liabilities, Continued</u>

(c) Deferred tax assets and liabilities are attributable to the following:

(In millions of won)	Ass	sets	Liabi	lities	To	tal
	December 31, 2018	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018	December 31, 2019
Other accounts receivable, net	W —		(1,013)	(4,364)	(1,013)	(4,364)
Inventories, net	60,606	89,522	_	_	60,606	89,522
Investments in subsidiaries and associates	13,404	_	_	(20,015)	13,404	(20,015)
Accrued expenses	126,072	131,196	_	_	126,072	131,196
Property, plant and equipment	445,721	691,599	(1,495)	(21,690)	444,226	669,909
Intangible assets	3,468	21,886	(14,588)	(10,759)	(11,120)	11,127
Provisions	32,468	59,875	_	(4,446)	32,468	55,429
Gain or loss on foreign currency translation, net	13	_	_	_	13	_
Others	20,850	137,667	(7,665)	(328)	13,185	137,339
Tax loss carryforwards	134,845	607,432	_	_	134,845	607,432
Tax credit carryforwards	308,393	38,337	_	_	308,393	38,337
Deferred tax assets (liabilities)	₩1,145,840	1,777,514	(24,761)	(61,602)	1,121,079	1,715,912

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

24. <u>Deferred Tax Assets and Liabilities, Continued</u>

(d) Changes in deferred tax assets and liabilities for the years ended December 31, 2018 and 2019 are as follows:

(In millions of won)	January 1, 2018	Profit or loss	Other comprehensive loss	December 31, 2018	Profit or loss	Other comprehensive loss	December 31, 2019
Other accounts receivable, net	W (1,441)	428	_	(1,013)	(3,351)	_	(4,364)
Inventories, net	34,550	26,056	_	60,606	28,916	_	89,522
Defined benefit liabilities, net	2,375	(1,206)	(1,169)	_	35,235	(35,235)	_
Subsidiaries and associates	29,061	(15,657)	_	13,404	(33,419)	_	(20,015)
Accrued expenses	183,903	(57,831)	_	126,072	5,124	_	131,196
Property, plant and equipment	409,928	34,298	_	444,226	225,683	_	669,909
Intangible assets	(21,189)	10,069	_	(11,120)	22,247	_	11,127
Provisions	27,018	5,450	_	32,468	22,961	_	55,429
Gain or loss on foreign currency translation, net	13	_	_	13	(13)	_	_
Others	27,562	(14,377)	_	13,185	124,154	_	137,339
Tax loss carryforwards	_	134,845	_	134,845	472,587	_	607,432
Tax credit carryforwards	268,926	39,467		308,393	(270,056)		38,337
Deferred tax assets (liabilities)	W 960,706	161,542	(1,169)	1,121,079	630,068	(35,235)	1,715,912

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

25. Earnings (Loss) Per Share Attributable to Owners of the Controlling Company

(a) Basic earnings (loss) per share for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In won and No. of shares)

2017	2018	2019
₩1,802,756,119,275	(207,239,484,774)	(2,829,705,069,665)
357,815,700	357,815,700	357,815,700
W 5,038	(579)	(7,908)
	₩1,802,756,119,275	₩1,802,756,119,275 (207,239,484,774) 357,815,700 357,815,700

For the years ended December 31, 2017, 2018 and 2019, there were no events or transactions that resulted in changes in the number of common stocks used for calculating earnings (loss) per share.

(b) The Controlling Company issued the convertible bonds on August 22, 2019. Diluted loss per share is not different from basic loss per share due to loss for the year ended December 31, 2019. As of December 31, 2019, 40,988,998 shares of potential common stock were excluded from the calculation of weighted-average number of common stocks due to antidilution.

26. Financial Risk Management

The Group is exposed to credit risk, liquidity risk and market risks. The Group identifies and analyzes such risks, and controls are implemented under a risk management system to monitor and manage these risks at below an acceptable level.

(a) Market Risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices, will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

(i) Currency Risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the functional currency of the Controlling Company, Korean won (KRW). The currencies in which these transactions primarily are denominated are USD, CNY, JPY, etc.

Interest on borrowings is denominated in the currency of the borrowing. Generally, borrowings are denominated in currencies that match the cash flows generated by the underlying operations of the Group, primarily KRW, USD and CNY.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group adopts policies to ensure that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances. Meanwhile, the Group entered into currency interest rate swap contracts to hedge currency risk with respect to foreign currency borrowings and bonds.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

26. Financial Risk Management, Continued

i) Exposure to currency risk

The Group's exposure to foreign currency risk based on notional amounts at the reporting date is as follows:

(In millions)	December 31, 2018						
	USD	JPY	CNY	TWD	EUR	PLN	VND
Cash and cash equivalents	790	83	5,515	121	8	206	2,070,889
Trade accounts and notes receivable	2,175	7	1,098		—		_
Non-trade receivable	21	852	201	3	4		23,182
Other assets denominated in foreign currencies	33	220	11,157	108	12	23	2,782
Trade accounts and notes payable	(863)	(12,501)	(2,862)	—	—	—	(355,390)
Other accounts payable	(928)	(20,326)	(4,762)	(6)	(3)	(4)	(1,585,130)
Financial liabilities	(2,571)		(5,198)				
Aggregate notional amounts in the consolidated statements of financial position	(1,343)	(31,665)	5,149	226	21	225	156,333
Currency swap contracts	780						
Net exposure	(563)	(31,665)	5,149	226	21	225	156,333
(In millions)				oer 31, 20			
	USD	JPY	CNY	TWD	EUR	PLN	VND
Cash and cash equivalents	1,594	68	8,360			PLN 25	VND 28,663
Cash and cash equivalents Trade accounts and notes receivable			8,360 550	TWD	EUR		
Cash and cash equivalents Trade accounts and notes receivable Non-trade receivable	1,594 2,485 276	68 19 455	8,360	TWD 33 — 3	<u>EUR</u> 5 - 2	25 —	
Cash and cash equivalents Trade accounts and notes receivable	1,594 2,485	68 19	8,360 550	33 —	<u>EUR</u> 5		28,663
Cash and cash equivalents Trade accounts and notes receivable Non-trade receivable	1,594 2,485 276	68 19 455	CNY 8,360 550 230	TWD 33 — 3	<u>EUR</u> 5 - 2	25 —	28,663 — 13,131
Cash and cash equivalents Trade accounts and notes receivable Non-trade receivable Other assets denominated in foreign currencies	1,594 2,485 276 29	68 19 455 526	CNY 8,360 550 230 5,668	TWD 33 — 3	<u>EUR</u> 5 - 2	25 —	28,663 — 13,131 4,032
Cash and cash equivalents Trade accounts and notes receivable Non-trade receivable Other assets denominated in foreign currencies Trade accounts and notes payable	1,594 2,485 276 29 (628)	68 19 455 526 (9,043)	CNY 8,360 550 230 5,668 (2,289)	33 — 3 369 —	EUR 5 - 2 5	25 — — 503 —	28,663 — 13,131 4,032 (291,891)
Cash and cash equivalents Trade accounts and notes receivable Non-trade receivable Other assets denominated in foreign currencies Trade accounts and notes payable Other accounts payable	1,594 2,485 276 29 (628) (488)	68 19 455 526 (9,043)	CNY 8,360 550 230 5,668 (2,289) (3,239)	33 — 3 369 —	EUR 5 - 2 5	25 — — 503 —	28,663 — 13,131 4,032 (291,891)
Cash and cash equivalents Trade accounts and notes receivable Non-trade receivable Other assets denominated in foreign currencies Trade accounts and notes payable Other accounts payable Financial liabilities	1,594 2,485 276 29 (628) (488) (4,255)	68 19 455 526 (9,043) (12,396)	CNY 8,360 550 230 5,668 (2,289) (3,239) (20,436)	TWD 33 - 3 369 - (4) -	EUR 5 - 2 5 - (10)	25 — 503 — —	28,663 — 13,131 4,032 (291,891) (786,356) —

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

26. Financial Risk Management, Continued

Average exchange rates applied for the years ended December 31, 2017, 2018 and 2019 and the exchange rates at December 31, 2018 and 2019 are as follows:

(In won)

	<u> </u>	Average rate	Reporting date spot rate		
				December 31,	December 31,
	2017	2018	2019	2018	2019
USD	₩1,131.08	1,100.21	1,165.46	1,118.10	1,157.80
JPY	10.09	9.96	10.70	10.13	10.63
CNY	167.52	166.41	168.56	162.76	165.74
TWD	37.16	36.51	37.74	36.58	38.48
EUR	1,277.01	1,298.53	1,304.52	1,279.16	1,297.43
PLN	299.98	304.87	303.62	297.33	304.87
VND	0.0498	0.0478	0.0502	0.0482	0.0500

ii) Sensitivity analysis

A weaker won, as indicated below, against the following currencies which comprise the Group's assets or liabilities denominated in a foreign currency as of December 31, 2018 and 2019, would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis is based on foreign currency exchange rate variances that the Group considers to be reasonably possible as of the end of the reporting period. The analysis assumes that all other variables, in particular interest rates, would remain constant. The changes in equity and profit or loss would have been as follows:

(In millions of won)

	Decembe	r 31, 2018	December 31, 2019	
	Equity	Profit or loss	Equity	Profit or loss
USD (5 percent weakening)	W (46,136)	38,725	23,570	105,398
JPY (5 percent weakening)	(12,060)	(10,497)	(8,397)	(6,418)
CNY (5 percent weakening)	41,779	318	(92,454)	11
TWD (5 percent weakening)	413	1	772	_
EUR (5 percent weakening)	1,197	390	221	(278)
PLN (5 percent weakening)	3,451	(236)	8,036	28
VND (5 percent weakening)	273	273	(1,871)	(1,871)

A stronger won against the above currencies as of December 31, 2018 and 2019 would have had the equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

Financial Risk Management, Continued

(ii) Interest Rate Risk

Interest rate risk arises principally from the Group's bonds and borrowings. The Group establishes and applies its policy to reduce uncertainty arising from fluctuations of interest rates and to minimize finance cost and manages interest rate risk by monitoring of trends of fluctuations in interest rates and establishing plan for countermeasures. Meanwhile, the Group entered into currency interest rate swap contracts amount of USD 1,785 million (\(\frac{\text{W}}{2}\),066,673 million) in notional amount to hedge interest rate risk with respect to variable interest rate applied foreign currency denominated borrowings.

i) Profile

The interest rate profile of the Group's interest-bearing financial instruments at the reporting date is as follows:

(In millions of won)

	December 31, 2018	December 31, 2019
Fixed rate instruments		
Financial assets	₩ 2,443,583	3,414,838
Financial liabilities	(5,033,515)	(6,066,554)
	W (2,589,932)	(2,651,716)
Variable rate instruments		
Financial liabilities	₩ (3,525,262)	(7,414,336)

ii) Equity and profit or loss sensitivity analysis for variable rate instruments

For the years ended December 31, 2018 and 2019 a change of 100 basis points in interest rates at the reporting date would have increased (decreased) equity and profit or loss by the amounts shown below for the respective following years. This analysis assumes that all other variables, in particular foreign currency rates, remain constant.

(In millions of won)

	Equi	y	Profit or loss	
	1%p	1%p	√op 1%p	
	increase	decrease	increase	decrease
December 31, 2018				
Variable rate instruments(*)	₩(25,558)	25,558	(25,558)	25,558
December 31, 2019				
Variable rate instruments(*)	W (38,774)	38,774	(38,774)	38,774

(*) Financial instruments related to interest rate swap not qualified for hedging are excluded.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

Financial Risk Management, Continued

(b) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers.

The Group's exposure to credit risk of trade and other receivables is influenced mainly by the individual characteristics of each customer. However, management believes that the default risk of the country in which each customer operates, do not have a significant influence on credit risk since the majority of the customers are global electronic appliance manufacturers operating in global markets

The Group establishes credit limits for each customer and each new customer is analyzed quantitatively and qualitatively before determining whether to utilize third party guarantees, insurance or factoring as appropriate.

In relation to the impairment of financial assets subsequent to initial recognition, the Group recognizes the changes in expected credit loss ("ECL") at each reporting date in order to reflect changes in the credit risks based on ECL model.

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk as of December 31, 2018 and 2019 are as follows:

(In millions of won)

(· · · · · · · · · · · · · · · · · · ·	December 31, 2018		December 31, 2019
Financial assets carried at amortized cost			
Cash and cash equivalents	₩	2,365,022	3,336,003
Deposits in banks		78,411	78,768
Trade accounts and notes receivable, net		2,829,163	3,154,080
Non-trade receivables		159,238	463,614
Accrued income		10,075	10,434
Deposits		91,123	31,036
Short-term loans		16,116	21,623
Long-term loans		55,048	40,827
Long-term non-trade receivables		11,448	9,072
Lease receivables		_	27,794
	W	5,615,644	7,173,251
Financial assets at fair value through profit or loss			
Convertible bonds	₩	1,327	1,544
Derivatives		13,059	49,676
	W	14,386	51,220
Financial assets at fair value through other comprehensive			
income			
Debt instruments	W	161	76
	W	5,630,191	7,224,547

Trade accounts and notes receivables are insured in order to manage credit risk if it does not meet the Group's internal credit ratings. Uninsured trade accounts and notes receivables are managed by continuous monitoring of internal credit ratings and seeking insurance coverage, if necessary.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

26. Financial Risk Management, Continued

(c) Liquidity Risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group has historically been able to satisfy its cash requirements from cash flows from operations and debt and equity financing. To the extent that the Group does not generate sufficient cash flows from operations to meet its capital requirements, the Group may rely on other financing activities, such as external long-term borrowings and offerings of debt securities, equity-linked and other debt securities. In addition, the Group maintains a line of credit with various banks.

The following are the contractual maturities of financial liabilities, including estimated interest payments, as of December 31, 2019.

(In millions of won)

				Contractual (cash flows in		
	Carrying amount	Total	6 months or less	6-12 months	1-2 years	2-5 years	More than 5 years
Non-derivative financial liabilities							
Borrowings	W 10,329,671	11,514,568	1,174,941	723,363	2,173,444	6,471,876	970,944
Bonds	3,151,218	3,306,729	297,649	184,878	908,281	1,780,014	135,907
Trade accounts and notes payable	2,618,261	2,618,261	2,618,261	_	_	_	_
Other accounts payable	2,069,105	2,069,105	2,068,039	1,066	_	_	
Other accounts payable (enterprise procurement cards)(*)	2,328,016	2,353,355	1,287,023	1,066,332			_
Long-term other accounts payable	1,069	1,069	_	_	1,069	_	_
Security deposits received	11,000	11,000	3,980	5,330	1,690	_	_
Lease liabilities	88,512	97,562	26,702	14,543	22,931	23,096	10,290
Derivative financial liabilities							
Derivatives	₩ 20,592	(13,101)			(4,870)	(8,231)	
	W 20,617,444	21,958,548	7,476,595	1,995,512	3,102,545	8,266,755	1,117,141

(*) Represents the amount of utility expenses and others paid by the enterprise procurement cards and the outstanding payables are settled at the end of the billing cycle. The payments to the card company arises from operating activities of purchasing of goods and services thus the related cash flow is disclosed as operating activities.

It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

26. Financial Risk Management, Continued

(d) Capital Management

Management's policy is to maintain a capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. Liabilities to equity ratio, net borrowings to equity ratio and other financial ratios are used by management to achieve an optimal capital structure. Management also monitors the return on capital as well as the level of dividends to ordinary shareholders.

	December 31, 2018	December 31, 2019
Total liabilities	W 18,289,464	23,086,282
Total equity	14,886,246	12,488,281
Cash and deposits in banks(*1)	2,443,422	3,414,760
Borrowings (including bonds)	8,558,777	13,480,889
Total liabilities to equity ratio	123%	185%
Net borrowings to equity ratio(*2)	41%	81%

- (*1) Cash and deposits in banks consist of cash and cash equivalents and current deposits in banks.
- (*2) Net borrowings to equity ratio is calculated by dividing total borrowings (including bonds and excluding lease liabilities) less cash and current deposits in banks by total equity.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

26. Financial Risk Management, Continued

(e) Determination of fair value

(i) Measurement of fair value

A number of the Group's accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

i) Current assets and liabilities

The carrying amounts approximate their fair value because of the short maturity of these instruments.

ii) Trade receivables and other receivables

The fair value of trade and other receivables is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date. This fair value is determined for disclosure purposes. The carrying amounts of current receivables approximate their fair value.

iii) Investments in equity and debt securities

The fair value of marketable financial assets at FVTPL and at FVOCI is determined by reference to their quoted closing bid price at the reporting date. The fair value of non-marketable instruments is determined using the results of fair value assessment performed by external valuation institutions and others.

iv) Non-derivative financial liabilities

Fair value, which is determined for disclosure purposes, except for the liabilities at FVTPL, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

26. Financial Risk Management, Continued

(ii) Fair values versus carrying amounts

The fair values of financial assets and liabilities, together with the carrying amounts shown in the consolidated statements of financial position as of December 31, 2018 and 2019 are as follows:

,	I	December	31, 2018	December 31, 2019	
		rying ounts	Fair values	Carrying amounts	Fair values
Financial assets carried at amortized cost					
Cash and cash equivalents	₩2,3	65,022	(*)	3,336,003	(*)
Deposits in banks		78,411	(*)	78,768	(*)
Trade accounts and notes receivable	2,8	29,163	(*)	3,154,080	(*)
Non-trade receivables	1	59,238	(*)	463,614	(*)
Accrued income		10,075	(*)	10,434	(*)
Deposits		91,123	(*)	31,036	(*)
Short-term loans		16,116	(*)	21,623	(*)
Long-term loans		55,048	(*)	40,827	(*)
Long-term non-trade receivables		11,448	(*)	9,072	(*)
Lease receivables		_	_	27,794	(*)
Financial assets at fair value through profit or loss					
Equity instruments	₩	13,681	13,681	9,879	9,879
Convertible bonds		1,327	1,327	1,544	1,544
Derivatives		13,059	13,059	49,676	49,676
Financial assets at fair value through other comprehensive income					
Debt instruments	₩	161	161	76	76
Financial liabilities at fair value through profit or loss					
Derivatives	₩	25,758	25,758	20,592	20,592
Convertible bonds				858,385	858,385
Financial liabilities carried at amortized cost					
Borrowings	₩6,2	26,520	6,281,996	10,329,671	10,394,498
Bonds	2,3	32,257	2,384,987	2,292,833	2,345,867
Trade accounts and notes payable	3,0	87,461	(*)	2,618,261	(*)
Other accounts payable	3,5	66,629	(*)	4,397,121	(*)
Long-term other accounts payable		3,103	(*)	1,069	(*)
Security deposits received		10,955	(*)	11,000	(*)
Lease liabilities			_	88,512	(*)

^(*) Excluded from disclosures as the carrying amount approximates fair value.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

26. Financial Risk Management, Continued

(iii) Fair values of financial assets and liabilities

i) Fair value hierarchy

The table below analyzes financial instruments carried at fair value based on the input variables used in the valuation method to measure fair value of assets and liabilities. The different levels have been defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly
- Level 3: inputs for the asset or liability that are not based on observable market data

ii) Financial instruments measured at fair value

Fair value hierarchy classifications of the financial instruments that are measured at fair value as of December 31, 2018 and 2019 are as follows:

(In	mil	lions	0	f won))

	Le	vel 1	Level 2	Level 3	Total
December 31, 2018					
Financial assets at fair value through profit or loss					
Equity instruments	₩	_		13,681	13,681
Convertible bonds		_		1,327	1,327
Derivatives		_	_	13,059	13,059
Financial asset at fair value through other comprehensive income					
Debt instruments	W	161	_	_	161
Financial liabilities at fair value through profit or loss					
Derivatives	W	_	_	25,758	25,758
(In millions of won)					
(In millions of won)					
(In millions of won)	Le	vel 1	Level 2	Level 3	Total
December 31, 2019	Lev	vel 1	Level 2	Level 3	Total
	Lev	vel 1	Level 2	Level 3	Total
December 31, 2019		vel 1	Level 2	<u>Level 3</u> 9,879	9,879
December 31, 2019 Financial assets at fair value through profit or loss		<u></u>	<u>Level 2</u>		
December 31, 2019 Financial assets at fair value through profit or loss Equity instruments		<u></u>	Level 2	9,879	9,879
December 31, 2019 Financial assets at fair value through profit or loss Equity instruments Convertible bonds				9,879 1,544	9,879 1,544
December 31, 2019 Financial assets at fair value through profit or loss Equity instruments Convertible bonds Derivatives		wel 1		9,879 1,544	9,879 1,544
December 31, 2019 Financial assets at fair value through profit or loss	₩			9,879 1,544	9,879 1,544 49,676
December 31, 2019 Financial assets at fair value through profit or loss	₩			9,879 1,544	9,879 1,544 49,676

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

26. Financial Risk Management, Continued

iii) Financial instruments not measured at fair value but for which the fair value is disclosed

Fair value hierarchy classifications, valuation technique and inputs for fair value measurements of the financial instruments not measured at fair value but for which the fair value is disclosed as of December 31, 2018 and December 31, 2019 are as follows:

(In millions of won)	December 31, 2018			Valuation	
Classification	Level 1	Level 2	Level 3	technique	Input
Liabilities					
Borrowings				Discounted cash	Discount
	₩—	_	6,281,996	flow	rate
Bonds				Discounted cash	Discount
	_	_	2,384,987	flow	rate
(In millions of won)	D	ecember 3	1, 2019	Valuation	
Classification	Level 1	Level 2	Level 3	technique	Input
Liabilities					
Borrowings				Discounted cash	Discount
	₩	_	10,394,498	flow	rate
Bonds				Discounted cash	Discount

The interest rates applied for determination of the above fair value at the reporting date are as follows:

	December 31, 2018	December 31, 2019
Borrowings, bonds and others	2.09~3.37%	1.87~3.56%

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

27. Leases

(a) Leases as lessee

The Group leases buildings, vehicles, machinery and equipment and others. Information about leases for which the Group is a lessee is presented below.

(i) Right-of-use assets

Right-of-use assets are presented as property, plant and equipment (See note 9(a)).

(In millions of won) **Buildings** Machinery and and structures Land Vehicles Others Total equipment Balance at January 1, 2019 ₩ 75,777 53,960 1,111 10,800 392 142,040 1,890 4,971 Addition 19,743 2,882 247 29,733 Depreciation (39,376)(2,272)(1,305)(7,760)(350)(51,063)Derecognition of right-of-use assets (3,056)(538)(3,594)(3,833)(193)(8)Impairment (248)(20)(4,302)Gain or loss on foreign currency translation 436 373 17 30 ₩ 53,213 288 Balance at December 31, 2019 49,754 2,147 7,848 113,250

(ii) Amounts recognized in profit or loss other than right-of-use assets

(In millions of won)

	Decem	ber 31, 2019
Interest on lease liabilities	W	(4,085)
Income from sub-leasing right-of-use assets presented in 'other revenue'		1,079
Expenses relating to short-term leases		(1,783)
Expenses relating to leases of low-value assets, excluding short-term		
leases of low-value assets		(1,188)

(iii) Lease liabilities

	Decem	ber 31, 2019
Balance at January 1, 2019	₩	115,119
Additions		33,878
Interest expense		4,085
Repayment of liabilities		(64,570)
Balance at December 31, 2019		88,512

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

27. Lease, Continued

(b) Leases as lessor

During 2019, the Group sub-leased certain right of use assets and classified them as finance leases. During 2019, the Group recognized a gain of \(\mathbb{W}\)3,390 million on derecognition of the right-of-use assets pertaining to buildings, machinery and equipment and presented the gain as gain on disposal of property, plant and equipment.

The Group recognized interest income on lease receivables of \(\psi\)1,079 million in 2019.

The following table sets out a maturity analysis of lease receivables, showing the undiscounted lease payments to be received after the reporting date. Under IAS 17, the Group did not have any finance leases as a lessor.

	December 31, 2	
6 months or less	W	3,282
6-12 months		3,282
1-2 years		6,563
2-5 years		16,956
Total undiscounted lease receivable		30,083
Unearned finance income		(2,289)
Net Investment in the lease		27,794

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

28. Changes in liabilities arising from financing activities

Changes in liabilities arising from financing activities for the year ended December 31, 2019 are as follows:

	January 1, 2019	Cash flows from financing activities	Reclassification	Gain or loss on foreign currency translation	Effective interest adjustment	Others	December 31, 2019
Short-term borrowings	W —	686,097		10,696			696,793
Current portion of long-term borrowings and							
bonds	1,553,907	(1,567,818)	1,237,344	18,887	584	_	1,242,904
Long-term borrowings	5,232,271	4,341,087	(827,883)	54,202	_	_	8,799,677
Bonds	1,772,599	1,323,251	(409,461)	(20,351)	10,568	64,910	2,741,516
Lease liabilities	115,119	(64,570)		1,849	4,085	32,029	88,512
	₩8,673,896	4,718,047		65,283	15,237	96,939	13,569,402

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

29. Related Parties and Others

(a) Related parties

Related parties as of December 31, 2019 are as follows:

Classification	Description
Associates(*)	Paju Electric Glass Co., Ltd. and others
Entity that has significant influence over the Controlling Company	LG Electronics Inc.
Subsidiaries of the entity that has significant influence over the Controlling Company	Subsidiaries of LG Electronics Inc.

(*) Details of associates are described in note 8.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

29. Related Parties and Others, Continued

(b) Significant transactions such as sales of goods and purchases of raw material and outsourcing service and others, which occurred in the normal course of business with related parties for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won)	2017						
					Purchase and	d others	
		les others	Dividend income	Purchase of raw material and others	Acquisition of property, plant and equipment	Outsourcing fees	Other costs
Associates and their subsidiaries							
New Optics Ltd.(*)	\mathbf{W}	1	_			4	6
INVENIA Co., Ltd.		_	_	1,862	66,548	_	2,259
AVATEC Co., Ltd.		_	530	_		90,785	720
Paju Electric Glass Co., Ltd.		_	8,109	380,815	_	_	4,225
Shinbo Electric Co., Ltd.(*)	1	15,812	_	_			21
Narenanotech Corporation(*)		_	_	279	21,727	_	244
WooRee E&L Co., Ltd.		_	_				175
YAS Co., Ltd.				6,347	69,243		2,474
	W 1	15,813	8,639	389,303	157,518	90,789	10,124
Entity that has significant influence over the Controlling							
Company							
LG Electronics Inc.	₩1,68	89,381	_	47,898	906,427	_	109,865
Subsidiaries of the entity that has significant influence over the Controlling Company							
LG Electronics India Pvt. Ltd.	₩ 7	71,597	_	_	_		163
LG Electronics Vietnam Haiphong Co., Ltd.	20	05,934	_	_	8,892		198

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

(In millions of won)	2017					
				Purchase and	d others	
	Sales and others	Dividend income	Purchase of raw material and others	Acquisition of property, plant and equipment	Outsourcing fees	Other costs
LG Electronics Nanjing New Technology Co., Ltd.	₩ 300,785	_	_	245	_	379
LG Electronics RUS, LLC	103,479	_		_	_	963
LG Electronics do Brasil Ltda.	228,821	_	_	_	_	430
LG Innotek Co., Ltd.	14,836	_	199,896	_	_	5,692
Qingdao LG Inspur Digital Communication Co., Ltd.	77,787	_	_	_	_	_
Inspur LG Digital Mobile Communications Co., Ltd.	230,832	_	_	_	_	_
LG Electronics Mexicalli, S.A. DE C.V.	319,772	_	_	_	_	186
LG Electronics Mlawa Sp. z o.o.	847,565	_	_	_	_	985
LG Electronics Taiwan Taipei Co., Ltd.	13,693	_	_	_	_	164
LG Hitachi Water Solutions Co., Ltd.	_	_	_	318,978	_	1,532
LG Electronics Reynosa, S.A. DE C.V.	1,287,340	_	_	_	_	1,926
LG Electronics Almaty Kazakhstan	14,079	_	_	_	_	53
LG Electronics Air-Conditioning (Shandong) Co., Ltd.	_	_	255	3,744	_	2,621
HiEntech Co., Ltd.	_	_	_	6,991	_	34,432
Hientech (Tianjin) Co., Ltd.	_	_	_	21,838	_	11,822
LG Electronics S.A. (Pty) Ltd.	14,155	_	_	_	_	25
Others	857		3	14		7,264
	W 3,731,532		200,154	360,702		68,835
	W 5,436,726	8,639	637,355	1,424,647	90,789	188,824

^(*) Represents transactions occurred prior to disposal of the entire investments.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

	2018					
	Purchase and others					-
(In millions of won)	Sales and others	Dividend income	Purchase of raw material and others	Acquisition of property, plant and equipment	Outsourcing fees	Other costs
Associates and their subsidiaries						
INVENIA Co., Ltd.	_	30	1,608	58,111	_	896
AVATEC Co., Ltd.	_	530	_	_	71,403	905
Paju Electric Glass Co., Ltd.	_	4,172	364,183	_	_	4,411
WooRee E&L Co., Ltd.	_	_	58	_	_	144
YAS Co., Ltd.		_	5,281	143,192	_	3,391
LB Gemini New Growth Fund No. 16(*)	1,112	540				
	W 1,112	5,272	371,130	201,303	71,403	9,747
Entity that has significant influence over the Controlling			·			
Company						
LG Electronics Inc.	₩1,215,153	_	36,522	1,041,563	_	127,775
Subsidiaries of the entity that has significant influence over the						
Controlling Company						
LG Electronics India Pvt. Ltd.	₩ 71,798	_	_	_	_	103
LG Electronics Vietnam Haiphong Co., Ltd.	173,051	_	_	4,541	_	166

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

	2018					
	-	Purchase and ot				
(In millions of won)	Sales and others	Dividend income	Purchase of raw material and others	Acquisition of property, plant and equipment	Outsourcing fees	Other costs
LG Electronics Nanjing New Technology Co., Ltd.	₩ 223,524			424		1,528
LG Electronics RUS, LLC	106,631	_	_	_	_	2,673
LG Electronics do Brasil Ltda.	192,775	_	_	_	_	350
LG Innotek Co., Ltd.	29,267	_	147,453	_		39,136
Qingdao LG Inspur Digital Communication Co., Ltd.	37,738	_	_	_	_	_
Inspur LG Digital Mobile Communications Co., Ltd.	131,970	_	_	_		1
LG Electronics Mexicalli, S.A. DE C.V.	187,844	_	_	_	_	210
LG Electronics Mlawa Sp. z o.o.	740,784	_		_		631
LG Electronics Taiwan Taipei Co., Ltd.	12,746	_	_	_	_	330
LG Hitachi Water Solutions Co., Ltd.	9,100	_	_	304,365	_	8,980
LG Electronics Reynosa, S.A. DE C.V.	1,030,414	_	_	_	_	2,021
LG Electronics Almaty Kazakhstan	3,759	_	_	_		42
LG Electronics Air-Conditioning (Shandong) Co., Ltd.	_	_	330	26,871	_	7,264
HiEntech Co., Ltd.		_		22,378		29,215
Hientech (Tianjin) Co., Ltd.	_	_	_	92,900	_	23,880
LG Electronics S.A. (Pty) Ltd.	7,244	_		_		20
LG Electronics Egypt S.A.E.	25,491	_	_	_	_	16
Others	5,195		28	15		11,480
	₩2,989,331		147,811	451,494		128,046
	W4 ,205,596	5,272	555,463	1,694,360	71,403	265,568

^(*) Represents transactions occurred prior to the Group's disposal of the entire investments.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

2019						
Purchase and oth				d others	others	
Sales and others	Dividend income	Purchase of raw material and others	Acquisition of property, plant and equipment	Outsourcing fees	Other costs	
		1,024	45,580	_	297	
2,639	265	_	_	73,323	891	
	6,057	342,958	_	_	4,416	
_	_	6,441	_	_	5	
	1,000	6,764	102,316	_	3,655	
		59			313	
₩ 2,639	7,502	357,246	147,896	73,323	9,577	
W 947,409		13,240	815,629	_	153,212	
₩ 87,116	_	_	_	_	194	
277,743	_	_	3,019	_	924	
297,033	_	_	31	_	486	
100,894	_	_	_	_	1,972	
	w - 2,639	## 2,639	Sales and others Dividend income Purchase of raw material and others ₩ — 180 1,024 2,639 265 — — 6,057 342,958 — — 6,441 — 1,000 6,764 — — 59 ₩ 2,639 7,502 357,246 ₩ 87,116 — — 277,743 — — 297,033 — —	Sales and others Dividend income Purchase of raw material and others Acquisition of property, plant and equipment ₩ — 180 1,024 45,580 2,639 265 — — — 6,057 342,958 — — — 6,441 — — 1,000 6,764 102,316 — — 59 — ₩ 2,639 7,502 357,246 147,896 ₩ 87,116 — — — 277,743 — 3,019 297,033 — 31	Sales and others Dividend income Purchase of raw material and others Acquisition of property, plant and equipment Outsourcing fees ₩ — 180 1,024 45,580 — 2,639 265 — — 73,323 — 6,057 342,958 — — — 1,000 6,764 102,316 — — 2,639 7,502 357,246 147,896 73,323 ₩ 2,639 7,502 357,246 147,896 73,323 ₩947,409 — 13,240 815,629 — ₩ 87,116 — — — 277,743 — 3,019 — 297,033 — 31 —	

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

29. Related Parties and Others, Continued

	2019						
	Purchase and others						
(In millions of won)	Sales and others	Dividend income	Purchase of raw material and others	Acquisition of property, plant and equipment	Outsourcing fees	Other costs	
LG Electronics do Brasil Ltda.	W 145,546	_	_	_	_	289	
LG Innotek Co., Ltd.	7,572	_	53,886	_	_	79,162	
Qingdao LG Inspur Digital Communication Co., Ltd.	22,563	_	_	_	_	_	
Inspur LG Digital Mobile Communications Co., Ltd.	41,858	_		_		_	
LG Electronics Mexicalli, S.A. DE C.V.	114,520	_	_	_	_	85	
LG Electronics Mlawa Sp. z o.o.	618,715	_		_		1,967	
LG Hitachi Water Solutions Co., Ltd.(*2)	_	_	_	79,986	_	_	
LG Electronics Reynosa, S.A. DE C.V.	722,194	_		_		1,155	
LG Electronics Air-Conditioning (Shandong) Co., Ltd.	_	_	444	14,527	_	88	
HiEntech Co., Ltd.(*2)	47	_		7,264		21,576	
HiEntech (Tianjin) Co., Ltd.(*2)	_	_	_	32,335	_	15,423	
LG Electronics Egypt S.A.E.	97,359	_		_		241	
LG Electronics Alabama Inc.	12,869	_	_	_	_	_	
LG Electronics Japan, Inc.	_	_		14		6,236	
P.T. LG Electronics Indonesia	11,200	_	_	_	_	176	
Others	12,564	_		33		6,996	
	W 2,569,793		54,330	137,209		136,970	
	W 3,519,841	7,502	424,816	1,100,734	73,323	299,759	

(*1) Represents transactions occurred prior to the Group's disposal of the entire investments

(*2) Represents transactions occurred prior to LG Electronics Inc.'s disposal of the entire investments.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

29. Related Parties and Others, Continued

(c) Trade accounts and notes receivable and payable as of December 31, 2018 and 2019 are as follows:

	Trade accounts and notes receivable and others				nd notes payable others
(In millions of won)	Decer	nber 31, 2018	December 31, 2019	December 31, 2018	December 31, 2019
Associates					
INVENIA Co., Ltd.(*)		2,000	_	30,179	_
AVATEC Co., Ltd.		_	_	4,382	1,029
Paju Electric Glass Co., Ltd.		_	_	60,566	62,853
WooRee E&L Co., Ltd.		_	_	7	1,888
YAS Co., Ltd.		_	_	6,145	27,489
Material Science Co., Ltd.		_	_	_	8
	W	2,000		101,279	93,267
Entity that has significant influence over the					
Controlling Company					
LG Electronics Inc.	₩	247,679	209,939	430,677	157,713
Subsidiaries of the entity that has significant					
influence over the Controlling Company					
LG Electronics India Pvt. Ltd.	₩	9,047	6,113	29	_
LG Electronics Vietnam Haiphong Co., Ltd.		25,544	47,740	_	75
LG Electronics Nanjing New Technology Co.,					
Ltd.		43,463	55,343	139	49
LG Electronics RUS, LLC		22,570	17,600	90	83
LG Electronics do Brasil Ltda.		15,608	14,805	62	26
LG Innotek Co., Ltd.		2,885	267	47,382	36,426
LG Electronics Mexicali, S.A. DE C.V.	₩	15,305	11,195	<u> </u>	17

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

29. Related Parties and Others, Continued

(III millions of worl)		nd notes receivable others	Trade accounts a	nd notes payable thers
	December 31, 2018	December 31, 2019	December 31, 2018	December 31, 2019
LG Electronics Mlawa Sp. z o.o.	W 70,236	124,390	33	75
LG Electronics Reynosa, S.A. DE				
C.V.	69,189	82,927	134	62
LG Electronics Egypt S.A.E.	10,296	9,432	_	_
Qingdao LG Inspur Digital				
Communication Co., Ltd.	3,530	7,221		_
P.T. LG Electronics Indonesia	_	7,696	_	16
Others	27,535	2,452	102,486	3,548
	₩ 315,208	387,181	150,355	40,377
	₩ 564,887	597,120	682,311	291,357

^(*) Excluded from related parties due to disposal of equity investments during the year ended December 31, 2019.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

29. Related Parties and Others, Continued

(d) Details of significant cash transactions such as loans and collection of loans, which occurred in the normal course of business with related parties for the years ended December 31, 2018 and 2019 are as follows:

(In millions of won)

(Loans(*)					
Associates	January 1, 2018	Increase	Decrease	December 31, 2018			
INVENIA Co., Ltd.	$\overline{\mathbf{W}}$ 2,375		(375)	2,000			
YAS Co., Ltd.	375		(375)				
	W 2,750		(750)	2,000			

(*) Loans are presented based on nominal amounts.

	Loans("1)				
Associates	January 1, 2019	Increase	Decrease(*2)	December 31, 2019	
INVENIA Co., Ltd.	W 2.000	1,000	(3.000)	_	

- (*1) Loans are presented based on nominal amounts.
- (*2) Excluded from related parties due to disposal of equity investments during the year ended December 31, 2019.

Notes to the Consolidated Financial Statements For the years ended December 31, 2017, 2018 and 2019

29. Related Parties and Others, Continued

(e) Key management personnel compensation

Compensation costs of key management for the years ended December 31, 2017, 2018 and 2019 are as follows:

(In millions of won)

	2017	2018	2019
Short-term benefits	W 3,724	2,622	2,664
Expenses related to the defined benefit plan	488	794	553
	W 4,212	3,416	3,217

Key management refers to the registered directors who have significant control and responsibilities over the Controlling Company's operations and business.

2017

2010

30. Supplemental Cash Flow Information

Supplemental cash flow information for the years ended December 31, 2017, 2018 and 2019 is as follows:

(In millions of won)

	2017	2018	2019
Non-cash investing and financing activities:			
Changes in other accounts payable arising from the purchase of property, plant			
and equipment	₩632,355	516,734	(1,333,967)
Recognition of right-of-use assets and lease liabilities	_	_	29,733

31. Non-current Assets Held for Sale

In prior years, the Group decided to dispose certain tangible assets of LG Display Poland Sp. z o.o. based on the management's approval and began effort to sell the disposal group. During the year ended December 31, 2019, the Group completed the sale of these assets to LG Chem Poland Sp. z o.o.

Gain from disposal of non-current assets held for sale amount to \(\pi_8,353\) million and was recognized as other income.

Description of LG Display Co., Ltd.'s American Depositary Shares

Citibank N.A. serves as the depositary for American depositary shares of LG Display Co., Ltd., pursuant to the deposit agreement among LG Display Co., Ltd., Citibank, N.A., as ADR depositary, and all holders and beneficial owners of American depositary shares of LG Display Co., Ltd., dated as of July 22, 2004, as amended by the Amendment No. 1 thereto dated September 2, 2014 and supplemented by the side letter agreement dated as of November 29, 2007. Unless otherwise indicated, all references in this exhibit to the terms "we," "us," "our" and "LG Display" refer to LG Display Co., Ltd., all references in this exhibit to "ADSs" are to our American depositary shares, and all references to "ADRs" are to the American depositary receipts issued under our ADSs.

The following is a summary description of the material terms of our ADSs and of your material rights as an owner of such ADSs. Because it is a summary, this description does not contain all the information that may be important to you. Your rights and obligations as an owner of ADSs are determined by reference to the terms of the deposit agreement and side letter agreement and not this summary. Statements printed in italics in this description are provided for your information and either reflect the current state of Korean law or are not contained in the deposit agreement. For more complete information, you should read the entire deposit agreement and the ADR. The original deposit agreement was filed with the United States Securities and Exchanges Commission (the "SEC") as an exhibit to the registration statement on Form F-6 on November 28, 2007, a form of the Amendment No. 1 thereto was filed with the SEC as an exhibit to the registration statement on Form F-6 on July 30, 2014, and the side letter agreement was filed with the SEC as an exhibit to the annual report on Form 20-F on April 16, 2008. You may obtain a copy of such filings from the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 and from the SEC's website at http://www.sec.gov. Copies of the deposit agreement are also available for inspection at the principal New York office of the ADR depositary, currently located at 388 Greenwich Street, New York, New York 10013.

American Depositary Receipts

ADSs represent ownership interests in securities that are on deposit with the ADR depositary. ADSs may be represented by certificates that are commonly known as ADRs. The ADR depositary typically appoints a custodian to safekeep the securities on deposit. The ADR depositary's custodian in this case is the Korea Securities Depository, located at 4 Gil 23 Yoinaru, Yeongdeungpo-gu, Seoul, Republic of Korea. Korea Securities Depository is also the institution authorized under applicable law to effect book-entry transfers of shares of our common stock. Each ADS represents the right to receive shares of our common stock on deposit with the custodian. An ADS also represents the right to receive any other property received by the ADR depositary or the custodian on behalf of the owner of the ADS but that has not been distributed to the owners of ADSs because of legal restrictions or practical considerations. An ADR may represent any number of ADSs. We and the ADR depositary treat only persons in whose names ADRs are registered on the books of the registrar as holders of ADRs.

As an owner of our ADSs, you are a party to the deposit agreement and therefore are bound to its terms and to the terms of the ADR that represents your ADSs. The deposit agreement and the ADR specify our rights and obligations as well as your rights and obligations as owner of ADSs and those of the ADR depositary. As an ADS holder you appoint the ADR depositary to act on your behalf in certain circumstances. The deposit agreement and the ADRs are governed by New York law. However, our obligations to the holders of shares of common stock are governed by the laws of Korea, which may be different from the laws in the United States.

As an owner of ADSs, you may hold your ADSs either by means of an ADR registered in your name or through a brokerage or safekeeping account. If you hold your ADSs through your brokerage or safekeeping account, you must rely on the procedures of your broker or bank to assert your rights as ADS owner. Banks and brokers typically hold securities such as the ADSs through clearing and settlement systems such as The Depository Trust Company ("DTC"). The procedures of such clearing and settlement systems may limit your ability to exercise your rights as an owner of ADSs. Please consult with your broker or bank if you have any questions concerning these limitations and procedures. This summary description assumes you own the ADSs directly by means of an ADS registered in your name and, as such, we refer to you as the "holder." When we refer to "you," we assume the reader owns ADSs.

Uncertificated form of ADSs

Pursuant to the side letter agreement, the ADR depositary may also issue ADSs that are not evidenced by ADRs (the "uncertificated ADSs") on its direct registration system, unless otherwise specifically instructed in writing by the applicable holder. The uncertificated ADSs are not represented by any instrument(s) but are evidenced only by the registration of "uncertificated securities" on the books and records of the ADR depositary maintained for such purpose. Uncertificated ADSs are in all material respects identical to certificated ADSs of the same type and class, except that (i) no ADR(s) are, nor need to be, issued to evidence uncertificated ADSs, (ii) uncertificated ADSs are, subject to the terms of the deposit agreement (as supplemented by the side letter agreement), transferable upon the same terms and conditions as uncertificated securities under New York law, (iii) each holder's ownership of uncertificated ADSs are recorded on the books and records of the ADR depositary maintained for such purpose and evidence of such holder's ownership are reflected in periodic statements provided by the ADR depositary to each such holder in accordance with applicable law, (iv) the ADR depositary may from time to time, upon notice to the holders of uncertificated ADSs affected thereby, establish rules and amend or supplement existing rules, as may be deemed reasonably necessary to maintain the direct registration system for the ADSs and for the issuance of uncertificated ADSs on behalf of holders, provided that such rules do not conflict with the terms of the deposit agreement (as supplemented by the side letter agreement) and applicable law, (v) the holder of uncertificated ADSs are not entitled to any benefits under the deposit agreement (as supplemented by the side letter agreement) and such holder's uncertificated ADSs shall not be valid or enforceable for any purpose against the ADR depositary or us unless such holder is registered on the books and records of the ADR depositary maintained for such purpose, (vi) the ADR depositary may, in connection with any deposit of shares resulting in the issuance of uncertificated ADSs and with any transfer, pledge, release and cancellation of uncertificated ADSs, require the prior receipt of such documentation as the ADR depositary may reasonably request, and (vii) upon termination of the deposit agreement (as supplemented by the side letter agreement), the ADR depositary does not require holders of uncertificated ADSs to affirmatively instruct the ADR depositary or to take other action before remitting proceeds from the sale of the deposited securities represented by such holders' uncertificated ADSs under the terms of the deposit agreement.

Holders of uncertificated ADSs that are not subject to any registered pledges, liens, restrictions or adverse claims, of which the ADR depositary has written notice at such time, may exchange the uncertificated ADSs (or any portion thereof) for ADRs of the same type and class, subject in each case to applicable laws and any rules the ADR depositary may establish from time to time in respect of the uncertificated ADSs. In addition, so long as the ADR depositary maintains its direct registration system for the ADSs, the holders of ADRs have the right to exchange the ADRs (or any portion thereof) for uncertificated ADSs upon (i) the due surrender of the ADRs to the ADR depositary for such purpose, and (ii) the presentation of a written request to such effect to the ADR depositary, subject in each case to all liens and restrictions noted on the ADR evidencing the ADS(s) and all adverse claims of which the ADR depositary then has written notice, the terms of the deposit agreement (as supplemented by the side letter agreement) and the rules that the ADR depositary may establish from time to time for such purposes thereunder, and applicable law. Moreover, holders of uncertificated ADSs may also request the sale of ADSs through the ADR depositary, subject to the terms and conditions generally applicable to the sale of ADSs through the ADR depositary from time to time (which may be changed by the ADR depositary).

Deposit and Withdrawal of Shares of Common Stock

The shares of common stock underlying the ADSs are delivered to the ADR depositary's custodian in book-entry form. Accordingly, no share certificates are issued for them, and the ADR depositary holds the shares of common stock in book-entry form through the custodian. The delivery of the shares of common stock pursuant to the deposit agreement takes place through the facilities of the custodian.

The ADR depositary will create ADSs if you or your broker deposit shares of common stock with the custodian. Upon payment of its issuance fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the ADR depositary will register the appropriate number of ADSs in the names you designate. Your ability to deposit shares of common stock and receive ADSs may be limited by U.S. and Korean legal considerations applicable at the time of deposit. The current limit on the number of shares that may be deposited into our ADR facility is 68,095,700 as of April 21, 2020. The number of shares issued or sold in any subsequent offering by us or our affiliates, subject to government authorization, raises the limit on the number of shares that may be deposited into the ADR facility, except to the extent such deposit is prohibited by applicable laws or violates our articles of incorporation, or we determine with the ADR depositary to limit the number of shares of common stock so offered that would be eligible for deposit under the deposit agreement in order to maintain liquidity for the shares in Korea as may be requested by the relevant Korean authorities.

The issuance of ADSs may be delayed until the ADR depositary or the custodian receives confirmation that all required approvals have been given and that the shares have been duly transferred to the custodian. The ADR depositary will only issue ADSs in whole numbers.

When you make a deposit of shares, you will be responsible for transferring good and valid title to these shares to the ADR depositary and you will be deemed to represent and warrant that:

- The shares are duly authorized, validly issued, fully paid, non-assessable and legally obtained.
- All preemptive (and similar) rights, if any, with respect to such shares have been validly waived or exercised.
- You are duly authorized to deposit the shares of common stock.
- The shares of common stock presented for deposit are free and clear of any lien, encumbrance, security interest, charge, mortgage or adverse claim, and are not, and the ADSs issuable upon such deposit will not be, "restricted securities" (as defined in the deposit agreement).
- The shares of common stock presented for deposit have not been stripped of any rights or entitlements.

If any of the representations or warranties are incorrect in any way, we and the ADR depositary may, at your cost and expense, take any and all actions necessary to correct the consequences of the misrepresentations.

The ADR depositary will arrange for the acceptance of the ADSs into DTC. A single ADR in the form of a "Balance Certificate" will evidence all ADSs held through DTC and will represent the aggregate number of ADSs that have been issued from time to time. That ADR will be registered in the name of the nominee for DTC (currently "Cede & Co."). As such, Cede & Co., or any subsequent nominee for DTC, will be the only holder of the ADR evidencing all ADSs held through DTC. Each beneficial owner of ADSs held through DTC must rely upon the procedures of DTC and the DTC participants to exercise, effect transfer of or be entitled to any rights attributable to such ADSs.

The ADR depositary and the ADR depositary's custodian will refuse to accept shares of common stock for deposit whenever we restrict transfer of shares of common stock to comply with our articles of incorporation or applicable law.

You may surrender your ADRs to the ADR depositary for cancellation and withdraw the underlying shares of our common stock. Upon payment of the cancellation fees provided in the deposit agreement and any governmental charges and taxes, subject to applicable laws and regulations of Korea and our articles of incorporation, you are entitled to physical delivery or electronic delivery to an account in Korea or, if permissible under applicable Korean law, outside Korea, of the shares of common stock evidenced by the ADSs and any other property at the time represented by ADRs you surrendered.

You assume the risk for delivery of all funds and securities upon withdrawal. Once canceled, the ADSs will not have any rights under the deposit agreement.

If you hold ADSs registered in your name, the ADR depositary may ask you to provide proof of identity and genuineness of any signature and such other documents as the ADR depositary may deem appropriate before it will cancel your ADSs. The withdrawal of the shares of common stock represented by your ADSs may be delayed until the ADR depositary receives satisfactory evidence of compliance with all applicable laws and regulations. Please keep in mind that the ADR depositary will only accept ADSs for cancellation that represent a whole number of securities on deposit and will only be permitted to deliver shares of common stock that have been listed for trading on the Korea Exchange. The ADR depositary will process ADSs presented for withdrawal of the shares of common stock they represent on a first come, first served basis.

You have the right to withdraw the securities represented by your ADSs at any time except for:

• Temporary delays that may arise because (1) the transfer books for the shares of common stock or ADSs are closed, or (2) shares of common stock are immobilized on account of a shareholders' meeting or a payment of dividends.

- Obligations to pay fees, taxes and similar charges.
- Restrictions imposed because of laws or regulations applicable to ADSs or the withdrawal of securities on deposit.

The deposit agreement may not be modified to impair your right to withdraw the securities represented by your ADSs except to comply with mandatory provisions of law.

If you want to withdraw the shares of common stock from the depositary facility, you must register your identity with the Financial Supervisory Service of Korea before you acquire the shares of common stock unless you intend to sell the shares of common stock within three months of acquisition. See "Item 10.D. Exchange Controls and Securities Regulations—Restrictions Applicable to Shares" in our Annual Report on Form 20-F for the year ended December 31, 2019.

Pre-Release Transactions

Under the provisions of the deposit agreement, the ADR depositary may not lend shares of common stock or ADSs. However, subject to the provisions of the deposit agreement and to the extent permitted by applicable Korean law, the ADR depositary may issue ADSs before deposit of the underlying shares of common stock. The ADR depositary may also deliver shares of common stock prior to receiving ADS for cancellation. These transactions are commonly called pre-release transactions. The ADR depositary may execute a pre-release transaction only under the following circumstances:

- before or at the time of the pre-release transaction, the person to whom the pre-release transaction is being made must represent to the ADR depositary in writing that it or its customer owns the shares of common stock to be deposited or the ADSs to be cancelled and show evidence of ownership of those securities to the ADR depositary's satisfaction;
- before or at the time of such pre-release transaction, the person to whom the pre-release transaction is being made must agree in writing
 with the ADR depositary that he will hold the shares of common stock or ADSs in trust for the ADR depositary until their delivery to the
 ADR depositary or custodian, reflect on his records the ADR depositary as owner of such shares of common stock or ADSs and
 unconditionally guarantee to deliver such shares of common stock or ADSs to the ADR depositary or custodian and agrees to any
 additional requirements or restrictions that the ADR depositary may impose;
- the pre-release transaction must be fully collateralized with cash or U.S. government securities or such other collateral as the ADR depositary deems appropriate;
- the ADR depositary must be able to terminate the pre-release transaction on not more than five business days' notice; and
- the pre-release transaction would be subject to further indemnities and credit regulations as the ADR depositary deems appropriate.

The deposit agreement limits the aggregate size of the pre-release transactions. The ADR depositary may retain for its own account any compensation received by it in connection with the pre- release transactions, such as earnings on the collateral.

Dividends, Other Distributions and Rights

As a holder, you generally have the right to receive the distributions we make on the securities deposited with the custodian bank. Your receipt of these distributions may be limited, however, by practical considerations and legal limitations. Holders receive such distributions under the terms of the deposit agreement in proportion to the number of ADSs held as of a specified record date.

Distributions of Cash

If the ADR depositary can, in its reasonable judgment and pursuant to applicable law, convert Korean Won (or any other foreign currency) into U.S. dollars on a reasonable basis and transfer the resulting U.S. dollars to the United States, the ADR depositary will as promptly as practicable convert all cash dividends and other cash distributions received by it on the deposited shares of common stock into U.S. dollars and distribute the U.S. dollars to you in proportion to the number of ADSs representing shares of common stock held by you, after deduction of the fees and expenses of the ADR depositary and any applicable taxes and governmental charges payable by the holder pursuant to the deposit agreement.

Other Distributions

In the event that the ADR depositary or the ADR depositary's custodian receives any distribution upon any deposited shares of common stock in property or securities (other than cash, shares of common stock or rights to receive shares of common stock), the ADR depositary will distribute the property or securities to you after deduction of the fees and expenses of the ADR depositary in proportion to your holdings in any manner that the ADR depositary deems, after consultation with us, commercially feasible. If the ADR depositary determines that any distribution of property or securities (other than cash, shares of common stock or rights to receive shares of common stock) cannot be made proportionally, or if for any other reason the ADR depositary deems the distribution not to be commercially feasible, the ADR depositary may, after consultation with us, dispose of all or a portion of the property or securities in such amounts and in such manner, including by public or private sale, as the ADR depositary deems equitable or practicable. The ADR depositary will distribute to you the net proceeds of any such sale, or the balance of the property or securities, after the deduction of the fees and expenses of the ADR depositary.

Distribution of Shares

If a distribution by us consists of a dividend in, or free distribution of, our shares of common stock, the ADR depositary may, with our approval, and will, if we request, deposit the shares of common stock and either (1) distribute to you, in proportion to your holdings, additional ADSs representing those shares of common stock, or (2) reflect on the records of the ADR depositary the increase in the aggregate number of ADSs representing the aggregate number of shares of common stock received, in both cases, after the deduction of the fees and expenses of the ADR depositary. No such distribution of new ADSs will be made if it would violate law (i.e., U.S. securities laws) or if it would not be operationally practicable. If the ADR depositary deems that such distribution for any reason is not commercially feasible, the ADR depositary may adopt, after consultation with us, any method as it may deem commercially feasible to effect such distribution, including by public or private sale of all or part of the shares of common stock received. The ADR depositary will distribute to you the net proceeds of any such sale as with a cash distribution. The ADR depositary will only distribute whole numbers of ADSs. Fractional entitlements to ADSs will be sold, and the proceeds of such sale will be distributed as in the case of a cash distribution.

Distribution of Rights

If we offer holders of our shares of common stock any rights to subscribe for additional shares of common stock or any other rights, the ADR depositary may make these rights available to you. The ADR depositary will first consult with us to determine whether it is lawful and commercially feasible to distribute those rights to you.

The ADR depositary will establish procedures to distribute rights to purchase additional ADSs to holders and to enable such holders to exercise such rights if it is lawful and reasonably practicable to make the rights available to holders of ADSs, and if we provide the ADR depositary with all of the documentation contemplated in the deposit agreement (such as opinions to address the lawfulness of the transaction). You may have to pay fees, expenses, taxes and other governmental charges to subscribe for the new ADSs upon the exercise of your rights. The ADR depositary is not obligated to establish procedures to facilitate the distribution and exercise by holders of rights to purchase new shares of common stock other than shares of common stock to be held in the form of ADSs. The ADR depositary will not distribute the rights to you if:

- We do not timely request that the rights be distributed to you or we request that the rights not be distributed to you;
- We fail to deliver satisfactory documents to the ADR depositary; or
- It is not reasonably practicable to distribute the rights to you.

If the ADR depositary determines in consultation with us that it is not lawful or commercially feasible to make these rights available to you, then upon our request, the ADR depositary will sell the rights and distribute the proceeds in the same way as it would do with a cash distribution. The ADR depositary may allow these rights that are not distributed or sold to lapse. In that case, you will receive no value for these rights.

If a registration statement under the Securities Act with respect to the securities to which any rights relate is required in order for us to offer the rights to you and to sell the securities represented by these rights, the ADR depositary will not offer such rights to you until such a registration statement is in effect, or unless the offering and sale of such securities and such rights to you are exempt from the registration requirements of the Securities Act or any required filing, report, approval or consent has been submitted, obtained or granted. Neither we nor the ADR depositary will be obligated to register the rights or securities under the Securities Act or to submit, obtain or request any filing, report, approval or consent.

Elective Distributions

Whenever we intend to distribute a dividend payable at the election of shareholders either in cash or in additional shares, we will give prior notice thereof to the ADR depositary and will indicate whether we wish the elective distribution to be made available to you. In such case, we will assist the ADR depositary in determining whether such distribution is lawful and commercially feasible. The ADR depositary will make the election available to you only if it is commercially feasible and if we have provided all of the documentation contemplated in the deposit agreement. In such case, the ADR depositary will establish procedures to enable you to elect to receive either cash or additional ADSs, in each case as described in the deposit agreement.

If the election is not made available to you, you will receive either cash or additional ADSs, depending on what a shareholder in Korea would receive upon failing to make an election, as more fully described in the deposit agreement.

Transfer, Combination and Split Up of ADRs

As an ADR holder, you are entitled to transfer, combine or split up your ADRs and the ADSs evidenced thereby. For transfers of ADRs, you will have to surrender the ADRs to be transferred to the ADR depositary and also must:

- ensure that the surrendered ADR certificate is properly endorsed or otherwise in proper form for transfer;
- provide such proof of identity and genuineness of signatures as the ADR depositary deems appropriate;
- provide any transfer stamps required by the State of New York or the United States; and
- pay all applicable fees, charges, expenses, taxes and other government charges payable by ADR holders pursuant to the terms of the deposit agreement, upon the transfer of ADRs.

To have your ADRs either combined or split up, you must surrender the ADRs in question to the ADR depositary with your request to have them combined or split up, and you must pay all applicable fees, charges and expenses payable by ADR holders, pursuant to the terms of the deposit agreement, upon a combination or split up of ADRs.

Record Dates

The ADR depositary will fix a record date, after consultation with us, in each of the following situations:

- we make any cash dividend or other cash distribution upon our shares of common stock;
- we make any distribution other than cash upon our shares of common stock;
- we issue rights with respect to our shares of common stock;
- the ADR depositary causes a change in the number of shares of common stock that are represented by each ADS; or
- the ADR depositary receives notice of any shareholders' meeting.

The record date will be, to the extent practicable, established as near as practicable to the record date fixed by us for the shares of common stock. The record date will determine (1) the ADR holders who are entitled to receive the dividend, distribution or rights, or the net proceeds of the sale of the rights; or (2) the ADR holders who are entitled to receive notices of meetings or to exercise rights.

Voting of the Underlying Shares of Common Stock

As a holder, you generally have the right under the deposit agreement to instruct the ADR depositary to exercise the voting rights for the shares of common stock represented by your ADSs. The voting rights of holders of shares of common stock are described in the section titled "Item 10.B. Memorandum and Articles of Association – Description of Capital Stock – Voting Rights" in our Annual Report on Form 20-F for the year ended December 31, 2019.

We will give the ADR depositary a notice of any meeting or solicitation of shareholder proxies immediately after we finalize the form and substance of such notice sufficiently in advance of the meeting or solicitation of shareholder proxies to provide holders with a reasonable opportunity to take all actions requested, the ADR depositary having no obligation to provide holders with notice, voting or proxy solicitation materials if it does not timely receive such materials from us. As soon as practicable after it receives our notice, the ADR depositary will fix a record date, and upon our written request, the ADR depositary will mail to you a notice that will contain the following:

- the information contained in our notice to the ADR depositary including an English translation, or, if requested by us, a summary of the information provided by us;
- a statement that the ADR holders as of the close of business on a specified record date will be entitled to instruct the ADR depositary as to how to exercise their voting rights for the number of shares of deposited shares of common stock, subject to the provisions of applicable Korean law and our articles of incorporation, which provisions, if any, will be summarized in the notice to the extent that they are material; and
- a statement as to the manner in which the ADR holders may give their instructions.

Upon your written request received on or before the date set by the ADR depositary for this purpose, the ADR depositary will endeavor, in so far as practicable, to vote or cause to be voted the deposited shares of common stock in accordance with the instructions set forth in your written requests. To the extent the ADR depositary does not timely receive voting instructions from a holder of ADSs, it will endeavor to vote the shares of common stock represented by those ADSs in the same proportion as the holders of all other outstanding shares of common stock vote their shares of common stock at the meeting. The ADR depositary will not, and will ensure that the custodian bank does not, vote the shares of common stock represented by ADSs at any meeting for which we have not timely provided voting materials to the ADR depositary.

Please note that the ability of the ADR depositary to carry out voting instructions may be limited by practical and legal limitations and the terms of the securities on deposit. We cannot assure you that you will receive voting materials in time to enable you to return voting instructions to the ADR depositary in a timely manner.

The ADR depositary may not itself exercise any voting discretion over any deposited shares of common stock. You may only exercise the voting rights in respect of whole numbers of ADSs. ADR holders may not be entitled to give instructions to vote the shares of common stock represented by the ADSs if, and to the extent that, the total number of shares of common stock represented by the ADSs of an ADR holder exceeds any limit set under applicable law. We can give no assurance to you, however, that we will notify the ADR depositary sufficiently in advance of the scheduled date of a meeting or solicitation of consents or proxies to enable the ADR depositary to make a timely mailing of notices to you, or that you will receive the notices sufficiently in advance of a meeting or solicitation of consents or proxies to give instructions to the ADR depositary.

Inspection of Transfer Books

The ADR depositary keeps books at its principal New York office which is currently located at 388 Greenwich Street, New York, New York 10013, for the registration and transfer of ADRs. You may inspect the books of the ADR depositary during regular business hours as long as the inspection is not for the purpose of communicating with holders in the interest of a business or object other than our business or a matter related to the deposit agreement or the ADSs.

Reports and Notices

On or before the first date on which we give notice, by publication or otherwise, of any meeting of shareholders, or of any adjourned meeting of shareholders, or of the taking of any action in respect of any distribution of cash or other distribution or the offering of any rights in respect of the shares of common stock, we will transmit to the custodian and the ADR depositary sufficient copies of the applicable notice in English in the form given or to be given to shareholders. We will furnish to the ADR depositary English language versions of any reports, notices and other communications that we generally transmit to holders of our common stock. The ADR depositary will arrange for the prompt mailing of copies of these documents, or, if we request, a summary of any such notice provided by us to you or, at our request, make notices, reports (other than the annual reports and semiannual financial statements) and other communications available to you on a basis similar to that for the holders of our common stock or on such other basis as we may advise the ADR depositary according to any applicable law, regulation or stock exchange requirement.

Notices delivered to you under the deposit agreement will be deemed to be effective three days (in the case of domestic mail or air courier) or seven days (in the case of overseas mail) from the date when a duly addressed letter containing the same is deposited, postage prepaid, in a post-office letter box or delivered to an air courier service or at the time when a confirmation thereof is produced in the case of a cable, telex or facsimile transmission, without regard for the actual receipt or time of actual receipt of the notice by you.

In addition, the ADR depositary will make available for inspection by holders at its principal New York office any notices, reports or communications, including any proxy soliciting materials, received from us that we generally transmit to the holders of our common stock or other deposited securities, including the ADR depositary. The ADR depositary will also send to you copies of reports and communications we will provide to it as described in the deposit agreement.

Changes Affecting Deposited Shares of Common Stock

In case of a change in the par value, or a split-up, consolidation or any other reclassification of shares of our common stock or upon any recapitalization, reorganization, merger or consolidation or sale of assets affecting us, any securities received by the ADR depositary or the custodian in exchange for, in conversion of or in respect of deposited shares of our common stock will be treated as new deposited shares of common stock under the deposit agreement. In that case, ADSs will represent, subject to the terms of the deposit agreement and applicable laws and regulations, including any registration requirements under the Securities Act, the right to receive the new deposited shares of common stock, unless additional ADSs are issued, as in the case of a stock dividend, or unless the ADR depositary calls for the surrender of outstanding ADRs to be exchanged for new ADRs.

If the ADR depositary may not lawfully distribute such property to you, the ADR depositary may sell such property and distribute the net proceeds to you as in the case of a cash distribution.

Amendment and Termination of the Deposit Agreement

We may agree with the ADR depositary to amend or supplement the deposit agreement and the ADSs without your consent for any reason. If the amendment or supplement adds or increases fees or charges, except for taxes and other governmental charges or certain expenses of the ADR depositary, or prejudices any substantial existing right of ADR holders, it will only become effective 30 days after the ADR depositary notifies you of the amendment or supplement. We do not consider to be materially prejudicial to your substantial rights any modifications or supplements that are reasonably necessary for the ADSs to be registered under the Securities Act or to be eligible for book-entry settlement, in each case without imposing or increasing the fees and charges you are required to pay. In addition, we may not be able to provide you with prior notice of any modifications or supplements that are required to accommodate compliance with applicable provisions of law. If you continue to hold your ADSs at the time an amendment or supplement becomes effective, you are considered to have agreed to the amendment or supplement and are bound by the deposit agreement as amended. Except as otherwise required by any mandatory provisions of applicable law, no amendment may impair your right to surrender your ADSs and to receive the underlying deposited securities.

The ADR depositary will terminate the deposit agreement if we ask it to do so with 90 days' prior written notice. The ADR depositary may also terminate the deposit agreement if the ADR depositary has notified us at least 90 days in advance that it would like to resign and we have not appointed a new depositary. In both cases, the ADR depositary must notify you at least 30 days before the termination date.

If any ADSs remain outstanding after the date of termination, the ADR depositary will stop performing any further acts under the deposit agreement, except:

- to collect dividends and other distributions pertaining to the deposited shares of common stock;
- to sell property and rights and the conversion of deposited shares of common stock into cash as provided in the deposit agreement; and
- to deliver deposited shares of common stock, together with any dividends or other distributions received with respect to the deposited shares of common stock and the net proceeds of the sale of any rights or other property represented by those ADSs in exchange for surrendered ADSs.

At any time after the expiration of six months from the date of termination, the ADR depositary may sell any remaining deposited shares of common stock and hold uninvested the net proceeds in an unsegregated account, together with any other cash or property then held, without liability for interest, for the pro rata benefit of the holders of ADSs that have not been surrendered by then.

Charges of ADR Depositary

As an ADS holder, you are required to pay the following service fees to the ADR depositary:

Services	Fees
Issuance of ADSs	Up to US\$0.05 per ADS issued
Cancellation of ADSs	Up to US\$0.05 per ADS canceled
Distribution of cash dividends or other cash distributions Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions or (ii) exercise of rights to purchase additional ADSs	Up to US\$0.02 per ADS held Up to US\$0.02 per ADS held
Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to US\$0.05 per ADS held
Other ADS services	Up to US\$0.02 per ADS held

As an ADS holder you are also responsible to pay certain fees and expenses incurred by the ADR depositary and certain taxes and governmental charges such as:

- taxes (including applicable interest and penalties) and other governmental charges;
- registration fees applicable to transfers of shares of common stock on our shareholders' register, or that of any entity acting as registrar for the shares, to the name of the ADR depositary or its nominee, or the custodian or its nominee, when making deposits or withdrawals under the deposit agreement;
- cable, telex and facsimile transmission expenses that are expressly provided in the deposit agreement;
- · expenses incurred by the ADR depositary in the conversion of foreign currency into U.S. dollars under the deposit agreement;

- such fees and expenses as are incurred by the ADR depositary in connection with compliance with exchange control regulations and other regulatory requirements applicable to shares of common stock, shares of common stock on deposit, ADSs and ADRs; and
- the fees and expenses incurred by the ADR depositary, the custodian or any nominee in connection with the servicing or delivery of shares of common stock on deposit.

Limitations on Obligations and Liabilities

The deposit agreement limits our obligations and the ADR depositary's obligations to you. Please note the following:

- We and the ADR depositary are obligated only to take the actions specifically stated in the deposit agreement without negligence or bad faith
- The ADR depositary disclaims any liability for any failure to carry out voting instructions, for any manner in which a vote is cast or for the effect of any vote, provided it acts in good faith and in accordance with the terms of the deposit agreement.
- The ADR depositary disclaims any liability for any failure to determine the lawfulness or practicality of any action, for the content of any document forwarded to you on our behalf or for the accuracy of any translation of such a document, for the investment risks associated with investing in shares of common stock, for the validity or worth of the shares of common stock, for any tax consequences that result from the ownership of ADSs, for the credit-worthiness of any third party, for allowing any rights to lapse under the terms of the deposit agreement, for the timeliness of any of our notices or for our failure to give notice.
- We and the ADR depositary are not obligated to perform any act that is inconsistent with the terms of the deposit agreement.
- We and the ADR depositary disclaim any liability if we are prevented or forbidden from acting on account of any law or regulation, any provision of our articles of incorporation, any provision of any securities on deposit or by reason of any act of God or war or other circumstances beyond our control.
- We and the ADR depositary disclaim any liability by reason of any exercise of, or failure to exercise, any discretion provided for the deposit agreement or in our articles of incorporation or in any provisions of securities on deposit with the ADR depositary.
- We and the ADR depositary further disclaim any liability for any action taken or inaction in reliance on the advice or information received from legal counsel, accountants, any person presenting shares of common stock for deposit, any holder of ADSs or authorized representatives thereof, or any other person believed by either of us in good faith to be competent to give such advice or information.
- We and the ADR depositary also disclaim liability for the inability by a holder to benefit from any distribution, offering, right or other benefit which is made available to holders of shares of common stock but is not, under the terms of the deposit agreement, made available to you.
- We and the ADR depositary may rely without any liability upon any written notice, request or other document believed to be genuine or to have been signed or presented by the proper parties.
- We and the ADR depositary also disclaim liability for any consequential or punitive damages for any breach of the terms of the deposit agreement.

General

The ADSs are transferable on the books of the ADR depositary; provided, however, that the ADR depositary may, after consultation with us, close the transfer books at any time or from time to time, when deemed expedient by it in connection with the performance of its duties. As a condition precedent to the execution and delivery of any ADSs, registration of transfer, split-up, combination of any ADR or surrender of any ADS for the purpose of withdrawal of deposited shares of common stock, the ADR depositary or the custodian may require payment from the depositor of the shares of common stock or holder of ADSs of a sum sufficient to reimburse the ADR depositary for any tax or other governmental charge and any stock transfer or registration fee and payment of any applicable fees payable by the holders of ADSs.

Any person depositing shares of common stock, any holder of an ADS or any beneficial owner may be required from time to time to file with the ADR depositary or the custodian a proof of citizenship, residence, exchange control approval, payment of applicable Korean or other taxes or governmental charges, or legal or beneficial ownership and the nature of their interest, to provide information relating to the registration on our shareholders' register (or our appointed agent for the transfer and registration of shares of common stock) of the shares of common stock presented for deposit or other information, to execute certificates and to make representations and warranties as we or the ADR depositary may deem necessary or proper or to enable us or the ADR depositary to perform our and its obligations under the deposit agreement. The ADR depositary may withhold the execution or delivery or registration of transfer of all or part of any ADR or the distribution or sale of any dividend or other distribution of rights or of the proceeds from their sale or the delivery of any shares deposited under the deposit agreement and any other securities, property and cash received by the ADR depositary or the custodian until the proof or other information is filed or the certificates are executed or the representations and warranties are made. The ADR depositary shall provide us, unless otherwise instructed by us, in a timely manner, with copies of any of these proofs and certificates and these written representations and warranties.

The delivery and surrender of ADSs and transfer of ADSs generally may be suspended during any period when our or the ADR depositary's transfer books are closed, or if that action is deemed necessary or advisable by us or the ADR depositary at any time or from time to time in accordance with the deposit agreement. We may restrict, in a manner as we deem appropriate, transfers of shares of common stock where the transfers may result in ownership of shares of common stock in excess of limits under applicable law.

Taxes

You are responsible for the taxes and other governmental charges payable on the ADSs and the securities represented by the ADSs. We, the ADR depositary and the custodian may deduct from any distribution the taxes and governmental charges payable by holders and may sell any and all property on deposit to pay the taxes and governmental charges payable by holders. You will be liable for any deficiency if the sale proceeds do not cover the taxes that are due.

The ADR depositary may refuse to issue ADSs, to deliver, transfer, split and combine ADRs or to release securities on deposit until all taxes and charges are paid by the applicable holder. The ADR depositary and the custodian may take reasonable administrative actions to obtain tax refunds and reduced tax withholding for any distributions on your behalf. However, you may be required to provide to the ADR depositary and to the custodian proof of taxpayer status and residence and such other information as the ADR depositary and the custodian may require to fulfill legal obligations. You are required to indemnify us, the ADR depositary and the custodian for any claims with respect to taxes based on any tax benefit obtained for you.

Foreign Currency Conversion

The ADR depositary will arrange for the conversion of all foreign currency received into U.S. dollars if such conversion is practical, and it will distribute the U.S. dollars in accordance with the terms of the deposit agreement. You may have to pay fees and expenses incurred in converting foreign currency, such as fees and expenses incurred in complying with currency exchange controls and other governmental requirements.

If the conversion of foreign currency is not practical or lawful, or if any required approvals are denied or not obtainable at a reasonable cost or within a reasonable period, the ADR depositary may take the following actions in its discretion:

- Convert the foreign currency to the extent practical and lawful and distribute the U.S. dollars to the holders for whom the conversion and distribution is lawful and practical.
- Distribute the foreign currency to holders for whom the distribution is lawful and practical.

Hold the foreign currency (without liability for interest) for the applicable holders.

Governing Law

The deposit agreement, side letter agreement and the ADRs are interpreted under, and all rights under the deposit agreement, side letter agreement or the ADRs are governed by, the laws of the State of New York.

We have irrevocably submitted to the non-exclusive jurisdiction of New York State or United States Federal Courts located in New York City and waived any objection to legal actions or proceedings in these courts whether on the ground of venue or on the ground that the proceedings have been brought in an inconvenient forum.

This submission was made for the benefit of the ADR depositary and the holders and shall not limit the right of any of them to take legal actions or proceedings in any other court of competent jurisdiction nor shall the taking of legal actions or proceedings in one or more jurisdictions preclude the taking of legal actions or proceedings in any other jurisdiction (whether concurrently or not), to the extent permitted under applicable law.

I, James (Hoyoung) Jeong, certify that:

- 1. I have reviewed this annual report on Form 20-F of LG Display Co., Ltd.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 29, 2020

/s/ JAMES (HOYOUNG) JEONG

James (Hoyoung) Jeong Representative Director, President and Chief Executive Officer

I, Donghee Suh, certify that:

- 1. I have reviewed this annual report on Form 20-F of LG Display Co., Ltd.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 29, 2020

/s/ DONGHEE SUH

Donghee Suh
Senior Vice President and
Chief Financial Officer

Certification

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsection (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsection (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of LG Display Co., Ltd., a corporation organized under the laws of the Republic of Korea (the "Company"), does hereby certify, to such officer's knowledge, that:

The annual report on Form 20-F for the year ended December 31, 2019 (the "Form 20-F") fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in the Form 20-F fairly presents, in all material respects, the financial condition and results of operation of the Company.

Date: April 29, 2020

/s/ JAMES (HOYOUNG) JEONG

James (Hoyoung) Jeong

Representative Director, President and Chief

Executive Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to LG Display Co., Ltd. and will be retained by LG Display Co., Ltd. and furnished to the Securities and Exchange Commission or its staff upon request.

Certification

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsection (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsection (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of LG Display Co., Ltd., a corporation organized under the laws of the Republic of Korea (the "Company"), does hereby certify, to such officer's knowledge, that:

The annual report on Form 20-F for the year ended December 31, 2019 (the "Form 20-F") fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in the Form 20-F fairly presents, in all material respects, the financial condition and results of operation of the Company.

Date: April 29, 2020

/s/ DONGHEE SUH

Donghee Suh

Senior Vice President and

Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to LG Display Co., Ltd. and will be retained by LG Display Co., Ltd. and furnished to the Securities and Exchange Commission or its staff upon request.