TPK Holding Co., Ltd. and Subsidiaries

Consolidated Financial Statements for the Years Ended December 31, 2018 and 2017 and Independent Auditors' Report

Deloitte.

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INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
TPK Holding Co., Ltd.

Opinion

We have audited the accompanying consolidated financial statements of TPK Holding Co., Ltd. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated balance sheets as of December 31, 2018 and 2017 and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2018 and 2017 and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

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

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters for the Group's consolidated financial statements for the year ended December 31, 2018 are stated as follows:

Property, Plant and Equipment Impairment Assessment

The description of key audit matter:

As of December 31, 2018, the carrying amount of property, plant and equipment (less the accumulated impairment loss of NT$14,816,421 thousand) was NT$33,237,605 thousand, accounting for 40% of the Group's total assets. According to IAS 36 "Impairment of Assets", at the end of each reporting period, the Group is required to assess whether there is any indication that an asset may be impaired. If there is an indication that an asset may be impaired, then the asset's recoverable amount must be calculated. Since such assessment of impairment requires management to make judgments and assumptions, which are subjective and cannot be certain, the impairment assessment of property, plant and equipment has been identified as a key audit matter.

Refer to Notes 4 (i), 4 (m), 5(a), 16, 36 and 37 to the Group's consolidated financial statements for details of the related accounting policy and the relevant information about property, plant and equipment.

Corresponding audit procedures:

The Group reviews the carrying amounts of its property, plant and equipment to determine whether there is any indication that those assets may be impaired. The review process normally relies on performing the control procedures to: (a) understand the Group's asset impairment assessment method and the design and implementation of the related internal control; (b) obtain an assessment of the asset impairment indicators which are assessed by the Group and based on each cash-generating unit; (c) assess the reasonability of the sales growth rate and profit margin which management used to estimate the recoverable amount of the cash-generating units to which the relevant assets belong; and (d) inspect whether the future cash flows are forecasted upon recent operating conditions, historical trends and industry overviews and whether the information and data used in the estimations are up to date.

Valuation of Inventory

The description of key audit matter:

As of December 31, 2018, the carrying amount of inventory was NT$10,810,362 thousand (less the allowance for inventory valuation and obsolescence losses of NT$638,914 thousand), which accounted for 13% of the Group's total assets. The Group is mainly engaged in the business of developing, manufacturing and selling touch modules and related products. As the touch modules industry is characterized by rapid change in technology, as well as short life cycles for the related products, in this regard, the risk surrounding the write-down of slow moving and obsolete inventory is higher. Based on the aging of inventories, the net realizable value of the Group's products, the related sales status and the changes in the market, the Group evaluated and recognized losses related to the write-down of slow moving and obsolete inventory monthly. Since such valuation of inventory requires significant judgment from management, the valuation of inventory has been identified as a key audit matter.

Refer to Notes 4 (g), 5 (f) and 13 to the Group's consolidated financial statements for details of the related accounting policy and the relevant information about inventory.

Corresponding audit procedures:

As for the evaluation of losses related to the write-down of slow moving and obsolete inventory, after first gaining familiarity with the industry characteristics to which the Group belongs, we obtained an understanding of the reasonability of the Group's policy for the provision for obsolete inventory and inventory whose carrying amount was lower than the net realizable value, and we randomly inspected inventory aging and performed our own calculation to verify whether the loss recognized adhered to the Group's provision policy.

In addition, at the end of the year, we performed an inventory observation and random counting to understand the inventory status and evaluate the appropriateness of the loss of obsolete and damaged inventory.

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

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

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

Those charged with governance, including the audit committee, are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

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

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

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

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

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

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

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2018 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Tzu-Jung Kuo and Cheng-Hung Kuo.

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 20, 2019

Notice to Readers

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

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

TPK HOLDING CO., LTD. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018		2017	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS (Note 4)				
Cash and cash equivalents (Notes 3, 4 and 6)	$ 17,063,897	20	$ 19,402,405	23
Financial assets at fair value through profit or loss - current (Notes 3, 4 and 7)	44,275	-	1,569	-
Financial assets at fair value through other comprehensive income - current (Notes 3, 4 and 8)	100,000	-	-	-
Financial assets at amortized cost - current (Notes 3, 4, 9, 35 and 37)	4,128,958	5	-	-
Debt investments with no active market - current (Notes 3, 4, 11, 35 and 37)	-	-	5,534,570	7
Notes and trade receivable, net (Notes 3, 4, 5, 12, 35 and 36)	10,452,126	13	5,331,144	7
Other receivables, net (Notes 3, 4, 5, 12, 35 and 36)	2,752,599	3	6,971,326	8
Current tax assets (Notes 4 and 28)	6,025	-	7,849	-
Inventories (Notes 4, 5 and 13)	10,810,362	13	7,297,858	9
Other current assets (Notes 3, 4 and 19)	181,171	-	133,356	-
Total current assets	45,539,413	54	44,680,077	54
NON-CURRENT ASSETS				
Financial assets at fair value through other comprehensive income - non-current (Notes 3, 4, 8, 14 and 31)	158,932	-	-	-
Financial assets measured at cost - non-current (Notes 3, 4, 10, 14 and 31)	-	-	255,545	-
Property, plant and equipment (Notes 4, 5, 16, 36 and 37)	33,237,605	40	32,994,649	40
Investment properties (Notes 4, 5 and 17)	121,281	-	474,172	1
Intangible assets (Notes 4, 5 and 18)	111,225	-	92,372	-
Deferred tax assets (Notes 4, 5 and 28)	2,455,497	3	1,979,654	2
Prepayments for equipment	1,149,996	2	1,216,469	2
Refundable deposits (Notes 3, 33 and 36)	153,839	-	168,335	-
Long-term prepayments for leases (Notes 3, 4 and 19)	1,039,450	1	1,116,519	1
Other non-current assets	367	-	520	-
Total non-current assets	38,428,192	46	38,298,235	46
TOTAL	$ 83,967,605	100	$ 82,978,312	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES (Note 4)				
Short-term borrowings (Notes 20, 35 and 36)	$ 5,208,695	6	$ 6,459,342	8
Financial liabilities at fair value through profit or loss - current (Notes 4, 7 and 21)	40,327	-	203,536	-
Notes and trade payable (Note 36)	19,418,432	23	18,513,499	22
Payables for purchase of equipment (Notes 22 and 36)	2,140,489	3	1,910,623	2
Other payables - others (Notes 22, 27 and 36)	2,664,452	3	2,916,009	4
Current tax liabilities (Notes 4 and 28)	128,734	-	372,887	-
Provisions - current (Notes 4, 5, 13 and 23)	1,749,927	2	1,223,299	2
Current portion of long-term borrowings and bonds payable (Notes 4, 20, 21 and 37)	2,822,862	4	7,586,853	9
Other current liabilities	194,808	-	721,769	1
Total current liabilities	34,368,726	41	39,907,817	48
NON-CURRENT LIABILITIES				
Long-term borrowings (Notes 16, 20, 36 and 37)	9,239,237	11	3,500,312	4
Deferred tax liabilities (Notes 4 and 28)	2,768,936	3	2,220,373	3
Net defined benefit liabilities - non-current (Notes 4 and 24)	11,870	-	13,862	-
Guarantee deposits received (Note 33)	15,959	-	164,539	-
Other non-current liabilities (Note 19)	321,168	1	790	-
Total non-current liabilities	12,357,170	15	5,899,876	7
Total liabilities	46,725,896	56	45,807,693	55
EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY (Notes 4, 14, 15, 21, 25, 30 and 32)				
Share capital				
Ordinary shares	4,066,638	5	4,066,638	5
Capital surplus	28,146,706	33	28,073,650	34
Retained earnings				
Legal reserve	3,246,461	4	3,007,586	3
Unappropriated earnings (accumulated deficits)	(833,561)	(1)	573,819	1
Total retained earnings	2,412,900	3	3,581,405	4
Other equity				
Exchange differences on translating foreign operations	2,265,358	3	1,226,002	2
Total equity attributable to owners of the Company	36,891,602	44	36,947,695	45
NON-CONTROLLING INTERESTS	350,107	-	222,924	-
Total equity	37,241,709	44	37,170,619	45
TOTAL	$ 83,967,605	100	$ 82,978,312	100

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

TPK HOLDING CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
OPERATING REVENUE, NET (Notes 4, 26 and 36)	$ 113,481,508	100	$ 107,208,482	100
OPERATING COSTS (Notes 13, 16, 18, 23, 24, 27, 30 and 36)	109,268,955	96	99,673,935	93
GROSS PROFIT	4,212,553	4	7,534,547	7
OPERATING EXPENSES (Notes 4, 12, 16, 18, 24, 27, 30 and 36)				
Selling and marketing expenses	639,589	1	824,372	1
General and administrative expenses	2,793,473	2	3,114,233	3
Research and development expenses	978,503	1	984,973	1
Total operating expenses	4,411,565	4	4,923,578	5
OPERATING INCOME (LOSS)	(199,012)	-	2,610,969	2
NON-OPERATING INCOME AND EXPENSES				
Government grant revenue (Note 4)	621,892	1	617,188	1
Interest income (Notes 4, 27 and 36)	535,529	-	264,257	-
Other income (Notes 27 and 36)	223,015	-	148,884	-
Gain on disposal of investments (Notes 4, 14, 15 and 31)	56,755	-	813,923	1
Gain on financial products at fair value through profit or loss (Notes 4, 7 and 35)	5,282	-	284,701	-
Finance costs (Notes 4, 20, 21 and 27)	(711,590)	(1)	(964,734)	(1)
Foreign exchange loss, net (Notes 4 and 39)	-	-	(419,903)	-
Foreign exchange gain, net (Notes 4 and 39)	85,992	-	-	-
Gain on disposal of financial products (Notes 4 and 21)	131,545	-	-	-
Other losses (Notes 4 and 17)	(53,401)	-	(79,374)	-
Total non-operating income and expenses	895,019	-	664,942	1
PROFIT BEFORE INCOME TAX	696,007	-	3,275,911	3
INCOME TAX EXPENSE (Notes 4 and 28)	331,273	-	889,875	1
NET PROFIT FOR THE YEAR	364,734	-	2,386,036	2

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TPK HOLDING CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
OTHER COMPREHENSIVE INCOME				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Notes 4 and 24)	$ 1,536	-	$ (2,802)	-
Exchange differences arising on translation to presentation currency (Notes 4 and 25)	1,144,623	1	(2,345,409)	(2)
Income tax relating to items that will not be reclassified subsequently to profit or loss (Notes 4 and 28)	-	-	(181)	-
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating foreign operations (Notes 4 and 25)	(106,899)	-	343,006	-
Share of the other comprehensive loss of associates accounted for using the equity method (Notes 4, 15 and 25)	-	-	(9,715)	-
Income tax relating to items that may be reclassified subsequently to profit or loss (Notes 4, 25 and 28)	-	-	7,172	-
Other comprehensive income (loss) for the year, net of income tax	1,039,260	1	(2,007,929)	(2)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 1,403,994	1	$ 378,107	-
NET PROFIT ATTRIBUTABLE TO:				
Owners of the Company	$ 223,832	-	$ 2,404,390	2
Non-controlling interests	140,902	-	(18,354)	-
	$ 364,734	-	$ 2,386,036	2
TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO:				
Owners of the Company	$ 1,264,724	1	$ 394,619	-
Non-controlling interests	139,270	-	(16,512)	-
	$ 1,403,994	1	$ 378,107	-

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TPK HOLDING CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
EARNINGS PER SHARE (Note 29)				
Basic	$ 0.55		$ 6.64	
Diluted	$ 0.55		$ 6.63	

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

TPK HOLDING CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	Equity Attributable to Owners of the Company								
			Retained Earnings		Other Equity				
	Share Capital (Notes 4 and 25)	Capital Surplus (Notes 4, 21, 25, 30 and 32)	Legal Reserve (Note 25)	Unappropriated Earnings (Accumulated Deficits) (Notes 4, 25 and 32)	Exchange Differences on Translating Foreign Operations (Notes 4, 25 and 28)	Treasury Shares (Notes 4, 25 and 30)	Total	Non-controlling Interests (Notes 4, 14, 25 and 32)	Total Equity
BALANCE AT JANUARY 1, 2017	$ 3,466,338	$ 21,537,232	$ 3,952,487	$ (2,772,489)	$ 3,232,790	$ (243,595)	$ 29,172,763	$ 239,436	$ 29,412,199
Legal reserve used to offset accumulated deficits	-	-	(944,901)	944,901	-	-	-	-	-
Issuance of ordinary shares in the form of global depositary receipts	598,200	6,403,732	-	-	-	-	7,001,932	-	7,001,932
Issuance of ordinary shares reserved for employee subscription	1,800	19,566	-	-	-	-	21,366	-	21,366
Net income (loss) for the year ended December 31, 2017	-	-	-	2,404,390	-	-	2,404,390	(18,354)	2,386,036
Other comprehensive income (loss) for the year ended December 31, 2017, net of income tax	-	-	-	(2,983)	(2,006,788)	-	(2,009,771)	1,842	(2,007,929)
Total comprehensive income (loss) for the year ended December 31, 2017	-	-	-	2,401,407	(2,006,788)	-	394,619	(16,512)	378,107
Recognition of employee share options by the Company	-	54,459	-	-	-	-	54,459	-	54,459
Compensation costs of issuance of ordinary shares reserved for employee subscription	-	1,141	-	-	-	-	1,141	-	1,141
Compensation costs of treasury shares transferred to employees	-	90,776	-	-	-	-	90,776	-	90,776
Issuance of ordinary shares under employee share options	300	2,700	-	-	-	-	3,000	-	3,000
Treasury shares transferred to employees	-	(35,956)	-	-	-	243,595	207,639	-	207,639
BALANCE AT DECEMBER 31, 2017	4,066,638	28,073,650	3,007,586	573,819	1,226,002	-	36,947,695	222,924	37,170,619
Appropriation of 2017 earnings									
Legal reserve	-	-	238,875	(238,875)	-	-	-	-	-
Cash dividends distributed by the Company	-	-	-	(1,219,991)	-	-	(1,219,991)	-	(1,219,991)
Net income for the year ended December 31, 2018	-	-	-	223,832	-	-	223,832	140,902	364,734
Other comprehensive income (loss) for the year ended December 31, 2018, net of income tax	-	-	-	1,536	1,039,356	-	1,040,892	(1,632)	1,039,260
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	225,368	1,039,356	-	1,264,724	139,270	1,403,994
Change in equity components of convertible bonds redeemed by the Company	-	(180)	-	-	-	-	(180)	-	(180)
Recognition of employee share options by the Company	-	78,713	-	-	-	-	78,713	-	78,713
Increase in non-controlling interests	-	(5,477)	-	(173,882)	-	-	(179,359)	91,730	(87,629)
Cash dividends distributed by subsidiaries	-	-	-	-	-	-	-	(93,141)	(93,141)
Liquidation and dissolution of subsidiaries	-	-	-	-	-	-	-	(10,676)	(10,676)
BALANCE AT DECEMBER 31, 2018	$ 4,066,638	$ 28,146,706	$ 3,246,461	$ (833,561)	$ 2,265,358	$ -	$ 36,891,602	$ 350,107	$ 37,241,709

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

TPK HOLDING CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax	$ 696,007	$ 3,275,911
Adjustments for:		
Depreciation expenses	7,287,034	8,383,566
Amortization expenses	30,739	41,318
Impairment loss reversed on trade receivables	-	(17,377)
Expected credit loss recognized on trade receivables	9,275	-
Net loss on fair value changes of financial assets and liabilities at fair value through profit or loss	90,656	693
Finance costs	711,590	964,734
Interest income	(535,529)	(264,257)
Compensation costs of employee share options	78,713	146,376
Loss (gain) on disposal of property, plant and equipment	57,484	(195,415)
Loss (gain) on disposal of intangible assets	387	(40)
Gain on disposal of investments	(56,755)	(443,476)
Gain on disposal of associates	-	(370,447)
Impairment loss recognized (reversed) on property, plant and equipment	2,444	(38,225)
(Reversal of) write-downs of inventories	165,218	(565,733)
Gain on redemption of bonds payable	(131,545)	-
Amortization of prepayments for leases	25,422	25,747
Recognition of provisions	860,263	639,198
Changes in operating assets and liabilities		
(Increase) decrease in trade and notes receivable	(5,186,889)	2,322,145
Decrease (increase) in other receivables	4,270,272	(3,705,559)
(Increase) decrease in inventories	(3,720,196)	1,150,587
Increase in other current assets	(54,817)	(24,396)
Increase in notes and trade payable	923,970	6,403,054
(Decrease) increase in other payables	(233,522)	346,863
Decrease in provisions	(377,848)	(442,021)
(Decrease) increase in other current liabilities	(520,301)	367,724
Decrease in net defined benefit liabilities	(456)	(709)
Cash generated from operations	4,391,616	18,000,261
Interest received	463,632	267,446
Income tax paid	(500,881)	(523,983)
Net cash generated from operating activities	4,354,367	17,743,724
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from sale of financial assets at amortized cost	1,405,612	-
Increase in debt investments with no active market	-	(4,147,713)
Net cash inflow on disposal of financial assets measured at cost	-	11
Net cash inflow on disposal of associates	-	567,529
Net cash inflow on disposal of subsidiaries	215,963	1,098,885
Net cash outflow on dissolution of subsidiaries	(10,671)	-

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TPK HOLDING CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
Payments for property, plant and equipment	$ (114,332)	$ (202,688)
Proceeds from disposal of property, plant and equipment	127,359	1,075,686
Decrease (increase) in refundable deposits	1,432	(112,697)
Payments for intangible assets	(55,190)	(10,255)
Proceeds from disposal of intangible assets	28	488
Decrease (increase) in other assets	153	(375)
Increase in prepayments for equipment	(5,934,618)	(3,364,796)
Decrease (increase) in long-term prepayments for leases	84,983	(155,648)
Net cash used in investing activities	(4,279,281)	(5,251,573)
CASH FLOWS FROM FINANCING ACTIVITIES		
Decrease in short-term borrowings	(1,434,039)	(20,002,522)
Repayments of bond payables	(6,310,297)	(2,293,072)
Proceeds from long-term borrowings	10,696,246	4,772,501
Repayments of long-term borrowings	(3,648,266)	(2,424,602)
Proceeds from (refund of) guarantee deposits received	(148,579)	162,433
Increase (decrease) in other liabilities	321,058	(326)
Dividends paid to owners of the Company	(1,219,991)	-
Proceeds from issuance of ordinary shares	-	7,023,298
Proceeds from exercise of employee share options	-	3,000
Proceeds from treasury shares transferred to employees	-	207,639
Interest paid	(684,664)	(829,164)
Decrease in non-controlling interests	(180,770)	-
Net cash used in financing activities	(2,609,302)	(13,380,815)
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES	195,708	(199,010)
NET DECREASE IN CASH AND CASH EQUIVALENTS	(2,338,508)	(1,087,674)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	19,402,405	20,490,079
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 17,063,897	$ 19,402,405

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

TPK HOLDING CO., LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

TPK Holding Co., Ltd. (the "Company") was incorporated as a limited company under the provisions of the Company Law of the Cayman Islands on November 21, 2005.

The Company and its subsidiaries (collectively referred to as the "Group") are mainly engaged in the business of developing, manufacturing and selling touch modules, touch display and indium tin oxide (ITO) glass-related products.

The Company's shares have been listed on the Taiwan Stock Exchange since October 29, 2010.

The functional currency of the Company is US dollars. For greater comparability and consistency of financial reporting, the consolidated financial statements are presented in New Taiwan dollars since the Company's shares are listed on the Taiwan Stock Exchange.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the board of directors on February 20, 2019.

3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

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

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

   IFRS 9 "Financial Instruments" and related amendments

   IFRS 9 supersedes IAS 39 "Financial Instruments: Recognition and Measurement", with consequential amendments to IFRS 7 "Financial Instruments: Disclosures" and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Refer to Note 4 for information relating to the relevant accounting policies.

   The requirements for classification, measurement and impairment of financial assets and hedging cost have been applied retrospectively starting from January 1, 2018, and the other requirements for hedge accounting have been applied prospectively. IFRS 9 is not applicable to items that have already been derecognized as of December 31, 2017.

Classification, measurement and impairment of financial assets

On the basis of the facts and circumstances that existed as of January 1, 2018, the Group has performed an assessment of the classification of recognized financial assets and has elected not to restate prior reporting periods.

The following table shows the original measurement categories and carrying amount under IAS 39 and the new measurement categories and carrying amount under IFRS 9 for each class of the Group's financial assets and financial liabilities as of January 1, 2018.

	Measurement Category		Carrying Amount		
Financial Assets	**IAS 39**	**IFRS 9**	**IAS 39**	**IFRS 9**	**Remark**
Cash and cash equivalents	Loans and receivables	Amortized cost	$ 19,402,405	$ 19,402,405	1)
Derivatives	Held-for-trading	Mandatorily at fair value through profit or loss (i.e. FVTPL)	1,569	1,569	
Equity securities	Available-for-sale	Fair value through other comprehensive income (i.e. FVTOCI) - equity instruments	255,545	255,545	2)
Restricted bank deposits	Loans and receivables	Amortized cost	443	443	1)
Notes receivable, trade receivables and other receivables	Loans and receivables	Amortized cost	12,302,470	12,302,470	1)
Financial products	Loans and receivables	Amortized cost	5,534,127	5,534,127	3)
Refundable deposits	Loans and receivables	Amortized cost	168,335	168,335	1)

Financial Assets	IAS 39 Carrying Amount as of January 1, 2018	Reclassifications	Remeasurements	IFRS 9 Carrying Amount as of January 1, 2018	Retained Earnings Effect on January 1, 2018	Other Equity Effect on January 1, 2018	Remark
FVTPL							
Derivatives	$ 1,569	$ -	$ -	$ 1,569	$ -	$ -	
FVTOCI	-	-	-	-	-	-	
Equity instruments							
Add: Reclassification from available-for-sale (IAS 39)	-	255,545	-	255,545	-	-	2)
	-	255,545	-	255,545	-	-	
Amortized cost	-	-	-	-	-	-	
Add: Reclassification from loans and receivables (IAS 39)	-	37,407,780	-	37,407,780	-	-	1) and 3)
	-	37,407,780	-	37,407,780	-	-	
	$ -	$ 37,664,894	$ -	$ 37,664,894	$ -	$ -	

1) Cash and cash equivalents, restricted bank deposits, notes receivable, trade receivables and other receivables that were previously classified as loans and receivables under IAS 39 are classified as at amortized cost with an assessment of expected credit losses under IFRS 9.

2) The Group elected to designate all its investments in equity securities previously classified as available-for-sale under IAS 39 as at FVTOCI under IFRS 9, because these investments are not held for trading.

   Investments in unlisted shares previously measured at cost under IAS 39 have been designated at FVTOCI under IFRS 9 and were remeasured at fair value.

3) Financial products previously classified as debt investments with no active market under IAS 39 are classified as at amortized cost with an assessment of expected credit losses under IFRS 9, because on January 1, 2018, the contractual cash flows were solely payments of principal and interest on the principal outstanding and these investments were held within a business model whose objective is to collect contractual cash flows.

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed by the FSC for application starting from 2019

New, Amended or Revised Standards and Interpretations (the "New IFRSs")	Effective Date Announced by IASB (Note 1)
Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019 (Note 2)
IFRS 16 "Leases"	January 1, 2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	January 1, 2019 (Note 3)
Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"	January 1, 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	January 1, 2019

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.

Note 3: The Group shall apply these amendments to plan amendments, curtailments or settlements occurring on or after January 1, 2019.

1) IFRS 16 "Leases"

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

Definition of a lease

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

The Group as lessee

Upon initial application of IFRS 16, the Group will recognize right-of-use assets, or investment properties if the right-of-use assets meet the definition of investment properties, and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value asset and short-term leases will be recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Group will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal and interest portion of lease liabilities will be classified within financing activities. Currently, payments under operating lease contracts are recognized as expenses on a straight-line basis. Prepaid lease payments for land use rights of land located in China are recognized as prepayments for leases. Cash flows for operating leases are classified within operating activities on the consolidated statements of cash flows.

The Group anticipates applying IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized on January 1, 2019. Comparative information will not be restated.

Except for the leases of investment properties mentioned below, lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases with the application of IAS 17. Lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at an amount equal to the lease liabilities, adjusted by the amount of any prepaid lease payments. The Group will apply IAS 36 to all right-of-use assets.

The Group expects to apply the following practical expedients:

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

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

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

d) The Group will use hindsight, such as in determining lease terms, to measure lease liabilities.

The Group as lessor

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

Anticipated impact on assets, liabilities and equity

	Carrying Amount as of December 31, 2018	**Adjustments Arising from Initial Application**	**Adjusted Carrying Amount as of January 1, 2019**
Prepayments for leases - non-current (recognized as long-term prepayments for leases)	$ 1,039,450	$ (1,039,450)	$ -
Right-of-use assets	-	2,551,422	2,551,422
Investment properties	121,281	9,668	130,949
Total effect on assets	$ 1,160,731	$ 1,521,640	$ 2,682,371
Lease liabilities - current	$ -	$ 253,322	$ 253,322
Lease liabilities - non-current	-	1,268,318	1,268,318
Total effect on liabilities	$ -	$ 1,521,640	$ 1,521,640

Except for the above impact, as of the date the consolidated financial statements were authorized for issue, the Group has assessed that the application of other standards and interpretations will not have a significant influence on the Group's financial position and financial performance.

c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

New IFRSs	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3 “Definition of a Business”	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between An Investor and Its Associate or Joint Venture”	To be determined by IASB
IFRS 17 “Insurance Contracts”	January 1, 2021
Amendments to IAS 1 and IAS 8 “Definition of Material”	January 1, 2020 (Note 3)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Group shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

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

Except for the above impact, as of the date the consolidated financial statements were authorized for issue, the Group has assessed that the application of other standards and interpretations will not have a significant influence on the Group’s financial position and financial performance.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Statement of compliance

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

b. Basis of preparation

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

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

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

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

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

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

Current assets include:

1) Assets held primarily for the purpose of trading;

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

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

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

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

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

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

d. Basis of consolidation

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

Income and expenses of subsidiaries acquired or disposed of during the reporting period are included in the consolidated statement of profit or loss and other comprehensive income from the effective dates of such acquisitions up to the effective dates of disposals, as appropriate.

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

All intra-group transactions, balances, income and expenses are eliminated in full upon consolidation. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

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

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

Before 2018, the fair value of any investment retained in a former subsidiary at the date when control is lost is regarded as the fair value on initial recognition of available-for-sale financial assets. Starting from 2018, the fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition of financial assets at fair value through other comprehensive income.

See Note 14, Table 6 and Table 7 following the Notes to Consolidated Financial Statements for detailed information on subsidiaries (including the percentages of ownership and main businesses).

e. Business combinations

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

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

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured at the non-controlling interests' proportionate share of recognized amounts of the acquiree's identifiable net assets. Other types of non-controlling interests are measured at fair value.

Business combinations involving entities under common control are not accounted for by the acquisition method. In preparing the consolidated financial statements, the balance of the difference between the investment cost generated from the acquisition of the acquiree's interests and the net assets is analyzed and dealt with in the way which was initially performed at the acquisition date.

f. Foreign currencies

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

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

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates at the date of the transaction.

For the purpose of presenting consolidated financial statements, the functional currencies of the Company and the group entities (including subsidiaries, associates and branches in other countries that use currencies which are different from the currency of the Company) are translated into the presentation currency, the New Taiwan dollar, as follows. Income and expense items are translated at the average exchange rates for the reporting period. The resulting currency translation differences are recognized in other comprehensive income attributed to the owners of the Company and non-controlling interests as appropriate. The exchange differences accumulated in equity which resulted from the translation of the assets and liabilities of the group entities into the presentation currency are not subsequently reclassified to profit or loss.

On the disposal of a foreign operation (i.e. a disposal of the Group's entire interest in a foreign operation, or a disposal involving the loss of control over a subsidiary that includes a foreign operation, or a partial disposal of an interest in an associate that includes a foreign operation of which the retained interest becomes a financial asset), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In relation to a partial disposal of a subsidiary that does not result in the Company losing control over the subsidiary, the proportionate share of accumulated exchange differences is re-attributed to the non-controlling interests of the subsidiary and is not recognized in profit or loss. For all other partial disposals, the proportionate share of accumulated exchange differences recognized in other comprehensive income is reclassified to profit or loss.

Goodwill and fair value adjustments on identifiable assets and liabilities acquired arising from the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognized in other comprehensive income.

g. Inventories

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

h. Investments in associates

An associate is an entity over which the Group has significant influence and that is not a subsidiary.

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

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

Any excess of the cost of an acquisition over the Group's share of net fair value of the identifiable assets and liabilities of an associate at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Group's share of net fair value of the identifiable assets and liabilities over the cost of the acquisition, after reassessment, is recognized immediately in profit or loss.

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

When the Group's share of losses of an associate equals or exceeds its interest in that associate (which includes any carrying amount of the investment accounted for using the equity method and long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Group has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

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

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

When a group entity transacts with its associate, profits and losses resulting from the transactions with the associate are recognized in the Group's consolidated financial statements only to the extent that interests in the associate are not related to the Group.

i. Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment loss.

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

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

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

j. Investment properties

Investment properties are properties held to earn rentals and or for capital appreciation.

Investment properties are initially measured at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

On derecognition of an investment property, the difference between the net disposal proceeds and the carrying amount of the asset is included in profit or loss

k. Goodwill (recognized as intangible assets)

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

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

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

If goodwill has been allocated to a cash-generating unit and the entity disposes of an operation within that unit, the goodwill associated with the operation which is disposed of is included in the carrying amount of the operation when determining the gain or loss.

l. Intangible assets

1) Intangible assets acquired separately

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

2) Intangible assets acquired in a business combination

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

3) Derecognition of intangible assets

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

m. Impairment of tangible and intangible assets other than goodwill

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

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

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

n. Financial instruments

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

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

1) Financial assets

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

a) Measurement categories

2018

Financial assets are classified into the following categories: Financial assets at FVTPL, financial assets at amortized cost and investments in debt instruments and equity instruments at FVTOCI.

i. Financial assets at FVTPL

Financial assets are classified as at FVTPL when such a financial asset is mandatorily classified or designated as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI and debt instruments that do not meet the amortized cost criteria or the FVTOCI criteria.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 35.

ii. Financial assets at amortized cost

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

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

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

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

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such a financial asset, except for:

i) Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such financial assets; and

ii) Financial assets that are not credit-impaired on purchase or origination but have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets in subsequent reporting periods.

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

iii. Investments in debt instruments at FVTOCI

Debt instruments that meet the following conditions are subsequently measured at FVTOCI:

i) The debt instrument is held within a business model whose objective is achieved by both the collecting of contractual cash flows and the selling of such financial assets; and

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

Investments in debt instruments at FVTOCI are subsequently measured at fair value. Changes in the carrying amounts of these debt instruments relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and impairment losses or reversals are recognized in profit or loss. Other changes in the carrying amount of these debt instruments are recognized in other comprehensive income and will be reclassified to profit or loss when the investment is disposed of.

iv. Investments in equity instruments at FVTOCI

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

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

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

2017

Financial assets are classified into the following categories: Financial assets at FVTPL, available-for-sale financial assets and loans and receivables.

i. Financial assets at FVTPL

Financial assets are classified as at FVTPL when such financial assets are either held for trading or designated as at FVTPL.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 35.

ii. Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives that are either designated as available-for-sale or are not classified as loans and receivables, held-to-maturity investments or financial assets at FVTPL.

Available-for-sale financial assets are measured at fair value. Changes in the carrying amounts of available-for-sale monetary financial assets (relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on available-for-sale equity investments) are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income and will be reclassified to profit or loss when such investments are disposed of or are determined to be impaired.

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

Available-for-sale equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity investments are measured at cost less any identified impairment loss at the end of each reporting period and presented as a separate line item as financial assets measured at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between the carrying amount and the fair value of such financial assets is recognized in other comprehensive income. Any impairment losses are recognized in profit and loss.

iii. Loans and receivables

Loans and receivables (including trade receivables, other receivables, cash and cash equivalents and debt investments with no active market) are measured at amortized cost using the effective interest method, less any impairment, except for short-term receivables when the effect of discounting is immaterial.

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

b) Impairment of financial assets and contract assets

2018

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables) and investments in debt instruments that are measured at FVTOCI.

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

Expected credit losses reflect the weighted average of credit losses with the respective risks of default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of such a financial asset.

2017

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

Financial assets at amortized cost, such as trade receivables and other receivables or debt investments with no active market, are assessed for impairment on a collective basis even if they were assessed not to be impaired individually. Objective evidence of impairment for a portfolio of receivables could include the Group’s past experience with collecting payments, as well as observable changes in national or local economic conditions that correlate with defaults on receivables.

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

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

For all other financial assets, objective evidence of impairment could include significant financial difficulty of the issuer or counterparty, breach of contract such as a default or delinquency in interest or principal payments, it becoming probable that the borrower will enter bankruptcy or financial re-organization, or the disappearance of an active market for those financial assets because of financial difficulties.

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

The carrying amount of a financial asset is reduced by the impairment loss directly for all financial assets, with the exception of trade receivables and other receivables, where the carrying amount is reduced through the use of an allowance account. When trade receivables and other receivables are considered uncollectible, they are written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible trade receivables and other receivables that are written off against the allowance account.

c) Derecognition of financial assets

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

Before 2018, on derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. Starting from 2018, on derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. However, on derecognition of an investment in an equity instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss, and the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

2) Equity instruments

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

Equity instruments issued by a group entity are recognized at the proceeds received, net of direct issue costs.

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

3) Financial liabilities

a) Subsequent measurement

Except for financial liabilities at FVTPL, all financial liabilities are measured at amortized cost using the effective interest method.

Financial liabilities are classified as at FVTPL when such financial liabilities are held for trading.

Financial liabilities held for trading are stated at fair value, with any gain or loss arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any interest or dividends paid on the financial liabilities. Fair value is determined in the manner described in Note 35.

b) Derecognition of financial liabilities

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

4) Convertible bonds

The component parts of compound instruments (i.e. convertible bonds) issued by the Group are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

On initial recognition, the fair value of the liability component is estimated using the prevailing market interest rate for similar non-convertible instruments. This amount is recorded as a liability on an amortized cost basis using the effective interest method until extinguished upon conversion or the instrument's maturity date. Any embedded derivative liability is measured at fair value.

The conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised, in which case, the balance recognized in equity will be transferred to capital surplus - share premium. When the conversion option remains unexercised at maturity, the balance recognized in equity will be transferred to capital surplus - share premium.

Transaction costs that relate to the issuance of the convertible notes are allocated to the liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to the equity component are recognized directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component.

5) Derivative financial instruments

The Group enters into derivative financial instruments, such as foreign exchange forward contracts, to manage its exposure to foreign currency exchange rate and interest rate risks.

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

Before 2018, derivatives embedded in non-derivative host contracts were treated as separate derivatives when they met the definition of a derivative; their risks and characteristics were not closely related to those of the host contracts; and the contracts were not measured at FVTPL. Starting from 2018, derivatives embedded in hybrid contracts that contain financial asset hosts that is within the scope of IFRS 9 are not separated; instead, the classification is determined in accordance with the entire hybrid contract. Derivatives embedded in non-derivative host contracts that are not financial assets that is within the scope of IFRS 9 (e.g. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative; their risks and characteristics are not closely related to those of the host contracts; and the host contracts are not measured at FVTPL.

o. Provisions

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

1) Onerous contracts

Provisions for onerous contracts arise where the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract. The present obligations arising under onerous contracts are recognized and measured as provisions.

2) Warranties

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

p. Revenue recognition

2018

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

Revenue from the sale of goods comes from sales of touch modules, touch display and ITO glass-related products. Sales of touch modules, touch display and ITO glass-related products are recognized as revenue when the goods are delivered to the customer's specific location or the goods are shipped because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility for sales to future customers and bears the risks of obsolescence. Trade receivables are recognized concurrently.

The Group does not recognize sales revenue on materials delivered to subcontractors because this delivery does not involve a transfer of risks and rewards of material ownership.

2017

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. An allowance for sales returns and liability for returns are recognized at the time of sale based on the seller's reliable estimate of future returns and based on past experience and other relevant factors.

1) Revenue from the sale of goods

Revenue from the sale of goods is recognized when all the following conditions are satisfied:

a) The Group has transferred to the buyer the significant risks and rewards of ownership of the goods;

b) The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;

c) The amount of revenue can be measured reliably;

d) It is probable that the economic benefits associated with the transaction will flow to the Group; and

e) The costs incurred or to be incurred in respect of the transaction can be measured reliably.

The Group does not recognize sales revenue on materials delivered to subcontractors because this delivery does not involve a transfer of risks and rewards of materials ownership.

2) Revenue from rendering of services

Service income is recognized when services are provided.

3) Royalty revenue

Royalty revenue is recognized on an accrual basis in accordance with the substance of the relevant agreement and provided that it is probable that the economic benefits will flow to the Group and that the amount of revenue can be measured reliably. Royalties determined on a time basis are recognized on a straight-line basis over the period of the agreement.

4) Interest income

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued on a time basis by reference to the principal outstanding and at the applicable effective interest rate.

q. Leasing

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

1) The Group as lessor

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

2) The Group as lessee

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

r. Borrowing costs

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

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

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

s. Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attached to them and that the grants will be received.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

t. Employee benefits

1) Short-term employee benefits

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

2) Retirement benefits

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

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

The net defined benefit liability represents the actual deficit in the Group's defined benefit plans.

u. Employee share options

Equity-settled share-based payment arrangements and employee share options granted to employees are measured at the fair value of the equity instruments at their grant dates.

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

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

v. Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

1) Current tax

For the subsidiaries incorporated in the territory of the Republic of China, according to the Income Tax Law, an additional tax of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain earnings.

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

2) Deferred tax

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

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, unused loss carryforwards and unused tax credits for purchases of machinery, equipment and technology and expenditures on research, development and personnel training to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

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

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

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

3) Current and deferred taxes for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income, in which case, the current and deferred taxes are also recognized in other comprehensive income. Where current taxes or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

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

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

a. Impairment test for tangible assets and intangible assets (excluding goodwill)

In the process of evaluating impairment of assets, the management is required to make subjective judgments in determining the independent cash flows, useful lives, expected future revenue and expenses related to specific asset groups while taking into consideration the nature of the industry. Furthermore, any changes in such estimations resulting from changes in economic conditions or the Company's strategy could possibly lead to a material impairment loss in future periods.

For the year ended December 31, 2018, the Group recognized an impairment loss on tangible and intangible assets in the amount of $2,444 thousand. For the year ended December 31, 2017, the Group recognized a reversal of impairment loss on tangible and intangible assets in the amount of $38,225 thousand.

b. Impairment of goodwill

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

The carrying amount of goodwill as of December 31, 2018 and 2017 was disclosed in Note 18.

c. Income tax

As of December 31, 2018 and 2017, no deferred tax asset has been recognized on the tax loss of $24,323,588 thousand and $22,504,102 thousand, respectively, due to the unpredictability of future profit streams. The realizability of deferred tax assets mainly depends on whether sufficient future profits or taxable temporary differences will be available. In cases where the actual future profits generated are less than expected, a material reversal of deferred tax assets may arise, which would be recognized in profit or loss for the period in which such a reversal takes place.

The details of unused tax losses as of December 31, 2018 and 2017 are described in Note 28.

d. Estimated impairment of financial assets - 2018

The provision for impairment of trade receivables and investments in debt instruments is based on assumptions about risk of default and expected loss rates. The Group uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Group's historical experience, existing market conditions as well as forward looking estimates as of the end of each reporting period. For details of the key assumptions and inputs used, see Note 12. Where the actual future cash inflows are less than expected, a material impairment loss may arise.

The carrying amounts of accounts receivable and other receivables as of December 31, 2018 were disclosed in Note 12.

e. Estimated impairment of accounts receivables and other receivables - 2017

When there is objective evidence of impairment loss on receivables, the Group takes into consideration the estimation of the future cash flows. The amount of the impairment loss is measured as the difference between such an asset's carrying amount and the present value of its estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. Where the actual future cash flows are less than expected, a material impairment loss may arise.

The carrying amounts of accounts receivable and other receivables as of December 31, 2017 were disclosed in Note 12.

f. Write-downs of inventories

The net realizable value of inventory is the estimated selling price in the ordinary course of business less the estimated costs of completion and disposal. The estimation of net realizable value is based on current market conditions and historical experience with product sales of a similar nature. Changes in market conditions may have a material impact on the estimation of the net realizable value.

The carrying amounts of inventories as of December 31, 2018 and 2017 are disclosed in Note 13.

g. Useful lives of property, plant and equipment

As described in Note 4(i), the Group reviews the estimated useful lives of property, plant and equipment at each balance sheet date. No changes in the estimated useful lives of property, plant, and equipment occurred for the years ended December 31, 2018 and 2017.

h. Estimated provisions

Provisions are present obligations arising as a result of past events. Based on the past experience, the Group recognized the estimated expenditures for settling such obligations as provisions. The Group has a variety of provisions, including onerous contracts and warranties. The carrying amounts of provisions as of December 31, 2018 and 2017 are disclosed in Note 23.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2018	**2017**
Cash on hand	$ 941	$ 1,335
Checking accounts and demand deposits	8,292,372	12,001,439
Cash equivalents		
Time deposits with original maturities of less than three months	8,770,584	7,399,631
	$ 17,063,897	$ 19,402,405

Interest rates for deposits in the bank on the balance sheet date were as follows:

	December 31	
	2018	**2017**
Deposits	0%-3.70%	0%-2.50%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31 2018	December 31 2017
Financial assets at FVTPL - current		
Financial assets mandatorily classified as at FVTPL		
Derivative financial assets (not under hedge accounting)		
Foreign exchange forward contracts	$ 44,275	$ -
Financial assets held for trading		
Derivative financial assets (not under hedge accounting)		
Foreign exchange forward contracts	-	1,569
	$ 44,275	$ 1,569
Financial liabilities at FVTPL - current		
Financial liabilities held for trading		
Derivative financial liabilities (not under hedge accounting)		
Foreign exchange option contracts	$ 40,327	$ -
Redemption options and put options of convertible bonds	-	203,536
	$ 40,327	$ 203,536

At the end of the reporting period, outstanding foreign exchange forward contracts not under hedge accounting were as follows:

	Currency	Maturity Date	Notional Amount (In Thousands)
December 31, 2018			
Sell USD/Buy RMB	USD/RMB	April 19, 2019	USD100,000/RMB700,700
December 31, 2017			
Sell USD/Buy RMB	USD/RMB	March 30, 2018	USD20,000/RMB131,800

At the end of the reporting period, outstanding foreign exchange option contracts not under hedge accounting were as follows (as of December 31, 2017: None):

	Currency	Maturity Date	Notional Amount (In Thousands)
December 31, 2018			
Foreign exchange option portfolio		April 17, 2019	
Call option	USD/RMB		USD50,000/RMB349,000
Put option	RMB/USD		RMB348,900/USD50,000
Foreign exchange option portfolio		April 17, 2019	
Call option	USD/RMB		USD50,000/RMB349,350
Put option	RMB/USD		RMB349,250/USD50,000

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

Gains and losses on structured deposit, foreign exchange forward contracts, foreign exchange option contracts and redemption options and put options of convertible bonds for the years ended December 31, 2018 and 2017 were as follows:

	For the Year Ended December 31	
	2018	2017
Foreign exchange forward contracts gain	$ 60,339	$ 287,205
Foreign exchange option contracts gain	40,485	-
Redemption options and put options of convertible bonds loss	(95,542)	(2,559)
Structured deposit	-	55
	$ 5,282	$ 284,701

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - 2018

	December 31, 2018
Investments in equity instruments at FVTOCI	
Current	
Domestic unlisted ordinary shares	
Kingyoup Optronics Co., Ltd. Ordinary shares ("KYO")	$ 100,000
Non-current	
Overseas unlisted ordinary shares	
Kingyoup Optronics Co., Ltd. Ordinary shares ("KYO")	$ 50,000
Jin Shun Xin Development (Pingtan) Co., Ltd. ("JSX")	108,932
	$ 158,932

The Group acquired ordinary shares of KYO and JSX for medium to long-term strategic purposes. Therefore, the management elected to designate these investments in equity instruments as at FVTOCI.

In June 2014, the Group acquired 16.57% equity shares of KYO for $150,000 thousand. According to the investment contract, if KYO cannot complete the initial public offering process in 5 years after the Group acquired the equity shares of KYO, the Group will request the original shareholder to buy back equity shares at the originally acquired price in June 2019, December 2019 and June 2020, separately. Hence, these investments in equity instruments are classified as financial assets at FVTOCI - current and non-current.

These investments in equity instruments were classified as available-for-sale under IAS 39. Refer to Note 3 and Note 10 for information relating to their reclassification and comparative information for 2017.

9. FINANCIAL ASSETS AT AMORTIZED COST - 2018

	December 31, 2018
Current	
Financial products	$ 2,720,908
Restricted bank deposits	210,165
Time deposits with original maturity of more than 3 months	1,197,885
	$ 4,128,958

Financial products were trade from the bank by subsidiaries. As of December 31, 2018 the relevant product details were as follows:

	December 31, 2018
Annual return rates	3.70%-5.53%
Maturity dates	January 10, 2019 - September 18, 2019

The Group's policy is to invest short-term financial products that have low credit risk. The Group assessed the impact of credit risk to principal and interest of financial products by understanding the final underlying asset of financial products and the value of collateral. After assessment, the credit risk of financial products is low, therefore, there is no allowance for impairment loss recognized on financial products.

The interest rates for time deposits with original maturity of more than 3 months were from 3.05763% to 3.089% as at the end of the reporting period. The interest rates for restricted bank deposits were from 0.05% to 0.35% as at the end of the reporting period. Restricted bank deposits are mainly in use as guarantees to banks and for payments of tariffs from importing raw materials.

Investments above were classified as debt investments with no active market under IAS 39. Refer to Note 3 and Note 11 for information relating to their reclassification and comparative information for 2017.

Refer to Note 37 for information relating to investments in financial assets at amortized cost pledged as security.

10. FINANCIAL ASSETS MEASURED AT COST - NON-CURRENT - 2017

	December 31, 2017
Domestic unlisted ordinary shares	$ 150,000
Overseas unlisted ordinary shares	105,545
	$ 255,545
Classified according to financial asset measurement categories	
Available-for-sale financial assets	$ 255,545

Due to the fact that the demands of the market did not meet expectations and the cost structure was not competitive enough, the operations of Hallys Corporation ("Hallys"), a subsidiary of CIM Corporation ("CIM"), still had no improvement. On August 24, 2015, TPK Universal Solutions Limited ("TPK HK"), a subsidiary of the Company, sold its equity interest in CIM at the price of its initial acquisition cost, and the ownership percentage of TPK HK in CIM declined from 80% to 0.08%. Because the Group has lost control over this subsidiary, any investment retained in the former subsidiary was reclassified to financial assets measured at cost - non-current. In addition, the Company signed an agreement on claims and liabilities and a supplemental agreement with CIM and Hallys (collectively, the "Hallys Group") to approve TPK HK selling its remaining 0.08% interest in CIM at the price of JPY41 thousand to Palladisio Capital Asia Limited ("Palladisio") on May 12, 2017. The sale proceeds were received on June 14, 2017. Refer to Note 12 for more information.

As the industry of JSX is not the core business of the Company, at January 26, 2017, the Company's board of directors resolved to sell its interest in JSX to Ruei-Shin Investment (Pingtan) Co., Ltd. in order to concentrate and utilize the Company's limited resources. In March 2017, TPKP sold 91% of its interest in JSX at the price of RMB246,192 thousand, and TPKP's percentage of ownership decreased from 100% to 9% aftermath. Since the Group has lost control over JSX, any investment retained in JSX was reclassified to financial assets measured at cost - non-current. Refer to Note 31 for information related to the disposal of the subsidiary.

Management believed that the fair values of the above unlisted equity investments held by the Group cannot be reliably measured due to the significant range of reasonable fair value estimates; therefore, such fair values were measured at cost at the end of reporting period.

11. DEBT INVESTMENTS WITH NO ACTIVE MARKET - 2017

	December 31, 2017
Current	
Financial products	$ 5,534,127
Restricted bank deposits	443
	$ 5,534,570

Financial products were trade from the bank by subsidiaries. As of December 31, 2017 the relevant product details were as follows:

	December 31, 2017
Annual return rates	2.00%-5.70%
Maturity dates	January 8, 2018 - August 13, 2018

As of December 31, 2017, the market interest rates of the time deposits with original maturities more than 3 months was 0.30%-0.96%. Restricted bank deposits are mainly in use as guarantees to banks and for payments of tariffs from importing raw materials. Refer to Note 37 for information relating to debt investments with no active market pledged as security.

12. NOTES RECEIVABLE, TRADE RECEIVABLES AND OTHER RECEIVABLES

	December 31	
	2018	2017
Notes and trade receivable (a)		
At amortized cost		
Notes receivable	$ 6,345	$ 785
Trade receivables	8,470,691	5,340,657
	8,477,036	5,341,442
Less: Allowance for impairment loss	(824)	(10,298)
	8,476,212	5,331,144
At FVTOCI	1,975,914	-
	$ 10,452,126	$ 5,331,144
Other receivables (b)		
At amortized cost		
Tax refund receivable	$ 336,926	$ 530,977
Factored but unused receivables	-	6,294,573
Others	255,089	208,508
	592,015	7,034,058
Less: Allowance for impairment loss	(83,327)	(62,732)
	508,688	6,971,326
At FVTOCI	2,243,911	-
	$ 2,752,599	$ 6,971,326

a. Trade receivables

2018

1) At amortized cost

The average credit period on sales of goods is 45 to 60 days after the end of the month in which sales occur. No interest was charged on trade receivables.

In order to minimize credit risk, the management of the Company has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Group reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Group's credit risk was significantly reduced.

The Group applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for all trade receivables. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of economic conditions at the reporting date.

The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g., when the debtor has been placed under liquidation. For trade receivables that have been written off, the Group continues to engage in enforcement activity to attempt to recover the receivables due. Where recoveries are made, these are recognized in profit or loss.

The following table details the loss allowance of trade receivables based on the Group's provision matrix.

December 31, 2018

	Not Past Due and Less than 60 Days	61 to 90 Days	91 to 180 Days	Over 180 Days	Total
Gross carrying amount	$ 10,331,628	$ 9,171	$ 85,318	$ 20,488	$ 10,446,605
Loss allowance (Lifetime ECL)	-	-	-	(824)	(824)
Amortized cost	$ 10,331,628	$ 9,171	$ 85,318	$ 19,664	$ 10,445,781

The movements of the loss allowance of trade receivables were as follows:

	2018
Balance at January 1, 2018	$ 10,298
Less: Net remeasurement of loss allowance	(9,518)
Less: Disposal of subsidiaries (Note 31)	(19)
Foreign exchange gains and losses	63
Balance at December 31, 2018	$ 824

2) At FVTOCI

For some trade receivables, the Group will decide whether to sell these trade receivables to banks without recourse based on its level of working capital. These trade receivables are classified as at FVTOCI because they are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.

2017

The Group applied the same credit policy in 2018 and 2017. In determining the recoverability of a trade receivable, the Group considered any change in the credit quality of the trade receivables since the date credit was initially granted to the end of reporting period. The Group assessed the allowance for impairment by reference to the collectability of receivables by considering an aging of receivables analysis, historical experience and the credit ratings of respective customers.

The aging of receivables was as follows:

	December 31, 2017
Less than 60 days	$ 5,260,450
61-90 days	8,530
91-180 days	27,314
More than 180 days	45,148
	$ 5,341,442

For the trade receivables balances that were past due at the end of the reporting period (refer to the below schedule), the Group did not recognize an allowance for impairment loss, because there was no significant change in the credit quality and the amounts were still considered recoverable. The Group did not hold any collateral or other credit enhancements for these balances. Moreover, the Group does not have the legal right to offset receivables and payables against the same counterparty.

The aging of receivables that were past due but not impaired was as follows:

	December 31, 2017
Less than 60 days	$ 235,273
61-90 days	7,886
91-180 days	18,477
More than 180 days	43,645
	$ 305,281

The aging of impaired trade receivables was as follows:

	December 31, 2017
Less than 60 days	$ 686
61-90 days	644
91-180 days	8,837
More than 180 days	1,503
	$ 11,670

The above aging schedule was based on the past-due date.

The movements of the allowance for doubtful trade receivables were as follows:

	Individually Assessed for Impairment	**Collectively Assessed for Impairment**	**Total**
Balance at January 1, 2017	$ 22,498	$ 21,416	$ 43,914
Add: Impairment losses recognized on receivables	6,120	-	6,120
Less: Reversed impairment losses	-	(11,234)	(11,234)
Less: Amounts written off during the year as uncollectable	(21,131)	(5,433)	(26,564)
Foreign exchange gains and losses	(1,395)	(543)	(1,938)
Balance at December 31, 2017	$ 6,092	$ 4,206	$ 10,298

b. Other receivables

As of December 31, 2018 and 2017, the Group's other receivables mainly consists of factored but unused receivables and tax refund receivable. Apart from tax refund receivable, the aging of the remaining receivables is less than 60 days (based on the invoice date).

2018

1) At amortized cost

Due to the consideration of the operating capital and the requirements of repayments for borrowings, Cando Corporation ("Cando") had issued its first secured domestic convertible bonds with a face value of $500,000 thousand. The Group acquired these bonds with a face value of $100,000 thousand and provided guarantees within the amount of $520,200 thousand for the convertible bonds issued by Cando. However, the convertible bonds were delisted at December 1, 2015, since Cando applied to the court for reorganization and disposal on November 5, 2015. The Group had made the payment for the principal of these bonds in the amount of $500,000 thousand on behalf of Cando and recognized as another receivable from Cando. Given that Cando and its subsidiaries, which had suffered huge financial difficulties, were unable to repay the debt, the Company has recognized an allowance for impairment losses on both trade receivables and other receivables from Cando after assessing the net amount of receivables and payables. Due to the indications showing that there was no improvement toward the recovery of the debt, the Group wrote off the receivables and the allowance for doubtful receivables in the amount of $988,545 thousand from Cando and its subsidiaries in June 2017. Refer to Note 36 for more information.

On May 12, 2017, the Company decided to sell its other receivables from Hallys Group and its remaining interest in CIM to Palladisio in the amount of JPY100,041 thousand. The proceeds has been received on June 14, 2017.

The Group assessed an allowance for impairment loss on other receivables by reference to the recoverability of receivables. After evaluating the operations and recoverability of the receivables from debtors, the Group recognized an allowance for impairment loss of 100% against the other receivables.

The movements of the loss allowance of other receivables were as follows:

	2018
Balance at January 1, 2018	$ 62,732
Add: Net remeasurement of loss allowance	18,793
Foreign exchange gains and losses	1,802
Balance at December 31, 2018	$ 83,327

2) At FVTOCI

For some other receivables, the Group will decide whether to sell these other receivables to banks without recourse based on its level of working capital. These other receivables are classified as at FVTOCI because they are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.

2017

The movements of the allowance for doubtful other receivables were as follows:

	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance at January 1, 2017	$ 1,318,538	$ 77,787	$ 1,396,325
Less: Reversed impairment losses	(1,667)	(10,596)	(12,263)
Less: Amounts written off during the years as uncollectable	(1,228,537)	-	(1,228,537)
Foreign exchange gains and losses	(88,334)	(4,459)	(92,793)
Balance at December 31, 2017	$ -	$ 62,732	$ 62,732

13. INVENTORIES

	December 31	
	2018	2017
Finished goods	$ 6,567,877	$ 3,856,907
Work in progress	512,725	370,607
Raw materials	3,729,760	3,070,344
	$ 10,810,362	$ 7,297,858

The cost of inventories recognized as cost of goods sold for the years ended December 31, 2018 and 2017 was $109,268,955 thousand and $99,673,935 thousand, respectively.

The accounts listed below were included in cost of goods sold:

	For the Year Ended December 31	
	2018	2017
(Reversal of) inventory write-downs	$ 165,218	$ (565,733)
Provision for loss on purchase commitments	6,439	1,172
Loss on inventory scraps	86,973	333,503
	$ 258,630	$ (231,058)

The cost of goods sold for the year ended December 31, 2018 included inventory write-downs of $165,218 thousand. For the year ended December 31, 2017, the cost of goods sold included reversals of inventory write-downs of $565,733 thousand.

Because of the characteristics of the industry, the product life cycle is short. Therefore, there is an accrued allowance for losses on inventory with aging of over 360 days.

Due to the characteristics of the industry and market fluctuations, certain raw materials are no longer usable. For the years ended December 31, 2018 and 2017, the Group evaluated and recognized a loss on purchase commitments in the amount of $6,439 thousand and $1,172 thousand, respectively. As of December 31, 2018 and 2017, the Group estimated and recognized short-term provisions for purchase commitments (Note 23) in the amounts of $14,247 thousand and $10,207 thousand, respectively.

14. SUBSIDIARIES

a. Subsidiaries included in the consolidated financial statements

Investor	Investee	Nature of Activities	Proportion of Ownership (%) December 31 2018	2017	Remark
TPK Holding Co., Ltd. ("TPKH")	TPK Technology International Inc. ("TTI")	International trade	100.00	100.00	
	Improve Idea Investments Ltd. ("Improve")	Holding company	100.00	100.00	
	Optera TPK Holding Pte. Ltd. ("OTH")	Holding company	100.00	100.00	
	Upper Year Holdings Limited ("UYH")	Holding company and international trade	100.00	100.00	14)
	Ray-Star Universal Solutions Limited ("RUSL")	Holding company	100.00	100.00	
Improve	TPK Asia Pacific Sdn. Bhd. ("TPKA")	Holding company	100.00	100.00	13)
TPKA	TPK Touch Solutions Inc. ("TPKT")	Touch related material sales and machinery manufacture, wholesale and retail	100.00	100.00	
	TPK Cando Solutions Inc. ("TCS")	Chemically strengthened glass processing and sales	-	55.00	7)
UYH	TPK Touch Solutions (Xiamen) Inc. ("TPKC")	Touch related material sales and machinery manufacture, wholesale and retail	73.84	73.84	5)
	TPK Lens Solutions Inc. ("TPKL")	Optical glass processing and sales	100.00	100.00	9)
	TPK Touch Systems (Xiamen) Inc. ("TPKS")	Touch modules research, development, manufacture and sales	100.00	100.00	
	Ray-Star Optical Solutions (Xiamen) Inc. ("RSO")	Optical glass processing and sales	63.85	55.00	9)
OTH	TPK America, LLC ("TPKU")	International trade	100.00	100.00	
	TPK Touch Solutions (Xiamen) Inc. ("TPKC")	Touch related material sales and machinery manufacture, wholesale and retail	10.27	10.27	5)
RUSL	TPK Universal Solutions Limited ("TPK HK")	Touch module related product research; holding company and international trade	100.00	100.00	11)
TPK HK	TPK Glass Solutions (Xiamen) Inc. ("TPKG")	Optical glass processing and sales	100.00	94.31	8) and 12)
	TPK Film Solutions Limited ("TPKF HK")	Holding company	100.00	80.02	2)
	TPK MasTouch Solutions (Xiamen) Inc. ("MTOH")	Touch modules research, development, manufacture and sales	100.00	100.00	12)
	TPK Touch Solutions (Pingtan) Inc. ("TPKP")	Touch modules research, development, manufacture and sales	100.00	100.00	12)
	TPK Materials Solution Inc. ("TPKM")	Touch related electronic materials and electronic chemicals processing, manufacture and research	100.00	100.00	
	TPK Advanced Solutions Inc. ("TPKD")	Touch modules research, development, manufacture and sales	49.90	49.90	
	TPK Touch Solutions (Xiamen) Inc. ("TPKC")	Touch related material sales and machinery manufacture, wholesale and retail	15.89	15.89	5)
	Xiamen Jan Jia Optoelectronics Co., Ltd. ("TPKJ")	Protective film and optical adhesive manufacture and sales	51.00	51.00	1)
TPKT	Ray-Star System Solutions Limited ("RSSL")	Holding company	100.00	100.00	10)
RSSL	TPK Glass Solutions (Xiamen) Inc. ("TPKG")	Optical glass processing and sales	-	5.69	8)
TPKC	Ray-Star Optical Solutions (Xiamen) Inc. ("RSO")	Optical glass processing and sales	36.15	45.00	
	TPK Advanced Solutions Inc. ("TPKD")	Touch modules research, development, manufacture and sales	50.10	50.10	

(Continued)

Investor	Investee	Nature of Activities	Proportion of Ownership (%) December 31 2018	2017	Remark
TPKF HK	TPK Film Solutions (Xiamen) Inc. ("TPKF")	Touch modules research, development, manufacture and sales	100.00	100.00	
TPKP	Jinshunxin Development (Pingtan) Co., Ltd. ("JSX")	Land development	-	-	4)
TPKG	TPK Chenqi (Mainland) Solutions Inc. ("TPKMS")	Trade	100.00	100.00	
TPKJ	Jin Tong Suzhou Optoelectronics Co., Ltd. ("JT")	Protective film and optical adhesive manufacture and sales	-	100.00	6)
	Jan Jia Trading Company Limited ("TPKJ HK")	International trading	100.00	-	3)

(Concluded)

Remark:

1) These are subsidiaries that have material non-controlling interests.

2) TPK HK acquired the remaining 19.98% ownership from external shareholders in the amount of US$3,000 thousand in March 2018. After the acquisition, TPK HK's percentage of ownership in TPKF HK increased from 80.02% to 100%.

3) To meet TPKJ's need of overseas material procurement and agency trading, the Company's board of directors resolved to set up TPKJ HK with a capital of less than US$500 thousand, which was invested by TPKJ on December 21, 2016. TPKJ HK was set up on January 3, 2018 with a capital investment of US$500 thousand in December 2018.

4) Due to the fact that JSX's industry is not the core business of the Company, on January 26, 2017, the Company's board of directors resolved to sell its interest in JSX to Ruei-Shin Investment (Pingtan) Co., Ltd. in order to concentrate and utilize its limited resources. TPKP sold 91% of its interest in JSX in the amount of RMB246,192 thousand in March 2017, and the gain on the disposal amounting to US$14,469 thousand was recognized. After the disposal, the Group's ownership percentage of JSX decreased from 100% to 9%. Since the Group lost control over JSX, any remaining investments in JSX were reclassified to financial assets measured at cost - non-current (classified as investments in equity instruments at FVTOCI in 2018). Refer to Note 31 for more information.

5) On March 12 and November 8, 2018, the Company's board of directors resolved to increase the capital of TPKC with amounts of US$31,673 thousand and US$29,000 thousand from retained earnings, respectively, and after issuance, the capital of TPKC increased from US$243,394 thousand to US$304,067 thousand. The amendment on registration for capital increase was completed on April 26 and November 15, 2018, respectively.

6) Due to the fact that JT did not reach the expected performance, on April 12, 2018, the Company's board of directors resolved to sell all of its interests in JT to Jan Ann Co., Ltd. (Cayman) or the designated third party in order to concentrate and utilize its limited resources. In May 2018, TPKJ sold all of its interests in JT with an amount of RMB49,950 thousand, and the gain on disposal which amounted to US$1,917 thousand was recognized. After disposal, JT was excluded in the consolidated financial statements. Refer to Note 31 for more information.

7) The Company resolved to dissolve and liquidate TCS in order to simplify its organizational structure, and the process of liquidation was completed in November 2018.

8) On June 22, 2018, the Company's board of directors resolved to sell 5.69% interest in TPKG from RSSL to TPK HK in order to adjust organizational structure, and the transaction was completed on July 13, 2018. After acquisition, TPK HK's percentage of ownership in TPKG increased from 94.31% to 100%.

9) On August 7, 2018, the Company's board of directors resolved to increase the capital of RSO and TPKL from UYH to improve the financial structure of RSO and TPKL. These issuances were completed in October 2018.

10) The Company's board of directors resolved to dissolve and liquidate RSSL in order to simplify its organizational structure. As of February 20, 2019, the process of dissolution and liquidation was not completed.

11) In response to the demand for electronic materials, on October 9, 2018, the Company's board of directors resolved to set up TPK Materials Solution (Xiamen) Inc. ("TPKMT") with a capital of US$10,000 thousand from TPK HK. TPKMT was set up on October 22, 2018, and a capital of US$2,914 thousand was invested in TPKMT in January 2019.

12) On November 8, 2018, the Company's board of directors resolved to increase the capital of TPKG, TPKP and MTOH from TPK HK in order to improve the financial structure of TPKG, TPKP and MTOH. In November 2018, TPK HK invested in TPKG with an amount of US$85,520 thousand; and in December 2018, TPK HK invested in MTOH with an amount of US$25,997 thousand.

13) On February 20, 2019, the Company's board of directors resolved to dissolve and liquidate TPKA in order to simplify its organizational structure.

14) On February 20, 2019, the Company's board of directors resolved to annul the registration of UYH Hong Kong Branch in order to simplify its organizational structure.

b. Details of subsidiaries with material non-controlling interests

	Proportion of Ownership and Voting Rights Held by Non-controlling Interests	
	December 31	
Name of Subsidiary	**2018**	**2017**
TPKJ	49.0%	49.0%

Refer to Table 7 following the Notes to Consolidated Financial Statements for information on the relevant places of incorporation and principal places of business of TPKJ.

	Profit Allocated to Non-controlling Interests		**Accumulated Non-controlling Interests**	
	For the Year Ended December 31		**December 31**	
Name of Subsidiary	**2018**	**2017**	**2018**	**2017**
TPKJ	$ 148,632	$ 120,937	$ 350,107	$ 297,947

Summarized financial information in respect of each of the Group's subsidiaries with material non-controlling interests is set out below. The summarized financial information below represents amounts before intragroup eliminations.

TPKJ and its subsidiaries

	December 31 2018	December 31 2017
Current assets	$ 1,880,719	$ 1,068,661
Non-current assets	199,540	280,694
Current liabilities	(1,365,658)	(740,416)
Non-current liabilities	-	(790)
Equity	$ 714,601	$ 608,149
Equity attributable to:		
Owners of the Company	$ 364,494	$ 310,202
Non-controlling interests of TPKJ	350,107	297,947
	$ 714,601	$ 608,149

	For the Year Ended December 31 2018	For the Year Ended December 31 2017
Operating revenue	$ 3,271,105	$ 2,677,218
Net profit for the year	$ 303,330	$ 246,810
Other comprehensive loss for the year	(6,796)	(5,809)
Total comprehensive income for the year	$ 296,534	$ 241,001
Net profit attributable to:		
Owners of the Company	$ 154,698	$ 125,873
Non-controlling interests of TPKJ	148,632	120,937
	$ 303,330	$ 246,810
Total comprehensive income attributable to:		
Owners of the Company	$ 151,232	$ 122,910
Non-controlling interests of TPKJ	145,302	118,091
	$ 296,534	$ 241,001
Net cash flows from:		
Operating activities	$ 212,376	$ 355,857
Investing activities	(151,181)	(43,889)
Financing activities	173,572	(69,883)
Translation adjustments	15,061	(12,296)
Net cash inflows	$ 249,828	$ 229,789
Dividends paid to non-controlling interest of:		
TPKJ	$ 93,141	$ -

15. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

a. Material associates

Name of Associate	Nature of Activities	Principal Place of Business	Proportion of Ownership and Voting Rights December 31 2018	2017
Unlisted shares				
Cando	Touch modules research, development and manufacture	Taiwan	19.78%	19.78%

The Group is able to exercise significant influence over Cando. As such, the investment and the related profit and loss from the investment are accounted for using the equity method.

Cando, a company with unlisted shares which the Group accounts for using the equity method. Due to the fact that Cando's assets were not sufficient enough to offset its liabilities, Cando declared bankruptcy on July 21, 2016, and the court announced its bankruptcy on January 17, 2018. After an assessment, the Group determined that the future recoverable amount for its investment in Cando was zero. As a result, the impairment loss of $283,252 thousand was recognized at the end of the calendar year 2015. As of December 31, 2018 and 2017, the carrying amounts of the investment in Cando were zero.

b. Aggregate information of associates that are not individually material

Due to TES XM's industry is not the core business of the Company, on November 9, 2016, the Company's board of directors resolved to sell 40% of its equity interest in TES XM to potential external investors in the amount of no less than US$43,200 thousand or by transferring the equivalent renminbi amount for consideration in order to concentrate and utilize its limited resources. TPK HK sold 22.7% and 17.3% of its ownership in TES XM in the amount of US$24,516 thousand and US$18,684 thousand in December 2016 and March 2017, respectively. The gains from the disposal were US$15,885 thousand and US$12,086 thousand, respectively. The selling price was determined in accordance to the relevant valuation report, and the proceeds were fully received before May 2, 2017.

16. PROPERTY, PLANT AND EQUIPMENT

	December 31 2018	2017
Carrying amount for each category		
Buildings	$ 16,257,689	$ 16,360,727
Machinery and equipment	15,684,771	15,521,295
Transportation and others	1,082,094	946,706
Property in construction	213,051	165,921
	$ 33,237,605	$ 32,994,649

	For the Year Ended December 31, 2018				
	Buildings	**Machinery and Equipment**	**Transportation and Others**	**Property in Construction**	**Total**
Cost					
Balance, beginning of year	$ 25,124,222	$ 57,854,807	$ 7,741,295	$ 165,921	$ 90,886,245
Additions	-	-	-	114,332	114,332
Disposals	(5,278)	(1,584,485)	(167,577)	-	(1,757,340)
Disposals of subsidiaries (Note 31)	-	(120,681)	(16,978)	-	(137,659)
Reclassification	555,288	5,698,536	557,418	(73,404)	6,737,838
Effects of foreign currency exchange differences	814,611	1,928,876	245,891	6,202	2,995,580
Balance, end of year	26,488,843	63,777,053	8,360,049	213,051	98,838,996
Accumulated depreciation					
Balance, beginning of year	5,874,830	30,691,907	6,397,812	-	42,964,549
Depreciation expenses	1,038,083	5,719,803	514,562	-	7,272,448
Disposals	(2,311)	(825,489)	(162,511)	-	(990,311)
Disposals of subsidiaries (Note 31)	-	(68,937)	(13,827)	-	(82,764)
Reclassification	107,426	15,360	1,916	-	124,702
Effects of foreign currency exchange differences	211,174	1,079,983	205,189	-	1,496,346
Balance, end of year	7,229,202	36,612,627	6,943,141	-	50,784,970
Accumulated impairment losses					
Balance, beginning of year	2,888,665	11,641,605	396,777	-	14,927,047
Impairment losses	-	2,444	-	-	2,444
Disposals	(214)	(580,473)	(1,499)	-	(582,186)
Reclassification	20,371	(15,354)	(1,921)	-	3,096
Effects of foreign currency exchange differences	93,130	431,433	(58,543)	-	466,020
Balance, end of year	3,001,952	11,479,655	334,814	-	14,816,421
Carrying amount, end of year	$ 16,257,689	$ 15,684,771	$ 1,082,094	$ 213,051	$ 33,237,605

	For the Year Ended December 31, 2017				
	Buildings	**Machinery and Equipment**	**Transportation and Others**	**Property in Construction**	**Total**
Cost					
Balance, beginning of year	$ 28,083,039	$ 61,934,720	$ 8,503,221	$ 27,284	$ 98,548,264
Additions	-	-	-	202,688	202,688
Disposals	(736,900)	(3,278,961)	(425,486)	-	(4,441,347)
Reclassification	(124,518)	3,970,901	292,434	(58,410)	4,080,407
Effects of foreign currency exchange differences	(2,097,399)	(4,771,853)	(628,874)	(5,641)	(7,503,767)
Balance, end of year	25,124,222	57,854,807	7,741,295	165,921	90,886,245
Accumulated depreciation					
Balance, beginning of year	5,343,823	28,320,096	6,480,561	-	40,144,480
Depreciation expenses	1,040,858	6,518,438	798,264	-	8,357,560
Disposals	(55,993)	(1,915,658)	(388,816)	-	(2,360,467)
Reclassification	(22,198)	58,360	1,318	-	37,480
Effects of foreign currency exchange differences	(431,660)	(2,289,329)	(493,515)	-	(3,214,504)
Balance, end of year	5,874,830	30,691,907	6,397,812	-	42,964,549
Accumulated impairment losses					
Balance, beginning of year	3,258,377	13,943,457	457,846	-	17,659,680
Reversed impairment losses	-	(38,225)	-	-	(38,225)
Disposals	(121,099)	(1,053,989)	(25,521)	-	(1,200,609)
Reclassification	-	(179,858)	(1,331)	-	(181,189)
Effects of foreign currency exchange differences	(248,613)	(1,029,780)	(34,217)	-	(1,312,610)
Balance, end of year	2,888,665	11,641,605	396,777	-	14,927,047
Carrying amount, end of year	$ 16,360,727	$ 15,521,295	$ 946,706	$ 165,921	$ 32,994,649

Part of the equipment for manufacturing purposes could no longer be used due to an alteration in the manufacturing process; such equipment was provided with an allowance for impairment loss. The impairment loss shall be reserved subsequently if the idled equipment is used again after the alteration in the manufacturing process.

The Group has recognized impairment losses in the amounts of $2,444 thousand for the year ended December 31, 2018. The Group has recognized reversal of impairment losses in the amounts of $38,225 thousand for the year ended December 31, 2017 (recorded as operating costs).

The Group's buildings mainly consist of factories and the construction of clean rooms, which are depreciated over an estimated useful life ranging from 1 to 20 years.

Otherwise, the property, plant and equipment listed above are depreciated on a straight-line basis over the estimated useful lives of the assets as follows:

Building	1-20 years
Machinery and equipment	1-11 years
Transportation and others	1-10 years

In order to activate the Company's assets, on May 4, 2017, the Company's board of directors resolved to sell its TCS factory located at Central Taiwan Science Park in Houli district along with its equipment to external manufacturers in the amount of no less than $625,000 thousand. However, affected by the sluggish real estate market, on August 28, 2017, the Company's board of directors resolved to sell its TCS factory and equipment in the amount of no less than 80% of the originally authorized price. The Group sold it to Micron Memory Taiwan Co., Ltd. in the amount of $500,000 thousand on August 28, 2017 and recognized disposal loss of $54,949 thousand. The selling price was determined based on the relevant valuation reports.

Property, plant and equipment pledged as collateral for bank borrowings is set out in Note 37.

17. INVESTMENT PROPERTIES

	December 31	
	2018	2017
Buildings	$ 121,281	$ 474,172

	For the Year Ended December 31	
	2018	2017
Cost		
Balance, beginning of year	$ 616,650	$ 497,269
Reclassification	(473,374)	161,733
Effects of foreign currency exchange differences	9,628	(42,352)
Balance, end of year	152,904	616,650
Accumulated depreciation		
Balance, beginning of year	122,317	81,545
Depreciation expenses	14,586	26,006
Reclassification	(107,426)	22,198
Effects of foreign currency exchange differences	2,146	(7,432)
Balance, end of year	31,623	122,317

(Continued)

	For the Year Ended December 31	
	2018	2017
Accumulated impairment loss		
Balance, beginning of year	$ 20,161	$ 21,848
Reclassification	(20,371)	-
Effects of foreign currency exchange differences	210	(1,687)
Balance, end of year	-	20,161
Carrying amount, end of year	$ 121,281	$ 474,172

(Concluded)

The Group's investment property is depreciated on a straight-line basis over the estimated useful life of 20 years.

The Group's investment property is located in the Xiamen industrial area. Due to infrequent transactions in the area and an unavailable alternative reliable measurement of fair value, the fair value of the investment property was not able to be determined reliably.

18. INTANGIBLE ASSETS

	December 31	
	2018	2017
Goodwill	$ 32,628	$ 32,191
Computer software	34,669	53,839
Patents	43,928	6,342
	$ 111,225	$ 92,372

	For the Year Ended December 31, 2018					
	Goodwill	Technical Know-how	Computer Software	Patents	Others	Total
Cost						
Balance, beginning of year	$ 662,121	$ 329,397	$ 363,359	$ 153,805	$ 41,590	$ 1,550,272
Additions	-	-	12,639	42,551	-	55,190
Disposals	-	-	(9,619)	-	-	(9,619)
Disposals of subsidiaries (Note 31)	-	(6,592)	(814)	(60,742)	-	(68,148)
Effects of foreign currency exchange differences	20,651	8,935	6,446	5,400	1,335	42,767
Balance, end of year	682,772	331,740	372,011	141,014	42,925	1,570,462
Accumulated amortization						
Balance, beginning of year	-	276,945	299,460	147,455	41,589	765,449
Amortization expenses	-	2,064	28,075	122	478	30,739
Disposals	-	-	(9,136)	-	-	(9,136)
Disposals of subsidiaries (Note 31)	-	(3,767)	(726)	(56,404)	-	(60,897)
Effects of foreign currency exchange differences	-	2,363	9,401	5,905	857	18,526
Balance, end of year	-	277,605	327,074	97,078	42,924	744,681

(Continued)

	For the Year Ended December 31, 2018					
	Goodwill	**Technical Know-how**	**Computer Software**	**Patents**	**Others**	**Total**
Accumulated impairment losses						
Balance, beginning of year	$ 629,930	$ 52,452	$ 10,060	$ 8	$ 1	$ 692,451
Disposals	-	-	(68)	-	-	(68)
Effects of foreign currency exchange differences	20,214	1,683	276	-	-	22,173
Balance, end of year	650,144	54,135	10,268	8	1	714,556
Carrying amount, end of year	$ 32,628	$ -	$ 34,669	$ 43,928	$ -	$ 111,225

(Concluded)

	For the Year Ended December 31, 2017					
	Goodwill	**Technical Know-how**	**Computer Software**	**Patents**	**Others**	**Total**
Cost						
Balance, beginning of year	$ 715,966	$ 352,400	$ 386,513	$ 163,322	$ 45,070	$ 1,663,271
Additions	-	-	10,255	-	-	10,255
Disposals	-	-	(15,342)	(426)	-	(15,768)
Effects of foreign currency exchange differences	(53,845)	(23,003)	(18,067)	(9,091)	(3,480)	(107,486)
Balance, end of year	662,121	329,397	363,359	153,805	41,590	1,550,272
Accumulated amortization						
Balance, beginning of year	-	295,560	289,035	154,235	42,866	781,696
Amortization expenses	-	2,562	35,815	2,456	485	41,318
Disposals	-	-	(12,855)	(426)	-	(13,281)
Effects of foreign currency exchange differences	-	(21,177)	(12,535)	(8,810)	(1,762)	(44,284)
Balance, end of year	-	276,945	299,460	147,455	41,589	765,449
Accumulated impairment losses						
Balance, beginning of year	682,636	56,840	12,939	8	1	752,424
Disposals	-	-	(2,039)	-	-	(2,039)
Effects of foreign currency exchange differences	(52,706)	(4,388)	(840)	-	-	(57,934)
Balance, end of year	629,930	52,452	10,060	8	1	692,451
Carrying amount, end of year	$ 32,191	$ -	$ 53,839	$ 6,342	$ -	$ 92,372

The intangible assets listed above were amortized on a straight-line basis over the estimated useful life of the related asset as follows:

Technical know-how	4-7 years
Computer software	1-6 years
Patents	4-19 years
Other intangible assets	3-10 years

19. PREPAYMENTS FOR LEASES

	December 31 2018	December 31 2017
Current assets (included in other current assets)	$ 2,094	$ 32,250
Non-current assets (included in long-term prepayments for leases)	1,039,450	1,116,519
	$ 1,041,544	$ 1,148,769

As of December 31, 2018 and 2017, the Group's prepayment for leases were mainly for land use rights in mainland China.

In order to activate the land use rights of TPKP, TPKP has signed a land development contract with Land Development Corporation of Pingtan Comprehensive Pilot Zone ("Land Development Corporation") and Fujian Luheng Construction Engineering Company Limited ("Luheng"). TPKP consigned Luheng to build dormitory which will be sold to Luheng and Land Development Corporation upon the construction completion. Land development will take about 3 years. The estimated selling price of dormitory and land was RMB1,255,000 thousand, and TPKP signed a purchase and sell agreement and construction contract with Land Development Corporation and Luheng. As of December 31, 2018, TPKP received an amount of RMB158,159 proceeds from disposal of real estate, and paid Luheng an amount of RMB86,139 for construction cost; in addition, an amount of RMB72,020 thousand was recognized in the advance real estate receipts which are classified as other non-current liabilities.

20. BORROWINGS

a. Short-term borrowings

	December 31 2018	December 31 2017
Unsecured borrowings		
Bank loans	$ 5,147,265	$ 6,459,342
Others	61,430	-
	$ 5,208,695	$ 6,459,342

As of December 31, 2018 and 2017, the range of weighted average effective interest rates on bank loans was 2.68%-4.48%, and 2.06%-3.24% per annum, respectively.

b. Long-term borrowings

	December 31 2018	December 31 2017
Secured borrowings		
Others	$ 927,327	$ 1,535,639

(Continued)

	December 31	
	2018	2017
Unsecured borrowings		
Bank loans	$ 11,134,772	$ 3,089,654
Others	-	223,200
	11,134,772	3,312,854
	12,062,099	4,848,493
Less: Current portion (due in one year)	(2,822,862)	(1,348,181)
Long-term borrowings	$ 9,239,237	$ 3,500,312

(Concluded)

As of December 31, 2018 and 2017, the long-term borrowings were collateralized by machinery and equipment (see Note 37) and were guaranteed by related parties (see Note 36). As of December 31, 2018 and 2017, the range of weighted average effective interest rates of bank borrowings were both 3.30%-4.75% per annum. The Group will repay all loans in the next 3 years.

For repayment of borrowings and replenishment of mid-term working capital, the Company's board of directors resolved to apply for joint credit line. The Company signed a 3-year syndicated loan which amounted to US$163,000 thousand (approximately NT$4,881,850 thousand) with 10 financial institutions including Mega Bank in May 2018, and the loan was fully utilized in June 2018. Additionally, the Company promised the lender on the condition of maintaining these financial ratios for the existence of the loan agreement.

21. BONDS PAYABLE (AS OF DECEMBER 31, 2018: NONE)

	December 31, 2017
Third issuance of euro-convertible bonds (ECB) (a)	$ 6,646,378
Less: Convertible bonds discount	(407,706)
	6,238,672
Less: Current portion (due in one year)	(6,238,672)
	$ -

a. Third and fourth issuance of ECB

In order to meet the need of overseas procurement funding for subsidiaries with due consideration of the diversity of fund raising, the Company's board of directors resolved to issue third and fourth unsecured ECB with a face value of up to US$250,000 thousand individually, and with an aggregate face value of up to US$400,000 thousand, on November 4, 2014. This proposal was approved and became effective under letter No. 10300519131 issued by the FSC on December 31, 2014. The bonds whose durations are 5 years were listed on the Luxembourg Stock Exchange on April 8, 2015, and the total amount of US$250,000 thousand of convertible bonds were issued. In accordance with the IFRSs, the Company has bifurcated the bonds into liability and equity components. On April 8, 2015, the Company received the net proceeds of ECB of US$248,602 thousand, which was recognized as bonds payable of US$234,333 thousand, financial liabilities at fair value through profit or loss of US$1,168 thousand and capital surplus of US$13,101 thousand. On September 30, 2015, the fourth issuance of ECB became automatically invalid due to not being issued.

Bondholders may request that the Company convert the bonds into the Company's ordinary shares at $238.30 per share and at the fixed exchange rate of US$1.00 to NT$31.29 between May 19, 2015 and March 29, 2020 (barring the period in which the registration of share transfer is suspended).

On January 2018, the Company redeemed an amount of US$3,116 thousand convertible bonds with a face value of US$3,000 thousand and recognized US$30 thousand as gain on redemption.

According to the regulation on the issuance of convertible bonds, 3 years from the issuance date, April 8, 2015, bondholders have the right to request from the Company to redeem the bonds at 104.59% of face value. Due to the fact that bondholders fully exercised the put option, the Company repaid all convertible bonds on April 8, 2018, and recognized US$4,489 thousand as gain on redemption.

b. Unsecured bonds in renminbi

In order to replenish the operating capital of TPKC and develop its fundraising diversity, the Company's board of directors resolved to issue renminbi bonds with a face value of up to RMB2,000,000 thousand. As of July 25, 2016, TPKC issued its bonds in the total amount of RMB500,000 thousand at the Shanghai Clearing House. The bonds with 5.10% interest rates have been discounted by RMB5,675 thousand, and the durations of the bonds are 1 year. TPKC redeemed the renminbi bonds after its expiration on July 26, 2017.

c. Short-term commercial paper in renminbi

In order to replenish operating capital of TPKC, the Company's board of directors resolved to issue short-term commercial paper in renminbi in the amount of up to RMB2,000,000 thousand with a duration of no greater than 270 days and in one or several tranches. As of December 31, 2018, none of the short-term commercial paper in renminbi has been issued.

Movements of debt instruments for the years ended December 31, 2018 and 2017 were as follows:

	For the Year Ended December 31			
	2018		2017	
	US$	NT$	US$	NT$
Balance, beginning of year	$ 209,633	$ 6,238,672	$ 275,456	$ 8,883,415
Interest expense	1,453	42,664	6,602	201,876
Redemption of bonds	(211,086)	(6,145,644)	(75,381)	(2,293,072)
Effect of foreign currency exchange differences	-	(135,692)	2,956	(553,547)
Balance, end of year	$ -	$ -	$ 209,633	$ 6,238,672

22. OTHER LIABILITIES

	December 31 2018	December 31 2017
Other payables		
Payables for purchase of equipment	$ 2,140,489	$ 1,910,623
Other payables - others		
Payable for salaries and bonuses	$ 887,531	$ 1,224,718
Payable for unused paid leaves	190,984	180,352
Tax payable	137,456	169,204
Payable for repairs	60,960	207,975
Payable for supplies	2,225	160,994
Others	1,385,296	972,766
	$ 2,664,452	$ 2,916,009

23. PROVISIONS

	December 31 2018	December 31 2017
Current		
Warranties (a)	$ 1,735,680	$ 1,213,092
Onerous contracts (b)	14,247	10,207
	$ 1,749,927	$ 1,223,299

	Warranties	Onerous Contracts	Total
Balance, January 1, 2018	$ 1,213,092	$ 10,207	$ 1,223,299
Additions	853,824	6,439	860,263
Usage	(375,168)	(2,680)	(377,848)
Effect of foreign currency exchange differences	43,932	281	44,213
Balance, December 31, 2018	$ 1,735,680	$ 14,247	$ 1,749,927
Balance, January 1, 2017	$ 1,098,763	$ 17,723	$ 1,116,486
Additions	638,026	1,172	639,198
Usage	(434,702)	(7,319)	(442,021)
Effect of foreign currency exchange differences	(88,995)	(1,369)	(90,364)
Balance, December 31, 2017	$ 1,213,092	$ 10,207	$ 1,223,299

a. The provision for warranty claims represents the present value of management’s best estimate of the future outflow of economic benefits that will be required under the Group’s obligations for warranties under local sale of goods legislation. The estimate had been made on the basis of historical warranty trends and may vary as a result of new materials, altered manufacturing processes or other events affecting product quality.

b. The provision for onerous contracts represents the loss that the Group was presently obligated to make under non-cancellable onerous purchase contracts where the purchased materials and supplies cannot be used for other products. The estimate may vary as a result of changes in future products.

24. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

TPKT, TPK HK Taiwan branch and TCS adopted a pension plan under the Labor Pension Act (LPA), which is a state-managed defined contribution plan. Under the LPA, an entity makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

The employees of the Company's subsidiaries in China are members of retirement benefit plans operated by their respective governments. The subsidiaries are required to contribute a specified percentage of payroll costs to the retirement benefit schemes to fund the benefits. The only obligation of the Company with respect to the retirement benefit plans is to make the specified contributions.

The Company's subsidiaries in the USA are required to contribute to the retirement benefit schemes according to the respective policies.

b. Defined benefit plans

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

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

	December 31	
	2018	**2017**
Present value of defined benefit obligation	$ 22,516	$ 23,459
Fair value of plan assets	(10,646)	(9,597)
Net defined benefit liability	$ 11,870	$ 13,862

Movements in the net defined benefit liability were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liability (Asset)
Balance at January 1, 2017	$ 20,390	$ (8,801)	$ 11,589
Service cost			
Net interest expense (income)	326	(146)	180
Recognized in profit or loss	326	(146)	180
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	59	59
Actuarial loss - experience adjustments	2,743	-	2,743
Recognized in other comprehensive income	2,743	59	2,802
Contributions from the employer	-	(709)	(709)
Balance at December 31, 2017	23,459	(9,597)	13,862
Service cost			
Net interest expense (income)	375	(159)	216
Recognized in profit or loss	375	(159)	216
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(218)	(218)
Actuarial loss - experience adjustments	(1,318)	-	(1,318)
Recognized in other comprehensive income	(1,318)	(218)	(1,536)
Contributions from the employer	-	(672)	(672)
Balance at December 31, 2017	$ 22,516	$ (10,646)	$ 11,870

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

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

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

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

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

	December 31	
	2018	2017
Discount rate	1.35%	1.60%
Expected rate of salary increase	3.00%	3.00%

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

	December 31	
	2018	**2017**
Discount rate		
0.25% increase	$ (794)	$ (825)
0.25% decrease	$ 829	$ 861
Expected rate of salary increase		
1% increase	$ 3,467	$ 3,633
1% decrease	$ (2,977)	$ (3,113)

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

	December 31	
	2018	**2017**
The expected contributions to the plan for the next year	$ 672	$ 709
The average duration of the defined benefit obligation	15 years	16 years

25. EQUITY

	December 31	
	2018	**2017**
Share capital		
Ordinary shares	$ 4,066,638	$ 4,066,638
Capital surplus	28,146,706	28,073,650
Retained earnings	2,412,900	3,581,405
Other equity items	2,265,358	1,226,002
Non-controlling interests	350,107	222,924
	$ 37,241,709	$ 37,170,619

a. Share capital

1) Ordinary shares

	December 31	
	2018	**2017**
Numbers of shares authorized (in thousands)	600,000	600,000
Shares authorized	$ 6,000,000	$ 6,000,000
Number of shares issued and fully paid (in thousands)	406,664	406,664
Shares issued	$ 4,066,638	$ 4,066,638
Additional paid-in capital	24,836,079	24,836,079
	$ 28,902,717	$ 28,902,717

Each fully paid ordinary share with a face value of $10 contains the rights to dividends and to vote.

For the purpose of replenishing operating capital, repaying borrowings, as well as improving the Group’s financial structure in order to react to the demand for funds for future development and to strengthen its competitiveness, on May 16, 2017, the annual shareholders’ meeting resolved to issue up to 50,000 thousand ordinary shares for cash or ECB of up to US$100,000 thousand in private placement. The Company could choose to only issue ordinary shares for cash or ECB, otherwise both could be done in concert. The numbers of ordinary shares issued in the form of GDRs, as well as the number of ordinary shares issued for cash and ECB in private placement, were limited to 85,000 thousand shares. However, the actual numbers of shares offered in private placement shall still depend on the condition of the market and the Company’s demand for funds.

In addition, the annual shareholders’ meeting resolved to issue ordinary shares at up to 20,000 thousand shares in private placement on May 16, 2017. The issued shares above were subscribed for by Shenzhen O-Film Tech Co., Ltd. (“O-Film Tech”) as a strategic investor at $90.5 per share in the total amount of $1,810,000 thousand. On March 21, 2017, the Company’s board of directors also resolved to participate in the direct issuance from O-Film Tech or subscribe for the shares of O-Film Tech in the open market within one year after the share subscription agreement was signed by both sides. The subscription of O-Film Tech’s shares with the face value of no greater than RMB40.34 amounted to up to RMB204,000 thousand in sum. This cross-shareholding has strengthened and steadied the business relationship between both companies. The Company signed a share subscription agreement with O-Film Tech on March 21, 2017.

The Company signed the letter of intent for a joint venture with O-Film Tech, and the joint venture will be founded after further negotiation and the signing of an official agreement. The Company and O-Film Tech will have joint control of the arrangement where the Company and O-Film Tech will respectively hold 49% and 51% of the interest in the joint company. By integrating the specialties from both companies, a comprehensive solution to the series of manufacturing processes for designing the products with front-end to back-end connectivity could be provided.

However, the prerequisite of above agreements has not been satisfied, and the subscription period will be expired soon; hence, the Company and O-Film Tech decided to terminate the agreement of share subscription and joint venture. Both companies are willing to maintain the strategic cooperation for the extensive cooperation in the future.

2) Global depositary receipts

The issuance of the GDRs was completed on October 1, 2012 and the GDRs were traded and listed on the Luxembourg Stock Exchange where 17,600 thousand units of GDRs with a price of US$13.42 less the issuance cost per unit were issued in the total amount of US$231,734 thousand. One GDR unit represents one share of the Company’s ordinary shares.

On April 8, 2015, 20,000 thousand units of GDRs were issued at a price of US$6.68 less the issuance cost per unit in the total amount of US$131,405 thousand. One GDR unit represents one share of the Company’s ordinary shares.

The shareholders meeting was held on May 16, 2017, and, in that meeting, the shareholders resolved to authorize the Company’s board of directors to issue new shares of up to 60,000 thousand ordinary shares for cash capital increase by: (a) issuing new shares at the same time, respectively or in installments, or (b) participating in GDR issuance via issuing new shares.

For the purpose of the capital needs for material procurement, on August 7, 2017, the Company's board of directors resolved to issue new ordinary shares in the form of GDRs for cash capital increase. The Company's board of directors proposed to issue 48,000 thousand to 60,000 thousand ordinary shares in this regard. This proposal was approved and declared by the FSC in letter No. 1060033942 on September 5, 2017. On September 8, 2017, 59,820 thousand units of GDRs and 180 thousand units of ordinary shares reserved for employee subscription were issued at a price of US$3.95 (less the issuance cost per unit) in the total amount of US$233,721 thousand. One GDR unit represents one of the Company's ordinary shares.

As of December 31, 2018, a total of 2 thousand units of GDRs corresponding to 2 thousand ordinary shares were outstanding.

b. Capital surplus

	December 31	
	2018	**2017**
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (Note)		
Recognized on issuance of ordinary shares	$ 24,836,079	$ 24,836,079
Recognized on redemption of convertible bonds	2,089,848	1,750,078
Treasury share transactions	54,820	54,820
	26,980,747	26,640,977
May not be used for any purpose		
Share of changes in capital surplus of associates	-	5,477
Recognized on employee share options	1,165,959	1,087,246
Recognized on conversion option of convertible bonds	-	339,950
	1,165,959	1,432,673
	$ 28,146,706	$ 28,073,650

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

c. Retained earnings and dividend policy

Under the Company's Articles of Incorporation (the "Articles"), the Company may distribute its profits in accordance with the proposals made by the Company's board of directors for a distribution plan and approved in the annual shareholders' meeting. While distributing any profit, the profit shall be first utilized for offsetting losses of previous years, and 10% of the remaining profit shall be set aside as a legal reserve until the accumulated legal reserve equals the Company's paid-in capital. Secondly, the Company shall appropriate the remaining profit to a special reserve in accordance with the Applicable Public Company Rules or as requested by the competent authorities. Moreover, the Company may appropriate up to 1% of the remaining profit as remuneration of directors, as well as set aside up to 10% of the remaining profit as bonuses for the employees of the Company and its subsidiaries. The Company's board of directors shall specify the exact percentages or amounts to be distributed as bonuses for the directors and employees. Shareholders may amend such proposals prior to approval. Directors who are also the executive officers of the Company may receive remuneration and bonuses simultaneously. Any remaining profit may be distributed as dividends (including cash dividends and share dividends) or bonuses under the Company Law of the Cayman Islands and Applicable Public Company Rules after taking into consideration financial, business and operational factors. The total amount to be distributed as dividends shall be no less than 10 % of the remaining profit, where the total amount of the distributed cash dividends shall be greater than 10 % of the total dividends. However, if dividends per share is less than NT$1 in any given year, the aforementioned 10% threshold shall not apply. The Company may decide to distribute cash dividends or share dividends in whole or in part at its sole discretion.

In accordance with the amended Company Act which was announced in May 2015, the recipients of share dividends and bonuses are limited to shareholders and do not include employees. On May 29, 2018, the annual shareholders' meeting resolved to amend appropriation of earnings in the Articles and set up the policies on the distribution of employees' compensation.

Refer to Note 27(f) for more information related to the estimation and actual distribution of employees' compensation and remuneration of directors.

Items referred to under Rule No. 1010012865 and Rule No. 1010047490 issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Company. Distribution can be made out of any subsequent reversal of the debit to other equity items.

The shareholders held their meeting on May 16, 2017, and resolved not to appropriate earnings for 2016. In addition, the shareholders also resolved to offset losses of previous years by using legal reserve of US$31,345 thousand.

The appropriation of earnings for 2017 had been resolved by the annual shareholders' meeting on May 29, 2018. The appropriation and dividends per share were as follows:

	Appropriation of Earnings		**Dividends Per Share**
	(In Thousands of US dollars)	**(In Thousands of N.T. Dollars)**	**(N.T. Dollars)**
Legal reserve	$ 7,981	$ 238,875	$ -
Cash dividend	40,761	1,219,991	3

The cash dividends in US dollars of the appropriations of earnings for 2017 were calculated based on the average closing exchange rate of US$1 to NT$29.93 which was the closing price at Bank of Taiwan on the bank trading day immediately preceding the shareholders' meeting.

On February 20, 2019, the Company's board of directors proposed the appropriation of earnings for 2018; except for US$697 thousand which was recognized as legal reserve, there was no appropriations of earnings.

The appropriations of earnings for 2018 is subject to resolution of the shareholders' meeting to be held on May 16, 2019.

d. Other equity items

Exchange differences on translating of foreign operations

	For the Year Ended December 31	
	2018	**2017**
Balance at January 1	$ 1,226,002	$ 3,232,790
Recognized for the year		
Exchange differences on translating the financial statements of foreign operations	(93,093)	363,810
Income tax relating to gains or losses on translating the financial statements of foreign operations	-	7,172
Share from associates accounted for using equity method	-	(9,715)
Exchange differences on translating to presentation currency	1,132,449	(2,368,055)
Balance at December 31	$ 2,265,358	$ 1,226,002

e. Non-controlling interests

	For the Year Ended December 31	
	2018	**2017**
Balance at January 1	$ 222,924	$ 239,436
Share in profit (loss) for the year	140,902	(18,354)
Other comprehensive income during the year		
Exchange differences on translating the financial statements of foreign entities	(13,806)	(20,804)
Exchange differences on translating to presentation currency	12,174	22,646
TPKJ distributed cash dividends	(93,141)	-
Non-controlling interests arising from acquisition of subsidiaries - TPKF HK	91,730	-
Dissolution and liquidation of TCS	(10,676)	-
Balance at December 31	$ 350,107	$ 222,924

f. Treasury shares (as of December 31, 2018: None)

Buy-back of Shares	**Shares Transferred to Employees (In Thousands of Shares)**	**Shares Cancelled (In Thousands of Shares)**	**Total (In Thousands of Shares)**
Number of shares at January 1, 2017	3,482	-	3,482
Decrease during the year	(3,482)	-	(3,482)
Number of shares at December 31, 2017	-	-	-

On December 19, 2017, the Company's board of directors resolved to transfer 3,482 thousand treasury shares to the employees at a price of $59.63 per share in the total amount of $207,639 thousand, and the buy-back cost was $243,595 thousand. The employee share options' base date was December 19, 2017, and the Company recognized compensation cost of $90,776 thousand on the grant date and recognized capital surplus (derived from its treasury share transactions) of $54,820 on the settlement date. Refer to Note 30 for more information.

Under the Securities and Exchange Act, the Company shall neither pledge treasury shares nor exercise shareholders' rights on these shares, such as the rights to dividends and to vote.

26. REVENUE

	For the Year Ended December 31	
	2018	2017
Revenue from sale of goods	$ 112,630,204	$ 105,844,430
Others	851,304	1,364,052
	$ 113,481,508	$ 107,208,482

The Group's revenue from the sale of touch modules, touch display and ITO glass-related products.

27. NET PROFIT FROM CONTINUING OPERATIONS

Net profit from continuing operation:

a. Interest income

	For the Year Ended December 31	
	2018	2017
Bank deposits	$ 264,257	$ 195,263
Financial assets at amortized cost - financing products	266,900	-
Debt investments with no active market - financing products	-	56,147
Loan to related parties and others	4,372	12,847
	$ 535,529	$ 264,257

b. Other income

	For the Year Ended December 31	
	2018	2017
Rental income		
Rental income from operating lease		
Investment properties	$ 38,043	$ 30,465
Others	6,640	5,220
	44,683	35,685
Others	178,332	113,199
	$ 223,015	$ 148,884

c. Finance costs

	For the Year Ended December 31	
	2018	2017
Interest on bank loans	$ 668,926	$ 762,858
Interest on ECB	42,664	175,923
Interest on unsecured renminbi bonds	-	25,953
Total interest expense for financial liabilities measured at amortized cost	$ 711,590	$ 964,734

d. Depreciation and amortization

	For the Year Ended December 31	
	2018	2017
Property, plant and equipment	$ 7,272,448	$ 8,357,560
Investment properties	14,586	26,006
Intangible assets	30,739	41,318
	$ 7,317,773	$ 8,424,884
An analysis of amortization by function		
Operating costs	$ 3,162	$ 4,641
Selling and marketing expenses	540	553
General and administration expenses	23,738	32,800
Research and development expenses	3,299	3,324
	$ 30,739	$ 41,318

e. Employee benefits expense

	For the Year Ended December 31	
	2018	2017
Post-employment benefits (see Note 24)		
Defined contribution plans	$ 352,044	$ 370,154
Defined benefit plans	216	180
	352,260	370,334
Share-based payments (see Note 30)		
Equity-settled	78,712	146,376
Other employee benefits	9,069,878	9,599,635
Total employee benefits expense	$ 9,500,850	$ 10,116,345
An analysis of employee benefits expense by function		
Operating costs	$ 7,320,910	$ 7,678,291
Operating expenses	2,179,940	2,438,054
	$ 9,500,850	$ 10,116,345

f. Employees’ compensation and remuneration of directors

Under the Articles, the Company may appropriate up to 1% of the remaining profit as remuneration of directors and set aside up to 10% of the remaining profit as bonuses for the employees of the Company and its subsidiaries.

In accordance with the amendments to the Company Act announced in May 2015, and the annual shareholders’ meeting resolved to the amendment in the Articles on May 29, 2018, the Company accrued employees’ compensation and remuneration of directors at rates of no less than 0.1% and no higher than 1%, respectively, of net profit before income tax, employees’ compensation, and remuneration of directors. If the Company has losses of previous years, net profit before income tax should be retained for offsetting the amount of those losses.

For the year ended December 31, 2018, the Company did not recognize any estimated remuneration of directors, but employees’ compensation was $2,700 thousand, which were approved by the Company’s board of directors on February 20, 2019.

For the year ended December 31, 2017, the Company did not recognize any estimated employees’ compensation, but remuneration of directors was $21,537 thousand. The remuneration of directors was based on past distributed amounts and in accordance with the most recent year’s distribution percentage.

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

On March 12, 2018, the Company’s board of directors resolved not to distribute employees’ compensation, and distribute remuneration of directors in the amount of US$594 thousand for the year ended December 31, 2017. There was difference between the approved amount of remuneration of directors and the actual amount of US$714 thousand recognized in the consolidated financial statements for the year ended December 31, 2018, and the difference was recognized in profit or loss in 2018.

On February 23, 2017, the Company’s board of directors resolved not to distribute employees’ compensation and remuneration of directors for the year ended December 31, 2016. There was no difference between the approved amount of employees’ compensation and remuneration of directors and the actual amount recognized in the consolidated financial statements for the year ended December 31, 2016.

Information on employees’ compensation and remuneration of directors resolved by the Company’s board of directors in 2018 and 2017 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

28. INCOME TAX RELATED TO CONTINUING OPERATIONS

a. Income tax recognized in profit or loss

Major components of tax expense were as follows:

	For the Year Ended December 31	
	2018	2017
Current tax		
In respect of the current year	$ 458,170	$ 670,091
Adjustments for prior years	5,340	32,837
	463,510	702,928
Deferred tax		
In respect of the current year	377,737	194,710
Effect of tax rate changes	(516,013)	-
Translation adjustments	6,039	(7,763)
	(132,237)	186,947
Income tax expense recognized in profit or loss	$ 331,273	$ 889,875

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

	For the Year Ended December 31	
	2018	2017
Profit before tax from continuing operations	$ 696,007	$ 3,275,911
Income tax expense calculated at the statutory rate	$ 241,429	$ 598,364
Permanent differences	(244,151)	30,842
Deferred tax effect of earnings of subsidiaries	478,109	307,382
Additional income tax under the Alternative Minimum Tax Act	24	24
Unrecognized deductible temporary differences	(181,683)	(735,628)
Unrecognized loss carryforwards	510,510	528,695
Exchange differences on translating to presentation currency	6,039	(7,763)
Effect of tax rate changes	(516,013)	-
Adjustments for prior years' tax	6,112	6,583
Others	30,897	161,376
Income tax expense recognized in profit or loss	$ 331,273	$ 889,875

The applicable tax rates used by subsidiaries to calculate deferred tax were as follows:

	December 31	
	2018	2017
TPKT, TCS and TPK HK (Taiwan Branch)	20%	17%
TPKC, TPKL, TPKS, RSO, TPKJ, TPKG, TPKF, TPKP, TPKD, TPKMS, MTOH and TPKM	10%, 15%-25%	10%, 12.5%-25%
UYH (Hong Kong Branch), TPK HK and TPKJ HK	5%, 16.5%	5%, 16.5%
RSSL	-	-
OTH and UYH	10%, 30%	10%, 30%
TPKU	36%	49%

In 2017, the applicable corporate income tax rate used by the group entities in the ROC is 17%. However, the Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings will be reduced from 10% to 5%. The applicable tax rate used by subsidiaries in China is 25%. Tax rates used by other group entities operating in other jurisdictions are based on the tax laws in those jurisdictions.

b. Income tax recognized in other comprehensive income (for the year ended December 31, 2018: None)

	For the Year Ended December 31, 2017
Deferred tax	
In respect of the current year:	
Translating foreign operations	$ (7,172)
Remeasurement on defined benefit plans	181
Total income tax expense (benefit) recognized in other comprehensive income	$ (6,991)

c. Current tax assets and liabilities

	December 31	
	2018	2017
Current tax assets		
Tax refund receivable	$ 6,025	$ 7,849
Current tax liabilities		
Income tax payable	$ 128,734	$ 372,887

d. Deferred tax assets and liabilities

	December 31	
	2018	2017
Deferred tax assets		
Unrealized compensation costs	$ 82,856	$ 81,777
Loss carryforwards	22,356	-
Unrealized warranty expenses	399,996	186,148
Unrealized losses on inventories	133,035	62,844
Unrealized impairment losses	1,630,886	1,337,716
Others	186,368	311,169
	$ 2,455,497	$ 1,979,654
Deferred tax liabilities		
Unappropriated earnings of subsidiaries	$ 2,768,132	$ 2,218,349
Unrealized foreign exchange gains	804	2,024
	$ 2,768,936	$ 2,220,373

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

	December 31	
	2018	2017
Loss carryforwards		
Expire in 5 years	$ 23,894,995	$ 21,522,435
Expire in 6-10 years	377,120	945,643
More than 10 years	51,473	36,024
	$ 24,323,588	$ 22,504,102
Deductible temporary differences		
Unrealized impairment losses	$ 6,646,229	$ 6,154,119
Others	1,438,548	1,391,772
	$ 8,084,777	$ 7,545,891

f. Information about unused loss carryforwards

Loss carryforwards of subsidiaries as of December 31, 2018 were comprised of:

Year of Loss	Unused Amount	Creditable Amount	Expiry Year
2010	$ 1,178	$ 104	2030
2011	26,691	2,359	2031
2012	9,312	823	2032
2014	1,482,378	367,681	2019 and 2024
2015	7,670,913	1,826,915	2020 and 2025
2016	7,696,449	1,767,329	2021 and 2026
2017	4,219,714	920,570	2022 and 2027
2018	3,328,579	682,688	2023, 2028, 2038 and no expiry year
	$ 24,435,214	$ 5,568,469	

g. Income tax assessment

The income tax returns though 2016 of TPKT and TPK HK Taiwan Branch have been assessed by the tax authorities. The income tax returns through 2018 of TCS have been assessed by the tax authorities.

29. EARNINGS PER SHARE

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

Net Profit for the Year

	For the Year Ended December 31	
	2018	**2017**
Profit for the year attributable to owners of the Company	$ 223,832	$ 2,404,390
Effect of potentially dilutive ordinary shares:		
Interest on convertible bonds (after tax)	-	175,923
Earnings used in the computation of diluted earnings per share	$ 223,832	$ 2,580,313

Weighted Average Number of Ordinary Shares Outstanding (In Thousands of Shares)

	For the Year Ended December 31	
	2018	**2017**
Weighted average number of ordinary shares used in the computation of basic earnings per share	406,664	362,010
Effect of potentially dilutive ordinary shares:		
Convertible bonds	-	27,213
Employee share options	-	1
Employees' compensation or bonuses issued to employees	56	-
Weighted average number of ordinary shares used in the computation of diluted earnings per share	406,720	389,224

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

Since the exercise price of the options or warrants issued by the Company exceeded the average market price of the shares during 2018 and 2017, they are anti-dilutive and excluded from the computation of diluted earnings per share.

30. SHARE-BASED PAYMENT ARRANGEMENTS

a. Employee share option plans

In May 2010, June 2012, April 2014, December 2014 and November 2015, 9,000 units, 2,808 units, 6,000 units, 6,300 units and 10,000 units of options were respectively granted to qualified employees of the Company and its subsidiaries. Each unit of options entitles the holder to subscribe for one thousand ordinary shares of the Company. The options granted in 2010, 2012, 2014 and 2015 are valid for 10 years, 7 years, 5 years and 5 years, respectively, and are exercisable at certain percentages after the second anniversary from the grant date. For any subsequent changes in the Company's capital surplus (via share dividend distributions and capital reductions other than by the cancellation of treasury shares), the exercise price shall be adjusted accordingly.

Information on employee share options was as follows:

	For the Year Ended December 31			
	2018		2017	
Employee Share Options	**Units of Options**	**Weighted-average Exercise Price (NT$)**	**Units of Options**	**Weighted-average Exercise Price (NT$)**
Balance at January 1	15,044	$153.6	18,731	$160.1
Options forfeited	(2,584)	161.4	(3,657)	170.3
Options exercised	-	-	(30)	100.0
Balance at December 31	12,460	148.6	15,044	153.6
Options exercisable, end of year	10,820	155.8	10,261	166.3

Information about outstanding options as of December 31, 2018 and 2017 was as follows:

December 31					
2018			2017		
Issue Date	**Range of Exercise Price (NT$)**	**Weighted-average Remaining Contractual Life (Years)**	**Issue Date**	**Range of Exercise Price (NT$)**	**Weighted-average Remaining Contractual Life (Years)**
May 1, 2010	$ 94.2	1.33	May 1, 2010	$ 94.2	2.33
June 4, 2012	242.0	0.42	June 4, 2012	242.0	1.42
April 23, 2014	206.4	0.31	April 23, 2014	206.4	1.31
December 2, 2014	184.2	0.92	December 2, 2014	184.2	1.92
December 16, 2014	203.9	0.96	December 16, 2014	203.9	1.96
November 5, 2015	100.0	1.85	November 5, 2015	100.0	2.85

Options granted were priced using the Black-Scholes pricing model and the inputs for the model were as follows:

Issue date	November 2015	December 2014	April 2014	June 2012	May 2010
Grant date share price (NT$)	$101	$197/$221	$228.5	$386	$155
Exercise price (NT$)	$101	$197/$221	$228.5	$386	$164
Expected volatility	50.90%-51.78%	48.53%-49.40%	48.66%	47.95%-48.20%	51.65%-52.01%
Expected life	3.5-4.5 years	3.5-4.5 years	3.5-4.5 years	4.5-5.5 years	6-7 years
Expected dividend yield	-	-	-	-	-
Risk-free interest rate	0.68%-0.79%	0.96%-1.13%	0.89%-1.09%	0.98%-1.06%	1.44%-1.51%

Expected volatility was based on the historical share price volatility of similar industries.

Compensation costs recognized were $78,713 thousand and $54,459 thousand for the years ended December 31, 2018 and 2017, respectively.

b. Issuance of ordinary shares reserved for employee subscription

On August 7, 2017, the Company's board of directors resolved to issue new ordinary shares in the form of GDRs and reserved part of the ordinary shares for employee subscription. For the year ended December 31, 2017, compensation costs of issuance of ordinary shares reserved for employee subscription was $1,141 thousand. Refer to Note 25 (a) for more information.

c. Treasury shares transferred to employee

In accordance with the resolution of the Company's board of directors made on December 19, 2017 and the "Regulations of the second round of buy-back shares transferred to employees", the Company transferred 3,482 thousand shares of treasury shares to the employees at a price of $59.63 per share. The Company transferred shares to employees of the Company and its subsidiaries who meet specific requirements. For the year ended December 31, 2017, compensation costs of treasury shares transferred to employee were $90,776 thousand. Refer to Note 25 (f) for more information.

31. DISPOSAL OF SUBSIDIARIES

On January 26, 2017, the Company's board of directors resolved to sell its interest in JSX to Ruei-Shin Investment (Pingtan) Co., Ltd. The subsidiary, TPKP, sold 91% of its ownership in JSX in the amount of RMB246,192 thousand in March 2017. The gains from the disposal, US$14,469 thousand, have been recognized. Due to the disposal, the interest that TPKP held in JSX has decreased from 100% to 9%, and the Group ceased to have control over JSX.

On April 12, 2018, the Company's board of directors resolved to sell all its interests in JT to Jan Ann Co., Ltd. (Cayman) or the designated third party. In May 2018, TPKJ sold all its interests in JT which amounted to RMB49,950 thousand, and US$1,917 thousand was recognized as gain on disposal. After disposal, JT was excluded in the consolidated financial statements.

a. Consideration received from the disposal

	JSX	JT
Consideration received in cash and cash equivalents	$ 1,099,089	$ 233,270

b. Analysis of assets and liabilities at date control was lost

	JSX	JT
Current assets		
Cash and cash equivalents	$ 204	$ 17,307
Notes and trade receivable, net	-	75,362
Inventories	-	30,556
Other current assets	134	7,002
Non-current assets		
Property, plant and equipment	-	54,895
Intangible assets	-	7,251
Deferred tax assets	1,476	-
Refundable deposits	-	13,059
Long-term prepayments for leases	681,465	-
Current liabilities		
Notes and trade payable	-	(19,037)
Other payables	(196)	(2,540)
Other current liabilities	-	(6,660)
Non-current liabilities		
Other non-current liabilities	-	(680)
Net assets disposed of	$ 683,083	$ 176,515

c. Gain on disposal of subsidiaries

	JSX	JT
Consideration received	$ 1,099,089	$ 233,270
Net assets disposed of	(683,083)	(176,515)
Reclassification of remaining interests to financial assets measured at cost - non-current	108,701	-
Reclassification of other comprehensive income in respect of subsidiaries	(81,232)	-
Gain on disposal	$ 443,475	$ 56,755

d. Net cash inflow on disposal of subsidiaries

	JSX	JT
Consideration received in cash and cash equivalents	$ 1,099,089	$ 233,270
Less: Cash and cash equivalent balances disposed of	(204)	(17,307)
	$ 1,098,885	$ 215,963

32. EQUITY TRANSACTIONS WITH NON-CONTROLLING INTERESTS

TPK HK acquired the remaining percentage of ownership of 19.98% from external shareholders in the amount of US$3,000 thousand in March 2018. After the acquisition, TPK HK's percentage of ownership in TPKF HK increased from 80.02% to 100%. The additional paid-in capital amounting to $5,477 thousand and unappropriated earnings amounting to $173,882 thousand were reduced since a difference from the equity transaction occurred.

The above transaction was accounted for as an equity transaction since the Group did not cease to have control over the subsidiary.

33. OPERATING LEASE ARRANGEMENTS

a. The Group as lessee

Operating leases relate to leases of manufacturing facilities, office facilities and transportation equipment with lease terms between 1 and 10 years.

As of December 31, 2018 and 2017, refundable deposits paid under operating leases amounted to $67,307 thousand and $83,946 thousand, respectively.

The future minimum lease payments payable for non-cancellable operating leases commitments were as follows:

	December 31	
	2018	2017
Not later than 1 year	$ 322,442	$ 323,330
Later than 1 year and not later than 5 years	937,154	450,332
Later than 5 years	501,103	400,823
	$ 1,760,699	$ 1,174,485

b. The Group as lessor

Operating leases relate to leases of investment properties owned by the Group with lease terms of 3 years. As of December 31, 2018 and 2017, the Group received guarantee deposits of $1,426 thousand and $1,402 thousand under operating leases, respectively.

The future minimum lease payments of non-cancellable operating leases were as follows:

	December 31	
	2018	**2017**
Not later than 1 year	$ 14,854	$ 17,108
Later than 1 year and not later than 5 years	2,476	17,633
	$ 17,330	$ 34,741

34. CAPITAL MANAGEMENT

The capital structure of the Group consists of its net debt and equity. The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of its debt and equity balance. Key management personnel of the Group review the capital structure periodically. Based on recommendations of the key management personnel, in order to balance the overall capital structure, the Group may adjust the amount of dividends paid to shareholders, the number of new shares issued or repurchased, and the amount of new debt issued or existing debt redeemed.

35. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments not measured at fair value

The management of the Group considers that the carrying amounts of financial assets and financial liabilities recognized in the consolidated financial statements approximate their fair values, or that their fair values cannot be measured reliably.

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

1) Fair value hierarchy

December 31, 2018

	Level 1	**Level 2**	**Level 3**	**Total**
Financial asset at FVTPL				
Derivatives financial assets	$ -	$ 44,275	$ -	$ 44,275

(Continued)

	Level 1	Level 2	Level 3	Total
Financial asset at FVTOCI				
Investments in equity instruments				
Domestic unlisted				
Ordinary shares	$ -	$ -	$ 150,000	$ 150,000
Overseas unlisted				
Ordinary shares	-	-	108,932	108,932
	-	-	258,932	258,932
Trade receivables, net	-	1,975,914	-	1,975,914
Other receivables, net	-	2,243,911	-	2,243,911
	$ -	$ 4,219,825	$ 258,932	$ 4,478,757
Financial liabilities at FVTPL				
Derivative financial liabilities	$ -	$ 40,327	$ -	$ 40,327

(Concluded)

December 31, 2017

	Level 1	Level 2	Level 3	Total
Financial asset at FVTPL				
Derivatives financial assets	$ -	$ 1,569	$ -	$ 1,569
Financial liabilities at FVTPL				
Derivative financial liabilities	$ -	$ -	$ 203,536	$ 203,536

For the years ended December 31, 2018 and 2017, there were no transfers between Levels 1 and 2.

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

	For the Year Ended December 31, 2018
Financial assets at FVTOCI - equity instruments	
Balance at January 1	$ 255,545
Effects of foreign currency exchange differences	3,387
Balance at December 31	$ 258,932

	For the Year Ended December 31	
	2018	2017
Financial liabilities at FVTPL - derivatives		
Balance at January 1	$ 203,536	$ 214,550
Losses recognized in profit or loss	95,542	2,559
Redemption of convertible bonds	(296,020)	-
Effects of foreign currency exchange differences	(3,058)	(13,573)
Balance at December 31	$ -	$ 203,536

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

The fair values of the Group's financial assets and liabilities were determined using methods and assumptions as follows:

a) The fair values of foreign exchange forward contracts were determined using quoted prices of forward exchange rates and yield rates. Yield rates are estimated at quoted interest rates with the same contract period.

b) The fair values of foreign exchange option contracts were determined using spot exchange rate on valuation date, exercise price of options, exchange rate volatility, contract period and quoted prices of risk-free interest rate with the same contract period.

c) The fair values of trade receivables and other receivables at FVTOCI were discounted at a rate that reflected the credit risk of various counterparties and estimated future cash flows.

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

The fair values of domestic and overseas unlisted equity investments held by the Group were determined using exercise price of put option of the investment contract and transfer price of the equity interest transfer agreement.

There were no quoted prices in active markets for put options and redemption options of ECB issued by the Group. Hence, the fair values of options are determined using the binomial option pricing model where the unobservable input is historical volatility. An increase in historical volatility used in isolation would result in an increase in the fair value. As of December 31, 2017, the historical volatility used was 47.59%. (as of December 31, 2018: None)

c. Categories of financial instruments

	December 31	
	2018	2017
Financial assets		
Held for trading	$ -	$ 1,569
Mandatorily classified as at FVTPL	44,275	-
Loans and receivables (1)	-	37,239,445
Available-for-sale financial assets (2)	-	255,545
Financial assets at amortized cost (3)	30,177,755	-

(Continued)

	December 31	
	2018	2017
Financial assets at FVTOCI		
Equity instruments	$ 258,932	$ -
Debt instruments	4,219,825	-
Refundable deposits	86,532	84,389
<u>Financial liabilities</u>		
Financial liabilities FVTPL		
Held for trading	40,327	203,536
Financial liabilities at amortized costs (4)	41,494,167	40,886,638
Guarantee deposits	14,533	163,137

(Concluded)

1) The balances included loans and receivables measured at amortized cost, which comprise cash and cash equivalents, debt investments with no active market, notes receivable, trade receivables and other receivables.

2) The balances included the carrying amount of available for sale financial assets measured at cost.

3) The balances included financial assets at amortized cost, which comprise cash and cash equivalents, financing products, notes receivable, trade receivables and other receivables (exclude trade receivables and other receivables at FVTOCI).

4) The balances included financial liabilities at amortized cost, which comprise short-term borrowing, notes and accounts payable, payables for purchase of equipment, payables - others, current portion of long-term borrowing and bonds payable, bonds payable, and long-term borrowings.

d. Financial risk management objectives and policies

The Group's major financial instruments include equity and debt investments, notes and trade receivable, notes and accounts payable, bonds payable and borrowings. The Group's Corporate Treasury function provides services to the business, coordinates access to domestic and international financial markets, monitors and manages the financial risks relating to the operations of the Group through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk (including foreign currency risk and interest rate risk), credit risk and liquidity risk.

The Group sought to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives are governed by the Group's policies approved by the Company's board of directors, which provided written principles on foreign currency risk, interest rate risk, credit risk, the use financial derivatives and non-derivative financial instrument, and the investment of excess liquidity. Compliance with policies and exposure limits was reviewed by internal auditors on a continuous basis. The Group did not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

Significant financial activities of the Group should be reviewed by the Company's board of directors to ensure compliance with the related regulations and internal control rules. During the execution of financial plans, the Group shall comply with the financial operating procedures and overall financial risk management policies.

1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates, interest rates and other price.

a) Foreign currency risk

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

The carrying amounts of the Group's significant foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period were as follows:

In Thousands of US dollars

	December 31	
	2018	**2017**
Assets		
RMB	$ 147,970	$ 151,279
NTD	17,848	22,461
JPY	319	251
Liabilities		
RMB	254,472	166,374
NTD	9,497	6,866
JPY	1,287	1,613

Except for the data described above, the Group also disclosed its derivatives exposed to foreign currency risk at the end of the reporting period in Note 7.

b) Analysis of sensitivity for foreign currency risk

The Group was mainly exposed to RMB, NTD, and JPY.

The following table details the Group's sensitivity to a 5% increase and decrease in the United States dollars (the functional currency) against the relevant foreign currencies. The sensitivity rate used when reporting foreign currency risk internally to key management personnel and representing management's assessment of the reasonably possible change in foreign exchange rate is 5%. The sensitivity analysis included only outstanding foreign currency denominated monetary items and adjusted their translation at the end of the reporting period for a 5% change in foreign currency rates.

	Impact on Profit or Loss if USD Strengthened 5% Against the Relevant Currency	
	For the Year Ended December 31	
	2018	**2017**
RMB	$ 445,242	$ 49,390
NTD	(12,214)	(22,101)
JPY	1,416	1,930

	Impact on Profit or Loss if USD Weakened 5% Against the Relevant Currency	
	For the Year Ended December 31	
	2018	2017
RMB	$ (493,293)	$ (23,650)
NTD	13,500	24,427
JPY	(1,565)	(2,133)

c) Interest rate risk

The Group was exposed to interest rate risk because entities in the Group borrowed funds at both fixed and floating interest rates. The risk is managed by the Group by maintaining an appropriate mix of fixed and floating rate borrowings.

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

	December 31	
	2018	2017
Fair value interest rate risk		
Financial assets	$ 12,899,542	$ 12,933,758
Financial liabilities	9,586,167	14,752,020
Cash flow interest rate risk		
Financial assets	8,218,286	11,927,950
Financial liabilities	7,684,627	2,794,487

d) Analysis of sensitivity to interest rate risk

The sensitivity analysis was determined based on the Group's exposure to interest rates for non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis was prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year. A 50 basis point increase or decrease was used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 50 basis points higher and all other variables were held constant, the Group's the pre-tax profit for the years ended December 31, 2018 and 2017 would increase by $2,668 thousand and $45,667 thousand, respectively, which was mainly attributable to the Group's exposure to interest rates on its variable-rate bank borrowings and its variable-rate bank deposits.

e) Other price risk

Investments in equity instruments held by the Group are domestic and overseas unlisted ordinary shares, which are held for strategic rather than trading purposes. The fair values of these equity investments are determined using exercise price of put option of the investment contract and transfer price of the equity interest transfer agreement, and the level of price risk exposure is not high.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in a financial loss to the Group. As at the end of the reporting period, the Group's maximum exposure to credit risk, which will cause a financial loss to the Group due to the failure of counterparties to discharge an obligation, could arise from the carrying amount of the respective recognized financial assets as stated in the balance sheets.

The Group adopted a policy of using internal and external credit ratings, only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. The Group uses other publicly available financial information and its own trading records to rate its major customers. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty-limits that are reviewed and approved by the risk management committee semi-annually.

The Group authorized and approved hierarchical credit lines and monitored trade receivables periodically based on the related trade receivables aging, thus reducing bad debts or overdue trade. Then, at the end of the reporting period, the Group would assess line by line its collectable amounts, allowance for impairment loss, and amounts of impairment recognized on trade receivables. Therefore, the management believed that the credit management of the Group fully covered the credit risk.

The Group's concentration of credit risk of 81.13% and 65.78% in total trade receivables as of December 31, 2018 and 2017, respectively, was related to the Group's the five largest customers.

3) Liquidity risk

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

The Group relies on bank borrowings as a significant source of liquidity. As of December 31, 2018 and 2017, the Group had available unutilized overdraft and short-term bank loan facilities of $41,760,815 thousand and $49,376,640 thousand, respectively.

a) Liquidity and interest rate risk table for non-derivative financial liabilities

The following table details of the Group's remaining contractual maturity for its short-term and long-term borrowings (including bonds payable). The table was drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Group can be required to pay.

Specifically, bank loans with a repayment on demand clause were included in the earliest time band regardless of the probability of the banks choosing to exercise their rights. The maturity dates for other non-derivative financial liabilities were based on the agreed repayment dates.

December 31, 2018

	Weighted Average Interest Rate (%)	On Demand or Less Than 1 Month	1 to 3 Months	3 Months to 1 Year	1 to 5 Years
Non-derivative financial liabilities					
Variable interest rate borrowings	4.1975	$ 149,833	$ -	$ 675,969	$ 6,858,825
Fixed interest rate borrowings	3.6722	1,093,565	1,567,498	4,544,692	2,380,412
		$ 1,243,398	$ 1,567,498	$ 5,220,661	$ 9,239,237

December 31, 2017

	Weighted Average Interest Rate (%)	On Demand or Less Than 1 Month	1 to 3 Months	3 Months to 1 Year	1 to 5 Years
Non-derivative financial liabilities					
Variable interest rate borrowings	4.4304	$ 153,567	$ 44,640	$ 1,090,454	$ 1,505,826
Fixed interest rate borrowings	2.7524	2,471,079	2,482,042	7,804,413	1,994,486
		$ 2,624,646	$ 2,526,682	$ 8,894,867	$ 3,500,312

The following table details the Group's expected maturity for some of its non-derivative financial assets. The table below was drawn up based on the undiscounted contractual maturities of the financial assets including interest that will be earned on those assets. The inclusion of information on non-derivative financial assets is necessary in order to understand the Group's liquidity risk management as the liquidity is managed on a net asset and liability basis.

December 31, 2018

	Weighted Average Interest Rate (%)	On Demand or Less Than 1 Month	1 to 3 Months	3 Months to 1 Year	1 to 5 Years
Non-derivative financial assets					
Variable interest rate assets	0.6258	$ 8,218,286	$ -	$ -	$ -
Fixed interest rate assets	3.2941	8,674,697	3,858,049	366,796	-
		$ 16,892,983	$ 3,858,049	$ 366,796	$ -

December 31, 2017

	Weighted Average Interest Rate (%)	On Demand or Less Than 1 Month	1 to 3 Months	3 Months to 1 Year	1 to 5 Years
Non-derivative financial assets					
Variable interest rate assets	0.9140	$ 11,927,950	$ -	$ -	$ -
Fixed interest rate assets	3.1049	5,787,829	4,546,244	2,599,685	-
		$ 17,715,779	$ 4,546,244	$ 2,599,685	$ -

For non-interest-bearing liabilities recorded as notes and trade payable, payables for purchase of equipment and other payables, the Company has set up the financial risk management policy to secure payment for all the payables prior to the expiry of the credit terms.

b) Liquidity and interest rate risk tables for derivative financial liabilities

The following table details the Group's liquidity analysis of its derivative financial instruments. The table is based on the undiscounted contractual net cash inflows and outflows on derivative instruments that settle on a net basis, and the undiscounted gross inflows and outflows on those derivatives that require gross settlement. When the amount payable or receivable is not fixed, the amount disclosed is determined by reference to the projected interest rates as illustrated by the yield curves at the end of the reporting period.

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Net settled					
Foreign exchange forward contracts	$ -	$ -	$ 64,355	$ -	$ -
Foreign exchange option contracts	-	-	(895)	-	-
	$ -	$ -	$ 63,460	$ -	$ -

December 31, 2017

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Net settled					
Foreign exchange forward contracts	$ -	$ 5,083	$ -	$ -	$ -

c) Financing facilities

	December 31	
	2018	2017
Unsecured bank overdraft facility, reviewed annually and payable on demand:		
Amount used	$ 29,148,217	$ 18,784,388
Amount unused	41,760,815	49,376,640
	$ 70,909,032	$ 68,161,028

e. Transfers of financial assets

Factored trade receivables for the years ended December 31, 2018 and 2017 were as follows:

Subsidiary	Counterparties	Currencies	Receivables Sold	Amounts Collected	Translation Adjustments	Advances Received at Year-end (Note 1)	Interest Rates on Advances Received (%)	Credit Line (Note 2)
For the year ended December 31, 2018								
TPK HK	A Bank	US$	$ 2,288,627	$ 2,030,244	$ -	$ 485,455	2M Libor+0.55%	US$400,000 thousand (approximately NT$12,286,000 thousand)
		NT$	$ 68,818,109	$ 61,048,626	$ 383,615	$ 14,910,762		
For the year ended December 31, 2017								
TPK HK	A Bank	US$	$ 1,963,540	$ 1,940,057	$ -	$ 227,072	2M Libor+0.59%	US$400,000 thousand (approximately NT$11,904,000 thousand)
		NT$	$ 59,901,127	$ 59,184,727	$ (524,471)	$ 6,757,664		

Note 1: Advances received included those for receivables factored but unused.

Note 2: Credit line is the advance limit receivable from the bank.

Pursuant to the factoring agreements, losses from sales returns and allowances were borne by the Group, while losses from credit risk shall be borne by the Bank. The factored but unused amount between TPK HK and A Bank has been reclassified from accounts receivable to other receivables.

f. Offsetting financial assets and financial liabilities

The Group is eligible to present certain financial assets and financial liabilities with financial institutions on a net basis on the balance sheet since the offsetting criteria are met.

The tables below present the quantitative information on financial assets and financial liabilities that have been offset in the balance sheet or that are covered by enforceable master netting arrangements or similar agreements.

December 31, 2018

Financial Assets	Gross Amounts of Recognized Financial Assets	Gross Amounts of Recognized Financial Liabilities Offset in the Balance Sheet	Net Amounts of Financial Assets Presented in the Balance Sheet
Financial assets at amortized cost	$ 7,625,743	$ (3,496,785)	$ 4,128,958

Financial Liabilities	Gross Amounts of Recognized Financial Liabilities	Gross Amounts of Recognized Financial Assets Offset in the Balance Sheet	Net Amounts of Financial Liabilities Presented in the Balance Sheet
Short-term borrowings	$ 8,705,480	$ (3,496,785)	$ 5,208,695

December 31, 2017

Financial Assets	Gross Amounts of Recognized Financial Assets	Gross Amounts of Recognized Financial Liabilities Offset in the Balance Sheet	Net Amounts of Financial Assets Presented in the Balance Sheet
Debt investment with no active market	$ 9,145,603	$ (3,611,033)	$ 5,534,570

Financial Liabilities	Gross Amounts of Recognized Financial Liabilities	Gross Amounts of Recognized Financial Assets Offset in the Balance Sheet	Net Amounts of Financial Liabilities Presented in the Balance Sheet
Short-term borrowings	$ 10,070,375	$ (3,611,033)	$ 6,459,342

36. TRANSACTIONS WITH RELATED PARTIES

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

a. Related party names and categories

Related Party Name	Related Party Category
Cando Corporation	Associate
Cando (Xiamen) Corporation	Associate
TES Touch Embedded Solutions Inc. (Taiwan Branch)	Related party in substance (associate prior to March 2017 disposal of remaining interest in TES XM)
TES Touch Embedded Solutions (Xiamen) Inc.	Related party in substance (associate prior to March 2017 disposal of remaining interest in TES XM)
TES Trading (Xiamen) Co Ltd.	Related party in substance (associate prior to March 2017 disposal of remaining interest in TES XM)
BTO Technologies (Xiamen) Ltd. ("BTO")	Related party in substance
Vision Optical Technologies (Xiamen) Inc. ("VOT")	Related party in substance
Pan Shi (Xiamen) Real Estate Development Inc.	Related party in substance
Taiwan Video & Monitor Corp. ("Taiwan VM")	Related party in substance
Nissha Printing Co., Ltd. ("Nissha")	Non-related party (related party in substance prior to March 2018 purchase of remaining interest in TPKF HK)
Cambrios Film Solutions Corporation Taiwan Branch	Related party in substance
Cambrios Film Solution Corporation (originally "AM Holding Corporation", changed name in December 2018, "Cambrios Film")	Related party in substance
Cambrios Advanced Materials Corp.	Related party in substance
Cambrios Advanced Materials (Quan Zhou) Corporation	Related party in substance

b. Sales and other income

Related Party Category/Name	For the Year Ended December 31 2018	2017
1) Operating revenue, net		
Associates	$ -	$ 195,761
Other related parties	787,148	723,472
	$ 787,148	$ 919,233
2) Rental income (recorded as other income)		
Other related parties		
Nissha	$ 589	$ 3,661
Others	4,003	1,559
	$ 4,592	$ 5,220
3) Other income		
Associates	$ -	$ 10
Other related parties	2,858	2,330
	$ 2,858	$ 2,340

Subsidiaries leased factories, offices and equipment to related parties under mutual lease agreements with monthly rental payments.

c. Purchases of goods, costs and expenses

Related Party Category/Name	For the Year Ended December 31 2018	2017
1) Purchases of goods		
Associates	$ -	$ 169,739
Other related parties	273,026	747,178
	$ 273,026	$ 916,917
2) Rental expenses (recorded as operating costs - manufacturing expenses)		
Other related parties		
BTO	$ 51,462	$ 51,216
VOT	47,788	47,171
Others	66	36
	$ 99,316	$ 98,423

Related Party Category/Name	For the Year Ended December 31 2018	2017
3) Rental expenses (recorded as operating expenses)		
Associates	$ -	$ 33
Other related parties		
BTO	37,855	37,017
Taiwan VM	30,389	29,040
Others	10,611	6,752
	78,855	72,809
	$ 78,855	$ 72,842

Subsidiaries leased factories, offices and dormitories from related parties under mutual lease agreements with monthly rental payments.

Related Party Category/Name	For the Year Ended December 31 2018	2017
4) Research expenses		
Associates	$ -	$ 1,635
Other related parties	9,666	7,386
	$ 9,666	$ 9,021
5) Miscellaneous expenses		
Associates	$ -	$ 489
Other related parties	-	349
	$ -	$ 838
6) Repair and maintenance expenses		
Other related parties	$ 130	$ 984
7) Material consumption		
Other related parties	$ 3,131	$ 684
8) Professional service fees		
Other related parties		
Cambrios Film	$ 77,456	$ 60,360
Others	6,824	6,864
	$ 84,280	$ 67,224

d. Receivables from (payables to) related parties

Related Party Category/Name	December 31 2018	December 31 2017
1) Trade receivables - related parties (recorded as trade receivables)		
Associates	$ 5,062	$ 5,075
Other related parties	95,809	167,354
	$ 100,871	$ 172,429
2) Trade payables - related parties (recorded as trade payables)		
Associates	$ 8,093	$ 7,951
Other related parties	50,832	73,486
	$ 58,925	$ 81,437

The outstanding payables to related parties are unsecured and will be settled in cash. No guarantees were received for receivables from related parties.

Related Party Category/Name	December 31 2018	December 31 2017
3) Other receivables - related parties (recorded as other receivables)		
Associates	$ 857	$ 830
Other related parties	1,028	1,293
	$ 1,885	$ 2,123
4) Payables for purchase of equipment - related parties (recorded as payable for purchase of equipment)		
Associates	$ 5,887	$ 5,702
Other related parties	-	2,271
	$ 5,887	$ 7,973
5) Other payables - related parties (recorded as other payables - others)		
Associates	$ 857	$ 872
Other related parties	86,961	77,084
	$ 87,818	$ 77,956

e. Others

Related Party Category/Name	December 31 2018	December 31 2017
Refundable deposits		
Associates	$ -	$ 5
Other related parties		
VOT	15,663	15,937
Others	7,353	7,272
	23,016	23,209
	$ 23,016	$ 23,214

Refundable deposits are the security deposits for leasing parts of plants and offices from related parties during the lease period from 2013 to 2019. For the years ended December 31, 2018 and 2017, the interest income on the deposits were both $4 thousand.

f. Loans to related parties

The Group provided associates with unsecured short-term loans at rates comparable to the market interest rate of interest. For the year ended December 31, 2017, the loans to related parties was unsecured loans with interest income of $7,707 thousand (as of December 31, 2018: None). In June 2017, based on the assessment of collectability of receivables from Cando and its subsidiaries, the Group wrote off its receivables with an allowance for doubtful receivables of $988,545 thousand. Refer to Note 12 for details.

g. Acquisitions of property, plant and equipment

Related Party Category/Name	Purchase Price For the Year Ended December 31 2018	Purchase Price For the Year Ended December 31 2017
Associates	$ 250	$ 71
Other related parties	1,738	2,266
	$ 1,988	$ 2,337

h. Disposals of property, plant and equipment

Related Party Category/Name	Proceeds For the Year Ended December 31 2018	Proceeds For the Year Ended December 31 2017
Other related parties	$ 268	$ 9

Related Party Category/Name	Gains on Disposals For the Year Ended December 31 2018	Gains on Disposals For the Year Ended December 31 2017
Other related parties	$ 236	$ 9

i. Endorsements and guarantees

As of December 31, 2018 and 2017, guarantees for long-term and short-term borrowings provided by related parties were as follows:

	December 31, 2018		
	US$	NT$	Guarantor
TPKD	$ 32,054	$ 984,539	TPKH
TPKD	32,054	984,539	TPKC

	December 31, 2017		
	US$	NT$	Guarantor
TPKD	$ 33,660	$ 1,001,722	TPKH
TPKD	33,660	1,001,722	TPKC
JT	15,300	455,328	TPKJ

Other related parties that have substantive related party relationship with the Company and the transaction price and payment terms of related parties are provided in Table 4 following the Notes to Consolidated Financial Statements.

j. Compensation of key management personnel

For the years ended December 31, 2018 and 2017, the total amounts of the remuneration of directors and other key management personnel were as follows:

	For the Year Ended December 31	
	2018	2017
Short-term employee benefits	$ 88,423	$ 69,281
Share-based payments	13,258	29,282
Post-employment benefits	908	963
	$ 102,589	$ 99,526

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

37. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for borrowings from banks and leasing companies, and the tariff of importing raw materials:

	December 31	
	2018	2017
Bank deposits (classified as financial assets at amortized cost)	$ 210,165	$ -
Bank deposits (classified as debt investments with no active market)	-	443
Machinery and equipment, net	1,158,229	1,540,777
	$ 1,368,394	$ 1,541,220

38. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Group as of December 31, 2018 and 2017 were as follows:

a. As of December 31, 2018 and 2017, unused letters of credit for purchases of raw materials and machinery and equipment amounted to approximately $238,929 thousand and $89,373 thousand, respectively.

b. Unrecognized commitments are as follows:

	December 31	
	2018	**2017**
Acquisition of property, plant and equipment	$ 1,145,949	$ 579,042

39. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Group entities significant financial assets and liability denominated in foreign currencies aggregated by the foreign currencies other than the functional currency (the US dollar) and the related the exchange rates between the foreign currencies and the respective functional currency were as follows:

(All Currencies in Thousands)

	December 31, 2018		
	Foreign Currencies	**Exchange Rate**	**US dollars**
Financial assets			
Monetary items			
RMB	$ 1,015,577	6.8632	$ 147,970
NTD	548,201	30.7150	17,848
JPY	35,190	110.4062	319
Non-monetary items			
Derivative instruments			
RMB	700,700	6.8632	44,275
Financial liabilities			
Monetary items			
RMB	1,746,549	6.8632	254,472
NTD	291,698	30.7150	9,497
JPY	142,082	110.4062	1,287
Non-monetary items			
Derivative instruments			
Foreign exchange options	200	6.8632	40,327

	December 31, 2017		
	Foreign Currencies	Exchange Rate	US dollars
Financial assets			
Monetary items			
RMB	$ 988,753	6.5342	$ 151,279
NTD	668,444	29.7600	22,461
JPY	28,292	112.6419	251
Non-monetary items			
Derivative instruments			
RMB	131,800	6.5342	1,569
Financial liabilities			
Monetary items			
RMB	1,087,413	6.5342	166,374
NTD	204,333	29.7600	6,866
JPY	181,688	112.6419	1,613

For the years ended December 31, 2018 and 2017, the realized and unrealized net foreign exchange gains and losses were $85,992 thousand and $(419,903) thousand, respectively. It is impractical to disclose net foreign exchange gains and losses by each significant foreign currency due to the variety of the foreign currency transactions and functional currencies of the Group entities.

40. SEPARATELY DISCLOSED ITEMS

a. Information about significant transactions and investees:

1) Financing provided to others. (Table 1)

2) Endorsements/guarantees provided. (Table 2)

3) Marketable securities held (excluding investment in subsidiaries). (Table 3)

4) Marketable securities acquired and disposed of at costs or prices of at least NT$300 million or 20% of the paid-in capital. (None)

5) Acquisition of individual real estate at costs of at least NT$300 million or 20% of the paid-in capital. (None)

6) Disposal of individual real estate at prices of at least NT$300 million or 20% of the paid-in capital. (None)

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital. (Table 4)

8) Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital. (Table 5)

9) Trading in derivative instruments. (Notes 7 and 35)

10) Intercompany relationships and significant intercompany transactions. (Table 8)

11) Information on investees. (Table 6)

b. Information on investments in mainland China

1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, net income of investee, investment income or loss, carrying amount of the investment at the end of the period, repatriations of investment income, and limit on the amount of investment in the mainland China area: (Table 7)

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms, and unrealized gains or losses: (Tables 1, 2, 4 and 5)

a) The amount and percentage of purchases and the balance and percentage of the related payables at the end of the period.

b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the period.

c) The amount of property transactions and the amount of the resultant gains or losses.

d) The balance of negotiable instrument endorsements or guarantees or pledges of collateral at the end of the period and the purposes.

e) The highest balance, the end of period balance, the interest rate range, and total current period interest with respect to financing of funds.

f) Other transactions that have a material effect on the profit or loss for the period or on the financial position, such as the rendering or receipt of services.

41. SEGMENT INFORMATION

Information reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance focuses on the types of goods or services delivered or provided. Specifically, the Group's reportable segment under IFRS 8 "Operating Segment" is the touch modules segment. The related information was as follows:

a. Information of reportable segment's gains or losses and assets

	For the Year Ended December 31					
	2018			2017		
	Touch Modules	Others	Total	Touch Modules	Others	Total
Revenue from external customers	$ 113,338,052	$ 143,456	$ 113,481,508	$ 106,855,186	$ 353,296	$ 107,208,482
Inter-segment revenue	2,804,237	6,134,512	8,938,749	465,108	5,491,278	5,956,386
Interest income	1,058,954	99,988	1,158,942	745,395	89,558	834,953
Finance costs	493,778	841,225	1,335,003	641,706	893,724	1,535,430
Depreciation and amortization	5,336,596	1,981,177	7,317,773	6,155,356	2,269,528	8,424,884
Impairment loss on assets (reversal of impairment loss)	2,444	-	2,444	(24,925)	(13,300)	(38,225)
Reportable segment profit (loss) before tax	4,573,790	(3,242,594)	1,331,196	7,949,283	(58,370)	7,890,913
Reportable segment income tax expense	(297,273)	(34,000)	(331,273)	(811,917)	(77,958)	(889,875)
Reportable segment net profit (loss)	4,276,517	(3,276,594)	999,923	7,137,366	(136,328)	7,001,038
Reportable segment assets	82,248,814	83,077,517	165,326,331	78,574,044	86,303,768	164,877,812
Reportable segment capital expenditure on acquisition of property, plant and equipment, intangible assets and long-term prepayments for leases	5,215,619	1,332,147	6,547,766	3,680,997	168,571	3,849,568

b. Reportable segment's gains or losses and other significant items reconciliation

1) Segment revenues and results

Profit and Loss	For the Year Ended December 31 2018	2017
Reportable segment profit before tax	$ 4,573,790	$ 7,949,283
Reportable segment income tax expense	(297,273)	(811,917)
Reportable segment net profit	4,276,517	7,137,366
Non-reportable segment's loss	(3,276,594)	(136,328)
Less: Inter-segment profit	(635,189)	(4,615,002)
Less: Net loss (profit) on non-controlling interests	(140,902)	18,354
Net profit attributable to owners of the Company	$ 223,832	$ 2,404,390

2) Other significant items reconciliation

For the Year Ended December 31, 2018

Other Significant Items	Total Amount of Reportable Segment	Total Amount of Non-reportable Segment	Reconciliation	Total
Interest income	$ 1,058,954	$ 99,988	$ (623,413)	$ 535,529
Finance costs	493,778	841,225	(623,413)	711,590
Capital expenditure on acquisition of property, plant and equipment, intangible assets and long-term prepayments for leases	5,215,619	1,332,147	(443,626)	6,104,140
Depreciation and amortization	5,336,596	1,981,177	-	7,317,773
Impairment loss	2,444	-	-	2,444

For the Year Ended December 31, 2017

Other Significant Items	Total Amount of Reportable Segment	Total Amount of Non-reportable Segment	Reconciliation	Total
Interest income	$ 745,395	$ 89,558	$ (570,696)	$ 264,257
Finance costs	641,706	893,724	(570,696)	964,734
Capital expenditure on acquisition of property, plant and equipment, intangible assets and long-term prepayments for leases	3,680,997	168,571	(116,181)	3,733,387
Depreciation and amortization	6,155,356	2,269,528	-	8,424,884
Reversal of impairment loss	24,925	13,300	-	38,225

3) Revenue from major products and services

The Company and its subsidiaries categorized reportable segment based on the type of products. There were no specific additional disclosure for products and revenue.

4) Geographical information

The Group operate in three principal geographical areas - Taiwan, the United States ("USA") and China.

The Group's revenue from continuing operations from external customers by location of operations and information about its non-current assets by location of assets are detailed below.

	Revenue from External Customers		Non-current Assets	
	For the Year Ended December 31		December 31	
	2018	2017	2018	2017
North America	$ 50,306,792	$ 66,778,752	$ 1,662	$ 2,626
Asia	26,503,807	21,848,795	35,812,101	36,060,410
Others	36,670,909	18,580,935	-	-
	$ 113,481,508	$ 107,208,482	$ 35,813,763	$ 36,063,036

Non-current assets above excludes deferred tax assets, financial assets measured at cost and financial assets at FVTOCI.

5) Information about major customers

Customers who contributed 10% or more to the Group's revenue for the years ended December 31, 2018 and 2017 are as follows:

	For the Year Ended December 31	
	2018	2017
Customer A	$ 65,745,659	$ 67,273,920
Customer B	18,025,433	14,458,478
	$ 83,771,092	$ 81,732,398

TPK HOLDING CO., LTD. AND SUBSIDIARIES

FINANCING PROVIDED TO OTHERS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands)

No. (Note 1)	Lender	Borrower	Financial Statements Account	Related Parties	Highest Balance for the Period (Notes 5 and 6)	Ending Balance (Notes 5 and 6)	Actual Borrowing Amount (Notes 5 and 7)	Interest Rate	Nature of Financing (Note 2)	Business Transaction Amount	Reason for Short-term Financing	Allowance for Impairment Loss	Collateral Item	Collateral Value	Financing Limit for Each Borrower (Notes 3 and 5)	Aggregate Financing Limit (Notes 3 and 5)	Note
0	TPKH	UYH	Loan to related parties	Y	NT$ 3,916,163 (approximately US$ 127,500)	NT$ 2,073,263 (approximately US$ 67,500)	NT$ 921,450 (approximately US$ 30,000)	2.1696%-3.1772%	b	$ -	Operating capital	$ -	-	$ -	NT$ 14,756,641 (approximately US$ 480,438)	NT$ 18,445,801 (approximately US$ 600,547	
		TPK HK	Loan to related parties	Y	NT$ 4,607,250 (approximately US$ 150,000)	NT$ 2,303,625 (approximately US$ 75,000)	-	2.3133%-4.2500%	b	-	Operating capital	-	-	-	NT$ 14,756,641 (approximately US$ 480,438)	NT$ 18,445,801 (approximately US$ 600,547	
1	UYH	TPKG	Loan to related parties	Y	NT$ 2,610,775 (approximately US$ 85,000)	-	-	2.4711%-3.2225%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
2	TPKC	RSO	Loan to related parties	Y	NT$ 215,005 (approximately US$ 7,000)	-	-	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKL	Loan to related parties	Y	NT$ 1,075,025 (approximately US$ 35,000)	-	-	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKG	Loan to related parties	Y	NT$ 6,143,000 (approximately US$ 200,000)	NT$ 3,685,800 (approximately US$ 120,000)	NT$ 2,989,899 (approximately US$ 97,343)	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		MTOH	Loan to related parties	Y	NT$ 2,457,200 (approximately US$ 80,000)	NT$ 2,457,200 (approximately US$ 80,000)	NT$ 1,510,944 (approximately US$ 49,192)	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKH	Loan to related parties	Y	NT$ 12,286,000 (approximately US$ 400,000)	NT$ 6,143,000 (approximately US$ 200,000)	-	3.0000%-3.2000%	b	-	Operating capital	-	-	-	NT$ 14,007,077 (approximately US$ 456,034)	NT$ 17,508,847 (approximately US$ 570,042)	
		TPKP	Loan to related parties	Y	NT$ 12,900,300 (approximately US$ 420,000)	NT$ 6,757,300 (approximately US$ 220,000)	NT$ 6,042,236 (approximately US$ 196,719)	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKF	Loan to related parties	Y	NT$ 1,873,615 (approximately US$ 61,000)	NT$ 798,590 (approximately US$ 26,000)	NT$ 688,444 (approximately US$ 22,414)	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKD	Loan to related parties	Y	NT$ 1,535,750 (approximately US$ 50,000)	NT$ 1,535,750 (approximately US$ 50,000)	NT$ 1,048,938 (approximately US$ 34,151)	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKS	Loan to related parties	Y	NT$ 614,300 (approximately US$ 20,000)	NT$ 614,300 (approximately US$ 20,000)	NT$ 272,957 (approximately US$ 8,887)	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPK HK	Loan to related parties	Y	NT$ 9,214,500 (approximately US$ 300,000)	NT$ 4,607,250 (approximately US$ 150,000)	-	3.0000%-3.2000%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKMT	Loan to related parties	Y	NT$ 61,430 (approximately US$ 2,000)	NT$ 61,430 (approximately US$ 2,000)	-	-	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	

(Continued)

No. (Note 1)	Lender	Borrower	Financial Statements Account	Related Parties	Highest Balance for the Period (Notes 5 and 6)	Ending Balance (Notes 5 and 6)	Actual Borrowing Amount (Notes 5 and 7)	Interest Rate	Nature of Financing (Note 2)	Business Transaction Amount	Reason for Short-term Financing	Allowance for Impairment Loss	Collateral		Financing Limit for Each Borrower (Notes 3 and 5)	Aggregate Financing Limit (Notes 3 and 5)	Note
													Item	Value			
3	TPK HK	TPKH	Loan to related parties	Y	NT$ 5,375,125 (approximately US$ 175,000)	NT$ 3,071,500 (approximately US$ 100,000)	NT$ 2,242,221 (approximately US$ 73,001)	2.4129%-3.8000%	b	$ -	Operating capital	$ -	-	$ -	NT$ 3,568,108 (approximately US$ 116,168)	NT$ 4,460,135 (approximately US$ 145,210)	
		MTOH	Loan to related parties	Y	NT$ 805,532 (approximately US$ 26,226)	-	-	2.2489%-3.2225%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKP	Loan to related parties	Y	NT$ 2,148,084 (approximately US$ 69,936)	NT$ 2,148,084 (approximately US$ 69,936)	NT$ 2,148,084 (approximately US$ 69,936)	2.4382%-3.2225%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKC	Loan to related parties	Y	NT$ 4,607,250 (approximately US$ 150,000)	NT$ 4,607,250 (approximately US$ 150,000)	NT$ 1,492,794 (approximately US$ 48,601)	2.6858%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		TPKG	Loan to related parties	Y	NT$ 4,607,250 (approximately US$ 150,000)	NT$ 4,607,250 (approximately US$ 150,000)	NT$ 3,071,500 (approximately US$ 100,000)	2.1482%-3.2225%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
		UYH	Loan to related parties	Y	NT$ 3,839,375 (approximately US$ 125,000)	-	-	1.9973%-3.3118%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
4	TPKA	TPK HK	Loan to related parties - long-term	Y	NT$ 1,197,885 (approximately US$ 39,000)	NT$ 1,197,885 (approximately US$ 39,000)	NT$ 1,197,885 (approximately US$ 39,000)	2.1129%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
5	TPKS	TPKC	Loan to related parties	Y	NT$ 1,535,750 (approximately US$ 50,000)	NT$ 921,450 (approximately US$ 30,000)	NT$ 3,072 (approximately US$ 100)	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
6	TPKM	TPKC	Loan to related parties	Y	NT$ 307,150 (approximately US$ 10,000)	NT$ 307,150 (approximately US$ 10,000)	NT$ 268,051 (approximately US$ 8,727)	3.5000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
7	RSSL	TPK HK	Loan to related parties	Y	NT$ 577,442 (approximately US$ 18,800)	NT$ 577,442 (approximately US$ 18,800)	NT$ 575,599 (approximately US$ 18,740)	3.3181%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
8	TPKJ	JT	Loan to related parties	N	NT$ 107,404 (approximately US$ 3,497	-	-	3.5000%	b	-	Operating capital	-	-	-	-	-	8
9	TPKD	TPKC	Loan to related parties	Y	NT$ 6,143,000 (approximately US$ 200,000)	NT$ 6,143,000 (approximately US$ 200,000)	-	3.0000%-4.2500%	b	-	Operating capital	-	-	-	NT$ 36,891,602 (approximately US$ 1,201,094)	NT$ 55,337,403 (approximately US$ 1,801,641)	
10	TPKT	TPK HK	Loan to related parties	Y	NT$ 1,996,475 (approximately US$ 65,000)	NT$ 921,450 (approximately US$ 30,000)	NT$ 921,450 (approximately US$ 30,000)	2.1129%-3.2893%	b	-	Operating capital	-	-	-	NT$ 1,108,031 (approximately US$ 36,075)	NT$ 1,385,039 (approximately US$ 45,093)	

Note 1: The parent company is indicated by “0”, while all other numbers indicate subsidiaries.

Note 2: Types of financing were as follows:

a. Business and trade.
b. Short-term financing.

(Continued)

Note 3: The limits of financing amounts were as follows:

a. Financing received from TPKH cannot exceed 50% of TPKH's net asset value, and the total short-term financing cannot exceed 40% of TPKH's net asset value.

b. Financing received from a financing company cannot exceed 50% of the financing company's net asset value, and the total short-term financing cannot exceed 40% of the financing company's net asset value.

c. The limits of individual financing provided are as follows:

1) Intercompany business and trade financing cannot exceed the business and trade amount. The business and trade amount is the higher of the sales amount or purchases amount within one year.

2) Short-term financing cannot exceed 40% of the financing company's net asset value.

d. The financing limits where TPKH directly and indirectly holds voting right shares of subsidiaries at 100% are as follows:

1) Business and trade: The total financing amount cannot exceed 50% of the financing company's net asset value; the amount of individual financing provided is limited to the business and trade amount where the business and trade amount is the higher of the sales amount or purchases amount within one year.

2) Short-term financing: The total financing amount cannot exceed 150% of TPKH's net asset value. The amount of individual financing provided cannot exceed 100% of TPKH's net asset value.

Note 4: The Company's board of directors approved the credit line of loans to another party for NT$55,539,969 thousand (approximately US$1,808,236 thousand). The loans to other parties disclosed on Table 1 did not exceed the credit lines approved by the Company's board of directors.

Note 5: The exchange rate from US dollars to New Taiwan dollars as of December 31, 2018 was US$1=NT$30.715.

Note 6: Highest balance and ending balance for the period only indicate credit line of loans to others, not the actual amount of loans.

Note 7: Intercompany balances and transactions were eliminated upon consolidation.

Note 8: TPKJ sold all of its interest in JT in May 2018, and on June 22, 2018, the Company's board of directors resolved to cancel the credit line of loans to JT. Refer to Notes 31 to the consolidated financial statements for more information.

(Concluded)

TPK HOLDING CO., LTD. AND SUBSIDIARIES

ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands)

No. (Note 1)	Endorser/ Guarantor	Endorsee/Guarantee		Limits on Endorsement/ Guarantee Given on Behalf of Each Party (Notes 2 and 3)	Maximum Amount Endorsed/ Guaranteed During the Period (Notes 3 and 4)	Outstanding Endorsement/ Guarantee at the End of the Period (Notes 3 and 4)	Actual Borrowing Amount (Note 3)	Amount Endorsed/ Guaranteed by Collaterals	Ratio of Accumulated Endorsement/ Guarantee to Net Equity in Latest Financial Statements	Aggregate Endorsement/ Guarantee Limit (Notes 2 and 3)	Endorsement/ Guarantee Given by Parent on Behalf of Subsidiaries	Endorsement/ Guarantee Given by Subsidiaries on Behalf of Parent	Endorsement/ Guarantee Given on Behalf of Companies in Mainland China	Note
		Name	Relationship											
0	TPKH	TPKD	Subsidiaries of which the Company held a 100% equity interest	NT$ 9,222,901 (approximately US$ 300,273)	NT$ 984,539 (approximately US$ 32,054)	NT$ 984,539 (approximately US$ 32,054)	NT$ 895,035 (approximately US$ 29,140)	$ -	2.67%	NT$ 18,445,801 (approximately US$ 600,547)	Y	N	Y	
1	TPKJ	JT	Subsidiaries of which the Company indirectly held a more than 50% equity interest	-	NT$ 447,518 (approximately US$ 14,570)	-	-	-	-	NT$ 18,445,801 (approximately US$ 600,547)	N	N	Y	5
2	TPKC	TPKD	Subsidiaries of which the Company held a 100% equity interest	NT$ 9,222,901 (approximately US$ 300,273)	NT$ 984,539 (approximately US$ 32,054)	NT$ 984,539 (approximately US$ 32,054)	NT$ 895,035 (approximately US$ 29,140)	-	2.67%	NT$ 18,445,801 (approximately US$ 600,547)	N	N	Y	

Note 1: The parent company is indicated by “0”, while all other numbers indicate subsidiaries.

Note 2: For TPKH, the total amount of endorsement/guarantee provided and the limit on endorsement/guarantee amounts provided to each guaranteed party cannot exceed 50% and 25% of TPKH’s net asset value, respectively. The maximum collateral/guarantee amount allowable was calculated based on the net assets value as of December 31, 2018.

Note 3: The exchange rate from US dollars to New Taiwan dollars as of December 31, 2018 was US$1=NT$30.715.

Note 4: The maximum amount and outstanding endorsement/guarantee at the end of the period only indicate limits on endorsement/guarantee amount to others, not the actual borrowing amount.

Note 5: TPKJ cancelled limits on endorsement/guarantee amount to JT in March 2018, and sold of its interest in JT in May 2018. Refer to Note 31 to the consolidated financial statements for more information.

TPK HOLDING CO., LTD. AND SUBSIDIARIES

MARKETABLE SECURITIES HELD
DECEMBER 31, 2018
(In Thousands, Unless Stated Otherwise)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2018				Note
				Shares	Carrying Amount	Percentage of Ownership	Fair Value	
TPKT	Kingyoup Optronics Co., Ltd. ordinary shares	-	Financial assets at FVTOCI	6,000,000	NT$ 150,000 (approximately US$ 4,884)	16.57	NT$ 150,000 (approximately US$ 4,884)	
TPKP	Jinshunxin Development (Pingtan) Co., Ltd. paid-in capital	-	Financial assets at FVTOCI	-	NT$ 108,932 (approximately US$ 3,547)	9.00	NT$ 108,932 (approximately US$ 3,547)	

Note: The exchange rate from US dollars to New Taiwan dollars as of December 31, 2018 was US$1=NT$30.715.

TPK HOLDING CO., LTD. AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands)

Company Name	Related Party	Relationship	Transaction Detail				Abnormal Transaction		Notes/Trade Receivable (Payables)		Note
			Purchase/ Sale	Amount (Notes 2 and 3)	% to Total	Payment Terms	Unit Price	Payment Term	Ending Balance (Notes 2 and 4)	% to Total	
TPKT	TPKD	The same ultimate parent company	Sales	NT$ 1,007,263 (approximately US$ 33,498)	0.89	45 days after monthly closing	No significant difference	No significant difference	NT$ 1,167 (approximately US$ 38)	0.01	
TPKC	TPKS	The same ultimate parent company	Purchase	NT$ 800,016 (approximately US$ 26,605)	0.84	45 days after monthly closing	No significant difference	No significant difference	NT$ 255,395 (approximately US$ 8,315)	1.32	
	TPKG	The same ultimate parent company	Purchase	NT$ 1,177,074 (approximately US$ 39,145)	1.23	45 days after monthly closing	No significant difference	No significant difference	NT$ 111,548 (approximately US$ 3,632)	0.57	
	TPK HK	Investments accounted for using equity method	Purchase	NT$ 6,066,112 (approximately US$ 201,736)	6.36	45 days after monthly closing	No significant difference	No significant difference	NT$ 477,049 (approximately US$ 15,531)	2.46	
	TPKM	The same ultimate parent company	Purchase	NT$ 102,612 (approximately US$ 3,412)	0.11	45 days after monthly closing	No significant difference	No significant difference	NT$ 9,209 (approximately US$ 300)	0.05	
	TPKJ	The same ultimate parent company	Purchase	NT$ 1,553,891 (approximately US$ 51,676)	1.63	45 days after monthly closing	No significant difference	No significant difference	NT$ 330,739 (approximately US$ 10,768)	1.70	
	TPKU	The same ultimate parent company	Sales	NT$ 633,629 (approximately US$ 21,072)	0.56	45 days after monthly closing	No significant difference	No significant difference	NT$ 79,577 (approximately US$ 2,591)	0.76	
	TPKG	The same ultimate parent company	Sales	NT$ 128,343 (approximately US$ 4,268)	0.11	45 days after monthly closing	No significant difference	No significant difference	NT$ 31,697 (approximately US$ 1,032)	0.30	
	TPK HK	Investments accounted for using equity method	Sales	NT$ 40,923,874 (approximately US$ 1,360,972)	36.29	45 days after monthly closing	No significant difference	No significant difference	NT$ 8,247,059 (approximately US$ 268,503	78.90	
	TPKD	Investments accounted for using equity method	Sales	NT$ 1,408,956 (approximately US$ 46,856)	1.25	45 days after monthly closing	No significant difference	No significant difference	NT$ 219,487 (approximately US$ 7,146)	2.10	

(Continued)

Company Name	Related Party	Relationship	Transaction Detail				Abnormal Transaction		Notes/Accounts Receivable (Payables)		Note
			Purchase/ Sale	Amount (Notes 2 and 3)	% to Total	Payment Terms	Unit Price	Payment Term	Ending Balance (Notes 2 and 4)	% to Total	
TPKS	TPKG	The same ultimate parent company	Purchase	NT$ 299,511 (approximately US$ 9,961)	0.31	45 days after monthly closing	No significant difference	No significant difference	NT$ 24,210 (approximately US$ 788)	0.12	
	TPKC	The same ultimate parent company	Sales	NT$ 800,016 (approximately US$ 26,605)	0.71	45 days after monthly closing	No significant difference	No significant difference	NT$ 255,403 (approximately US$ 8,315)	2.44	
	TPK HK	The same ultimate parent company	Sales	NT$ 5,579,140 (approximately US$ 185,541)	4.95	45 days after monthly closing	No significant difference	No significant difference	NT$ 1,877,528 (approximately US$ 61,127)	17.96	
TPKU	TPKC	The same ultimate parent company	Purchase	NT$ 633,509 (approximately US$ 21,068)	0.66	45 days after monthly closing	No significant difference	No significant difference	NT$ 79,577 (approximately US$ 2,591)	0.41	
TPKG	TPKC	The same ultimate parent company	Purchase	NT$ 127,671 (approximately US$ 4,246)	0.13	45 days after monthly closing	No significant difference	No significant difference	NT$ 31,696 (approximately US$ 1,032)	0.16	
	TPKC	The same ultimate parent company	Sales	NT$ 1,177,917 (approximately US$ 39,173)	1.04	45 days after monthly closing	No significant difference	No significant difference	NT$ 111,549 (approximately US$ 3,632)	1.07	
	TPKS	The same ultimate parent company	Sales	NT$ 299,511 (approximately US$ 9,961)	0.27	45 days after monthly closing	No significant difference	No significant difference	NT$ 24,210 (approximately US$ 788)	0.23	
	TPKD	The same ultimate parent company	Sales	NT$ 926,441 (approximately US$ 30,810)	0.82	45 days after monthly closing	No significant difference	No significant difference	NT$ 41,917 (approximately US$ 1,365)	0.40	
TPK HK	TPKC	Investments accounted for using equity method	Purchase	NT$ 40,923,874 (approximately US$ 1,360,972)	42.94	45 days after monthly closing	No significant difference	No significant difference	NT$ 582,108 (approximately US$ 18,952)	3.00	
	TPKS	The same ultimate parent company	Purchase	NT$ 5,579,140 (approximately US$ 185,541)	5.85	45 days after monthly closing	No significant difference	No significant difference	-	-	
	MTOH	Investments accounted for using equity method	Purchase	NT$ 1,997,531 (approximately US$ 66,430)	2.10	45 days after monthly closing	No significant difference	No significant difference	NT$ 77,604 (approximately US$ 2,527)	0.40	
	TPKD	Investments accounted for using equity method	Purchase	NT$ 61,537,709 (approximately US$ 2,046,509)	64.57	45 days after monthly closing	No significant difference	No significant difference	NT$ 14,115,817 (approximately US$ 459,574)	72.69	
	TPKC	Investments accounted for using equity method	Sales	NT$ 6,645,346 (approximately US$ 220,999)	5.89	45 days after monthly closing	No significant difference	No significant difference	NT$ 1,316,394 (approximately US$ 42,858)	12.59	
	TPKD	Investments accounted for using equity method	Sales	NT$ 39,959,053 (approximately US$ 1,328,885)	35.44	45 days after monthly closing	No significant difference	No significant difference	NT$ 5,099,028 (approximately US$ 166,011)	48.78	

(Continued)

Company Name	Related Party	Relationship	Transaction Detail				Abnormal Transaction		Notes/Accounts Receivable (Payables)		Note
			Purchase/ Sale	Amount (Notes 2 and 3)	% to Total	Payment Terms	Unit Price	Payment Term	Ending Balance (Notes 2 and 4)	% to Total	
MTOH	TPKP	The same ultimate parent company	Purchase	NT$ 296,088 (approximately US$ 9,847)	0.31	45 days after monthly closing	No significant difference	No significant difference	NT$ 35,402 (approximately US$ 1,153)	0.18	
	TPKJ	The same ultimate parent company	Purchase	NT$ 163,014 (approximately US$ 5,421)	0.17	45 days after monthly closing	No significant difference	No significant difference	NT$ 59,496 (approximately US$ 1,937)	0.31	
	TPK HK	Investments accounted for using equity method	Sales	NT$ 1,997,531 (approximately US$ 66,430)	1.77	45 days after monthly closing	No significant difference	No significant difference	NT$ 206,360 (approximately US$ 6,719)	1.97	
	TES XM	Related party in substance	Sales	NT$ 709,177 (approximately US$ 23,585)	0.63	60 days after monthly closing	No significant difference	No significant difference	NT$ 92,867 (approximately US$ 3,023)	0.89	
TPKP	MTOH	The same ultimate parent company	Sales	NT$ 296,088 (approximately US$ 9,847)	0.26	45 days after monthly closing	No significant difference	No significant difference	NT$ 35,402 (approximately US$ 1,153)	0.34	
TPKM	TPKC	The same ultimate parent company	Sales	NT$ 102,722 (approximately US$ 3,416)	0.09	45 days after monthly closing	No significant difference	No significant difference	NT$ 9,209 (approximately US$ 300)	0.09	
TPKD	TPKC	Investments accounted for using equity method	Purchase	NT$ 973,759 (approximately US$ 32,384)	1.02	45 days after monthly closing	No significant difference	No significant difference	NT$ 174,919 (approximately US$ 5,695)	0.90	
	TPKG	The same ultimate parent company	Purchase	NT$ 926,099 (approximately US$ 30,799)	0.97	45 days after monthly closing	No significant difference	No significant difference	NT$ 41,917 (approximately US$ 1,365)	0.22	
	TPK HK	Investments accounted for using equity method	Purchase	NT$ 39,671,739 (approximately US$ 1,319,330)	41.62	45 days after monthly closing	No significant difference	No significant difference	NT$ 4,958,761 (approximately US$ 161,444)	25.54	
	TPKJ	The same ultimate parent company	Purchase	NT$ 1,269,044 (approximately US$ 42,204)	1.33	45 days after monthly closing	No significant difference	No significant difference	NT$ 291,068 (approximately US$ 9,476)	1.50	
	TPK HK	Investments accounted for using equity method	Sales	NT$ 61,537,709 (approximately US$ 2,046,509)	54.57	45 days after monthly closing	No significant difference	No significant difference	NT$ 14,123,677 (approximately US$ 459,830)	135.13	
	BTO	Related party in substance	Purchase	NT$ 154,571 (approximately US$ 5,140)	0.16	45 days after monthly closing	No significant difference	No significant difference	NT$ 31,353 (approximately US$ 1,021)	0.16	

(Continued)

Company Name	Related Party	Relationship	Transaction Detail				Abnormal Transaction		Notes/Accounts Receivable (Payables)		Note
			Purchase/ Sale	Amount (Notes 2 and 3)	% to Total	Payment Terms	Unit Price	Payment Term	Ending Balance (Notes 2 and 4)	% to Total	
TPKJ	TPKC	The same ultimate parent company	Sales	NT$ 1,554,866 (approximately US$ 51,709)	1.38	45 days after monthly closing	No significant difference	No significant difference	NT$ 330,739 (approximately US$ 10,768)	3.16	
	MTOH	The same ultimate parent company	Sales	NT$ 163,408 (approximately US$ 5,434)	0.14	45 days after monthly closing	No significant difference	No significant difference	NT$ 59,496 (approximately US$ 1,937)	0.57	
	TPKD	The same ultimate parent company	Sales	NT$ 1,269,377 (approximately US$ 42,215)	1.13	45 days after monthly closing	No significant difference	No significant difference	NT$ 291,068 (approximately US$ 9,476)	2.78	

Note 1: The sales prices and payment terms of intercompany and related party sales and purchases were not significantly different from those transactions with third parties.

Note 2: Except for TES XM and BTO, intercompany balances and transactions were eliminated upon consolidation.

Note 3: The average exchange rate from US dollars to New Taiwan dollars for the year ended December 31, 2018 was US$1=NT$30.0696.

Note 4: The exchange rate from US dollars to New Taiwan dollars as of December 31, 2018 was US$1=NT$30.715.

(Concluded)

TPK HOLDING CO., LTD. AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2018
(In Thousands)

Company Name	Related Party	Relationship	Ending Balance (Notes 1 and 3)	Turnover Rate	Overdue		Amount Received in Subsequent Period (Note 2)	Allowance for Impairment Loss
					Amount (Note 1)	Action Taken		
TPKC	TPK HK	Investment accounted for using equity method	NT$ 8,247,059 (approximately US$ 268,503)	7.34	NT$ 1,452,878 (approximately US$ 47,302)	Enhance collection	NT$ 1,696,558 (approximately US$ 55,235)	$ -
	TPKD	Investment accounted for using equity method	NT$ 219,487 (approximately US$ 7,146)	4.12	NT$ 44,474 (approximately US$ 1,448)	Enhance collection	NT$ 92,064 (approximately US$ 2,997)	-
	TPKD	Investment accounted for using equity method	NT$ 147,101 (approximately US$ 4,789)	-	-	-	NT$ 643 (approximately US$ 21)	-
TPKS	TPKC	The same ultimate parent company	NT$ 255,403 (approximately US$ 8,315)	4.46	NT$ 88,472 (approximately US$ 2,880)	Enhance collection	NT$ 88,287 (approximately US$ 2,874)	-
	TPK HK	The same ultimate parent company	NT$ 1,877,528 (approximately US$ 61,127)	3.86	NT$ 974,722 (approximately US$ 31,734)	Enhance collection	NT$ 984,926 (approximately US$ 32,067)	-
TPKG	TPKC	The same ultimate parent company	NT$ 111,549 (approximately US$ 3,632)	11.59	-	-	-	-
TPK HK	TPKC	Investment accounted for using equity method	NT$ 1,316,394 (approximately US$ 42,858)	6.48	NT$ 272 (approximately US$ 9)	Enhance collection	NT$ 143,358 (approximately US$ 4,667)	-
	TPKD	Investment accounted for using equity method	NT$ 5,099,028 (approximately US$ 166,011)	6.99	NT$ 491,791 (approximately US$ 16,011)	Enhance collection	NT$ 1,653,892 (approximately US$ 53,846)	-
MTOH	TPK HK	Investment accounted for using equity method	NT$ 206,360 (approximately US$ 6,719)	11.51	-	-	NT$ 214,252 (approximately US$ 6,975)	-
TPKD	TPK HK	Investment accounted for using equity method	NT$ 14,123,677 (approximately US$ 459,830)	3.93	-	-	NT$ 1,491,246 (approximately US$ 48,551)	-

(Continued)

Company Name	Related Party	Relationship	Ending Balance (Notes 1 and 3)	Turnover Rate	Overdue		Amount Received in Subsequent Period (Note 2)	Allowance for Impairment Loss
					Amount (Note 1)	Action Taken		
TPKJ	TPKC	The same ultimate parent company	NT$ 330,739 (approximately US$ 10,768)	7.08	$ -	-	$ -	$ -
	TPKD	The same ultimate parent company	NT$ 291,068 (approximately US$ 9,476)	4.98	-	-	-	-

Note 1: The exchange rate from US dollars to New Taiwan dollars as of December 31, 2018 was US$1=NT$30.715.

Note 2: The amount received in the subsequent period means that the collection was made by January 28, 2019.

Note 3: Please refer to Table 1 for information on financing provided to others.

(Concluded)

TPK HOLDING CO., LTD. AND SUBSIDIARIES

INFORMATION ON INVESTEES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2018			Net Income (Loss) of the Investee (Note 2)	Share of Profits (Loss) (Notes 2 and 4)	Note
				December 31, 2018 (Note 1)	December 31, 2017 (Note 1)	Number of Shares	%	Carrying Amount (Notes 1 and 4)			
TPKH	Improve	Samoa	Holding company	NT$ 4,745,160 (approximately US$ 154,490)	NT$ 4,745,160 (approximately US$ 154,490)	154,490,000	100.00	NT$ 4,057,772 (approximately US$ 132,110)	NT$ 18,323 (approximately US$ 609)	NT$ 18,323 (approximately US$ 609)	Subsidiary
	UYH	Samoa	Holding company and international trade	NT$ 6,052,084 (approximately US$ 197,040)	NT$ 6,052,084 (approximately US$ 197,040)	196,250,000	100.00	NT$ 30,212,184 (approximately US$ 983,630)	NT$ 1,702,413 (approximately US$ 56,616)	NT$ 1,702,413 (approximately US$ 56,616)	Subsidiary (Note 9)
	TTI	Samoa	International trade	NT$ 15,358 (approximately US$ 500)	NT$ 15,358 (approximately US$ 500)	500,000	100.00	NT$ 195,712 (approximately US$ 6,372)	NT$ 91,836 (approximately US$ 3,054)	NT$ 91,836 (approximately US$ 3,054)	Subsidiary
	OTH	Singapore	Holding company	NT$ 1,601,879 (approximately US$ 52,153)	NT$ 1,601,879 (approximately US$ 52,153)	31,000	100.00	NT$ 1,766,739 (approximately US$ 57,520)	NT$ 155,965 (approximately US$ 5,187)	NT$ 155,965 (approximately US$ 5,187)	Subsidiary
	RUSL	Hong Kong	Holding company	NT$ 14,420,631 (approximately US$ 469,498)	NT$ 14,105,802 (approximately US$ 459,248)	469,498,000	100.00	NT$ 8,980,154 (approximately US$ 292,370)	NT$ (1,360,951) (approximately US$ -45,260)	NT$ (1,360,951) (approximately US$ -45,260)	Subsidiary
Improve	TPKA	Malaysia	Holding company	NT$ 5,116,783 (approximately US$ 166,589)	NT$ 5,116,783 (approximately US$ 166,589)	632,187	100.00	NT$ 4,021,168 (approximately US$ 130,919)	NT$ 18,227 (approximately US$ 606)	NT$ 18,227 (approximately US$ 606)	Sub-subsidiary (Note 10)
OTH	TPKU	U.S.A.	International trade	NT$ 147,432 (approximately US$ 4,800)	NT$ 147,432 (approximately US$ 4,800)	Note 3	100.00	NT$ 191,338 (approximately US$ 6,229)	NT$ (5,944) (approximately US$ -198)	NT$ (5,944) (approximately US$ -198)	Sub-subsidiary
RUSL	TPK HK	Hong Kong	Touch modules related product research, holding company and International trade	NT$ 14,359,201 (approximately US$ 467,498)	NT$ 14,044,372 (approximately US$ 457,248)	467,498,000	100.00	NT$ 8,920,270 (approximately US$ 290,421)	NT$ (1,360,802) (approximately US$ -45,255)	NT$ (1,360,802) (approximately US$ -45,255)	Sub-subsidiary
TPK HK	Cando	Taiwan	Touch modules research and manufacture	NT$ 5,945,628 (approximately US$ 193,574)	NT$ 5,945,628 (approximately US$ 193,574)	77,124,591	19.78	-	-	-	Associate accounted for using equity method (Note 6)
	TPKF HK	Hong Kong	Holding company	NT$ 461,186 (approximately US$ 15,015)	NT$ 369,041 (approximately US$ 12,015)	18,000,000	100.00	NT$ (556,164) (approximately US$ -18,107)	NT$ (100,433) (approximately US$ -3,340)	NT$ (94,675) (approximately US$ -3,149)	Sub-subsidiary
TPKA	TPKT	Taiwan	Touch related material sales and machinery manufacture, wholesale and retail	NT$ 2,911,700 (approximately US$ 116,433)	NT$ 2,911,700 (approximately US$ 116,433)	50,717,000	100.00	NT$ 2,770,078 (approximately US$ 90,187)	NT$ 11,715 (approximately US$ 390)	NT$ 11,715 (approximately US$ 390)	Sub-subsidiary
	TCS	Taiwan	Chemically strengthened glass processing and sales	NT$ 330,000 (approximately US$ 11,061)	NT$ 330,000 (approximately US$ 11,061)	-	-	-	NT$ (4,709) (approximately US$ -157)	NT$ (2,590) (approximately US$ -86)	Sub-subsidiary (Note 8)
TPKT	RSSL	Hong Kong	Holding company	NT$ 408,817 (approximately US$ 13,310)	NT$ 408,817 (approximately US$ 13,310)	13,310,000	100.00	NT$ 579,539 (approximately US$ 18,868)	NT$ (38,905) (approximately US$ -1,294)	NT$ (38,905) (approximately US$ -1,294)	Sub-subsidiary
TPKJ	TPKJ HK	Hong Kong	International trade	NT$ 15,358 (approximately US$ 500)	-	500,000	100.00	NT$ 15,623 (approximately US$ 509)	NT$ 259 (approximately US$ 9)	NT$ 259 (approximately US$ 9)	Sub-subsidiary (Note 7)

Note 1: The exchange rate from US dollars to New Taiwan dollars as of December 31, 2018 was US$1=NT$30.715.

Note 2: The average exchange rate from US dollars to New Taiwan dollars for the year ended December 31, 2018 was US$1=NT$30.0696.

Note 3: There are no shares since it is a limited liability no-shares company.

Note 4: Except for Cando, intercompany balances and transactions were eliminated upon consolidation.

(Continued)

Note 5: Please refer to Table 7 for information on investment in mainland China.

Note 6: Based on assessments, the recoverable amounts of the Company's interests in Cando were less than their carrying amounts. Hence, impairment losses of the total carrying amounts were recognized. Refer to Note 15 to the consolidated financial statements for more information.

Note 7: To meet TPKJ's need of overseas material procurement and agency trading, the Company's board of directors resolved to set up TPKJ HK with a capital of less than US$500 thousand, which was invested by TPKJ on December 21, 2016. TPKJ HK was set up on January 3, 2018 with a capital investment of US$500 thousand in December 2018.

Note 8: The Company resolved to dissolve and liquidate TCS in order to simplify its organizational structure, and the process of liquidation was completed in November 2018.

Note 9: On February 20, 2019, the Company's board of directors resolved to annul the registration of UYH Hong Kong Branch in order to simplify its organizational structure.

Note 10: On February 20, 2019, the Company's board of directors resolved to dissolve and liquidate TPKA in order to simplify its organizational structure.

(Concluded)

TPK HOLDING CO., LTD. AND SUBSIDIARIES

INFORMATION ON INVESTMENT IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands)

Investee Company	Main Business and Products	Paid in Capital (Notes 1 and 2)	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2018	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2018 (Note 2)	Net Income (Loss) of the investee (Note 3)	% Ownership of Direct or Indirect investment	Investment Income (Loss) Recognized (Notes 3 and 5)	Carrying Amount as of December 31, 2018 (Note 2)	Accumulated Repatriation of Investment Income as of December 31, 2018
					Outward	Inward						
TPKC	Touch related material sales and machinery manufacture, wholesale and retail	NT$ 7,475,846 (approximately US$ 243,394)	Direct investment	$ -	$ -	$ -	$ -	NT$ 1,514,051 (approximately US$ 50,352)	100.00	NT$ 1,514,051 (approximately US$ 50,352)	NT$ 35,017,693 (approximately US$ 1,140,084)	$ -
TPKL	Optical glass processing and sales	NT$ 1,345,010 (approximately US$ 43,790)	Direct investment	-	-	-	-	NT$ (10,029) (approximately US$ -334)	100.00	NT$ (10,029) (approximately US$ -334)	NT$ (5,167) (approximately US$ -168)	-
TPKS	Touch modules research, development, manufacture and sales	NT$ 767,875 (approximately US$ 25,000)	Direct investment	-	-	-	-	NT$ 602,054 (approximately US$ 20,022)	100.00	NT$ 602,054 (approximately US$ 20,022)	NT$ 1,659,522 (approximately US$ 54,030)	-
RSO	Optical glass processing and sales	NT$ 573,449 (approximately US$ 18,670)	Direct investment	-	-	-	-	NT$ 3,984 (approximately US$ 132)	100.00	NT$ 3,984 (approximately US$ 132)	NT$ (3,332) (approximately US$ -108)	-
TPKG	Optical glass processing and sales	NT$ 11,420,451 (approximately US$ 371,820)	Direct investment	NT$ 408,510 (approximately US$ 13,300)	-	-	NT$ 408,510 (approximately US$ 13,300)	NT$ (1,495,110) (approximately US$ -49,722)	100.00	NT$ (1,495,110) (approximately US$ -49,722)	NT$ 2,546,594 (approximately US$ 82,910)	-
MTOH	Touch modules research, development, manufacture and sales	NT$ 2,641,408 (approximately US$ 85,997)	Direct investment	-	-	-	-	NT$ (61,463) (approximately US$ -2,044)	100.00	NT$ (53,675) (approximately US$ -1,785)	NT$ 1,034,869 (approximately US$ 33,693)	-
TPKP	Touch modules research, development, manufacture and sales	NT$ 4,607,250 (approximately US$ 150,000)	Direct investment	-	-	-	-	NT$ (1,014,697) (approximately US$ -33,745)	100.00	NT$ (1,014,697) (approximately US$ -33,745)	NT$ (3,873,151) (approximately US$ -126,100)	-
TPKM	Touch related electronic materials manufacture	NT$ 107,503 (approximately US$ 3,500)	Direct investment	-	-	-	-	NT$ 10,441 (approximately US$ 347)	100.00	NT$ 10,441 (approximately US$ 347)	NT$ 298,318 (approximately US$ 9,712)	-
TPKMS	Trade	NT$ 6,920 (approximately US$ 225)	Direct investment	-	-	-	-	NT$ (469) (approximately US$ -16)	100.00	NT$ (469) (approximately US$ -16)	NT$ 7,443 (approximately US$ 242)	-
TPKD	Touch modules research, development, manufacture and sales	NT$ 3,929,415 (approximately US$ 127,931)	Direct investment	-	-	-	-	NT$ 1,803,653 (approximately US$ 59,983)	100.00	NT$ 1,803,653 (approximately US$ 59,983)	NT$ 14,729,734 (approximately US$ 479,562)	-
TPKJ	Protective film and optical adhesive manufacture and sales	NT$ 110,574 (approximately US$ 3,600)	Indirect investment	-	-	-	-	NT$ 300,545 (approximately US$ 9,995)	51.00	NT$ 152,982 (approximately US$ 5,088)	NT$ 364,494 (approximately US$ 11,867)	NT$ 191,676 (approximately US$ 6,240)

(Continued)

Investee Company	Main Business and Products	Paid in Capital (Notes 1 and 2)	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2018	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2018 (Note 2)	Net Income (Loss) of the investee (Note 3)	% Ownership of Direct or Indirect investment	Investment Income (Loss) Recognized (Notes 3 and 5)	Carrying Amount as of December 31, 2018 (Note 2)	Accumulated Repatriation of Investment Income as of December 31, 2018
					Outward	Inward						
JT	Protective film and optical adhesive manufacture and sales	NT$ 179,068 (approximately US$ 5,830)	Indirect investment	$ -	$ -	$ -	$ -	NT$ 11,520 (approximately US$ 383)	51.00 (Note 6)	NT$ 5,875 (approximately US$ 195)	$ -	$ -
TPKF	Touch modules research, development, manufacture and sales	NT$ 543,656 (approximately US$ 17,700)	Direct investment	-	-	-	-	NT$ (100,252) (approximately US$ -3,334)	100.00	NT$ (100,252) (approximately US$ -3,334)	NT$ (562,327) (approximately US$ -18,308)	-

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2018 (Note 2)	Investment Amount Authorized by Investment Commission, MOEA (Note 2)	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA (Notes 2 and 4)
NT$408,510 (approximately US$13,300)	NT$500,655 (approximately US$16,300)	NT$1,662,047 (approximately US$54,112)

Note 1: It is calculated based on historical cost.

Note 2: The exchange rate from US dollars to New Taiwan dollars as of December 31, 2018 was US$1=NT$30.715.

Note 3: The average exchange rate from US dollars to New Taiwan dollars for the year ended December 31, 2018 was US$1=NT$30.0696.

Note 4: The limit cannot exceed 60% of TPKT's net asset value as of December 31, 2018.

Note 5: The investee company's financial report was reviewed by parent company's auditors.

Note 6: In May 2018, TPKJ sold all its interests in JT which amounted to RMB49,950 thousand; after disposal, JT was excluded in the consolidated financial statements.

(Concluded)

TPK HOLDING CO., LTD. AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands)

No. (Note 1)	Company Name (Note 2)	Counterparty (Notes 2)	Relationship (Note 3)	Transactions Details				
				Financial Statements Account	Amount (US$)	Amount (Approximately NT$)	Terms (Note 4)	Percentage of Consolidated Total Gross Sales or Total Assets (Note 5)
1	TPKH	UYH	1	Loan to related parties - short-term	$ 30,000	$ 921,450	-	1.10
		TPK HK	1	Short-term borrowings	73,001	2,242,221	-	2.67
2	TPKA	TPK HK	3	Loan to related parties - long-term	39,000	1,197,885	-	1.43
3	TPKT	TPK HK	3	Loan to related parties - short-term	30,000	921,450	-	1.10
		TPKD	3	Sales	33,498	1,007,263	-	0.89
4	TPKC	TPKS	3	Loan to related parties - short-term	8,887	272,957	-	0.33
		TPKS	3	Trade payables	8,315	255,395	-	0.30
		TPKS	3	Purchase	26,605	800,016	-	0.70
		TPKU	3	Sales	21,072	633,629	-	0.56
		TPKG	3	Loan to related parties - short-term	97,343	2,989,899	-	3.56
		TPKG	3	Trade payables	3,632	111,548	-	0.13
		TPKG	3	Purchase	39,145	1,177,074	-	1.04
		TPKG	3	Sales	4,268	128,343	-	0.11
		TPK HK	3	Trade receivables, net	268,503	8,247,059	-	9.82
		TPK HK	3	Short-term borrowings	48,601	1,492,794	-	1.78
		TPK HK	3	Trade payables	42,858	1,316,394	-	1.57
		TPK HK	3	Research expense	19,263	579,234	-	0.51
		TPK HK	3	Purchase	201,736	6,066,112	-	5.35
		TPK HK	3	Sales	1,360,972	40,923,874	-	36.06
		MTOH	3	Loan to related parties - short-term	49,192	1,510,944	-	1.80
		TPKP	3	Loan to related parties - short-term	196,719	6,042,236	-	7.20
		TPKP	3	Interest revenue	5,291	159,099	-	0.14
		TPKM	3	Short-term borrowings	8,727	268,051	-	0.32
		TPKD	3	Other current assets	4,873	149,689	-	0.18
		TPKD	3	Loan to related parties - short-term	34,151	1,048,938	-	1.25
		TPKD	3	Trade receivables, net	7,146	219,480	-	0.26
		TPKD	3	Rental revenue	11,032	331,730	-	0.29
		TPKD	3	Sales	46,856	1,408,956	-	1.24
		TPKD	3	Non-operating income	8,595	258,439	-	0.23
		TPKF	3	Loan to related parties - short-term	22,414	688,444	-	0.82
		TPKJ	3	Trade payables	10,768	330,739	-	0.39
		TPKJ&JT	3	Purchase	51,676	1,553,891	-	1.37

(Continued)

No. (Note 1)	Company Name (Note 2)	Counterparty (Notes 2)	Relationship (Note 3)	Transactions Details				
				Financial Statements Account	Amount (US$)	Amount (Approximately NT$)	Terms (Note 4)	Percentage of Consolidated Total Gross Sales or Total Assets (Note 5)
5	TPKS	TPKG	3	Purchase	$ 9,961	$ 299,511	-	0.26
		TPK HK	3	Trade receivables, net	61,127	1,877,528	-	2.24
		TPK HK	3	Sales	185,541	5,579,140	-	4.92
6	TPKG	TPK HK	3	Short-term borrowings	100,000	3,071,500	-	3.66
		TPKD	3	Sales	30,810	926,441	-	0.82
7	TPK HK	MTOH	3	Trade payables	6,719	206,360	-	0.25
		MTOH	3	Purchase	66,430	1,997,531	-	1.76
		TPKP	3	Loan to related parties - short-term	69,936	2,148,084	-	2.56
		TPKD	3	Trade receivables, net	166,011	5,099,028	-	6.07
		TPKD	3	Trade payables	460,023	14,129,609	-	16.83
		TPKD	3	Purchase	2,046,509	61,537,709	-	54.23
		TPKD	3	Sales	1,328,885	39,959,053	-	35.21
		RSSL	3	Short-term borrowings	18,740	575,599	-	0.69
8	MTOH	TPKP	3	Purchase	9,847	296,088	-	0.26
		TPKJ&JT	3	Purchase	5,421	163,014	-	0.14
9	TPKD	TPKJ	3	Trade payables	9,476	291,068	-	0.35
		TPKJ&JT	3	Purchase	42,204	1,269,044	-	1.12

Note 1: The parent company is indicated by “1”, while all other numbers indicate subsidiaries.

Note 2: The Company name and counterparty are listed in Note 14 to the financial statements.

Note 3: No. 1 represents the transactions from parent company to subsidiary.
No. 2 represents the transactions from subsidiary to parent company.
No. 3 represents the transactions between subsidiaries.

Note 4: The sales prices and payment terms of intercompany sales and purchases were not significantly different from those transactions with third parties. For other intercompany transactions, prices and terms are determined based on mutual agreements.

Note 5: Other transactions that were less than 0.1% of total assets or sales are not disclosed.

Note 6: Intercompany balances and transactions were eliminated upon consolidation.

Note 7: In May 2018, TPKJ sold all its interests in JT which amounted to RMB49,950 thousand; after disposal, JT was excluded in the consolidated financial statements.

(Concluded)