ASE Technology Holding Co., Ltd. and Subsidiaries

Consolidated Financial Statements as of December 31, 2020 and 2021 and for the Years Ended December 31, 2019, 2020 and 2021 and Reports of Independent Registered Public Accounting Firms

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of ASE Technology Holding Co., Ltd.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of ASE Technology Holding Co., Ltd. (a corporation incorporated under the laws of the Republic of China) and its subsidiaries (collectively, the "Group") as of December 31, 2020 and 2021, the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "Consolidated Financial Statements") (all expressed in New Taiwan Dollars). In our opinion, based on our audits and the report of other auditors, the Consolidated Financial Statements present fairly, in all material respects, the financial position of the Group as of December 31, 2020 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We did not audit the consolidated financial statements of Siliconware Precision Industries Co., Ltd. and its subsidiaries (collectively, "SPIL"), a wholly owned subsidiary, which statements reflect total assets constituting 22% and 22% of the Group's consolidated total assets as of December 31, 2020 and 2021, respectively, and total revenue constituting 22%, 21% and 19% of the Group's consolidated revenues for the years ended December 31, 2019, 2020 and 2021, respectively. The consolidated financial statements of SPIL were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for SPIL, is based solely on the report of other auditors.

Our audits also comprehended the translation of New Taiwan dollar amounts into U.S. dollar amounts and, in our opinion, such translation has been made in conformity with the basis stated in Note 4 to the Consolidated Financial Statements. Such U.S. dollar amounts are presented solely for the convenience of the readers outside the Republic of China.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Group's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 25, 2022, expressed an unqualified opinion on the Group's internal control over financial reporting based on our audit and the report of other auditors.

Basis for Opinion

These Consolidated Financial Statements are the responsibility of the Group's management. Our responsibility is to express an opinion on the Group's Consolidated Financial Statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Consolidated Financial Statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the Consolidated Financial Statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the Consolidated Financial Statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the Consolidated Financial Statements. We believe that our audits and the report of other auditors provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the Consolidated Financial Statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the Consolidated Financial Statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill – Packaging and Testing Segments - Refer to Notes 4, 5, 18, 29 and 30 to the Consolidated Financial Statements

Critical Audit Matter Description

The Group's evaluation of goodwill for impairment involves the comparison of the value in use of each segment to its carrying value. The Group used the discounted cash flow model to estimate value in use, which requires management to make significant estimates and assumptions related to discount rates and forecasts of future revenues. Changes in these assumptions could have a significant impact on either the value in use, the amount of any goodwill impairment charge, or both. The goodwill balance was NT\$52,072,413 thousand (US\$1,877,161 thousand) as of December 31, 2021, of which NT\$35,412,424 thousand (US\$1,276,584 thousand) and NT\$13,304,040 thousand (US\$479,598 thousand) were allocated to the packaging and testing segments, respectively. The value in use of the packaging and testing segments exceeded their carrying values as of the measurement date and, therefore, no impairment was recognized.

We identified the valuation of goodwill for the Group's packaging and testing segments as a critical audit matter due to the significant estimates and assumptions management makes to estimate the value in use of the packaging and testing segments and the sensitivity of their operations to changes in demand. Auditing management's judgments related to the selection of the discount rates and forecasts of future revenues for the packaging and testing segments required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the discount rates and forecasts of future revenues used by management to estimate the value in use of the packaging and testing segments included the following, among others:

- We tested the design and operating effectiveness of controls over management's goodwill impairment evaluation, including those over the determination of the value in use of the packaging and testing segments, such as controls related to management's selection of the discount rate and assessment on the reasonableness of forecasts of future revenue.
- We evaluated management's ability to accurately forecast future revenues of the packaging and testing segments by comparing their actual results to management's historical forecasts.
- We performed sensitivity analyses to evaluate the risk of impairment if key assumptions are changed.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the discount rates by performing certain procedures, including:
 - Testing the source information underlying the determination of the discount rates and the mathematical accuracy of the calculation.
 - Developing a range of independent estimates and comparing those to the discount rates selected by management.

/s/Deloitte & Touche Taipei, Taiwan Republic of China March 25, 2022

We have served as the Group's auditor since 1984.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholder of Siliconware Precision Industries Co., Ltd.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Siliconware Precision Industries Co., Ltd. and its subsidiaries (the "Company") as of December 31, 2021 and 2020, and the related consolidated statements of comprehensive income, of changes in equity and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes (collectively referred to as the "consolidated financial statements") (not presented herein). We also have audited the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting (not presented herein). Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a

material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the Board of Directors and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

/s/PricewaterhouseCoopers, Taiwan

Taipei, Taiwan Republic of China March 16, 2022

We have served as the Company's auditor since 1994.

December 31, 2020

CONSOLIDATED BALANCE SHEETS

Cash and cash equivalents (Note 6)
Financial assets at fair value through profit

or loss - current (Note 7) Contract assets - current (Note 40) Trade receivables, net (Note 10) Other receivables (Notes 10 and 30) Current tax assets (Note 26) Inventories (Note 11)

(Notes 12 and 36)

Other current assets

NON-CURRENT ASSETS

36 and 37)

Total current assets

or loss - non-current (Note 7)

Right-of-use assets (Note 16)

Other non-current assets

(Amounts in Thousands)

ASSETS

CURRENT ASSETS

(Re	etrospectively			
	Adjusted)	December	31,20	21
	NT\$	NT\$	U	S\$ (Note 4)
\$	51,538,071	\$ 76,073,345	\$	2,742,370
	4,342,605	2,933,446		105,748
	4,782,904	5,607,209		202,134
	91,833,989	115,462,210		4,162,300
	3,693,936	13,732,607		495,047
	702,820	542,180		19,545
	48,590,434	67,832,981		2,445,313
	13,471,645	5,412,114		195,102
	551,655	140,857		5,078
	4,578,783	 4,620,779		166,575
	224,086,842	292,357,728		10,539,212

2,502,834

2,019,812

16,996,600

239,867,550

10,680,262

3,275,073

Financial assets at fair value through other comprehensive income - non-current (Note 8) Investments accounted for using the equity method (Note 14) Property, plant and equipment (Notes 15, 25,

Financial assets at fair value through profit

Inventories related to real estate business

Other financial assets - current (Notes 13 and 36)

Investment properties (Notes 17, 25 and 36) 12,538,083 22,144,787 798,298 Goodwill (Note 18) 52,072,413 52,709,053 1,877,160 Other intangible assets (Notes 19 and 25) 24,563,707 885,498 27,711,771 Deferred tax assets (Note 26) 5,477,373 5,369,010 193,548 Other financial assets - non-current (Notes 13 530,345 1,416,123 51,050 and 36)

2,180,978

1,741,134

12,806,673

234,365,397

8,741,807

1,263,188

 Total non-current assets
 360,065,802
 380,908,171
 13,731,370

 TOTAL
 \$ 584,152,644
 \$ 673,265,899
 \$ 24,270,582

(Continued)

90,225

72,812

612,711

8,646,992

385,013

118,063

CONSOLIDATED BALANCE SHEETS

(Amounts in Thousands)

		ember 31, 2020 etrospectively				
		Adjusted)		December	r 31, 20	021
LIABILITIES AND EQUITY		NT\$		NT\$	ı	US\$ (Note 4)
CURRENT LIABILITIES						
Short-term borrowings (Note 20)	\$	31,290,839	\$	34,319,464	\$	1,237,183
Financial liabilities at fair value through						
profit or loss - current (Note 7)		1,537,208		417,660		15,056
Financial liabilities for hedging - current						
(Notes 20 and 34)		5,277,325		6,716,965		242,140
Trade payables		73,268,234		84,470,284		3,045,072
Other payables (Note 22)		39,415,623		46,696,900		1,683,378
Current tax liabilities (Note 26)		6,514,502		16,362,350		589,847
Lease liabilities - current (Note 16)		774,444		809,536		29,183
Current portion of bonds payable (Note 21)		6,999,951		9,902,710		356,983
Current portion of long-termborrowings						
(Notes 20 and 36)		2,250,121		4,526,683		163,183
Other current liabilities		7,264,084		13,022,789		469,459
Total current liabilities		174,592,331		217,245,341		7,831,484
NON-CURRENT LIABILITIES						
Financial liabilities for hedging - non-current						
(Notes 20 and 34)		5,910,919		4,780,931		172,348
Bonds payable (Note 21)		49,253,603		42,364,627		1,527,204
Long-term borrowings (Notes 20 and 36)		102,259,378		117,164,876		4,223,680
Deferred tax liabilities (Note 26)		7,121,027		7,590,197		273,619
Lease liabilities - non-current (Note 16)		5,101,386		6,590,348		237,576
Net defined benefit liabilities (Note 23)		6,466,794		5,864,071		211,394
Other non-current liabilities		1,710,090		3,494,448		125,971
Total non-current liabilities		177,823,197		187,849,498		6,771,792
Total liabilities		352,415,528		405,094,839		14,603,276
EQUITY ATTRIBUTABLE TO OWNERS OF THE	-		-		-	
COMPANY (Note 24)						
Share capital						
Ordinary shares		43,385,311		44,034,146		1,587,388
Shares subscribed in advance		130,609		52,356		1,887
Total share capital		43,515,920		44,086,502		1,589,275
Capital surplus		139,767,550		143,693,168		5,179,999
Retained earnings		137,707,330		143,073,100		3,177,777
Legal reserve		2 001 284		6 200 109		227 116
Special reserve		3,901,384		6,300,198		227,116
		10,847,697		9,569,027		344,954
Unappropriated earnings		30,084,965		69,712,555		2,513,070
Total retained earnings		44,834,046		85,581,780		3,085,140
Other equity		(10,043,302)		(12,246,443)		(441,472)
Treasury shares		(1,959,107)		(7,488,362)		(269,948)
Equity attributable to owners of the Company		216,115,107		253,626,645		9,142,994
NON-CONTROLLING INTERESTS (Note 24)		15,622,009		14,544,415		524,312
Total equity		231,737,116		268,171,060		9,667,306
TOTAL	\$	584,152,644	\$	673,265,899	\$	24,270,582

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

(Concluded)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Amounts in Thousands Except Earnings Per Share)

			F	or the Year End	ed D	ecember 31		
		2019		2020		20	21	
		NT\$		NT\$		NT\$	U	S\$ (Note 4)
OPERATING REVENUES (Note 40)	\$	413,182,184	\$	476,978,710	\$	569,997,133	\$	20,547,842
OPERATING COSTS (Notes 11 and 25)		348,871,391		398,994,442		459,628,356		16,569,155
GROSS PROFIT		64,310,793		77,984,268		110,368,777		3,978,687
OPERATING EXPENSES (Note 25)								
Selling and marketing expenses General and administrative expenses Research and development expenses		5,751,168 16,637,887 18,395,334		5,605,464 18,200,304 19,302,418		6,386,763 20,804,032 21,053,633		230,237 749,965 758,963
Total operating expenses		40,784,389		43,108,186		48,244,428		1,739,165
OTHER OPERATING INCOME AND EXPENSES, NET (Note 25)	_	(268,555)		502,492		1,189,829		42,892
PROFIT FROM OPERATIONS		23,257,849		35,378,574		63,314,178		2,282,414
NON-OPERATING INCOME AND EXPENSES Other income (Note 25) Other gains and losses (Note 25) Finance costs (Note 25) Share of the profit or loss of associates		1,359,093 2,683,989 (4,203,395)		1,474,547 1,827,576 (3,459,511)		1,600,099 17,211,099 (2,831,307)		57,682 620,443 (102,066)
and joint ventures		182,275		547,612		899,700		32,433
Total non-operating income and expenses		21,962		390,224		16,879,591		608,492
PROFIT BEFORE INCOME TAX		23,279,811		35,768,798		80,193,769		2,890,906
INCOME TAX EXPENSE (Note 26)		5,011,246		7,116,898	_	17,943,772		646,856
PROFIT FOR THE YEAR		18,268,565		28,651,900		62,249,997		2,244,050
OTHER COMPREHENSIVE INCOME (LOSS) Items that will not be reclassified subsequently to profit or loss: Remeasurement of defined benefit obligation Unrealized gain (loss) on equity instruments at fair value through		(365,262)		(594,778)		51,167		1,845
other comprehensive income Share of other comprehensive income		(216,121)		(166,239)		202,092		7,285
of associates and joint ventures Income tax relating to items that will not be reclassified subsequently		1,504,760		2,656,966		3,595,194		129,603
to profit or loss		(3,816)		(122,901)		(179,403)		(6,467)
		919,561		1,773,048		3,669,050		132,266

(Continued)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Amounts in Thousands Except Earnings Per Share)

			F	or the Year End	ed De	December 31				
		2019		2020		2021				
		NT\$		NT\$		NT\$	US	\$ (Note 4)		
Items that may be reclassified subsequently to profit or loss: Exchange differences on translating										
foreign operations Unrealized gain (loss) on debt investments at fair value through	\$	(5,202,145)	\$	(831,784)	\$	(4,094,565)	\$	(147,605)		
other comprehensive income Gain (loss) on hedging instruments Share of other comprehensive income (loss) of associates		(2,052)		(2,136) (574,824)		63,722 738,600		2,297 26,626		
and joint ventures	_	(85,975) (5,290,172)	_	131,009 (1,277,735)		29,209 (3,263,034)		1,053 (117,629)		
Other comprehensive income (loss) for the year, net of income tax		(4,370,611)		495,313		406,016		14,637		
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	\$	13,897,954	\$	29,147,213	\$	62,656,013	\$	2,258,687		
NET PROFIT ATTRIBUTABLE TO: Owners of the Company Non-controlling interests	\$	17,060,591 1,207,974	\$	26,970,580 1,681,320	\$	60,150,167 2,099,830	\$	2,168,353 75,697		
	\$	18,268,565	\$	28,651,900	\$	62,249,997	\$	2,244,050		
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:										
Owners of the Company Non-controlling interests	\$	13,122,185 775,769	\$	27,440,726 1,706,487	\$	60,630,154 2,025,859	\$	2,185,657 73,030		
	\$	13,897,954	\$	29,147,213	\$	62,656,013	\$	2,258,687		
EARNINGS PER SHARE (Note 27) Basic Diluted	\$ \$	4.01 3.91	\$ \$	6.32 6.17	\$	13.97 13.54	\$ \$	0.50 0.49		
EARNINGS PER AMERICAN DEPOSITARY SHARE ("ADS") (Note 27)										
Basic Diluted	\$ \$	8.02 7.82	\$	12.65 12.33	\$	27.94 27.07	\$ \$	1.01 0.98		

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

(Concluded)

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(Amounts in Thousands)

	Equity Attributable to Owners of the Company								_							
									Unrealized Gain	Other Equity			_			
	Share	e Capital			Retai	ned Earnings		Exchange Differences on Translating	(Loss) on Financial Assets at Fair Value Through Other	Gain (Loss)	Unearned					
	Shares		Capital	Legal	Special	Unappropriated	T ()	Foreign	Comprehensive	on Hedging	Employee	T. ()	Treasury	T. 4.1	Non-controlling	T 4 1 F 14
	(In Thousands)	Amounts	Surplus	Reserve	Reserve	Earnings	Total	Operations	Income	Instruments	Compensation	Total	Shares	Total	Interests	Total Equity
BALANCE AT JANUARY 1, 2019	4,321,714	\$ 43,217,144	\$ 143,276,664	\$ -	\$ 3,353,938	\$ 20,403,477	\$ 23,757,415	\$ (5,888,574)	\$ (1,015,107)) \$ -	\$ -	\$ (6,903,681	\$ (1,959,107)	\$ 201,388,435	\$ 17,639,487	\$ 219,027,922
Appropriation of 2018 earnings Legal reserve	_	_	_	2,203,895	_	(2,203,895		_	_	_	_	_	_	_	_	_
Special reserve	-	-	-	2,203,073	3,548,844	(3,548,844	,	-	-	-	-	-	-	-	-	-
Cash dividends distributed by the Company						(10,806,454	(10,806,454)							(10,806,454)		(10,806,454)
		· 	<u> </u>	2,203,895	3,548,844	(16,559,193	(10,806,454)					<u> </u>		(10,806,454)		(10,806,454)
Change from investments in associates accounted for using the equity method			3,604											3,604		3,604
Other changes in the capital surplus		· 	1,070						<u>-</u>					1,070		1,070
Net profit for the year ended December 31, 2019			1,070			17,060,591	17,060,591					·		17,060,591	1,207,974	18,268,565
Other comprehensive income (loss) for the year ended		_	_	_	_	17,000,371	17,000,371	_	_		_	_	_	17,000,371	1,207,774	10,200,303
December 31, 2019, net of income tax						(280,461	(280,461)	(4,874,110)	1,216,165			(3,657,945		(3,938,406)	(432,205_)	(4,370,611)
Total comprehensive income (loss) for the year ended December 31, 2019	_	-	-			16,780,130	16,780,130	(4,874,110)	1,216,165		_	(3,657,945) -	13,122,185	775,769	13,897,954
Cash dividends received by subsidiaries from the Company		-	182,354			-	-	- () - ()	-		-	-	-	182,354	-	182,354
Disposal of interest in investments accounted for																
using the equity method (Note 14)			(75,276			1,392	1,392							(73,884)		(73,884)
Differences between consideration and carrying amount arising from acquisition or disposal of subsidiaries (Note 31)			(2,779,613) -										(2,779,613)	(4,335,090)) (7,114,703)
Changes in percentage of ownership interest in			(2,777,013									·		(2,779,013)	(4,333,070)	(7,114,703)
subsidiaries (Note 31)		<u>-</u>	(1,960,167									<u> </u>		(1,960,167)	(2,017,319)	(3,977,486)
Issue of ordinary shares under employee share options (Note 28)	8,814	88,143	1,137,020											1,225,163		1,225,163
Cash dividends distributed by subsidiaries															(360,245)	(360,245)
Additional non-controlling interest arising on issue of employee share options by subsidiaries (Note 28)		. <u> </u>	(875,293)										(875,293)	1,672,310	797,017
Disposal of investments in equity instruments at fair value						4044.			(101.1.5.)			40 4 4 2 5				
through other comprehensive income BALANCE AT DECEMBER 31, 2019	4 220 520	e 42 205 297	e 129 010 262	£ 2.202.805	e (002 792	404,156	404,156	e (10.7(2.694.)	\$ (203,098)		-	(404,156) <u> </u>	£ 100 427 400	- 12 274 012	e 212 802 212
BALANCE AT JANUARY 1, 2020	4,330,528					\$ 21,029,962 \$ 21,029,962	\$ 30,136,639	\$ (10,762,684)			<u>\$</u> -		\$ (1,959,107) \$ (1,959,107)		\$ 13,374,912	\$ 212,802,312
Appropriation of 2019 earnings	4,330,328	\$ 43,303,287	\$ 138,910,363	\$ 2,203,893	\$ 6,902,782	\$ 21,029,962	\$ 30,130,039	\$ (10,762,684)	\$ (203,098)) <u>\$ -</u>	3 -	\$ (10,965,782	\$ (1,959,107)	\$ 199,427,400	\$ 13,374,912	\$ 212,802,312
Legal reserve	-	-	-	1,697,489	-	(1,697,489) -	-	-	-	-	-	-	-	-	-
Special reserve	-	-	-	-	3,944,915	(3,944,915		-	-	-	-	-	-	-	-	-
Cash dividends distributed by the Company			·	1 (07 100	2.044.015	(8,668,331	´ - ` ` ` ` ` ` ` ´				-	·		(8,668,331)		(8,668,331)
Character in the control of the cont		· 	. <u> </u>	1,697,489	3,944,915	(14,310,735	(8,668,331)							(8,668,331)		(8,668,331)
Change from investments in associates accounted for using the equity method	_	-	22,774	_	_	_	_	-	-	_	_	-	-	22,774	_	22,774
Other changes in the capital surplus		-	1,608					_			-			1,608		1,608
Net profit for the year ended December 31, 2020		-	-			26,970,580	26,970,580							26,970,580	1,681,320	28,651,900
Other comprehensive income (loss) for the year ended December 31, 2020, net of income tax	-	-	-	-	-	(469,748		(879,255)	2,248,414	(429,265) -	939,894	-	470,146	25,167	495,313
Total comprehensive income (loss) for the year ended December 31, 2020		-				26,500,832	26,500,832	(879,255)	2,248,414	(429,265)) -	939,894		27,440,726	1,706,487	29,147,213
Cash dividends received by subsidiaries from the Company			145,741			-	-			<u></u>	-			145,741	-	145,741
Disposal of interest in investments accounted for																
using the equity method (Note 14)			2,199			(980	(980)		1,094			1,094		2,313		2,313 (Continued)

(Continued)

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(Amounts in Thousands)

							Equity Attributable to	o Owners of the Comp	any							
							-1			Other Equity			_		•	
	Share	: Capital			Retain	ed Earnings		Exchange Differences on Translating	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other	Gain (Loss)	Unearned					
	Shares (In Thousands)	Amounts	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Total	Foreign Operations	Comprehensive Income	on Hedging Instruments	Employee Compensation	Total	Treasury Shares	Total	Non-controlling Interests	Total Equity
Differences between consideration and carrying amount arising from acquisition or disposal of subsidiaries (Notes 31)	_	\$ -	\$ (13,502)) \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (13,502)	\$ (116,440)) \$ (129,942)
Changes in percentage of ownership interest in subsidiaries (Note 31)			(780,533) -		(2,760,175)	(2,760,175)							(3,540,708)	(588,080)	(4,128,788)
Issue of ordinary shares under employee share options (Note 28)	21,064	210,633	1,588,792											1,799,425		1,799,425
Cash dividends distributed by subsidiaries			-											-	(346,774)	(346,774)
Additional non-controlling interest arising on issue of employee share options by subsidiaries (Note 28)			(109,892)) -		(392,447)	(392,447)	, -						(502,339)	1,591,904	1,089,565
Disposal of investments in equity instruments at fair value through other comprehensive income						18,508	18,508		(18,508)		(18,508)				
BALANCE AT DECEMBER 31, 2020 (RETROSPECTIVELY ADJUSTED)	4,351,592	\$ 43,515,920	\$ 139,767,550	\$ 3,901,384	\$ 10,847,697	\$ 30,084,965	\$ 44,834,046	\$ (11,641,939)	\$ 2,027,902	\$ (429,265)	\$ -	\$ (10,043,302)	\$ (1,959,107	\$ 216,115,107	\$ 15,622,009	\$ 231,737,116
BALANCE AT JANUARY 1, 2021 (RETROSPECTIVELY ADJUSTED)	4,351,592	\$ 43,515,920	\$ 139,767,550	\$ 3,901,384	\$ 10,847,697	\$ 30,084,965	\$ 44,834,046	\$ (11,641,939)	\$ 2,027,902	\$ (429,265)	\$ -	\$ (10,043,302)	\$ (1,959,107	\$ 216,115,107	\$ 15,622,009	\$ 231,737,116
Appropriation of 2020 earnings Legal reserve			-	2,398,814	-	(2,398,814)			-		_	-	-	-		<u>-</u>
Special reserve Cash dividends distributed by the Company		- -	- -	<u>-</u>	(1,278,670)	1,278,670 (18,389,856)	(18,389,856)	- -	- -					(18,389,856)	. <u>-</u>	(18,389,856)
				2,398,814	(1,278,670)	(19,510,000	(18,389,856)							(18,389,856)		(18,389,856)
Change from investments in associates accounted for using the equity method			(30,533			450,054	450,054		(450,054)		(450,054)		(30,533)	<u> </u>	(30,533)
Other changes in the capital surplus			1,633											1,633		1,633
Net profit for the year ended December 31, 2021	-	-	-	-	-	60,150,167	60,150,167	-	-	-	-	-	-	60,150,167	2,099,830	62,249,997
Other comprehensive income (loss) for the year ended December 31, 2021, net of income tax						25,842	25,842	(3,751,707)	3,654,754	551,098		454,145		479,987	(73,971)	406,016
Total comprehensive income (loss) for the year ended December 31, 2021			<u> </u>			60,176,009	60,176,009	(3,751,707)	3,654,754	551,098		454,145		60,630,154	2,025,859	62,656,013
Buy-back of ordinary shares			<u> </u>										(5,529,255	(5,529,255)		(5,529,255)
Cash dividends received by subsidiaries from the Company			305,737											305,737		305,737
Changes in percentage of ownership interest in subsidiaries (Note 31)			(58,448)) <u> </u>		(2,530,714)	(2,530,714)	<u> </u>	<u> </u>				<u>-</u> _	(2,589,162)	(2,748,521)	(5,337,683)
Issue of ordinary shares under share-based payment arrangements (Note 28)	57,058	570,582	3,648,781								(1,164,991)	(1,164,991)		3,054,372		3,054,372
Cash dividends distributed by subsidiaries															(1,062,529)	(1,062,529)
Additional non-controlling interest arising on issue of employee share options by subsidiaries (Note 28)			58,448											58,448	314,398	372,846
Issue of convertible bonds by subsidiaries (Note 21)															393,199	393,199
Disposal of investments in equity instruments at fair value through other comprehensive income						1,042,241	1,042,241		(1,042,241)		(1,042,241)				
BALANCE AT DECEMBER 31, 2021	4,408,650	\$ 44,086,502	\$ 143,693,168	\$ 6,300,198	\$ 9,569,027	\$ 69,712,555	\$ 85,581,780	\$ (15,393,646)	\$ 4,190,361	\$ 121,833	\$ (1,164,991	\$ (12,246,443)	\$ (7,488,362	\$ 253,626,645	\$ 14,544,415	\$ 268,171,060
US DOLLARS (Note 4) BALANCE AT DECEMBER 31, 2021	4,408,650	\$ 1,589,275	\$ 5,179,999	\$ 227,116	\$ 344,954	\$ 2,513,070	\$ 3,085,140	\$ (554,926)	\$ 151,058	\$ 4,392	\$ (41,996)	\$ (441,472)	\$ (269,948)	\$ 9,142,994	\$ 524,312	\$ 9,667,306

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

(Concluded)

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

	For the Year Ended December 31 2019 2020 2021							
		2019 NT\$		2020 NT\$		NT\$		S\$ (Note 4)
		1110		1110		1114	O.	3\$ (1\text{1\text{0\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{0\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{1\text{0\text{0\text{1\tex{1\text{1\tex{1\text{1\tex{1\text{1\text{1\text{1\ti}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}
SH FLOWS FROM OPERATING								
ACTIVITIES	¢.	22 270 911	d.	25 769 709	¢.	90 102 760	¢.	2 000 004
Profit before income tax	\$	23,279,811	\$	35,768,798	\$	80,193,769	\$	2,890,906
Adjustments for:		46,000,225		47.505.600		50 470 157		1 010 404
Depreciation expense		46,890,235		47,525,688		50,470,157		1,819,400
Amortization expense		3,576,606		3,733,377		4,054,120		146,14
Net loss (gain) on fair value change of								
financial assets and liabilities at fair value		(1.646.022.)		71.040		1 400 005		52.71
through profit or loss		(1,646,822)		71,848		1,490,005		53,71
Finance costs		4,203,395		3,459,511		2,831,307		102,06
Interest income		(549,681)		(520,783)		(542,329)		(19,55
Dividend income		(185,061)		(150,715)		(289,852)		(10,44
Share-based payments compensation		871,699		955,575		699,211		25,20
Share of profit of associates and joint ventures		(182,275)		(547,612)		(899,700)		(32,43
Loss (gain) on disposal of property,								
plant and equipment		164,467		(460,868)		(71,770)		(2,58
Loss (gain) on disposal of investments accounted								
for using the equity method		-		(91,297)		67,482		2,43
Impairment loss recognized on financial assets		400,201		-		4,718		17
Reversal of impairment loss recognized on								
financial assets		(35,727)		(56,950)		-		
Impairment loss recognized on non-								
financial assets		653,140		2,486,066		774,712		27,92
Gain on disposal of subsidiaries		-		(802,753)		(17,340,418)		(625,10
Gain on remeasurement of investments								
accounted for using the equity method		(319,712)		-		-		
Gain from bargain purchase - acquisition of								
subsidiaries		-		-		(33,114)		(1,19
Net gain on foreign currency exchange		(1,498,107)		(2,543,821)		(1,668,522)		(60,14
Others		8,687		(295,859)		(74,356)		(2,68
Changes in operating assets and liabilities								
Financial assets mandatorily at fair value								
through profit or loss		6,102,421		2,188,285		2,174,012		78,37
Contract assets		(1,408,816)		1,113,950		(1,345,069)		(48,48
Trade receivables		995,839		(9,396,304)		(27,957,812)		(1,007,85
Other receivables		(10,755)		(773,411)		(354,849)		(12,79
Inventories		1,407,099		(13,559,192)		(23,325,588)		(840,86
Other current assets		(1,206,456)		366,237		(819,252)		(29,53
Other operating activities assets		-		(14,396)		(785,204)		(28,30
Financial liabilities held for trading		(1,053,535)		(2,763,864)		(3,814,095)		(137,49
Trade payables		(1,024,250)		14,032,779		13,654,819		492,24
Other payables		1,515,776		3,601,102		5,938,081		214,06
Other current liabilities		655,694		23,520		5,552,277		200,15
Other operating activities liabilities		267,965		(301,838)		2,017,904		72,74
Cash generated from operations		81,871,838		83,047,073		90,600,644		3,266,06
Interest received		549,846		479,900		527,551		19,01
Dividend received		518,115		512,287		655,537		23,63
Interest paid		(4,015,673)		(3,442,545)		(2,625,883)		(94,66
Income tax paid		(6,620,876)		(5,536,077)		(7,423,947)		(267,62
income tax paid								
Net cash generated from operating								•

(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

	For the Year Ended December 31						
	2019	2020	202				
	NT\$	NT\$	NT\$	US\$ (Note 4)			
CASH FLOWS FROM INVESTING							
ACTIVITIES							
Purchase of financial assets at fair value through							
other comprehensive income	\$ (409,985)	\$ (259,168)	\$ (32,246)	\$ (1,162)			
Proceeds from sale of financial assets at fair value							
through other comprehensive income	-	20,686	672	24			
Return of capital from financial assets at fair value							
through other comprehensive income	12,664	84,186	14,201	512			
Purchase of financial assets at fair value							
through profit or loss	(26,852)	-	-	-			
Proceeds from sale of financial assets at	,						
amortized cost	-	-	26,531	956			
Acquisition of associates and joint ventures	(2,107,844)	(186,071)	(226,560)	(8,167)			
Proceeds from disposal of investments accounted for							
using the equity method	-	2,271,618	-	-			
Net cash outflow on acquisition of subsidiaries	(81,646)	(8,745,638)	(180,718)	(6,515)			
Proceeds from disposal of subsidiaries	-	3,717,039	23,941,276	863,060			
Return of capital from investments accounted for							
using the equity method	-	125,005	-	-			
Payments for property, plant and equipment	(56,810,153)	(62,077,446)	(70,905,659)	(2,556,080)			
Proceeds from disposal of property, plant	, , , ,	(, , , ,	(, , , ,	, , , ,			
and equipment	448,939	4,449,113	1,605,002	57,859			
Payments for intangible assets	(1,411,068)	(982,655)	(1,069,866)	(38,568)			
Proceeds from disposal of intangible assets	6,929	8,353	1,421	51			
Payments for right-of-use assets	(288,052)	(118,354)	(956,218)	(34,471)			
Payments for investment properties	(2,532)	(6,352)	-	- · · · ·			
Proceeds from disposal of investment properties	5	-	-	-			
Increase in other financial assets	(2,275,354)	(822,959)	(372,091)	(13,414)			
Decrease in other financial assets	8,561,929	1,083,934	447,665	16,138			
Increase in other non-current assets	(216,158)	(1,338,269)	(1,416,675)	(51,070)			
Decrease in other non-current assets	20,032	1,244,650	324,270	11,690			
Income tax paid	,	-,- : :,,,,,	(570,700)	(20,573)			
Proceeds from disposal of right-of-use assets	-	585,902	278,126	10,026			
Other investing activities items	89	123	-	-			
Net cash used in investing activities	(54,579,057)	(60,946,303)	(49,091,569)	(1,769,704)			
CARLELOWS FROM FRIANCING							
CASH FLOWS FROM FINANCING							
ACTIVITIES			10.042.200	262.055			
Proceeds from short-term borrowings	- (4 (02 142)	(1.502.222.)	10,043,398	362,055			
Repayment of short-term borrowings	(4,683,142)	(1,502,323)	-	-			
Proceeds from bonds offering	19,279,033	19,967,149	3,280,943	118,275			
Repayment of bonds payable	-	(250,000)	(7,000,000)	(252,343)			
Proceeds from long-term borrowings	165,757,252	180,020,420	190,192,666	6,856,260			
Repayment of long-term borrowings	(164,612,521)	(206,520,559)	(174,173,841)	(6,278,797)			
Repayment of the principle portion of lease	,,,,,,	/a	(0.55- :	,			
liabilities	(636,556)	(844,357)	(907,403)	(32,711)			
Dividends paid	(10,623,030)	(8,520,982)	(18,082,500)	(651,857)			
Proceeds from exercise of employee share options	1,149,227	1,934,530	2,727,915	98,339			
Payments for buy-back of ordinary shares	-	-	(5,529,255)	(199,324)			
				(Continued)			

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

			For the Year End	ded D	ecember 31			
	 2019		2020	2021				
	NT\$	NT\$			NT\$		S\$ (Note 4)	
Decrease in non-controlling interests	\$ (12,117,251)	\$	(6,291,089)	\$	(6,400,212)	\$	(230,721)	
Other financing activities items	 (11,820)		11,867		(22,557)		(813)	
Net cash used in financing activities	 (6,498,808)		(21,995,344)		(5,870,846)		(211,637)	
EFFECTS OF EXCHANGE RATE								
CHANGES ON THE BALANCE OF								
CASH AND CASH EQUIVALENTS								
HELD IN FOREIGN CURRENCY	 (2,612,946)		(711,795)		(2,236,213)		(80,613)	
NET INCREASE (DECREASE) IN CASH								
AND CASH EQUIVALENTS	8,612,439		(8,592,804)		24,535,274		884,473	
CASH AND CASH EQUIVALENTS AT								
THE BEGINNING OF THE YEAR	 51,518,436		60,130,875		51,538,071		1,857,897	
CASH AND CASH EQUIVALENTS AT								
THE END OF THE YEAR	\$ 60,130,875	\$	51,538,071	\$	76,073,345	\$	2,742,370	

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

(Concluded)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in Thousands, Unless Stated Otherwise)

1. GENERAL INFORMATION

ASE Technology Holding Co., Ltd. (the "Company") is a corporation incorporated in Nanzih Technology Industrial Park under the laws of Republic of China ("R.O.C.") starting from April 30, 2018 (date of incorporation). The Company and its subsidiaries (collectively referred to as the "Group") offer a comprehensive range of semiconductors packaging, testing, and electronic manufacturing services ("EMS").

The Company's subsidiaries, Advanced Semiconductor Engineering, Inc. (symbol "2311", "ASE") and Siliconware Precision Industries Co., Ltd. (symbol "2325", "SPIL"), entered into and executed a joint share exchange agreement to establish the Company and the Company acquired all issued and outstanding ordinary shares of ASE and SPIL on April 30, 2018. Both of ASE's and SPIL's ordinary shares have been delisted while the ordinary shares of the Company were listed starting from the same date under the symbol "3711". In addition, ASE's ordinary shares that have been traded on the New York Stock Exchange (the "NYSE") under the symbol "ASX" in the form of American Depositary Shares ("ADS") starting from September 2000 were exchanged as the Company's ADSs under the same symbol "ASX" starting from April 30, 2018.

The ordinary shares of the Company's subsidiary, Universal Scientific Industrial (Shanghai) Co., Ltd. ("USISH"), have been listed on the Shanghai Stock Exchange under the symbol "601231" since February 2012.

The consolidated financial statements are presented in the Company's functional currency, New Taiwan dollar (NT\$).

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were authorized for issue by the management on March 22, 2022.

3. APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS AS ISSUED BY THE INTERNATIONAL ACCOUNTING STANDARDS BOARD ("IASB") (collectively, "IFRSs")

a. Amendments to IFRSs that are mandatorily effective for the current year

In the current year, the Group applied the amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 "Interest Rate Benchmark Reform - Phase 2" and amendment to IFRS 16 "Covid-19 - Related Rent Concessions beyond June 30, 2021."

Except for the following, the initial application of the aforementioned new, revised or amended standards and interpretations did not have material impact on the Group's accounting policies:

Amendment to IFRS 16 "Covid-19 - Related Rent Concessions beyond June 30, 2021"

The Group elected to apply the amendment that extends the availability of the practical expedient to lease payments due on or before June 30, 2022. Refer to Note 4 for the relevant accounting policies of the practical expedient.

The Group applies the amendment from January 1, 2021.

b. New, revised or amended standards and interpretations in issue but not yet effective

The Group has not applied the following new, revised or amended standards and interpretations that have been issued but are not yet effective:

	Effective Date
New, Revised or Amended Standards and Interpretations	Announced by IASB (Note 1)
"Annual Improvements to IFRS Standards 2018–2020"	January 1, 2022 (Note 2)
Amendments to IFRS 3 "Reference to the Conceptual Framework"	January 1, 2022 (Note 3)
Amendments to IAS 16 "Property, Plant and Equipment - Proceeds before Intended Use"	January 1, 2022 (Note 4)
Amendments to IAS 37 "Onerous Contracts—Cost of Fulfilling a Contract"	January 1, 2022 (Note 5)
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
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	January 1, 2023
Amendments to IAS 1 "Disclosure of Accounting Policies"	January 1, 2023 (Note 6)
Amendments to IAS 8 "Definition of Accounting Estimates"	January 1, 2023 (Note 7)
Amendments to IAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"	January 1, 2023 (Note 8)

- Note 1: Unless stated otherwise, the above New IFRSs are effective for annual reporting periods beginning on or after their respective effective dates.
- Note 2: The amendments to IFRS 9 will be applied prospectively to modifications and exchanges of financial liabilities that occur on or after the annual reporting periods beginning on or after January 1, 2022.
- Note 3: The amendments are applicable to business combinations for which the acquisition date is on or after the beginning of the annual reporting period beginning on or after January 1, 2022.
- Note 4: The amendments are applicable to property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after January 1, 2021.
- Note 5: The amendments are applicable to contracts for which the entity has not yet fulfilled all its obligations on January 1, 2022.
- Note 6: The amendments will be applied prospectively for annual reporting periods beginning on or after January 1, 2023.
- Note 7: The amendments are applicable to changes in accounting estimates and changes in accounting policies that occur on or after the beginning of the annual reporting period beginning on or after January 1, 2023.
- Note 8: Except for deferred taxes that will be recognized on January 1, 2022 for temporary differences associated with leases and decommissioning obligations, the amendments will be applied prospectively to transactions that occur on or after January 1, 2022.

c. Significant changes in accounting policy resulted from new, revised and amended standards and interpretations in issue but not yet effective

Except for the following, as of the date that the accompanying consolidated financial statements were authorized for issue, the Group does not expect that the application of the aforementioned new, revised or amended standards and interpretations will have a material impact on the financial statements.

1) Amendments to IAS 16 "Property, Plant and Equipment: Proceeds before Intended Use"

The amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. The cost of those items is measured in accordance with IAS 2 "Inventories". Any proceeds from selling those items and the cost of those items are recognized in profit or loss in accordance with applicable standards.

The amendments are applicable only to items of property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after January 1, 2021.

2) Amendments to IAS 37 "Onerous Contracts - Cost of Fulfilling a Contract"

The amendments specify that when assessing whether a contract is onerous, the "cost of fulfilling a contract" includes both the incremental costs of fulfilling that contract (for example, direct labor and materials) and an allocation of other costs that relate directly to fulfilling contracts (for example, an allocation of depreciation for an item of property, plant and equipment used in fulfilling the contract).

3) Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"

The amendments clarify that for a liability to be classified as non-current, the Group shall assess whether it has the right at the end of the reporting period to defer settlement of the liability for at least twelve months after the reporting period. If such rights are in existence at the end of the reporting period, the liability is classified as non-current regardless of whether the Group will exercise that right. The amendments also clarify that, if the right to defer settlement is subject to compliance with specified conditions, the Group must comply with those conditions at the end of the reporting period even if the lender does not test compliance until a later date.

The amendments stipulate that, for the purpose of liability classification, the aforementioned settlement refers to a transfer of cash, other economic resources or the Group's own equity instruments to the counterparty that results in the extinguishment of the liability. However, if the terms of a liability that could, at the option of the counterparty, result in its settlement by a transfer of the Group's own equity instruments, and if such option is recognized separately as equity in accordance with IAS 32 "Financial Instruments: Presentation", the aforementioned terms would not affect the classification of the liability.

4) Amendments to IAS 1 "Disclosure of Accounting Policies"

The amendments specify that the Group should refer to the definition of material to determine its material accounting policy information to be disclosed. Accounting policy information is material if it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. The amendments also clarify that:

• accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed;

- the Group may consider the accounting policy information as material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial; and
- not all accounting policy information relating to material transactions, other events or conditions is itself material.

The amendments also illustrate that accounting policy information is likely to be considered as material to the financial statements if that information relates to material transactions, other events or conditions and:

- (1) the Group changed its accounting policy during the reporting period and this change resulted in a material change to the information in the financial statements;
- (2) the Group chose the accounting policy from options permitted by the standards;
- (3) the accounting policy was developed in accordance with IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" in the absence of an IFRS that specifically applies;
- (4) the accounting policy relates to an area for which the Group is required to make significant judgments or assumptions in applying an accounting policy, and the Group discloses those judgments or assumptions; or
- (5) the accounting is complex and users of the financial statements would otherwise not understand those material transactions, other events or conditions.
- 5) Amendments to IAS 8 "Definition of Accounting Estimates"

The amendments define that accounting estimates are monetary amounts in financial statements that are subject to measurement uncertainty. In applying accounting policies, the Group may be required to measure items at monetary amounts that cannot be observed directly and must instead be estimated. In such a case, the Group uses measurement techniques and inputs to develop accounting estimates to achieve the objective. The effects on an accounting estimate of a change in a measurement technique or a change in an input are changes in accounting estimates unless they result from the correction of prior period errors.

6) Amendments to IAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"

The amendments clarify that the initial recognition exemption under IAS 12 does not apply to transactions in which equal taxable and deductible temporary differences arise on initial recognition. The Group will recognize a deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized) and a deferred tax liability for all deductible and taxable temporary differences associated with leases and decommissioning obligations on January 1, 2022, and recognize the cumulative effect of initial application in retained earnings at that date. The Group will apply the amendments prospectively to transactions other than leases and decommissioning obligations that occur on or after January 1, 2022.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Statement of compliance

The consolidated financial statements have been prepared in accordance with IFRSs as issued by the IASB.

b. Basis of preparation

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

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

- 1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- 2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or a 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 a liability.

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

Current assets include cash and cash equivalents and those assets held primarily for trading purposes or expected to be realized within twelve months after the balance sheet date, unless the asset is to be used for an exchange or to settle a liability, or otherwise remains restricted, at more than twelve months after the balance sheet date. Current liabilities are obligations incurred for trading purposes or to be settled within twelve months after the balance sheet date (even if an agreement to refinance, or to reschedule payments, on a long-term basis is completed after the balance sheet date and before the consolidated financial statements are authorized for issue) and liabilities that do not have an unconditional right to defer settlement for at least 12 months after the balance sheet date (terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification). Assets and liabilities that are not classified as current are classified as non-current.

The Group engages in the construction business which has an operating cycle of over one year. The normal operating cycle applies when considering the classification of the Group's construction-related assets and liabilities.

d. Basis of consolidation

1) Principles for preparing consolidated financial statements

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 period are included in the consolidated statement of profit or loss and other comprehensive income from the effective dates of 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 Company.

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

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the

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 had the Group directly disposed of the related assets or liabilities.

2) Subsidiaries included in consolidated financial statements were as follows:

			Establishment	Percentage of Ownership (%)			
Name of Investor	Name of Investee	Main Businesses	and Operating Location	Decemb 2020	oer 31 2021		
Name of Investor	Name of Theestee	Main Businesses	Location	2020	2021		
The Company	ASE	Engaged in the packaging and testing of semiconductors	R.O.C.	100.0	100.0		
	USI Inc. ("USIINC")	Holding company	R.O.C.	100.0	100.0		
	SPIL	Engaged in the assembly, testing and turnkey services of integrated circuit	R.O.C.	100.0	100.0		
ASE	A.S.E. Holding Limited	Holding company	Bermuda	100.0	100.0		
	J & R Holding Limited ("J&R Holding")	Holding company	Bermuda	100.0	100.0		
	Innosource Limited	Holding company	British Virgin Islands	100.0	100.0		
	Omniquest Industrial Limited	Holding company	British Virgin Islands	71.0	71.0		
	ASE Marketing & Service Japan Co., Ltd.	Engaged in marketing and sales services	Japan	100.0	100.0		
	ASE Test, Inc.	Engaged in the testing of semiconductors	R.O.C.	100.0	100.0		
	Luchu Development Corporation	Engaged in the development of real estate properties	R.O.C.	67.1	67.1		
	Advanced Microelectronic Products Inc. ("AMPI")	Engaged in the manufacturing of integrated circuit	R.O.C.	7.6	7.6		
ASE Test, Inc.	Alto Enterprises Limited	Holding company	British Virgin Islands	100.0	100.0		
	Super Zone Holdings Limited	Holding company	Hong Kong	100.0	100.0		
	Luchu Development Corporation	Engaged in the development of real estate properties	R.O.C.	19.0	19.0		
	TLJ Intertech Inc.	Engaged in information software services	R.O.C.	60.0	60.0		
	MingFeng Information Service Corp., Ltd.	In the process of liquidation (Liquidation completed in February 2022)	R.O.C.	100.0	100.0		
	AMPI	Engaged in the manufacturing of integrated circuit	R.O.C.	43.4	43.4		
A.S.E. Holding Limited	ASE Investment (Labuan) Inc.	Holding company	Malaysia	70.1	70.1		
	ASE Test Limited ("ASE Test")	Holding company	Singapore	10.2	10.2		
	ASE Technology Partners, Limited	Holding company and was established in August 2021	British Cayman Islands	-	100.0		
	Integrated Solutions Enterprise Europe ("ITGEU")	Trading company, and was acquired in October 2021 (Note 29)	Belgium	-	100.0		
J&R Holding	ASE Test	Holding company	Singapore	89.8	89.8		
	Omniquest Industrial Limited	Holding company	British Virgin Islands	8.4	8.4		
	J&R Industrial Inc.	Engaged in leasing equipment and investing activity	R.O.C.	100.0	100.0		
	ASE Japan Co., Ltd.	Engaged in the packaging and testing of semiconductors	Japan	100.0	100.0		
	ASE (U.S.) Inc.	After-sales service and sales support	U.S.A.	100.0	100.0		
	Global Advanced Packaging Technology Limited	Holding company	British Cayman Islands	100.0	100.0		
	Anstock Limited	Liquidated in June 2021	British Cayman Islands	100.0	-		
	Anstock II Limited	Liquidated in June 2021	British Cayman Islands	100.0	-		
	Suzhou ASEN Semiconductors Co., Ltd. ("ASEN")	Engaged in the packaging and testing of semiconductors (organizational adjustment through exchanged shares to Global Advanced Packaging Test (Hong Kong) Limited in September 2021)	Suzhou, China	100.0	-		
				(Con	tinued)		

(Continued)

			Establishment	Percen Owners	hip (%)
Name of Investor	Name of Investee	Main Businesses	and Operating Location	Decem 2020	2021
Innosource Limited	Omniquest Industrial Limited	Holding company	British Virgin	20.6	20.6
Omniquest Industrial Limited	ASE (Shanghai) Inc. ASE Corporation	Engaged in the production of substrates Holding company	Islands Shanghai, China British Cayman	8.5 100.0	8.5 100.0
Alto Enterprises Limited	ASE (Kunshan) Inc.	Engaged in the packaging and testing of semiconductors	Islands Kun Shan, China	22.9	(Note 2)
	ASE Investment (Kun Shan) Limited	Holding company	Kun Shan, China	85.9	85.9
Super Zone Holdings Limited	Advanced Semiconductor Engineering (China) Ltd.	Engaged in the packaging and testing of semiconductors, after-sale services, advisory and lease of factory	Shanghai, China	100.0	100.0
ASE Investment (Labuan) Inc.	ASE (Korea) Inc. ("ASE Korea")	Engaged in the packaging and testing of semiconductors	Korea	100.0	100.0
ASE Technology Partners, Limited	ASE Technology Acquisition Corporation	Holding company and was established in August 2021	British Cayman Islands	-	100.0
ASE Korea	ASE (Weihai) Inc.	Engaged in the packaging and testing of semiconductors (disposed to J&R Holding and organizational adjustment through exchanged shares from J&R Holding to GAPT (Hong Kong) Limited in October 2021)	Shandong, China	100.0	-
ASE Test	ASE Test Holdings, Ltd.	Holding company	British Cayman Islands	100.0	100.0
	ASE Holdings (Singapore) Pte Ltd	Holding company	Singapore	100.0	100.0
	ASE Investment (Labuan) Inc. ASE Singapore Pte. Ltd.	Holding company Engaged in the packaging and testing of	Malaysia Singapore	29.9 100.0	29.9 100.0
ASE Test Holdings, Ltd.	ISE Labs, Inc.	semiconductors Engaged in the testing of semiconductors	U.S.A.	100.0	100.0
ISE Labs, Inc.	ISE Services, Inc.	Engaged in wafer procurement and customer product management services	U.S.A.	100.0	100.0
ASE Holdings (Singapore) Pte Ltd	ASE Electronics (M) Sdn. Bhd.	Engaged in the packaging and testing of semiconductors	Malaysia	100.0	100.0
Global Advanced Packaging Technology Limited	ASE Assembly & Test (Shanghai) Limited	Engaged in the packaging and testing of semiconductors and leasing of properties	Shanghai, China	100.0	100.0
	ASE Advanced Semiconductor (Shanghai) Limited	Engaged in the packaging and testing of semiconductors (disposed to ASEN in November 2021)	Shanghai, China	100.0	-
	GAPT Holding Limited	Holding company and was established in August 2021	British Virgin Islands	-	(Note 2)
GAPT Holding Limited	Global Advanced Packaging Test (Hongkong) Limited	Engaged in the trading of substrates and was established in August 2021	Hong Kong	-	(Note 2)
Global Advanced Packaging Test (Hongkong) Limited	Suzhou ASEN Semiconductors Co., Ltd. ("ASEN")	Engaged in the packaging and testing of semiconductors (acquired from J&R Holding in September 2021 through share exchange under restructure)	Suzhou, China	-	(Note 2)
	ASE (Weihai) Inc.	Engaged in the packaging and testing of semiconductors (acquired from J&R Holding in October 2021 through share exchange under restructure)	Shandong, China	-	(Note 2)
ASEN	ASE Advanced Semiconductor (Shanghai) Limited	Engaged in the packaging and testing of semiconductors (acquired from Global Advanced Packaging Technology Limited in November 2021)	Shanghai, China	-	(Note 2)
ASE Assembly & Test (Shanghai) Limited	ASE Investment (Kun Shan) Limited	Holding company	Kun Shan, China	14.1	14.1
	Wuxi Tongzhi Microelectronics Co., Ltd.	Engaged in the packaging and testing of semiconductors	Wuxi, China	100.0	100.0
	ISE Labs, China, Ltd. Shanghai Ding Hui Real Estate Development Co., Ltd. ("DH")	Engaged in the testing of semiconductor Engaged in the development, construction and sale of real estate properties	Shanghai, China Shanghai, China	100.0 60.0	100.0 60.0
DH	Shanghai Ding Qi Property Management Co., Ltd.	Engaged in the management of real estate properties	Shanghai, China	100.0	100.0
	Shanghai Ding Wei Real Estate Development Co., Ltd. ("DW")	Engaged in the development, construction and leasing of real estate properties	Shanghai, China	100.0	100.0
	Shanghai Ding Yu Real Estate Development Co., Ltd.	Engaged in the development, construction and leasing of real estate properties	Shanghai, China	100.0	100.0
	Kun Shan Ding Hong Real Estate Development Co., Ltd	Engaged in the development, construction and leasing of real estate properties	Kun Shan, China	100.0	100.0
				(Cor	ntinued)

	Name of Investee	Main Businesses	Establishment and Operating Location	Percentage of Ownership (%)	
Name of Investor				Decem 2020	
	Shanghai Ding Xu Property Management Co., Ltd.	Engaged in the management of real estate properties	Shanghai, China	100.0	100.0
	Shanghai Dingyao Estate Development Co., Ltd.	Engaged in the management of real estate properties	Shanghai, China	100.0	100.0
	Shanghai Ding Fan Business Management Co., Ltd.	Engaged in the management of real estate properties (acquired from DW in November 2020)	Shanghai, China	100.0	100.0
ASE Investment (Kun Shan) Limited	ASE (Kunshan) Inc.	Engaged in the packaging and testing of semiconductors	Kun Shan, China	49.3	(Note 2)
ASE Corporation	ASE Labour Inc.	Holding company	Mauritius Malavsia	100.0	100.0
ASE Mauritius Inc.	ASE Labuan Inc. ASE (Kunshan) Inc.	Holding company Engaged in the packaging and testing of semiconductors	Kun Shan, China	100.0 27.8	100.0 (Note 2)
	ASE (Shanghai) Inc.	Engaged in the production of substrates	Shanghai, China	91.5	91.5
ASE Labuan Inc.	ASE Electronics Inc. Advanced Semiconductor	Engaged in the production of substrates	R.O.C.	100.0	100.0 100.0
ASE (Shanghai) Inc.	Engineering (HK) Limited	Engaged in the trading of substrates	Hong Kong	100.0	100.0
	Shanghai Ding Hui Real Estate Development Co., Ltd.	Engaged in the development, construction and sale of real estate properties	Shanghai, China	40.0	40.0
	Universal Scientific Industrial (Shanghai) Co., Ltd. ("USISH")	Engaged in the designing, manufacturing and sales of electronic components	Shanghai, China	0.8	0.8
USIINC	Huntington Holdings	Holding company	British Virgin	100.0	100.0
Huntington Holdings	International Co., Ltd. Unitech Holdings International	Holding company	Islands British Virgin	100.0	100.0
International Co., Ltd.	Co., Ltd. Real Tech Holdings Limited	Holding company	Islands British Virgin Islands	100.0	100.0
	Universal ABIT Holding Co., Ltd.	In the process of liquidation	British Cayman Islands	100.0	100.0
Real Tech Holdings Limited	USI Enterprise Limited ("USIE")	Engaged in the service of investment advisory and warehousing management	Hong Kong	95.9	100.0
USIE	USISH	Engaged in the designing, manufacturing and sales of electronic	Shanghai, China	76.6	77.1
USISH	Universal Global Technology Co., Limited	components Holding company	Hong Kong	100.0	100.0
	Universal Global Technology (Kunshan) Co., Ltd. ("UGKS")	Engaged in the designing and manufacturing of electronic components	Kun Shan, China	100.0	100.0
	Universal Global Technology (Shanghai) Co., Ltd.	Engaged in the processing and sales of computer and communication peripherals as well as business in import and export of goods and technology	Shanghai, China	100.0	100.0
	Universal Global Electronics (Shanghai) Co., Ltd.	Engaged in the sales of electronic components and telecommunications equipment	Shanghai, China	100.0	100.0
	USI Electronics (Shenzhen) Co., Ltd.	Engaged in the design, manufacturing and sales of motherboards and computer peripherals	Shenzhen, China	50.0	50.0
	Universal Global Technology (Huizhou) Co., Ltd.	Engaged in the research and manufacturing of new electronic applications, communications, computers and other electronics products and also provided auxiliary technical services as well as import	Huizhou, China	100.0	100.0
		and export services			
Universal Global Technology	FINANCIERE AFG ("FAFG") Universal Global Industrial Co.,	Holding company Engaged in manufacturing, trading and	France Hong Kong	10.4 100.0	10.4 100.0
Co., Limited	Limited Universal Global Scientific Industrial Co., Ltd. ("UGTW")	investing activity Engaged in the manufacturing of components of telecommunication and cars and provision of related R&D services	R.O.C.	100.0	100.0
	USI America Inc.	Engaged in the manufacturing and processing of motherboards and wireless network communication and	U.S.A.	100.0	100.0
	Universal Scientific Industrial De Mexico S.A. De C.V.	provision of related technical service Engaged in the assembling of motherboards and computer	Mexico	100.0	100.0
	USI Japan Co., Ltd.	components Engaged in the manufacturing and sales of computer peripherals, integrated chip and other related accessories	Japan	100.0	100.0
	USI Electronics (Shenzhen) Co., Ltd.	Engaged in the design, manufacturing and sales of motherboards and computer peripherals	Shenzhen, China	50.0	50.0
		artana tankanan		(Cor	ntinued)

Name of Investor		Main Businesses	Establishment and Operating Location	Percentage of Ownership (%)	
	Name of Investee			2020	ber 31 2021
	Universal Global Electronics Co., Ltd.	Engaged in accepting and outsourcing orders as well as sales of electronic components and service of technical	Hong Kong	100.0	100.0
	Universal Scientific Industrial (France) ("USIFR")	advisory Engaged in investing activities	France	100.0	100.0
	UNIVERSAL SCIENTIFIC INDUSTRIAL (VIETNAM) CO., LTD.	Engaged in IC assembly for wearable devices and was established in July 2020.	Vietnam	100.0	100.0
Universal Global Industrial Co., Limited	Universal Scientific Industrial De Mexico S.A. De C.V.	Engaged in the assembling of motherboards and computer components	Mexico	(Note 1)	(Note 1)
UGTW	Universal Scientific Industrial Co., Ltd. ("USI")	Engaged in the manufacturing, processing and sales of computers, computer peripherals and related accessories	R.O.C.	100.0	100.0
Universal Global Electronics Co., Ltd.	Universal Scientific Industrial Poland Sp. z o.o. ("USIPL")	Engaged in the design and manufacturing of electronic components and new electronic applications.	Poland	100.0	100.0
Universal Global Electronics (Shanghai) Co., Ltd.	USI Science and Technology (Shenzhen) Co., Ltd.	Engaged in the design of electronic components, service of technical advisory; wholesale of electronic components and communication peripherals as well as business in import and export of goods and management of properties. Established in November 2020.	Shenzhen, China	100.0	100.0
USIFR	FAFG ASTEELFLASH GROUP	Holding company Holding company (disposed to FAFG in October 2021)	France France	89.6 (Note 1)	89.6
FAFG	ASTEELFLASH GROUP	Holding company (acquired 1 share from Universal Scientific Industrial	France	100.0	100.0
	MANUFACTURING POWER TUNISIA	(France) in October 2021) Engaged in the design and manufacturing of electronic components	Tunisia	0.1	0.1
	ASTEELFLASH MEXICO S.A. de C.V.		Mexico	0.1	0.1
ASTEELFLASH GROUP	ASTEELFLASH (BEDFORD) LIMITED	Engaged in the design and manufacturing of electronic components	United Kingdom	100.0	100.0
	ASTEELFLASH FRANCE	Engaged in the design and manufacturing of electronic components	France	99.9	99.9
	ASTEELFLASH TUNISIE S.A.	Engaged in the design and manufacturing of electronic components	Tunisia	100.0	100.0
	ASTEELFLASH HONG KONG LIMITED		Hong Kong	100.0	100.0
	ASTEELFLASH MEXICO S.A. de C.V.	Engaged in the design and manufacturing of electronic components	Mexico	99.9	99.9
	ASTEELFLASH GERMANY GmbH	Engaged in the design and manufacturing of electronic components	Germany	100.0	100.0
	MANUFACTURING POWER TUNISIA	Engaged in the design and manufacturing of electronic components	Tunisia	99.9	99.9
	ASTEELFLASH US HOLDING CORP.		U.S.A.	100.0	100.0
	ASTEEL ELECTRONIQUE FOUCHANA	Engaged in the design and manufacturing of electronic components (disposed to ASTEELFLASH TUNISIE S.A. in June 2021)	Tunisia	(Note 1)	-
	AFERH TUNISIE	Engaged in the management, training and consulting of human resources	Tunisia	0.5	0.5
	ASTEEL ELECTRONICS MANUFACTURING SERVICES	Engaged in the design and manufacturing of electronic components	Tunisia	0.1	0.1
	ASTEELFLASH PLZEN S.R.O.	Engaged in the design and manufacturing of electronic components (acquired from ASTEELFLASH GERMANY GmbH	Czech Republic	-	100.0
		in April 2021)		(Cor	ntinued)

Name of Investor	Name of Investee	Main Businesses	Establishment and Operating Location	Percentage of Ownership (%)	
				Decem 2020	ber 31 2021
ASTEELFLASH (BEDFORD) LIMITED	ASTEELFLASH TUNISIE S.A.	Engaged in the design and manufacturing of electronic	Tunisia	(Note 1)	(Note 1)
ASTEELFLASH TECHNOLOGIE	ASTEELFLASH FRANCE	components Engaged in the design and manufacturing of electronic components	France	(Note 1)	(Note1)
ASTEELFLASH FRANCE	SCI CHASSET	Engaged in the management and operation of real estate properties and holding the ownership of real estate properties (Liquidated in July 2021)	France	100.0	-
	AFERH	Engaged in the management, training and consulting of human resources (Liquidated in July 2021)	France	100.0	-
	ASTEEL ELECTRONICS MANUFACTURING SERVICES	Engaged in the design and manufacturing of electronic components	Tunisia	99.9	99.9
	ASTEEL ELECTRONIQUE FOUCHANA	Engaged in the design and manufacturing of electronic components (disposed to ASTEELFLASH TUNISIE S.A. in June 2021)	Tunisia	94.2	-
	ASTEELFLASH TECHNOLOGIE	Engaged in projection of plastic and the design and manufacturing of industrial components	France	100.0	100.0
	ASTEELFLASH BRETAGNE	Engaged in the design and manufacturing of electronic components	France	100.0	100.0
	ASTEELFLASH TUNISIE S.A.	Engaged in the design and manufacturing of electronic components	Tunisia	(Note 1)	(Note 1)
ASTEELFLASH TUNISIE S.A.	ASTEEL ELECTRONIQUE TUNISIE	Engaged in the design and manufacturing of electronic components (merged by ASTEELFLASH TUNISIE S.A.in December 2021)	Tunisia	100.0	-
	ASTEEL ELECTRONIQUE FOUCHANA	Engaged in the design and manufacturing of electronic components (acquired from ASTEELFLASH GROUP, ASTEELFLASH FRANCE, Asteelflash Suzhou Co., Ltd. and ASTEELFLASH USA CORP.in June 2021 and merged by ASTEELFLASH TUNISIE S.A. in December 2021)	Tunisia	(Note 1)	-
AFERH	AFERH TUNISIE	Engaged in the management, training and consulting of organization and human resources	Tunisia	99.5	99.5
ASTEELFLASH HONG KONG LIMITED	Asteelflash Suzhou Co., Ltd.	Engaged in the design and manufacturing of electronic components	Suzhou, China	100.0	100.0
Asteelflash Suzhou Co., Ltd.	ASTEEL ELECTRONIQUE FOUCHANA	Engaged in the design and manufacturing of electronic components (disposed to ASTEELFLASH TUNISIE S.A. in June 2021)	Tunisia	(Note 1)	-
	ASTEELFLASH TUNISIE S.A.	Engaged in the design and manufacturing of electronic components	Tunisia	(Note 1)	(Note 1)
ASTEELFLASH GERMANY GmbH	ASTEELFLASH HERSFELD GmbH	Engaged in the design and manufacturing of electronic components	Germany	100.0	100.0
	ASTEELFLASH EBERBACH GmbH	Engaged in the design and manufacturing of electronic components	Germany	100.0	100.0
	ASTEELFLASH BONN GmbH	Engaged in the design and manufacturing of electronic components	Germany	100.0	100.0
	ASTEELFLASH SCHWANDORF GmbH	Engaged in the design and manufacturing of electronic components	Germany	100.0	100.0
	ASTEELFLASH PLZEN S.R.O.		Czech Republic	100.0	-
	ASTEELFLASH DESIGN SOLUTIONS HAMBOURG GmbH	Engaged in the design and manufacturing of electronic components	Germany	100.0	100.0
		-		(Cor	ntinued)

	Name of Investee	Main Businesses	Establishment and Operating Location	Percentage of Ownership (%) December 31	
Name of Investor				2020	2021
	EN ELECTRONICNETWORK SRL	Engaged in the design and manufacturing of electronic components	Romania	100.0	100.0
	ASTEELFLASH TUNISIE S.A.	Engaged in the design and manufacturing of electronic components	Tunisia	(Note 1)	(Note 1)
ASTEELFLASH MEXICO S.A. de C.V.	ASTEELFLASH TUNISIE S.A.	Engaged in the design and manufacturing of electronic components	Tunisia	(Note 1)	(Note 1)
ASTEELFLASH US HOLDING CORP.	ASTEELFLASH USA CORP.	Engaged in the design and manufacturing of electronic components	U.S.A.	100.0	100.0
ASTEELFLASH USA CORP.	ASTEEL ELECTRONIQUE FOUCHANA	Engaged in the design and manufacturing of electronic components (disposed to ASTEELFLASH TUNISIE S.A. in June 2021)	Tunisia	(Note 1)	-
	ASTEELFLASH TUNISIE S.A.	Engaged in the design and manufacturing of electronic components	Tunisia	(Note 1)	(Note 1)
SPIL	SPIL (B.V.I.) Holding Limited	Engaged in investing activities	British Virgin Islands	100.0	100.0
	Siliconware Investment Co., Ltd.	Engaged in investing activities	R.O.C.	100.0	100.0
SPIL (B.V.I.) Holding Limited	Siliconware USA, Inc.	Engaged in marketing activities	U.S.A.	100.0	100.0
	SPIL (Cayman) Holding Limited	Engaged in investing activities	British Cayman Islands	100.0	100.0
SPIL (Cayman) Holding Limited	Siliconware Technology (Suzhou) Limited ("SZ")	Engaged in the packaging and testing of semiconductors	Suzhou, China	100.0	100.0
				(Con	cluded)

Note 1: The number of shares held was 1 share or 3 shares and the percentage of ownership was less than 0.1%.

Note 2: In December 2021, the Company's board of directors resolved to dispose its 100% shareholdings in those subsidiaries, which were settled in December 2021 and resulted in losing its control over those subsidiaries. Refer to Note 30 DISPOSAL OF SUBSIDIARIES for related disclosure.

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 interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after re-assessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds 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 interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase gain.

Where the consideration the Group transfers in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and considered as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with the corresponding adjustments being made against goodwill or gains on bargain purchases. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed as of the acquisition date. The measurement period does not exceed 1 year from the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration not classified as equity is remeasured at fair value at the end of subsequent reporting period with any gain or loss recognized in profit or loss.

When a business combination is achieved in stages, the Group's previously held equity interest in an acquiree is remeasured to fair value at acquisition date, and the resulting gain or loss, if any, is recognized in profit or loss or other comprehensive income. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognized in other comprehensive income are recognized on the same basis as would be required had those interest been directly disposed of by the Group.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted retrospectively during the measurement period, or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

Business combination involving entities under common control is not accounted for using the acquisition method but is accounted for at the carrying amounts of the entities. The Group elected not to restate comparative information of the prior period in the financial statements as the business combination was an organization restructure under common control.

f. Foreign currencies

In preparing the financial statements of each individual 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 each balance sheet date, 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 period in which they arise except for exchange differences on transactions entered into in order to hedge certain foreign currency risks.

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

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

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

On the 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 a joint

arrangement or 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 Group 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 the accumulated exchange differences recognized in other comprehensive income is reclassified to profit or loss.

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

g. Inventories and inventories related to real estate business

Inventories, including raw materials, supplies, work in process, finished goods, and materials and supplies in transit are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except for those that may be appropriate to group items of similar or related inventories. Net realizable value is the estimated selling prices of inventories less all estimated costs of completion and estimated costs necessary to make the sale. Raw materials and supplies are recorded at moving average cost while work in process and finished goods are recorded at standard cost.

Inventories related to real estate business include land and buildings held for sale, land held for construction and construction in progress. Land held for development is recorded as land held for construction upon obtaining the title of ownership. Prior to the completion, the borrowing costs directly attributable to construction in progress are capitalized as part of the cost of the asset. Construction in progress is transferred to land and buildings held for sale upon completion. Land and buildings held for sale, construction in progress and land held for construction are stated at the lower of cost or net realizable value and related write-downs are made by item. The amounts received in advance for real estate properties are first recorded as advance receipts and then recognized as revenue when the construction is completed and the title and significant risk of the real estate properties are transferred to customers. Cost of sales of land and buildings held for sale are recognized based on the ratio of property sold to the total property developed.

h. Investments in associates and joint ventures

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

The Group applies the equity method to investments in an associate and joint venture.

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

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

When the Group subscribes for additional new shares of an associate and joint venture at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Group's proportionate interest in the associate and joint venture. The Group records such a difference as an adjustment to investments with the corresponding amount charged to gain or loss on disposal of investments accounted for using the equity method. When the Group reduces its ownership interest in an associate or a joint venture but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognised in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

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

The entire carrying amount of 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 and a joint venture. Any retained investment is measured at fair value at that date, and the fair value is regarded as the investment's fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate and the joint venture attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate and the joint venture. The Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate and joint venture on the same basis as would be required had that associate directly disposed of the related assets or liabilities. If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Group continues to apply the equity method and does not remeasure the retained interest.

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

i. Property, plant and equipment

Except for land which is stated at cost, property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment.

Properties 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.

Freehold land is not depreciated.

Depreciation of 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 method are reviewed at each balance sheet date, with the effect of any changes in estimate 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 rental and/or for capital appreciation. Investment properties include right-of-use assets and properties under construction that meet the definition of investment properties.

Freehold 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.

Investment properties acquired through leases are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made on or before the commencement date, plus initial direct costs incurred and an estimate of costs needed to restore the underlying assets, less any lease incentives received. These investment properties are subsequently measured at cost less accumulated depreciation and accumulated impairment loss and adjusted for any remeasurement of the lease liabilities.

Depreciation is recognized using the straight-line method.

Investment properties under construction are measured at cost less accumulated impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Depreciation of these assets commences when the assets are ready for their intended use.

For a transfer of classification from investment properties to property, plant and equipment and to right-of-use assets, the deemed cost of the property for subsequent accounting is its carrying amount at the commencement of owner-occupation.

For a transfer of classification from property, plant and equipment and right-of-use assets to investment properties, the deemed cost of an item of property for subsequent accounting is its carrying amount at the end of owner-occupation.

For a transfer of classification from inventories to investment properties, the deemed cost of an item of property for subsequent accounting is its carrying amount at the inception of an operating lease.

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

Goodwill arising from an acquisition of a business is carried at cost as established at the date of 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 unit") 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. An impairment loss recognized for goodwill is not reversed in subsequent periods.

1. Other intangible assets

1) Separate acquisition

Other intangible assets with finite useful lives acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Other intangible assets are amortized using the straight-line method over their estimated useful lives. The estimated useful lives, residual values, and amortization methods are reviewed at each balance sheet date, with the effect of any changes in estimate being accounted for on a prospective basis.

2) Acquired through business combinations

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

3) Derecognition

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

m. Impairment of property, plant and equipment, right-of-use asset, investment properties and intangible assets other than goodwill

At each balance sheet date or whenever events or changes in circumstances indicate that the carrying value may not be recoverable, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use asset, investment properties and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the individual cash-generating units on a reasonable and consistent basis of allocation. The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent 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 immediately 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 issue 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 fair value through profit or loss are recognized immediately in profit or loss.

1) Financial assets

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

a) Measurement categories

Financial assets held by the Group 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 asset at FVTPL

Financial asset is classified as at FVTPL when the financial asset is mandatorily classified or it is designated as at FVTPL. The Group's 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, and any dividends or interest earned on such financial assets are recognized in other income; any remeasurement gains or losses on such financial assets are recognized in other gains or losses.

Fair value is determined in the manner described in Note 34.

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

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

- 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 the financial asset; 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.

A financial asset is credit impaired when one or more of the following events have occurred:

- i) Significant financial difficulty of the issuer or the borrower;
- ii) Breach of contract, such as a default;
- iii) It is becoming probable that the borrower will enter bankruptcy or undergo a financial reorganization; or
- iv) The disappearance of an active market for that financial asset because of financial difficulties.

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 and repurchase agreements collateralized by bonds. These cash equivalents are held for the purpose of meeting short-term cash commitments.

iii. Investments in debt instruments at FVTOCI

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

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

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

b) Impairment of financial assets and contract assets

At each balance sheet date, 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 and contract assets.

The Group always recognizes lifetime Expected Credit Loss ("ECL") for trade receivables and contract assets. For all other financial instruments, the Group recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the 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 ECL.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL 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 the financial asset.

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 entity.

On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in a debt instrument at FVTOCI, 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. 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.

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

3) Financial liabilities

a) Subsequent measurement

All financial liabilities are measured at amortized cost using the effective interest method or at fair value through profit or loss:

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, and any gains or losses on such financial liabilities are recognized in other gains or losses.

Fair value is determined in the manner described in Note 34.

b) Derecognition of financial liabilities

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

4) Derivative financial instruments

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

Derivatives are initially recognized at fair value at the date on 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 unless the derivative is designated and effective as a hedging instrument; in which event, the timing of the recognition in profit or loss depends on the nature of the hedging relationship. When the fair value of a derivative financial instrument is positive, the derivative is recognized as a financial liability.

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.

5) Convertible bonds issued by the subsidiaries

The component parts of compound instruments (i.e., convertible bonds) issued by the subsidiary 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 upon 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 non-controlling interests, and is not subsequently remeasured. When the conversion option remains unexercised at maturity, the balance recognized in non-controlling interests will be transferred to capital surplus - the change of interest in subsidiaries.

Transaction costs that relate to the issuance of the convertible bonds 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 non-controlling interests. Transaction costs relating to the liability component are included in the carrying amount of the liability component.

o. Hedge accounting

The Group designates certain hedging instruments, which include derivatives, embedded derivatives and non-derivatives in respect of foreign currency risk, as either fair value hedges or cash flow hedges or hedges of net investment in foreign operations.

1) Fair value hedges

Gains or losses on hedging instruments that are designated and qualify as fair value hedges are recognized in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognized in profit or loss in the line item relating to the hedged item.

The Group discontinues hedge accounting only when the hedging relationship ceases to meet the qualifying criteria; for instance, when the hedging instrument expires or is sold, terminated or exercised.

2) Cash flow hedges

The effective portion of gains or losses on hedging instruments that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gains or losses relating to the ineffective portion are recognized immediately in profit or loss.

The associated gains or losses that were recognized in other comprehensive income are reclassified from equity to profit or loss as a reclassification adjustment in the line item relating to the hedged item in the same period when the hedged item affects profit or loss. If a hedge of a forecasted transaction subsequently results in the recognition of a non-financial asset or a non-financial liability, the associated gains and losses that were recognized in other comprehensive income are removed from equity and included in the initial cost of the non-financial asset or non-financial liability.

The Group discontinues hedge accounting only when the hedging relationship cease to meet the qualifying criteria; for instance, when the hedging instrument expires or is sold, terminated, or exercised. The cumulative gain or loss on the hedging instrument that has been previously recognized in other comprehensive income from the period when the hedge was effective remains separately in equity until the forecast transaction occurs. When a forecast transaction is no longer

expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

3) Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized in other comprehensive income and accumulated under the heading of foreign currency translation reserve. The gains or losses relating to the ineffective portion are recognized immediately in profit or loss.

The gains and losses on the hedging instrument relating to the effective portion of the hedge, which were accumulated in the foreign currency translation reserve, are reclassified to profit or loss on the disposal or partial disposal of a foreign operation.

p. Revenue recognition

The Group identifies the contracts with customers, allocates transaction prices to performance obligations and, when performance obligations are satisfied, recognizes revenues at fixed amounts as agreed in the contracts with taking estimated volume discounts into consideration.

For contracts where the period between the date on which the Group transfers a promised good or service to a customer and the date on which the customer pays for that good or service is one year or less, the Group does not adjust the promised amount of consideration for the effects of a significant financing component.

The Group's duration of contracts with customers is expected to be one year or less, and the consideration from contracts with customers is included in transaction price and, therefore, can apply the practical expedient that not to disclose the performance obligations including (i) the aggregate amount of the transaction price allocated to the performance obligations that are not fully satisfied or have partially completed at the end of the reporting period, and (ii) the expected timing for recognition of revenue.

The Group's operating revenues include revenues from sale of goods and services as well as sale and leasing of real estate properties.

When customers control goods while they are manufactured in progress, the Group measures the progress on the basis of costs incurred relative to the total expected costs as there is a direct relationship between the costs incurred and the progress of satisfying the performance obligations. Revenue and contract assets are recognized during manufacture and contract assets are reclassified to trade receivables when the manufacture is completed or when the goods are shipped upon customer's request.

The Group recognizes revenues and trade receivables when the goods are shipped or when the goods are delivered to the customer's specific location because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility for sales to future customers and bears the risks of obsolescence.

Revenues from sale of real estate properties are recognized when customers purchase real estate properties and complete the transfer procedures. Revenues from leasing real estate properties are recognized during leasing periods on the straight-line basis.

q. Leases

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

For a contract that contains a lease component and non-lease components, the Group elects to account for the lease and non-lease components as a single lease component.

1) The Group as lessor

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

When the Group subleases a right-of-use asset, the sublease is classified by reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. However, if the head lease is a short-term lease that the Group, as a lessee, has accounted for applying recognition exemption, the sublease is classified as an operating lease.

Lease payments (less any lease incentives payable) from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases. Initial direct costs incurred in obtaining operating leases are added to the carrying amounts of the underlying assets and recognized as expenses on a straight-line basis over the lease terms.

2) The Group as lessee

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

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made on or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the consolidated balance sheets. With respect to the recognition and measurement of right-of-use assets that meet the definition of investment properties, refer to the aforementioned accounting policies for investment properties.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms. However, if leases transfer ownership of the underlying assets to the Group by the end of the lease terms or if the costs of right-of-use assets reflect that the Group will exercise a purchase option, the Group depreciates the right-of-use assets from the commencement dates to the end of the useful lives of the underlying assets.

Lease liabilities are initially measured at the present value of the lease payments, which comprise fixed payments, in-substance fixed payments, variable lease payments which depend on an index or a rate, residual value guarantees, the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and payments of penalties for terminating a lease if the lease term reflects such termination, less any lease incentives receivable. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses the lessee's incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, a change in the amounts expected to be payable under a residual value guarantee, a change in the assessment of an option to purchase an underlying asset, or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Group remeasures the lease liabilities with a corresponding adjustment to the right-of-use assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. For a lease modification that is not accounted for as a separate lease, the Group accounts for the remeasurement of the lease liability by (a) decreasing the

carrying amount of the right-of-use asset of lease modifications that decreased the scope of the lease, and recognizing in profit or loss any gain or loss on the partial or full termination of the lease; (b) making a corresponding adjustment to the right-of-use asset of all other lease modifications. Lease liabilities are presented on a separate line in the consolidated balance sheets.

The Group negotiates with the lessor for rent concessions as a direct consequence of the COVID-19 to change the lease payments originally due by June 30, 2022, that results in the revised consideration for the lease substantially less than the consideration for the lease immediately preceding the change. There is no substantive change to other terms and conditions. The Group elects to apply the practical expedient to all of these rent concessions, and therefore, does not assess whether the rent concessions are lease modifications. Instead, the Group recognizes the reduction in lease payment in profit or loss as a deduction of expenses of variable lease payments, in the period in which the events or conditions that trigger the concession occurs, and makes a corresponding adjustment to the lease liability.

Variable lease payments that do not depend on an index or a rate are recognized as expenses in the periods in which they are incurred.

r. Borrowing costs

Borrowing costs directly attributable to the 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 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 related to income are not recognized until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognized in other income on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognized as deferred revenue in the consolidated financial statements and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

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.

The benefit of a government loan received at a below-market rate of interest is treated as a government grant measured as the difference between the proceeds received and the fair value of the loan based on prevailing market interest rates.

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 expenses when employees have rendered services entitling them to the contributions.

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

Net defined benefit liability (asset) represents the actual deficit (surplus) in the Group's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

u. Share-based payment arrangements

The fair value at the grant date of the employee share options and restricted stocks for employees is expensed on a straight-line basis over the vesting period, based on the Group's best estimate of the number of options or shares that are expected to ultimately vest, with a corresponding increase in capital surplus - employee share options or non-controlling interests (employee share options issued by subsidiaries) and other equity - unearned employee benefits or non-controlling interests (restricted stocks for employees issued by subsidiaries). It is recognized as an expense in full at the grant date if vesting immediately. The grant date of issued ordinary shares for cash which are reserved for employees is the date on which the number of shares that the employees purchase is confirmed.

When restricted stocks for employees are issued, other equity - unearned employee benefits is recognized on the grant date, with a corresponding increase in capital surplus - restricted stocks for employees.

At each balance sheet date, the Group reviews its estimate of the number of employee share options and restricted stocks for employees 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 the capital surplus - employee share options or non-controlling interests (employee share options issued by subsidiaries) and other equity - unearned employee benefits or non-controlling interests (restricted stocks for employees issued by subsidiaries).

v. Taxation

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

1) Current tax

Income tax payable (recoverable) is based on taxable profit (loss) for the year determined according to the applicable tax laws of each tax jurisdiction. Taxable profit differs from net profit as reported in profit or loss because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

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 in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. If a temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit, the resulting deferred tax asset or liability is not recognized. In addition, a deferred tax liability is not recognized on taxable temporary differences arising from the initial recognition of goodwill.

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 capital expenditure 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 difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary difference 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 each balance sheet date 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 each balance sheet date 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 assets are realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. 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 balance sheet date, to recover or settle the carrying amount of its assets and liabilities.

3) Current and deferred tax for the year

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity, respectively.

Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

w. U.S. Dollar Amounts

A translation of the consolidated financial statements into U.S. dollars is included solely for the convenience of the readers and has been translated from New Taiwan dollar (NT\$) at the exchange rate as set forth in the statistical release by the U.S. Federal Reserve Board of the United States, which was NT\$27.74 to US\$1.00 as of December 31, 2021. The translation should not be construed as a representation that the NT\$ amounts have been, could have been, or could in the future be, converted into U.S. dollars at this or any other rate of exchange.

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, estimates and assumptions on the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and underlying assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The Group considers the recent development of the COVID-19 in R.O.C. and its economic environment implications when making its critical accounting estimates in cash flow projections, growth rate, discount rate, profitability, etc. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised if the revisions affect only that year or in the year of the revisions and future years if the revisions affect both current and future years.

Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The calculation of the value in use requires management to estimate the future cash flows expected to be generated from the 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, or change in facts and circumstances results in downward revision of future cash flows or upward revision of discount rate, a material impairment loss may arise.

6. CASH AND CASH EQUIVALENTS

	December 31					
		2020		20	21	
		NT\$		NT\$	U	S\$ (Note 4)
Cash on hand Checking accounts and demand deposits Cash equivalents (time deposits with original maturity of less than three months and	\$	6,073 48,734,866	\$	5,638 47,094,687	\$	203 1,697,718
repurchase agreements collateralized by bonds)		2,797,132		28,973,020	_	1,044,449
	\$	51,538,071	<u>\$</u>	76,073,345	\$	2,742,370

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

			Dec	cember 31		
		2020 rospectively (djusted)		20)21	
		NT\$		NT\$	USS	S (Note 4)
Financial assets mandatorily classified as at FVTPL	_					
Derivative instruments (non-designated hedges)						
Swap contracts Forward exchange contracts	\$	99,312 122,511	\$	85,629 23,373	\$	3,087 843 (Continued)

	December 31			
	2020 (Retrospectively Adjusted)	20	221	
	NT\$	NT\$	US\$ (Note 4)	
Redemption option and put option of convertible bonds	\$ -	\$ 8,463	\$ 305	
Target redemption forward contracts Non-derivative financial assets	-	500	18	
Quoted ordinary shares Private-placement funds Unquoted preferred shares Contingent considerations (Note 29) Open-end mutual funds Current	4,064,438 1,124,754 385,440 387,790 339,338 6,523,583 4,342,605	2,683,193 1,322,686 583,270 394,943 334,223 5,436,280 2,933,446	96,726 47,682 21,026 14,237 12,049 195,973 105,748	
Non-current	\$ 2,180,978	\$ 2,502,834	\$ 90,225	
Financial liabilities held for trading	<u>-</u>			
Derivative instruments (non-designated hedging) Swap contracts Forward exchange contracts Target redemption forward contracts	\$ 1,448,972 9,020 79,216	\$ 360,797 56,863	\$ 13,006 2,050	
Current	<u>\$ 1,537,208</u>	<u>\$ 417,660</u>	\$ 15,056 (Concluded)	

At each balance sheet date, outstanding swap contracts not accounted for hedge accounting were as follows:

Currency	Maturity Period	Notional Amount (In Thousands)
December 31, 2020		
Sell NT\$/Buy US\$ Sell US\$/Buy RMB Sell US\$/Buy HKD Sell US\$/Buy JPY Sell US\$/Buy KRW Sell US\$/Buy NT\$	2021.01-2021.12 2021.01-2021.02 2021.02 2021.01 2021.01 2021.01-2021.02	NT\$51,140,082/US\$1,755,000 US\$59,793/RMB395,742 US\$13,804/HKD\$107,000 US\$41,630/JPY4,300,000 US\$30,000/KRW33,066,000 US\$675,240/NT\$19,073,846
December 31, 2021		
Sell RMB/Buy US\$ Sell NT\$/Buy US\$ Sell US\$/Buy RMB Sell US\$/Buy JPY Sell US\$/Buy KRW Sell US\$/Buy NT\$	2022.01 2022.01-2022.12 2022.02 2022.01 2022.01 2022.01-2022.04	RMB2,617,518/US\$409,000 NT\$52,916,127/US\$1,903,000 US\$54,415/RMB349,800 US\$17,671/JPY2,000,000 US\$37,500/KRW44,418,750 US\$570,130/NT\$15,845,090

At each balance sheet date, outstanding forward exchange contracts not accounted for hedge accounting were as follows:

Currency	Maturity Period	Notional Amount (In Thousands)
December 31, 2020		
Sell RMB/Buy US\$ Sell HKD/Buy US\$ Sell NT\$/Buy US\$ Sell US\$/Buy RMB Sell US\$/Buy EUR Sell US\$/Buy JPY Sell US\$/Buy KRW Sell US\$/Buy MYR Sell US\$/Buy NT\$ Sell US\$/Buy SGD	2021.01 2021.01 2021.01-2021.02 2021.01-2021.04 2021.01 2021.01-2021.04 2021.01 2021.01-2021.04 2021.01-2021.02 2021.01-2021.02	RMB756,946/US\$116,093 HKD4,100/US\$529 NT\$2,667,230/US\$95,000 US\$363,000/RMB2,385,500 US\$1,607/EUR1,320 US\$100,076/JPY10,405,845 US\$16,000/KRW17,575,300 US\$24,000/MYR98,737 US\$27,470/NT\$776,867 US\$18,500/SGD24,868
December 31, 2021		
Sell RMB/Buy JPY Sell RMB/Buy US\$ Sell NT\$/Buy US\$ Sell US\$/Buy RMB Sell US\$/Buy EUR Sell US\$/Buy JPY Sell US\$/Buy MYR Sell US\$/Buy NT\$ Sell US\$/Buy SGD	2022.01 2022.01 2022.01-2022.03 2022.01-2022.06 2022.01 2022.01-2022.02 2022.01-2022.02 2022.01 2022.01-2022.02	RMB35,127/ JPY630,000 RMB727,645/US\$114,000 NT\$3,465,805/US\$125,000 US\$265,000/RMB1,701,695 US\$460/EUR407 US\$94,747/JPY10,789,851 US\$8,000/MYR33,430 US\$10,000/NT\$277,735 US\$16,900/SGD22,925

As of each balance sheet date, outstanding target redemption forward contracts not accounted for hedge accounting were as follows:

Currency	Maturity Period	Notional Amount (In Thousands)
December 31, 2020		
Sell EUR/Buy US\$	2022.04-2022.06	EUR23,279/US\$27,475
December 31, 2021		
Sell EUR/Buy US\$	2022.04-2022.06	EUR2,982/US\$3,475

The target redeemable forward contracts held by subsidiaries are weekly settled. If the market exchange rate is lower than the execution rate at the time of settlement, the contract will be settled at the nominal amount, whereas if the market exchange rate is higher than the execution rate, the contract will be settled at a leveraged nominal amount (twice the nominal amount). The contracts last until all the nominal amount of US\$ position is fully settled. However, when the accumulated excess of the execution rates over the market exchange rates reach the agreed threshold after the weekly settlement, the contracts will be automatically early terminated.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (FVTOCI)

	December 31				
	2020	20	21		
	NT\$	NT\$	US\$ (Note 4)		
Investments in equity instruments at FVTOCI Investments in debt instruments at FVTOCI	\$ 728,398 	\$ 943,354 1,076,458	\$ 34,007 <u>38,805</u>		
	<u>\$ 1,741,134</u>	\$ 2,019,812	<u>\$ 72,812</u>		

a. Investments in equity instruments at FVTOCI

			De	cember 31		
		2020		20)21	
		NT\$		NT\$	USS	(Note 4)
Unquoted ordinary shares Quoted ordinary shares Unquoted preferred shares Limited partnership	\$	567,377 - 151,329 9,692	\$	820,779 102,124 11,245 9,206	\$	29,588 3,682 405 332
	<u>\$</u>	728,398	\$	943,354	\$	34,007

b. Investments in debt instruments at FVTOCI

	December 31						
	2020	20)21				
	NT\$	NT\$	US\$ (Note 4)				
Unsecured subordinate corporate bonds	\$ 1,012,736	\$ 1,076,458	\$ 38,805				

The Group purchased 1,000 units of the abovementioned perpetual unsecured subordinate corporate bonds with par value of NT\$1,000 thousand with annual interest rate at 3.5% and effective interest rate at 3.2%.

9. CREDIT RISK MANAGEMENT FOR INVESTMENTS IN DEBT INSTRUMENTS

The Group's investment in unsecured subordinate corporate bonds is rated the equivalent of investment grade or higher and has low credit risk for impairment assessment.

There was no significant increase in credit risk of such debt instrument since initial recognition leading to changes in interest rates and terms, and there was also no significant change in bond issuer's operation affecting the ability performing debt obligation. Therefore, no expected credit losses existed. The Group reviews changes in bond yields and other public information periodically and makes an assessment whether there has been a significant increase in lifetime Expected Credit Loss ("ECL") since initial recognition.

10. TRADE RECEIVABLES, NET

	December 31						
	2020	20	21				
	NT\$	NT\$	US\$ (Note 4)				
At amortized cost							
Gross carrying amount	\$ 91,304,934	\$ 109,473,101	\$ 3,946,399				
Less: Allowance for impairment loss	97,358	103,353	3,726				
- -	91,207,576	109,369,478	3,942,673				
At FVTOCI	626,413	6,092,462	219,627				
	\$ 91,833,989	\$ 115,462,210	\$ 4,162,300				

a. Trade receivables

1) At amortized cost

The Group's average credit terms granted to the customers were 30 to 90 days. The Group evaluates the risk and probability of credit loss of trade receivables by reference to the Group's past experiences, financial condition of each customer, impact of COVID-19, as well as competitive advantage and future development of the industry in which the customer operates. The Group then reviews the recoverable amount of each individual trade receivable at each balance sheet date to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, management believes the Group's credit risk was significantly reduced.

The Group measures the loss allowance for trade receivables at an amount equal to lifetime ECLs. 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 each balance sheet date. As the Group's historical credit loss experience shows significantly different loss patterns for different customer segments, the provision matrix for expected credit loss allowance based on trade receivables due status is further distinguished according to the Group's different customer base.

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. 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, 2020

	Not Past Due NT\$	Overdue 1 to 30 days NT\$	Overdue 31 to 90 Days NT\$	Overdue Over 91 Days NT\$	Individually Impaired NT\$	Total NT\$
Expected credit loss rate	0%	0%-10%	0%-70%	1%-100%	50%-100%	
Gross carrying amount Loss allowance (Lifetime ECLs)	\$ 86,820,792 (18,911)	\$ 3,823,249 (2,053)	\$ 557,487 (20,629)	\$ 92,873 (45,232)	\$ 10,533 (10,533)	\$ 91,304,934 (97,358)
	<u>\$ 86,801,881</u>	\$ 3,821,196	\$ 536,858	<u>\$ 47,641</u>	<u>\$ -</u>	<u>\$ 91,207,576</u>

December 31, 2021

	Not Past Due NT\$	Overdue 1 to 30 days NT\$	Overdue 31 to 90 Days NT\$	Overdue Over 91 Days NT\$	Individually Impaired NT\$	Total NT\$
Expected credit loss rate	0%	0%-10%	0%-70%	1%-100%	0%-100%	
Gross carrying amount Loss allowance (Lifetime ECLs)	\$ 105,538,390 (18,062)	\$ 3,136,438 (1,811)	\$ 609,695 (22,785)	\$ 99,118 (46,337)	\$ 89,460 (14,358)	\$ 109,473,101 (103,353)
	<u>\$105,520,328</u>	\$ 3,134,627	\$ 586,910	\$ 52,781	\$ 75,102	<u>\$109,369,748</u>
		Overdue	Overdue	Overdue	Individually	
	Not Past Due US\$ (Note 4)	1 to 30 days US\$ (Note 4)	31 to 90 Days US\$ (Note 4)	Over 91 Days US\$ (Note 4)	Impaired US\$ (Note 4)	Total US\$ (Note 4)
Expected credit loss rate		1 to 30 days	31 to 90 Days	Over 91 Days	Impaired	
Expected credit loss rate Gross carrying amount Loss allowance (Lifetime ECLs)	US\$ (Note 4)	1 to 30 days US\$ (Note 4)	31 to 90 Days US\$ (Note 4)	Over 91 Days US\$ (Note 4)	Impaired US\$ (Note 4)	

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

	December 31								
	2019 2020					2021			
		NT\$		NT\$		NT\$	US	\$ (Note 4)	
Balance at January 1 Net remeasurement of	\$	155,389	\$	136,497	\$	97,358	\$	3,510	
loss allowance		(38,277)		(55,742)		17,078		616	
Reclassification		(5,877)		(6,970)		-		-	
Acquisition through business				, , , , , , , , , , , , , , , , , , ,					
combinations		25,553		32,460		_		-	
Amounts written off		-		(3,944)		(399)		(14)	
Disposal of subsidiaries Effects of foreign currency exchange		-		-		(4,637)		(167)	
differences		(291)		(4,943)		(6,047)		(219)	
Balance at December 31	\$	136,497	\$	97,358	\$	103,353	\$	3,726	

2) At FVTOCI

For the trade receivables due from certain customers, the Group decides whether or not to factor these trade receivables to banks without recourse based on the Group's demand 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 the collection of contractual cash flows and the selling of financial assets.

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

December 31, 2020

	No	t Past Due NT\$	1 to	verdue 30 days NT\$	31 to	verdue o 90 Days NT\$	Over	erdue 01 Days T\$	Imp	idually aired T\$	 Total NT\$
Expected credit loss rate		0%		0%		0%		-		-	
Gross carrying amount Loss allowance (Lifetime ECLs)	\$	613,968	\$	9,874	\$	2,571	\$	<u>-</u>	\$	<u>-</u>	\$ 626,413
	\$	613,968	\$	9,874	\$	2,571	\$		\$		\$ 626,413

December 31, 2021

	Not Past Due NT\$	Overdue 1 to 30 days NT\$	Overdue 31 to 90 Days NT\$	Overdue Over 91 Days NT\$	Individually Impaired NT\$	Total NT\$
Expected credit loss rate	0%	0%	0%	0%	0%	
Gross carrying amount Loss allowance (Lifetime ECLs)	\$ 5,991,543 <u> </u>	\$ 9,415 <u>-</u> \$ 9,415	\$ 91,493 <u>-</u> \$ 91,493	\$ 11 	\$ - - \$ -	\$ 6,092,462 <u>\$ 6,092,462</u>
	Not Past Due US\$ (Note 4)	Overdue 1 to 30 days US\$ (Note 4)	Overdue 31 to 90 Days US\$ (Note 4)	Overdue Over 91 Days US\$ (Note 4)	Individually Impaired US\$ (Note 4)	Total US\$ (Note 4)
Expected credit loss rate	0%	0%	0%	0%	0%	
Gross carrying amount Loss allowance (Lifetime ECLs)	\$ 215,989	\$ 340	\$ 3,298	\$ 0	\$ - -	\$ 219,627
	<u>\$ 215,989</u>	<u>\$ 340</u>	<u>\$ 3,298</u>	<u>\$</u>	<u>s -</u>	<u>\$ 219,627</u>

3) At FVTPL

Some of the Group's subsidiaries sell all of their trade receivables to banks without recourse. The sale will result in the derecognition of these trade receivables because the Group's subsidiaries will transfer substantially all risks and rewards to banks. These trade receivables are measured at FVTPL because the objective of the subsidiary' business model is neither held to collect contractual cash flows nor held both to collect contractual cash flows and to sell financial assets. As of December 31, 2020 and 2021, the trade receivables at FVTPL were all factored to banks without recourse.

b. Transfers of financial assets

The followings were the Group's outstanding trade receivables transferred but not yet due were as follows:

Annual

Counterparty	Receivables Factoring Proceed		Reclassified to Other Receivables		Reco	Advances Received- Unused		rances eived- sed	Interest Rates on Advances Received (%)
December 31, 2020	_								
BNP Paribas	EUR	16,691	EUR	15,315	EUR	14,481	EUR	1,376	0.80
HSBC	EUR	6,773	EUR	6,456	EUR	5,779	EUR	317	1.45
Citibank Taiwan Ltd.	US\$	94,471	US\$	-	US\$	-	US\$	94,471	0.84-0.95
Standard Chartered Bank	US\$	53,800	US\$	-	US\$	-	US\$	53,800	0.91
First Commercial Bank	NT\$	6,879	NT\$	-	NT\$	-	NT\$	6,879	1.95
December 31, 2021	_								
BNP Paribas	EUR	12,115	EUR	12,081	EUR	11,475	EUR	34	0.80
First Commercial Bank	NT\$	8,565	NT\$	-	NT\$	-	NT\$	8,565	1.95

Pursuant to the factoring agreements, losses from commercial disputes (such as sales returns and discounts) are borne by the Group, while losses from credit risk are borne by banks. As of December 31, 2020 and 2021, the Group's issued promissory notes with aggregate amounts of US\$2,000 thousand to Citibank Taiwan Ltd. to compensate losses from commercial disputes. As of the date that the consolidated financial statements were authorized for issue by the management, the Group did not have a material commercial dispute and also expected to have no material commercial dispute in the foreseeable future.

11. INVENTORIES

	December 31				
	2020 (Retrospectively Adjusted)	20	021		
	NT\$	NT\$	US\$ (Note 4)		
Finished goods	\$ 8,822,632	\$ 8,454,783	\$ 304,787		
Work in process	6,856,405	7,950,743	286,617		
Raw materials	29,428,008	46,978,647	1,693,534		
Supplies	2,691,779	3,339,042	120,369		
Raw materials and supplies in transit	<u>791,610</u>	1,109,766	40,006		
	<u>\$ 48,590,434</u>	\$ 67,832,981	\$ 2,445,313		

The cost of inventories recognized as operating costs for the years ended December 31, 2019, 2020 and 2021 were NT\$347,877,603 thousand, NT\$398,068,260 thousand and NT\$458,345,579 thousand (US\$16,522,912 thousand), respectively, which included write-downs of inventories at NT\$452,134 thousand, NT\$1,493,793 thousand and NT\$647,946 thousand (US\$23,358 thousand), respectively.

12. INVENTORIES RELATED TO REAL ESTATE BUSINESS

	December 31					
	2020	20	21			
	NT\$	NT\$	US\$ (Note 4)			
Land and buildings held for sale Construction in progress	\$ 625,791 11,058,328	\$ 667,630 2,956,958	\$ 24,067 106,596			
Land held for construction	1,787,526	1,787,526	64,439			
	<u>\$ 13,471,645</u>	<u>\$ 5,412,114</u>	<u>\$ 195,102</u>			

Construction in progress is mainly located on Hutai Road in Shanghai, China and Lidu Road in Kun Shan, China. The capitalized borrowing costs for the years ended December 31, 2019, 2020 and 2021 are disclosed in Note 25.

Construction in progress located on Hutai Road in Shanghai was completed in 2021 and immediately leased out for shopping centers business. As a result, the Group reclassified those buildings and land use right under the line item of "inventories related to real estate - construction in progress" to investment properties with amount of NT\$9,722,579 thousand (US\$350,490 thousand).

As of December 31, 2020 and 2021, inventories related to real estate business of NT\$13,471,645 thousand and NT\$5,412,114 thousand (US\$195,102 thousand), respectively, are expected to be recovered longer than twelve months.

Refer to Note 36 for the carrying amount of inventories related to real estate business that had been pledged by the Group to secure bank borrowings.

13. OTHER FINANCIAL ASSETS

	December 31					
		2020		20)21	
		NT\$		NT\$	US	\$ (Note 4)
Guarantee deposits	\$	516,505	\$	1,007,651	\$	36,325
Pledged time deposits (Note 36)		367,550		415,065		14,963
Time deposits with original maturity						
over three months		35,988		60,499		2,181
Others (Note 36)		161,957		73,765		2,659
, , ,		1,082,000		1,556,980		56,128
Current		551,655	_	140,857	-	5,078
Non-current	\$	530,345	\$	1,416,123	\$	51,050

14. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	December 31					
	2020	2021				
	NT\$	NT\$	US\$ (Note 4)			
Investments in associates Investments in joint ventures	\$ 12,335,239 471,434	\$ 16,500,670 495,930	\$ 594,833 <u>17,878</u>			
	<u>\$ 12,806,673</u>	<u>\$ 16,996,600</u>	\$ 612,711			

a. Investments in associates

1) Investments in associates accounted for using the equity method that was not individually material consisted of the following:

		Operating	Carrying	Carrying Amount as of December 31		
Name of Associate	Main Business	Location	2020	2021		
			NT\$	NT\$	US\$ (Note 4)	
Yann Yuan Investment Co., Ltd. ("Yann Yuan")	Engaged in investing activities	R.O.C.	\$ 6,670,035	\$ 9,873,978	\$ 355,947	
ChipMOS Technologies Inc. ("ChipMOS")	Engaged in the packaging and testing of semiconductors	R.O.C.	2,406,843	2,717,250	97,954	
M-Universe Investments Pte. Ltd. ("MU")	Investment company	Singapore	1,848,588	1,859,542	67,035	
Hung Ching Development & Construction Co. ("HC")	Engaged in the development, construction and leasing of real estate properties	R.O.C.	1,352,760	1,828,921	65,931	
Hung Ching Kwan Co. ("HCK")	Engaged in the leasing of real estate properties	R.O.C.	270,087	258,757	9,328	
Chipletz, Inc. ("CHIPLETZ")	Fabless substrate design house	U.S.A.	-	210,937	7,604	
Deca Technologies Inc. ("DECA")	Holding company with group engaged in the development of wafer level packaging and interconnect technology	U.S.A.	87,075	51,434	1,854	
	Less: Deferred gain on transfer of land		12,635,388 300,149 \$ 12,335,239	16,800,819 300,149 \$ 16,500,670	605,653 10,820 \$ 594,833	

2) At each balance sheet date, the total percentages of ownership held by the Group were as follows:

	December 31		
	2020	2021	
Yann Yuan	32.21%	29.45%	
ChipMOS	10.85%	10.85%	
MU	42.23%	42.23%	
HC	26.22%	26.22%	
HCK	27.31%	27.31%	
CHIPLETZ	-	20.82%	
DECA	17.85%	17.85%	

- 3) In March 2021, the Group's subsidiary, ISE Labs, Inc., invested US\$8,000 thousand to obtain 20.82% shareholdings in CHIPLETZ, hence, the Group has significant influence over CHIPLETZ.
- 4) In June 2021, the Group's subsidiary, SPIL, did not subscribe to Yann Yuan's cash capital increase proportionately, which led to a decrease in the Group's percentage of ownership in Yann Yuan to 29.45%.
- 5) Fair values (Level 1) of investments in associates with available published price quotation are summarized as follows:

		December 31					
	2020	20	21				
	NT\$	NT\$	US\$ (Note 4)				
ChipMOS HC	\$ 2,710,572 \$ 1,317,692	\$ 3,835,045 \$ 2,141,249	\$ 138,250 \$ 77,190				

6) Aggregate information of associates that are not individually material

	For the Year Ended December 31							
	2019	2020	20)21				
	NT\$	NT\$	NT\$	US\$ (Note 4)				
The Group's share of:								
Net income	\$ 321,413	\$ 545,833	\$ 872,697	\$ 31,460				
Other comprehensive								
income	1,401,453	2,784,094	3,624,403	130,656				
Total comprehensive	4. 500 0.66	ф. 2.22 2.22 7		D 162 116				
ıncome	<u>\$ 1,722,866</u>	\$ 3,329,927	<u>\$ 4,497,100</u>	<u>\$ 162,116</u>				

b. Investments in joint ventures

1) Investment in joint ventures that was not individually material and accounted for using the equity method consisted of the following:

		Operating	Carrying Amount as of December 31					
Name of Joint Venture	Main Business	Location	2020	2021				
			NT\$	NT\$	US\$ (Note 4)			
SUMA-USI Electronics Co., Ltd. ("SUMA-USI")	Engaged in the design and manufacturing of electronic products	China	<u>\$ 471,434</u>	<u>\$ 495,930</u>	<u>\$ 17,878</u>			

2) At each balance sheet date, the percentages of ownership held by the Group's subsidiary were as follows:

Decem	ber 31	
2020	2021	
49.00%	49.00%	

- 3) In March 2019, UGKS entered into a joint venture agreement with Cancon Information Industry Co., Ltd. to establish SUMA-USI and obtained 49.00% ownership of SUMA-USI. Based on the joint venture agreement, both investors jointly lead the relevant operation activities of SUMA-USI, which resulted in that the investment in SUMA-USI was accounted for using the equity method.
- 4) Aggregate information of joint ventures that were not individually material

	For the Year Ended December 31							
		2019		2020	2021			
		NT\$		NT\$		NT\$	US\$	(Note 4)
The Group's share of:								
Net income (loss) Other comprehensive	\$	(139,137)	\$	1,780	\$	27,003	\$	973
income (loss)		(3,169)		3,881		<u>-</u>		
Total comprehensive income (loss)	\$	(142,306)	\$	5,661	\$	27,003	<u>\$</u>	973

15. PROPERTY, PLANT AND EQUIPMENT

The carrying amounts of each class of property, plant and equipment were as follows:

	December 31					
	,	2020 etrospectively Adjusted)		20)21	
		NT\$		NT\$	U	S\$ (Note 4)
Land	\$	10,457,960	\$	11,530,540	\$	415,665
Buildings and improvements		82,813,857		79,273,937		2,857,748
Machinery and equipment		122,539,797		128,202,516		4,621,577
Other equipment		4,700,318		3,928,284		141,610
Construction in progress and machinery under installation		13,853,465		16,932,273		610,392
	\$	234,365,397	\$	239,867,550	\$	8,646,992

For the year ended December 31, 2019

	Land NTS	Buildings and Improvements NT\$	Machinery and Equipment NT\$	Other Equipment NT\$	Construction in Progress and Machinery under Installation NT\$	Total NT\$
	1110	1110	1419	1110	1119	1110
Cost						
Balance at January 1, 2019 Additions	\$ 10,165,969 -	\$ 141,708,011 806,844	\$ 353,838,390 413,008	\$ 18,380,122 76,671	\$ 10,911,552 61,777,364	\$ 535,004,044 63,073,887
Disposals Reclassification	-	(983,690) 13,601,469	(19,139,634) 41,302,651	(2,507,440) 3,062,838	(57,221,627)	(22,630,764) 745,331
Acquisition through business combinations		15,001,407	41,302,031	3,002,030	(57,221,027)	743,331
(Note 29)	189,111	1,044,383	5,507,315	43,611	250,455	7,034,875
Effect of foreign currency exchange differences	(21,258)	(2,204,057)	(5,176,282)	(300,686)	919,817	(6,782,466)
Balance at December 31, 2019	\$ 10,333,822	<u>\$ 153,972,960</u>	<u>\$ 376,745,448</u>	<u>\$ 18,755,116</u>	<u>\$ 16,637,561</u>	<u>\$ 576,444,907</u>
Accumulated depreciation and impairment						
Balance at January 1, 2019	\$ -	\$ 62,744,074	\$ 245,750,420	\$ 12,194,041	\$ -	\$ 320,688,535
Depreciation expenses	-	6,989,392	35,747,308	2,503,967	-	45,240,667
Impairment losses recognized	-	78,562	102,056	20,388	-	201,006
Disposals	-	(881,149)	(18,640,266)	(2,503,438)	-	(22,024,853)
Reclassification	-	210,558	83,777	(103)	-	294,232
Acquisition through business combinations				40.000		
(Note 29)	-	445,682	4,000,338	19,028	-	4,465,048
Effect of foreign currency exchange differences		(1,023,739)	(3,294,855)	(194,461)		(4,513,055)
Balance at December 31, 2019	<u>s -</u>	\$ 68,563,380	\$ 263,748,778	\$ 12,039,422	<u>s -</u>	\$ 344,351,580

For the year ended December 31, 2020 (retrospectively adjusted)

		Land NT\$		Buildings and Improvements NT\$	_	Machinery and Equipment NT\$		Other Equipment NT\$		Construction in Progress and Machinery der Installation NT\$	_	Total NT\$
Cost												
Balance at January 1, 2020 Additions Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations (Note 29) Effect of foreign currency exchange differences	\$	10,333,822 - - - 167,136 (42,998)	\$	153,972,960 86,409 (365,758) (3,665,811) 7,367,875 1,680,497 (263,672)	\$	376,745,448 695,561 (12,818,849) (3,223,448) 52,980,977 4,445,789 (2,456,999)	\$	18,755,116 47,137 (2,419,423) (445,506) 222,066 722,490 (10,902)	\$	16,637,561 58,195,094 (126,605) (792,543) (60,032,844) 53,828 (81,026)	\$	576,444,907 59,024,201 (15,730,635) (8,127,308) 538,074 7,069,740 (2,855,597)
Balance at December 31, 2020 (retrospectively adjusted)	<u>\$</u>	10,457,960	<u>\$</u>	158,812,500	2	<u>\$ 416,368,479</u>	<u>\$</u>	16,870,978	<u>\$</u>	13,853,465	<u>\$</u>	616,363,382
Accumulated depreciation and impairment												
Balance at January 1, 2020 Depreciation expense Impairment losses recognized Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations (Note 29) Effect of foreign currency exchange differences	\$	- - - - -	\$	68,563,380 7,401,223 (300,832) (153,002) 3,462 548,190 (63,778)	-	\$ 263,748,778 36,373,712 981,535 (8,306,990) (345,834) 497,230 3,049,895 (2,169,644)	\$	12,039,422 2,241,613 10,738 (2,398,756) (82,059) (188,844) 588,935 (40,389)	\$	- - - - - -	\$	344,351,580 46,016,548 992,273 (11,006,578) (580,895) 311,848 4,187,020 (2,273,811)
Balance at December 31, 2020	\$		\$	75,998,643	5	\$ 293,828,682	\$	12,170,660	\$	_	\$	381,997,985

For the year ended December 31, 2021

	Land NTS	Buildings and Improvements NT\$	Machinery and Equipment NT\$	Other Equipment NT\$	Construction in Progress and Machinery under Installation NTS	TotalNT\$
Cost	1415	1414	1414	1419	1113	1419
Balance at January 1, 2021 (retrospectively adjusted) Additions Disposals Disposal of subsidiaries (Note 30) Reclassification	\$ 10,457,960 1,126,012 (2,400)	\$ 158,812,500 2,718,507 (659,833) (12,344,067) 5,038,562	\$ 416,368,479 1,332,497 (10,999,274) (33,309,236) 53,856,444	\$ 16,870,978 135,439 (2,144,766) (1,247,326) 1,181,455	\$ 13,853,465 69,105,086 (32,960) (1,237,431) (64,884,288)	\$ 616,363,382 74,417,541 (13,839,233) (48,138,060) (4,807,434)
Acquisitions through business combinations (Note 29) Effect of foreign currency exchange differences	(51.425)	5,284	28,282	3,108	4,852	41,526
2 , 2	(51,425)	(929,254)	(3,788,594)	(197,844)	123,549	(4,843,568)
Balance at December 31, 2021	<u>\$ 11,530,540</u>	<u>\$ 152,641,699</u>	<u>\$ 423,488,598</u>	<u>\$ 14,601,044</u>	<u>\$ 16,932,273</u>	<u>\$ 619,194,154</u>
Accumulated depreciation and impairment						
Balance at January 1, 2021 Depreciation expense Impairment losses recognized Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations	\$ - - - - -	\$ 75,998,643 7,620,561 15,915 (565,551) (5,369,867) (3,924,490)	\$ 293,828,682 39,147,076 105,815 (10,151,428) (24,974,206) 142,234	\$ 12,170,660 1,836,523 5,036 (2,065,174) (1,100,858) (18,218)	\$ - - - - -	\$ 381,997,985 48,604,160 126,766 (12,782,153) (31,444,931) (3,800,474)
(Note 29) Effect of foreign currency exchange differences	-	241 (407,690)	1,067 (2,813,158)	2,452 (157,661)	-	3,760 (3,378,509)
Balance at December 31, 2021	\$	\$ 73,367,762	\$ 295,286,082	\$ 10,672,760	<u> </u>	\$ 379,326,604
	Land	Buildings and Improvements	Machinery and Equipment	Other Equipment	Construction in Progress and Machinery under Installation	Total
	Land US\$ (Note 4)				Progress and Machinery	Total US\$ (Note 4)
Cost		Improvements	Equipment	Equipment	Progress and Machinery under Installation	
Cost Balance at January 1, 2021 (retrospectively adjusted) Additions Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations (Note 29) Effect of foreign currency exchange differences		Improvements	Equipment	Equipment	Progress and Machinery under Installation	
Balance at January 1, 2021 (retrospectively adjusted) Additions Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations (Note 29)	\$ 376,999 40,592 (86)	\$ 5,725,036 98,000 (23,786) (444,992) 181,635	Equipment US\$ (Note 4) \$ 15,009,678	Equipment US\$ (Note 4) \$ 608,182 4,883 (77,317) (44,965) 42,590	Progress and Machinery under Installation US\$ (Note 4) \$ 499,404 2,491,171 (1,188) (44,608) (2,339,016)	\$ 22,219,299 2,682,681 (498,890) (1,735,330) (173,304) 1,497
Balance at January 1, 2021 (retrospectively adjusted) Additions Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations (Note 29) Effect of foreign currency exchange differences	\$ 376,999 40,592 (86) - 14 (1,854)	\$ 5,725,036 98,000 (23,786) (444,992) 181,635	Equipment US\$ (Note 4) \$ 15,009,678	\$ 608,182 4,883 (77,317) (44,965) 42,590 112 (7,132)	Progress and Machinery under Installation US\$ (Note 4) \$ 499,404 2,491,171 (1,188) (44,608) (2,339,016) 175 4,454	\$ 22,219,299 2,682,681 (498,890) (1,735,330) (173,304) 1,497 (174,606)
Balance at January 1, 2021 (retrospectively adjusted) Additions Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations (Note 29) Effect of foreign currency exchange differences Balance at December 31, 2021 Accumulated depreciation and impairment Balance at January 1, 2021 Depreciation expense Impairment losses recognized Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations	\$ 376,999 40,592 (86) - 14 (1,854)	\$ 5,725,036 98,000 (23,786) (444,992) 181,635 190 (33,499) \$ 5,502,584 \$ 2,739,677 274,714 574 (20,388) (193,579) (141,474)	\$ 15,009,678 48,035 (396,513) (1,200,765) 1,941,473 1,020 (136,575) \$ 15,266,353 \$ 10,592,238 1,411,214 3,815 (365,949) (900,296) 5,127	\$ 608,182 4,883 (77,317) (44,965) 42,590 112 (7,132) \$ 526,353 \$ 438,740 66,205 182 (74,447) (39,685) (657)	Progress and Machinery under Installation US\$ (Note 4) \$ 499,404 2,491,171 (1,188) (44,608) (2,339,016) 175 4,454	\$ 22,219,299 2,682,681 (498,890) (1,735,330) (173,304) 1,497 (174,606) \$ 22,321,347 \$ 13,770,655 1,752,133 4,571 (460,784) (1,133,560) (137,004)
Balance at January 1, 2021 (retrospectively adjusted) Additions Disposals Disposal of subsidiaries (Note 30) Reclassification Acquisitions through business combinations (Note 29) Effect of foreign currency exchange differences Balance at December 31, 2021 Accumulated depreciation and impairment Balance at January 1, 2021 Depreciation expense Impairment losses recognized Disposals Disposal of subsidiaries (Note 30) Reclassification	\$ 376,999 40,592 (86) - 14 (1,854) \$ 415,665	\$ 5,725,036 98,000 (23,786) (444,992) 181,635 190 (33,499) \$ 5,502,584 \$ 2,739,677 274,714 574 (20,388) (193,579)	\$ 15,009,678 48,035 (396,513) (1,200,765) 1,941,473 1,020 (136,575) \$ 15,266,353 \$ 10,592,238 1,411,214 3,815 (365,949) (900,296)	\$ 608,182 4,883 (77,317) (44,965) 42,590 112 (7,132) \$ 526,353 \$ 438,740 66,205 182 (74,447) (39,685)	Progress and Machinery under Installation US\$ (Note 4) \$ 499,404 2,491,171 (1,188) (44,608) (2,339,016) 175 4,454 \$ 610,392	\$ 22,219,299 2,682,681 (498,890) (1,735,330) (173,304) 1,497 (174,606) \$ 22,321,347 \$ 13,770,655 1,752,133 4,571 (460,784) (1,133,560)

Based on the future operation plans and the capacity evaluation, the Group assessed that a portion of plant and equipment in the packaging segment and the testing segment were not qualified for the production needs and, therefore, recognized an impairment loss of NT\$201,006 thousand, NT\$992,273 thousand and NT\$126,766 thousand (US\$4,571 thousand) under the line item of other operating income and expenses (Note 25) for the years ended December 31, 2019, 2020 and 2021, respectively. The recoverable amounts of a portion of the impaired plant and equipment were determined by their fair value less cost of disposal, of which the fair value was based on the recent quoted prices of assets with similar age and obsolescence provided by vendors in secondary market or the disposal price, and both of which represented Level 3 inputs because the secondary market was not active and the disposal price was negotiated with

counterparties. The recoverable amounts of the remaining impaired plant and equipment were determined by their value in use and the Group expects only short-term or no economic benefits would be generated by these assets and the discount effect was immaterial.

Each class of property, plant and equipment was depreciated on a straight-line basis over the following useful lives:

Buildings and improvements	
Main plant buildings	10-55 years
Cleanrooms	10-20 years
Others	3-20 years
Machinery and equipment	2-10 years
Other equipment	2-20 years

The capitalized borrowing costs for the years ended December 31, 2019, 2020 and 2021 are disclosed in Note 25.

16. LEASE ARRANGEMENTS

a. Right-of-use assets

					D	ecember 31		
			,	2020 trospectively Adjusted)		20)21	
			_	NT\$	_	NT\$		\$ (Note 4)
Carrying amounts								
Land			\$	5,961,974	\$	6,093,518	\$	219,666
Buildings and improvement	ts			2,548,838		3,663,682		132,072
Machinery and equipment				181,065		880,443		31,739
Other equipment				49,930		42,619		1,536
			<u>\$</u>	8,741,807	<u>\$</u>	10,680,262	\$	385,013
			For	the Year End	ded I	December 31		
		2019		2020		20	21	
		NT\$		NT\$		NT\$	US	\$ (Note 4)
Additions to right-of-use assets	\$	824,268	\$	702,996	<u>\$</u>	3,239,770	<u>\$</u>	116,791
Depreciation charge for								
right-of-use assets	\$	215,301	\$	214,682	\$	217,674	\$	7,847
Land	•	307,708	,	370,458	•	509,746	•	18,376
Buildings and improvements Machinery and				ŕ		ŕ		
equipment		507,443		335,039		356,052		12,835
Other equipment	_	25,006		26,701		31,478		1,135
	\$	1,055,458	\$	946,880	\$	1,114,950	\$	40,193

The amounts disclosed above with respect to the right-of-use assets did not include the right-of-use assets that meet the definition of investment properties.

b. Lease liabilities

		December 31						
		2020		20	021	21		
		NT\$		NT\$	US	S\$ (Note 4)		
Carrying amounts								
Current Non-current	<u>\$</u> \$	774,444 5,101,386	<u>\$</u>	809,536 6,590,348	<u>\$</u> \$	29,183 237,576		

The Group's lease liabilities were mainly from land and buildings and improvements. The range of discount rates for lease liabilities was as follows:

	December 31			
	2020	2021		
Land (%)	0.54-8.00	0.54-8.00		
Buildings and improvements (%)	0.54-8.84	0.45-8.84		

c. Material lease-in activities and terms

The Group leases land and buildings for the use of plants and offices with remaining lease terms of 1-53 years and 1-29 years, respectively. For the leasehold land located in the R.O.C., the Group has extension options at the expiry of the lease periods. However, the government has the right to adjust the lease payments on the basis of changes in announced land value prices and also has the right to terminate the lease contract under certain circumstances. The Group does not have bargain purchase options to acquire the leasehold land and buildings at the expiry of the lease periods. In addition, the Group is prohibited from subleasing or transferring all or any portion of the underlying assets without the lessor's consent.

d. Subleases

In addition to the sublease transactions described in Note 17, the Group did not have other sublease transactions

e. Other lease information

	December 31						
	,	2020		20)21	_	
		NT\$ NT\$		NT\$	US\$ (Note 4)		
Expenses relating to short-term leases Expenses relating to low-value assets leases Expenses relating to variable lease payments not included in the measurement of lease	<u>\$</u> \$	682,142 5,433	<u>\$</u> \$	814,235 5,080	<u>\$</u> \$	29,352 183	
liabilities Total cash outflow for leases	<u>\$</u>	43,112 1,854,456	<u>\$</u> \$	61,141 2,909,157	<u>\$</u>	2,204 104,872	

The Group elected to apply the recognition exemption for qualifying short-term leases and low-value asset leases and, therefore, did not recognize right-of-use assets and lease liabilities for these leases.

17. INVESTMENT PROPERTIES

For the year ended December 31, 2019

		Land		ildings and provements	R	Right-of-use Assets		Total
		NT\$		NT\$		NT\$		NT\$
Cost								
Balance at January 1, 2019 Additions	\$	35,965	\$	8,409,790 2,532	\$	6,891,947	\$	15,337,702 2,532
Disposals		<u>-</u>		(1,843)		-		(1,843)
Reclassification		_		(490,130)		(21,069)		(511,199)
Effects of foreign currency				(200,000)		, ,		, , ,
exchange differences		-		(209,980)	_	(303,086)	_	(513,066)
Balance at December 31, 2019	<u>\$</u>	35,965	\$	7,710,369	\$	6,567,792	<u>\$</u>	14,314,126
Accumulated depreciation								
Balance at January 1, 2019	\$	_	\$	707,376	\$	292,722	\$	1,000,098
Depreciation expenses	·	_	·	377,536	·	216,574		594,110
Disposals		-		(1,240)		-		(1,240)
Reclassification		-		(210,455)		543		(209,912)
Effects of foreign currency exchange differences		<u>-</u>		99,354		(22,355)	_	76,999
Balance at December 31, 2019	\$	<u>-</u>	<u>\$</u>	972,571	<u>\$</u>	487,484	<u>\$</u>	1,460,055
Carrying amount at December 31, 2019	\$	35,965	\$	6,737,798	\$	6,080,308	\$	12,854,071
			Ψ	0,737,770	<u>Ψ</u>	0,000,500	Ψ	12,031,071
For the year ended December	r 31, 20	<u> 120</u>	_		_			
		Land		ildings and provements	Ri	ight-of-use Assets		Total
	-	NT\$		NT\$		NT\$		NT\$
Cost								
Balance at January 1, 2020	\$	35,965	\$	7,710,369	\$	6,567,792	\$ 1	4,314,126
Additions		-		6,352		-		6,352
Disposals		-		(1,902)		46.001		(1,902)
Reclassification Effects of foreign currency		-		(3,884)		46,201		42,317
exchange differences		<u>-</u>		111,870		124,920		236,790
Balance at December 31, 2020	\$	35,965	\$	7,822,805	\$	6,738,913	<u>\$ 1</u>	4,597,683
								(Continued)

	Land NT\$		Buildings and Improvements NT\$			ht-of-use Assets NT\$		Total NT\$
Accumulated depreciation								
Balance at January 1, 2020 Depreciation expenses Disposals Reclassification Effects of foreign currency exchange differences	\$	- - - -	\$	972,571 353,048 (1,293) (1,498) 19,639	\$	487,484 209,212 - 10,617 9,820	\$	1,460,055 562,260 (1,293) 9,119 29,459
Balance at December 31, 2020	<u>\$</u>	_	\$	1,342,467	\$	717,133	\$	2,059,600
Carrying amount at December 31, 2020	<u>\$</u>	35,965	<u>\$</u>	6,480,338	<u>\$</u>	6,021,780	<u>\$</u>	12,538,083 (Concluded)

For the year ended December 31, 2021

		Land		ildings and provements	Ri	ight-of-use Assets		Total
		NT\$		NT\$		NT\$		NT\$
Cost								
Balance at January 1, 2021 Disposals	\$	35,965	\$	7,822,805 (5,350)	\$	6,738,913	\$	14,597,683 (5,350)
Disposal of subsidiaries (Note 30) Reclassification (Note 12)		(393)		(1,290,187) 9,818,133		(87,412) 3,398,139		(1,377,599) 13,215,879
Effects of foreign currency exchange differences				30,697		(6,962)		23,735
Balance at December 31, 2021	\$	35,572	\$	16,376,098	\$	10,042,678	\$	26,454,348
Accumulated depreciation								
Balance at January 1, 2021 Depreciation expenses Disposals	\$	- - -	\$	1,342,467 482,625 (3,671)	\$	717,133 268,422	\$	2,059,600 751,047 (3,671)
Disposal of subsidiaries (Note 30) Reclassification		- -		(570,403) 2,014,201		(19,946) 78,914		(590,349) 2,093,115
Effects of foreign currency exchange differences				6,927		(7,108)		(181)
Balance at December 31, 2021	\$	<u>-</u>	<u>\$</u>	3,272,146	<u>\$</u>	1,037,415	<u>\$</u>	4,309,561
Carrying amount at December 31, 2021	<u>\$</u>	35,572	<u>\$</u>	13,103,952	<u>\$</u>	9,005,263	<u>\$</u>	22,144,787

	Land	Buildings and Improvements	Right-of-use Assets	Total
	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)
Cost				
Balance at January 1, 2021 Disposals Disposal of subsidiaries (Note	\$ 1,296 -	\$ 282,005 (193)	\$ 242,931	\$ 526,232 (193)
30) Reclassification (Note 12)	(14)	(46,510) 353,934	(3,151) 122,500	(49,661) 476,420
Effects of foreign currency exchange differences		1,107	(251)	<u>856</u>
Balance at December 31, 2021	<u>\$ 1,282</u>	\$ 590,343	\$ 362,029	\$ 953,654
Accumulated depreciation				
Balance at January 1, 2021 Depreciation expenses Disposals	\$ - - -	\$ 48,395 17,398 (132)	\$ 25,852 9,676	\$ 74,247 27,074 (132)
Disposal of subsidiaries (Note 30) Reclassification Effects of foreign currency	- -	(20,563) 72,610	(719) 2,845	(21,282) 75,455
exchange differences		250	(256)	<u>(6</u>)
Balance at December 31, 2021	<u>\$</u>	<u>\$ 117,958</u>	\$ 37,398	<u>\$ 155,356</u>
Carrying amount at December 31, 2021	<u>\$ 1,282</u>	<u>\$ 472,385</u>	<u>\$ 324,631</u>	<u>\$ 798,298</u>

Right-of-use assets included in investment properties were leasehold land located in Shanghai and were subleased under operating leases.

The abovementioned investment properties were leased out for 1 to 20 years, with an option to extend for an additional lease term. The lease contracts contain market review clauses in the event that the lessees exercise their options to extend. The lessees do not have bargain purchase options to acquire the investment properties at the expiry of the lease term.

In addition to fixed lease payments, some of the lease contracts also indicated that the lessees should make variable payments determined at a specific percentage of the excess of respective lessee's monthly revenues over a specific amount.

The maturity analysis of lease payments receivable under operating leases of investment properties was as follows:

	December 31							
	2020		20	21				
	NT\$			US\$ (Note 4)				
Year 1	\$ 880,929	\$	1,693,659	\$	61,055			
Year 2	688,123		1,405,450		50,666			
Year 3	471,966		1,210,891		43,651			
Year 4	383,307		1,019,498		36,752			
					(Continued)			

	December 31							
	2020		20)21	·			
	NT\$		NT\$	US	6\$ (Note 4)			
Year 5 Year 6 onwards	\$ 335,700 664,259		929,609 3,241,525	\$	33,511 116,854			
	\$ 3,424,290	<u>\$</u>	9,500,632	\$	342,489 (Concluded)			

The investment properties were depreciated on a straight-line basis over the following useful lives:

Main buildings	10-40 years
Right-of-use assets	10-50 years

Because the market conditions were severely affected by COVID-19 in 2020 and 2021, the Group agreed to provide unconditional rent concessions for some lease contracts. The rent concessions were accounted for as adjustments to related income over the remaining lease term. For the years ended December 31, 2020 and 2021, total amount from the rent concessions were NT\$54,139 thousand and NT\$3,865 thousand (US\$139 thousand), respectively.

The fair value of the investment properties was measured using the market approach and the income approach based on level 3 inputs by independent professional appraisers. The significant unobservable inputs were discount rates. The fair value of the investment properties was as follows:

		December 31				
	2020	20	21			
	NT\$	NT\$	US\$ (Note 4)			
Fair value	<u>\$ 19,799,714</u>	\$ 36,158,216	<u>\$ 1,303,468</u>			

Refer to Note 36 for the carrying amount of the investment properties that had been pledged by the Group to secure borrowings.

18. GOODWILL

For the year ended December 31, 2019

	Cost		ccumulated npairment	Carrying amount		
		NT\$	NT\$		NT\$	
Balance at January 1, 2019 Acquisition through business combinations	\$	52,388,559	\$ 2,414,113	\$	49,974,446	
(Note 29)		264,977	_		264,977	
Effect of foreign currency exchange differences		(40,987)	 <u>-</u>		(40,987)	
Balance at December 31, 2019	\$	52,612,549	\$ 2,414,113	<u>\$</u>	50,198,436	

For the year ended December 31, 2020 (retrospectively adjusted)

	Cost NT\$	Accumulated impairment NT\$	Carrying amount NT\$
Balance at January 1, 2020 Acquisition through business combinations	\$ 52,612,549	\$ 2,414,113	\$ 50,198,436
(Note 29) Effect of foreign currency exchange differences	2,567,842 (57,225)	<u>-</u>	2,567,842 (57,225)
Balance at December 31, 2020	\$ 55,123,166	<u>\$ 2,414,113</u>	\$ 52,709,053
For the year ended December 31, 2021		Accumulated	Carrying
	Cost	impairment	amount
	NT\$	NT\$	NT\$
Balance at January 1, 2021 (retrospectively adjusted) Disposal of subsidiaries (Note 30) Effect of foreign currency exchange differences	\$ 55,123,166 (310,711) (325,929)	\$ 2,414,113	\$ 52,709,053 (310,711) (325,929)
Balance at December 31, 2021	\$ 54,486,526	\$ 2,414,113	\$ 52,072,413
	Cost US\$ (Note 4)	Accumulated Impairment US\$ (Note 4)	Carrying Amount US\$ (Note 4)
Balance at January 1, 2021 (retrospectively adjusted) Disposal of subsidiaries (Note 30) Effect of foreign currency exchange differences	\$ 1,987,136 (11,201) (11,749)	\$ 87,026 	\$ 1,900,110 (11,201) (11,749)
Balance at December 31, 2021	\$ 1,964,186	\$ 87,026	\$ 1,877,160

a. Allocating goodwill to cash-generating units

The Group did not monitor goodwill for internal management purpose but for financial reporting purpose and, therefore, the goodwill was allocated to the following cash-generating units for evaluation of impairment: packaging segment, testing segment, EMS segment and other segment. The carrying amounts of goodwill allocated to cash-generating units were as follows:

	December 31					
	2020 (Retrospectively Adjusted)	20)21			
Cash-generating units	NT\$	NT\$	US\$ (Note 4)			
Packaging segment Testing segment EMS segment (Note 29) Others	\$ 35,703,625 13,365,068 3,492,259 148,101	\$ 35,412,424 13,304,040 3,207,848 148,101	\$ 1,276,583 479,598 115,640 5,339			
	\$ 52,709,053	\$ 52,072,413	<u>\$ 1,877,160</u>			

b. Impairment assessment

At the end of each year, the Group performs evaluation of goodwill for impairment by reviewing the recoverable amounts based on value in use which incorporates cash flow projections estimated by management covering a five-year period. The cash flows beyond that five-year period are extrapolated using a steady per annum growth rate. In assessing value in use, the estimated future cash flows are discounted to their present value using annual pre-tax discount rates which were 9.59%-14.99%, 10.39%-14.71% and 10.27%-15.76% as of December 31, 2019, 2020 and 2021, respectively. For the years ended December 31, 2019, 2020 and 2021, no impairment loss was recognized. The key assumption used in calculating each segment's value in use also included the growth rates for operating revenues, which were based on the forecast for the Group and the industry as well as the Group's historical performance.

Management believes that any reasonably possible change in the key assumptions on which the recoverable amount was based on would not cause the carrying amount of each cash-generating unit to exceed its recoverable amount.

December 31

19. OTHER INTANGIBLE ASSETS

The carrying amounts of each class of other intangible assets were as follows:

			2020			
			ospectively ljusted)		202	1
			<u> </u>	3.70		
			NT\$	NT	\$	US\$ (Note 4)
Customer relationships		\$ 9	,120,300	\$ 7,99	0,956	\$ 288,066
Computer software			,795,873		9,723	100,206
Patents and acquired spec	cific technology		,720,213		0,404	494,968
Others			75,385		2,624	2,258
		<u>\$ 27</u>	,711,771	\$ 24,56	3,707	\$ 885,498
	1 21 2010					
For the year ended Decer	nber 31, 2019		Patents and	1		
			Acquired			
	Customer	Computer	Specific			
	Relationships	Software	Technology	J	Others	Total
	NT\$	NT\$	NT\$		NT\$	NT\$
Cost						
Balance at January 1,						
2019	\$ 11,915,636	\$ 4,401,045	\$ 20,588,356	5 \$	83,657	\$ 36,988,694
Additions	-	1,358,533	-	-	(7,625)	1,350,908
Disposals or	(015 (05)	(1.122.116)			(6.215)	(2.045.206)
derecognization Acquisition through	(915,635)	(1,123,446)	-	-	(6,315)	(2,045,396)
business combinations						
(Note 29)	_	19,944	732,604	1	_	752,548
Effect of foreign currency		- /-	, , , , ,			, , .
exchange differences		(49,198)	(2,264	<u> </u>	(1,417)	(52,879)
Balance at December 31,						
2019	\$11,000,001	\$ 4,606,878	\$21,318,696	5 \$	68,300	\$ 36,993,875
						(Continued)

	Customer Relationships NT\$	Computer Software NT\$	Patents and Acquired Specific Technology NT\$		Others NT\$	TotalNT\$
Accumulated amortization						
Balance at January 1, 2019 Amortization expense Disposals or derecognization Acquisition through business combinations (Note 29) Effect of foreign currency exchange differences	\$ 1,548,839 1,033,464 (915,635)	\$ 3,241,363 583,300 (1,116,512) 7,765 (38,577)	\$ 1,332,687 1,955,703 - 313,422 (1,639)	\$	27,772 4,139 (6,315)	\$ 6,150,661 3,576,606 (2,038,462) 321,187 (40,509)
Balance at December 31, 2019	<u>\$ 1,666,668</u>	<u>\$ 2,677,339</u>	<u>\$ 3,600,173</u>	<u>\$</u>	25,303	\$ 7,969,483 (Concluded)

For the year ended December 31, 2020 (retrospectively adjusted)

	Customer Relationships	Computer Software	Patents and Acquired Specific Technology	Others	Total
	NT\$	NT\$	NT\$	NT\$	NT\$
Cost					
Balance at January 1,					
2020	\$11,000,001	\$ 4,606,878	\$21,318,696	\$ 68,300	\$ 36,993,875
Additions	-	951,439	171	31,045	982,655
Disposals or					
derecognization	-	(55,413)	-	(14,594)	(70,007)
Disposal of subsidiaries		(20.125)			(20.125)
(Note 30)	-	(38,125)	-	-	(38,125)
Acquisition through					
business combinations	005 565	1 567 500		114 260	2 567 242
(Note 29) Effect of foreign currency	885,565	1,567,508	-	114,269	2,567,342
exchange differences	4,717	(65,838)	312	(19,160)	(79,969)
exchange differences	<u> </u>	(05,656)	312	(19,100)	(79,909)
Balance at December 31,					
2020	\$11,890,283	\$ 6,966,449	\$21,319,179	\$ 179,860	\$ 40,355,771
Accumulated amortization					
Balance at January 1,					
2020	\$ 1,666,668	\$ 2,677,339	\$ 3,600,173	\$ 25,303	\$ 7,969,483
Amortization expense	1,000,000	729,330	1,998,554	5,493	3,733,377
Disposals or		/ / / - `		(= 0 : :)	(:
derecognization	-	(47,345)	-	(5,044)	(52,389)
Disposal of subsidiaries		(10, (00)			(10,600)
(Note 30)	-	(10,688)	-	-	(10,688) (Continued)

	Customer Relationships NT\$	Computer Software NT\$	Patents and Acquired Specific Technology NT\$	Others NT\$	Total NT\$
Acquisition through business combinations (Note 29) Effect of foreign currency	102,768	843,746	-	79,673	1,026,187
exchange differences	547	(21,806)	239	(950)	(21,970)
Balance at December 31, 2020	\$ 2,769,983	<u>\$ 4,170,576</u>	\$ 5,598,966	<u>\$ 104,475</u>	\$12,644,000 (Concluded)
For the year ended Decer	mber 31, 2021				
	Customer Relationships	Computer Software	Patents and Acquired Specific Technology	Others	Total
	NT\$	NT\$	NT\$	NT\$	NT\$
Cost					
Balance at January 1, 2021 (retrospectively adjusted) Additions	\$ 11,890,283	\$ 6,966,449 1,193,060	\$ 21,319,179 2,000	\$ 179,860 37,959	\$ 40,355,771 1,233,019
Disposals or derecognization	(102,637)	(150,670)	-	(71,014)	(324,321)
Disposal of subsidiaries (Note 30) Acquisition through business combinations	-	(789,998)	(5,401)	(6,243)	(801,642)
(Note 29) Effect of foreign currency	-	622	-	-	622
exchange differences	(83,041)	(167,769)	(537)	(7,036)	(258,383)
Balance at December 31, 2021	\$11,704,605	<u>\$ 7,051,694</u>	<u>\$21,315,241</u>	<u>\$ 133,526</u>	\$ 40,205,066
Accumulated amortization					
Balance at January 1, 2021 Amortization expense Disposals or	\$ 2,769,983 1,049,759	\$ 4,170,576 971,190	\$ 5,598,966 1,991,641	\$ 104,475 41,530	\$12,644,000 4,054,120
derecognization Disposal of subsidiaries	(102,637)	(139,907)	-	(67,741)	(310,285)
(Note 30) Acquisition through	-	(626,338)	(5,288)	(3,067)	(634,693)
business combinations (Note 29)	-	222	-	-	222
Effect of foreign currency exchange differences	(3,456)	(103,772)	(482)	(4,295)	(112,005)
Balance at December 31, 2021	\$ 3,713,649	<u>\$ 4,271,971</u>	<u>\$ 7,584,837</u>	<u>\$ 70,902</u>	<u>\$15,641,359</u>

	Customer Relationships US\$ (Note 4)	Computer Software US\$ (Note 4)	Patents and Acquired Specific Technology US\$ (Note 4)	Others US\$ (Note 4)	Total US\$ (Note 4)
Cost					
Balance at January 1, 2021 (retrospectively adjusted) Additions Disposals or	\$ 428,633	\$ 251,134 43,009	\$ 768,536 72	\$ 6,484 1,368	\$ 1,454,787 44,449
derecognization	(3,700)	(5,432)	-	(2,560)	(11,692)
Disposal of subsidiaries (Note 30) Acquisition through	-	(28,479)	(195)	(225)	(28,899)
business combinations (Note 29)	-	23	-	-	23
Effect of foreign currency exchange differences	(2,994)	(6,048)	(19)	(254)	(9,315)
Balance at December 31, 2021	\$ 421,939	<u>\$ 254,207</u>	\$ 768,394	<u>\$ 4,813</u>	<u>\$ 1,449,353</u>
Accumulated amortization					
Balance at January 1, 2021 Amortization expense Disposals or	\$ 99,855 37,843	\$ 150,345 35,010	\$ 201,837 71,797	\$ 3,766 1,497	\$ 455,803 146,147
derecognization	(3,700)	(5,043)	-	(2,442)	(11,185)
Disposal of subsidiaries (Note 30) Acquisition through	-	(22,579)	(191)	(110)	(22,880)
business combinations (Note 29)	-	8	-	-	8
Effect of foreign currency exchange differences	(125)	(3,741)	(17)	(155)	(4,038)
Balance at December 31, 2021	<u>\$ 133,873</u>	<u>\$ 154,000</u>	<u>\$ 273,426</u>	\$ 2,556	\$ 563,85 <u>5</u>

Each class of other intangible assets was amortized on the straight-line basis over the following useful lives:

	December 31, 2020	December 31, 2021
Customer relationships	11-16 years	11-16 years
Computer software	2-10 years	2-10 years
Patents and acquired specific technology	5-17 years	5-17 years
Others	5-32 years	5-10 years

20. BORROWINGS

a. Short-term borrowings

Bank loans mainly represented unsecured revolving loans, letters of credit and bank overdrafts.

	December 31					
	2020		2021			
		NT\$		NT\$	U	S\$ (Note 4)
Secured bank loans, annual interest rates both were 0.90%-1.87% as of December 31, 2020 and 2021	\$	300,495	\$	203,127	\$	7,322
Unsecured bank loans, annual interest rates were 0.58%-3.38% and 0.40%-3.75% as of December 31, 2020 and	Þ	300,493	Þ	203,127	Ф	1,322
2021, respectively		34,297,362		40,833,302		1,472,001
•		34,597,857		41,036,429		1,479,323
Less: financial liabilities for hedging - current (Note 34)		3,307,018		6,716,965		242,140
	\$	31,290,839	\$	34,319,464	\$	1,237,183

b. Long-term borrowings

1) Bank loans

	December 31					
	2020	20	021			
	NT\$	NT\$	US\$ (Note 4)			
Revolving bank loans						
Syndicated bank loans - repayable						
through January 2022, annual interest						
rates were 1.15%-1.17% and 1.08%						
as of December 31, 2020 and 2021,						
respectively (Note 36)	\$ 12,536,424	\$ 2,562,926	\$ 92,391			
Others - repayable through January						
2022 to July 2029, annual interest						
rates were 0.56%-4.15% and 0.40%-						
4.00% as of December 31, 2020 and						
2021, respectively	84,146,125	107,383,417	3,871,068			
Mortgage loans						
Repayable through March 2022 to						
December 2033, annual interest rates						
were 1.90%-4.90% and 2.32%-4.55%						
as of December 31, 2020 and 2021,						
respectively	10,813,997	8,031,142	289,515			
	107,496,546	117,977,485	4,252,974			
Less: unamortized discounts	104,323	3,642	<u> 131</u>			
	107,392,223	117,973,843	4,252,843			
			(Continued)			

	December 31						
	2020			20	021	21	
		NT\$		NT\$	U	S\$ (Note 4)	
Less: current portion financial liabilities for hedging -	\$	2,250,121	\$	4,526,683	\$	163,183	
current (Note 34) financial liabilities for hedging -		1,970,307		-		-	
non-current (Note 34)		5,910,919		4,780,931		172,348	
	<u>\$</u>	97,260,876	<u>\$ 1</u>	108,666,229	\$	3,917,312 (Concluded)	

Pursuant to some of the above revolving bank loans agreements, the Company's subsidiaries should meet certain financial covenants which are calculated based on each of their annual audited consolidated financial statements or semi-annual reviewed consolidated financial statements. The Company's subsidiaries were in compliance with all of the financial covenants.

2) Long-term bills payable

	December 31					
	2020			2		
		NT\$		NT\$	US	\$ (Note 4)
China Bills Finance Corporation, repayable through March 2023 to December 2023, annual interest rates were 0.65%-0.90% and 0.65% as of December 31, 2020 and 2021, respectively	\$	2,000,000	\$	2,500,000	\$	90,123
Ta Ching Bills Finance Corporation, repayable through January 2023 to March 2023, annual interest rates were 0.91% and 0.65% as of December 31, 2020 and 2021, respectively		1,000,000		2,500,000		90,123
Mega Bills Finance Corporation, repayable in March 2023, annual interest rates were 0.92%-0.93% and 0.65% as of December 31, 2020 and 2021, respectively		2,000,000		2,000,000		72,098
International Bills Finance Corporation, early repaid in March 2023, annual interest rate was 0.65% as of December		, ,		, ,		,
31, 2021 Less: unamortized discounts		5,000,000 1,498		1,500,000 8,500,000 1,353		54,073 306,417 49
	\$	4,998,502	<u>\$</u>	8,498,647	<u>\$</u>	306,368

21. BONDS PAYABLE

		December 31	
	2020	20	21
	NT\$	NT\$	US\$ (Note 4)
Unsecured domestic bonds Interest due annually with annual interest rate at 1.30% and fully redeemed in January 2021 Repayable at maturity in January 2023 and	\$ 7,000,000	\$ -	\$ -
interest due annually with annual interest rate at 1.50%	2,000,000	2,000,000	72,098
Repayable at maturity in January 2022 and interest due annually with annual interest rate at 1.25% Repayable at maturity in January 2024 and	3,700,000	3,700,000	133,381
interest due annually with annual interest rate at 1.45% Repayable at maturity in April 2024 and interest due annually with annual interest	4,300,000	4,300,000	155,011
rate at 0.90% Repayable at maturity in April 2026 and	6,500,000	6,500,000	234,319
interest due annually with annual interest rate at 1.03% Repayable at maturity in April 2025 and	3,500,000	3,500,000	126,172
interest due annually with annual interest rate at 0.90% Repayable at maturity in August 2023 and	10,000,000	10,000,000	360,490
interest due annually with annual interest rate at 0.72% Repayable at maturity in August 2025 and	3,000,000	3,000,000	108,147
interest due annually with annual interest rate at 0.85% Repayable at maturity in August 2027 and	5,000,000	5,000,000	180,245
interest due annually with annual interest rate at 0.95% Unsecured overseas bonds	2,000,000	2,000,000	72,098
US\$200,000 thousand (linked to New Taiwan dollar), repayable at maturity in October 2022 and interest due quarterly with annual interest rate at 2.15% US\$100,000 thousand (linked to New Taiwan dollar), repayable at maturity in October	6,204,800	6,204,800	223,677
2024 and interest due quarterly with annual interest rate at 2.50% Unsecured overseas convertible bonds RMB779,801 thousand, repayable at maturity in March 2027 and interest due annually with annual interest rate at 0.10%, 0.20%, 0.60%, 1.30%, 1.80% and 2.00% for the first, second, third, fourth, fifth and sixth	3,102,400	3,102,400	111,839
year, respectively	56,307,200	3,385,381 52,692,581	122,040 1,899,517
	50,507,200	32,072,301	(Continued)

	December 31				
	2020	20	21		
	NT\$	NT\$	US\$ (Note 4)		
Less: discounts on bonds payable	\$ 53,646 56,253,554	\$ 425,244 52,267,337	\$ 15,330 1,884,187		
Less: current portion of bonds payable	6,999,951	9,902,710	356,983		
	\$ 49,253,603	\$ 42,364,627	\$ 1,527,204 (Concluded)		

- a. In December 2017, AMPI offered the fifth secured domestic convertible bonds in NT\$250,000 thousand with nil coupon rate and a maturity of 3 years. Each holder of the bonds has the right to convert the bonds into ordinary shares of AMPI at the conversion price at any time from the 3 months after the offering date to the maturity date. The initial conversion price was NT\$4.8 per share at offering date and the conversion price will be subject to adjustment in the event of the conversion provisions due to anti-dilution clause. As of September 30, 2020, the conversion prices was NT\$4.8 per share. The bonds may be early redeemed at the option of AMPI, in whole or in part, at any time provided that (1) if the closing price of AMPI's ordinary shares on the Taipei Exchange exceeds the conversion price by 30% or more for 30 consecutive business days in the period starting from 3 months after the offering to 40 days before the maturity or (2) the outstanding amount of the bonds falls below 10% of the originally offered in the period aforementioned. AMPI already redeemed these bonds in December 2020.
- b. In March 2021, the subsidiary, USISH, offered an unsecured overseas convertible bonds (the "USISH Bonds") in RMB3,450,000 thousand with par value of RMB100. Within 5 trading days after maturity, USISH will redeem all the unconverted bonds at a price of 108% of the par value (including the interests of the last installation).

When the USISH Bonds were offered, the subsidiaries, USIE and ASE (Shanghai) Inc., totally subscribed for RMB2,670,199 thousand. Such USISH Bonds were deemed as a hybrid financial instrument under IFRS 9 and, therefore, USIE and ASE (Shanghai) Inc. classified them as financial assets mandatorily at FVTPL. Since the aforementioned contractual obligations assumed by USISH and the contractual rights entitled to USIE and ASE (Shanghai) Inc. were extinguished in economic substance, the assets and liabilities related to the USISH Bonds subscribed for by USIE and ASE (Shanghai) Inc. were all eliminated upon the consolidation.

Each holder of the USISH Bonds has the right to convert the USISH Bonds into ordinary shares of USISH at the conversion price at any time from the first trading day after 9 months of the offering date to the maturity date (the "Conversion Period"). The initial conversion price was RMB20.25 per share at offering date and the conversion price will be subject to the adjustment in the event of the conversion provisions due to anti-dilution clause. As of December 31, 2021, the conversion price was RMB19.75. As of December 31, 2021, USISH Bonds with the cumulative par value of RMB26 thousand was converted into one thousand ordinary shares of USISH. Before the maturity of the Bonds, if the closing price of USISH's ordinary shares in Shanghai Stock Exchange is lower than 80% of the current conversion price for at least 15 trading days out of any 30 consecutive trading days, the board of directors of USISH will have the right to propose a downward revision on conversion price and submit it to USISH's shareholders' meeting for approval.

During the Conversion Period, USISH's board of directors has the right to redeem all or part of the unconverted bonds at the price of par value plus accrued interests in either of the following circumstances: (1) if the closing price of USISH's ordinary shares in Shanghai Stock Exchange is not less 130% (including 130%) of the current conversion price for at least 20 trading days out of any 30 consecutive trading days, or (2) the unconverted USISH Bonds falls below RMB30,000 thousand.

In the last two interest accrual years before the maturity, the holders of USISH Bonds have the right to sell back all or part of USISH Bonds to USISH at the price of par value plus accrued interest in either of the following circumstances: (1) if the closing price of USISH's ordinary shares in Shanghai Stock Exchange is lower than 70% of the current conversion price in any 30 consecutive trading days, or (2) if USISH is deemed to change the use of the funds pursuant to the relevant regulations of the China Securities Regulatory Commission or USISH is identified by the China Securities Regulatory Commission as changing the use of funds before the maturity. In addition, after 3 years from the offering date, holders of USISH Bonds have the right to sell back all or part of USISH Bonds to USISH at 102% of the par value (including the interests accrued for the 3rd year).

At the offering date, USISH Bonds consisted of debt host contract (recognized under the line item of bonds payable), conversion right (recognized under the line item of non-controlling interests since it is an equity component of the bonds offered by the subsidiary), redemption option and put option (recognized under the line item of financial liabilities at FVTPL). In the consolidated financial statements, the effective interest rate of the debt host contract was 4.2989%, the amount of the conversion right was NT\$404,026 thousand (US\$14,565 thousand), and the aggregate fair value of the redemption option and put option was NT\$6,756 thousand (US\$244 thousand) on initial recognition.

22. OTHER PAYABLES

	December 31				
	2020	20)21		
	NT\$	NT\$	US\$ (Note 4)		
Payables for property, plant and equipment	\$ 10,013,971	\$ 13,607,664	\$ 490,543		
Accrued salary and bonus	12,448,548	12,217,011	440,411		
Accrued employees' compensation and					
remuneration to directors	4,405,981	7,711,445	277,990		
Accrued employee insurance	1,105,122	1,204,387	43,417		
Accrued utilities	536,491	581,662	20,968		
Others	10,905,510	11,374,731	410,049		
	\$ 39,415,623	\$ 46,696,900	\$ 1,683,378		

23. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

- 1) The pension plan under the R.O.C. Labor Pension Act ("LPA") for the Group's R.O.C. resident employees is a government-managed defined contribution plan. Based on the LPA, the Company and its subsidiaries in R.O.C. makes monthly contributions to employees' individual pension accounts at 6% of their monthly salaries.
- 2) The subsidiaries of the Group located in countries other than Taiwan also make contributions at various ranges according to relevant local regulations.

b. Defined benefit plans

1) The Company and its subsidiaries in R.O.C. joined the defined benefit pension plan under the R.O.C. Labor Standards Law operated by the government. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the last six months before retirement. The Company and its subsidiaries in R.O.C. make contributions based on a certain percentage of their domestic employees' monthly salaries to a pension fund administered by the pension fund monitoring committee. Before the end of each year, the Company and its subsidiaries in R.O.C.

assess the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company and its subsidiaries in R.O.C. are required to fund the difference in one appropriation that should be made by the end of March in the next year. Pension contributions are deposited in the Bank of Taiwan in the committee's name and are managed by the Bureau of Labor Funds, Ministry of Labor ("the Bureau"); the Company and its subsidiaries in Taiwan have no right to influence the investment policy and strategy.

- 2) Pension plans for certain subsidiaries of the Group stipulate that employees with service years exceeding agreed years are entitled to receive a lump-sum payment based on their length of service and the agreed salaries at the time of termination of employment.
- 3) ASE, SPIL, ASE Test, Inc. and ASEE have pension plans for executive managers. Pension costs under the plans were NT\$11,567 thousand, NT\$11,184 thousand and NT\$32,836 thousand (US\$1,183 thousand) (recognized under the line item of net defined benefit liabilities) for the years ended December 31, 2019, 2020 and 2021, respectively. Pension payments were NT\$26,144 thousand (US\$942 thousand) for the year ended December 31, 2021. As of December 31, 2020 and 2021, accrued pension liabilities for executive managers were NT\$346,015 thousand and NT369,999 thousand (US\$13,338 thousand), respectively.
- 4) The amounts included in the consolidated balance sheets arising from the Group's obligation in respect of its defined benefit plans excluding those for executive managers were as follows:

	December 31		
	2020	2021	
	NT\$	NT\$	US\$ (Note 4)
Present value of the defined benefit			
obligation	\$ 12,159,145	\$ 11,424,860	\$ 411,855
Fair value of the plan assets	(5,962,305)	(5,863,264)	(211,365)
Present value of unfunded defined benefit			
obligation	6,196,840	5,561,596	200,490
Recorded under other payables	(102,367)	(67,524)	(2,434)
Recorded under other non-current assets	26,306		
Net defined benefit liabilities	\$ 6,120,779	\$ 5,494,072	<u>\$ 198,056</u>

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation NT\$	Fair Value of the Plan Assets NT\$	Net Defined Benefit Liabilities (Assets) NT\$
		2.24	
Balance at January 1, 2019	<u>\$ 10,297,139</u>	\$ (5,492,123)	\$ 4,805,016
Service cost			
Current service cost	211,226	-	211,226
Net interest expense (income)	151,635	(97,387)	54,248
Recognized in profit or loss	362,861	(97,387)	265,474
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(104,516)	(104,516) (Continued)

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Assets)
	NT\$	NT\$	NT\$
Actuarial (gain) loss Changes in financial assumptions Experience adjustments Changes in demographic	\$ 398,732 70,374	\$ - -	\$ 398,732 70,374
assumptions Recognized in other comprehensive income	(2,329) 466,777		(2,329)
Contributions from the employer Benefits paid from the pension fund	(393,897)	(514,617) 393,897	(514,617)
the Group Business combinations Exchange differences on foreign plans	(21,439) 62,857 (105,724)	(28,380) 100,948	(21,439) 34,477 (4,776)
Balance at December 31, 2019	10,668,574	(5,742,178)	4,926,396
Service cost Current service cost Past service cost and gain on settlements Net interest expense (income) Recognized in profit or loss	193,693 (25,891) 119,314 287,116	- (81,114) (81,114)	193,693 (25,891) 38,200 206,002
Remeasurement Return on plan assets (excluding amounts included in net interest)		(109,616)	(109,616)
Actuarial (gain) loss Changes in financial assumptions Experience adjustments Changes in demographic assumptions Recognized in other comprehensive income	465,433 281,661	-	465,433 281,661
	(36,627) 710,467	(109,616)	(36,627) 600,851
Contributions from the employer Benefits paid from the pension fund the Group	(552,430) (14,520)	(620,433) 603,137	(620,433) 50,707 (14,520)
Assets extinguished on settlement Business combinations Exchange differences on foreign plans	1,018,480 41,458	11,910 - (24,011)	11,910 1,018,480 17,447
Balance at December 31, 2020	12,159,145	(5,962,305)	6,196,840

(Continued)

	Present Value of the Defined Benefit Obligation NT\$ Fair Value of the Plan Assets NT\$		Net Defined Benefit Liabilities (Assets) NT\$
Service cost Current service cost Past service cost and gain on	\$ 173,307	\$ -	\$ 173,307
settlements	(10,284)	_	(10,284)
Net interest expense (income)	78,501	(59,761)	18,740
Recognized in profit or loss	241,524	(59,761)	181,763
Remeasurement Return on plan assets (excluding amounts included in net interest)	_	(42,636)	(42,636)
Actuarial (gain) loss			
Changes in financial assumptions	(418,542)	-	(418,542)
Experience adjustments	242,896	-	242,896
Changes in demographic assumptions Recognized in other comprehensive	160,156	_	160,156
income	(15,490)	(42,636)	(58,126)
Contributions from the employer Benefits paid from	-	(542,584)	(542,584)
the pension fund	(556,419)	562,442	6,023
the Group	(80,603)	-	(80,603)
Business combinations	46,291	-	46,291
Exchange differences on foreign plans	(369,588)	181,580	(188,008)
Balance at December 31, 2021	<u>\$ 11,424,860</u>	\$ (5,863,264)	\$ 5,561,596 (Concluded)
	Present Value of the Defined Benefit Obligation US\$ (Note 4)	Fair Value of the Plan Assets US\$ (Note 4)	Net Defined Benefit Liabilities (Assets) US\$ (Note 4)
	035 (110164)	055 (11016 4)	035 (11016 4)
Balance at January 1, 2021	\$ 438,325	<u>\$ (214,935)</u>	\$ 223,390
Service cost Current service cost Past service cost and gain on	6,248	-	6,248
settlements	(371)	-	(371)
Net interest expense (income)	2,830	(2,154)	676
Recognized in profit or loss	8,707	(2,154)	6,553
Remeasurement Return on plan assets (excluding amounts included in net interest)	_	(1,537)	(1,537)
Actuarial (gain) loss	_	(1,557)	(1,001)
Changes in financial assumptions	(15,088)	-	(15,088) (Continued)

	of th E	ent Value te Defined Benefit oligation 5 (Note 4)	Pla	falue of the n Assets (Note 4)] L i	t Defined Benefit iabilities Assets) \$ (Note 4)
Experience adjustments	\$	8,756	\$	-	\$	8,756
Changes in demographic assumptions		5,773		<u>-</u>		5,773
Recognized in other comprehensive income		(559)		(1,537)		(2,096)
Contributions from the employer Benefits paid from		-		(19,560)		(19,560)
the pension fund		(20,058)		20,275		217
the Group		(2,906)		-		(2,906)
Business combinations		1,669		-		1,669
Exchange differences on foreign plans		(13,323)		6,546		(6,777)
Balance at December 31, 2021	\$	411,855	\$ ((211,365)	\$	200,490 (Concluded)

5) The fair value of the plan assets by major categories at each balance sheet date was as follows:

	December 31					
	2020	20)21			
	NT\$	NT\$	US\$ (Note 4)			
Cash	\$ 2,236,340	\$ 2,267,223	\$ 81,731			
Equity instruments	2,459,708	2,334,180	84,145			
Debt instruments	1,092,115	1,039,412	37,470			
Others	174,142	222,449	8,019			
Total	\$ 5,962,305	\$ 5,863,264	\$ 211,365			

6) Through the defined benefit plans under the Labor Standards Law of the R.O.C., the Group in R.O.C. are exposed to the following risks:

a) Investment risk

The plan assets are invested in 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.

b) 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.

c) 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.

- 7) The management of ASE Korea is responsible for the administration of the fund and determination of the investment strategies according to related local regulations. ASE Korea is responsible for the shortfall between the fund and the defined benefit obligation. The plan assets are investment in the certificates of deposits.
- 8) The present value of the defined benefit obligation and the related current service cost and past service cost were measured using the Projected Unit Credit Method. Except the pension plans for executive managers, the key assumptions used for the actuarial valuations were as follow:

	December 31		
	2020	2021	
Discount rates (%)	0.00-2.77	0.05-3.31	
Expected rates of salary increase (%)	1.00-4.06	1.00-4.02	

The sensitivity analysis below has been determined based on reasonably possible changes of the respective assumptions occurring at each balance sheet date, while holding all other assumptions constant.

	December 31				
	2020	20	21		
	NT\$	NT\$	US\$ (Note 4)		
Discount rate					
0.5% higher	\$ (617,803)	\$ (548,265)	\$ (19,764)		
0.5% lower	\$ 600,451	\$ 593,980	\$ 21,412		
Expected rates of salary increase					
0.5% higher	\$ 611,217	\$ 538,689	\$ 19,419		
0.5% lower	\$ (565,555)	\$ (503,700)	\$ (18,158)		

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

9) Maturity analysis of undiscounted pension benefit

	December 31				
	2020	20	21		
	NT\$	NT\$	US\$ (Note 4)		
No later than 1 year Later than 1 year but not later than 5 years Later than 5 years	\$ 498,092 2,553,522 12,325,576	\$ 561,812 2,593,560 12,600,192	\$ 20,253 93,495 454,225		
	\$ 15,377,190	\$ 15,755,564	\$ 567,973		

The Group expected to make contributions of NT\$513,781 thousand and NT\$595,871 thousand (US\$21,481 thousand) to the defined benefit plans in the next year starting from January 1, 2021 and 2022, respectively.

As of December 31, 2020 and 2021, the average duration of the defined benefit obligation excluding those for executive managers of the Group both were 9 to 16 years.

24. EQUITY

a. Share capital

Ordinary shares

		December 31			
		2020	2021		
Numbers of shares authorized (in thousands)		5,500,000	5,500,000		
Numbers of shares reserved (in thousands) Employee share options		400,000	400,000		
Number of shares issued and fully paid (in thou	4,351,592	4,408,650			
		December 31			
	2020	2021			
	NT\$	NT\$	US\$ (Note 4)		
Share capital authorized	\$ 55,000,000	\$ 55,000,000	<u>\$ 1,982,696</u>		
Share capital reserved Employee share options	\$ 4,000,000	\$ 4,000,000	\$ 144,196		

American Depositary Receipts

The Company's ADS represents 2 ordinary shares of the Company. As of December 31, 2020 and 2021, 107,964 thousand and 157,164 thousand ADSs were outstanding and represented 215,927 thousand and 314,328 thousand ordinary shares of the Company, respectively.

b. Capital surplus

		December 31	
	2020	20	21
	NT\$	NT\$	US\$ (Note 4)
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (1)			
or transferred to share capital (1)			
Issuance of ordinary shares	\$ 13,548,426	\$ 16,049,286	\$ 578,561
Merger by share exchange	117,693,658	117,693,658	4,242,742
Difference between consideration and the carrying amount of the subsidiaries' net			
assets during actual disposal or acquisition	3,240,987	3,240,987	116,835
Exercised employee share options	1,617,254	2,362,951	85,182
Treasury share transactions	510,449	816,186	29,422
Expired share options (Note 28)	645,903	645,903	23,284
• • • • • • • • • • • • • • • • • • • •	137,256,677	140,808,971	5,076,026

(Continued)

			Dec	ember 31			
		2020		20	2021		
		NT\$		NT\$	U	S\$ (Note 4)	
May be used to offset a deficit only	-						
Changes in percentage of ownership interest in subsidiaries (2)	\$	1,451	\$	1,451	\$	52	
Share of changes in capital surplus of associates		41,239		10,706		386	
Dividends that the claim period has elapsed and unclaimed by shareholders		3,550 46,240		5,183 17,340		187 625	
May not be used for any purpose	_						
Employee share options Employee restricted stock awards		1,894,952		1,442,132 1,193,782		51,988 43,034	
Others (3)		569,681 2,464,633		230,943 2,866,857	_	8,326 103,348	
	\$ 139	9,767,550	<u>\$ 14</u>	3,693,168	<u>\$</u>	5,179,999 (Concluded)	

- 1) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and once a year).
- 2) Such capital surplus arises from the effects of changes in ownership interests in subsidiaries resulting from equity transactions other than actual disposals or acquisitions, or from changes in capital surplus of subsidiaries accounted for using the equity method.
- Such capital surplus represents the excess of the carrying amount of related accounts over the par value due to employee share options exercised and the Company has not completed registration formalities.

c. Retained earnings and dividend policy

The Articles of Incorporation of the Company (the "Articles") provides that annual net income shall be distributed in the following order:

- 1) Replenishment of deficits;
- 2) 10.0% as legal reserve;
- 3) Special reserve appropriated or reversed in accordance with laws or regulations set forth by the authorities concerned;
- 4) If annual net income remains, a proposal for the distribution of such amount together with a part or all of the accumulated undistributed profits from previous years shall be prepared by the board of directors and submit to the shareholders' meeting for resolution. However, the distributable dividends may be paid in cash after a resolution has been adopted by a majority vote at a meeting of the board of directors attended by two-thirds of the total number of directors; and in addition thereto a report of such distribution shall be submitted to the shareholders' meeting.

For the policies on the distribution of employees' compensation and remuneration of directors, refer to employees' compensation and remuneration of directors in Note 25(g).

The Company is currently in the mature growth stage. To meet the capital needs for business development now and in the future and satisfy the shareholders' demand for cash inflows, the Company shall use residual dividend policy to distribute dividends, of which the cash dividend is not lower than 30% of the total dividend distribution, with the remainder to be distributed in shares. A distribution plan is also to be made by the board of directors and passed for resolution in the shareholders' meeting.

Appropriation of earnings to legal reserve shall be made until the legal reserve equals the Company's share capital. Legal reserve may be used to offset deficits. If the Company has no deficit and the legal reserve has exceeded 25% of the Company's share capital, the excess may be transferred to capital or distributed in cash.

Items referred to under Rule No. 1090150022 issued by the Financial Supervisory Commission R.O.C. and in the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Company.

The appropriation of earnings for 2019 and 2020 resolved in the Company's annual shareholders' meetings in June 2020 and August 2021, respectively, were as follows:

		Appropriation of Earnings				Dividends Per Share			
	Fo	or Year 2019	9 For Year 2020		For Year 2019		For Y	ear 2020	
		NT\$		NT\$		NT\$ lollars)		NT\$ lollars)	
Legal reserve Special reserve (reverse) Cash dividends	\$	1,697,489 3,944,915 8,668,331	\$	2,398,814 (1,278,670) 18,389,856	\$	2.0	\$	4.2	
	\$	14,310,735	\$	19,510,000					

d. Others equity items

1) Exchange differences on translating foreign operations

	For the Year Ended December 31						
	2019	2020	20	21			
	NT\$	NT\$	NT\$	US\$ (Note 4)			
Balance at January 1 Recognized for the year Exchange	\$ (5,888,574)	\$ (10,762,684)	\$ (11,641,939)	\$ (419,681)			
differences arising on translating foreign operations Share from associates and joint venture accounted for	(4,788,135)	(1,173,204)	(3,203,730)	(115,491)			
using the equity method	(85,975)	101,038	21,307	768 (Continued)			

		For the Year Ended December 31							
	2019	2020	20	21					
	NT\$	NT\$	NT\$	US\$ (Note 4)					
Reclassification Disposal of associates and joint venture accounted for using the equity method Disposal of foreign operations	\$ - 	\$ 29,971 162,940	\$ - <u>(569,284</u>)	\$ - (20,522)					
Balance at December 31	<u>\$ (10,762,684)</u>	<u>\$ (11,641,939</u>)	<u>\$ (15,393,646)</u>	\$ (554,926) (Concluded)					

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

		For the Year En	ded December 31	
	2019	2020	20	21
	NT\$	NT\$	NT\$	US\$ (Note 4)
Balance at January 1 Unrealized gain (loss) recognized during the year	\$ (1,015,107)	\$ (203,098)	\$ 2,027,902	\$ 73,104
Debt instruments Equity instruments Share from associates and joint venture accounted for using the equity method	(2,052) (283,472) 1,501,689	(2,136) (405,020) 2,655,570	63,722 (8,671)	2,297 (313)
Realized gain (loss) recognized during the year Disposal of associates and joint venture accounted for using the equity method Cumulative unrealized loss of equity instruments transferred to retained	-	1,094	-	-
earnings due to disposal	-	16,383	33,258	1,199 (Continued)

	For the Year Ended December 31					
	2019	2020	2021			
	NT\$	NT\$	NT\$	US\$ (Note 4)		
Cumulative unrealized loss transferred to retained earnings due to disposal of equity instruments in relation to associates and joint venture accounted for using the equity method	<u>\$ (404,156)</u>	<u>\$ (34,891)</u>	<u>\$ (1,525,553)</u>	<u>\$ (54,995)</u>		
Balance at December 31	<u>\$ (203,098)</u>	<u>\$ 2,027,902</u>	<u>\$ 4,190,361</u>	\$ 151,058 (Concluded)		

3) Gain (loss) on hedging instruments - hedges of net investments of foreign operations

	For the Year Ended December 31					
	2	020	2021			
	N	T\$		NT\$	US	\$ (Note 4)
Balance at January 1 Recognized during the year Foreign currency risk – loans	\$	-	\$	(429,265)	\$	(15,475)
denominated in foreign currency		<u>429,265</u>)		551,098		19,867
Balance at December 31	\$ (4	429,265)	\$	121,833	\$	4,392

4) Unearned employee compensation

In August 2021, the shareholders' meeting resolved to issue restricted stock awards for employees. Refer to Note 28 for the information.

	For the Year Ended December 31, 2021			
	NT	'\$	US\$	(Note 4)
Balance at January 1 Issuance of employee restricted stock	\$	-	\$	-
awards Share-based payment expenses	· ·	3,782) 8,791		(48,442) 6,446
Balance at December 31	\$ (1,16	<u>4,991</u>)	\$	<u>(41,996</u>)

e. Treasury shares (in thousand shares)

Purpose of Repurchase	Shares repurchased for cancellation	Shares held by subsidiaries	Total
Balance at December 31, 2020		72,941	72,941
Balance at January 1, 2021 Addition	53,067	72,941	72,941 53,067
Balance at December 31, 2021	53,067	72,941	126,008

In order to maintain the Company's credit and shareholders' rights and interests, the board of directors resolved in November 2021 to repurchase up to 55,000 thousand of the Company's ordinary shares for cancellation at prices between NT\$90 (US\$3) to NT\$150 (US\$5) per share during November 8, 2021 to January 7, 2022. If the Company's shares price falls below NT\$90 (US\$3), the Company will continuous to execute the repurchase. As of December 31, 2021, the Company has early completed the repurchase of 55,000 thousand shares, of which 53,067 thousand shares were bought back before December 31, 2021 at an average price of NT\$104.2 (US\$3.8) while the remaining 1,933 thousand shares were bought back during January 2022 at an average price of NT\$106.4 (US\$3.8). In February 2022, the Company's board of directors resolved that February 25, 2022 was the record date for capital reduction and completed the cancellation of those repurchased ordinary shares.

The Company's shares held by its subsidiaries at each balance sheet date were as follows:

	Shares Held by Subsidiaries (in thousand shares)	Carrying Amount NT\$	Carrying Amount US\$ (Note 4)	Fair Value NT\$	Fair Value US\$ (Note 4)
December 31, 2020	-				
ASE Test J&R Holding ASE Test, Inc.	44,100 23,352 5,489 72,941	\$ 1,380,721 381,709 196,677 \$ 1,959,107		\$ 3,585,349 1,898,508 446,287 \$ 5,930,144	
December 31, 2021	-				
ASE Test J&R Holding ASE Test, Inc.	44,100 23,352 5,489	\$ 1,380,721 381,709 196,677	\$ 49,774 13,760 7,090	\$ 4,696,675 2,486,975 584,620	\$ 169,311 89,653 21,075
	72,941	<u>\$ 1,959,107</u>	<u>\$ 70,624</u>	<u>\$ 7,768,270</u>	<u>\$ 280,039</u>

Fair value (Level 1) of the Company's shares held by subsidiaries is based on the closing price from an available published price quotation.

Under the Securities and Exchange Act in the R.O.C., the Company shall neither pledge treasury shares nor exercise shareholders' rights on these shares, such as the rights to dividends and voting. The subsidiaries holding the aforementioned treasury shares are bestowed shareholders' rights except the rights to participate in any share issuance for cash and voting.

f. Non-controlling interests

	For the Year Ended December 31						
		2020 (retrospectively					
	2019	adjusted)	20				
	NT\$	NT\$	NT\$	US\$ (Note 4)			
Balance at January 1							
(retrospectively adjusted)	\$ 17,639,487	\$ 13,374,912	\$ 15,622,009	\$ 563,158			
Share of profit for the year Other comprehensive income	1,207,974	1,681,320	2,099,830	75,697			
(loss) for the year Exchange difference on							
translating foreign							
operations	(414,010)	178,480	(321,551)	(11,592)			
Unrealized gain (loss) on				, ,			
equity instruments at							
FVTOCI	(10,773)	1,321	50,679	1,827			
Gain (loss) from hedging	-	(145,559)	187,502	6,759			
Remeasurement on			,	,			
defined benefit plans	(7,422)	(9,075)	1,497	54			
Share of other							
comprehensive income							
from associates							
accounted for using the							
equity method	-	-	7,902	285			
Non-controlling interests							
arising from acquisition or							
disposal of subsidiaries							
(Note 29)	666,651	298	-	-			
Acquisition of non-							
controlling interests in							
subsidiaries (Note 31)	(5,084,785)	(116,738)	-	-			
Issuance of ordinary shares	, , ,	, , ,					
by subsidiaries (Note 29)	83,044	1,711,453	-	-			
Subsidiaries' buy back of							
their own outstanding							
ordinary shares (Note 31)	(2,017,319)	(2,299,533)	(2,748,521)	(99,081)			
Equity component of	,	, , , , ,	,				
convertible bonds issued							
by subsidiaries	-	-	393,199	14,174			
Non-controlling interest							
relating to outstanding							
vested employee share							
options granted by							
subsidiaries	1,672,310	1,591,904	314,398	11,334			
Cash dividends distributed to	•			•			
non-controlling interests	(360,245)	(346,774)	(1,062,529)	(38,303)			
Balance at December 31	<u>\$ 13,374,912</u>	<u>\$ 15,622,009</u>	<u>\$ 14,544,415</u>	<u>\$ 524,312</u>			

25. PROFIT BEFORE INCOME TAX

a. Other operating income and expenses, net

	For the Year Ended December 31					
	2019	2020	20	21		
	NT\$	NT\$	NT\$	US\$ (Note 4)		
Rental income	\$ 136,301	\$ 153,682	\$ 175,373	\$ 6,322		
Gain (loss) on disposal of property, plant and						
equipment	(164,467)	460,868	71,770	2,587		
Royalty income	· -	_	135,400	4,881		
Impairment loss (Note 15)	(201,006)	(992,273)	(126,766)	(4,571)		
Others	(39,383)	880,215	934,052	33,673		
	\$ (268,555)	\$ 502,492	\$ 1,189,829	<u>\$ 42,892</u>		

b. Other income

	For the Year Ended December 31				
	2019	2020	2021		
	NT\$	NT\$	NT\$	US\$ (Note 4)	
Interest income					
Bank deposits	\$ 549,681	\$ 520,783	\$ 529,132	\$ 19,074	
Contracts with customers	· -	· -	13,197	476	
Government subsidies	624,351	803,049	767,918	27,683	
Dividends income	185,061	150,715	289,852	10,449	
	<u>\$1,359,093</u>	<u>\$1,474,547</u>	\$1,600,099	<u>\$ 57,682</u>	

c. Other gains and losses

	For the Year Ended December 31					
	2019	2020	20	21		
	NT\$	NT\$	NT\$	US\$ (Note 4)		
Remeasurement gain on investments accounted for using the equity method due to step acquisition	\$ 319,712	\$ -	\$ -	\$ -		
Net gain on financial assets mandatorily at FVTPL	3,631,763	3,211,125	1,199,065	43,225		
Net loss arising on financial instruments held for trading	(1,984,941)	(3,282,973)	(2,689,070)	(96,938)		
Gain on disposal of subsidiaries (Note 30)	(1,501,511)	802,753	17,340,418	625,105		
Foreign exchange gain, net	1,125,681	1,005,374	1,395,054	50,290		
Gain recognized in bargain purchase transaction (Note 29)	-	-	33,114	1,194		
Gain (loss) on disposal of investments accounted for using the equity method	-	91,297	(67,482)	(2,433) (Continued)		

	For the Year Ended December 31				
	2019	2020	20	21	
	NT\$	NT\$	NT\$	US\$ (Note 4)	
Impairment loss on financial assets Others	\$ (400,201) (8,025)	\$ - -	\$ - -	\$ - -	
	<u>\$2,683,989</u>	<u>\$1,827,576</u>	<u>\$17,211,099</u>	\$ 620,443 (Concluded)	

d. Finance costs

	For the Year Ended December 31					
	2019	2020	2021			
	NT\$	NT\$	NT\$	US\$ (Note 4)		
Interest on lease liabilities Interest on borrowings and	\$ 88,742	\$ 88,026	\$ 105,159	\$ 3,791		
bonds payable	4,211,541	3,498,999	2,790,368	100,590		
Total interest expense for financial liabilities measured at amortized cost Less: Amounts included in the cost of qualifying assets	4,300,283	3,587,025	2,895,527	104,381		
Inventories related to real	(25.712)	(05 590)	(71.011)	(2.560)		
estate business Property, plant and	(35,713)	(95,589)	(71,011)	(2,560)		
equipment	<u>(77,715</u>)	(54,208)	(25,581)	(922)		
	4,186,855	3,437,228	2,798,935	100,899		
Other finance costs	16,540	22,283	32,372	1,167		
	\$ 4,203,395	\$ 3,459,511	\$ 2,831,307	\$ 102,066		

Information relating to the capitalized borrowing costs was as follows:

_	For the Year Ended December 31				
	2019	2020	2021		
Annual interest capitalization rates Inventories related to real estate business (%) Property, plant and equipment (%)	4.35-4.85 0.96-4.03	4.20-4.75 0.49-3.47	4.20-4.35 0.48-1.08		

e. Depreciation and amortization

	For the Year Ended December 31							
		2019		2020		2021		
		NT\$		NT\$		NT\$		S\$ (Note 4)
Property, plant and equipment Right-of-use assets Investment properties Other intangible assets	\$	45,240,667 1,055,458 594,110 3,576,606	\$	46,016,548 946,880 562,260 3,733,377	\$	48,604,160 1,114,950 751,047 4,054,120	\$	1,752,133 40,193 27,074 146,147
Total	<u>\$</u>	50,466,841	\$	51,259,065	\$	54,524,277	\$	1,965,547 (Continued)

	For the Year Ended December 31								
	2019	2020	20)21					
	NT\$	NT\$	NT\$	US\$ (Note 4)					
Summary of depreciation by function									
Operating costs Operating expenses	\$ 43,749,333 3,140,902	\$ 44,017,839 3,507,849	\$ 46,880,267 3,589,890	\$ 1,689,988 129,412					
	\$ 46,890,235	<u>\$ 47,525,688</u>	\$ 50,470,157	\$ 1,819,400					
Summary of amortization by function									
Operating costs	\$ 2,092,074	\$ 2,231,060	\$ 2,443,870	\$ 88,099					
Operating expenses	1,484,532	1,502,317	1,610,250	58,048					
	\$ 3,576,606	\$ 3,733,377	<u>\$ 4,054,120</u>	\$ 146,147 (Concluded)					

Operating expenses directly related to investment properties

	For the Year Ended December 31							
	2019	2020	2021					
	NT\$	NT\$	NT\$	US\$ (Note 4)				
Direct operating expenses of investment properties that generated rental income	<u>\$ 1,232,826</u>	\$1,121,85 <u>4</u>	\$1,422,463	\$ 51,278				

f. Employee benefits expense

	For the Year Ended December 31								
	2019	2020	021						
	NT\$		NT\$	US\$ (Note 4)					
Post-employment benefits									
Defined contribution plans	\$ 3,148,209	\$ 2,979,167	\$ 3,489,642	\$ 125,798					
Defined benefit plans	277,041	217,186	214,599	7,736					
•	3,425,250	3,196,353	3,704,241	133,534					
Equity-settled share-based	, ,	, ,	, ,	,					
payments	871,699	955,575	699,211	25,206					
Other employee benefits	70,279,752	76,648,412	90,412,118	3,259,269					
1 2									
	\$ 74,576,701	\$ 80,800,340	\$ 94,815,570	\$ 3,418,009					
Summary of employee benefits expense by function									
Operating costs	\$ 49,173,778	\$ 52,526,164	\$ 61,555,563	\$ 2,219,018					
Operating expenses	25,402,923	28,274,176	33,260,007	1,198,991					
- F	_== ,		22,200,007	-,-,0,,,1					
	\$ 74,576,701	\$ 80,800,340	\$ 94,815,570	\$ 3,418,009					

g. Employees' compensation and the remuneration to directors

The Articles stipulates to distribute employees' compensation and remuneration to directors at the rates of 0.01%-1.00% and no higher than 0.75%, respectively, of net profit before income tax, employees' compensation and remuneration to directors.

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	2020				2021					
	Accrual Rate (%)			Accrual Rate (%)	Accrual Amount			ount		
			NT\$			NT\$	US	§ (Note 4)		
Employees' compensation	0.20	\$	54,909	0.19	\$	121,935	\$	4,396		
Remuneration to directors	0.40		109,818	0.30		195,095		7,033		

If there is a change in the proposed amounts after the consolidated financial statement authorized for issue, the differences are recorded as a change in accounting estimate and will be adjusted in the following year.

In March 2020 and 2021, the board of directors resolved the appropriations of employees' compensation and remuneration to directors in cash for 2019 and 2020, respectively. The differences between the resolved amounts and the accrued amounts reflected in the annual consolidated financial statements for the years ended December 31, 2019 and 2020 were deemed changes in estimates. The differences were NT\$3 thousand and NT\$818 thousand (US\$29 thousand) and were adjusted in net profit for each of the year ended December 31, 2020 and 2021, respectively.

	For Ye	ar 2019	For Year 2020			
	Employees' compensation	Remuneration to directors	Employees' compensation	Remuneration to directors NT\$		
	NT\$	NT\$	NT\$			
Resolved by the board of						
directors	<u>\$ 34,400</u>	\$ 68,800	<u>\$ 54,909</u>	<u>\$ 109,000</u>		
Recognized in the consolidated financial statements	\$ 34,400	\$ 68,803	\$ 54,909	<u>\$ 109,818</u>		

Information on the employees' compensation and the remuneration to directors resolved by the board of directors is available at the Market Observation Post System website of the Taiwan Stock Exchange (the "TWSE").

26. INCOME TAX

The Company and its subsidiaries, ASE, SPIL and USIINC, have filed a consolidated tax return for corporate income tax and for unappropriated earnings.

a. Income tax recognized in profit or loss

The major components of income tax were as follows:

	For the Year Ended December 31							
	2019	2020	2020 203					
	NT\$	NT\$ NT\$		US\$ (Note 4)				
Current income tax								
In respect of the current year Income tax on unappropriated	\$ 5,002,954	\$ 6,807,882	\$ 14,533,570	\$ 523,921				
earnings Changes in estimate for prior	19,115	680,649	3,684,138	132,810				
years	(352,579) 4,669,490	(472,512) 7,016,019	(129,152) 18,088,556	(4,656) 652,075 (Continued)				

	For the Year Ended December 31								
	2019			2020			2021		
		NT\$		NT\$		NT\$	US	\$ (Note 4)	
Deferred income tax									
In respect of the current year	\$	563,512	\$	212,338	\$	(95,906)	\$	(3,457)	
Changes in tax rates		54,072		-		18,337		660	
Changes in estimate for prior									
years		(213,758)		(103,021)		16,625		600	
Effect of foreign currency									
exchange differences		<u>(62,070</u>)		(8,438)		<u>(83,840</u>)		(3,022)	
		341,756		100,879		(144,784)		(5,219)	
Income tax expense recognized									
in profit or loss	\$	5,011,246	\$	7,116,898	\$ 1	17,943,772	\$	646,856	
•							(Concluded)	

A reconciliation of income tax expense calculated at the statutory rates and income tax expense recognized in profit or loss was as follows:

	For the Year Ended December 31							
		2019	2020			20	21	
	NT\$			NT\$		NT\$	US	S\$ (Note 4)
Profit before income tax	\$	23,279,811	\$	35,768,798	<u>\$</u>	80,193,769	\$	2,890,906
Income tax expense calculated at								
the statutory rates	\$	11,802,811	\$	16,907,904	\$	33,697,736	\$	1,214,771
Nontaxable expense in								
determining taxable income		459,133		316,619		357,936		12,903
Tax-exempt income		(495,883)		(387,212)		(14,578,355)		(525,536)
Additional income tax on								
unappropriated earnings		19,115		680,649		3,684,138		132,810
Income tax credits		(898,198)		(1,191,387)		(1,654,821)		(59,655)
The origination and reversal of								
temporary differences		(3,594,774)		(6,033,652)		78,544		2,831
Income tax adjustments on prior								
years		(352,579)		(472,512)		(112,527)		(4,056)
Unrecognized deferred tax liability								
for temporary differences								
associated with investments		(1,993,561)		(2,616,917)		(6,135,120)		(221,165)
Unrecognized loss carryforwards		-		-		288,025		10,383
Realized investment loss on								
merger of subsidiary		-		(138,890)		-		-
Withholding tax		65,182		52,296		87,175		3,143
Land value increment tax		-		-		117,341		4,230
Capital gains tax		<u>=</u>	_	<u> </u>		2,113,700		76,197
Income tax expense recognized in								
profit or loss	\$	5,011,246	\$	7,116,898	\$	17,943,772	\$	646,856

In July 2019, the President of the R.O.C. announced the amendments to the Statute for Industrial Innovation, which stipulate that the amounts of unappropriated earnings in 2018 and thereafter that are reinvested in the construction or purchase of certain assets or technologies are allowed as deduction when computing the income tax on unappropriated earnings. When calculating the tax on unappropriated earnings, the Group only deducts the amount of the unappropriated earnings that has been reinvested in capital expenditure.

In addition, in accordance with Rule No.10904558730 issued by the Ministry of Finance of Taiwan, the Group has deducted the amount of dividends distributed in 2020 attributable to the increase in the retained earnings as of January 1, 2018 as a result of initial adoption of IFRS 9 and IFRS 15 when calculating the tax on unappropriated earnings for 2018.

b. Income tax recognized directly in equity

	For the Year Ended December 31								
	2019			2020			2021		
		NT\$		NT\$		NT\$		US\$ (Note 4)
Deferred income tax Related to employee share									
options	\$	1,404	\$	(1,159)	\$		(9)	\$	(0)

c. Income tax recognized in other comprehensive income

	For the Year Ended December 31								
		2019		2020		202	21	1	
		NT\$		NT\$		NT\$	USS	§ (Note 4)	
Deferred income tax									
Related to remeasurement of defined benefit plans Unrealized loss on equity	\$	74,308	\$	114,559	\$	(19,319)	\$	(696)	
instruments at fair value through other comprehensive income		(78,124)		(237,460)		(160,084)		(5,771)	
Income tax recognized in other comprehensive income	\$	(3,816)	\$	(122,901)	\$	(179,403)	<u>\$</u>	(6,467)	

d. Current tax assets and liabilities

		December 31					
	2020	20	21				
	NT\$	NT\$	US\$ (Note 4)				
Current tax assets Tax refund receivable Prepaid income tax	\$ 303,265 399,555	\$ 207,272 334,908	\$ 7,472 12,073				
Trepara meome tax	\$ 702,820	\$ 542,180	\$ 19,545				
Current tax liabilities Income tax payable	<u>\$ 6,514,502</u>	\$ 16,362,350	\$ 589,847				

e. Deferred tax assets and liabilities

The Group offset certain deferred tax assets and deferred tax liabilities which met the offset criteria.

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

For the year ended December 31, 2019

	Balance at January 1	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Recognized in Equity	Exchange Differences	Acquisitions through Business Combinations	Balance at December 31
Deferred tax assets	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$
Deterred the assets							
Temporary differences							
Property, plant and equipment	\$ 689,790	\$ (119,972)	\$ -	\$ -	\$ (25,023)	\$ 49	\$ 544,844
Defined benefit obligation	1,064,824	(57,746)	74,308	-	(2,803)	-	1,078,583
FVTPL financial instruments	211,556	47,991	-	-	(40)	-	259,507
Others	1,838,746	(84,377)		1,160	(24,906)	14,326	1,744,949
	3,804,916	(214,104)	74,308	1,160	(52,772)	14,375	3,627,883
Loss carry-forward	672,275	(166,128)	-	-	(12,203)	48,837	542,781
Investment credits	631,166	(86,722)			(7,404)		537,040
	\$ 5,108,357	<u>\$ (466,954)</u>	\$ 74,308	<u>\$ 1,160</u>	<u>\$ (72,379</u>)	\$ 63,212	\$ 4,707,704
Deferred tax liabilities							
Temporary differences							
Property, plant and equipment	\$ 5,236,104	\$ (39,379)	\$ -	S -	\$ (7,074)	\$ 16,966	\$ 5,206,617
FVTPL financial instruments	4,535	4,706	-	-	(49)	-	9,192
Others	566,074	(90,524)	78,124	(244)	(3,144)	6,142	556,428
	\$ 5,806,713	<u>\$ (125,197)</u>	\$ 78,124	<u>\$ (244)</u>	<u>\$ (10,267)</u>	<u>\$ 23,108</u>	\$ 5,772,237

For the year ended December 31, 2020 (retrospectively adjusted)

			Recognized in Other			Acquisitions through		
	Balance at	Recognized in	Comprehensive	Recognized	Exchange	Business	Disposal of	Balance at
	January 1	Profit or Loss	Income	in Equity	Differences	Combinations	Subsidiaries NTS	December 31
	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$	NIS	NT\$
Deferred tax assets								
Temporary differences								
Property, plant and								
equipment	\$ 544,844	\$ 4,632	\$ -	\$ -	\$ 12,435	\$ 81,773	\$ (13,982)	\$ 629,702
Defined benefit								
obligation	1,078,583	(36,633)	114,559	-	1,005	212,941	-	1,370,455
FVTPL financial	250 507	(120.045)			(7)	2.005	(11.201)	112 250
instruments	259,507	(138,045)	-	-	(7)	2,085	(11,281)	112,259
Others	1,744,949	679,197	- 114.550	(999)	<u>(45,169</u>)	150,291	(120,359)	2,407,910
I	3,627,883	509,151	114,559	(999)	(31,736)	447,090	(145,622)	4,520,326
Loss carry-forward Investment credits	542,781 537,040	(44,651) (86,100)	-	-	(915) (21,559)	183,045	(152,594)	527,666 429,381
investment credits	337,040	(80,100)	<u>-</u>		(21,339)			429,361
	<u>\$ 4,707,704</u>	<u>\$ 378,400</u>	<u>\$ 114,559</u>	<u>\$ (999</u>)	<u>\$ (54,210)</u>	<u>\$ 630,135</u>	<u>\$ (298,216)</u>	<u>\$ 5,477,373</u>
Deferred tax liabilities								
Temporary differences								
Property, plant and	e 5 200 (17	0 427 465	\$ -	\$ -	\$ (29,248)	¢ 275 552	s -	\$5,980,387
equipment FVTPL financial	\$ 5,206,617	\$ 427,465	5 -	5 -	\$ (29,248)	\$ 375,553	\$ -	\$3,960,367
instruments	9,192	(2,942)	_	_	67	_	-	6,317
Others	556,428	54,755	237,460	160	(1,060)	287,375	(795)	1,134,323
Stilets		51,755	237,100		(1,000)	201,515	(175)	1,101,020
	\$ 5,772,237	\$ 479,278	<u>\$ 237,460</u>	<u>\$ 160</u>	\$ (30,241)	\$ 662,928	<u>\$ (795)</u>	\$ 7,121,027

For the year ended December 31, 2021

	Balance at January 1 (retrospectively adjusted) NT\$	Recognized in Profit or Loss	Recognized in Other Comprehensive Income NT\$	in E	gnized quity T\$		xchange fferences NT\$	Disposal of Subsidiaries NT\$	Balance at December 31 NTS
Deferred tax assets	_								
Temporary differences	Ф. (20 702	Ø (106.442)	•	•		•	(7.170)	0 (245 104)	e 00.077
Property, plant and equipment	\$ 629,702	\$ (186,443)	\$ -	\$	-	2	(7,178)	\$ (345,104)	\$ 90,977
Defined benefit obligation FVTPL financial instruments	1,370,455	(115,707)	(19,319)		-		(47,276)	-	1,188,153
	112,259	77,593	-		-		(502)	-	189,350
Others	2,407,910	679,492			<u>(7</u>)	_	52,399	(269,080)	2,870,714
	4,520,326	454,935	(19,319)		(7)		(2,557)	(614,184)	4,339,194
								((Continued)

	Balance at January 1 (retrospectively adjusted)	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Recognized in Equity	Exchange Differences	Disposal of Subsidiaries NTS	Balance at December 31
	NT\$	NT\$	NT\$	NT\$	NT\$	NIS	NT\$
Loss carry-forward Investment credits	\$ 527,666 429,381	\$ 187,981 (15,549)	\$ - -	\$ <u>-</u>	\$ (31,077) (22,798)	\$ (45,788) 	\$ 638,782 391,034
	<u>\$ 5,477,373</u>	<u>\$ 627,367</u>	<u>\$ (19,319</u>)	<u>\$ (7</u>)	<u>\$ (56,432)</u>	<u>\$ (659,972)</u>	\$ 5,369,010
Deferred tax liabilities							
Temporary differences							
Property, plant and equipment FVTPL financial instruments	\$ 5,980,387 6,317	\$ 165,628 6,274	\$ - -	\$ - -	\$ (42,437) (11)	\$ (186,834)	\$ 5,916,744 12,580
Others	1,134,323	310,681	160,084	2	69,848	(14,065)	1,660,873
	<u>\$ 7,121,027</u>	<u>\$ 482,583</u>	<u>\$_160,084</u>	<u>\$2</u>	\$ 27,400	<u>\$ (200,899)</u>	<u>\$_7,590,197</u> (Concluded)
						(Concluded)
	Balance at January 1 (retrospectively adjusted)	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Recognized in Equity	Exchange Differences	Disposal of Subsidiaries	Balance at December 31
	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)
Deferred tax assets							
Temporary differences Property, plant and equipment Defined benefit obligation FVTPL financial instruments Others	\$ 22,700 49,404 4,047 <u>86,803</u> 162,954	\$ (6,721) (4,171) 2,797 	\$ - (696) - - (696)	\$ - - - - (0)	\$ (259) (1,704) (18) 	\$ (12,441) - - - - - - - (9,700) (22,141)	\$ 3,279 42,833 6,826 103,487 156,425
Loss carry-forward Investment credits	19,022 15,479	6,777	-	-	(1,121) (822)	(1,651)	23,027 14,096
investment credits	13,479	(561)	_		(622)		14,090
	<u>\$ 197,455</u>	<u>\$ 22,616</u>	<u>\$ (696)</u>	<u>\$ (0)</u>	<u>\$ (2,035)</u>	<u>\$ (23,792)</u>	\$ 193,548
Deferred tax liabilities	_						
Temporary differences Property, plant and equipment FVTPL financial instruments Others	\$ 215,587 228 40,891	\$ 5,971 226 11,200	\$ - - 5,771	\$ - - 0	\$ (1,530) (1) 2,518	\$ (6,735) (507)	\$ 213,293 453 59,873
	\$ 256,706	\$ 17,397	\$ 5,771	\$ 0	\$ 987	\$ (7,242)	\$ 273,619

f. Items for which no deferred tax assets have been recognized for loss carry-forward, investment credits and deductible temporary differences

	December 31						
	2020	20)21				
	NT\$	NT\$	US\$ (Note 4)				
Loss carry-forward Investment credits Deductible temporary differences	\$ 1,497,056 49,611 377,242	\$ 1,340,849 44,244 241,249	\$ 48,336 1,595 8,697				
	\$ 1,923,909	<u>\$ 1,626,342</u>	\$ 58,628				

The unrecognized loss carry-forward will expire through 2030.

g. Information about unused loss carry-forward, unused investment credits, tax-exemption and other tax relief

As of December 31, 2021, the unused loss carry-forward comprised:

Expiry Year	NT\$	JS\$ ote 4)
2022	\$ 243,136	\$ 8,765
2023	192,254	6,930
2024	171,664	6,188
2025	185,524	6,688
2026 and thereafter	1,187,051	 42,792
	\$1,979,629	\$ 71,363

As of December 31, 2021, unused investment credits comprised:

Tax Credit Source	Rer	naining Cre	Expiry Year		
		NT\$	(1	US\$ Note 4)	
Purchase of machinery and equipment Others	\$	370,360 64,918	\$	13,351 2,340	2026 2026 and thereafter
	\$	435,278	\$	15,691	

As of December 31, 2021, profits attributable to the following expansion project is exempted from income tax for a 5-year period:

Tax-exemption Period

Construction and expansion of ASE Test Inc. in 2009

2018.01-2022.12

Some China subsidiaries qualified as high technology enterprises were entitled to a reduced income tax rate of 15% and were eligible to deduct certain times of research and development expenses from their taxable income.

h. Unrecognized deferred tax liabilities associated with investments

As of December 31, 2020 and 2021, the taxable temporary differences associated with the investments in subsidiaries for which no deferred tax liabilities have been recognized were NT\$33,474,725 thousand and NT\$39,480,927 thousand (US\$1,423,249 thousand), respectively.

i. Income tax assessments

The tax authorities have examined income tax returns of the Company and its R.O.C. subsidiaries through 2018 and 2019.

27. EARNINGS PER SHARE

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

	For the Year Ended December 31						
	2019	2020	20	21			
	NT\$	NT\$	NT\$	US\$ (Note 4)			
Profit for the year attributable to owners of the Company Effect of potentially dilutive ordinary shares:	\$ 17,060,591	\$ 26,970,580	\$ 60,150,167	\$ 2,168,353			
Potential ordinary shares of the subsidiary	(385,865)	(521,073)	(1,056,778)	(38,096)			
Earnings used in the computation of diluted earnings per share	<u>\$ 16,674,726</u>	<u>\$ 26,449,507</u>	\$ 59,093,389	\$ 2,130,257			

Weighted average number of ordinary shares outstanding (in thousand shares):

	For the Year Ended December 31				
	2019	2020	2021		
Weighted average number of ordinary shares in					
the computation of basic earnings per share	4,251,964	4,265,732	4,305,348		
Effect of potentially dilutive ordinary shares					
Employee share options	10,232	22,086	58,113		
Employees' compensation	570	815	1,264		
Employee restricted stock awards	_	_	943		
Weighted average number of ordinary shares in					
the computation of diluted earnings per share	4,262,766	4,288,633	4,365,668		

For the computation of earnings per ADS, the denominators were the half of the aforementioned weighted average outstanding shares (1 ADS represents 2 ordinary shares) while the numerators held constant.

The Group is able to settle the employees' compensation by cash or shares. The Group assumed that the entire amount of the compensation would be settled in shares and the resulting potential shares were included in the weighted average number of ordinary shares outstanding used in the computation of diluted earnings per share if the effect is dilutive. Such dilutive effect of the potential shares was included in the computation of diluted earnings per share until the board of directors approve the number of shares to be distributed to employees at their meeting in the following year.

28. SHARE-BASED PAYMENT ARRANGEMENTS

a. Employee share option plans of the Company

In order to attract, retain and reward employees, the Company and its subsidiary, ASE, have their employee share option plans for the Group's full-time employees. As disclosed in Note 1, the Company assumed ASE's obligations of outstanding employee share option plans starting from April 30, 2018 and each share option represents the right to purchase 0.5 ordinary share of the Company when exercised. Under the terms of the plan, share options are granted at an exercise price equal to or not less than the closing price of the ordinary shares listed on the TWSE at the issue date. The right of those share options granted under the plan is valid for 10 years, non-transferable and exercisable at certain percentages subsequent to the second anniversary of the grant date. For any subsequent changes in the Company's capital structure or when cash dividend per ordinary share exceeds 1.5% of the market price per ordinary share, the exercise price is accordingly adjusted.

Information about the share option plans that the Company granted and assumed were as follows:

For the Year Ended December 31 2019 2020 2021 Weighted Weighted Weighted Average Average Average Number of **Exercise** Number of **Exercise** Number of Exercise **Options** Price **Options** Price **Options Price** (In Per Share (In Per Share (In Per Share Thousands) (NT\$) Thousands) (NT\$) Thousands) (NT\$) Balance at January 1 183,814 170,786 \$57.0 144,767 \$58.1 \$56.9 Options expired (1,006)40.8 Options forfeited (4,214)61.8 58.0 (5.907)52.3 (3,949)Options exercised (8,814)48.4 (21,064)49.2 (42,058)61.4

144,767

67,388

56.9

61.4

96,802

49,696

53.3

55.5

The weighted average share prices at exercise dates of share options for the years ended December 31, 2019, 2020 and 2021 were NT\$69.3, NT\$68.5 and NT\$108.8 (US\$3.9), respectively.

57.0

63.5

170,786

33,822

Information about the outstanding share options that the Company granted and assumed at each balance sheet date was as follows:

	Range of Exercise Price Per Share (NT\$)	Weighted Average Remaining Contractual Life (Years)
December 31, 2020	_	
ASE 4 th share options ASE 5 th share options The Company 1 st share options	\$ 45.2 73.0 52.9	0.3 4.7 7.9
December 31, 2021	_	
ASE 5 th share options The Company 1 st share options	73.0 51.0	3.7 6.9

b. Employee restricted stock awards plan of the Company

Balance at December 31

Options exercisable, end of year

To attract and retain talents as well as motivate and engage employees, the Company's annual shareholders' meetings resolved in August 2021 to issue the 2021 employee restricted stock awards plan and granted 15,000 thousand ordinary shares on the record date of October 1, 2021. The par value and the exercise price was NT\$10 (US\$0.36) and NT\$0 per share, respectively. The fair value at the grant day was NT\$92.4 (US\$3.33) per share.

The vested shares are settled and issued on an annual basis during a three-year period starting from October 1, 2021. Up to one-thirds of the total shares granted will be vested only after the Company reaching specific performance targets before the end of each year-period. Except for inheritance, those shares shall not be sold, pledged, transferred, gifted, conditioned, or otherwise dispose of before vest, while the rights of attendance, propose, speak, vote and election at shareholders meeting and other rights, including but not limited to, stock dividend, cash dividend, distribution from legal reserve and

capital surplus, share options at cash capital increase are identical with the Company's ordinary shares issued and outstanding. All the shares under this plan should be deposited in a trust account before vest.

After the grant date, the Company has the right to revoke and cancel those unvested shares. The dividends (including cash dividends, stock dividends, and the cash or the shares distributed from legal reserve or capital surplus) entitled to those unvested shares and interests derived therefrom shall be returned to the Company from the trust account at the same time.

c. Employee share option plans of subsidiaries

USIE

The terms of the plans issued by USIE were the same with those option plans previously granted by ASE. Information about share options was as follows:

	Fo	r the Year End	led December 3	1
	201	19	202	20
	Number of Options (In Thousands)	Weighted Average Exercise Price Per Share (US\$)	Number of Options (In Thousands)	Weighted Average Exercise Price Per Share (US\$)
Balance at January 1 Options forfeited Options exercised	16,711 - 	\$2.1 - 2.0	8,349 (7) <u>(8,342)</u>	\$2.3 2.9 2.3
Balance at December 31	<u>8,349</u>	2.3		-
Options exercisable, end of year	<u>8,349</u>	2.3		-

In 2019 and 2020, the Group's shareholdings in USIE decreased because USIE's share options were exercised. The transaction was accounted for as an equity transaction since the Group did not cease to have control over USIE and, as a result, capital surplus was decreased by NT\$981,078 thousand in 2019, and capital surplus and retained earnings was decreased by NT\$1,120,111 thousand and NT\$392,447 thousand, respectively, in 2020. In addition, all of USIE's share options were fully exercised as of December 31, 2020.

USISH

Under the share option plan issued in 2015 ("2015 share options"), each unit represents the right to purchase one ordinary share of USISH when exercised. The options are valid for 10 years, non-transferable and exercisable at certain percentages subsequent to the second anniversary of the grant date incorporated with certain performance conditions. For any subsequent changes in USISH's capital structure, the exercise price is accordingly adjusted.

In November 2019, USISH adopted the first share option plan ("2019 share options") and granted 17,167 thousand share options to its employees. Each unit represents the right to purchase one ordinary share of USISH when exercised. The options are valid for 3.0 years, 4.0 years and 5.0 years, respectively, and are exercisable at certain percentages within 12 months subsequent to the second, the third and the fourth anniversary of the grant date under the satisfaction of certain performance conditions within each respective vesting period. In the event that USISH increases share capital by capital surplus or by cash, or distributes share dividends or cash dividends, the exercisable share option units and the exercise price are accordingly adjusted.

In September 2020, USISH adopted the second share option plan ("2020 share options") and granted 1,140 thousand share options to its employees. The conditions of issued 2020 share options are the same as 2019 share options plan, except that the options are valid for 2.2 years, 3.2 years and 4.2 years,

respectively, and with each respective vesting period of 1.2 years, 2.2 years and 3.2 years.

Information about share options was as follows:

	For the Year Ended December 31												
	201	19	202	20	202	21							
	Number of Options (In Thousands)	Exercise Price Per Share (RMB)	Number of Options (In Thousands)	Exercise Price Per Share (RMB)	Number of Options (In Thousands)	Exercise Price Per Share (RMB)							
Balance at January 1 Options granted Options forfeited Options exercised	21,537 17,167 (463) (3,164)	\$15.5 13.3 15.4 15.5	35,077 1,140 (636) _(4,315)	\$14.5 21.7 14.0 15.5	31,266 (952) (828)	\$14.6 - 14.5 13.8							
Balance at December 31	35,077	14.5	31,266	14.6	29,486	14.2							
Options exercisable, end of year	<u>13,694</u>	15.5	<u>13,416</u>	15.5	<u>19,249</u>	14.8							
Fair value of options granted (RMB)	<u>\$6.27-8.35</u>		<u>\$7.03-8.93</u>		<u>\$ -</u>								

Information about USISH's outstanding share options at each balance sheet date was as follows:

	Range of Exercise Price Per Share (RMB)	Remaining Contractual Life (Years)
December 31, 2020		
2015 share options 2019 share options 2020 share options	\$ 15.5 13.3 21.7	4.9 3.9 3.9
December 31, 2021		
2015 share options 2019 share options 2020 share options	15.5 12.7 21.2	3.9 2.9 2.9

d. Employee restricted stock plans of subsidiaries

In November 2019, USISH adopted the first restricted stock plan ("2019 restricted stocks") and granted 6,156 thousand ordinary shares to its directors (excluding independent directors), supervisors and employees. In April 2020, the board of directors further resolved to grant 6,403 thousand ordinary shares instead, while other terms remain constant. The plan was of 3 phases starting from 2019 and each phase lasts for 1 year with a valid period of 4.5 years, 3.5 years and 2.5 years, respectively. Upon satisfaction of certain performance conditions in each phase, participants are entitled to subscribe a certain percentage of the total USISH's ordinary shares issued under the plan with a lock-up period of 1 year. The valid period may be early terminated or extended prior to one month of the expiration date depending on the conditions of ordinary shares granted. In the event that USISH increases share capital by capital surplus or by cash, or distributes share dividends or cash dividends, the exercise price is accordingly adjusted.

In September 2020, USISH adopted the second restricted stock plan ("2020 restricted stocks") and granted 425 thousand ordinary shares to its employees. The conditions of issued 2020 restricted stocks are the same as 2019 restricted stocks plan, except that the restricted stocks are valid for 2 years and the

ordinary shares that USISH would issue to participants for free are with a lock-up period of 1.3 year.

In September 2021, USISH adopted the third restricted stock plan ("2021 restricted stocks") and granted 281 thousand ordinary shares to its expatriate staff. The conditions of issued 2021 restricted stocks are the same as 2020 restricted stocks plan.

Information about restricted stocks was as follows:

	For the Year Ended December 31											
	201	19	202	20	202	21						
	Number of Options (In Thousands)	Exercise Price Per Share (RMB)	Number of Options (In Thousands)	Exercise Price Per Share (RMB)	Number of Options (In Thousands)	Exercise Price Per Share (RMB)						
Balance at January 1	_	\$ -	6,156	\$13.3	5,547	\$12.2						
Options granted	6,156	13.3	672	4.9	281	_						
Options exercised	´ -	-	(1,281)	13.2	(1,780)	12.7						
Options forfeited	<u> </u>	-		-	<u>(483</u>)	12.1						
Balance at December 31	6,156	13.3	5,547	12.2	3,565	10.2						
Options exercisable, end of year		-		-		-						
Fair value of options granted (RMB)	<u>\$ 13.47</u>		<u>\$ 18.55</u>		<u>\$ 11.78</u>							

Information about USISH's outstanding restricted stocks at each balance sheet date was as follows:

	Range of Exercise Price Per Share (RMB)	Remaining Contractual Life (Years)
December 31, 2020		
2019 restricted stocks 2020 restricted stocks	\$ 13.2	3.3 1.7
December 31, 2021		
2019 restricted stocks	12.7	2.3
2020 restricted stocks	-	0.7
2021 restricted stocks	-	1.7

The Group's shareholdings in USISH decreased because the abovementioned share option plans and restricted stock plan were exercised in 2019, 2020 and 2021. The transaction was accounted for as an equity transaction since the Group did not cease to have control over USISH and, as a result, capital surplus increased by NT\$105,785 thousand, NT\$1,010,219 thousand and NT\$58,448 thousand (US\$2,107 thousand) in 2019, 2020 and 2021, respectively.

e. Fair value information

For the fair values at the grant date of USISH's 2019, 2020 and 2021 plans, the share options plans were measured by using the trinomial tree model, while the restricted stocks plans were measured by using the Black-Scholes Option Pricing Model incorporating the effect of the lock-up period. The inputs to the models were as follows:

Share option plan

	2019 Share Options Plan	2020 Share Options Plan
Share price at the grant date	RMB15.84 per share	RMB21.55 per share
Exercise price	RMB13.34 per share	RMB21.65 per share
Expected volatility (%)	45.07-51.80	48.14-53.57
Expected lives (years)	3-5	2.2-4.2
Expected dividend yield	-	-
Risk free interest rate (%)	2.80-2.97	2.80-2.99

Restricted stock plan

	2019 Restricted Stocks Plan	2019 Restricted Stocks Plan Amended in 2020	2020 Restricted Stocks Plan	2021 Restricted Stocks Plan
Share price at the grant date	RMB16.30 per share	RMB16.60 per share	RMB24.30 per share	RMB14.65 per share
Exercise price	RMB13.34 per share	RMB13.34 per share	(Note)	(Note)
Expected volatility (%)	47.77	57.21	56.97	47.15
Lock-up periods (years)	1	1	1.3	1.3
Expected dividend yield	-	-	-	-
Risk free interest rate (%)	2.70	1.55	2.63	2.34

Note: The restricted stock plan is to transfer ordinary shares for free upon satisfaction of certain performance conditions prior to the expiration.

Expected volatilities were based on the annualized volatilities of USISH's historical share prices.

For the years ended December 31, 2019, 2020 and 2021, employee benefits expense recognized on the share-based payment plans were NT\$871,699 thousand, NT\$955,575 thousand and NT\$699,211 thousand (US\$25,206 thousand), respectively.

29. BUSINESS COMBINATIONS

a. Subsidiaries acquired

	Principal Activity	Date of Acquisition	Proportion of Voting Equity Interests Acquired (%)	Consideration	n Transferred
				NT\$	US\$ (Note 4)
AMPI	Engaged in the manufacturing of integrated circuit	April 30, 2019	50.97	\$ 250,000	
ASEEE	Engaged in the production of embedded substrate	April 26, 2019	51.00	<u>\$</u>	
USIPL	Engaged in the design and manufacturing of electronic components and new electronic applications	October 31, 2019	60.00	\$ 313,057	
	F.L				(Continued)

	Principal Activity	Date of Acquisition	Proportion of Voting Equity Interests Acquired (%)	Consideration Transferred							
				NT\$	US\$ (Note 4)						
FAFG	Holding company and the group engaged in the design and manufacturing of electronic components	December 1, 2020	100.00	<u>\$ 12,443,637</u>							
ITGEU SER	Trading company Engaged in the design and manufacturing of electronic components	October 21, 2021 November 2, 2021	100.00 100.00	\$ 50,368 \$ 217,919	\$ 1,816 \$ 7,856						
					(Concluded)						

b. Consideration Transferred

		AMPI		ASEEE		USIPL	FAFG (Retrospectively Adjusted)	ITGEU				SER			
		NT\$		NT\$		NT\$	NT\$		NT\$	(US\$ (Note 4)		NT\$	(US\$ (Note 4)
Cash Equity instrument issued Contingent consideration	\$	250,000	\$	- -	\$	313,057	\$ 11,094,802 1,734,570	\$	50,368	\$	1,816	\$	217,919	\$	7,856
arrangement	_		_	<u> </u>	_		(385,735)	-		_		-		_	
Fair value of identifiable net assets acquired	\$	250,000	\$	<u>-</u>	\$	313,057	<u>\$ 12,443,637</u>	\$	50,368	\$	1,816	<u>\$</u>	217,919	<u>\$</u>	7,856

In April 2019, the Group's subsidiary, ASE Test, Inc., subscribed for 100,000 thousand ordinary shares of AMPI from its private placement with NT\$250,000 thousand in cash. The percentage of the Group's ownership in AMPI then increased to 50.97% and, therefore, the Group obtained control over AMPI. The investment in ordinary shares of AMPI originally accounted for using the equity method was remeasured to the fair value at the acquisition date and the Group recognized remeasurement gain of NT\$243,057 thousand under the line item of other gains and losses.

In April 2019, ASE entered into a memorandum of understanding with TDK Corporation ("TDK") in relation to ASEEE that was incorporated by a joint venture agreement entered into by the Group and TDK. In addition to a reduction of one legal representative director of TDK, which resulted in that the Group obtained control over ASEEE starting from April 2019 and the investments in ASEEE originally accounted for using the equity method was remeasured to its fair value at the acquisition date with a remeasurement gain of NT\$76,655 thousand under the line item of other gains and losses (Note 25), the memorandum of understanding set out that, after ASEEE offset its accumulated deficits against its capital in an amount of NT\$1,147,595 thousand, ASE subscribed all of 150,000 thousand ordinary shares newly issued by ASEEE through its capital increase by cash in an amount of NT\$1,500,000 thousand in May 2019 and then repurchased all of ASEEE's ordinary shares held by TDK in an amount of US\$6,000 thousand in July 2019. As a result, the Group eventually held 100% of ownership in ASEEE (Note 31). Furthermore, ASE merged ASEEE in February 2020.

In October 2019, the Group's subsidiary, Universal Global Electronics Co., Ltd., acquired 60% shareholdings of USIPL with a total consideration based on independent professional appraisal reports.

In December 2020, the Group's subsidiary, USIFR, paid NT\$10,800,558 thousand (equivalent to US\$368,753 thousand) in cash and the Group's subsidiary, USISH, issued its 25,940 thousand new ordinary shares, respectively, to acquire 100% shareholdings of FAFG. In addition, according to the share purchase agreement, USIFR is obliged to pay an earn-out amount up to US\$42,805 thousand in 2023 if FAFG's net profit in 2021 and 2022 reaches the predetermined target. In December 2020, USIFR deposited NT\$294,244 thousand (equivalent to US\$10,122 thousand) in advance to trust

account. Based on the valuation report of fair value of contingent consideration, USIFR will be able to receive NT\$385,735 thousand back, of which NT\$294,244 thousand will be received from trust account while NT\$91,491 thousand will be received additionally.

In November 2021, the Group's subsidiary, ASTEELFLASH FRANCE, acquired 100% shareholdings of SER and obtained control over SER. In November 2021, the board of directors of ASTEELFLASH FRANCE further resolved to merge SER. December 28, 2021 was the record date for the merger and such merger was completed.

c. Assets acquired and liabilities assumed at the date of acquisition

		AMPI		ASEEE		USIPL		FAFG		ITO	GEU		SER					
_		NT\$		NT\$		NT\$		NT\$		NT\$		US\$ (Note 4)		NT\$		US\$ Note 4)		
Assets																		
Cash and cash equivalents	\$	349,496	\$	23,197	\$	108,718	\$	2,349,164	\$	68,719	\$	2,477	\$	18,850	\$	680		
Trade and other receivables		371,144		5,732		58,713		4,434,296		41,832		1,508		40,671		1,466		
Inventories		403,887		11,033		229		4,836,819		-		-		375,912		13,551		
Property, plant and equipment		683,207		1,361,572		525,048		2,882,720		94		3		37,672		1,357		
Intangible assets		128,900		290,757		11,704		1,541,155		32		1		368		14		
Others		237,766		317,888		99,112		1,919,118		2,828		102		186,377		6,719		
Liabilities																		
Trade and other payables Borrowings and bonds		(224,295)		(133,278)		(217,887)		(4,575,720)		(29,165)		(1,051)		(214,883)		(7,746)		
payables		(951,519)		(1,371,395)		(190,737)		(356,417)		-		-		-		-		
Others	_	(148,723)	_	(290,273)	-	(63,708)	-	(3,155,051)	_	(858)	_	(31)	_	(227,048)	_	(8,185)		
Fair value of identifiable net assets acquired	\$	849,863	\$	215,233	\$	331,192	9	5 9,876,084	\$	83,482	\$	3,009	\$	217,919	\$	7,856		

A call option on the remaining 40% non-controlling interests of USIPL was stipulated in the equity transfer agreement. The Group recognized the call option under the line item of financial assets at FVTPL and exercised it in June 2020 (Note 31).

d. Non-controlling interest

Non-controlling interests of AMPI and ASEEE were measured at their proportionate share of their fair value of AMPI's and ASEEE's identifiable net assets, respectively.

Non-controlling interests of USIPL were measured at fair value at the acquisition date by using market approach incorporating transaction prices of comparable companies and the discount rate for lack of control. The significant unobservable inputs is the discount rate for lack of control of 31%.

Non-controlling interests of FAFG were measured at its proportionate share of the fair value of FAFG's identifiable net assets.

e. Goodwill recognized on acquisitions or gain recognized in bargain purchase transaction

	AMPI		ASEEE	USIPL FAFG				IT	GEU	J	SER			
	NT\$		NT\$		NT\$	NT\$		NT\$		US\$ (Note 4)	NT\$	(US\$ (Note 4)	
Consideration transferred Add: Fair value of investments	\$ 250,000	\$	-	\$	313,057	\$ 12,443,637	\$	50,368	\$	1,816	\$ 217,919	\$	7,856	
previously owned Add: Non-controlling	315,925		117,609		-	-		-		-	-		-	
interests Less: Fair value of identifiable	416,716		105,464		142,494	289		-		-	-		-	
net assets acquired	(849,863)	(215,233)	_	(331,192)	(9,876,084)	-	(83,482)	_	(3,009)	<u>(217,919</u>)	-	(7,856)	
Goodwill recognized on acquisition (gain recognized in bargain purchase transaction)	\$ 132,778	S	7,840	\$	124,359	\$ 2,567,842	\$	(33,114)	\$	(1,193)	\$	\$_	<u>-</u>	

The goodwill from acquisitions mainly represents the control premium. In addition, the consideration

paid for acquisitions effectively included amounts attributed to the benefits of expected synergies, such as revenue growth and future market expansions. These benefits are not recognized separately from goodwill because they do not meet the recognition criteria for identifiable intangible assets.

The goodwill recognized on acquisitions is not expected to be deductible for tax purpose.

f. Net cash outflow (inflow) on acquisition of subsidiaries

		AMPI		ASEEE	USIPL		FAFG		IT			SER				
		NT\$		NT\$		NT\$	NT\$		NT\$	(1	US\$ Note 4)		NT\$	(1	US\$ Note 4)	
Consideration transferred Less: Cash and cash equivalent	\$	250,000	\$	-	\$	313,057	\$ 11,094,802	\$	50,368	\$	1,816	\$	217,919	\$	7,856	
acquired	_	(349,496)	_	(23,197)	_	(108,718)	(2,349,164)	-	(68,719)	_	(2,477)	-	(18,850)	_	(680)	
Net cash outflow (inflow) on acquisition of subsidiaries	\$	(99,496)	\$	(23,197)	\$	204,339	<u>\$ 8,745,638</u>	\$	(18,351)	\$	(661)	\$	199,069	\$	7,176	

g. Impact of acquisitions on the results of the Group

The results of operations since the acquisition date were included in the consolidated statements of comprehensive income and were as follows:

	AMPI (for the period from April 30, 2019 through December 31, 2019)	ASEEE (for the period from April 26, 2019 through December 31, 2019)	USIPL (for the period from October 31, 2019 through December 31, 2019)	FAFG (for the period from December 1, 2020 through December 31, 2020)	ITG (for the period 21, 2021 December	from October through	SER (for the period from November 2, 2021 through December 31, 2021)			
	NTS	NT\$	NTS	NT\$	NT\$	US\$ (Note 4)	NT\$	US\$ (Note 4)		
Operating revenue Net profit (loss)	\$ 704,243 \$ (217,163)	\$ (1,159) \$ (469,598)	\$ 39,080 \$ (11,995)	\$ 2,043,440 \$ 91,179	\$ 75,221 \$ (4,593)	\$ 2,712 \$ (166)	\$ 225,017 \$ (508)	\$ 8,112 \$ (18)		

Had the abovementioned business combinations been in effect at the beginning of each annual reporting period and the investments originally accounted for using the equity method been remeasured to their fair value as of January 1 of each respective annual reporting period, the Group's operating revenues and profit for the year would have been NT\$413,782,708 thousand and NT\$18,030,506 thousand for the year ended December 31, 2019, respectively, NT\$497,146,285 thousand and NT\$28,833,916 thousand for the year ended December 31, 2020, respectively, and NT\$570,363,380 thousand (US\$20,561,045 thousand) and NT\$62,277,713 thousand (US\$2,245,051 thousand) for the year ended December 31, 2021, respectively. This pro-forma information is for illustrative purposes only and is not necessarily an indication of the operating revenue and results of operations of the Group that actually would have been achieved had the acquisition been completed at the beginning of each annual reporting period, nor is it intended to be a projection of future results.

In determining the pro-forma operating revenue and profit for the period had each subsidiary been acquired at the beginning of each respective annual reporting period, the Group has calculated the depreciation of property, plant and equipment and the amortization of intangible assets acquired on the basis of the fair values at the initial accounting for the business combination rather than the carrying amounts recognized in the respective pre-acquisition financial statements.

h. As of December 31, 2021, the Group has completed the identification of the difference between the cost of the investment and the Group's share of FAFG's net fair value of identifiable assets and liabilities, and has retrospectively adjusted the comparative consolidated financial statements as of and for the year ended December 31, 2020. As of December 31, 2020, the retrospective adjustments are summarized as follows:

	Decembe	r 31, 2020
	After Retrospectively Adjusted	Before Retrospectively Adjusted
	NT\$	NT\$
Consolidated balance sheet		
Inventories	\$ 48,590,434	\$ 48,516,459
Financial assets at fair value through profit or loss – non-current	\$ 2,180,978	\$ 1,793,188
Property, plant and equipment	\$ 234,365,397	\$ 233,207,324
Right-of-use assets	\$ 8,741,807	\$ 8,620,612
Goodwill	\$ 52,709,053	\$ 54,777,439
Other intangible assets	\$ 27,711,771	\$ 26,808,668
Deferred tax liabilities	\$ 7,121,027	\$ 6,551,233
Non-controlling interests	\$ 15,622,009	\$ 15,616,053

30. DISPOSAL OF SUBSIDIARIES

The board of directors of the Group's subsidiary, SPIL (Cayman) Holding Limited, resolved in September 2020 to dispose its 100% shareholdings in Siliconware Electronics (Fujian) Co., Limited ("SF") to Shenzhen Hiwin System Limited with a consideration of RMB966,000 thousand. The disposal was completed in October 2020 and the control over SF was transferred to the acquirer.

The board of directors of the Company resolved in December 2021 to dispose its 100% shareholdings in GAPT Holding Limited (including its subsidiaries) and ASEKS (collectively, "GAPT Holding and ASEKS"). The disposal was completed in December 2021 and the control over GAPT Holding and ASEKS was transferred to the acquirer.

a. Analysis of assets and liabilities on the date control was lost

	2020	2021						
	SF	GAPT Holdin	g and ASEKS					
	NT\$	NT\$	US\$ (Note 4)					
Current Assets								
Cash and cash equivalent	\$ 200,347	\$ 2,625,715	\$ 94,655					
Trade and other receivables	318,425	4,505,531	162,420					
Inventories	239,865	2,284,880	82,368					
Other current assets	111,913	1,215,992	43,835					
Non-Current Assets	ŕ		•					
Property, plant and equipment	7,546,413	16,693,129	601,770					
Right-of-use assets	812,861	181,855	6,556					
Investment property	· -	787,250	28,379					
Goodwill	-	310,711	11,201					
Deferred tax assets	298,217	659,972	23,792					
Other non-current assets	43,482	308,500	11,122					
Current Liabilities								
Short-term borrowings	-	(2,443,005)	(88,068)					
Trade and other payables	(1,739,330)	(5,949,592)	(214,477)					
Current portion of long-term borrowings	(1,746,000)	-	-					
Other current liabilities	(24,564)	(647,027)	(23,325)					
Non-Current Liabilities	, ,		, ,					
Long-term borrowings	(2,947,682)	-	-					
Deferred tax liabilities	(796)	(200,899)	(7,242) (Continued)					

	20	20	2021						
	S	\mathbf{G}_{I}	APT Holdin	ng and ASEKS					
	N		NT\$	US	\$ (Note 4)				
Lease liabilities – non-current Other non-current liabilities	\$	<u>-</u>	\$	(8,150) (156,863)	\$	(294) (5,655)			
Net assets disposed of	\$ 3,1	13,151	<u>\$ 20</u>	0,167,999	<u>\$</u>	727,037 (Concluded)			

b. Gain on disposal of subsidiaries

	2020	20	21
	SF	GAPT Holdin	g and ASEKS
	NT\$	NT\$	US\$ (Note 4)
Total consideration (paid in cash) Net assets disposed of Reclassification of accumulated exchange difference from equity to profit or loss	\$ 4,078,844 (3,113,151)	\$ 36,939,133 (20,167,999)	\$ 1,331,620 (727,037)
due to the loss of control	(162,940)	569,284	20,522
Gain on disposals	\$ 802,753	<u>\$ 17,340,418</u>	\$ 625,105

c. Net cash inflow on disposals of subsidiaries

		2020	202	21
	SF		GAPT Holdin	g and ASEKS
		NT\$	NT\$	US\$ (Note 4)
Consideration received in cash and cash				
equivalents	\$	4,078,844	\$ 36,939,133	\$ 1,331,620
Less: Cash and cash equivalent				
balances disposed of		(200,347)	(2,625,715)	(94,655)
Other receivables (Note) (the				
outstanding receivables of				
consideration, net of relevant				
expenditure)		<u>(161,458</u>)	<u>(10,533,600</u>)	(379,726)
	Ф	2 717 020	Ф 22 77 0 010	Ф 057.220
	\$	3,717,039	<u>\$ 23,779,818</u>	<u>\$ 857,239</u>

Note: The outstanding receivables for the disposal of SF had been fully received in 2021.

31. EQUITY TRANSACTION WITH NON-CONTROLLING INTERESTS

a. USISH

USISH repurchased its own 13,037 thousand outstanding ordinary shares during year ended December 31, 2019 and, as a result, the Group's shareholdings of USISH increased from 74.6% to 77.7%. The transaction was accounted for as an equity transaction since the Group did not cease to have control over USISH and capital surplus was decreased by NT\$334,719 thousand.

In September 2021, USISH repurchased its own 16,042 thousand outstanding ordinary shares at prices between RMB13.86 to RMB14.95 per share which made the Group's shareholdings of USISH increased. The transaction was accounted for as an equity transaction since the Group did not cease to have control over USISH and, as a result, capital surplus and retained earnings were decreased by

NT\$11,277 thousand (US\$407 thousand) and NT\$436,927 thousand (US\$15,751 thousand), respectively.

b. USIPL

In May 2020, the board of directors of Universal Global Electronics Co., Ltd. resolved to acquire 40% shareholdings of USIPL from Chung Hong Electronics (Suzhou) Co., Ltd. at RMB24,500 thousand. The aforementioned transaction resulted the Group's shareholdings in USIPL to increase from 60% to 100%, and such transactions were accounted for as an equity transaction since the Group did not cease to have control over USIPL. The Group recognized a decrease in capital surplus by NT\$13,502 thousand in the second quarter of 2020.

c. USIE

In July 2019, the shareholders' meeting of USIE resolved to repurchase its own outstanding 7,378 thousand ordinary shares at US\$14.30 per share, and, as a result, the Group's shareholdings in USIE increased from 95.42% to 98.72%. The transaction was accounted for as an equity transaction since the transaction did not change the Group's control over USIE and the Group capital surplus decreased by NT\$1,625,448 thousand in 2019. In July 2019, the board of directors of USIE resolved July 23, 2019 was the record date for capital reduction and then the repurchased ordinary shares were subsequently cancelled.

In September 2020, the shareholders' meeting of USIE resolved to repurchase its own outstanding 10,308 thousand ordinary shares at US\$19.47 per share, and as a result, the Group's shareholdings of USIE increased from 95.00% to 99.62%. The transaction was accounted for as an equity transaction since the transaction did not change the Group's control over USIE and capital surplus and retained earnings were decreased by NT\$780,533 thousand and NT\$2,760,175 thousand, respectively, in the third quarter of 2020. In September 2020, the board of directors of USIE resolved September 15, 2020 was the record date for capital reduction and then the repurchased ordinary shares were subsequently cancelled.

In December 2021, the shareholders' meeting of USIE resolved to repurchase its own outstanding 9,137 thousand ordinary shares at US\$17.20 per share which made the Group's shareholdings of USIE increased from 95.85% to 100.00%. The transaction was accounted for as an equity transaction since the transaction did not change the Group's control over USIE and capital surplus and retained earnings were decreased by NT\$47,171 thousand (US\$1,700 thousand) and NT\$2,093,787 thousand (US\$75,479 thousand), respectively, in the fourth quarter of 2021. In December 2021, the board of directors of USIE resolved that December 22, 2021 was the record date for capital reduction and the repurchased ordinary shares were subsequently cancelled.

d. ASEN and SZ

In July 2019, ASE's board of directors resolved to acquire 30% shareholdings of ASEN from Beijing Unis Capital Management Co., Ltd. at US\$97,748 thousand by its subsidiary, J&R Holding. In addition, in July 2019, SPIL's board of directors also resolved to acquire 30% shareholdings of SZ from Tibet Zixi Electronic Technology Co., Ltd. at US\$162,870 thousand by its subsidiary, SPIL (Cayman) Holding Limited. The aforementioned transactions will result the Group's shareholdings of ASEN and SZ both to increase from 70% to 100% and, therefore, both transactions will be accounted for as an equity transaction since the Group will not cease to have control over the subsidiaries. The Group recognized a decrease in capital surplus by NT\$2,650,950 thousand in 2019.

e. Others

In July 2018, UGTW's board of directors approved to acquire the outstanding ordinary shares of USI at NT\$18 per ordinary shares. In 2019, UGTW completed the acquisition and recognized an increase in capital surplus by NT\$142 thousand.

As disclosed in Note 29, ASE purchased ASEEE's ordinary shares through its capital increase in May 2019 and then repurchased all of ASEEE's ordinary shares held by TDK in July 2019. As a result, the Group eventually held 100% of ownership in ASEEE and capital surplus was decreased by NT\$128,805 thousand.

32. CASH FLOW INFORMATION

a. Non-cash investing activities

In addition to other notes, the Group entered into the following investing activities which include both cash and non-cash items for the years ended December 31, 2019, 2020 and 2021:

	For the Year Ended December 31								
	2019	2020	20:	21					
	NT\$	NT\$	NT\$	US\$ (Note 4)					
Payments for property, plant and equipment Purchase of property, plant and equipment	\$ 63,073,887	\$ 59,024,201	\$ 74,417,541	\$ 2,682,681					
Increase in other non-current assets	68,560	78,291	1,184,927	42,715					
Decrease (increase) in other payables Capitalized borrowing costs	(6,254,579) (77,715)	3,029,162 (54,208)	(4,671,228) (25,581)	(168,394) (922)					
	\$ 56,810,153	\$ 62,077,446	\$ 70,905,659	\$ 2,556,080					
Proceeds from disposal of property, plant and equipment Consideration from disposal of property, plant and equipment	\$ 441,444	\$ 5,184,925	\$ 1,128,850	\$ 40,693					
Increase in other non-current assets Increase (decrease) in other	-	-	(134,760)	(4,858)					
receivables	7,495	(735,812)	610,912	22,024					
	\$ 448,939	\$ 4,449,113	\$ 1,605,002	\$ 57,859					
Payments for other intangible assets									
Purchase of other intangible assets Decrease in other payables	\$ 1,350,908 60,160	\$ 982,655 	\$ 1,069,866	\$ 38,568					
	\$ 1,411,068	\$ 982,655	\$ 1,069,866	\$ 38,568					

b. Changes in liabilities arising from financing activities

For the year ended December 31, 2019

	I (in	Short-term Borrowings cluding financial lities for hedging) NT\$	_ <u>B</u> c	onds Payable NT\$		Long-term Borrowings NT\$	Lea	se Liabilities NT\$		Total NT\$
Balance at January 1, 2019	\$	47,163,103	\$	16,985,936	\$	137,898,329	\$	6,084,729	\$	208,132,097
Net financing cash flows		(4,683,142)		19,279,033		1,144,731		(636,556)		15,104,066
Interest under operating activities		-		-		-		1,766		1,766
Non-cash changes										
Lease liabilities		-		-		-		536,216		536,216
Acquisition through business										
combinations (Note 29)		656,820		245,664		1,523,968		81,649		2,508,101
Amortization of issuance cost		-		11,522		189,151		-		200,673
Lease modifications		-		-		-		(239,321)		(239,321)
Short-term borrowings transferred to										
long-term borrowings		(1,499,000)		-		1,499,000		-		-
Effects of foreign currency exchange	_	(1,065,452)	_		-	(1,176,581)		(19,559)	_	(2,261,592)
Balance at December 31, 2019	\$	40,572,329	\$	36,522,155	\$	141,078,598	\$	5,808,924	\$	223,982,006

For the year ended December 31, 2020

] (in	Short-term Borrowings cluding financial ilities for hedging) NT\$	Bo	onds Payable NT\$		Long-term Borrowings NT\$	Leas	se Liabilities NT\$	Total NT\$
Balance at January 1, 2020	\$	40,572,329	\$	36,522,155	\$	141,078,598	\$	5,808,924	\$223,982,006
Net financing cash flows		(1,502,323)		19,717,149		(26,500,139)		(844,357)	(9,129,670)
Interest under operating activities		-		-		-		111	111
Rent expense under operating activities		-		-		-		(7,729)	(7,729)
Non-cash changes									
Lease liabilities		-		-		-		584,642	584,642
Amortization of issuance cost		-		14,250		156,982		-	171,232
Lease modifications		-		-		-		(289,687)	(289,687)
Short-term borrowings transferred to									
long-term borrowings		(3,850,000)		-		3,850,000		-	-
Adjustments for government subsidy		-		-		41,650		-	41,650
Acquisition of subsidiaries (Note 29)		356,417		-		-		633,606	990,023
Disposal of subsidiaries (Note 30)		-		-		(4,693,682)		(670)	(4,694,352)
Effects of foreign currency exchange	_	(978,565)	_		_	(1,542,685)		(9,010)	(2,530,260)
Balance at December 31, 2020	\$	34,597,858	\$	56,253,554	\$	112,390,724	\$	5,875,830	<u>\$ 209,117,966</u>

For the year ended December 31, 2021

	I (in	Short-term Borrowings cluding financial lities for hedging) NT\$	Bo	onds Payable NT\$	(iı	Long-term Borrowings neluding financial bilities for hedging) NT\$	Lea	se Liabilities NT\$	_	Total NT\$
Balance at January 1, 2021 Net financing cash flows Interest under operating activities Rent expense under operating activities Convertible bonds classified separately as	\$	34,597,858 10,043,398	\$	56,253,554 (3,719,057)	\$	112,390,724 16,018,825	\$	5,875,830 (907,403) 800 (184)	\$	209,117,966 21,435,763 800 (184)
equity components and embedded derivative liability		-		(399,955)		-		-	((399,955) Continued)

	Bo (inclu	ort-term rrowings ding financial ies for hedging) NT\$	Bon	nds Payable NT\$	B (inc	Long-term orrowings luding financial ities for hedging) NT\$	Lea	se Liabilities NT\$		Total NT\$
Non-cash changes Lease liabilities Amortization of issuance cost Convertible bonds issued by subsidiaries and converted to ordinary shares Lease modifications Acquisition of subsidiaries (Note 29) Disposal of subsidiaries (Note 30) Reclassification Effects of foreign currency exchange Balance at December 31, 2021		- - - (2,443,005) - (1,161,822) 41,036,429	\$ 	126,283 (102) - - - - 6,614 52,267,337	\$ 	- 224,979 - - - - (2,162,038) 126,472,490	\$ 	2,037,665 (58,799) 180,745 (32,655) 380,292 (76,407) 7,399,884	\$ 	2,037,665 351,262 (102) (58,799) 180,745 (2,475,660) 380,292 (3,393,653) 227,176,140
2	<u> </u>	.1,000,120	9	<u></u>	Ψ	120,112,100	Ψ	<u></u>	_	Concluded)
	Bo (inclu	ort-term rrowings ding financial ies for hedging) \$ (Note 4)		nds Payable (\$ (Note 4)	(inc	Long-term orrowings luding financial tities for hedging) S\$ (Note 4)		se Liabilities S\$ (Note 4)		Total (S\$ (Note 4)
Balance at January 1, 2021 Net financing cash flows Interest under operating activities Rent expense under operating activities Convertible bonds classified separately as equity components and embedded derivative	\$	1,247,219 362,055	\$	2,027,886 (134,068)	\$	4,051,577 577,463	\$	211,818 (32,711) 29 (7)	\$	7,538,500 772,739 29 (7)
liability Non-cash changes		-		(14,418)		-		-		(14,418)
Lease liabilities										72 456
Amortization of issuance cost		-		4,553		8,110		73,456		73,456 12,663
Amortization of issuance cost Convertible bonds issued by subsidiaries and converted to ordinary shares Lease modifications Acquisition of subsidiaries (Note 29) Disposal of subsidiaries (Note 30) Reclassification Effects of foreign currency exchange		(88,068) - (41,883)		4,553 (4) - - - 238		8,110 - - - - (77,939)		73,456 - (2,120) 6,516 (1,177) 13,709 (2,754)		

33. CAPITAL MANAGEMENT

The capital structure of the Group consists of 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 shareholders through the optimization of the debt and equity balance. Key management personnel of the Group periodically reviews the cost of capital and the risks associated with each class of capital. 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.

The Group is not subject to any externally imposed capital requirements except those discussed in Note 20.

34. FINANCIAL INSTRUMENTS

- a. Fair value of financial instruments that are not measured at fair value
 - 1) Fair value of financial instruments not measured at fair value but for which fair value is disclosed

Except bonds payable measured at amortized cost, the management considered that the carrying amounts of financial assets and financial liabilities not measured at fair value approximate their fair

values. The carrying amounts and fair value of bonds payable as of December 31, 2020 and 2021 were as follows:

	Carrying	Amount	Fair Value				
	NT\$	US\$ (Note 4)	NT\$	US\$ (Note 4)			
December 31, 2020 December 31, 2021	\$ 56,253,554 52,267,337	\$ 1,884,187	\$ 56,448,769 52,429,758	\$ 1,890,042			

2) Fair value hierarchy

The aforementioned fair value hierarchy of bonds payable was Level 3 which was determined based on discounted cash flow analysis with the applicable yield curve for the duration. The significant unobservable inputs is discount rates that reflected the credit risk.

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

1) Fair value hierarchy

	Level 1 NT\$		Level 2 NT\$		I	Level 3 NT\$	Total NT\$	
December 31, 2020 (retrospectively adjusted)								
Financial assets at FVTPL Derivative financial assets Forward exchange								
contracts Swap contracts Non-derivative financial assets	\$	-	\$	122,511 99,312	\$	-	\$	122,511 99,312
Quoted ordinary shares	4,064,438		-		-		4,064,438	
Private-placement funds		-		-	1	,124,754	1,124,754	
Contingent considerations Unquoted preferred shares		-		-		387,790 385,440		387,790 385,440
Open-end mutual funds	339,338						339,338	
	<u>\$ 4,40</u>	03,776	<u>\$</u>	221,823	<u>\$ 1</u>	,897,984	<u>\$</u>	6,523,583
Financial assets at FVTOCI Investments in equity instruments								
Unquoted ordinary shares	\$	-	\$	-	\$	567,377	\$	567,377
Unquoted preferred shares		-		-		151,329		151,329
Limited partnership Investments in debt instruments Unsecured subordinate		-		-		9,692		9,692
corporate bonds		_		_	1	,012,736		1,012,736
Trade receivables, net		<u> </u>		<u>-</u>		626,413		626,413
	\$		\$	<u>-</u>	<u>\$ 2</u>	,367,547	<u>\$</u>	2,367,547
							((Continued)

	Level 1		Level 2			evel 3	Total	
]	NT\$	Ι	NT\$	N	NT\$	N	NT\$
Financial liabilities at FVTPL Derivative financial liabilities Swap contracts	\$	-	\$ 1,4	448,972	\$	-	\$ 1,4	48,972
Target redemption forward contracts Forward exchange		-		79,216		-		79,216
contracts			9,020				9,020	
	<u>\$</u>		<u>\$ 1,537,208</u>		<u>\$</u>		\$ 1,537,208 (Concluded)	
	Level 1		Level 2		Level 3		Total	
	NT\$	US\$ (Note 4)	NT\$	US\$ (Note 4)	NT\$	US\$ (Note 4)	NT\$	US\$ (Note 4)
December 31, 2021								
Financial assets at FVTPL Derivative financial assets Swap contracts Forward exchange contracts Redemption option and put option of convertible bonds Target redemption forward contracts Non-derivative financial assets Quoted ordinary shares Private-placement funds Unquoted preferred shares Contingent considerations Open-end mutual funds	\$ - -	\$ - -	\$ 85,629 23,373 8,463 500	\$ 3,087 843 305 18	\$ - -	\$ - -	\$ 85,629 23,373 8,463 500	\$ 3,087 843 305 18
	2,683,193 - - - - - - - - - - - - - - - - - - -	96,726 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	\$ 4,253	1,322,686 583,270 394,943 ————————————————————————————————————	47,682 21,026 14,237 	2,683,193 1,322,686 583,270 394,943 334,223	96,726 47,682 21,026 14,237 12,049
Financial assets at FVTOCI Investments in equity instruments Unquoted ordinary shares Quoted ordinary shares Unquoted preferred shares Limited partnership Investments in debt instruments Unsecured subordinate corporate bonds Trade receivables, net	\$ - 102,124 - - - - - - - - - - - - -	\$ 3,682 	\$ - - - - - - - - -	\$ - - - - - - - - -	\$ 820,779 11,245 9,206 1,076,458 6,092,462 \$ 8,010,150	\$ 29,588 405 332 38,805 219,627 \$ 288,757	\$ 820,779 102,124 11,245 9,206 1,076,458 6,092,462 \$ 8,112,274	\$ 29,588 3,682 405 332 38,805 219,627 \$ 292,439
Financial liabilities at FVTPL Derivative financial liabilities Swap contracts Forward exchange contracts	\$ - - - \$ -	s - - s -	\$ 360,797 56,863 \$ 417,660	\$ 13,006 2,050 \$ 15,056	\$ - - - \$ -	\$ - - - \$ -	\$ 360,797 56,863 \$ 417,660	\$ 13,006 2,050 \$ 15,056

For the financial assets and liabilities that were measured at fair value on a recurring basis, there were no transfers between Level 1 and Level 2 of the fair value hierarchy during the years ended December 31, 2020 and 2021.

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

For the year ended December 31, 2019

	Financial Assets at FVTPL			nancial Asse			
Financial Assets		Equity Instruments		Equity struments	Debt Instruments	Total NT\$	
Pinanciai Assets	NT\$		NT\$		NT\$		
Balance at January 1 Recognized in profit or loss	\$	475,123 3,431	\$	580,399	\$ 1,016,924	\$ 2,072,446 3,431	
Recognized in other comprehensive income Included in unrealized losses on financial assets at FVTOCI Effects of foreign currency exchange		(14,368)		(216,121) (5,695)	(2,052)	(218,173) (20,063)	
		(-1,500)		(=,==)		(Continued)	

	Financial Assets at FVTPL	Financial Asse	ets at FVTOCI	
Financial Assets	Equity Instruments	Equity Instruments	Debt Instruments	Total
	NT\$	NT\$	NT\$	NT\$
Net increase in trade receivables Trade receivables factoring	\$ -	\$ -	\$ 3,171,205 (1,141,515)	\$ 3,171,205 (1,141,515)
Purchases	541,528	409,985	(1,141,515)	951,513
Disposals	_	(12,665)		(12,665)
Balance at December 31	<u>\$ 1,005,714</u>	\$ 755,903	\$ 3,044,562	\$ 4,806,179 (Concluded)

For the year ended December 31, 2020

	F	Financial Assets at FVTPL				nancial Asse				
		Equity		Debt Instruments		Equity	Debt			
Financial Assets		struments	In			truments	Instruments	Total		
		NT\$		NT\$		NT\$	NT\$	NT\$		
Balance at January 1	\$	1,005,714	\$	_	\$	755,903	\$ 3,044,562	\$ 4,806,179		
Recognized in profit or loss		(17,941)		-		_	-	(17,941)		
Recognized in other comprehensive income										
Included in unrealized losses on financial										
assets at FVTOCI		-		-		(149,856)	(2,136)	(151,992)		
Effects of foreign currency exchange		(15,455)		-		(15,562)	-	(31,017)		
Net increase in trade receivables		-		370,110		-	5,635,706	6,005,816		
Trade receivables factoring		-		(370,110)		-	(7,038,983)	(7,409,093)		
Purchases		893,234				259,168	-	1,152,402		
Disposals		(329,370)		-		(121,255)	-	(450,625)		
Acquisition through business combinations		387,790		-			-	387,790		
Exercise of call option	_	(25,988)	_					(25,988)		
Balance at December 31 (retrospectively										
adjusted)	<u>\$</u>	1,897,984	\$		\$	728,398	\$ 1,639,149	\$ 4,265,531		

For the year ended December 31, 2021

	Financial As	sets at FVTPL	Financial Ass	ets at FVTOCI	
Financial Assets	Equity Instruments	Debt Instruments	Equity Instruments	Debt Instruments	Total
	NT\$	NT\$	NT\$	NT\$	NT\$
Balance at January 1 (retrospectively adjusted)	\$ 1,897,984	\$ -	\$ 728,398	\$ 1,639,149	\$ 4,265,531
Recognized in profit or loss	131,276	-	-	-	131,276
Recognized in other comprehensive income					
Included in unrealized losses on financial					
assets at FVTOCI	-	-	129,726	63,722	193,448
Effects of foreign currency exchange	(79,614)	-	(4,508)	_	(84,122)
Net increase in trade receivables	-	3,269,782	-	14,940,539	18,210,321
Trade receivables factoring	-	(3,269,782)	-	(9,474,490)	(12,744,272)
Purchases	459,046	-	32,246	-	491,292
Disposals	(107,793)	-	(14,873)	-	(122,666)
Reclassify	_ _	_	(29,758)		(29,758)
Balance at December 31	<u>\$ 2,300,899</u>	<u> </u>	<u>\$ 841,231</u>	<u>\$ 7,168,920</u>	<u>\$ 10,311,050</u>

	F	Financial Assets at FVTPL				nancial Ass					
		Equity		Debt	Equity			Debt			
Financial Assets		struments	ments Instruments			struments	In	struments		Total	
		US\$ US\$ (Note 4)				US\$ (Note 4)		US\$ (Note 4)		US\$ (Note 4)	
Balance at January 1 (retrospectively adjusted) Recognized in profit or loss Recognized in other comprehensive income Included in unrealized losses on financial	\$	68,421 4,732	\$	-	\$	26,257	\$	59,089	\$	153,767 4,732	
assets at FVTOCI Effects of foreign currency exchange		(2,870)		-		4,677 (163)		2,297		6,974 (3,033)	
									(Co	ontinued)	

	Financial As	sets at FVTPL	Financial Ass				
	Equity	Debt	Equity	Debt	_		
Financial Assets	Instruments	Instruments	Instruments	Instruments	Total		
	US\$	US\$	US\$	US\$	US\$		
	(Note 4)	(Note 4)	(Note 4)	(Note 4)	(Note 4)		
Net increase in trade receivables	\$ -	\$ 117,872	\$ -	\$ 538,592	\$ 656,464		
Trade receivables factoring	-	(117,872)	-	(341,546)	(459,418)		
Purchases	16,548	-	1,163	-	17,711		
Disposals	(3,886)	-	(536)	-	(4,422)		
Reclassify			(1,073)		(1,073)		
Balance at December 31	<u>\$ 82,945</u>	<u> </u>	\$ 30,325	<u>\$ 258,432</u>	\$ 371,702 (Concluded)		
					(Concluded)		

- 3) Valuation techniques and assumptions applied for the purpose of measuring fair value
 - a) Valuation techniques and inputs applied for the purpose of measuring Level 2 fair value measurement

Financial Instruments	Valuation Techniques and Inputs
Derivatives - swap contracts and forward exchange contracts	Discounted cash flows - Future cash flows are estimated based on observable forward exchange rates at balance sheet dates and contract forward exchange rates, discounted at rates that reflected the credit risk of various counterparties.
Derivatives - redemption option and put option of convertible bonds	Option pricing models - Use of present value techniques and reflect the time value and intrinsic value of redemption option and put option.
Target redemption forward contracts	Valuation based on the spot exchange rate on the valuation date, the exercise price, the volatility in exchange rate, the contract period and the quoted risk free interest rate during the contract period.

b) Valuation techniques and inputs applied for the purpose of measuring Level 3 fair value measurement

The fair value of unquoted ordinary shares, unquoted preferred shares, limited partnership and private-placement funds were determined by using market approach and asset-based approach. The significant unobservable inputs were the discount rates for lack of marketability of 10% to 30%. If the discount rates for lack of marketability to the valuation model increased by 1% to reflect reasonably possible alternative assumptions while all other variables held constant, the fair value of the abovementioned investments would have decreased approximately by NT\$9,700 thousand and NT\$19,300 thousand (US\$696 thousand) as of December 31, 2020 and 2021, respectively.

The fair values of the unsecured subordinate corporate bonds were determined using income approach based on a discounted cash flow analysis. The significant unobservable input was the discount rate that reflects the credit risk of the counterparty. If the discount rate increased by 0.1% while all other variables held constant, the fair value of the bonds would have decreased approximately by NT\$5,000 thousand and NT\$4,000 thousand (US\$144 thousand) as of December 31, 2020 and 2021, respectively.

The fair value of accounts receivables measured at FVTOCI are determined based on the present value of future cash flows that reflect the credit risk of counterparties. Since the discount effect was not significant, the Group measured its fair value by using the nominal values.

The fair value of the contingent considerations were determined by using the Monte Carlo Simulation method. If the estimated net profit margin fails to reach the performance specified in the agreement, the Group could receive the contingent considerations according to the agreement, refer to Note 29 for business combinations.

c. Categories of financial instruments

	December 31								
	2020 (Retrospectively Adjusted)	20	21						
	NT\$	NT\$	US\$ (Note 4)						
Financial assets	<u>—</u> .								
FVTPL									
Mandatorily at FVTPL	\$ 6,523,583	\$ 5,436,280	\$ 195,973						
Measured at amortized cost (Note 1)	147,521,583	200,732,680	7,236,218						
FVTOCI									
Equity instruments	728,398	943,354	34,007						
Debt instruments	1,012,736	1,076,458	38,805						
Trade receivables, net	626,413	6,092,462	219,627						
Financial liabilities									
FVTPL									
Held for trading	1,537,208	417,660	15,056						
Financial liabilities for hedging	11,188,244	11,497,896	414,488						
Measured at amortized cost (Note 2)	304,737,749	339,445,544	12,236,683						

Note 1: The balances included financial assets measured at amortized cost which comprised cash and cash equivalents, trade and other receivables and other financial assets.

Note 2: The balances included financial liabilities measured at amortized cost which comprised short-term borrowings, trade and other payables, bonds payable and long-term borrowings.

d. Financial risk management objectives and policies

The derivative instruments used by the Group were to mitigate risks arising from ordinary business operations. All derivative transactions entered into by the Group were designated as either hedging or trading. Derivative transactions entered into for hedging purposes must hedge risk against fluctuations in foreign exchange rates and interest rates arising from operating activities. The currencies and the amount of derivative instruments held by the Group must match its hedged assets and liabilities denominated in foreign currencies.

The Group's risk management department monitored risks to mitigate risk exposures, reported unsettled position, transaction balances and related gains or losses to the Group's chief financial officer on monthly basis.

1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. Gains or losses arising from fluctuations in foreign currency exchange rates of a variety of derivative financial instruments were approximately offset by those of hedged items. Interest rate risk was not significant due to the cost of capital was expected to be fixed.

There had been no change to the Group's exposure to market risks or the manner in which these risks were managed and measured.

a) Foreign currency exchange rate risk

The Group had sales and purchases as well as financing activities denominated in foreign currency which exposed the Group to foreign currency exchange rate risk. The Group entered into a variety of derivative financial instruments to hedge foreign currency exchange rate risk to minimize the fluctuations of assets and liabilities denominated in foreign currencies.

The carrying amounts of the Group's foreign currency denominated monetary assets and liabilities (including those eliminated upon consolidation) as well as derivative instruments which exposed the Group to foreign currency exchange rate risk at each balance sheet date are presented in Note 39.

The Group was mainly subject to the impact from the exchange rate fluctuation in US\$ and JPY against NT\$, RMB or EUR. 1% fluctuation is used when reporting foreign currency exchange rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign currency exchange rates. The sensitivity analysis included financial assets and liabilities and inter-company receivables and payables within the Group. The changes in profit before income tax due to a 1% change in US\$ and JPY against NT\$, RMB and EUR would be NT\$82,000 thousand, NT\$35,000 thousand and NT\$38,000 thousand (US\$1,370 thousand) for the years ended December 31, 2019, 2020 and 2021, respectively. Hedging contracts and hedged items have been taken into account while measuring the changes in profit before income tax. The abovementioned sensitivity analysis mainly focused on the foreign currency monetary items at each balance sheet date. As the period-end exposure did not reflect the exposure for the years ended December 31, 2019, 2020 and 2021, the abovementioned sensitivity analysis was unrepresentative of those respective years.

Hedge accounting

The Group's hedging strategy was to lift borrowings denominated in foreign currencies to avoid exchange rate exposure from its investments in equity instruments denominated in foreign currencies (recognized under the line item of financial assets at FVTPL) and net investment in foreign subsidiary, USIFR, which has EUR as its functional currency. Those transactions were designated as fair value hedges and a hedge of net investment in foreign operation, respectively. Hedge adjustments were made to totally offset the foreign exchange gains or losses from those equity instruments denominated in foreign currencies and foreign operations when they were evaluated based on the exchange rates on each balance sheet date.

The hedge ineffectiveness in these hedging relationships arose from the material difference between the notional amounts of borrowings denominated in foreign currencies and the original investments in equity instruments denominated in foreign currencies and net investment in foreign operations. No other sources of ineffectiveness is expected to emerge from these hedging relationships.

December 31, 2020

Hedging Instrument/	Line item in	Car	nount		
Hedged Items	Balance sheet	 Asset		Liability	
		 NT\$		NT\$	
Fair value hedge					
Borrowings denominated in foreign currencies/ Financial assets at FVTPL	Financial liabilities for hedging - current	\$ -	\$	3,307,018	
Hedge of net investment in foreign operation	Financial liabilities for hedging - current	-		1,970,307	
Hedge of net investment in foreign operation	Financial liabilities for hedging - non-current	-		5,910,919	

	Cal	Change in V	Used for effectiveness	Accumulated Gains or Losses in Other Equity					Carrying Amount of dged Item in Fair Value Hedge	Accumulated Amount of Fair Value Hedge Adjustments on Hedged Item		
Hedging Instrument/ Hedged Item		Hedging nstrument NT\$	_ <u>I</u>	Hedged ItemNT\$		Continuing Hedges NT\$	Acc	Hedge ounting No ger Applied NT\$		Asset NT\$		Asset NT\$
Fair value hedge												
Borrowings denominated in foreign currencies/ Financial assets at FVTPL	\$	157,842	\$	(157,842)	\$	-	\$	-	\$	2,859,132	\$	(142,217)
Hedge of net investment in		574,824		(574,824)		(574,824)		-		-		-

December 31, 2021

Hedging Instrument/	Line item in						
Hedged Items	Balance sheet	-	A	sset	Liabi	ility	
Ü		NTS	\$	US (Not		NT\$	US\$ (Note 4)
Fair value hedge							
Borrowings denominated in foreign currencies/ Financial assets at FVTPL	Financial liabilities for hedging - current	\$	-	\$	-	\$ 2,954,921	\$ 106,522
Hedge of net investment in foreign operation	Financial liabilities for hedging - current		-		-	3,762,044	135,618
Hedge of net investment in foreign operation	Financial liabilities for hedging -		-		-	4,780,931	172,348

	Calc	Change in V		Used for	Accumulated Gains or Losses in Other Equity					Carrying Amount of edged Item in Fair Value Hedge	Accumulated Amount of Fair Value Hedge Adjustments on Hedged Item	
Hedging Instrument/ Hedged Item		Hedging astrument NT\$	_H	edged Item NT\$	He	inuing dges T\$	Accoun Longer	ting No Applied	g No		_	Asset NT\$
Fair value hedge Borrowings denominated in foreign currencies/	\$	94,145	\$	(94,145)	\$	-	\$	-	\$	2,318,517	\$	(236,362)
Financial assets at FVTPL Hedge of net investment in foreign operation		(738,600)		738,600	1	63,776		-		-		-

Hedging Instrument/ Hedged Item	Change in Value Used for Calculating Hedge Ineffectiveness					Accumula Losses in (A Hed	Carrying mount of lged Item in air Value Hedge	Accumulated Amount of Fair Value Hedge Adjustments on Hedged Item		
	Insti	dging rument (Note 4)		dged Item (\$ (Note 4)	1	ntinuing Hedges (Note 4)	Accou Longe	ledge unting No er Applied (Note 4)	Asset US\$ (Note 4)		Asset US\$ (Note 4)		
Fair value hedge													
Borrowings denominated in foreign currencies/ Financial assets at FVTPL	\$	3,394	\$	(3,394)	\$	-	\$	-	\$	83,580	\$	(8,521)	
Hedge of net investment in foreign operation		(26,626)		26,626		5,904		-		-		-	

b) Interest rate risk

Except a portion of long-term borrowings and bonds payable at fixed interest rates, the Group was exposed to interest rate risk because group entities borrowed funds at floating interest rates. Changes in market interest rates led to variances in effective interest rates of borrowings from which the future cash flow fluctuations arise. The Group utilized financing instruments with low interest rates and favorable terms to maintain low financing cost, adequate banking facilities, as well as to hedge interest rate risk.

The carrying amounts of the Group's financial assets and financial liabilities with exposure to interest rates at each balance sheet date were as follows:

	December 31							
	2020	20	21					
	NT\$	NT\$	US\$ (Note 4)					
Fair value interest rate risk								
Financial assets	\$ 5,049,005	\$ 5,474,105	\$ 197,336					
Financial liabilities	56,599,417	76,206,394	2,747,166					
Cash flow interest rate risk								
Financial assets	45,489,788	69,654,969	2,510,994					
Financial liabilities	131,715,366	158,557,225	5,715,834					

For assets and liabilities with floating interest rates, a 100 basis point increase or decrease was used when reporting interest rate risk internally to key management personnel. If interest rates had been 100 basis points (1%) higher or lower and all other variables held constant, the Group's profit before income tax for the years ended December 31, 2019, 2020 and 2021 would have decreased or increased approximately by NT\$1,232,000 thousand, NT\$862,000 thousand and NT\$959,000 thousand (US\$34,571 thousand), respectively. Hedging contracts and hedged items have been taken into account while measuring the changes in profit before income tax. The abovementioned sensitivity analysis mainly focused on the interest rate items at the end of each year. As the year-end exposure did not reflect the exposure for the years ended December 31, 2019, 2020 and 2021, the abovementioned sensitivity analysis was unrepresentative of those respective periods.

c) Other price risk

The Group was exposed to equity price risk through its investments in financial assets at FVTPL and financial assets at FVTOCI. If equity price was 1% higher or lower, profit before income tax for the years ended December 31, 2019, 2020 and 2021 would have increased or decreased approximately by NT\$51,000 thousand, NT\$59,000 thousand and NT\$49,000 thousand (US\$1,766 thousand), respectively, and other comprehensive income before income tax for the years ended December 31, 2019, 2020 and 2021 would have increased or decreased approximately by NT\$8,000 thousand, NT\$7,000 thousand and NT\$9,000 thousand (US\$324 thousand), respectively.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group's credit risk arises from cash and cash equivalents, trade and other receivables and other financial assets. The Group's maximum exposure to credit risk was the carrying amounts of financial assets in the consolidated balance sheets.

As of December 31, 2020 and 2021, the Group's five largest customers accounted for 27% and 33% of trade receivables, respectively. The Group transacts with a large number of unrelated customers and, thus, no concentration of credit risk was observed.

3) Liquidity risk

The Group manages liquidity risk by maintaining adequate working capital and banking facilities to fulfill the demand for cash flow used in the Group's operation and capital expenditure. The Group also monitors its compliance with all the loan covenants. Liquidity risk is not considered to be significant.

In the table below, financial liabilities with a repayment on demand clause were included in the

earliest time band regardless of the probability of counter-parties choosing to exercise their rights. The maturity dates for other non-derivative financial liabilities were based on the agreed repayment dates.

To the extent that interest flows are floating rate, the undiscounted amounts were derived from the interest rates at each balance sheet date.

December 31, 2020

	On Demand or Less than 1 Month NT\$	1 to 3 Months NT\$	3 Months to 1 Year NT\$	1 to 5 Years NT\$	More than 5 Years NT\$
Non-derivative financial liabilities	_				
Non-interest bearing	\$ 43,111,390	\$ 44,122,659	\$ 8,223,684	\$ 319,510	\$ 176,536
Obligation under leases	103,734	151,921	619,908	1,779,041	4,088,301
Floating interest rate liabilities	13,792,596	8,190,076	10,214,154	102,253,481	7,999,130
Fixed interest rate liabilities	11,895,281	528,290	3,349,614	46,900,450	5,631,522
	\$ 68,903,001	\$ 52,992,946	\$ 22,407,360	\$151,252,482	\$ 17,895,489

Further information for maturity analysis of obligation under leases was as follows:

	I	ess than							More than
		1 Year NT\$	1 to 5 Years NT\$	5 to 10 Years NT\$	10	to 15 Years NT\$	15	to 20 Years NT\$	 20 Years NT\$
Obligation under leases	\$	875,563	\$ 1,779,041	\$ 1,422,331	\$	776,735	\$	674,446	\$ 1,214,789

<u>December 31, 2021</u>

	On Demand or Less than 1 Month NT\$	1 to 3 Months NT\$	3 Months to 1 Year NT\$	1 to 5 Years NT\$	More than 5 Years NT\$
Non-derivative financial liabilities	_				
Non-interest bearing Obligation under leases Floating interest rate liabilities Fixed interest rate liabilities	\$ 52,353,176 84,978 12,565,548 10,262,781 \$ 75,266,483	\$ 48,140,652 157,710 5,180,527 3,093,668 \$ 56,572,557	\$ 10,216,253 687,144 13,416,893 12,978,593 \$ 37,298,883	\$ 291,480 2,585,624 112,493,242 43,555,458 \$ 158,925,804	\$ 114,201 4,929,602 7,494,670 5,479,867 \$ 18,018,340
	On Demand or Less than 1 Month US\$ (Note 4)	1 to 3 Months US\$ (Note 4)	3 Months to 1 Year US\$ (Note 4)	1 to 5 Years US\$ (Note 4)	More than 5 Years US\$ (Note 4)
Non-derivative financial liabilities	_				
Non-interest bearing Obligation under leases Floating interest rate liabilities Fixed interest rate liabilities	\$ 1,887,281 3,063 452,976 369,963	\$ 1,735,424 5,685 186,753 111,524	\$ 368,286 24,771 483,666 467,866	\$ 10,508 93,209 4,055,272 1,570,132	\$ 4,117 177,707 270,176 197,544
	\$ 2,713,283	\$ 2,039,386	<u>\$ 1,344,589</u>	\$ 5,729,121	\$ 649,544

Further information for maturity analysis of obligation under leases was as follows:

	Less than					More than
	1 Year	1 to 5 Years	5 to 10 Years	10 to 15 Years	15 to 20 Years	20 Years
	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$
Obligation under leases	\$ 929,832	\$ 2,585,624	\$ 1,731,995	<u>\$ 883,335</u>	\$ 802,765	<u>\$ 1,511,507</u>

	L	ess than									M	ore than	
		1 Year	1 t	o 5 Years	5 to	10 Years	10 t	o 15 Years	15 t	o 20 Years	2	0 Years	
	US\$ (Note 4)		US	§ (Note 4)	USS	S (Note 4)	US	§ (Note 4)	US	§ (Note 4)	US\$ (Note 4)		
Obligation under leases	\$	33,519	\$	93,209	\$	62,437	\$	31,843	\$	28,939	\$	54,488	

The amounts included above for floating interest rate instruments for non-derivative financial liabilities were subject to change if changes in floating interest rates differ from those estimates of interest rates determined at each balance sheet date.

The following table detailed the Group's liquidity analysis for its derivative financial instruments. The table was based on the undiscounted contractual net cash inflows and outflows on derivative instruments settled on a net basis, and the undiscounted gross cash inflows and outflows on those derivatives that require gross settlement. When the amounts payable or receivable are not fixed, the amounts disclosed have been determined by reference to the projected interest rates as illustrated by the yield curves at each balance sheet date.

	On Demand or Less than 1 Month NT\$	1 to 3 Months NT\$	3 Months to 1 Year NT\$	More than 1 Year
December 31, 2020				
Net settled	_			
Forward exchange contracts	\$ 30,514	<u>\$ 18,429</u>	<u>\$ -</u>	<u>\$</u>
Gross settled				
Forward exchange contracts Inflows	¢ 9.972.792	¢ 5565127	¢ 521.227	ø
Outflows	\$ 8,862,682 (8,798,238)	\$ 5,565,137 (5,518,153)	\$ 531,336 (526,880)	\$ - -
0 41.1. 0 110	64,444	46,984	4,456	
Swap contracts				
Inflows Outflows	19,311,999 (19,524,820)	17,179,871 (17,486,997)	36,739,200 (37,495,172)	-
Outriows	(212,821)	(307,126)	$\frac{(37,475,172)}{(755,972)}$	
Target redemption forward				
contracts Inflows	42,720	96,120	416,520	227,128
Outflows	(44,471)	(100,060)	(433,595)	(236,081)
	(1,751)	(3,940)	(17,075)	(8,953)
	<u>\$ (150,128)</u>	\$ (264,082)	<u>\$ (768,591)</u>	<u>\$ (8,953)</u>
		On Demand or Less than 1 Month	1 to 3 Months	3 Months to 1 Year
		NT\$	NT\$	NT\$
December 31, 20	21			
Net settled				
Forward exchange contracts		<u>\$ (21,379)</u>	<u>\$ (1,410)</u>	<u>\$</u>
Gross settled Forward exchange contracts				
Inflows		\$ 2,382,315	\$ 6,817,411	\$ 531,596
Outflows		(2,380,359)	(6,784,689)	(525,920)
		1,956	32,722	5,676
				(Continued)

	On Demand or Less than 1 Month NT\$	1 to 3 Months NT\$	3 Months to 1 Year NT\$
Swap contracts Inflows	\$ 23,759,435	\$ 21,272,450	\$ 37,841,805
Outflows	(23,814,701) (55,266)	(21,314,442) (41,992)	(37,965,438) (123,633)
Target redemption forward contracts			
Inflows Outflows	19,376 (18,845) 531	43,596 (42,401) 1,195	33,216 (32,243) 973
	\$ (52,779)	<u>\$ (8,075)</u>	\$ (116,984) (Concluded)
	On Demand or Less than 1 Month	1 to 3 Months	3 Months to 1 Year
December 31, 2021	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)
Net settled			
Forward exchange contracts	<u>\$ (771)</u>	<u>\$ (51)</u>	<u>\$</u>
Gross settled			
Forward exchange contracts Inflows	\$ 85,880	\$ 245,761	\$ 19,164
Outflows	(85,810) 	(244,581) 1,180	(18,959) 205
Swap contracts			
Inflows	856,505	766,851	1,364,160
Outflows	(858,497) (1,992)	(768,365) (1,514)	(1,368,617) (4,457)
Target redemption forward contracts			
Inflows Outflows	698 (679)	1,572 (1,529)	1,197 (1,162)
Outilows	19	43	35
	<u>\$ (1,903)</u>	<u>\$ (291)</u>	\$ (4,217)

35. RELATED PARTY TRANSACTIONS

Balances and transactions within the Group had been eliminated upon consolidation. Details of transactions between the Group and other related parties were disclosed as follows:

a. Related parties

In addition to those disclosed in Note 14, the related parties were as follows:

Relationship with the Company
Substantial related party
Substantial related party

b. Contribution of related party

			For	the Year En	ear Ended December 31				
Relationship and Name of Related Party		2019 NT\$		2020 NT\$		NT\$		6 (Note 4)	
Substantial related party ASE Cultural and Educational Foundation ASE Environmental	\$	100,000	\$	-	\$	10,000	\$	360	
Protection and Sustainability Foundation		<u>-</u>		100,000		100,000		3,605	
	\$	100,000	\$	100,000	\$	110,000	\$	3,965	

- c. In 2019, the subsidiary, ASE, purchased real estate properties from associates, HC, with the amount of NT\$2,326,000 thousand, which was primarily based on the independent professional appraisal reports and had been fully paid in September 2019.
- d. ASE and HC entered into a joint development agreement in June 2020 under the concept of joint construction. The agreement stipulates that HC will build the plant on the leasehold land and ASE and its affiliates will have the priority to purchase the plant after the completion of the plant construction. The final transaction price will be the purchase price less an amount based on the ratio calculated by independent professional appraisers.
- e. In the third quarter of 2021, ASE purchased real estate properties from HC with an amount of NT\$2,362,000 thousand (US\$85,148 thousand) (tax excluded) which was primarily based on the independent professional appraisal reports and had been fully paid.
- f. The subsidiaries, ASE and ASEE, separately entered into a joint construction and allocation of housing units agreement with HC in August 2021. The agreement stipulates that ASE and ASEE will provide land or leasehold land and fund to HC for plant construction and to allocate those housing units based on the independent professional appraisal reports. After the completion of the plant construction, ASE, ASEE and its affiliates will have the priority to purchase the plant.
- g. As disclosed in Note 31, USIE repurchased its own 2,805 thousand, 2,685 thousand and 2,271 thousand ordinary shares from the Group's key management personnel with approximately NT\$1,247,187 thousand, NT\$1,520,976 thousand and NT\$1,081,214 thousand (US\$38,977 thousand) in July 2019, September 2020 and December 2021, respectively.
- h. Compensation to key management personnel

	For the Year Ended December 31							
	2019	2020	20	021				
	NT\$	NT\$	NT\$	US\$ (Note 4)				
Short-term employee benefits Post-employment benefits Share-based payments	\$ 1,027,191 2,208 134,544	\$ 1,264,980 2,007 	\$ 1,744,903 3,505 163,697	\$ 62,902 126 5,901				
	\$ 1,163,943	<u>\$ 1,420,761</u>	<u>\$ 1,912,105</u>	\$ 68,929				

The compensation to the Group's key management personnel was determined according to personal performance and market trends.

36. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for bank borrowings, tariff guarantees of imported raw materials or collateral:

	December 31						
	2020			2021			
Inventories related to real estate business Property, plant and equipment Investment properties		NT\$		NT\$		\$ (Note 4)	
	\$	10,564,873 124,124 11,847,145	\$	2,587,110 114,390 20,796,862	\$	93,263 4,124 749,707	
Other financial assets (including current and non-current)	_	460,890		444,358		16,018	
	\$	22,997,032	\$	23,942,720	\$	863,112	

In addition to the abovementioned assets, 89.6% of shareholdings in FAFG was provided as collateral for syndicated bank loans as of December 31, 2020.

37. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Group as of each balance sheet date were as follows:

- a. As of December 31, 2020 and 2021, unused letters of credit of the Group were approximately NT\$2,000 thousand and NT\$74,000 thousand (US\$2,668 thousand), respectively.
- b. As of December 31, 2020 and 2021, letters of bank guarantee provided to customs for the import and export of goods with bank facilities granted to the Group were approximately NT\$671,721 thousand and NT\$738,628 thousand (US\$26,627 thousand), respectively.
- c. As of December 31, 2020 and 2021, the Group's commitments to purchase property, plant and equipment were approximately NT\$32,627,411 thousand and NT\$52,678,554 thousand (US\$1,899,011 thousand), respectively, of which NT\$1,968,779 thousand and NT\$3,761,120 thousand (US\$135,585 thousand) had been prepaid, respectively. As of December 31, 2020 and 2021, the commitment that the Group has contracted for the construction related to real estate business were approximately NT\$602,548 thousand and NT\$59 thousand (US\$2 thousand), respectively.
- d. The Group entered into long-term purchase agreements of materials and supplies with multiple suppliers. The relative minimum purchase quantity is specified in the agreements.
- e. The Group entered into long-term agreements with multiple customers. The relative minimum order quantity to customers and minimum purchase quantity of materials from suppliers are specified in the agreements.
- f. In December 2021, in consideration of corporate social responsibility, the board of directors resolved the disbursements of NT\$20,000 thousand (US\$721 thousand) to ASE Cultural and Educational Foundation for promoting the cultural and educational activities to discharge the Group's social responsibilities.
- g. In December 2013, in consideration of corporate social responsibility for environmental protection, the board of directors of ASE, approved the contributions of at least NT\$100,000 thousand (US\$3,605 thousand) annually to be made in the next 30 years, with a total amount of at least NT\$3,000,000 thousand (US\$108,147 thousand), for promoting environmental protection efforts in Taiwan. In

December 2021, the board of directors of ASE resolved to contribute NT\$100,000 thousand (US\$3,605 thousand) to ASE Environmental Protection and Sustainability Foundation.

38. OTHERS

- a. There were five employees and a waste disposal supplier of a subsidiary in China accused by China People's Procuratorate (the "Procuratorate") for committing the crime of environmental pollution in 2018. During the trial, the Procuratorate claimed that the subsidiary should also be charged with corporate crime which caused the subsidiary received a change and addition indictment in October 2019. In June 2020, in the first trial, the court of first instance ruled that the subsidiary shall be imposed a fine of RMB400 thousand and return the benefit (RMB344 thousand) generated from such violation. Both of the fine and the return of benefit from violation were recognized by the subsidiary under the line item of other gains and losses. Because some of co-defendants have filed an appeal against the judgment and, pursuant to local applicable law, the whole case will be deemed appealed. This case was denied by the court of second instance, which affirmed the judgment of the first instance, on April 7, 2021. The case was concluded.
- b. On December 20, 2013, the Kaohsiung Environmental Protection Bureau (the "KEPB") imposed an administrative fine of NT\$102,014 thousand (the "Original Fine") upon ASE for violation of the Water Pollution Control Act. After ASE sought administrative remedies against the Original Fine, the Original Fine has been revoked by final judgment of Supreme Administrative Court on June 8, 2017, and KEPB is ordered to refund the Original Fine to ASE. On December 27, 2019, KEPB has refunded NT\$55,062 thousand to ASE. On February 10, 2020, KEPB re-imposed an administrative fine of NT\$46,952 thousand (the "New Fine") upon ASE and offset the New Fine by the remaining amount which shall be refunded to ASE. Therefore, no additional payment that ASE should make for the New Fine. After ASE filed an administrative appeal against the New Fine, the Administrative Appeal Review Committee of Kaohsiung City Government has revoked the New Fine on December 15, 2020 and remanded to KEPB for another legitimate administrative action.

39. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The following information was aggregated by the foreign currencies other than functional currencies of the group entities and the exchange rates between foreign currencies and respective functional currencies were disclosed. The significant financial assets and liabilities denominated in foreign currencies were as follows:

	Foreign Currencies (In Thousand)	Exchange Rate	Carrying Amount (In Thousand)
December 31, 2020	<u></u>		
Monetary financial assets			
US\$	\$ 4,269,075	US\$1=NT\$28.48	\$ 121,583,265
US\$	1,527,381	US\$1=RMB6.5249	43,499,803
US\$	41,643	US\$1= EUR0.8143	1,185,984
ЈРҮ	13,544,360	JPY1=NT\$0.2763	3,742,306
JPY	1,174,208	JPY1=US\$0.0097	324,434
HKD	174,765	HKD1=NT\$3.6730	641,912
			(Continued)

	Foreign Currencies (In Thousand)	Exchange Rate	Carrying Amount (In Thousand)
Monetary financial liabilities			
US\$	\$ 4,439,915	US\$1=NT\$28.48	\$ 126,448,786
US\$	1,517,568	US\$1=RMB6.5249	43,220,325
US\$	20,896	US\$1= EUR0.8143	595,128
JPY	13,657,967	JPY1=NT\$0.2763	3,773,695
JPY	1,188,650	JPY1=US\$0.0097	328,424
HKD	18,814	HKD1=NT\$3.6730	69,103
December 31, 2021	<u> </u>		
Monetary financial assets			
US\$	4,885,163	US\$1=NT\$27.68	135,221,324
US\$	1,718,314	US\$1=RMB6.3757	47,562,940
US\$	42,250	US\$1= EUR0.8829	1,169,492
JPY	12,584,942	JPY1=NT\$0.2405	3,026,677
JPY	551,496	JPY1=US\$0.0087	132,635
Monetary financial liabilities			
US\$	4,899,633	US\$1=NT\$27.68	135,621,853
US\$	1,503,606	US\$1=RMB6.3757	41,619,803
US\$	88,741	US\$1= EUR0.8829	2,456,363
JPY	14,078,075	JPY1=NT\$0.2405	3,385,776
JPY	990,667	JPY1=US\$0.0087	238,255
			(Concluded)

The significant realized and unrealized foreign exchange gain (loss) were as follows:

	For the Year Ended December 31						
	201	19	2020		2021		
Functional Currencies	Exchange Rate	Net Foreign Exchange Gain (Loss)	Exchange Rate	Net Foreign Exchange Gain (Loss)	Exchange Rate	Net Fo Exchange (U
		NT\$		NT\$		NT\$	US\$ (Note 4)
US\$ NT\$ RMB	US\$1=NT\$29.98 RMB1=NT\$4.2975	\$ (84,177) 1,203,823 14,055	US\$1=NT\$28.48 RMB1=NT\$4.3648	\$ (143,804) 1,382,067 (181,624)	US\$1=NT\$27.68 RMB1=NT\$4.3415	\$ 132,582 1,413,969 (85,675)	\$ 4,780 50,972 (3,089)
		\$ 1,133,701		\$ 1,056,639		<u>\$ 1,460,876</u>	<u>\$ 52,663</u>

40. OPERATING SEGMENTS INFORMATION

The Group has the following reportable segments: Packaging, Testing and EMS. The Group packages bare semiconductors into finished semiconductors with enhanced electrical and thermal characteristics; provides testing services, including front-end engineering testing, wafer probing and final testing services; engages in the designing, assembling, manufacturing and sale of electronic components and telecommunications equipment motherboards. Information about other business activities and operating segments that are not reportable are combined and disclosed in "Others." The Group engages in other activities such as substrate production as well as sale and leasing of real estate properties.

The accounting policies for segments are the same as those described in Note 4. The measurement basis for resources allocation and performance evaluation is based on profit before income tax.

a. Segment revenues and operation results

	Packaging	Testing	EMS	Others	Adjustments and Eliminations	Total
	NT\$	NT\$	NTS	NTS	NT\$	NT\$
For the year ended December 31, 2019	-					
Revenue from external customers	\$ 198,916,897	\$ 42,658,686	\$ 165,789,479	\$ 5,817,122	\$ -	\$ 413,182,184
Inter-group revenues (Note 1) Segment revenues	5,370,963 204,287,860	231,399 42,890,085	60,638,567 226,428,046	7,431,399 13,248,521	(73,672,328)	486,854,512
Interest income Interest expense	186,291 (3,403,475)	90,091 (545,609)	249,487 (255,404)	284,458 (243,013)	(260,646) 260,646	549,681 (4,186,855)
Depreciation and amortization Share of the profit or loss of associates and	(33,456,831)	(12,379,703)	(2,534,825)	(2,095,482)	-	(50,466,841)
joint ventures Impairment loss	75,303 (601,066)	39,852 (141)	67,120	-	-	182,275 (601,207)
Segment profit before income tax	7,572,763	10,321,537	6,082,106	(696,595)	-	23,279,811
Expenditures for segment assets	35,462,305	23,966,051	2,770,129	875,402	-	63,073,887
December 31, 2019	-					
Investments accounted for using the equity method	8,867,316	1,123,490	2,094,401	-	-	12,085,207
Contract assets	4,162,124	1,735,192	-	-	-	5,897,316
For the year ended December 31, 2020	-					
Revenue from external customers	218,666,071	47,271,074	204,690,669 21,472,775	6,350,896	(39,578,833)	476,978,710
Inter-group revenues (Note 1) Segment revenues	10,436,168 229,102,239	435,587 47,706,661	226,163,444	7,234,303 13,585,199	(39,578,833)	516,557,543
Interest income Interest expense	133,160 (2,244,280)	79,821 (564,269)	275,766 (443,519)	32,036 (185,160)	-	520,783 (3,437,228)
Depreciation and amortization Share of the profit or loss of associates and	(32,333,229)	(14,189,024)	(2,877,546)	(1,859,266)	-	(51,259,065)
joint ventures	362,133	99,670	85,809	-	-	547,612
Impairment loss Segment profit before income tax	(218,600) 17,476,440	(773,673) 10,277,760	8,438,766	(424,168)	-	(992,273) 35,768,798
Expenditures for segment assets	38,643,303	14,275,397	5,614,409	491,092	-	59,024,201
December 31, 2020	-					
Investments accounted for using the equity method	9,146,344	1,340,307	2,320,022	-	_	12,806,673
Contract assets	3,641,244	1,141,660	-	-	-	4,782,904
For the year ended December 31, 2021	-					
Revenue from external customers Inter-group revenues (Note 1)	272,543,899 7,244,889	49,978,736 339,619	239,488,267 27,825,073	7,986,231 7,527,260	(42,936,841)	569,997,133
Segment revenues	279,788,788	50,318,355	267,313,340	15,513,491	(42,730,841)	612,933,974
Interest income Interest expense	61,141 (1,604,107)	88,874 (405,648)	301,072 (629,584)	91,242 (159,596)	-	542,329 (2,798,935)
Depreciation and amortization Share of the profit or loss of associates and	(34,384,500)	(13,819,080)	(4,336,266)	(1,984,431)	-	(54,524,277)
joint ventures	737,650	66,107	95,943	-	-	899,700
Impairment loss Segment profit before income tax	(86,997) 41,581,126	(39,769) 11,998,938	8,528,675	18,085,030	-	(126,766) 80,193,769
Expenditures for segment assets	48,531,368	16,773,513	7,654,560	1,458,100	-	74,417,541
December 31, 2021	_					
Investments accounted for using the equity method	12,744,756	1,896,372	2,355,472	_	_	16,996,600
Contract assets	4,735,181	872,028	-	-	-	5,607,209
					Adjustments	
	Packaging US\$ (Note 4)	Testing US\$ (Note 4)	US\$ (Note 4)	Others US\$ (Note 4)	US\$ (Note 4)	Total US\$ (Note 4)
For the year ended December 31, 2021	, ,	, ,	, ,	, ,	, ,	, ,
Revenue from external customers	s 9,824,942	\$ 1,801,685	\$ 8,633,319	\$ 287,896	\$ -	\$ 20,547,842
Inter-group revenues (Note 1)	261,171	12,243	1,003,067	271,350	(1,547,831)	-
Segment revenues Interest income	10,086,113 2,204	1,813,928 3,204	9,636,386 10,853	559,246 3,289	-	22,095,673 19,550
Interest expense Depreciation and amortization	(57,827) (1,239,528)	(14,623) (498,164)	(22,696) (156,318)	(5,753) (71,537)	-	(100,899) (1,965,547)
Share of the profit or loss of associates and						
joint ventures Impairment loss	26,591 (3,137)	2,383 (1,434)	3,459	-	-	32,433 (4,571)
Segment profit before income tax Expenditures for segment assets	1,498,959 1,749,509	432,550 604,669	307,450 275,940	651,947 52,563	-	2,890,906 2,682,681
December 31, 2021	1,1 12,000	00 1,002	275,910	52,505		_,002,001
Investments accounted for using the equity	-					
method	459,436	68,362	84,913	-	-	612,711
Contract assets	170,698	31,436	-	-	-	202,134

Note 1: Inter-group revenues were eliminated upon consolidation.

Note 2: The disaggregated product and service type from the Group's contract with customer is the same as those disclosed in above reportable segment.

b. Revenue from major products and services

	For the Year Ended December 31			
	2019	2020	2021	
	NT\$	NT\$	NT\$	US\$ (Note 4)
Packaging service Testing service EMS	\$ 198,916,897 42,658,686 165,789,479	\$218,666,071 47,271,074 204,690,669	\$ 272,543,899 49,978,736 239,488,267	\$ 9,824,942 1,801,685 8,633,319
Others	5,817,122	6,350,896	7,986,231	287,896
	\$413,182,184	\$476,978,710	\$ 569,997,133	\$ 20,547,842

c. Geographical information

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

1) Net revenues from external customers

		For the Year Ended December 31			
	2019	2020	2021		
	NT\$	NT\$	NT\$	US\$ (Note 4)	
United States	\$ 245,521,027	\$ 297,117,001	\$ 353,500,361	\$ 12,743,344	
Taiwan	51,244,470	64,829,301	94,598,067	3,410,168	
Asia	75,938,364	74,447,091	62,523,167	2,253,900	
Europe	38,613,132	39,477,306	57,910,641	2,087,622	
Others	1,865,191	1,108,011	1,464,897	52,808	
	<u>\$413,182,184</u>	\$476,978,710	\$569,997,133	\$ 20,547,842	

2) Non-current assets

		December 31	
	2020 (Retrospectively Adjusted)	20	021
	NT\$	NT\$	US\$ (Note 4)
Taiwan China Others	\$ 239,353,978 66,253,694 31,875,938	\$ 252,525,376 65,375,423 34,702,992	\$ 9,103,294 2,356,720 1,251,009
	\$ 337,483,610	\$ 352,603,791	\$ 12,711,023

Non-current assets exclude financial instruments, post-employment benefit assets, and deferred tax assets.

d. Major customers

Except customer A from which the operating revenues generated from packaging and EMS segments were NT\$103,987,781 thousand, NT\$145,952,908 thousand and NT\$158,624,032 thousand (US\$5,718,242 thousand) for the years ended December 31, 2019, 2020 and 2021, respectively, and customer B from which the operating revenues generated from packaging and testing segments was NT\$44,653,072 thousand for the year ended December 31, 2019, the Group did not have any other individual customer from which the operating revenues exceeded 10% of operating revenues for the years ended December 31, 2019, 2020 and 2021.