Consolidated Financial Statements for the Years Ended December 31, 2021 and 2020 and Independent Auditors' Report

REPRESENTATION LETTER

The entities that are required to be included in the combined financial statements of Taiwan Semiconductor Manufacturing Company Limited as of and for the year ended December 31, 2021, under the Criteria Governing the Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises are the same as those included in the consolidated financial statements prepared in conformity with the International Financial Reporting Standard 10, "Consolidated Financial Statements." In addition, the information required to be disclosed in the combined financial statements is included in the consolidated financial statements. Consequently, Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries do not prepare a separate set of combined financial statements.

Very truly yours,

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED By

MARK LIU Chairman

February 15, 2022

Deloitte.



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INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders Taiwan Semiconductor Manufacturing Company Limited

Opinion

We have audited the accompanying consolidated financial statements of Taiwan Semiconductor Manufacturing Company Limited and its subsidiaries (the "Company"), which comprise the consolidated balance sheets as of December 31, 2021 and 2020, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2021 and 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

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

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2021. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter for the Company's consolidated financial statements for the year ended December 31, 2021 is stated as follows:

<u>Property</u>, plant and equipment (PP&E) – commencement of depreciation related to PP&E classified as equipment under installation and construction in progress (EUI/CIP)

Refer to Notes 4, 5 and 14 to the consolidated financial statements.

The Company's evaluation of when to commence depreciation of EUI/CIP involves determining when the assets are available for their intended use. The criteria the Company uses to determine whether EUI/CIP are available for their intended use involves subjective judgments and assumptions about the conditions necessary for the assets to be capable of operating in the intended manner. Changes in these assumptions could have a significant impact on when depreciation is recognized.

Given the subjectivity in determining the date to commence depreciation of EUI/CIP, performing audit procedures to evaluate the reasonableness of the Company's judgments and assumptions required a high degree of auditor judgment. Consequently, the validity of commencement of depreciation related to PP&E classified as EUI/CIP is identified as a key audit matter.

Our audit procedures related to the evaluation of when to commence depreciation of EUI/CIP included the following, among others:

- 1. We read the Company's policy and understood the criteria used to determine when to commence depreciation.
- 2. We tested the effectiveness of the controls over the evaluation of when to commence depreciation of EUI/CIP.
- 3. We sampled the year-end balance of EUI/CIP and performed the following for each selection:
 - a. Evaluated whether the selection did not meet the criteria specified by the Company for commencement of depreciation.
 - b. Observed the assets and evaluated their status.
- 4. We sampled and evaluated whether the selection of EUI/CIP met the criteria specified by the Company for commencement of depreciation during the year.
- 5. We sampled and evaluated whether the selection of EUI/CIP met the criteria specified by the Company for commencement of depreciation subsequent to year end.

Other Matter

We have also audited the parent company only financial statements of Taiwan Semiconductor Manufacturing Company Limited as of and for the years ended December 31, 2021 and 2020 on which we have issued an unmodified opinion.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRS, IAS, IFRIC, and SIC endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China, and for such internal control as management

determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

Those charged with governance (including members of the Audit Committee) are responsible for overseeing the Company's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

- 1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- 2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- 3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- 4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- 5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2021 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Mei Yen Chiang and Shang Chih Lin.

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Deloitte & Touche Taipei, Taiwan Republic of China

February 15, 2022

Shang-Chih Lin

Notice to Readers

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

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

CONSOLIDATED BALANCE SHEETS (In Thousands of New Taiwan Dollars)

	December 31	December 31, 2021		2020
	Amount	%	December 31, 2 Amount	%
ASSETS				
CURRENT ASSETS				
Cash and cash equivalents (Note 6)	\$ 1,064,990,192	29	\$ 660,170,647	24
Financial assets at fair value through profit or loss (Note 7)	159,048	-	2,259,412	-
Financial assets at fair value through other comprehensive income (Note 8)	119,519,251	3	122,448,453	5
Financial assets at amortized cost (Note 9)	3,773,571	-	6,597,992	-
Hedging financial assets (Note 10)	13,468	-	47	-
Notes and accounts receivable, net (Note 11)	197,586,109	5	145,480,272	5
Receivables from related parties (Note 33) Other receivables from related parties (Note 33)	715,324 61,531	-	558,131 50,645	-
Inventories (Notes 5 and 12)	193,102,321	5	137,353,407	5
Other financial assets (Note 34)	16,630,611	1	10,676,111	1
Other current assets	10,521,481	-	6,590,191	-
			0,590,191	
Total current assets	1,607,072,907	43	1,092,185,308	40
NONCURRENT ASSETS				
Financial assets at fair value through other comprehensive income (Note 8)	5,887,892	-	4,514,940	-
Financial assets at amortized cost (Note 9)	1,533,391	-	4,372,207	-
Investments accounted for using equity method (Note 13)	21,963,418	1	18,841,061	1
Property, plant and equipment (Notes 5 and 14)	1,975,118,704	53	1,555,589,120	56
Right-of-use assets (Notes 5 and 15)	32,734,537	1	27,728,382	1
Intangible assets (Notes 5 and 16)	26,821,697	1	25,768,179	1
Deferred income tax assets (Notes 5 and 26)	49,153,886	1	25,958,184	1
Refundable deposits	2,624,854	-	1,343,001	-
Other noncurrent assets	2,592,169		4,411,023	
Total noncurrent assets	2,118,430,548	57	1,668,526,097	60
TOTAL	<u>\$ 3,725,503,455</u>	_100	<u>\$ 2,760,711,405</u>	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term loans (Notes 17 and 30)	\$ 114,921,333	3	\$ 88,559,026	3
Financial liabilities at fair value through profit or loss (Note 7)	681,914	-	94,128	-
Hedging financial liabilities (Note 10)	9,642	-	1,169	_
Accounts payable	47,285,603	1	38,987,284	1
Payables to related parties (Note 33)	1,437,186	-	2,107,718	-
Salary and bonus payable	23,802,100	1	20,071,241	1
Accrued profit sharing bonus to employees and compensation to directors and supervisors (Note 29)	36,524,741	1	35,681,046	1
Payables to contractors and equipment suppliers	145,742,148	4	157,804,961	6
Cash dividends payable (Note 21)	142,617,093	4	129,651,902	5
Income tax payable (Notes 5 and 26)	59,647,152	2	53,909,313	2
Long-term liabilities - current portion (Notes 18, 19 and 30)	4,566,667	-	2,600,000	-
Accrued expenses and other current liabilities (Notes 5, 15, 22, 30 and 33)	162,267,779	4	87,683,260	3
Total current liabilities	739,503,358	20	617,151,048	22
NONCURRENT LIABILITIES				
Bonds payable (Notes 18 and 30)	610,070,652	16	254,105,084	9
Long-term bank loans (Notes 19 and 30)	3,309,131	-	1,967,611	-
Deferred income tax liabilities (Notes 5 and 26)	1,873,877	-	1,729,941	-
Lease liabilities (Notes 5, 15 and 30)	20,764,214	1	20,560,649	1
Net defined benefit liability (Note 20)	11,036,879	-	11,914,074	1
Guarantee deposits	686,762	-	265,599	-
Others (Note 22)	167,525,377	5	2,395,400	
Total noncurrent liabilities	815,266,892	22	292,938,358	11
Total liabilities	1,554,770,250	42	910,089,406	33
	<u> </u>			

EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT

Capital stock (Note 21)	259,303,805	7	259,303,805	9
Capital surplus (Note 21)	64,761,602	2	56,347,243	2
Retained earnings (Note 21)	<u>.</u>			
Appropriated as legal capital reserve	311,146,899	8	311,146,899	11
Appropriated as special capital reserve	59,304,212	2	42,259,146	2
Unappropriated earnings	1,536,378,550	41	1,235,280,036	45
	1,906,829,661	51	1,588,686,081	58
Others (Note 21)	(62,608,515)	<u>(2</u>)	(54,679,873)	<u>(2</u>)
Equity attributable to shareholders of the parent	2,168,286,553	58	1,849,657,256	67
NON - CONTROLLING INTERESTS	2,446,652	<u> </u>	964,743	<u> </u>
Total equity	2,170,733,205	58	1,850,621,999	67
TOTAL	<u>\$ 3,725,503,455</u>	100	<u>\$ 2,760,711,405</u>	100

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

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2021		2020	
	Amount	%	Amount	%
NET REVENUE (Notes 5, 22, 33 and 38)	\$1,587,415,037	100	\$1,339,254,811	100
COST OF REVENUE (Notes 5, 12, 29 and 33)	767,877,771	48	628,124,691	47
GROSS PROFIT	819,537,266	52	711,130,120	53
OPERATING EXPENSES (Notes 5, 29 and 33) Research and development General and administrative Marketing	124,734,755 36,929,588 7,558,591	8 2 <u>1</u>	109,486,089 28,457,593 7,112,867	8 2 <u>1</u>
Total operating expenses	169,222,934	11	145,056,549	<u> 11 </u>
OTHER OPERATING INCOME AND EXPENSES, NET (Notes 14, 15 and 29)	(333,435)		710,127	
INCOME FROM OPERATIONS (Note 38)	649,980,897	41	566,783,698	42
NON-OPERATING INCOME AND EXPENSES Share of profits of associates Interest income (Note 23) Other income Foreign exchange gain (loss), net (Note 36) Finance costs (Note 24) Other gains and losses, net (Note 25)	5,603,084 5,708,765 973,141 13,662,655 (5,414,218) (7,388,010)	- - 1 -	$\begin{array}{r} 3,592,818\\ 9,018,400\\ 660,607\\ (3,303,298)\\ (2,081,455)\\ \underline{10,106,410} \end{array}$	- 1 - - 1
Total non-operating income and expenses	13,145,417	1	17,993,482	2
INCOME BEFORE INCOME TAX	663,126,314	42	584,777,180	44
INCOME TAX EXPENSE (Notes 5 and 26)	66,053,180	4	66,619,098	5
NET INCOME	597,073,134	38	518,158,082	<u> </u>
OTHER COMPREHENSIVE INCOME (LOSS) (Notes 5, 20, 21 and 26) Items that will not be reclassified subsequently to profit or loss: Remeasurement of defined benefit obligation Unrealized gain on investments in equity instruments at fair value through other comprehensive income Gain (loss) on hedging instruments	242,079 1,900,797 (41,416)	- - -	(3,516,749) 423,697 24,085 (Con	(1) - tinued)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2021		2020			
	Amount	%	Amount	%		
Share of other comprehensive loss of associates Income tax benefit (expense) related to items that	\$ (30,194)	-	\$ (11,604)	-		
will not be reclassified subsequently	<u>(85,269)</u> 1,985,997		<u>422,663</u> (2,657,908)	<u>-</u> (1)		
Items that may be reclassified subsequently to profit or loss:						
Exchange differences arising on translation of foreign operations Unrealized gain/(loss) on investments in debt instruments at fair value through other	(6,181,830)	(1)	(29,847,196)	(2)		
comprehensive income	(3,431,791) 131,535	-	2,466,711	-		
Gain on hedging instruments Share of other comprehensive loss of associates Income tax expense related to items that may be	(119,997)	-	(283,409)	-		
reclassified subsequently	(3,370) (9,605,453)		(27,663,894)	(2)		
Other comprehensive loss for the year, net of income tax	(7,619,456)	(1)	(30,321,802)	<u>(3</u>)		
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>\$ 589,453,678</u>	37	<u>\$ 487,836,280</u>	<u> </u>		
NET INCOME ATTRIBUTABLE TO: Shareholders of the parent Non-controlling interests	\$ 596,540,013 533,121	38	\$ 517,885,387 <u>272,695</u>	39 		
	<u>\$ 597,073,134</u>	38	<u>\$ 518,158,082</u>	<u> </u>		
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:						
Shareholders of the parent Non-controlling interests	\$ 588,918,059 535,619	37	\$ 487,563,478 <u>272,802</u>	36		
	<u>\$ 589,453,678</u>	<u>37</u>	<u>\$ 487,836,280</u>	<u> 36</u>		
EARNINGS PER SHARE (NT\$, Note 27) Basic earnings per share Diluted earnings per share	<u>\$ 23.01</u> <u>\$ 23.01</u>		<u>\$ 19.97</u> <u>\$ 19.97</u>			

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

(Concluded)

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (In Thousands of New Taiwan Dollars)

	Equity Attributable to Shareholders of the Parent														
						Equity Attribu	table to Sharenoider			Others					
	Capital Stock -	Common Stock			Retained	Earnings		Foreign Currency	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other	Gain (Loss) on	Unearned Stock-Based				
	Shares (In Thousands)	Amount	Capital Surplus	Legal Capital Reserve	Special Capital Reserve	Unappropriated Earnings	Total	Translation Reserve	Comprehensive Income	Hedging Instruments	Employee Compensation	Total	Total	Non-controlling Interests	Total Equity
BALANCE, JANUARY 1, 2020	25,930,380	\$ 259,303,805	\$ 56,339,709	\$ 311,146,899	\$ 10,675,106	\$1,011,512,974	\$1,333,334,979	\$ (26,871,400)	\$ (692,959)	\$ (3,820)	\$ (190)	\$ (27,568,369)	\$1,621,410,124	\$ 685,302	\$1,622,095,426
Appropriations of earnings Special capital reserve Cash dividends to shareholders Total	- 	- 		- 	31,584,040	(31,584,040) (259,303,805) (290,887,845)	(259,303,805) (259,303,805)	- 							(259,303,805) (259,303,805)
Net income in 2020	-	-	-	-	-	517,885,387	517,885,387	-	-	-	-	-	517,885,387	272,695	518,158,082
Other comprehensive income (loss) in 2020, net of income tax						(3,121,793)	(3,121,793)	(30,130,227)	2,906,026	24,085		(27,200,116)	(30,321,909)	107	(30,321,802)
Total comprehensive income (loss) in 2020						514,763,594	514,763,594	(30,130,227)	2,906,026	24,085		(27,200,116)	487,563,478	272,802	487,836,280
Disposal of investments in equity instruments at fair value through other comprehensive income	-	-	-	-	-	(108,687)	(108,687)	-	108,687	-	-	108,687	-	-	-
Basis adjustment for loss on hedging instruments	-	-	-	-	-	-	-	-	-	(20,265)	-	(20,265)	(20,265)	-	(20,265)
Adjustments to share of changes in equities of associates	-	-	292	-	-	-	-	-	-	-	190	190	482	-	482
Donation from shareholders	-	-	7,242	-	-	-	-	-	-	-	-	-	7,242	27	7,269
Increase in non-controlling interests			<u> </u>											6,612	6,612
BALANCE, DECEMBER 31, 2020	25,930,380	259,303,805	56,347,243	311,146,899	42,259,146	1,235,280,036	1,588,686,081	(57,001,627)	2,321,754	-	-	(54,679,873)	1,849,657,256	964,743	1,850,621,999
Appropriations of earnings Special capital reserve Cash dividends to shareholders Total		-			17,045,066	(17,045,066) (278,751,590) (205,706,656)	<u>(278,751,590</u>) (278,751,590)	-	-		-		(278,751,590)		(278,751,590)
Net income in 2021					17,045,066	<u>(295,796,656</u>) 596,540,013	<u> (278,731,390</u>) 596,540,013						<u>(278,751,590</u>) 596,540,013	533,121	<u>(278,751,590</u>) 597,073,134
Other comprehensive income (loss) in 2021, net of income tax	-	-	-	-	-	<u> </u>	167,503	(6,301,734)	- (1,559,790)	- 72,067	-	(7,789,457)	(7,621,954)	2,498	(7,619,456)
Total comprehensive income (loss) in 2021						596,707,516	596,707,516	(6,301,734)	(1,559,790)	72,067		(7,789,457)	588,918,059	535,619	589,453,678
Disposal of investments in equity instruments at fair value through other								(0,501,754)	(1,559,790)			<u>(1,169,451</u>)		555,019	<u> </u>
comprehensive income	-	-	-	-	-	187,654	187,654	-	(187,654)	-	-	(187,654)	-	-	-
Basis adjustment for gain on hedging instruments	-	-	-	-	-	-	-	-	-	48,469	-	48,469	48,469	-	48,469
Adjustments to share of changes in equities of associates	-	-	4,796	-	-	-	-	-	-	-	-	-	4,796	-	4,796
From difference between the consideration received and the carrying amount of the subsidiaries' net assets during actual disposal	-	-	8,406,282	-	-	-	-	-	-	-	-	-	8,406,282	1,045,516	9,451,798
From share of changes in equities of subsidiaries	-	-	(7,891)	-	-	-	-	-	-	-	-	-	(7,891)	7,891	-
Donation from shareholders	-	-	11,172	-	-	-	-	-	-	-	-	-	11,172	110	11,282
Decrease in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	-	(107,382)	(107,382)
Effect of acquisition of subsidiary														155	155
BALANCE, DECEMBER 31, 2021	25,930,380	<u>\$ 259,303,805</u>	<u>\$ 64,761,602</u>	<u>\$ 311,146,899</u>	<u>\$ 59,304,212</u>	<u>\$1,536,378,550</u>	<u>\$1,906,829,661</u>	<u>\$ (63,303,361</u>)	<u>\$ 574,310</u>	<u>\$ 120,536</u>	<u>\$</u>	<u>\$ (62,608,515</u>)	<u>\$2,168,286,553</u>	<u>\$ 2,446,652</u>	<u>\$2,170,733,205</u>

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

CONSOLIDATED STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars)

		2021		2020
CASH FLOWS FROM OPERATING ACTIVITIES				
Income before income tax	\$	663,126,314	\$	584,777,180
Adjustments for:	Ŧ		+	
Depreciation expense		414,187,700		324,538,443
Amortization expense		8,207,169		7,186,248
Expected credit losses recognized (reversal) on investments in debt				
instruments		(2,735)		3,672
Finance costs		5,414,218		2,081,455
Share of profits of associates		(5,603,084)		(3,592,818)
Interest income		(5,708,765)		(9,018,400)
Share-based compensation		7,788		6,612
Loss (gain) on disposal or retirement of property, plant and				
equipment, net		273,627		(188,863)
Loss on disposal or retirement of intangible assets, net		1,228		599
Impairment loss on property, plant and equipment		274,388		10,159
Gain on financial instruments at fair value through profit or loss, net		-		(3,005)
Gain on disposal of investments in debt instruments at fair value				
through other comprehensive income, net		(93,229)		(1,439,420)
Gain on foreign exchange, net		(16,115,936)		(1,372,610)
Dividend income		(362,310)		(637,575)
Others		(414,219)		13,554
Changes in operating assets and liabilities:				
Financial instruments at fair value through profit or loss		2,649,244		(2,965,270)
Notes and accounts receivable, net		(52,105,823)		(8,082,708)
Receivables from related parties		(157,193)		303,939
Other receivables from related parties		(10,886)		7,588
Inventories		(55,748,914)		(54,372,211)
Other financial assets		(8,236,897)		1,389,493
Other current assets		(3,899,043)		(1,358,129)
Accounts payable		8,298,319		404,607
Payables to related parties		(670,532)		672,818
Salary and bonus payable		3,730,859		3,798,888
Accrued profit sharing bonus to employees and compensation to				
directors and supervisors		843,695		12,032,143
Accrued expenses and other current liabilities		84,322,721		20,617,359
Other noncurrent liabilities		154,085,985		-
Net defined benefit liability	1	(635,116)	—	(785,171)
Cash generated from operations	1	,195,658,573		874,028,577
Income taxes paid		(83,497,851)	—	(51,362,365)
Not each concreted by enousting activities	1	112 160 722		000 666 010
Net cash generated by operating activities	_1	,112,160,722		822,666,212 (Continued)
				(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars)

	2021	2020
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisitions of:		
Financial assets at fair value through other comprehensive income	\$ (255,888,679)	\$ (262,637,496)
Financial assets at amortized cost	(3,799,737)	(4,302,770)
Property, plant and equipment	(839,195,708)	(507,238,722)
Intangible assets	(9,040,751)	(9,542,387)
Proceeds from disposal or redemption of:		
Financial instruments at fair value through profit or loss - debt		20.040
instruments	-	30,049
Financial assets at fair value through other comprehensive income	254,604,537	266,931,916
Financial assets at amortized cost	9,368,275	285,210
Property, plant and equipment Property from return of conital of investments in equity instruments at	390,364	606,732
Proceeds from return of capital of investments in equity instruments at fair value through other comprehensive income	115,627	51,052
Derecognition of hedging financial instruments	276,261	(308,776)
Interest received	5,990,948	9,775,120
Proceeds from government grants - property, plant and equipment	821,312	1,044,327
Proceeds from government grants - others	6,605	25,369
Other dividends received	362,310	735,081
Dividends received from investments accounted for using equity	002,010	,00,001
method	2,136,426	2,752,043
Increase in prepayments for leases	(1,200,000)	(4,693,416)
Refundable deposits paid	(1,997,337)	(726,883)
Refundable deposits refunded	683,684	1,431,837
Net cash used in investing activities	(836,365,863)	(505,781,714)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase (decrease) in short-term loans	35,668,397	(31,571,567)
Proceeds from short-term bills payable	-	7,485,303
Repayments of short-term bills payable	-	(7,500,000)
Proceeds from issuance of bonds	364,592,792	236,725,675
Repayment of bonds	(2,600,000)	(31,800,000)
Proceeds from long-term bank loans	1,510,000	2,000,000
Payments for transaction costs attributable to the issuance of bonds	(737,724)	(390,730)
Repayment of the principal portion of lease liabilities	(1,985,338)	(2,615,708)
Interest paid	(3,833,633)	(1,781,097)
Guarantee deposits received	469,041	145,633
Guarantee deposits refunded	(36,763)	(16,060)
Cash dividends	(265,786,399)	(259,303,805)
Disposal of ownership interests in subsidiaries (without losing control)	9,451,798	-
Donation from shareholders	11,282	7,269
Decrease in non-controlling interests	(115,015)	
Net cash generated by (used in) financing activities	136,608,438	(88,615,087)
	<u></u>	(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars)

	2021	2020
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	<u>\$ (7,583,752</u>)	<u>\$ (23,498,100</u>)
NET INCREASE IN CASH AND CASH EQUIVALENTS	404,819,545	204,771,311
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	660,170,647	455,399,336
CASH AND CASH EQUIVALENTS, END OF YEAR	<u>\$1,064,990,192</u>	<u>\$ 660,170,647</u>

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

1. GENERAL

Taiwan Semiconductor Manufacturing Company Limited (TSMC), a Republic of China (R.O.C.) corporation, was incorporated on February 21, 1987. TSMC is a dedicated foundry in the semiconductor industry which engages mainly in the manufacturing, sales, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing of masks.

On September 5, 1994, TSMC's shares were listed on the Taiwan Stock Exchange (TWSE). On October 8, 1997, TSMC listed some of its shares of stock on the New York Stock Exchange (NYSE) in the form of American Depositary Shares (ADSs).

The address of its registered office and principal place of business is No. 8, Li-Hsin Rd. 6, Hsinchu Science Park, Taiwan. The principal operating activities of TSMC's subsidiaries are described in Note 4.

2. THE AUTHORIZATION OF FINANCIAL STATEMENTS

The accompanying consolidated financial statements were approved and authorized for issue by the Board of Directors on February 15, 2022.

3. APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS

a. Initial application of the amendments to the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) (collectively, "IFRSs") endorsed and issued into effect by the Financial Supervisory Commission (FSC)

The initial application of the amendments to the IFRSs endorsed and issued into effect by the FSC did not have a significant effect on the accounting policies of TSMC and its subsidiaries (collectively as the "Company").

b. Amendments to the IFRSs issued by International Accounting Standards Board (IASB) and endorsed by the FSC with effective date starting 2022

New, Revised or Amended Standards and Interpretations	Effective Date Issued by IASB
Annual Improvements to IFRS Standards 2018 - 2020 Cycle	January 1, 2022
Amendments to IFRS 3 "Reference to the Conceptual Framework"	January 1, 2022
Amendments to IAS 16 "Property, Plant and Equipment - Proceeds before Intended Use"	January 1, 2022
Amendments to IAS 37 "Onerous Contracts-Cost of Fulfilling a Contract"	January 1, 2022

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

New, Revised or Amended Standards and Interpretations	Effective Date Issued by IASB
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets	To be determined by IASB
between an Investor and its Associate or Joint Venture"	-
Amendments to IAS 1 "Classification of Liabilities as Current or Non-	January 1, 2023
current"	
Amendments to IAS 1 "Disclosure of Accounting Policies"	January 1, 2023
Amendments to IAS 8 "Definition of Accounting Estimates"	January 1, 2023
Amendments to IAS 12 "Deferred Tax related to Assets and	January 1, 2023
Liabilities arising from a Single Transaction"	

As of the date the accompanying consolidated financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance from the initial adoption of the aforementioned standards or interpretations and related applicable period. The related impact will be disclosed when the Company completes its evaluation.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

Statement of Compliance

The accompanying consolidated financial statements have been prepared in conformity with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed by the FSC with the effective dates (collectively, "Taiwan-IFRSs").

Basis of Preparation

The accompanying consolidated financial statements have been prepared on the historical cost basis except for financial instruments that are measured at fair values, as explained in the accounting policies below. Historical cost is generally based on the fair value of the consideration given in exchange for the assets.

Basis of Consolidation

The basis for the consolidated financial statements

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

Income and expenses of subsidiaries acquired or disposed of are included in the consolidated statement of comprehensive income from the effective date of acquisition and up to the effective date of disposal, as appropriate. Total comprehensive income of subsidiaries is attributed to the shareholders of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

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 on consolidation.

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

When the Company loses control of a subsidiary, a gain or loss is recognized in profit or loss and is calculated as the difference between:

- a. the aggregate of the fair value of consideration received and the fair value of any retained interest at the date when control is lost; and
- b. the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interest.

The Company shall account for all amounts recognized in other comprehensive income in relation to the subsidiary on the same basis as would be required if the Company had directly disposed of the related assets and liabilities.

The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the cost on initial recognition of an investment in an associate.

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The subsidiaries in the consolidated financial statements

The detail information of the subsidiaries at the end of reporting period was as follows:

			Establishment	Percentage of		
			and Operating	December 31,	December 31,	
Name of Investor	Name of Investee	Main Businesses and Products	Location	2021	2020	Note
TSMC	TSMC North America	Sales and marketing of integrated circuits and other semiconductor devices	San Jose, California, U.S.A.	100%	100%	-
	TSMC Europe B.V. (TSMC Europe)	Customer service and supporting activities	Amsterdam, the Netherlands	100%	100%	a)
	TSMC Japan Limited (TSMC Japan)	Customer service and supporting activities	Yokohama, Japan	100%	100%	a)
	TSMC Design Technology Japan, Inc. (TSMC JDC)	Engineering support activities	Yokohama, Japan	100%	100%	a)
	TSMC Japan 3DIC R&D Center, Inc. (TSMC 3DIC)	Engineering support activities	Yokohama, Japan	100%	-	a), b)
	TSMC Korea Limited (TSMC Korea)	Customer service and supporting activities	Seoul, Korea	100%	100%	a)
	TSMC Partners, Ltd. (TSMC Partners)	Investing in companies involved in the semiconductor design and manufacturing, and other investment activities	Tortola, British Virgin Islands	100%	100%	a)
	TSMC Global, Ltd. (TSMC Global)	Investment activities	Tortola, British Virgin Islands	100%	100%	-
	TSMC China Company Limited (TSMC China)	Manufacturing, sales, testing and computer-aided design of integrated circuits and other semiconductor devices	Shanghai, China	100%	100%	-
	TSMC Nanjing Company Limited (TSMC Nanjing)	Manufacturing, sales, testing and computer-aided design of integrated circuits and other semiconductor devices	Nanjing, China	100%	100%	-
	VisEra Technologies Company Ltd. (VisEra Tech)	Research, design, development, manufacturing, sales, packaging and test of color filter	Hsin-Chu, Taiwan	73%	87%	c)
	TSMC Arizona Corporation (TSMC Arizona)	Manufacturing, sales and testing of integrated circuits and other semiconductor devices	Phoenix, Arizona, U.S.A.	100%	100%	d)
	Japan Advanced Semiconductor Manufacturing, Inc. (JASM)	Manufacturing, sales, testing and computer aided design of integrated circuits and other semiconductor devices	Kumamoto, Japan	100%	-	a), e)
	VentureTech Alliance Fund II, L.P. (VTAF II)	Investing in technology start-up companies	Cayman Islands	98%	98%	a)
	VentureTech Alliance Fund III, L.P. (VTAF III)	Investing in technology start-up companies	Cayman Islands	98%	98%	a)
	Emerging Fund L.P. (Emerging Fund)	Investing in technology start-up companies	Cayman Islands	99.9%	-	a), f)
	·	-			(Co	ntinued)

			Establishment	Percentage o				
Name of Investor	Name of Investee	Main Businesses and Products	and Operating Location	December 31, 2021	December 31, 2020	Note		
TSMC Partners	TSMC Development, Inc. (TSMC Development)	Investing in companies involved in semiconductor manufacturing	Delaware, U.S.A.	100%	100%	-		
	TSMC Technology, Inc. (TSMC Technology)	Engineering support activities	Delaware, U.S.A.	100%	100%	a)		
	TSMC Design Technology Canada Inc. (TSMC Canada)	Engineering support activities	Ontario, Canada	100%	100%	a)		
TSMC Development	WaferTech, LLC (WaferTech)	Manufacturing, sales and testing of integrated circuits and other semiconductor devices	Washington, U.S.A.	100%	100%	-		
VTAF III	Growth Fund Limited (Growth Fund)	Investing in technology start-up companies	Cayman Islands	100%	100%	a)		
(Concluded)								

Note a: This is an immaterial subsidiary for which the consolidated financial statements are not audited by the Company's independent auditors.

Note b: TSMC 3DIC is established in March 2021.

Note c: To facilitate VisEra's IPO in Taiwan, 39,501 thousand common shares of VisEra at a price of NT\$240 were sold by TSMC and an increase of NT\$8,406,282 thousand in capital surplus was recognized. TSMC's shareholding in VisEra decreased from 87% to 73%. This disposal was accounted for as an equity transaction since the transaction did not change TSMC's control over VisEra.

Note d: Under the terms of the development agreement entered into between TSMC Arizona and the City of Phoenix, the City of Phoenix commits approximately US\$205 million toward various public infrastructure projects in the area of the proposed manufacturing facility, conditioned on TSMC Arizona's achieving a minimum project scale with defined spending and job-creation thresholds.

Note e: JASM is established in December 2021 and has increased its capital in January 2022. After the increase in capital, TSMC's shareholding in JASM decreased from 100% to 81%. This transaction was accounted for as an equity transaction since the transaction did not change TSMC's control over JASM.

Note f: Emerging fund is established in January 2021.

Foreign Currencies

The financial statements of each individual consolidated entity were expressed in the currency which reflected its primary economic environment (functional currency). The functional currency of TSMC and presentation currency of the consolidated financial statements are both New Taiwan Dollars (NT\$). In preparing the consolidated financial statements, the operating results and financial positions of each consolidated entity are translated into NT\$.

In preparing the financial statements of each individual consolidated entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Such exchange differences are recognized in profit or loss in the year in which they arise. Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising on the retranslation of non-monetary items are included in profit or loss for the year except for exchange differences arising on the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which case, the exchange differences are also recognized directly in other comprehensive income. Non-monetary items that are measured in terms of historical cost in foreign currencies are not retranslated.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Company's foreign operations are translated into NT\$ using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

Classification of Current and Noncurrent Assets and Liabilities

Current assets are assets held for trading purposes and assets expected to be converted to cash, sold or consumed within one year from the end of the reporting period. Current liabilities are obligations incurred for trading purposes and obligations expected to be settled within one year from the end of the reporting period. Assets and liabilities that are not classified as current are noncurrent assets and liabilities, respectively.

Cash Equivalents

Cash equivalents, for the purpose of meeting short-term cash commitments, consist of highly liquid time deposits and investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Financial Instruments

Financial assets and liabilities shall be recognized when the Company becomes a party to the contractual provisions of the instruments.

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

Financial Assets

The classification of financial assets depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. Regular way purchases or sales of financial assets are recognized and derecognized on a trade date or settlement date basis for which financial assets were classified in the same way, respectively. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

a. Category of financial assets and measurement

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

1) Financial asset at FVTPL

For certain financial assets which include debt instruments that do not meet the criteria of amortized cost or FVTOCI, it is mandatorily required to measure them at FVTPL. Any gain or loss arising from remeasurement is recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any interest earned on the financial asset.

2) Investments in debt instruments at FVTOCI

Debt instruments with contractual terms specifying that cash flows are solely payments of principal and interest on the principal amount outstanding, together with objective of collecting contractual cash flows and selling the financial assets, are measured at FVTOCI.

Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment gains or losses on investments in debt instruments at FVTOCI 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 these debt instruments are disposed.

3) Investments in equity instruments at FVTOCI

On initial recognition, the Company may irrevocably designate investments in equity investments that is not held for trading as at FVTOCI.

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.

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

4) Measured at amortized cost

Cash and cash equivalents, debt instrument investments, notes and accounts receivable (including related parties), other receivables and refundable deposits are measured at amortized cost.

Debt instruments with contractual terms specifying that cash flows are solely payments of principal and interest on the principal amount outstanding, together with objective of holding financial assets in order to collect contractual cash flows, are measured at amortized cost.

Subsequent to initial recognition, financial assets measured at amortized cost are measured at amortized cost, which equals to carrying amount determined by the effective interest method less any impairment loss.

b. Impairment of financial assets

At the end of each reporting period, a loss allowance for expected credit loss is recognized for financial assets at amortized cost (including accounts receivable) and for investments in debt instruments that are measured at FVTOCI.

The loss allowance for accounts receivable is measured at an amount equal to lifetime expected credit losses. For financial assets at amortized cost and investments in debt instruments that are measured at FVTOCI, when the credit risk on the financial instrument has not increased significantly since initial recognition, a loss allowance is recognized at an amount equal to expected credit loss resulting from possible default events of a financial instrument within 12 months after the reporting date. If, on the other hand, there has been a significant increase in credit risk since initial recognition, a loss allowance is recognized at an amount equal to expected credit loss resulting from the expected at an amount equal to expected credit loss resulting from all possible default events over the expected life of a financial instrument.

The Company recognizes an impairment 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 Company derecognizes a financial asset only when the contractual rights to the cash flows from the financial asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the financial 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 that had been recognized in other comprehensive income is recognized in profit or loss. However, on derecognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

Financial Liabilities and Equity Instruments

Classification as debt or equity

Debt and equity instruments issued by the Company 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

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Financial liabilities

Financial liabilities are subsequently measured either at amortized cost using effective interest method or at FVTPL.

Financial liabilities are classified as at fair value through profit or loss when the financial liability is either held for trading or is designated as at fair value through profit or loss.

Financial liabilities at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

Financial liabilities other than those held for trading purposes and designated as at FVTPL are subsequently measured at amortized cost at the end of each reporting period.

Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

Derivative Financial Instruments

Derivative financial instruments are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative financial instrument 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 hedge relationship.

Hedge Accounting

a. Fair value hedge

The Company designates certain hedging instruments, such as interest rate futures contracts, to partially hedge against the fair value change caused by interest rates fluctuation in the Company's fixed income investments. Changes in the fair value of 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 items that are attributable to the hedged risk.

b. Cash flow hedge

The Company designates certain hedging instruments, such as forward contracts, to partially hedge its foreign exchange rate risks or interest rate risks associated with certain highly probable forecast transactions (capital expenditures or issuance of debts). The effective portion of changes in the fair value of hedging instruments is recognized in other comprehensive income. When forecast transactions actually take place, the accumulated gains or losses that were recognized in other comprehensive income are removed from equity and included in the initial cost of the hedged items, or reclassified to finance costs of hedged items in the same period or periods during which the hedged expected future cash flows affect profit or loss. The gains or losses from hedging instruments relating to the ineffective portion are recognized immediately in profit or loss.

The Company prospectively 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.

Inventories

Inventories are stated at the lower of cost or net realizable value. Inventories are recorded at standard cost and adjusted to approximate weighted-average cost at the end of the reporting period. Net realizable value represents the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale.

Investments Accounted for Using Equity Method

Investments accounted for using the equity method are investments in associates.

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The operating results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. Under the equity method, an investment in an associate is initially recognized in the consolidated statements of financial position at cost and adjusted thereafter to recognize the Company's share of profit or loss and other comprehensive income of the associate as well as the distribution received. The Company also recognizes its share in the changes in the equities of associates.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Company's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment loss recognized 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.

When the Company subscribes to additional shares in an associate at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company's proportionate interest in the net assets of the associate. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus. If the Company's ownership interest is reduced due to the additional subscription to the shares of associate by other investors, the proportionate amount of the gains or losses previously recognized in other comprehensive

income in relation to that associate shall be reclassified to profit or loss on the same basis as would be required if the associate had directly disposed of the related assets or liabilities.

When a consolidated entity transacts with an associate, profits and losses resulting from the transactions with the associate are recognized in the Company's consolidated financial statements only to the extent of interests in the associate that are not owned by the Company.

Property, Plant and Equipment

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment. Costs include any incremental costs that are directly attributable to the construction, acquisition of the item of property, plant and equipment or borrowing costs eligible for capitalization.

Property, plant and equipment in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Such assets are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other identical categories of property, plant and equipment, commences when the assets are available for their intended use.

Depreciation is recognized so as to write off the cost of the assets less their residual values over their useful lives, and it is computed using the straight-line method mainly over the following estimated useful lives: land improvements - 20 years; buildings (assets used by the Company and assets subject to operating leases) - 10 to 20 years; machinery and equipment (assets used by the Company and assets subject to operating leases) - 5 years; and office equipment - 5 years. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis. Land is not depreciated.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the assets. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

Leases

For a contract that contains a lease component and non-lease component, the Company may elect to account for the lease and non-lease components as a single lease component.

The Company as lessor

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

The Company as lessee

Except for payments for low-value asset leases and short-term leases (leases of machinery and equipment and others) which are recognized as expenses on a straight-line basis, the Company recognizes right-of-use assets and lease liabilities for all leases at the commencement date of the lease.

Right-of-use assets are measured at cost. The cost of right-of-use assets comprises the initial measurement of lease liabilities adjusted for lease payments and initial direct costs made at or before the commencement date, plus an estimate of costs needed to restore the underlying assets. Subsequent measurement is calculated as cost less accumulated depreciation and accumulated impairment loss and adjusted for changes in lease liabilities as a result of lease term modifications or other related factors. Right-of-use assets are presented separately in the consolidated balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms. If the lease transfers ownership of the underlying assets to the Company by the end of the lease terms or if the cost of right-of-use assets reflects that the Company will exercise a purchase option, the Company depreciates the right-of-use assets from the commencement dates to the end of the useful lives of the underlying assets.

Lease liabilities are measured at the present value of the lease payments. Lease payments comprise fixed payments, variable lease payments which depend on an index or a rate and the exercise price of a purchase option if the Company is reasonably certain to exercise that option. The lease payments are discounted using the lessee's incremental borrowing rates.

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 future lease payments resulting from a change in an index or a rate used to determine those payments, or a change in the assessment of an option to purchase an underlying asset, the Company remeasures the lease liabilities with a corresponding adjustment to the right-of-use assets. Lease liabilities are presented on a separate line in the consolidated balance sheets.

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.

Intangible Assets

Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment losses, if any.

Other intangible assets

Other separately acquired intangible assets with finite useful lives are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized using the straight-line method over the following estimated useful lives: Technology license fees - the estimated life of the technology or the term of the technology transfer contract; software and system design costs - 3 years or contract period; patent and others - the economic life or contract period. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Impairment of Tangible Assets, Right-of-use Assets and Intangible Assets

Goodwill

Goodwill is not amortized and instead is tested for impairment annually, or more frequently when there is an indication that the cash generating unit may be impaired. For the purpose of impairment testing, goodwill is allocated to each of the Company's cash-generating units or groups of cash-generating units that are expected to benefit from the synergies of the combination. If the recoverable amount of a cash-generating unit is less than its carrying amount, the difference is allocated first to reduce the carrying amount of any goodwill allocated to such cash generating unit and then to the other assets of the cash generating unit pro rata based on the carrying amount of each asset in the cash generating unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

Tangible assets, right-of-use assets and other intangible assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible assets (property, plant and equipment), right-of-use assets and other intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

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. An impairment loss is recognized immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset or a cash-generating unit is increased to the revised estimate of its recoverable amount, but the increased carrying amount does not exceed 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.

Revenue Recognition

The Company recognizes revenue when performance obligations are satisfied. The performance obligations are satisfied when customers obtain control of the promised goods, which is generally when the goods are delivered to the customers' specified locations.

Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. Estimated sales returns and other allowances is generally made and adjusted based on historical experience and the consideration of varying contractual terms to recognize refund liabilities, which is classified under accrued expenses and other current liabilities.

In principle, payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued. Due to the short term nature of the receivables from sale of goods with the immaterial discounted effect, the Company measures them at the original invoice amounts without discounting.

Employee Benefits

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 service rendered by employees.

Retirement benefits

For defined contribution retirement benefit plans, payments to the benefit plan are recognized as an expense when the employees have rendered service entitling them to the contribution. For defined benefit retirement benefit plans, the cost of providing benefit is recognized based on actuarial calculations.

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 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 represents the actual deficit in the Company's defined benefit plan.

Taxation

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

Current tax

Income tax on unappropriated earnings (excluding earnings from foreign consolidated subsidiaries) is expensed in the year the shareholders approved the appropriation of earnings which is the year subsequent to the year the earnings are generated.

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

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. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, net operating loss carryforwards and tax credits for research and development expenses 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 Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered. The deferred tax assets which originally not recognized is also reviewed at the end of each reporting period and recognized to the extent that it is probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered.

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

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.

Government Grants

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

Government grants whose primary condition is that the Company should purchase, construct or otherwise acquire noncurrent assets (mainly including land use right and depreciable assets) are recognized as a deduction from the carrying amount of the related assets and recognized as a reduced depreciation or amortization charge in profit or loss over the contract period or useful lives of the related assets. Government grants that are receivables as compensation for expenses already incurred are deducted from incurred expenses in the period in which they become receivables.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION AND UNCERTAINTY

The Company has considered the economic implications of COVID-19 on critical accounting estimates and will continue evaluating the impact on its financial position and financial performance as a result of the pandemic.

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

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimate is revised if the revision affects only that year, or in the year of the revision and future years if the revision affects both current and future years.

Critical Accounting Judgments

Revenue Recognition

The Company recognizes revenue when the conditions described in Note 4 are satisfied.

Commencement of Depreciation Related to Property, Plant and Equipment Classified as Equipment under Installation and Construction in Progress (EUI/CIP)

As described in Note 4, commencement of depreciation related to EUI/CIP involves determining when the assets are available for their intended use. The criteria the Company uses to determine whether EUI/CIP are available for their intended use involves subjective judgments and assumptions about the conditions necessary for the assets to be capable of operating in the intended manner.

Judgments on Lease Terms

In determining a lease term, the Company considers all facts and circumstances that create an economic incentive to exercise or not to exercise an option, including any expected changes in facts and circumstances from the commencement date until the exercise date of the option. Main factors considered include contractual terms and conditions covered by the optional periods, and the importance of the underlying asset to the lessee's operations, etc. The lease term is reassessed if a significant change in circumstances that are within the control of the Company occurs.

Key Sources of Estimation and Uncertainty

Estimation of Sales Returns and Allowances

Sales returns and other allowance is estimated and recorded based on historical experience and in consideration of different contractual terms. The amount is deducted from revenue in the same period the related revenue is recorded. The Company periodically reviews the reasonableness of the estimates.

Valuation of Inventory

Inventories are stated at the lower of cost or net realizable value, and the Company uses estimate to determine the net realizable value of inventory at the end of each reporting period.

The Company estimates the net realizable value of inventory for normal waste, obsolescence and unmarketable items at the end of reporting period and then writes down the cost of inventories to net realizable value. The net realizable value of the inventory is determined mainly based on assumptions of future demand within a specific time horizon.

Impairment of Tangible Assets, Right-of-use Assets and Intangible Assets Other than Goodwill

In the process of evaluating the potential impairment of tangible assets, right-of-use assets and intangible assets other than goodwill, the Company determines the independent cash flows, useful lives, expected future revenue and expenses related to the specific asset groups with the consideration of the nature of semiconductor industry. Any change in these estimates based on changed economic conditions or business strategies could result in significant impairment charges or reversal in future years.

Realization of Deferred Income Tax Assets

Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which those deferred tax assets can be utilized. Assessment of the realization of the deferred tax assets requires subjective judgment and estimate, including the future revenue growth and profitability, tax holidays, the amount of tax credits can be utilized and feasible tax planning strategies. Any changes in the global economic environment, the industry trends and relevant laws and regulations could result in significant adjustments to the deferred tax assets.

Determination of Lessees' Incremental Borrowing Rates

In determining a lessee's incremental borrowing rate used in discounting lease payments, the Company mainly takes into account the market risk-free rates, the estimated lessee's credit spreads and secured status in a similar economic environment.

6. CASH AND CASH EQUIVALENTS

	December 31, 2021	December 31, 2020
Cash and deposits in banks Repurchase agreements Government bonds Commercial paper	\$1,058,808,104 5,275,345 906,743	\$ 653,580,548 1,750,443 3,716,119 1,123,537
	<u>\$1,064,990,192</u>	<u>\$ 660,170,647</u>

Deposits in banks consisted of highly liquid time deposits that were readily convertible to known amounts of cash and were subject to an insignificant risk of changes in value.

7. FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31, 2021	December 31, 2020
Financial assets		
Mandatorily measured at FVTPL Forward exchange contracts	<u>\$ 159,048</u>	<u>\$ 2,259,412</u>
Financial liabilities		
Held for trading Forward exchange contracts	<u>\$ 681,914</u>	<u>\$ 94,128</u>

The Company entered into forward exchange contracts to manage exposures due to fluctuations of foreign exchange rates. These forward exchange contracts did not meet the criteria for hedge accounting. Therefore, the Company did not apply hedge accounting treatment for these forward exchange contracts.

Outstanding forward exchange contracts consisted of the following:

	Maturity Date	Contract Amount (In Thousands)
December 31, 2021		
Sell NT\$ Sell US\$	January 2022 to March 2022 January 2022 to March 2022	NT\$ 132,734,482 US\$ 2,009,148
December 31, 2020		
Sell NT\$ Sell US\$	January 2021 to March 2021 January 2021 to March 2021	NT\$ 144,697,981 US\$ 1,176,858

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	December 31, 2021	December 31, 2020
Investments in debt instruments at FVTOCI Corporate bonds Agency bonds/Agency mortgage-backed securities Government bonds Asset-backed securities	\$ 57,253,161 32,070,114 21,345,794 <u>8,660,424</u> <u>119,329,493</u>	\$ 56,593,623 43,977,113 13,459,503 <u>8,368,264</u> 122,398,503
Investments in equity instruments at FVTOCI Non-publicly traded equity investments Publicly traded stocks	5,887,892 <u>189,758</u> <u>6,077,650</u> <u>\$ 125,407,143</u>	4,514,940 49,950 4,564,890 <u>\$ 126,963,393</u> (Continued)

	December 31, 2021	December 31, 2020
Current Noncurrent	\$ 119,519,251 5,887,892	\$ 122,448,453 <u>4,514,940</u>
	<u>\$ 125,407,143</u>	<u>\$ 126,963,393</u> (Concluded)

These investments in equity instruments are held for medium to long-term purposes and therefore are accounted for as FVTOCI. For dividends recognized from these investments, please refer to consolidated statements of cash flows. All of the dividends are from investments held at the end of the reporting period.

For the years ended December 31, 2021 and 2020, as non-publicly traded investees were acquired and the Company adjusted its investment portfolio, equity investments designated at FVTOCI were divested for NT\$628,711 thousand and NT\$8 thousand, respectively. The related other equity-unrealized gain/loss on financial assets at FVTOCI of NT\$185,993 thousand and NT\$108,996 thousand were transferred to increase and decrease retained earnings, respectively.

As of December 31, 2021 and 2020, the cumulative loss allowance for expected credit loss of NT\$33,209 thousand and NT\$32,480 thousand was recognized under investments in debt instruments at FVTOCI, respectively. Refer to Note 32 for information relating to the credit risk management and expected credit loss.

9. FINANCIAL ASSETS AT AMORTIZED COST

	December 31, 2021	December 31, 2020
Corporate bonds Less: Allowance for impairment loss	\$ 5,310,039 (3,077)	\$ 10,977,298 (7,099)
	<u>\$ 5,306,962</u>	<u>\$ 10,970,199</u>
Current Noncurrent	\$ 3,773,571 <u>1,533,391</u>	\$ 6,597,992 4,372,207
	<u>\$ 5,306,962</u>	<u>\$ 10,970,199</u>

Refer to Note 32 for information relating to credit risk management and expected credit loss for financial assets at amortized cost.

10. HEDGING FINANCIAL INSTRUMENTS

	December 31, 2021	December 31, 2020
Financial assets- current		
Fair value hedges		
Interest rate futures contracts	\$ -	\$ 47
Cash flow hedges		
Forward interest rate contracts	13,468	
	<u>\$ 13,468</u>	<u>\$ 47</u>
		(Continued)

	December 31, 2021	December 31, 2020
Financial liabilities- current		
Fair value hedges Interest rate futures contracts	<u>\$ 9,642</u>	<u>\$ 1,169</u> (Concluded)

Fair value hedge

The Company entered into interest rate futures contracts, which are used to partially hedge against the fair value changes caused by interest rate fluctuation in the Company's fixed income investments. The hedge ratio is adjusted in response to the changes in the financial market and capped at 100%.

On the basis of economic relationships, the value of the interest rate futures contracts and the value of the hedged financial assets change in opposite directions in response to movements in interest rates.

The main source of hedge ineffectiveness in these hedging relationships is the credit risk of the hedged financial assets, which is not reflected in the fair value of the interest rate futures contracts. No other sources of ineffectiveness emerged from these hedging relationships during the hedging period. Amount of hedge ineffectiveness recognized in profit or loss is classified under other gains and losses, net.

The following tables summarize the information relating to the hedges of interest rate risks.

December 31, 2021

Hedging Instruments	Contract Amount (US\$ in Thousands)	Maturity
Interest rate futures contracts - US Treasury futures	US\$ 53,900	March 2022
Hedged Items	Asset Carrying Amount	Accumulated Amount of Fair Value Hedge Adjustments
Financial assets at FVTOCI	\$ 4,079,274	\$ 9,642
December 31, 2020		
Hedging Instruments	Contract Amount (US\$ in Thousands)	Maturity
Interest rate futures contracts - US Treasury futures	US\$ 88,700	March 2021
		Accumulated Amount of Fair Value Hedge
Hedged Items	Asset Carrying Amount	Adjustments
Financial assets at FVTOCI	\$ 6,198,683	\$ 1,122

The effect for the years ended December 31, 2021 and 2020 is detailed below:

Hedging Instruments/Hedged Items	Increase (Decrease) in Value Used for Calculating Hedge Ineffectiveness Years Ended December 31	
	2021	2020
Hedging Instruments Interest rate futures contracts - US Treasury futures Hedged Items	\$ 148,817	\$ (353,611)
Financial assets at FVTOCI	(148,817)	353,611
	<u>\$</u>	<u>\$</u>

Cash flow hedge

The Company entered into forward contracts to partially hedge foreign exchange rate risks or interest rate risks associated with certain highly probable forecast transactions (capital expenditures or issuance of debts). The hedge ratio is adjusted in response to the changes in the financial market and capped at 100%. The forward contracts have maturities of 12 months or less.

On the basis of economic relationships, the Company expects that the value of forward contracts and the value of hedged transactions will change in opposite directions in response to movements in foreign exchange rates or interest rates.

The main source of hedge ineffectiveness in these hedging relationships is driven by the effect of the counterparty's own credit risk on the fair value of forward contracts. No other sources of ineffectiveness emerged from these hedging relationships. For the years ended December 31, 2021 and 2020, refer to Note 21(d) for gain or loss arising from changes in the fair value of hedging instruments, the amount transferred to initial carrying amount of hedged items and the amount reclassified to finance costs of hedged items.

The following tables summarize the information relating to the hedges of interest rate risks.

December 31, 2021

Hedging Instruments	Contract Amount (In Thousands)	Maturity	Balance in Other Equity (Continuing Hedges)
Forward interest rate contracts	US\$ 328,000	January 2022	\$128,165

The effect for the years ended December 31, 2021 and 2020 is detailed below:

Hedging Instruments/Hedged Items	Increase (Decrease) in Value Used for Calculating Hedge Ineffectiveness Years Ended December 31	
Hedging Instruments		
Forward exchange contracts (capital expenditures)	<u>\$ (41,416</u>)	<u>\$ 24,085</u>
Forward interest rate contracts (issuance of debts)	<u>\$132,508</u>	<u>\$ </u>
		(Continued)

Hedging Instruments/Hedged Items	for Calcula Ineffect	ase) in Value Used ating Hedge ctiveness 1 December 31	
	2021	2020	
Hedged Items Forecast transaction (capital expenditures) Forecast transaction (issuance of debts)	<u>\$ 41,416</u> <u>\$(132,508</u>)	<u>\$ (24,085</u>) <u>\$ -</u> (Concluded)	
11. NOTES AND ACCOUNTS RECEIVABLE, NET			
	December 31,	December 31,	

	2021	2020
At amortized cost		
Notes and accounts receivable	\$ 193,733,220	\$ 142,771,597
Less: Loss allowance	(347,020)	(246,626)
	193,386,200	142,524,971
At FVTOCI	4,199,909	2,955,301
	<u>\$ 197,586,109</u>	<u>\$ 145,480,272</u>

The Company signed a contract with the bank to sell certain accounts receivable without recourse and transaction cost required. These accounts receivable are classified as at FVTOCI because they are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.

In principle, the payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month when the invoice is issued. Aside from recognizing impairment loss for credit-impaired accounts receivable, the Company recognizes loss allowance based on the expected credit loss ratio of customers by different risk levels with consideration of factors of historical loss ratios and customers' financial conditions, competitiveness and business outlook. For accounts receivable past due over 90 days without collaterals or guarantees, the Company recognizes loss allowance at full amount.

Aging analysis of notes and accounts receivable

	December 31, 2021	December 31, 2020
Not past due	\$ 191,740,045	\$ 140,933,622
Past due		
Past due within 30 days	6,186,814	4,784,425
Past due 31-60 days	6,182	8,708
Past due 61-120 days	88	48
Past due over 121 days	-	95
Less: Loss allowance	(347,020)	(246,626)
	<u>\$ 197,586,109</u>	<u>\$ 145,480,272</u>

All of the Company's accounts receivable classified as at FVTOCI were not past due.

Movements of the loss allowance for accounts receivable

	Years Ended December 31		
	2021	2020	
Balance, beginning of year Provision (Reversal) Effect of exchange rate changes	\$ 246,626 100,408 (14)	\$ 325,325 (78,474) (225)	
Balance, end of year	<u>\$ 347,020</u>	<u>\$ 246,626</u>	

For the years ended December 31, 2021 and 2020, the changes in loss allowance were mainly due to the variations in the balance of accounts receivable of different risk levels.

12. INVENTORIES

	December 31, 2021	December 31, 2020
Finished goods Work in process Raw materials Supplies and spare parts	\$ 32,562,750 137,700,402 11,111,122 11,728,047	\$ 21,705,625 91,672,870 14,715,963 9,258,949
	<u>\$ 193,102,321</u>	<u>\$ 137,353,407</u>

Write-down of inventories to net realizable value and reversal of write-down of inventories resulting from the increase in net realizable value were included in the cost of revenue during reporting period. The amounts are illustrated below:

	Years Ended December 31		
	2021	2020	
Inventory losses	<u>\$ 533,034</u>	<u>\$ 3,664,513</u>	

13. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

Associates consisted of the following:

		Place of	Carrying	g Amount		l Voting Rights Held Company
Name of Associate	Principal Activities	Incorporation and Operation	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Vanguard International Semiconductor Corporation (VIS)	Manufacturing, sales, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing and design service of masks	Hsinchu, Taiwan	\$ 10,613,127	\$ 9,029,890	28%	28%
Systems on Silicon Manufacturing Company Pte Ltd. (SSMC)	Manufacturing and sales of integrated circuits and other semiconductor devices	Singapore	6,795,699	5,900,245	39%	39%
Xintec Inc. (Xintec)	Wafer level chip size packaging and wafer level post passivation interconnection service	Taoyuan, Taiwan	3,046,961	2,554,123	41%	41%
Global Unichip Corporation (GUC)	Researching, developing, manufacturing, testing and marketing of integrated circuits	Hsinchu, Taiwan	1,484,683	1,328,620	35%	35%
Mutual-Pak Technology Co., Ltd. (Mutual-Pak)	Manufacturing of electronic parts, wholesaling and retailing of electronic materials, and researching, developing and testing of RFID	New Taipei, Taiwan	22,948	28,183	28%	28%
			<u>\$ 21,963,418</u>	<u>\$ 18,841,061</u>		

As of December 31, 2021 and 2020, no investments in associates are individually material to the Company. Please refer to the consolidated statements of comprehensive income for recognition of share of both profit (loss) and other comprehensive income (loss) of associates that are not individually material.

The market prices of the associates' ownership held by the Company in publicly traded stocks calculated by the closing price at the end of the reporting period are summarized as follows. The closing price represents the quoted price in active markets, the level 1 fair value measurement.

Name of Associate	December 31, 2021	December 31, 2020
VIS	<u>\$ 73,347,312</u>	<u>\$53,849,925</u>
GUC	<u>\$ 27,359,085</u>	<u>\$15,827,184</u>
Xintec	<u>\$ 15,913,315</u>	<u>\$20,420,233</u>

14. PROPERTY, PLANT AND EQUIPMENT

	December 31, 2021	December 31, 2020
Assets used by the Company Assets subject to operating leases	\$1,975,113,974 4,730	\$1,554,585,938 <u>1,003,182</u>
	\$1,975,118,704	\$1,555,589,120

a. Assets used by the Company

	Land and Land Improvements	Buildings	Machinery and Equipment	Office Equipment	Equipment under Installation and Construction in Progress	Total
Cost						
Balance at January 1, 2021 Additions Disposals or retirements Transfers from assets subject	\$ 3,942,625 2,587,183	\$ 522,447,474 53,971,271 (41,143)	\$ 3,607,005,732 401,659,011 (26,192,191)	\$ 68,862,648 7,642,962 (333,385)	\$ 223,965,360 369,545,869 -	\$ 4,426,223,839 835,406,296 (26,566,719)
to operating leases Transfers to assets subject to	-	35,478	1,443,590	-	-	1,479,068
operating leases Effect of exchange rate	-	-	(244,579)	-	-	(244,579)
changes	(41,578)	184,697	1,077,673	(18,055)	(355,496)	847,241
Balance at December 31, 2021	<u>\$ 6,488,230</u>	<u>\$ 576,597,777</u>	<u>\$ 3,984,749,236</u>	<u>\$ 76,154,170</u>	<u>\$ 593,155,733</u>	<u>\$ 5,237,145,146</u>
Accumulated depreciation						
Balance at January 1, 2021 Additions Disposals or retirements Transfers from assets subject	\$ 506,129 1,329	\$ 271,799,471 34,331,645 (36,527)	\$ 2,555,529,969 368,777,680 (22,230,098)	\$ 43,802,332 8,373,282 (332,557)	\$ - - -	\$ 2,871,637,901 411,483,936 (22,599,182)
to operating leases	-	15,066	436,816	-	-	451,882
Transfers to assets subject to operating leases Impairment Effect of exchange rate	-	-	(68,279) 274,388	-	-	(68,279) 274,388
changes	(7,632)	55,587	818,965	(16,394)		850,526
Balance at December 31, 2021	<u>\$ 499,826</u>	<u>\$ 306,165,242</u>	<u>\$ 2,903,539,441</u>	<u>\$ 51,826,663</u>	<u>\$</u>	<u>\$ 3,262,031,172</u>
Carrying amounts at December 31, 2021	<u>\$ 5,988,404</u>	<u>\$ 270,432,535</u>	<u>\$ 1,081,209,795</u>	<u>\$ 24,327,507</u>	<u>\$ 593,155,733</u>	<u>\$1,975,113,974</u> (Continued)

	Land and Land Improvements	Buildings	Machinery and Equipment	Office Equipment	Equipment under Installation and Construction in Progress	Total
Cost						
Balance at January 1, 2020 Additions (deductions) Disposals or retirements Transfers from assets subject	\$ 3,991,798 - -	\$ 438,075,063 84,882,543 (41,568)	\$ 2,886,622,968 729,943,300 (6,397,279)	\$ 54,611,364 15,112,949 (734,129)	\$ 528,295,086 (304,218,044)	\$ 3,911,596,279 525,720,748 (7,172,976)
to operating leases	-	23,142	-	-	-	23,142
Transfers to assets subject to operating leases Effect of exchange rate	-	-	(1,199,011)	-	-	(1,199,011)
changes	(49,173)	(491,706)	(1,964,246)	(127,536)	(111,682)	(2,744,343)
Balance at December 31, 2020	\$ 3,942,625	<u>\$ 522,447,474</u>	\$3,607,005,732	<u>\$ 68,862,648</u>	<u>\$ 223,965,360</u>	<u>\$4,426,223,839</u>
Accumulated depreciation						
Balance at January 1, 2020 Additions Disposals or retirements Transfers from assets subject	\$ 538,690 1,479	\$ 243,059,390 29,209,096 (27,990)	\$ 2,278,265,943 285,393,637 (6,012,942)	\$ 37,418,395 7,216,921 (732,403)	\$ - - -	\$ 2,559,282,418 321,821,133 (6,773,335)
to operating leases	-	8,215	-	-	-	8,215
Transfers to assets subject to operating leases Impairment Effect of exchange rate	-	-	(202,593) 10,159	-	-	(202,593) 10,159
changes	(34,040)	(449,240)	(1,924,235)	(100,581)		(2,508,096)
Balance at December 31, 2020	<u>\$ 506,129</u>	<u>\$ 271,799,471</u>	<u>\$ 2,555,529,969</u>	<u>\$ 43,802,332</u>	<u>\$</u>	<u>\$ 2,871,637,901</u>
Carrying amounts at December 31, 2020	<u>\$ 3,436,496</u>	<u>\$ 250,648,003</u>	<u>\$1,051,475,763</u>	<u>\$ 25,060,316</u>	<u>\$ 223,965,360</u>	<u>\$1,554,585,938</u> (Concluded)

The significant part of the Company's buildings includes main plants, mechanical and electrical power equipment and clean rooms, and the related depreciation is calculated using the estimated useful lives of 20 years, 10 years and 10 years, respectively.

In the first quarter of 2021, the Company recognized an impairment loss of NT\$274,388 thousand for certain machinery and equipment that was assessed to have no future use, and the recoverable amount of certain machinery and equipment was nil. Such impairment loss was recognized in other operating income and expenses.

b. Assets subject to operating leases

Assets subject to operating leases	Buildings	Machinery and Equipment	Total
Cost			
Balance at January 1, 2021 Transfers to assets used by the Company Transfers from assets used by the Company	\$ 227,529 (35,478)	\$ 1,199,011 (1,443,590) <u>244,579</u>	\$ 1,426,540 (1,479,068) <u>244,579</u>
Balance at December 31, 2021	<u>\$ 192,051</u>	<u>\$</u>	<u>\$ 192,051</u>
Accumulated depreciation			
Balance at January 1, 2021 Additions Transfers to assets used by the Company Transfers from assets used by the Company	\$ 201,366 1,021 (15,066)	\$ 221,992 146,545 (436,816) <u>68,279</u>	\$ 423,358 147,566 (451,882) <u>68,279</u>
Balance at December 31, 2021	<u>\$ 187,321</u>	<u>\$</u>	<u>\$ 187,321</u>
Carrying amounts at December 31, 2021	<u>\$ 4,730</u>	<u>\$</u>	<u>\$ 4,730</u> (Continued)

	Buildings	Machinery and Equipment	Total
Cost			
Balance at January 1, 2020 Disposals or retirements Transfers to assets used by the Company Transfers from assets used by the Company	\$ 562,610 (311,939) (23,142)	\$ - - - 1,199,011	\$ 562,610 (311,939) (23,142) <u>1,199,011</u>
Balance at December 31, 2020	<u>\$ 227,529</u>	<u>\$ 1,199,011</u>	<u>\$ 1,426,540</u>
Accumulated depreciation			
Balance at January 1, 2020 Additions Disposals or retirements Transfers to assets used by the Company Transfers from assets used by the Company	\$ 499,066 16,281 (305,766) (8,215)	\$ - 19,399 - 202,593	\$ 499,066 35,680 (305,766) (8,215) 202,593
Balance at December 31, 2020	<u>\$ 201,366</u>	<u>\$ 221,992</u>	<u>\$ 423,358</u>
Carrying amounts at December 31, 2020	<u>\$ 26,163</u>	<u>\$ 977,019</u>	<u>\$ 1,003,182</u> (Concluded)

Operating leases relate to leases of buildings and leases of machinery and equipment with lease terms ranging between approximately 1 to 5 years. The lessees do not have purchase options to acquire the assets at the expiration of the lease periods.

The maturity analysis of operating lease payments receivable from the buildings and machinery and equipment is as follows:

	December 31, 2021	December 31, 2020
Year 1 Year 2	\$ 17,978	\$ 149,120 <u>16,992</u>
	<u>\$ 17,978</u>	<u>\$ 166,112</u>

15. LEASE ARRANGEMENTS

a. Right-of-use assets

	December 31, 2021	December 31, 2020
Carrying amounts		
Land Buildings Machinery and equipment Office equipment	\$ 29,778,636 2,918,133 3,474 <u>34,294</u>	\$ 25,141,908 2,544,742 41,732
	<u>\$ 32,734,537</u>	<u>\$ 27,728,382</u>

	Years Ended December 31			
	2021	2020		
Additions to right-of-use assets	<u>\$ 7,769,782</u>	<u>\$ 13,481,172</u>		
Depreciation of right-of-use assets Land Buildings Machinery and equipment Office equipment	\$ 1,825,712 707,856 539 22,091 \$ 2,556,198	\$ 1,312,888 569,531 775,809 23,402 \$ 2,681,630		
Income from subleasing right-of-use assets (classified under other operating income and expenses, net)	<u>\$ 82,031</u>	<u>\$ 79,624</u>		
b. Lease liabilities				
	December 31, 2021	December 31, 2020		
Carrying amounts				
Current portion (classified under accrued expenses and other current liabilities) Noncurrent portion	\$ 2,176,451 20,764,214 \$ 22,940,665	\$ 1,828,025 20,560,649 \$ 22,388,674		
Ranges of discount rates for lease liabilities are as follows:				
	December 31, 2021	December 31, 2020		
Land Buildings Machinery and equipment Office equipment	0.39%-2.14% 0.39%-3.88% 0.71% 0.28%-3.88%	0.48%-2.14% 0.54%-3.88% - 0.28%-3.88%		

c. Material terms of right-of-use assets

The Company leases land and buildings mainly for the use of plants and offices with lease terms of 1 to 36 years. The lease contracts for land located in the R.O.C. specify that lease payments will be adjusted every 2 years on the basis of changes in announced land value prices. The Company does not have purchase options to acquire the leasehold land and buildings at the end of the lease terms.

d. Subleases

The Company subleases the right to use its buildings and machinery and equipment under operating leases with lease terms of 1 to 6 years.

The maturity analysis of lease payments receivable under operating subleases is as follows:

		December 31, 2021	December 31, 2020
	Year 1	<u>\$ 60,771</u>	<u>\$ 144,099</u>
e.	Other lease information		
		Years Ended	December 31
		2021	2020
	Expenses relating to short-term leases Expenses relating to variable lease payments not included in the	<u>\$ 5,250,279</u>	<u>\$ 3,153,451</u>
	measurement of lease liabilities	<u>\$ 168,736</u>	<u>\$ 256,996</u>
		Years Ended	December 31
		2021	2020
	Total cash outflow for leases	<u>\$ 7,510,762</u>	<u>\$ 6,354,610</u>

16. INTANGIBLE ASSETS

	Goodwill	Technology License Fees	Software and System Design Costs	Patent and Others	Total
Cost					
Balance at January 1, 2021 Additions Disposals or retirements Effect of exchange rate changes	\$ 5,436,602 	\$ 22,161,712 1,372,806 (559)	\$ 36,238,967 7,726,168 (318,736) <u>4,558</u>	\$ 11,277,701 219,504 	\$ 75,114,982 9,318,478 (318,736) (53,335)
Balance at December 31, 2021	<u>\$ 5,379,164</u>	<u>\$ 23,533,959</u>	<u>\$ 43,650,957</u>	<u>\$ 11,497,309</u>	<u>\$ 84,061,389</u>
Accumulated amortization and impairment					
Balance at January 1, 2021 Additions Disposals or retirements Effect of exchange rate changes	\$ - - -	\$ 12,226,066 2,686,786 	\$ 30,111,759 4,323,860 (317,508) <u>3,467</u>	\$ 7,008,978 1,196,523 	\$ 49,346,803 8,207,169 (317,508) <u>3,228</u>
Balance at December 31, 2021	<u>\$ -</u>	<u>\$ 14,912,293</u>	<u>\$ 34,121,578</u>	<u>\$ 8,205,821</u>	<u>\$ 57,239,692</u>
Carrying amounts at December 31, 2021	<u>\$ 5,379,164</u>	<u>\$ 8,621,666</u>	<u>\$ 9,529,379</u>	<u>\$ 3,291,488</u>	<u>\$ 26,821,697</u>
Cost					
Balance at January 1, 2020 Additions Disposals or retirements Effect of exchange rate changes	\$ 5,693,376 - - (256,774)	\$ 15,854,951 6,308,926 (2,165)	\$ 33,024,010 3,275,757 (60,467) (333)	\$ 8,302,996 2,974,784 	\$ 62,875,333 12,559,467 (60,467) (259,351)
Balance at December 31, 2020	<u>\$ 5,436,602</u>	<u>\$ 22,161,712</u>	<u>\$ 36,238,967</u>	<u>\$ 11,277,701</u>	<u>\$ 75,114,982</u>
Accumulated amortization and impairment					
Balance at January 1, 2020 Additions Disposals or retirements Effect of exchange rate changes	\$ - - -	\$ 9,823,770 2,404,461 (2,165)	\$ 26,502,067 3,669,257 (59,868) 	\$ 5,896,468 1,112,530 (20)	\$ 42,222,305 7,186,248 (59,868) (1,882)
Balance at December 31, 2020	<u>\$</u>	<u>\$ 12,226,066</u>	<u>\$ 30,111,759</u>	<u>\$ 7,008,978</u>	<u>\$ 49,346,803</u>
Carrying amounts at December 31, 2020	<u>\$ 5,436,602</u>	<u>\$ 9,935,646</u>	<u>\$ 6,127,208</u>	<u>\$ 4,268,723</u>	<u>\$ 25,768,179</u>

The Company's goodwill has been tested for impairment at the end of the annual reporting period and the recoverable amount is determined based on the value in use. The value in use was calculated based on the cash flow forecast from the financial budgets covering the future five-year period, and the Company used annual discount rates of 8.0% in both years in its test of impairment as of December 31, 2021 and 2020, to reflect the relevant specific risk in the cash-generating unit.

For the years ended December 31, 2021 and 2020, the Company did not recognize any impairment loss on goodwill.

17. SHORT-TERM LOANS

	December 31, 2021	December 31, 2020
Unsecured loans		
Amount	<u>\$114,921,333</u>	<u>\$ 88,559,026</u>
Loan content		
US\$ (in thousands)	\$ -	\$ 200,000
EUR (in thousands)	3,652,935	2,398,000
Annual interest rate	(0.73)%-0%	(0.54)%-0.33%
Maturity date	Due by June	Due by February
	2022	2021

18. BONDS PAYABLE

	December 31, 2021	December 31, 2020
Domestic unsecured bonds Overseas unsecured bonds Less: Discounts on bonds payable Less: Current portion	\$ 312,448,000 304,414,000 (2,391,348) (4,400,000)	\$ 173,197,000 84,291,000 (782,916) (2,600,000)
	<u>\$ 610,070,652</u>	<u>\$ 254,105,084</u>

The major terms of domestic unsecured bonds are as follows:

Issuance	Tranche	Issuance Period	Total Amount	Coupon Rate	Repayment and Interest Payment
NT\$ unsecured bonds					
101-3	-	October 2012 to October 2022	\$ 4,400,000	1.53%	Bullet repayment; interest payable annually
101-4	В	January 2013 to January 2020	10,000,000	1.35%	The same as above
	С	January 2013 to January 2023	3,000,000	1.49%	The same as above
102-1	В	February 2013 to February 2020	11,600,000	1.38%	The same as above

(Continued)

Issuance	Tranche	Issuance Period	Total Amount	Coupon Rate	Repayment and Interest Payment
102-1	С	February 2013 to February 2023	\$ 3,600,000	1.50%	Bullet repayment; interest payable annually
102-2	А	July 2013 to July 2020	10,200,000	1.50%	The same as above
	В	July 2013 to July 2023	3,500,000	1.70%	The same as above
102-4	D	September 2013 to March 2021	2,600,000	1.85%	Bullet repayment; interest payable annually (interest for the six months prior to maturity will accrue on the basis of actual days and be repayable at maturity)
	E	September 2013 to March 2023	5,400,000	2.05%	The same as above
	F	September 2013 to September 2023	2,600,000	2.10%	Bullet repayment; interest payable annually
109-1	А	March 2020 to March 2025	3,000,000	0.58%	The same as above
	В	March 2020 to March 2027	10,500,000	0.62%	The same as above
	С	March 2020 to March 2030	10,500,000	0.64%	The same as above
109-2	А	April 2020 to April 2025	5,900,000	0.52%	The same as above
	В	April 2020 to April 2027	10,400,000	0.58%	The same as above
	С	April 2020 to April 2030	5,300,000	0.60%	The same as above
109-3	А	May 2020 to May 2025	4,500,000	0.55%	The same as above
	В	May 2020 to May 2027	7,500,000	0.60%	The same as above
	С	May 2020 to May 2030	2,400,000	0.64%	The same as above
109-4	А	July 2020 to July 2025	5,700,000	0.58%	Two equal installments in last two years; interest payable annually
	В	July 2020 to July 2027	6,300,000	0.65%	The same as above
	С	July 2020 to July 2030	1,900,000	0.67%	The same as above
109-5	А	September 2020 to September 2025	4,800,000	0.50%	The same as above
	В	September 2020 to September 2027	8,000,000	0.58%	The same as above
	С	September 2020 to September 2030	2,800,000	0.60%	The same as above
109-6 (green bond)	А	December 2020 to December 2025	1,600,000	0.40%	The same as above
,					(Continued)

(Continued)

Issuance	Tranche	Issuance Period	Total Amount	Coupon Rate	Repayment and Interest Payment
109-6 (green bond)	В	December 2020 to December 2027	\$ 5,600,000	0.44%	Two equal installments in last two years; interest payable annually
	С	December 2020 to December 2030	4,800,000	0.48%	The same as above
109-7	А	December 2020 to December 2025	1,900,000	0.36%	The same as above
	В	December 2020 to December 2027	10,200,000	0.41%	The same as above
	С	December 2020 to December 2030	6,400,000	0.45%	The same as above
110-1	А	March 2021 to March 2026	4,800,000	0.50%	Bullet repayment; interest payable annually
	В	March 2021 to March 2028	11,400,000	0.55%	The same as above
	С	March 2021 to March 2031	4,900,000	0.60%	The same as above
110-2	А	May 2021 to May 2026	5,200,000	0.50%	The same as above
	В	May 2021 to May 2028	8,400,000	0.58%	The same as above
	С	May 2021 to May 2031	5,600,000	0.65%	The same as above
110-3	А	June 2021 to June 2026	6,900,000	0.52%	The same as above
	В	June 2021 to June 2028	7,900,000	0.58%	The same as above
	С	June 2021 to June 2031	4,900,000	0.65%	The same as above
110-4	А	August 2021 to August 2025	4,000,000	0.485%	The same as above
	В	August 2021 to August 2026	8,000,000	0.50%	The same as above
	С	August 2021 to August 2028	5,400,000	0.55%	The same as above
	D	August 2021 to August 2031	4,200,000	0.62%	The same as above
110-6	А	October 2021 to April 2026	3,200,000	0.535%	The same as above
	В	October 2021 to October 2026	6,900,000	0.54%	The same as above
	С	October 2021 to October 2028	4,600,000	0.60%	The same as above
	D	October 2021 to October 2031	1,600,000	0.62%	The same as above
110-7	А	December 2021 to December 2026	7,700,000	0.65%	The same as above
	В	December 2021 to June 2027	3,500,000	0.675%	The same as above
	С	December 2021 to December 2028	5,500,000	0.72%	The same as above
					(Concluded)

(Concluded)

Issuance	Tranche	Issuance Period	Total Amount (US\$ in Thousands)	Coupon Rate	Repayment and Interest Payment
US\$ unsecured bonds					
109-1	-	September 2020 to September 2060	US\$1,000,000	2.70%	Bullet repayment (callable on the 5th anniversary of the issue date and every anniversary thereafter); interest payable annually
110-5	-	September 2021 to September 2051	1,000,000	3.10%	The same as above

The major terms of overseas unsecured bonds are as follows:

Issuance Period	Total Amount (US\$ in Thousands)	Coupon Rate	Repayment and Interest Payment
September 2020 to September 2025	US\$1,000,000	0.75%	Bullet repayment (callable at any time, in whole or in part, at the relevant redemption price according to relevant agreements); interest payable semi-annually
September 2020 to September 2027	750,000	1.00%	The same as above
September 2020 to September 2030	1,250,000	1.375%	The same as above
April 2021 to April 2026	1,100,000	1.25%	The same as above
April 2021 to April 2028	900,000	1.75%	The same as above
April 2021 to April 2031	1,500,000	2.25%	The same as above
October 2021 to October 2026	1,250,000	1.75%	The same as above
October 2021 to October 2031	1,250,000	2.50%	The same as above
October 2021 to October 2041	1,000,000	3.125%	The same as above
October 2021 to October 2051	1,000,000	3.25%	The same as above

The Company issued domestic unsecured bonds during the period from January 1, 2022 to February 15, 2022, the major terms are as follows:

Issuance	Tranche	Issuance Period	Total 4	Amount	Coupon Rate	Repayment and Interest Payment
NT\$ unsecured bonds						
111-1 (green bond)	А	January 2022 to January 2027	\$2,	100,000	0.63%	Bullet repayment; interest payable annually
	В	January 2022 to January 2029	3,	300,000	0.72%	The same as above

19. LONG-TERM BANK LOANS

	December 31, 2021	December 31, 2020
Unsecured loans Less: Discounts on government grants Less: Current portion	\$ 3,510,000 (34,202) (166,667)	\$ 2,000,000 (32,389)
	<u>\$ 3,309,131</u>	<u>\$ 1,967,611</u>
Loan content Annual interest rate Maturity date	0.4%-0.9% Due by September 2026	0.4% Due by September 2025

The long-term bank loans of the Company are with preferential interest rates subsidized by the government, and the loans are used to fund capital expenditure qualifying for the subsidy.

20. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The plan under the R.O.C. Labor Pension Act (the "Act") is deemed a defined contribution plan. Pursuant to the Act, TSMC and VisEra Tech have made monthly contributions equal to 6% of each employee's monthly salary to employees' pension accounts. Furthermore, TSMC North America, TSMC Arizona, TSMC China, TSMC Nanjing, TSMC Europe, TSMC Canada and TSMC Technology also make monthly contributions at certain percentages of the basic salary of their employees. Accordingly, the Company recognized expenses of NT\$3,711,010 thousand and NT\$2,809,484 thousand for the years ended December 31, 2021 and 2020, respectively.

b. Defined benefit plans

TSMC has defined benefit plans under the R.O.C. Labor Standards Law that provide benefits based on an employee's length of service and average monthly salary for the six-month period prior to retirement. The Company contributes an amount equal to 2% of salaries paid each month to their respective pension funds (the Funds), which are administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the Committee's name in the Bank of Taiwan. Before the end of each year, the Company assesses the balance in the Funds. If the amount of the balance in the Funds is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The Funds are operated and managed by the government's designated authorities; as such, the Company does not have any right to intervene in the investments of the Funds.

Amounts recognized in respect of these defined benefit plans were as follows:

	Years Ended December 31		
	2021	2020	
Current service cost	\$ 145,289	\$ 123,311	
Net interest expense	47,196	81,604	
Components of defined benefit costs recognized in profit or loss	192,485	204,915	
Remeasurement on the net defined benefit liability:			
Return on plan assets (excluding amounts included in net			
interest expense)	(73,298)	(139,212)	
Actuarial loss arising from experience adjustments	94,278	494,051	
Actuarial loss arising from changes in demographic			
assumptions	277,454	-	
Actuarial (gain) loss arising from changes in financial			
assumptions	(540,513)	3,161,910	
Components of defined benefit costs recognized in other			
comprehensive income	(242,079)	3,516,749	
•			
Total	<u>\$ (49,594</u>)	<u>\$ 3,721,664</u>	

The pension costs of the aforementioned defined benefit plans were recognized in profit or loss by the following categories:

	Years Ended December 31		
	2021	2020	
Cost of revenue	\$ 124,548	\$ 126,274	
Research and development expenses	52,801	57,306	
General and administrative expenses	12,430	18,248	
Marketing expenses	2,706	3,087	
	<u>\$ 192,485</u>	<u>\$ 204,915</u>	

The amounts arising from the defined benefit obligation of the Company were as follows:

	December 31, 2021	December 31, 2020
Present value of defined benefit obligation Fair value of plan assets	\$ 16,585,442 (5,548,563)	\$ 16,980,277 (5,066,203)
Net defined benefit liability	<u>\$ 11,036,879</u>	<u>\$ 11,914,074</u>

Movements in the present value of the defined benefit obligation were as follows:

	Years Ended December 31		
	2021	2020	
Balance, beginning of year	\$ 16,980,277	\$ 13,484,090	
Current service cost	145,289	123,311	
Interest expense	66,664	118,808	
Remeasurement:			
Actuarial loss arising from experience adjustments	94,278	494,051	
Actuarial loss arising from changes in demographic			
assumptions	277,454	-	
Actuarial (gain) loss arising from changes in financial			
assumptions	(540,513)	3,161,910	
Benefits paid from plan assets	(431,817)	(398,986)	
Benefits paid directly by the Company	(6,190)	(2,907)	
Balance, end of year	<u>\$ 16,585,442</u>	<u>\$ 16,980,277</u>	

Movements in the fair value of the plan assets were as follows:

	Years Ended December 31		
	2021	2020	
Balance, beginning of year	\$ 5,066,203	\$ 4,301,594	
Interest income	19,468	37,204	
Remeasurement:			
Return on plan assets (excluding amounts included in net			
interest expense)	73,298	139,212	
Contributions from employer	821,411	987,179	
Benefits paid from plan assets	(431,817)	(398,986)	
Balance, end of year	<u>\$ 5,548,563</u>	<u>\$ 5,066,203</u>	

The fair value of the plan assets by major categories at the end of reporting period was as follows:

	December 31, 2021	December 31, 2020
Cash Equity instruments Debt instruments	\$ 1,000,961 2,951,835 <u>1,595,767</u>	\$ 632,769 2,926,745 1,506,689
	<u>\$ 5,548,563</u>	<u>\$ 5,066,203</u>

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The principal assumptions of the actuarial valuation were as follows:

	Measurer	Measurement Date		
	December 31, 2021	December 31, 2020		
Discount rate Future salary increase rate	0.75% 3.00%	0.40% 3.00%(Note)		

Note: The Company has an additional 20 percent pay raise in 2021.

Through the defined benefit plans under the R.O.C. Labor Standards Law, the Company is exposed to the following risks:

- 1) Investment risk: The pension funds are invested in equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the government's designated authorities or under the mandated management. However, under the R.O.C. Labor Standards Law, the rate of return on assets shall not be less than the average interest rate on a two-year time deposit published by the local banks and the government is responsible for any shortfall in the event that the rate of return is less than the required rate of return.
- 2) Interest risk: A decrease in the government bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the debt investments of the plan assets.

Assuming a hypothetical decrease in interest rate at the end of the reporting period contributed to a decrease of 0.5% (and not below 0.0%) in the discount rate and all other assumptions were held constant, the present value of the defined benefit obligation would increase by NT\$780,460 thousand and NT\$694,732 thousand as of December 31, 2021 and 2020, respectively.

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

Assuming the expected salary rate increases by 0.5% at the end of the reporting period and all other assumptions were held constant, the present value of the defined benefit obligation would increase by NT\$759,527 thousand and NT\$835,964 thousand as of December 31, 2021 and 2020, respectively.

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.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation liability.

The Company expects to make contributions of NT\$2,269,881 thousand to the defined benefit plans in the next year starting from December 31, 2021. The weighted average duration of the defined benefit obligation is 9 years.

21. EQUITY

a. Capital stock

	December 31, 2021	December 31, 2020
Authorized shares (in thousands)	<u>28,050,000</u>	28,050,000
Authorized capital	<u>\$ 280,500,000</u>	\$ 280,500,000
Issued and paid shares (in thousands)	<u>25,930,380</u>	25,930,380
Issued capital	<u>\$ 259,303,805</u>	\$ 259,303,805

A holder of issued common shares with par value of NT\$10 per share is entitled to vote and to receive dividends.

The authorized shares include 500,000 thousand shares allocated for the exercise of employee stock options.

As of December 31, 2021, 1,064,243 thousand ADSs of TSMC were traded on the NYSE. The number of common shares represented by the ADSs was 5,321,213 thousand shares (one ADS represents five common shares).

b. Capital surplus

	December 31, 2021	December 31, 2020
Additional paid-in capital	\$ 24,184,939	\$ 24,184,939
From merger	22,804,510	22,804,510
From convertible bonds	8,892,847	8,892,847
From difference between the consideration received and the carrying amount of the subsidiaries' net assets during actual		
disposal	8,406,282	-
From share of changes in equities of subsidiaries	113,952	121,843
From share of changes in equities of associates	307,322	302,526
Donations	51,750	40,578
	<u>\$ 64,761,602</u>	<u>\$ 56,347,243</u>

Under the relevant laws, the capital surplus generated from the excess of the issuance price over the par value of capital stock (including the stock issued for new capital, mergers and convertible bonds), the difference between the consideration received and the carrying amount of the subsidiaries' net assets during actual disposal and donations 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 stock dividends up to a certain percentage of TSMC's paid-in capital. The capital surplus from share of changes in equities of subsidiaries and associates and dividend of a claim extinguished by a prescription may be used to offset a deficit.

c. Retained earnings and dividend policy

TSMC's Articles of Incorporation provide that, earnings distribution may be made on a quarterly basis after the close of each quarter. Distribution of earnings by way of cash dividends should be approved by TSMC's Board of Directors and reported to TSMC's shareholders in its meeting. When allocating earnings, TSMC shall first estimate and reserve the taxes to be paid, offset its losses, set aside a legal capital reserve at 10% of the remaining earnings (until the accumulated legal capital reserve equals TSMC's paid-in capital), then set aside a special capital reserve in accordance with relevant laws or regulations or as requested by the authorities in charge. Any balance left over shall be allocated according to relevant laws and the TSMC's Articles of Incorporation.

TSMC's Articles of Incorporation also provide that profits of TSMC may be distributed by way of cash dividend and/or stock dividend. However, distribution of earnings shall be made preferably by way of cash dividend. Distribution of earnings may also be made by way of stock dividend, provided that the ratio for stock dividend shall not exceed 50% of the total distribution.

The legal capital reserve may be used to offset a deficit, or be distributed as dividends in cash or stocks for the portion in excess of 25% of the paid-in capital if the Company incurs no loss.

Pursuant to existing regulations, the Company is required to set aside additional special capital reserve equivalent to the net debit balance of the other components of stockholders' equity, such as the accumulated balance of foreign currency translation reserve, unrealized valuation gain or loss from fair value through other comprehensive income financial assets, gain or loss from changes in fair value of hedging instruments in cash flow hedges, etc. For the subsequent decrease in the deduction amount to stockholders' equity, any special reserve appropriated may be reversed to the extent that the net debit balance reverses.

The appropriations of 2021, 2020 and 2019 quarterly earnings have been approved by TSMC's Board of Directors in its meeting, respectively. The appropriations and cash dividends per share were as follows:

Resolution Date of TSMC's	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
	of 2021	of 2021	of 2021	of 2021
Board of Directors in its meeting	February 15,	November 9,	August 10,	June 9,
	2022	2021	2021	2021
Special capital reserve	<u>\$3,304,303</u>	\$ 710,169	\$ 10,201,220	\$ (6,287,050)
Cash dividends to shareholders	<u>\$71,308,546</u>	\$ 71,308,547	\$ 71,308,546	\$ 71,308,546
Cash dividends per share (NT\$)	<u>\$2.75</u>	\$ 2.75	\$ 2.75	\$ 2.75
Resolution Date of TSMC's	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
	of 2020	of 2020	of 2020	of 2020
Board of Directors in its meeting	February 9,	November 10,	August 11,	May 12,
	2021	2020	2020	2020
Special capital reserve Cash dividends to shareholders Cash dividends per share (NT\$)	<u>\$ 12,420,727</u> <u>\$ 64,825,951</u> <u>\$ 2.5</u>	\$ <u>5,501,351</u> \$ <u>64,825,951</u> \$ <u>2.5</u>	\$ 11,884,457 \$ 64,825,951 \$ 2.5	$\frac{(2,694,841)}{(5,694,841)}$ $\frac{(5,694,841)}{(5,694,825,951)}$ $\frac{(5,694,825,951)}{(5,694,825,951)}$
Resolution Date of TSMC's	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
	of 2019	of 2019	of 2019	of 2019
Board of Directors in its meeting	February 11,	November 12,	August 13,	June 5,
	2020	2019	2019	2019
Special capital reserve	\$ 16,893,073	\$ <u>3,289,166</u>	\$ (3,338,190)	\$ (4,723,939)
Cash dividends to shareholders	\$ 64,825,951	\$ <u>64,825,951</u>	\$ 64,825,951	\$ 51,860,761
Cash dividends per share (NT\$)	\$ 2.5	\$ <u>2.5</u>	\$ 2.5	\$ 2.0

The special capital reserve for 2021 is to be presented for approval in the TSMC's shareholders' meeting to be held on June 8, 2022 (expected).

d. Others

Changes in others were as follows:

Year Ended December 31, 2021				
Foreign Currency Translation Reserve	Unrealized Gain (Loss) on Financial Assets at FVTOCI	Gain (Loss) on Hedging Instruments	Unearned Stock-Based Employee Compensation	Total
\$(57,001,627)	\$ 2,321,754	\$ -	\$-	\$ (54,679,873)
(6,181,737)	-	-	-	(6,181,737)
	1 000 006			1 000 000
-	, ,	-	-	1,898,206
-	(3,339,796)	-	-	(3,339,796)
	(187 654)			(187,654)
	(107,051)			(107,051)
-	(93,229)	-	-	(93,229)
-	1,234	-	-	1,234
-	-	90,119	-	90,119
		10.1.0		10.1.0
-	-	48,469	-	48,469
(110.007)	20.015	(14,692)		(104 CCA)
(119,997)			-	(104,664)
	(30,220)	(3,370)		(59,590)
\$(63,303,361)	\$ 574.310	\$ 120.536	\$ -	\$ (62,608,515)
	Currency Translation Reserve	Foreign Currency Translation Reserve Gain (Loss) on Financial Assets at FVTOCI \$ (57,001,627) \$ 2,321,754 (6,181,737) - - 1,898,206 - (3,339,796) - (187,654) - (93,229) - 1,234 - - (119,997) 30,015 - (56,220)	Foreign Currency Translation Reserve Gain (Loss) on Financial Assets at FVTOCI Gain (Loss) on Hedging Instruments $\$$ (57,001,627) $\$$ 2,321,754 $\$$ - $(6,181,737)$ - - - 1,898,206 - - (3,339,796) - - (187,654) - - (93,229) - - 1,234 - - - 90,119 - - 48,469 (119,997) 30,015 (14,682) - (56,220) (3,370)	Foreign Currency Translation Reserve Gain (Loss) on Financial Assets at FVTOCI Gain (Loss) on Hedging Instruments Unearned Stock-Based Employee Compensation $\$$ (57,001,627) $\$$ 2,321,754 $\$$ - $\$$ - $\$$ - $(6,181,737)$ - - - - - 1,898,206 - - - - (3,339,796) - - - - (187,654) - - - - (93,229) - - - - 1,234 - - - - - 90,119 - - - - 48,469 - - - - (3,370) - -

	Year Ended December 31, 2020				
	Foreign Currency Translation Reserve	Unrealized Gain (Loss) on Financial Assets at FVTOCI	Gain (Loss) on Hedging Instruments	Unearned Stock-Based Employee Compensation	Total
Balance, beginning of year	\$(26,871,400)	\$ (692,959)	\$ (3,820)	\$ (190)	\$ (27,568,369)
Exchange differences arising on translation of foreign operations Unrealized gain (loss) on financial assets at	(29,846,818)	-	-	-	(29,846,818)
FVTOCI Equity instruments Debt instruments	-	423,212 3,907,022	-	-	423,212 3,907,022
Cumulative unrealized gain (loss) of equity instruments transferred to retained earnings due to disposal Cumulative unrealized gain (loss) of debt	-	108,687	-	-	108,687
instruments transferred to profit or loss due to disposal Loss allowance adjustments from debt	-	(1,439,420)	-	-	(1,439,420)
instruments	-	(891)	-	-	(891)
Gain (loss) arising on changes in the fair value of hedging instruments Transferred to initial carrying amount of	-	-	24,085	-	24,085
hedged items	-	-	(20,265)	-	(20,265)
Share of other comprehensive income (loss) of associates	(283,409)	15,450	-	-	(267,959)
Share of unearned stock-based employee compensation of associates Income tax effect	-	- 653	-	190	190 653
meome an effect		000			000
Balance, end of year	<u>\$(57,001,627</u>)	<u>\$ 2,321,754</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (54,679,873</u>)

The aforementioned other equity includes the changes in other equities of TSMC and TSMC's share of its subsidiaries and associates.

e. Treasury stock

For TSMC's shareholders' interests, TSMC's Board of Directors approved a share buyback plan on February 15, 2022 to repurchase 1,387 thousand shares during the period from February 16, 2022 to April 15, 2022. The shares purchased will be cancelled subsequently.

22. NET REVENUE

a. Disaggregation of revenue from contracts with customers

	Years Ended December 3120212020		
Product			
Wafer	\$1,405,300,273	\$1,178,456,273	
Others	182,114,764	160,798,538	
	<u>\$1,587,415,037</u>	<u>\$1,339,254,811</u>	
	Years Ended	December 31	
Geography	2021	2020	
Taiwan	\$ 203,963,760	\$ 129,082,884	
United States	1,015,996,424	817,910,976	
China	164,552,063	233,783,358	
Europe, the Middle East and Africa	89,010,064	70,213,432	
Japan	71,920,856	63,299,176	
Others	41,971,870	24,964,985	
	<u>\$1,587,415,037</u>	<u>\$1,339,254,811</u>	

The Company categorized the net revenue mainly based on the countries where the customers are headquartered.

	Years Ended December 31		
Platform	2021	2020	
Smartphone	\$ 695,091,191	\$ 645,303,613	
High Performance Computing	587,780,144	439,809,984	
Internet of Things	133,005,979	110,355,188	
Automotive	67,076,353	44,367,562	
Digital Consumer Electronics	55,577,223	54,555,665	
Others	48,884,147	44,862,799	
	<u>\$1,587,415,037</u>	<u>\$1,339,254,811</u>	

	Years Ended December 31		
Resolution		2021	2020
5-nanometer		\$ 262,327,365	\$ 90,934,485
7-nanometer		440,383,100	394,836,964
10-nanometer		659,989	3,403,151
16-nanometer		191,058,940	197,959,003
20-nanometer		5,668,752	8,450,865
28-nanometer		153,066,563	149,367,729
40/45-nanometer		103,413,639	103,176,542
65-nanometer		66,467,903	61,226,671
90-nanometer		32,260,288	29,380,358
0.11/0.13 micron		40,558,534	33,197,137
0.15/0.18 micron		86,700,287	86,008,475
0.25 micron and above		22,734,913	20,514,893
Wafer revenue		<u>\$1,405,300,273</u>	<u>\$1,178,456,273</u>
Contract balances			
	December 31, 2021	December 31, 2020	January 1, 2020

Contract liabilities (classified under accrued			
expenses and other current liabilities)	<u>\$ 39,762,588</u>	<u>\$ 13,775,088</u>	\$ 6,784,323

The changes in the contract liability balances primarily result from the timing difference between the satisfaction of performance obligation and the customer's payment.

The Company recognized revenue from the beginning balance of contract liability, which amounted to NT\$11,590,400 thousand and NT\$4,737,915 thousand for the years ended December 31, 2021 and 2020, respectively.

c. Temporary receipts from customers

b.

	December 31, 2021
Current portion (classified under accrued expenses and other current liabilities) Noncurrent portion (classified under other noncurrent liabilities)	\$ 30,612,702 <u>155,381,485</u>
	<u>\$ 185,994,187</u>

The Company's temporary receipts from customer are payments made by customers to the Company to retain the Company's capacity. When the terms and conditions set forth in the agreements are subsequently satisfied, the treatment of temporary receipts will be determined by mutual consent.

d. Refund liabilities

Estimated sales returns and other allowances is made and adjusted based on historical experience and the consideration of varying contractual terms. As of December 31, 2021 and 2020, the aforementioned refund liabilities amounted to NT\$41,038,041 thousand and NT\$33,194,765 thousand (classified under accrued expenses and other current liabilities), respectively.

23. INTEREST INCOME

	Years Ended December 31		
	2021	2020	
Interest income			
Bank deposits	\$ 2,834,838	\$ 5,139,149	
Financial assets at FVTPL	-	2,522	
Financial assets at FVTOCI	2,192,470	3,121,856	
Financial assets at amortized cost	681,457	754,873	
	<u>\$ 5,708,765</u>	<u>\$ 9,018,400</u>	

24. FINANCE COSTS

	Years Ended December 31		
	2021	2020	
Interest expense			
Corporate bonds	\$ 5,202,999	\$ 1,337,347	
Lease liabilities	193,324	227,752	
Bank loans	17,546	500,875	
Others	349	15,481	
	<u>\$ 5,414,218</u>	<u>\$ 2,081,455</u>	

25. OTHER GAINS AND LOSSES, NET

	Years Ended December 31		ember 31	
		2021		2020
Gain on disposal of financial assets, net				
Investments in debt instruments at FVTOCI	\$	93,229	\$	1,439,420
Gain (loss) on financial instruments at FVTPL, net				
Mandatorily measured at FVTPL	(7,973,667)		8,244,491
The reversal (accrual) of expected credit loss of financial assets				
Investments in debt instruments at FVTOCI		(1,234)		891
Financial assets at amortized cost		3,969		(4,563)
Other gains, net		489,693		426,171
	<u>\$ (</u>	7,388,010)	\$	10,106,410

26. INCOME TAX

a. Income tax expense recognized in profit or loss

Income tax expense consisted of the following:

	Years Ended December 31		
	2021	2020	
Current income tax expense			
Current tax expense recognized in the current year	\$ 88,844,915	\$ 72,705,385	
Income tax adjustments on prior years	207,801	38,701	
Other income tax adjustments	152,232	150,204	
	89,204,948	72,894,290	
Deferred income tax benefit			
The origination and reversal of temporary differences	(17,530,023)	(6,275,192)	
Investment tax credits	(5,621,745)		
	(23,151,768)	(6,275,192)	
Income tax expense recognized in profit or loss	<u>\$ 66,053,180</u>	<u>\$ 66,619,098</u>	

A reconciliation of income before income tax and income tax expense recognized in profit or loss was as follows:

	Years Ended December 31		
	2021	2020	
Income before tax	<u>\$ 663,126,314</u>	<u>\$ 584,777,180</u>	
Income tax expense at the statutory rate	\$ 134,613,312	\$ 118,837,423	
Tax effect of adjusting items:			
Nondeductible items in determining taxable income	11,261,407	1,009,758	
Tax-exempt income	(89,852,940)	(65,988,096)	
Additional income tax under the Alternative Minimum Tax Act	32,852,688	18,872,837	
The origination and reversal of temporary differences	(17,530,023)	(6,275,192)	
Income tax credits	(5,651,297)	(26,537)	
	65,693,147	66,430,193	
Income tax adjustments on prior years	207,801	38,701	
Other income tax adjustments	152,232	150,204	
Income tax expense recognized in profit or loss	<u>\$ 66,053,180</u>	<u>\$ 66,619,098</u>	

For the years ended December 31, 2021 and 2020, the Company applied a tax rate of 20% for entities subject to the R.O.C. Income Tax Law; for other jurisdictions, taxes are calculated using the applicable tax rate for each individual jurisdiction.

b. Income tax expense recognized in other comprehensive income

	Years Ended December 31		
	2021	2020	
Deferred income tax benefit (expense)			
Related to remeasurement of defined benefit obligation	\$ (29,049)	\$ 422,010	
Related to unrealized gain/loss on investments in equity			
instruments at FVTOCI	(56,220)	653	
Related to gain/loss on cash flow hedges	(3,370)		
	\$ (88,639)	\$ 422,663	

c. Deferred income tax balance

The analysis of deferred income tax assets and liabilities was as follows:

	December 31, 2021	December 31, 2020
Deferred income tax assets		
Temporary differences Depreciation Refund liability Investment tax credits Net defined benefit liability Unrealized loss on inventories Deferred compensation cost Investments in equity instruments at FVTOCI Others	\$ 34,720,661 5,986,173 5,621,745 1,237,086 898,998 373,983 10,173 305,067	\$ 19,354,383 3,755,131 1,341,960 858,463 330,340 66,393 251,514
Others	<u>\$ 49,153,886</u>	<u> </u>
Deferred income tax liabilities	<u>\$ 47,133,000</u>	<u> </u>
Temporary differences Unrealized exchange gains Others	\$ (706,311) (1,167,566)	\$ (866,495) (863,446)
	<u>\$ (1,873,877</u>)	<u>\$ (1,729,941</u>)
	Year Ended December 31, 2021 Recognized in	

	Year Ended December 31, 2021					
		Recogn	nized in			
	Balance,		Other	Effect of		
	Beginning of		Comprehensive	Exchange Rate	Balance, End of	
	Year	Profit or Loss	Income	Changes	Year	
Deferred income tax assets						
Temporary differences						
Depreciation	\$ 19,354,383	\$ 15,365,737	\$ -	\$ 541	\$ 34,720,661	
Refund liability	3,755,131	2,231,450	-	(408)	5,986,173	
Investment tax credits	-	5,621,745	-	(100)	5,621,745	
Net defined benefit liability	1,341,960	(75,825)	(29,049)	-	1,237,086	
Unrealized loss on inventories	858,463	41,061	(,0)	(526)	898,998	
Deferred compensation cost	330,340	49,113	_	(5,470)	373,983	
Investments in equity instruments	550,510	19,115		(3,170)	575,765	
at FVTOCI	66,393		(56,220)		10.173	
Others	251,514	59,045	(30,220)	(5,492)	305,067	
Guidis				(3,1)2)		
	<u>\$ 25,958,184</u>	<u>\$ 23,292,326</u>	<u>\$ (85,269</u>)	<u>\$ (11,355</u>)	<u>\$ 49,153,886</u>	
Deferred income tax liabilities						
Temporary differences						
Unrealized exchange gains	\$ (866,495)	\$ 160.184	\$ -	\$ -	\$ (706,311)	
Others	(863,446)	(300,742)	(3,370)	φ (8)	(1,167,566)	
	(000,++0)	(300,742)	(3,370)	(0)	(1,107,500)	
	<u>\$ (1,729,941</u>)	<u>\$ (140,558</u>)	<u>\$ (3,370</u>)	<u>\$ (8</u>)	<u>\$ (1,873,877</u>)	

	Year Ended December 31, 2020					
		Recogn	nized in	, 		
	Balance, Beginning of Year	Profit or Loss	Other Comprehensive Income	Effect of Exchange Rate Changes	Balance, End of Year	
Deferred income tax assets						
Temporary differences Depreciation Refund liability Net defined benefit liability Unrealized loss on inventories Deferred compensation cost Investments in equity instruments at FVTOCI Others	$\begin{array}{c} 13,547,220\\ 2,150,352\\ 1,016,248\\ 469,430\\ 323,093\\ 65,740\\ \underline{356,275}\\ 0,00000000000000000000000000000000000$	\$ 5,823,956 1,606,140 (96,298) 391,095 27,437 (91,590)	\$	\$ (16,793) (1,361) (2,062) (20,190) (13,171)	\$ 19,354,383 3,755,131 1,341,960 858,463 330,340 66,393 251,514	
Deferred income tax liabilities	<u>\$ 17,928,358</u>	<u>\$ 7,660,740</u>	<u>\$ 422,663</u>	<u>\$ (53,577</u>)	<u>\$ 25,958,184</u>	
Temporary differences Unrealized exchange gains Others	\$ (333,606) (10,787) <u>\$ (344,393</u>)	\$ (532,889) (852,659) <u>\$ (1,385,548</u>)	\$ - 	\$ - 	\$ (866,495) (863,446) <u>\$ (1,729,941</u>)	

d. The deductible temporary differences for which no deferred income tax assets have been recognized

As of December 31, 2021 and 2020, the aggregate deductible temporary differences for which no deferred income tax assets have been recognized amounted to NT\$66,431,255 thousand and NT\$55,521,034 thousand, respectively.

e. Unused tax-exemption information

As of December 31, 2021, the profits generated from the following project of TSMC are exempt from income tax for a five-year period:

Tax-exemption Period

Construction and expansion of 2009 by TSMC

2018 to 2022

f. The information of unrecognized deferred income tax liabilities associated with investments

As of December 31, 2021 and 2020, the aggregate taxable temporary differences associated with investments in subsidiaries not recognized as deferred income tax liabilities amounted to NT\$177,552,831 thousand and NT\$152,827,360 thousand, respectively.

g. Income tax examination

The tax authorities have examined income tax returns of TSMC through 2019. All investment tax credit adjustments assessed by the tax authorities have been recognized accordingly.

27. EARNINGS PER SHARE

	Years Ended December 31		
	2021	2020	
Basic EPS Diluted EPS	<u>\$ 23.01</u> <u>\$ 23.01</u>	<u>\$ 19.97</u> <u>\$ 19.97</u>	

EPS is computed as follows:

	Amounts (Numerator)	Number of Shares (Denominator) (In Thousands)	EPS (NT\$)
Year Ended December 31, 2021			
Basic/Diluted EPS Net income available to common shareholders of the parent	<u>\$ 596,540,013</u>	25,930,380	<u>\$ 23.01</u>
Year Ended December 31, 2020			
Basic/Diluted EPS Net income available to common shareholders of the parent	<u>\$ 517,885,387</u>	25,930,380	<u>\$ 19.97</u>

28. SHARE-BASED PAYMENT ARRANGEMENTS

a. Employee restricted stock awards

The issuance of employee restricted stock awards (RSAs) for year 2021 of no more than 2,600 thousand common shares has been approved by TSMC's shareholders' meeting held on July 26, 2021. The grants will be made free of charge. Under the aforementioned resolution, TSMC's Board of Directors approved the issuance of RSAs of 1,387 thousand shares. The grant date and the issuance date will be on March 1, 2022.

Vesting conditions of the aforementioned arrangement are as follow:

- 1) The RSAs granted to a key management personnel can only be vested if
 - the key management personnel remains employed by TSMC on the last date of each vesting period;
 - during the vesting period, the key management personnel may not breach any agreement with the TSMC or violate the TSMC's work rules; and
 - certain key management personnel performance metrics and the TSMC's business performance metrics are met.
- 2) The maximum percentage of granted RSAs that may be vested each year shall be as follows: one-year anniversary of the grant: 50%; two-year anniversary of the grant: 25%; and three-year anniversary of the grant: 25%; provided that the actual percentage and number of the RSAs to be vested in each year will be calculated based on the achievement of the TSMC's business performance metrics.
- 3) The maximum number of RSAs that may be vested in each year will be set as 110%, among which 100% will be subject to a calculation based on the TSMC's relative Total Shareholder Return ("TSR", including capital gains and dividends) achievement to determine the number of RSAs to be vested; this number will be further subject to a modifier to increase or decrease up to 10% based on the Compensation Committee's evaluation of the TSMC's Environmental, Social, and Governance ("ESG") achievements. The number of shares so calculated should be rounded down to the nearest integral.

TSMC's TSR relative to the TSR of S&P 500 IT Index

Above the Index by X percentage points Equal to the Index Below the Index by X percentage points **Ratio of Shares to be Vested**

50% + X * 2.5%, with the maximum of 100% 50% - X * 2.5%, with the minimum of 0%

Restrictions imposed on the key management personnel' rights in the RSAs before the vesting conditions are fulfilled:

- 1) During each vesting period, no key management personnel granted RSAs, except for inheritance, may sell, pledge, transfer, give to another person, create any encumbrance on, or otherwise dispose of, any shares under the unvested RSAs.
- 2) Before the vesting conditions are fulfilled, the attendance, proposal rights, speech rights, voting rights and etc. shall be exercised by the engaged trustee/custodian on the key management personnel's behalf. Any other shareholder rights including but not limited to the entitlement to any distribution regarding dividends, bonuses and capital reserve, and the subscription right of the new shares issued for any capital increase, are the same as those of holders of common shares of TSMC.
- 3) Granted RSAs shall be deposited in a trust/custody account.

On February 15, 2022, TSMC's Board of Directors approved the issuance of RSAs for year 2022 of no more than 2,960 thousand common shares. The grants will be made free of charge. The actual number of shares to be issued will be resolved by the Board of Directors after the RSAs is approved at the shareholders' meeting and by the competent authority.

b. Cash-settled share-based payment arrangements

In February 2022, TSMC executed a compensation plan to grant no more than 236 thousand units of employee cash-settled share-based payment arrangement without consideration. One unit of the right represents a right to the market value of one TSMC's common share when vested. The vesting conditions and the ratio of units to be vested for key management personnel of the plan are the same as the aforementioned RSAs for year 2021.

29. ADDITIONAL INFORMATION OF EXPENSES BY NATURE

	Years Ended	Years Ended December 31		
	2021	2020		
a. Depreciation of property, plant and equipment and right-of-use assets				
Recognized in cost of revenue Recognized in operating expenses Recognized in other operating income and expenses	\$ 386,103,923 27,936,211 <u>147,566</u>	\$ 299,311,405 25,191,358 <u>35,680</u>		
	<u>\$ 414,187,700</u>	<u>\$ 324,538,443</u>		
b. Amortization of intangible assets				
Recognized in cost of revenue Recognized in operating expenses	\$ 5,574,246 2,632,923	\$ 4,837,728 		
	<u>\$ 8,207,169</u>	<u>\$ 7,186,248</u>		

		Years Ended December 31		
		2021	2020	
c.	Employee benefits expenses			
	Post-employment benefits			
	Defined contribution plans	\$ 3,711,010	\$ 2,809,484	
	Defined benefit plans	192,485	204,915	
	•	3,903,495	3,014,399	
	Other employee benefits	161,043,653	137,803,038	
		<u>\$ 164,947,148</u>	<u>\$ 140,817,437</u>	
	Employee benefits expense summarized by function			
	Recognized in cost of revenue	\$ 98,012,833	\$ 83,098,994	
	Recognized in operating expenses	66,934,315	57,718,443	
		<u>\$ 164,947,148</u>	<u>\$ 140,817,437</u>	

According to TSMC's Articles of Incorporation, TSMC shall allocate compensation to directors and profit sharing bonus to employees of TSMC not more than 0.3% and not less than 1% of annual profits during the period, respectively.

TSMC accrued profit sharing bonus to employees based on a percentage of net income before income tax, profit sharing bonus to employees and compensation to directors during the period; compensation to directors was expensed based on estimated amount payable. If there is a change in the proposed amounts after the annual consolidated financial statements are authorized for issue, the differences are recorded as a change in accounting estimate. Accrued profit sharing bonus to employees is illustrated below:

	Years Ended December 31		
	2021	2020	
Profit sharing bonus to employees	<u>\$ 35,601,449</u>	<u>\$ 34,753,184</u>	

TSMC's profit sharing bonus to employees and compensation to directors for 2021, 2020 and 2019 had been approved by the Board of Directors of TSMC, as illustrated below:

	Years Ended December 31				
	2021	2020	2019		
Resolution Date of TSMC's Board of	February 15,	February 9,	February 11,		
Directors in its meeting	2022	2021	2020		
Profit sharing bonus to employees	<u>\$ 35,601,449</u>	<u>\$ 34,753,184</u>	<u>\$ 23,165,745</u>		
Compensation to directors	<u>\$ 487,537</u>	<u>\$ 509,753</u>	<u>\$ 360,404</u>		

There is no significant difference between the aforementioned approved amounts and the amounts charged against earnings of 2021, 2020 and 2019, respectively.

The information about the appropriations of TSMC's profit sharing bonus to employees and compensation to directors is available at the Market Observation Post System website.

30. CASH FLOW INFORMATION

a. Non-cash transactions

	Years Ended December 31	
	2021	2020
Additions of financial assets at FVTOCI Conversion of convertible bonds into equity securities	\$ 253,613,917	\$ 268,653,527 (120,548)
Exchange of equity instruments	(106,185)	-
Changes in accrued expenses and other current liabilities	2,380,947	(5,895,483)
Payments for acquisition of financial assets at FVTOCI	<u>\$ 255,888,679</u>	<u>\$ 262,637,496</u>
Disposal of financial assets at FVTOCI	\$ 251,201,439	\$ 269,011,852
Changes in other financial assets	3,509,283	(2,079,936)
Exchange of equity instruments	(106,185)	
Proceeds from disposal of financial assets at FVTOCI	<u>\$ 254,604,537</u>	<u>\$ 266,931,916</u>
Additions of property, plant and equipment	\$ 835,406,296	\$ 525,720,748
Changes in other financial assets	1,933,965	584,782
Exchange of assets	(3,256,517)	(1,148)
Changes in payables to contractors and equipment suppliers	5,153,380	(19,085,925)
Transferred to initial carrying amount of hedged items	(41,416)	20,265
Payments for acquisition of property, plant and equipment	<u>\$ 839,195,708</u>	<u>\$ 507,238,722</u>
Additions of intangible assets	\$ 9,318,478	\$ 12,559,467
Changes in other financial assets	2,950	10,457
Changes in account payable	-	191,429
Changes in accrued expenses and other current liabilities	(280,677)	(3,218,966)
Payments for acquisition of intangible assets	<u>\$ 9,040,751</u>	<u>\$ 9,542,387</u>

b. Reconciliation of liabilities arising from financing activities

				Non-cash changes		
	Balance as of January 1, 2021	Financing Cash Flow	Foreign Exchange Movement	Leases Modifications	Other Changes (Note)	Balance as of December 31, 2021
Short-term loans Bonds payable Long-term bank loans Lease liabilities Total	\$ 88,559,026 256,705,084 1,967,611 22,388,674 <u>\$ 369,620,395</u>	\$ 35,668,397 361,255,068 1,510,000 (2,178,297) <u>\$ 396,255,168</u>	\$ (8,777,416) (3,646,920) (82,377) <u>\$ (12,506,713</u>)	\$ - 	\$ (528,674) 157,420 (1,813) <u>193,324</u> <u>\$ (179,743</u>)	\$ 114,921,333 614,470,652 3,475,798 22,940,665 <u>\$ 755,808,448</u>
				Non-cash changes		
	Balance as of January 1, 2020	Financing Cash Flow	Foreign Exchange Movement	<u>Non-cash changes</u> Leases Modifications	Other Changes (Note)	Balance as of December 31, 2020
Short-term loans Bonds payable Long-term bank loans Lease liabilities	January 1,	0	Foreign Exchange	Leases	Other Changes	December 31,

Note: Other changes include discounts on short-term loans, amortization of bonds payable, amortization of long-term bank loan interest subsidy and financial cost of lease liabilities.

31. CAPITAL MANAGEMENT

The Company requires significant amounts of capital to build and expand its production facilities and acquire additional equipment. In consideration of the industry dynamics, the Company manages its capital in a manner to ensure that it has sufficient and necessary financial resources to fund its working capital needs, capital asset purchases, research and development activities, dividend payments, debt service requirements and other business requirements associated with its existing operations over the next 12 months.

32. FINANCIAL INSTRUMENTS

a. Categories of financial instruments

	December 31, 2021	December 31, 2020
Financial assets FVTPL (Note 1) FVTOCI (Note 2)	\$ 159,048 129,607,052	\$ 2,259,412 129,918,694
Hedging financial assets Amortized cost (Note 3)	13,468 	47 826,293,705
Financial liabilities	<u>\$1,413,495,242</u>	<u>\$ 958,471,858</u>
FVTPL (Note 4) Hedging financial liabilities Amortized cost (Note 5)	\$ 681,914 9,642 <u>1,355,957,244</u>	\$ 94,128 1,169 <u>748,129,332</u>
	<u>\$1,356,648,800</u>	<u>\$ 748,224,629</u>

- Note 1: Financial assets mandatorily measured at FVTPL.
- Note 2: Including notes and accounts receivable (net), equity and debt investments.
- Note 3: Including cash and cash equivalents, financial assets at amortized cost, notes and accounts receivable (including related parties), other receivables and refundable deposits.
- Note 4: Held for trading.
- Note 5: Including short-term loans, accounts payable (including related parties), payables to contractors and equipment suppliers, cash dividends payable, accrued expenses and other current liabilities, bonds payable, long-term bank loans, guarantee deposits and other noncurrent liabilities.
- b. Financial risk management objectives

The Company manages its exposure to foreign currency risk, interest rate risk, equity price risk, credit risk and liquidity risk with the objective to reduce the potentially adverse effects the market uncertainties may have on its financial performance.

The plans for material treasury activities are reviewed by the Audit Committees and/or Board of Directors in accordance with procedures required by relevant regulations or internal controls. During the implementation of such plans, the Company must comply with certain treasury procedures that provide guiding principles for overall financial risk management and segregation of duties.

c. Market risk

The Company is exposed to the financial market risks, primarily changes in foreign currency exchange rates, interest rates and equity investment prices. A portion of these risks is hedged.

Foreign currency risk

Substantially all the Company's sales are denominated in U.S. dollars and over half of its capital expenditures are denominated in currencies other than NT dollars, primarily in U.S. dollars, Japanese yen and Euros. As a result, any significant fluctuations to its disadvantage in the exchanges rate of NT dollar against such currencies, in particular a weakening of U.S. dollar against NT dollar, would have an adverse impact on the revenue and operating profit as expressed in NT dollars. The Company uses foreign currency derivative contracts, such as currency forwards or currency swaps, to protect against currency exchange rate risks associated with non-NT dollar-denominated assets and liabilities and certain forecasted transactions. These hedges reduce, but do not entirely eliminate, the effect of foreign currency exchange rate movements on the assets and liabilities.

Based on a sensitivity analysis performed on the Company's total monetary assets and liabilities for the years ended December 31, 2021 and 2020, a hypothetical adverse foreign currency exchange rate change of 10% would have decreased its net income by NT\$1,435,346 thousand and NT\$897,722 thousand, respectively, after taking into account hedges and offsetting positions.

Interest rate risk

The Company is exposed to interest rate risks primarily related to its investment portfolio and outstanding debt. Changes in interest rates affect the interest earned on the Company's cash and cash equivalents and fixed income securities, the fair value of those securities, as well as the interest paid on its debt.

The Company's cash and cash equivalents as well as fixed income investments in both fixed- and floatingrate securities carry a degree of interest rate risk. The majority of the Company's fixed income investments are fixed-rate securities, which are classified as financial assets at FVTOCI, and may have their fair value adversely affected due to a rise in interest rates. At the same time, if interest rates fall, cash and cash equivalents as well as floating-rate securities may generate less interest income than expected. The Company has entered and may in the future enter into interest rate futures to partially hedge the interest rate risk on its fixed income investments. However, these hedges can offset only a small portion of the financial impact from movements in interest rates.

Based on a sensitivity analysis performed on the Company's fixed income investments at the end of the reporting period, interest rates increase of 100 basis points (1.00%) across all maturities would have decreased the Company's other comprehensive income by NT\$3,767,071 thousand and NT\$3,143,569 thousand for the years ended December 31, 2021 and 2020, respectively.

All of the Company's short-term debt is floating-rate, hence a rise in interest rates may result in higher interest expense than expected. The majority of the Company's long-term debt is fixed-rate and measured at amortized cost and as such, changes in interest rates would not affect the future cash flows and the carrying amount.

Other price risk

The Company is exposed to equity price risk arising from financial assets at FVTOCI.

Assuming a hypothetical decrease of 10% in prices of the equity investments at the end of the reporting period for the years ended December 31, 2021 and 2020, the other comprehensive income would have decreased by NT\$595,766 thousand and NT\$446,470 thousand, respectively.

d. Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial losses to the Company. The Company is exposed to credit risks from operating activities, primarily accounts receivable, and from investing activities, primarily deposits, fixed-income investments and other financial instruments with banks. Credit risk is managed separately for business related and financial related exposures. As of the end of the reporting period, the Company's maximum credit risk exposure is equal to the carrying amount of financial assets.

Business related credit risk

The Company's accounts receivable are from its customers worldwide. The majority of the Company's outstanding accounts receivable are not covered by collaterals or guarantees. While the Company has procedures to monitor and manage credit risk exposure on accounts receivable, there is no assurance such procedures will effectively eliminate losses resulting from its credit risk. This risk is heightened during periods when economic conditions worsen.

As of December 31, 2021 and 2020, the Company's ten largest customers accounted for 79% of accounts receivable in both years. The Company considers the concentration of credit risk for the remaining accounts receivable not material.

Financial credit risk

The Company mitigates its financial credit risk by selecting counterparties with investment grade credit ratings and by limiting the exposure to any individual counterparty. The Company regularly monitors and reviews the limit applied to counterparties and adjusts the limit according to market conditions and the credit standing of the counterparties.

The objective of the Company's investment policy is to achieve a return that will allow the Company to preserve principal and support liquidity requirements. The policy generally requires securities to be investment grade and limits the amount of credit exposure to any one issuer. The Company assesses whether there has been a significant increase in credit risk in the invested securities since initial recognition by reviewing changes in external credit ratings, financial market conditions and material information of the issuers.

The Company assesses the 12-month expected credit loss and lifetime expected credit loss based on the probability of default and loss given default provided by external credit rating agencies. The current credit risk assessment policies are as follows:

Evnected

Category	Description	Basis for Recognizing Expected Credit Loss	Credit Loss Ratio
Performing	Credit rating is investment grade on valuation date	12 months expected credit loss	0-0.1%
Doubtful	Credit rating is non-investment grade on valuation date	Lifetime expected credit loss-not credit impaired	-
In default	Credit rating is CC or below on valuation date	Lifetime expected credit loss-credit impaired	-
Write-off	There is evidence indicating that the debtor is in severe financial difficulty and the Company has no realistic prospect of recovery	Amount is written off	-

For the years ended December 31, 2021 and 2020, the expected credit loss decreased NT\$3,293 thousand and increased NT\$1,054 thousand, respectively. The changes were mainly due to investment portfolio adjustment.

e. Liquidity risk management

The objective of liquidity risk management is to ensure the Company has sufficient liquidity to fund its business operations over the next 12 months. The Company manages its liquidity risk by maintaining adequate cash and cash equivalents, financial assets at FVTOCI-current, financial assets at amortized cost-current and sufficient cost-efficient funding.

The table below summarizes the maturity profile of the Company's financial liabilities based on contractual undiscounted payments, including principal and interest.

	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years	Total
December 31, 2021					
Non-derivative financial liabilities					
Short-term loans Accounts payable (including related	\$ 114,767,034	\$ -	\$ -	\$ -	\$ 114,767,034
parties) Payables to contractors and	48,722,789	-	-	-	48,722,789
equipment suppliers Accrued expenses and other current	145,742,148	-	-	-	145,742,148
liabilities Bonds payable	120,240,359 13,580,628	42,801,397	- 191,458,126	- 506,504,958	120,240,359 754,345,109
Long-term bank loans Lease liabilities (including those classified under accrued expenses	183,671	2,217,112	1,153,900		3,554,683
and other current liabilities) (Note) Others	2,371,568	3,896,249 164,991,929	3,385,295	14,649,235	24,302,347 164,991,929
	445,608,197	213,906,687	195,997,321	521,154,193	1,376,666,398
Derivative financial instruments					
Forward exchange contracts Outflows	187,708,035	_	_	_	187,708,035
Inflows	(187,631,930)				(187,631,930)
	76,105				76,105
	<u>\$ 445,684,302</u>	<u>\$ 213,906,687</u>	<u>\$ 195,997,321</u>	<u>\$ 521,154,193</u>	<u>\$1,376,742,503</u>
December 31, 2020					
Non-derivative financial liabilities					
Short-term loans Accounts payable (including related	\$ 88,557,526	\$ -	\$ -	\$ -	\$ 88,557,526
parties) Payables to contractors and	41,095,002	-	-	-	41,095,002
equipment suppliers Accrued expenses and other current	157,804,961	-	-	-	157,804,961
liabilities	71,995,747	-	-	-	71,995,747
Bonds payable Long-term bank loans Lease liabilities (including those classified under accrued expenses	5,327,971 8,000	27,631,589 847,389	59,986,812 1,170,944	207,152,135	300,098,507 2,026,333
and other current liabilities) (Note)	<u>2,024,212</u> 366,813,419	<u>3,566,719</u> 32,045,697	<u>3,198,845</u> 64,356,601	<u> 15,067,857</u> 222,219,992	<u>23,857,633</u> 685,435,709
Derivative financial instruments					
Forward exchange contracts					
Outflows Inflows	177,764,155 (181,457,960)	-	-	-	177,764,155 (181,457,960)
mitows	(3,693,805)				(3,693,805)
	<u>\$ 363,119,614</u>	<u>\$ 32,045,697</u>	<u>\$ 64,356,601</u>	<u>\$ 222,219,992</u>	<u>\$ 681,741,904</u>

Note: Information about the maturity analysis for lease liabilities more than 5 years:

	5-10 Years	10-15 Years	15-20 Years	More Than 20 Years	Total
December 31, 2021					
Lease liabilities	<u>\$ 7,513,939</u>	<u>\$ 5,043,067</u>	<u>\$ 1,972,740</u>	<u>\$ 119,489</u>	<u>\$ 14,649,235</u>
				More Than	
	5-10 Years	10-15 Years	15-20 Years	20 Years	Total
December 31, 2020	5-10 Years	10-15 Years	15-20 Years	20 Years	Total

- f. Fair value of financial instruments
 - 1) Fair value measurements recognized in the consolidated balance sheets

Fair value measurements are grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The timing of transfers between levels within the fair value hierarchy is at the end of reporting period.

2) Fair value of financial instruments that are measured at fair value on a recurring basis

Fair value hierarchy

The following table presents the Company's financial assets and liabilities measured at fair value on a recurring basis:

	December 31, 2021			
-	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Mandatorily measured at FVTPL Forward exchange contracts	<u>\$</u>	<u>\$ 159,048</u>	<u>\$</u>	<u>\$ 159,048</u>
Financial assets at FVTOCI				
Investments in debt instruments Corporate bonds Agency bonds/Agency	\$ -	\$ 57,253,161	\$ -	\$ 57,253,161
mortgage-backed securities Government bonds	21,267,002	32,070,114 78,792	-	32,070,114 21,345,794
Asset-backed securities Investments in equity instruments Non-publicly traded equity	-	8,660,424	-	8,660,424
investments Publicly traded stocks Notes and accounts receivable, net	189,758	4.199.909	5,887,892	5,887,892 189,758 4,199,909
Notes and accounts receivable, net	<u>\$ 21,456,760</u>	<u>\$ 102,262,400</u>	<u>\$ 5,887,892</u>	<u>\$ 129,607,052</u> (Continued)

	December 31, 2021			
-	Level 1	Level 2	Level 3	Total
Hedging financial assets				
Cash flow hedges Forward interest rate contracts	<u>\$ </u>	<u>\$ 13,468</u>	<u>\$</u>	<u>\$ 13,468</u>
Financial liabilities at FVTPL				
Held for trading Forward exchange contracts	<u>\$</u>	<u>\$ 681,914</u>	<u>\$</u>	<u>\$ 681,914</u>
Hedging financial liabilities				
Fair value hedges Interest rate futures contracts	<u>\$ 9,642</u>	<u>\$</u>	<u>\$</u>	<u>\$ 9,642</u> (Concluded)
		December	31, 2020	
-	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Mandatorily measured at FVTPL Forward exchange contracts	<u>\$</u>	<u>\$ 2,259,412</u>	<u>\$</u>	<u>\$ 2,259,412</u>
Financial assets at FVTOCI				
Investments in debt instruments Corporate bonds Agency bonds/Agency	\$ -	\$ 56,593,623	\$ -	\$ 56,593,623
mortgage-backed securities Government bonds	- 13,279,154	43,977,113 180,349	-	43,977,113 13,459,503
Asset-backed securities Investments in equity instruments Non-publicly traded equity	-	8,368,264	-	8,368,264
investments Publicly traded stocks	- 49,950	-	4,514,940	4,514,940 49,950
Notes and accounts receivable, net		2,955,301		2,955,301
	<u>\$ 13,329,104</u>	<u>\$112,074,650</u>	<u>\$ 4,514,940</u>	<u>\$129,918,694</u>
Hedging financial assets				
Fair value hedges Interest rate futures contracts	<u>\$ 47</u>	<u>\$</u>	<u>\$</u>	<u>\$ 47</u>
Financial liabilities at FVTPL				
Held for trading Forward exchange contracts	<u>\$</u>	<u>\$ 94,128</u>	<u>\$</u>	<u>\$ 94,128</u>
Hedging financial liabilities				
Fair value hedges Interest rate futures contracts	<u>\$ 1,169</u>	<u>\$</u>	<u>\$</u>	<u>\$ 1,169</u>

Because certain equity investment's quoted price (unadjusted) in active markets became available in the fourth quarter of 2020, its fair value hierarchy was transferred from Level 2 to Level 1.

Reconciliation of Level 3 fair value measurements of financial assets

The financial assets measured at Level 3 fair value were equity investments classified as financial assets at FVTOCI and financial assets at FVTPL. Reconciliations for the years ended December 31, 2021 and 2020 are as follows:

	Years Ended December 31	
	2021	2020
Balance, beginning of year	\$ 4,514,940	\$ 4,208,900
Additions	319,177	175,202
Recognized in profit or loss	-	(3,821)
Recognized in other comprehensive income or loss	1,821,762	409,014
Disposals and proceeds from return of capital of investments	(700,224)	(51,060)
Effect of exchange rate changes	(67,763)	(223,295)
Balance, end of year	<u>\$ 5,887,892</u>	<u>\$ 4,514,940</u>

Valuation techniques and assumptions used in Level 2 fair value measurement

The fair values of financial assets and financial liabilities are determined as follows:

- The fair values of corporate bonds, agency bonds, agency mortgage-backed securities, assetbacked securities and government bonds are determined by quoted market prices provided by third party pricing services.
- The fair values of forward contracts are measured using forward rates and discount rates derived from quoted market prices.
- The fair value of accounts receivable classified as at FVTOCI is determined by the present value of future cash flows based on the discount rate that reflects the credit risk of counterparties

Valuation techniques and assumptions used in Level 3 fair value measurement

The fair values of non-publicly traded equity investments (excluding those trading on the Emerging Stock Board) are mainly determined by using the asset approach and market approach.

The asset approach takes into account the net asset value measured at the fair value by independent parties. On December 31, 2021 and 2020, the Company uses unobservable inputs derived from discount for lack of marketability of 10%. When other inputs remain equal, the fair value will decrease by NT\$51,372 thousand and NT39,006 thousand, respectively, if discounts for lack of marketability increase by 1%.

For the remaining few investments, the market approach is used to arrive at their fair values, for which the recent financing activities of investees, the market transaction prices of the similar companies and market conditions are considered.

3) Fair value of financial instruments that are not measured at fair value

Except as detailed in the following table, the Company considers that the carrying amounts of financial instruments in the consolidated financial statements that are not measured at fair value approximate their fair values.

Fair value hierarchy

The table below sets out the fair value hierarchy for the Company's financial assets and liabilities which are not required to be measured at fair value:

	December 31, 2021	
	Carrying	Level 2
	Amount	Fair Value
Financial assets		
Financial assets at amortized costs Corporate bonds	<u>\$ </u>	<u>\$ </u>
Financial liabilities		
Financial liabilities at amortized costs Bonds payable	<u>\$ 614,470,652</u>	<u>\$ 613,514,692</u>
	Decembe	r 31, 2020
	Carrying	Level 2
	Amount	Fair Value
Financial assets		
Financial assets at amortized costs Corporate bonds	<u>\$ 10,970,199</u>	<u>\$ 11,053,550</u>
Financial liabilities		
Financial liabilities at amortized costs Bonds payable	<u>\$ 256,705,084</u>	<u>\$ 257,551,196</u>
Valuation techniques and assumptions used in Level 2 fair value	e measurement	

The fair values of corporate bonds and the Company's bonds payable are determined by quoted market prices provided by third party pricing services.

33. RELATED PARTY TRANSACTIONS

Intercompany balances and transactions between TSMC and its subsidiaries, which are related parties of TSMC, have been eliminated upon consolidation; therefore those items are not disclosed in this note. The following is a summary of significant transactions between the Company and other related parties:

a. Related party name and categories

Related Party Name	Related Party Categories		
	A		
GUC	Associates		
VIS	Associates		
SSMC	Associates		
Xintec	Associates		
TSMC Education and Culture Foundation	Other related parties		
TSMC Charity Foundation	Other related parties		

b. Net revenue

			V F. J. J	D
			2021	December 31 2020
	Item	Related Party Categories		
	Net revenue from sale of goods	Associates	<u>\$ 8,475,908</u>	<u>\$ 8,129,764</u>
c.	Purchases			
			Years Ended	December 31
			2021	2020
	Related Party Categories			
	Associates		<u>\$ 7,569,787</u>	<u>\$ 7,606,421</u>
d.	Receivables from related parties			
			December 31, 2021	December 31, 2020
	Item	Related Party Name/Categories		
	Receivables from related parties	GUC Xintec	\$ 597,836 <u>117,488</u>	\$ 370,643 <u>187,488</u>
			<u>\$ 715,324</u>	<u>\$ 558,131</u>
	Other receivables from related parties	SSMC VIS Other associates	\$ 50,375 11,156	\$ 45,291 4,311 <u>1,043</u>
			<u>\$ 61,531</u>	<u>\$ 50,645</u>
e.	Payables to related parties			
	1		December 31, 2021	December 31, 2020
	Item	Related Party Name/Categories		
	Payables to related parties	Xintec VIS SSMC Other associates	\$ 725,325 357,151 349,211 5,499	\$ 1,358,624 311,406 400,819 <u>36,869</u>
			<u>\$ 1,437,186</u>	<u>\$ 2,107,718</u>
f.	Accrued expenses and other curre	ent liabilities	December 31, 2021	December 31, 2020
	Item	Related Party Categories		
	Contract liabilities	Associates	<u>\$726,350</u>	<u>\$</u>

g. Others

		Years Ended December 31		
		2021	2020	
Item	Related Party Categories			
Manufacturing expenses	Associates	<u>\$ 5,459,919</u>	<u>\$ 5,439,978</u>	

The sales prices and payment terms to related parties were not significantly different from those of sales to third parties. For other related party transactions, price and terms were determined in accordance with mutual agreements.

The Company leased factory and office from associates. The lease terms and prices were both determined in accordance with mutual agreements. The rental expenses were paid to associates monthly; the related expenses were both classified under manufacturing expenses.

h. Compensation of key management personnel

The compensation to directors and other key management personnel were as follows:

	Years Ended December 31		
	2021	2020	
Short-term employee benefits Post-employment benefits	\$ 2,886,786 	\$ 2,666,696 2,334	
	<u>\$ 2,889,686</u>	<u>\$ 2,669,030</u>	

The compensation to directors and other key management personnel were determined by the Compensation Committee of TSMC in accordance with the individual performance and market trends.

34. PLEDGED ASSETS

The Company provided certificate of deposits recorded in other financial assets as collateral mainly for building construction, building lease agreements and energy purchase agreements. As of December 31, 2021 and 2020, the aforementioned other financial assets amounted to NT\$210,235 thousand and NT\$135,375 thousand, respectively.

35. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

Significant contingent liabilities and unrecognized commitments of the Company as of the end of the reporting period, excluding those disclosed in other notes, were as follows:

a. Under a technical cooperation agreement with Industrial Technology Research Institute, the R.O.C. Government or its designee approved by TSMC can use up to 35% of TSMC's capacity provided TSMC's outstanding commitments to its customers are not prejudiced. The term of this agreement is for five years beginning from January 1, 1987 and is automatically renewed for successive periods of five years unless otherwise terminated by either party with one year prior notice. As of December 31, 2021, the R.O.C. Government did not invoke such right.

- b. Under a Shareholders Agreement entered into with Philips and EDB Investments Pte Ltd. on March 30, 1999, the parties formed a joint venture company, SSMC, which is an integrated circuit foundry in Singapore. TSMC's equity interest in SSMC was 32%. Nevertheless, in September 2006, Philips spunoff its semiconductor subsidiary which was renamed as NXP B.V. Further, TSMC and NXP B.V. purchased all the SSMC shares owned by EDB Investments Pte Ltd. pro rata according to the Shareholders Agreement on November 15, 2006. After the purchase, TSMC and NXP B.V. currently own approximately 39% and 61% of the SSMC shares, respectively. TSMC and NXP B.V. are required, in the aggregate, to purchase at least 70% of SSMC's capacity, but TSMC alone is not required to purchase more than 28% of the capacity. If any party defaults on the commitment and the capacity utilization of SSMC falls below a specific percentage of its capacity, the defaulting party is required to compensate SSMC for all related unavoidable costs. There was no default from the aforementioned commitment as of December 31, 2021.
- c. TSMC entered into long-term purchase agreements of materials and supplies and agreements of waste disposal with multiple suppliers. The relative minimum fulfillment quantity and price are specified in the agreements.
- d. TSMC entered into a long-term purchase agreement of equipment. The relative fulfillment quantity and price are specified in the agreement.
- e. TSMC entered into long-term energy purchase agreements with multiple suppliers. The relative fulfillment period, quantity and price are specified in the agreements.
- f. Amounts available under unused letters of credit as of December 31, 2021 and 2020 were NT\$136,710 thousand and NT\$56,194 thousand, respectively.

36. EXCHANGE RATE INFORMATION OF FOREIGN-CURRENCY FINANCIAL ASSETS AND LIABILITIES

The following information was summarized according to the foreign currencies other than the functional currency of the Company. The exchange rates disclosed were used to translate the foreign currencies into the functional currency. The significant financial assets and liabilities denominated in foreign currencies were as follows:

	Foreign Currencies (In Thousands)	Exchange Rate (Note 1)	Carrying Amount (In Thousands)
December 31, 2021			
Financial assets			
Monetary items			
USD	\$ 11,445,396	27.674	\$ 316,739,883
USD	2,023,233	6.379(Note 2)	55,990,951
EUR	14,964	31.460	470,776
EUR	40,326	7.252(Note 3)	1,268,665
JPY	10,921,880	0.2414	2,636,542
			(Continued)

	Foreign Currencies (In Thousands)	Exchange Rate (Note 1)	Carrying Amount (In Thousands)
Financial liabilities			
Monetary items USD EUR JPY	\$ 11,958,503 3,539,320 112,456,908	27.674 31.460 0.2414	\$ 330,939,620 111,347,020 27,147,098
<u>December 31, 2020</u>			
Financial assets			
Monetary items USD USD EUR JPY	6,984,545 785,171 13,820 83,593,234	28.097 6.540(Note 2) 34.587 0.2729	196,244,748 22,060,962 478,002 22,812,594
Financial liabilities			
Monetary items USD EUR JPY	6,966,889 4,150,215 105,112,663	28.097 34.587 0.2729	195,748,671 143,543,499 28,685,246 (Concluded)

Note 1: Except as otherwise noted, exchange rate represents the number of NT dollar for which one foreign currency could be exchanged.

Note 2: The exchange rate represents the number of RMB for which one U.S. dollar could be exchanged.

Note 3: The exchange rate represents the number of RMB for which one Euro could be exchanged.

Please refer to the consolidated statements of comprehensive income for the total of realized and unrealized foreign exchange gain and loss for the years ended December 31, 2021 and 2020, respectively. Since there were varieties of foreign currency transactions and functional currencies within the subsidiaries of the Company, the Company was unable to disclose foreign exchange gain (loss) towards each foreign currency with significant impact.

37. ADDITIONAL DISCLOSURES

Following are the additional disclosures required by the Securities and Futures Bureau for TSMC:

- a. Financings provided: See Table 1 attached;
- b. Endorsement/guarantee provided: See Table 2 attached;
- c. Marketable securities held (excluding investments in subsidiaries and associates): See Table 3 attached;
- d. Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital: See Table 4 attached;

- e. Acquisition of individual real estate properties at costs of at least NT\$300 million or 20% of the paid-in capital: See Table 5 attached;
- f. Disposal of individual real estate properties at prices of at least NT\$300 million or 20% of the paid-in capital: None;
- g. Total purchases from or sales to related parties of at least NT\$100 million or 20% of the paid-in capital: See Table 6 attached;
- h. Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital: See Table 7 attached;
- i. Information about the derivative financial instruments transaction: See Notes 7 and 10;
- j. Others: The business relationship between the parent and the subsidiaries and significant transactions between them: See Table 8 attached;
- k. Names, locations, and related information of investees over which TSMC exercises significant influence (excluding information on investment in mainland China): See Table 9 attached;
- 1. Information on investment in mainland China
 - 1) The name of the investee in mainland China, the main businesses and products, its issued capital, method of investment, information on inflow or outflow of capital, percentage of ownership, income (losses) of the investee, share of profits/losses of investee, ending balance, amount received as dividends from the investee, and the limitation on investee: See Table 10 attached.
 - 2) Significant direct or indirect transactions with the investee, its prices and terms of payment, unrealized gain or loss, and other related information which is helpful to understand the impact of investment in mainland China on financial reports: See Table 8 attached.
- m. Information of major shareholders

List of all shareholders with ownership of 5 percent or greater showing the names and the number of shares and percentage of ownership held by each shareholder: See Table 11 attached.

38. OPERATING SEGMENTS INFORMATION

a. Operating segments, segment revenue and operating results

TSMC's chief operating decision makers periodically review operating results, focusing on operating income generated by foundry segment. Operating results are used for resource allocation and/or performance assessment. As a result, the Company has only one operating segment, the foundry segment. The foundry segment engages mainly in the manufacturing, sales, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing of masks.

The basis for the measurement of income from operations is the same as that for the preparation of financial statements. Please refer to the consolidated statements of comprehensive income for the related segment revenue and operating results.

- b. Geographic and major customers' information were as follows:
 - 1) Geographic information

Noncurrent Assets	December 31, 2021	December 31, 2020
Taiwan	\$1,953,007,722	\$1,569,080,378
United States	41,208,723	9,455,505
China	41,895,164	34,456,406
Europe, the Middle East and Africa	143,916	174,169
Japan	1,011,043	327,250
Others	539	2,996
	<u>\$2,037,267,107</u>	<u>\$1,613,496,704</u>

Noncurrent assets include property, plant and equipment, right-of-use assets, intangible assets and other noncurrent assets.

2) Major customers representing at least 10% of net revenue

	Year	s Ended	December 31	
	2021		2020	
	Amount	%	Amount	%
Customer A	\$ 405,402,955	26	\$ 336,775,511	25
Customer B	153,740,831	10	NA (Note)	NA
Customer C	NA	NA	167,390,758	12

Note: Revenue less than 10% of the Company's net revenue.

FINANCINGS PROVIDED FOR THE YEAR ENDED DECEMBER 31, 2021 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

					Maximum	Ending Balance	Amount Actually						Coll	ateral	Financing Limits	0
N	D.	Financing Company Count	party Financial Statement Account	Related Party	Balance for the Period (Foreign Currencies in Thousands) (Note 3)	(Foreign Currencies in Thousands) (Note 3)	Drawn (Foreign Currencies in Thousands)	Interest Rate	Nature for Financing	Transaction Amounts	Reason for Financing	Allowance for Bad Debt	Item	Value	for Each Borrowing Company (Notes 1 and 2)	Company's Total Financing Amount Limits (Notes 1 and 2)
1	Т	SMC China TSMC	anjing Other receivables from related parties	Yes	\$ 55,669,760 (RMB 10,600,000) &	\$ 33,979,260 (RMB 5,600,000) &	\$ 24,293,360 (RMB 5,600,000)	1.30%-1.50%	The need for short-term and long-term	\$ -	Operating capital	\$ -	-	\$-	\$ 73,690,307	\$ 73,690,307
2	с т	SMC Global TSMC	Other receivables from related parties	Yes	(US\$ 350,000) 102,393,800 (US\$ 3,700,000)	(US\$ 350,000) -	-	0.00%	financing The need for short-term financing	-	Operating capital	-	-	-	749,278,812	749,278,812

Note 1: The aggregate amount available for lending to TSMC Nanjing from TSMC China shall not exceed the net worth of TSMC China.

Note 2: The aggregate amount available for lending to TSMC from TSMC Global shall not exceed two times (200%) of the net worth of TSMC Global.

Note 3: The maximum balance for the period and ending balance represent the amounts approved by the Board of Directors.

ENDORSEMENTS/GUARANTEES PROVIDED FOR THE YEAR ENDED DECEMBER 31, 2021 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

		Guarant	eed Party	Limits on	Maximum				Ratio of				
No.	Endorsement/ Guarantee Provider	Name	Nature of Relationship	Endorsement/ Guarantee Amount Provided to Each Guaranteed Party (Notes 1 and 2)	Balance for the Period (Foreign	Ending Balance (Foreign Currencies in Thousands) (Note 3)	Amount Actually Drawn (Foreign Currencies in Thousands)	Amount of Endorsement/ Guarantee Collateralized by Properties	Accumulated Endorsement/ Guarantee to Net	Maximum Endorsement/ Guarantee Amount Allowable (Notes 1 and 2)	Guarantee Provided by Parent Company	Guarantee Provided by A Subsidiary	Guarantee Provided to Subsidiaries in Mainland China
0	TSMC	TSMC North America	Subsidiary	\$ 542,071,638	\$ 2,302,845 (US\$ 83,213)	\$ 2,302,845 (US\$ 83,213)	\$ 2,302,845 (US\$ 83,213)	\$-	0.11%	\$ 542,071,638	Yes	No	No
		TSMC Global	Subsidiary	542,071,638	207,555,000 (US\$ 7,500,000)	207,555,000	179,881,000 (US\$ 6,500,000)	-	9.57%	542,071,638	Yes	No	No
		TSMC Arizona	Subsidiary	542,071,638	222,289,191	222,289,191 (US\$ 8,032,420)	(US\$ 4,532,420)	-	10.25%	542,071,638	Yes	No	No
1	TSMC Japan	TSMC JDC	The same parent company	331,028	318,648	(JPY 1,320,000)	318,648	-	0.01%	331,028	No	No	No

Note 1: The total amount of the endorsement/guarantee provided by TSMC to TSMC North America, TSMC Global and TSMC Arizona shall not exceed twenty-five percent (25%) of TSMC's net worth.

Note 2: The total amount of the endorsement/guarantee provided by TSMC Japan to TSMC JDC shall not exceed two hundred and fifty percent (250%) of TSMC Japan's net worth.

Note 3: The maximum balance for the period and ending balance represent the amounts approved by the Board of Directors.

MARKETABLE SECURITIES HELD DECEMBER 31, 2021

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

					December 31, 2021				
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencie in Thousands)	s Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	No	
SMC	Non-publicly traded equity investments								
	United Industrial Gases Co., Ltd.	-	Financial assets at fair value through other comprehensive income	21,230	\$ 497,641	10	\$ 497,641		
	Shin-Etsu Handotai Taiwan Co., Ltd.	-	//	10,500	387,072	7	387,072		
	Global Investment Holding Inc.	-	//	10,442	111,441	6	111,441		
	Crimson Asia Capital	-	"	-	2,246	1	2,246		
MC Partners	Non-publicly traded equity investments								
	Shanghai Walden Venture Capital Enterprise	-	Financial assets at fair value through other comprehensive income	-	US\$ 45,254	6	US\$ 45,254		
	China Walden Venture Investments II, L.P.	-	"	-	US\$ 16,456	9	US\$ 16,456		
	China Walden Venture Investments III, L.P.	-	//	-	US\$ 11,755	4	US\$ 11,755		
	Movella Inc.	-	//	6,333	-	10	-		
	Tela Innovations	-	"	6,942	-	22	-		
SMC Global	Corporate bond								
	Bank of America Corporation	-	Financial assets at fair value through other comprehensive income	-	US\$ 75,265	N/A	US\$ 75,265		
The Citi	Morgan Stanley	-	"	-	US\$ 65,115	N/A	US\$ 65,115		
	The Goldman Sachs Group, Inc.	-	"	-	US\$ 53,756	N/A	US\$ 53,756		
	Citigroup Inc.	-	//	-	US\$ 49,298	N/A	US\$ 49,298		
	JPMorgan Chase & Co.	-	//	-	US\$ 45,332	N/A	US\$ 45,332		
	Wells Fargo & Company	-	//	-	US\$ 38,439	N/A	US\$ 38,439		
	AbbVie Inc.	-	//	-	US\$ 37,531	N/A	US\$ 37,531		
	Mitsubishi UFJ Financial Group, Inc.	-	//	_	US\$ 31,881	N/A	US\$ 31,881		
	Sumitomo Mitsui Financial Group, Inc.	-	//	-	US\$ 27,669	N/A	US\$ 27,669		
	HSBC Holdings plc	-	//	-	US\$ 26,960	N/A	US\$ 26,960		
	Athene Global Funding	-	//	-	US\$ 25,606	N/A	US\$ 25,606		
	Lloyds Banking Group plc	_	//	_	US\$ 21,675	N/A	US\$ 21,675		
	BNP Paribas SA	_	11	_	US\$ 21,320	N/A	US\$ 21,320		
	Apple Inc.	_	11	_	US\$ 20,502	N/A	US\$ 20,502		
Athe Lloy BNF Appi Hyui Norc Orac	Hyundai Capital America, Inc.	_	"	_	US\$ 19,683	N/A	US\$ 19,683		
	Nordea Bank Abp	_	"		US\$ 19,605	N/A	US\$ 19,605		
	Oracle Corporation	_	"	_	US\$ 19,448	N/A N/A	US\$ 19,448		
	Banco Santander, S.A.	_	"		US\$ 18,461	N/A N/A	US\$ 18,461		
	Volkswagen Group of America Finance, LLC	_	"		US\$ 18,205	N/A N/A	US\$ 18,205		
	AT&T Inc.	_	"		US\$ 17,883	N/A N/A	US\$ 17,883		
	Metropolitan Life Global Funding I		"		US\$ 17,885 US\$ 17,341	N/A N/A	US\$ 17,383 US\$ 17,341		
	Sumitomo Mitsui Trust Bank, Limited	_	"	-	US\$ 16,182	N/A N/A	US\$ 16,182		
	NatWest Markets Plc	-	"	-	US\$ 16,070	N/A N/A	US\$ 16,070		
	Credit Suisse AG, New York Branch	-	"	-	US\$ 15,372	N/A N/A	US\$ 15,372		
	The Toronto-Dominion Bank	-		-		N/A N/A	US\$ 15,372 US\$ 14,786		
	Toyota Motor Credit Corporation	-		-					
		-	"	-	US\$ 14,567	N/A	US\$ 14,567		
	Deutsche Bank AG - New York Branch	-	"	-	US\$ 14,423	N/A	US\$ 14,423		
	Mizuho Financial Group, Inc.	-	"	-	US\$ 13,999	N/A	US\$ 13,999		

TABLE 3

						December 31, 2021			
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units	Carrying Value	Percentage of	Fair Value	No	
nena company rame		Trendronomp with the Company		(In Thousands)	(Foreign Currencies	Ownership (%)	(Foreign Currencies	1.0	
					in Thousands)	- · ·	in Thousands)		
MC Global	Standard Chartered PLC	-	Financial assets at fair value through other comprehensive income	-	US\$ 13,484	N/A	US\$ 13,484		
	Principal Life Global Funding II	-	"	-	US\$ 13,462	N/A	US\$ 13,462		
	Macquarie Group Limited	-	//	-	US\$ 13,190	N/A	US\$ 13,190		
	Royal Bank of Canada	-	//	-	US\$ 13,159	N/A	US\$ 13,159		
	Barclays PLC	-	//	-	US\$ 13,019	N/A	US\$ 13,019		
	AIG Global Funding	-	//	-	US\$ 12,808	N/A	US\$ 12,808		
	Nationwide Building Society	-	//	-	US\$ 12,794	N/A	US\$ 12,794		
	Banque Fédérative du Crédit Mutuel Société anonyme	-	//	-	US\$ 12,731	N/A	US\$ 12,731		
	NTT Finance Corporation	-	//	-	US\$ 12,546	N/A	US\$ 12,546		
	Equitable Financial Life Global Funding	-	//	-	US\$ 12,485	N/A	US\$ 12,485		
	Capital One Financial Corporation	-	//	-	US\$ 12,063	N/A	US\$ 12,063		
	BPCE SA	-	"	_	US\$ 11,849	N/A	US\$ 11,849		
	National Securities Clearing Corporation	-	"	_	US\$ 11,771	N/A	US\$ 11,771		
	Amazon.com, Inc.	_	11	-	US\$ 11,711	N/A	US\$ 11,711		
	Société Générale Société anonyme	_	<i>n</i>	-	US\$ 11,448	N/A	US\$ 11,448		
	Protective Life Global Funding	_	<i>n</i>	-	US\$ 11,256	N/A	US\$ 11,256		
	Intel Corporation	_	11	_	US\$ 11,221	N/A	US\$ 11,221		
	Verizon Communications Inc.	_	"	_	US\$ 10,971	N/A	US\$ 10,971		
	Santander UK Group Holdings plc		"	_	US\$ 10,463	N/A	US\$ 10,463		
	Chevron Corporation		"		US\$ 10,326	N/A	US\$ 10,326		
	Fédération des caisses Desjardins du Québec		"		US\$ 10,055	N/A	US\$ 10,055		
	ING Groep N.V.		"		US\$ 10,028	N/A	US\$ 10,035 US\$ 10,028		
	U.S. Bancorp		"	_	US\$ 9,799	N/A	US\$ 9,799		
	Roper Technologies, Inc.		"		US\$ 9,790	N/A N/A	US\$ 9,790		
	Daimler Trucks Finance North America LLC	-	"	-	US\$ 9,675	N/A N/A	US\$ 9,675		
	Merck & Co., Inc.	-	"	-	US\$ 9,625	N/A N/A	US\$ 9,625		
	Bristol-Myers Squibb Company	-	"	-	US\$ 9,412	N/A N/A	US\$ 9,412		
	Equinor ASA	-	"	-	US\$ 9,213	N/A N/A	US\$ 9,213		
	Canadian Imperial Bank of Commerce	-	"	-	US\$ 9,213 US\$ 9,075	N/A N/A	US\$ 9,075		
	NIKE, Inc.	-	"	-	US\$ 9,073 US\$ 8,867	N/A N/A	US\$ 9,073 US\$ 8,867		
	Nike, Inc. New York Life Global Funding	-	"	-					
	ç	-	"	-	US\$ 8,801	N/A	US\$ 8,801		
	The Bank of Nova Scotia	-	//	-	US\$ 8,543	N/A	US\$ 8,543		
	Danske Bank A/S	-	"	-	US\$ 8,362	N/A	US\$ 8,362		
	KfW United Health Crown Incomposited	-	"	-	US\$ 8,258	N/A	US\$ 8,258		
	UnitedHealth Group Incorporated	-	"	-	US\$ 8,213	N/A	US\$ 8,213		
	Guardian Life Global Funding	-	"	-	US\$ 8,171	N/A	US\$ 8,171		
	AstraZeneca Finance LLC	-	//	-	US\$ 8,123	N/A	US\$ 8,123		
	International Bank for Reconstruction and Development	-	"	-	US\$ 8,107	N/A	US\$ 8,107		
	ASB Bank Limited	-	"	-	US\$ 8,030	N/A	US\$ 8,030		
	Great-West Lifeco U.S. Finance 2020, Lp	-	"	-	US\$ 7,944	N/A	US\$ 7,944		
Inte Sun Nor	Inter-American Development Bank	-	"	-	US\$ 7,937	N/A	US\$ 7,937		
	Suncorp-Metway Limited	-	11	-	US\$ 7,846	N/A	US\$ 7,846		
	Nomura Holdings, Inc.	-	11	-	US\$ 7,818	N/A	US\$ 7,818		
	Equifax Inc.	-	"	-	US\$ 7,807	N/A	US\$ 7,807		
	Pacific Life Global Funding II	-	"	-	US\$ 7,543	N/A	US\$ 7,543		
	Santander UK plc	-	"	-	US\$ 7,428	N/A	US\$ 7,428		
	Credit Agricole SA London Branch	-	"	-	US\$ 7,342	N/A	US\$ 7,342		
	Intuit Inc.	-	//	-	US\$ 7,231	N/A	US\$ 7,231		

	ompany Name Marketable Securities Type and Name					December	31, 2021			
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units	Carrying Value		Percentage of		Value	Note
field Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	(In Thousands)		Currencies	Ownership (%)		Currencies	TION
				(in Tho	usands)	• ····· · · ····	in The	ousands)	
ISMC Global	AstraZeneca PLC	-	Financial assets at fair value through other comprehensive income	-	US\$	7,128	N/A	US\$	7,128	
	SMBC Aviation Capital Finance DAC	-	"	-	US\$	7,006	N/A	US\$	7,006	
	Prudential Funding Corp.	-	//	-	US\$	6,971	N/A	US\$	6,971	
	Cargill, Incorporated	-	//	-	US\$	6,566	N/A	US\$	6,566	
	Credit Suisse Group AG	-	//	-	US\$	6,485	N/A	US\$	6,485	
	Discover Bank (New Castle, Delaware)	-	//	-	US\$	6,471	N/A	US\$	6,471	
	Banco Bilbao Vizcaya Argentaria, S.A.	-	//	-	US\$	6,373	N/A	US\$	6,373	
	Montpelier Re Holdings Ltd.	-	//	-	US\$	6,371	N/A	US\$	6,371	
	UBS Group Funding (Switzerland) AG	_	//	-	US\$	6,370	N/A	US\$	6,370	
	Bank of Montreal	_	//	-	US\$	6,295	N/A	US\$	6,295	
	Huntington Bancshares Incorporated	_	//	-	US\$	6,275	N/A	US\$	6,275	
	Exxon Mobil Corporation	_	"	-	US\$	6,254	N/A	US\$	6,254	
ANZ N Scentre	ANZ New Zealand (Int'l) Limited	_	"	-	US\$	6,211	N/A	US\$	6,211	
	Scentre Group Trust 1	_	11	_	US\$	6,200	N/A	US\$	6,200	
	Enel Finance International N.V.	_	"	_	US\$	6,118	N/A	US\$	6,118	
	The Bank of New York Mellon Corporation		"	_	US\$	6,072	N/A	US\$	6,072	
	Fox Corporation		"		US\$	6,052	N/A	US\$	6,052	
	Macquarie Bank Limited		"		US\$	5,991	N/A	US\$	5,991	
	WPP Finance 2010		"	_	US\$	5,950	N/A	US\$	5,950	
	Shire Acquisitions Investments Ireland Designated Activity	-	"	-	US\$	5,929	N/A N/A	US\$ US\$	5,929	
	Company	-	"	-	039	5,929	1V/A	USφ	5,929	
	UBS AG, London Branch	_	//	-	US\$	5,880	N/A	US\$	5,880	
	Siemens Financieringsmaatschappij N.V.	_	//	-	US\$	5,871	N/A	US\$	5,871	
	W. P. Carey Inc.	_	//	-	US\$	5,763	N/A	US\$	5,763	
	Alabama Power Company	_	//	-	US\$	5,704	N/A	US\$	5,704	
	Cox Communications, Inc.	_	11	-	US\$	5,649	N/A	US\$	5,649	
	UBS Group AG	_	11	-	US\$	5,526	N/A	US\$	5,526	
	Fiserv, Inc.	_	"	_	US\$	5,463	N/A	US\$	5,463	
	CenterPoint Energy, Inc.	_	"	_	US\$	5,359	N/A	US\$	5,359	
	Roche Holdings, Inc.		"		US\$	5,327	N/A	US\$	5,327	
	Five Corners Funding Trust		"		US\$	5,299	N/A	US\$	5,299	
	CGI Inc.		"		US\$	5,222	N/A N/A	US\$	5,222	
	Capital One, National Association		"		US\$	5,202	N/A	US\$	5,202	
	Credit Suisse Group Funding (Guernsey) Limited		"	-	US\$ US\$	5,202	N/A N/A	US\$ US\$	5,202	
	Sprint Spectrum Co Llc		"	-	US\$ US\$	3,133 4,958	N/A N/A	US\$ US\$	4,958	
	HP Inc.		"	-	US\$ US\$	4,938 4,897	N/A N/A	US\$ US\$	4,938 4,897	
	DNB Bank ASA			-		4,897 4,836	N/A N/A	US\$ US\$	4,897 4,836	
		-	"	-	US\$	4,836 4,789			4,836 4,789	
	Northwestern Mutual Global Funding	-	"	-	US\$		N/A N/A	US\$		
	Jackson National Life Global Funding	-	//	-	US\$	4,713	N/A	US\$	4,713	
	Intercontinental Exchange, Inc.	-	"	-	US\$	4,706	N/A	US\$	4,706	
	Comcast Corporation	-	//	-	US\$	4,658	N/A	US\$	4,658	
	American International Group, Inc.	-	//	-	US\$	4,604	N/A	US\$	4,604	
	NatWest Group plc	-	//	-	US\$	4,583	N/A	US\$	4,583	
	Thermo Fisher Scientific Inc.	-	"	-	US\$	4,570	N/A	US\$	4,570	
	Bank of New Zealand	-	"	-	US\$	4,570	N/A	US\$	4,570	
	AvalonBay Communities, Inc.	-	"	-	US\$	4,499	N/A	US\$	4,499	
	Eversource Energy	-	"	-	US\$	4,477	N/A	US\$	4,477	
	OGE Energy Corp.	-	//	-	US\$	4,428	N/A	US\$	4,428	

						December	31, 2021			
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units	Carrying Value (Foreign Currencies		Percentage of		Value Currencies	Not
				(In Thousands)		usands)	Ownership (%)		ousands)	
MC Global	Florida Power & Light Company	-	Financial assets at fair value through other comprehensive income	-	US\$	4,383	N/A	US\$	4,383	
	Swedbank AB (publ)	_		-	US\$	4,334	N/A	US\$	4,334	
	7-Eleven, Inc.	_	11	-	US\$	4,301	N/A	US\$	4,301	
	Pioneer Natural Resources Company	_	"	_	US\$	4,210	N/A	US\$	4,210	
	Daimler Finance North America LLC	_	"	_	US\$	4,206	N/A	US\$	4,206	
	Fidelity National Information Services, Inc.	_	"	_	US\$	4,204	N/A	US\$	4,204	
	Element Fleet Management Corp.	_	"	_	US\$	4,200	N/A	US\$	4,200	
	Coöperatieve Rabobank U.A.	_	"	_	US\$	4,194	N/A	US\$	4,194	
	Public Storage		"		US\$	4,078	N/A	US\$	4,078	
	Svenska Handelsbanken AB (publ)		"		US\$	4,078	N/A	US\$	4,078	
	European Bank for Reconstruction and Development	_	"	-	US\$	4,069	N/A N/A	US\$	4,069	
	Exelon Corporation		"		US\$	4,063	N/A N/A	US\$	4,063	
	MPLX LP		"		US\$ US\$	4,003	N/A N/A	US\$ US\$	4,003	
	Ameren Corporation	_	"		US\$ US\$	4,040	N/A N/A	US\$ US\$	4,040	
	American Express Credit Corporation	_	"	- -	US\$ US\$	4,028 4,007	N/A N/A	US\$ US\$	4,028 4,007	
Ameria CNO C B.A.T. Appala Coca-C Domin	CNO Global Funding	_	"	- -	US\$ US\$	4,007 4,007	N/A N/A	US\$ US\$	4,007 4,007	
	B.A.T. International Finance p.l.c.	-	"	-	US\$	4,007	N/A N/A	US\$	4,007	
	Appalachian Power Company	-	"	-	US\$ US\$	4,003 3,978	N/A N/A	US\$ US\$	4,003 3,978	
		-	"	-						
	Coca-Cola Europacific Partners PLC	-	"	-	US\$	3,975	N/A	US\$	3,975	
	Dominion Energy, Inc.	-	"	-	US\$	3,899	N/A	US\$	3,899	
	BorgWarner Inc.	-	"	-	US\$	3,856	N/A	US\$	3,856	
	V.F. Corporation	-	"	-	US\$	3,830	N/A	US\$	3,830	
	Bayer US Finance II LLC	-	"	-	US\$	3,802	N/A	US\$	3,802	
	Fifth Third Bancorp	-	"	-	US\$	3,725	N/A	US\$	3,725	
	Public Service Electric and Gas Company	-	"	-	US\$	3,714	N/A	US\$	3,714	
	The Charles Schwab Corporation	-	"	-	US\$	3,669	N/A	US\$	3,669	
	Truist Bank	-	"	-	US\$	3,655	N/A	US\$	3,655	
	Monongahela Power Company	-	"	-	US\$	3,652	N/A	US\$	3,652	
	Welltower Inc.	-	"	-	US\$	3,634	N/A	US\$	3,634	
	Ross Stores, Inc.	-	"	-	US\$	3,608	N/A	US\$	3,608	
	Diageo Capital plc	-	//	-	US\$	3,554	N/A	US\$	3,554	
	F&G Global Funding	-	"	-	US\$	3,519	N/A	US\$	3,519	
	Highmark Inc.	-	"	-	US\$	3,512	N/A	US\$	3,512	
	Verisk Analytics, Inc.	-	//	-	US\$	3,494	N/A	US\$	3,494	
	ERAC USA Finance LLC	-	//	-	US\$	3,493	N/A	US\$	3,493	
	American Honda Finance Corporation	-	"	-	US\$	3,473	N/A	US\$	3,473	
	Skandinaviska Enskilda Banken AB (publ)	-	"	-	US\$	3,458	N/A	US\$	3,458	
	Pfizer Inc.	-	"	-	US\$	3,416	N/A	US\$	3,416	
	HSBC Bank Canada	-	"	-	US\$	3,406	N/A	US\$	3,406	
	USAA Capital Corp.	-	"	-	US\$	3,375	N/A	US\$	3,375	
	Penske Truck Leasing Co., L.P.	-	//	-	US\$	3,364	N/A	US\$	3,364	
	Xcel Energy Inc.	-	"	-	US\$	3,318	N/A	US\$	3,318	
Th	The Western Union Company	-	"	-	US\$	3,313	N/A	US\$	3,313	
	BMW US Capital, LLC	-	"	-	US\$	3,298	N/A	US\$	3,298	
	Johnson & Johnson	-	"	-	US\$	3,292	N/A	US\$	3,292	
	Nestlé Holdings, Inc.	-	"	-	US\$	3,291	N/A	US\$	3,291	
	ONE Gas, Inc.	-	"	-	US\$	3,195	N/A	US\$	3,195	
	PNC Bank, National Association	-	//	-	US\$	3,187	N/A	US\$	3,187	
	Texas Instruments Incorporated				US\$	3,184	N/A	US\$	3,184	

					~	December				
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)		ng Value Currencies usands)	Percentage of Ownership (%)	(Foreign	Value Currencies ousands)	Not
MC Global	CNA Financial Corporation	-	Financial assets at fair value through other comprehensive income	-	US\$	3,165	N/A	US\$	3,165	
	Avangrid, Inc.	-		-	US\$	3,136	N/A	US\$	3,136	
	Oncor Electric Delivery Company LLC	-	//	-	US\$	3,111	N/A	US\$	3,111	
	Baidu, Inc.	-	//	-	US\$	3,091	N/A	US\$	3,091	
	Novartis Capital Corporation	-	11	-	US\$	3,052	N/A	US\$	3,052	
	BOC Aviation Limited	_	11	-	US\$	3,041	N/A	US\$	3,041	
	Ralph Lauren Corporation	_	11	_	US\$	3,018	N/A	US\$	3,018	
	Baxalta Incorporated	_	"	_	US\$	3,017	N/A	US\$	3,010	
	Phillips 66	_	"	_	US\$	2,952	N/A	US\$	2,952	
	Southern California Edison Company		"		US\$	2,932	N/A	US\$	2,932	
	Chevron Phillips Chemical Company LLC		"		US\$	2,936	N/A	US\$	2,936	
	Hewlett Packard Enterprise Company		"		US\$	2,936	N/A N/A	US\$	2,936	
	B.A.T Capital Corporation	_	"		US\$	2,930 2,936	N/A N/A	US\$ US\$	2,930	
	Ameriprise Financial, Inc.	-	"	-	US\$ US\$	2,930	N/A N/A	US\$ US\$	2,930	
	National Bank of Canada	-		-	US\$ US\$	2,911 2,879	N/A N/A	US\$ US\$	2,911 2,879	
	Eastern Energy Gas Holdings, LLC	-	"	-	US\$	2,879	N/A N/A	US\$ US\$	2,879	
	Ventas Realty, Limited Partnership	-	"	-		2,843	N/A N/A	US\$ US\$	2,843	
		-	"	-	US\$					
	American Express Company	-	"	-	US\$	2,809	N/A	US\$	2,809	
	Air Products and Chemicals, Inc.	-	"	-	US\$	2,779	N/A	US\$	2,779	
Reli	Reliance Standard Life Global Funding II	-	"	-	US\$	2,765	N/A	US\$	2,765	
	PPL Electric Utilities Corporation	-	//	-	US\$	2,753	N/A	US\$	2,753	
	Baxter International Inc.	-	"	-	US\$	2,751	N/A	US\$	2,751	
	CVS Health Corporation	-	"	-	US\$	2,725	N/A	US\$	2,725	
	Public Service Enterprise Group Incorporated	-	"	-	US\$	2,715	N/A	US\$	2,715	
	NBN Co Limited	-	"	-	US\$	2,707	N/A	US\$	2,707	
	DTE Energy Company	-	"	-	US\$	2,703	N/A	US\$	2,703	
	Realty Income Corporation	-	//	-	US\$	2,689	N/A	US\$	2,689	
	Nuveen Finance, LLC	-	//	-	US\$	2,684	N/A	US\$	2,684	
	GA Global Funding Trust	-	//	-	US\$	2,678	N/A	US\$	2,678	
	Gilead Sciences, Inc.	-	//	-	US\$	2,671	N/A	US\$	2,671	
	CRH America, Inc.	-	//	-	US\$	2,622	N/A	US\$	2,622	
	CMS Energy Corporation	-	"	-	US\$	2,604	N/A	US\$	2,604	
	Kimco Realty Corporation	-	"	-	US\$	2,596	N/A	US\$	2,596	
	Pinnacle West Capital Corporation	-	//	-	US\$	2,586	N/A	US\$	2,586	
	The PNC Financial Services Group, Inc.	-	"	-	US\$	2,580	N/A	US\$	2,580	
	American Electric Power Company, Inc.	-	//	-	US\$	2,571	N/A	US\$	2,571	
	AutoZone, Inc.	-	//	-	US\$	2,562	N/A	US\$	2,562	
	Yara International ASA	-	//	-	US\$	2,553	N/A	US\$	2,553	
	Magellan Midstream Partners, L.P.	-	//	-	US\$	2,548	N/A	US\$	2,548	
	WEC Energy Group, Inc.	-	//	-	US\$	2,543	N/A	US\$	2,543	
	Air Lease Corporation	_	"	-	US\$	2,540	N/A	US\$	2,540	
	John Deere Capital Corporation	-		_	US\$	2,522	N/A	US\$	2,522	
	RGA Global Funding	-		_	US\$	2,506	N/A	US\$	2,506	
	Empower Finance 2020, LP	_		_	US\$	2,300	N/A	US\$	2,465	
	BP Capital Markets America, Inc.	_	"	_	US\$	2,403	N/A N/A	US\$	2,405	
	Chevron U.S.A. Inc.	_	"		US\$	2,437 2,447	N/A N/A	US\$ US\$	2,437 2,447	
	Georgia Power Company	-	"	-	US\$	2,447	N/A N/A	US\$ US\$	2,447 2,424	
	Reynolds American Inc.	-		-	US\$ US\$	2,424 2,404	N/A N/A	US\$ US\$	2,424 2,404	
	-	-	"	-		,				
	Berkshire Hathaway Inc.	-	//	-	US\$	2,403	N/A	US\$	2,403	

					<u> </u>	December	31, 2021	.	X 7 1	
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	(Foreign	ng Value Currencies pusands)	Percentage of Ownership (%)	(Foreign	Value Currencies ousands)	No
MC Global	Ryder System, Inc.	-	Financial assets at fair value through other comprehensive income	-	US\$	2,363	N/A	US\$	2,363	
	NiSource Inc.	-	"	-	US\$	2,350	N/A	US\$	2,350	
	DuPont de Nemours, Inc.	-	//	-	US\$	2,324	N/A	US\$	2,324	
	Union Pacific Corporation	-	//	-	US\$	2,314	N/A	US\$	2,314	
	O'Reilly Automotive, Inc.	-	//	-	US\$	2,311	N/A	US\$	2,311	
	Health Care Service Corporation	-	//	-	US\$	2,238	N/A	US\$	2,238	
	Reckitt Benckiser Treasury Services plc	-	"	-	US\$	2,216	N/A	US\$	2,216	
	ITC Holdings Corp.	-	"	-	US\$	2,209	N/A	US\$	2,209	
	Georgia-Pacific LLC	-	"	-	US\$	2,205	N/A	US\$	2,205	
	The East Ohio Gas Company	_	"	_	US\$	2,190	N/A	US\$	2,190	
	Mead Johnson Nutrition Company	_	"	_	US\$	2,178	N/A	US\$	2,178	
	Magna International Inc.	_	"	_	US\$	2,170	N/A	US\$	2,170	
	Citizens Bank, National Association		"	_	US\$	2,172	N/A N/A	US\$	2,172	
	Amphenol Corporation	_	"		US\$	2,133	N/A N/A	US\$	2,133	
	Healthpeak Properties, Inc.	_	, , , , , , , , , , , , , , , , , , ,	-	US\$ US\$	2,123	N/A N/A	US\$ US\$	2,123	
	Hormel Foods Corporation	-	",	-	US\$ US\$	2,122 2,120	N/A N/A	US\$ US\$	2,122 2,120	
	Olympus Corporation	-	"	-	US\$ US\$	2,120 2,110	N/A N/A	US\$ US\$	2,120 2,110	
		-	"	-		2,110 2,087	N/A N/A		2,110 2,087	
	Cigna Corporation	-	"	-	US\$			US\$		
	Tucson Electric Power Company	-	//	-	US\$	2,082	N/A	US\$	2,082	
	Otis Worldwide Corporation	-	//	-	US\$	2,065	N/A	US\$	2,065	
	General Electric Company	-	//	-	US\$	2,038	N/A	US\$	2,038	
	Keurig Dr Pepper Inc.	-	"	-	US\$	2,022	N/A	US\$	2,022	
	NextEra Energy Capital Holdings, Inc.	-	"	-	US\$	2,000	N/A	US\$	2,000	
	Shinhan Financial Group Co., Ltd.	-	"	-	US\$	1,970	N/A	US\$	1,970	
	Kinder Morgan, Inc.	-	//	-	US\$	1,961	N/A	US\$	1,961	
	Mitsubishi Corporation	-	//	-	US\$	1,953	N/A	US\$	1,953	
	NBK SPC Limited	-	//	-	US\$	1,947	N/A	US\$	1,947	
	Automatic Data Processing, Inc.	-	//	-	US\$	1,911	N/A	US\$	1,911	
	Sydney Airport Finance Company Pty Ltd	-	//	-	US\$	1,910	N/A	US\$	1,910	
	AmerisourceBergen Corporation	-	"	-	US\$	1,894	N/A	US\$	1,894	
	Kentucky Utilities Company	-	"	-	US\$	1,894	N/A	US\$	1,894	
	Wipro IT Services LLC	-	//	-	US\$	1,862	N/A	US\$	1,862	
	Evergy Kansas Central, Inc.	-	//	-	US\$	1,847	N/A	US\$	1,847	
	Walmart Inc.	-	//	-	US\$	1,831	N/A	US\$	1,831	
	Gulfstream Natural Gas System, L.L.C.	-	//	-	US\$	1,829	N/A	US\$	1,829	
	Enbridge Inc.	-	//	-	US\$	1,823	N/A	US\$	1,823	
	Caterpillar Financial Services Corporation	-	//	-	US\$	1,821	N/A	US\$	1,821	
	Burlington Northern Santa Fe, LLC	-	//	-	US\$	1,814	N/A	US\$	1,814	
	Tencent Holdings Limited	-	"	-	US\$	1,803	N/A	US\$	1,803	
	McCormick & Company, Incorporated	_		-	US\$	1,769	N/A	US\$	1,769	
	Infor, Inc.	_	"	-	US\$	1,762	N/A	US\$	1,762	
	Tyson Foods, Inc.	_	"	_	US\$	1,754	N/A	US\$	1,754	
	Quest Diagnostics Incorporated		"		US\$	1,734	N/A	US\$	1,733	
	AIA Group Limited	_	"		US\$	1,733	N/A N/A	US\$	1,733	
	Berkshire Hathaway Energy Company	-	",	-	US\$ US\$	1,721	N/A N/A	US\$ US\$	1,721	
	eBay Inc.	-		-	US\$ US\$	1,719	N/A N/A	US\$ US\$	1,719	
		-		-						
	University of California	-	"	-	US\$	1,700	N/A	US\$	1,700	
	International Business Machines Corporation	-	//	-	US\$	1,692	N/A	US\$	1,692	
	Emerson Electric Co.	-	//	-	US\$	1,683	N/A	US\$	1,683	

						December	31, 2021	-		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	(Foreign	ng Value Currencies usands)	Percentage of Ownership (%)	(Foreign	Value Currencies pusands)	Not
SMC Global	Raytheon Technologies Corporation	-	Financial assets at fair value through other comprehensive income	-	US\$	1,675	N/A	US\$	1,675	
	Westpac Banking Corporation	-		-	US\$	1,670	N/A	US\$	1,670	
	Midwest Connector Capital Company LLC	-	"	-	US\$	1,658	N/A	US\$	1,658	
	Anthem, Inc.	-	//	-	US\$	1,651	N/A	US\$	1,651	
	Essex Portfolio Limited Partnership	-	//	-	US\$	1,644	N/A	US\$	1,644	
	APT Pipelines Limited	-	//	-	US\$	1,641	N/A	US\$	1,641	
	UBS Group Funding (Jersey) Ltd.	-	//	-	US\$	1,635	N/A	US\$	1,635	
	China Resources Gas Group Limited	-	"	-	US\$	1,614	N/A	US\$	1,614	
	MetLife, Inc.	-	"	-	US\$	1,611	N/A	US\$	1,611	
	The Southern Company	-	"	_	US\$	1,609	N/A	US\$	1,609	
	Alimentation Couche-Tard Inc.	_	"	_	US\$	1,606	N/A	US\$	1,606	
	Suntory Holdings Limited	_	"		US\$	1,598	N/A N/A	US\$	1,598	
	Mondelez International Holdings Netherlands Bv	_	"		US\$	1,597	N/A N/A	US\$	1,597	
	Duke Energy Florida, LLC	-	"		US\$ US\$	1,597	N/A N/A	US\$ US\$	1,594	
	Panasonic Corporation	-		-		1,594 1,588	N/A N/A	US\$ US\$		
	-	-		-	US\$	1,588 1,581	N/A N/A	US\$ US\$	1,588	
	NSTAR Electric Company	-	"	-	US\$				1,581	
	Brookfield Finance LLC	-	"	-	US\$	1,576	N/A	US\$	1,576	
	CK Hutchison International (19) Limited	-	//	-	US\$	1,564	N/A	US\$	1,564	
	CPI Property Group S.A.	-	"	-	US\$	1,562	N/A	US\$	1,562	
	Barclays Bank PLC	-	"	-	US\$	1,546	N/A	US\$	1,546	
	Marsh & McLennan Companies, Inc.	-	//	-	US\$	1,530	N/A	US\$	1,530	
	Marathon Petroleum Corporation	-	//	-	US\$	1,524	N/A	US\$	1,524	
	KEB Hana Bank	-	//	-	US\$	1,504	N/A	US\$	1,504	
	Alliant Energy Finance, LLC	-	"	-	US\$	1,466	N/A	US\$	1,466	
	Eastern Gas Transmission and Storage, Inc.	-	//	-	US\$	1,421	N/A	US\$	1,421	
	Virginia Electric and Power Company	-	//	-	US\$	1,418	N/A	US\$	1,418	
	NetApp, Inc.	-	//	-	US\$	1,384	N/A	US\$	1,384	
	Truist Financial Corporation	-	//	-	US\$	1,375	N/A	US\$	1,375	
	Met Tower Global Funding	-	//	-	US\$	1,368	N/A	US\$	1,368	
	Andrew W. Mellon Foundation, The	-	"	-	US\$	1,365	N/A	US\$	1,365	
	PACCAR Financial Corp.	-	11	-	US\$	1,327	N/A	US\$	1,327	
	Entergy Arkansas, LLC	_	"	_	US\$	1,314	N/A	US\$	1,314	
	Martin Marietta Materials, Inc.	_	"		US\$	1,305	N/A	US\$	1,305	
	State Of Tennessee	_	"		US\$	1,303	N/A N/A	US\$	1,258	
	Lincoln National Corporation	-	"		US\$ US\$	1,238	N/A N/A	US\$ US\$	1,238	
	State Street Corporation	-		-		1,182	N/A N/A	US\$ US\$	1,182	
	-	-		-	US\$					
	IBERDROLA INTL BV	-	"	-	US\$	1,140	N/A	US\$	1,140	
	The Curators of the University of Missouri	-	//	-	US\$	1,123	N/A	US\$	1,123	
	Glencore Funding LLC	-	//	-	US\$	1,118	N/A	US\$	1,118	
	Enterprise Products Operating LLC	-	"	-	US\$	1,110	N/A	US\$	1,110	
	Foxconn (Far East) Limited	-	"	-	US\$	1,109	N/A	US\$	1,109	
	The Cleveland Electric Illuminating Company	-	"	-	US\$	1,103	N/A	US\$	1,103	
	Baker Hughes Holdings LLC	-	"	-	US\$	1,079	N/A	US\$	1,079	
	Sinopec Group Overseas Development (2014) Ltd.	-	//	-	US\$	1,068	N/A	US\$	1,068	
	BBVA México, S.A., Institución de Banca Múltiple, Grupo Financiero BBVA México	-	//	-	US\$	1,063	N/A	US\$	1,063	
	Brighthouse Financial Global Funding	-	//	-	US\$	1,060	N/A	US\$	1,060	
	Pricoa Global Funding I	-	//	-	US\$	1,050	N/A	US\$	1,050	
	Kansas City Southern			1	US\$	1,047	N/A	US\$	1,047	

						December	31, 2021		X7 1	
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	(Foreign	ng Value Currencies usands)	Percentage of Ownership (%)	(Foreign	Value Currencies ousands)	No
MC Global	DH Europe Finance II S.a.r.l.	-	Financial assets at fair value through other comprehensive income	-	US\$	1,038	N/A	US\$	1,038	
	Baltimore Gas and Electric Company	_		_	US\$	1,030	N/A	US\$	1,030	
	Entergy Mississippi, LLC	_	"	_	US\$	1,023	N/A	US\$	1,023	
	Loews Corporation		"		US\$	1,023	N/A	US\$	1,021	
	Derver City & County Housing Authority		"		US\$	1,019	N/A	US\$	1,019	
	MassMutual Global Funding II	_	"	-	US\$	1,019	N/A N/A	US\$	1,019	
	Texas Eastern Transmission, LP	-	"	-	US\$ US\$	1,018	N/A N/A	US\$ US\$	1,018	
	Kaiser Foundation Hospitals	-	"	-	US\$ US\$	1,011	N/A N/A	US\$ US\$	1,011	
	Board Of Regents State Of Iowa	-	"	-	US\$ US\$	978	N/A N/A	US\$ US\$	978	
	-	-	//	-						
	National Rural Utilities Cooperative Finance Corporation	-	"	-	US\$	974	N/A	US\$	974	
	Aflac Incorporated	-	//	-	US\$	945	N/A	US\$	945	
	QNB Finance Ltd.	-	"	-	US\$	930 930	N/A	US\$	930 930	
	Unilever Capital Corporation	-	//	-	US\$	930	N/A	US\$	930	
	Mitsubishi HC Capital Inc.	-	//	-	US\$	910	N/A	US\$	910	
	BHP Billiton Finance (USA) Limited	-	"	-	US\$	903	N/A	US\$	903	
	CubeSmart, L.P.	-	//	-	US\$	889	N/A	US\$	889	
	KeyBank National Association	-	//	-	US\$	871	N/A	US\$	871	
	Palm Beach County, Florida	-	//	-	US\$	844	N/A	US\$	844	
	TransCanada PipeLines Limited	-	//	-	US\$	841	N/A	US\$	841	
	Sinopec Capital (2013) Ltd.	-	//	-	US\$	820	N/A	US\$	820	
	Aetna Inc.	-	//	-	US\$	815	N/A	US\$	815	
	The Walt Disney Company	-	//	-	US\$	814	N/A	US\$	814	
	Niagara Mohawk Power Corporation	-	//	-	US\$	811	N/A	US\$	811	
	Oregon Health & Science University	-	//	-	US\$	808	N/A	US\$	808	
	Visa Inc.	-	//	-	US\$	805	N/A	US\$	805	
	Crédit Agricole S.A.	-	"	-	US\$	790	N/A	US\$	790	
	Southern Power Company	_	11	-	US\$	787	N/A	US\$	787	
	MASCO CORP		"		US\$	771	N/A	US\$	771	
	Sky Limited		"		US\$	745	N/A	US\$	745	
	Canadian Natural Resources Limited	_	"	-	US\$	734	N/A N/A	US\$	734	
	Hyundai Capital Services, Inc.	-	"	-	US\$ US\$	734	N/A N/A	US\$	734	
	Warner Media, LLC	-	"	-						
		-	//	-	US\$	728	N/A	US\$	728	
	Southern California Gas Company	-	//	-	US\$	726	N/A	US\$	726	
	Sodexo, Inc.	-	//	-	US\$	717	N/A	US\$	717	
	Sinopec Group Overseas Development (2017) Limited	-	//	-	US\$	707	N/A	US\$	707	
	Norsk Hydro ASA	-	//	-	US\$	688	N/A	US\$	688	
	Abbott Laboratories	-	//	-	US\$	679	N/A	US\$	679	
	Stryker Corporation	-	//	-	US\$	670	N/A	US\$	670	
	State Of Washington	-	//	-	US\$	654	N/A	US\$	654	
	Bell Canada, Inc.	-	//	-	US\$	646	N/A	US\$	646	
	Republic Services, Inc.	-	//	-	US\$	621	N/A	US\$	621	
	Florida Hurricane Catastrophe Fund Finance Corporation	-	//	-	US\$	621	N/A	US\$	621	
	QUALCOMM Incorporated	-	//	-	US\$	618	N/A	US\$	618	
	UBS AG (LONDON BRANCH)	-	"	-	US\$	616	N/A	US\$	616	
	Intact U.S. Holdings Inc.	-	//	-	US\$	612	N/A	US\$	612	
	American Water Capital Corp.	-	//	-	US\$	608	N/A	US\$	608	
	Sinopec Group Overseas Development (2012) Ltd.	_	//	-	US\$	606	N/A	US\$	606	
	Port of Morrow	_		-	US\$	592	N/A	US\$	592	
	Dormitory Authority of the State of New York	_	"		US\$	584	N/A N/A	US\$	584	
	Dominiory Autionity of the State of New TOLK	-	//	-	030	504	1N/A	039	504	

						December	31, 2021			
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carryin (Foreign C in Tho	Currencies	Percentage of Ownership (%)	(Foreign (Value Currencies usands)	No
MC Global	Arizona Public Service Company	-	Financial assets at fair value through other comprehensive income	-	US\$	576	N/A	US\$	576	
	Duke Energy Progress, LLC	_		-	US\$	571	N/A	US\$	571	
	Shell International Finance B.V.	_	//	-	US\$	563	N/A	US\$	563	
	Fifth Third Bank, National Association	_	//	-	US\$	556	N/A	US\$	556	
	State of Hawaii	_	11	-	US\$	540	N/A	US\$	540	
	United Parcel Service, Inc.	_	"	-	US\$	539	N/A	US\$	539	
	Trane Technologies Luxembourg Finance S.A.	_	"	-	US\$	530	N/A	US\$	530	
	Ecolab Inc.		,, ,,	_	US\$	526	N/A	US\$	526	
	TTX Company		"	_	US\$	510	N/A	US\$	510	
	Altria Group, Inc.		"	-	US\$	506	N/A N/A	US\$	506	
	Simon Property Group, L.P.	-	"	-	US\$ US\$	506	N/A N/A	US\$	506	
	174 Power Global Corporation	-		-	US\$ US\$	506 504	N/A N/A	US\$ US\$	506 504	
	Commonwealth Bank of Australia	-		-		504 501	N/A N/A	US\$ US\$		
		-	"	-	US\$				501	
	DENSO Corporation	-	//	-	US\$	488	N/A	US\$	488	
	Brazos Higher Education Authority Inc	-	//	-	US\$	462	N/A	US\$	462	
	Target Corporation	-	"	-	US\$	437	N/A	US\$	437	
	MUFG Union Bank, National Association	-	//	-	US\$	430	N/A	US\$	430	
	PayPal Holdings, Inc.	-	//	-	US\$	429	N/A	US\$	429	
	University of Massachusetts Building Authority	-	"	-	US\$	425	N/A	US\$	425	
	Sierra Pacific Power Company	-	//	-	US\$	416	N/A	US\$	416	
	McKesson Corporation	-	//	-	US\$	414	N/A	US\$	414	
	Comerica Bank	-	//	-	US\$	413	N/A	US\$	413	
	Boston Properties Limited Partnership	-	//	-	US\$	411	N/A	US\$	411	
	Entergy Corporation	-	//	-	US\$	411	N/A	US\$	411	
	Banco del Estado de Chile	-	"	-	US\$	408	N/A	US\$	408	
	Komatsu Finance America, Inc.	-	"	-	US\$	404	N/A	US\$	404	
	Honeywell International Inc.	-	//	-	US\$	401	N/A	US\$	401	
	Duke Energy Corporation	_	//	-	US\$	394	N/A	US\$	394	
	The Norinchukin Bank	_	//	-	US\$	394	N/A	US\$	394	
	PepsiCo, Inc.	_	11	-	US\$	387	N/A	US\$	387	
	StanCorp Financial Group Inc.	_	"	_	US\$	374	N/A	US\$	374	
	Entergy Louisiana, LLC		,, ,,		US\$	372	N/A	US\$	372	
	Principal Financial Group, Inc.		"	-	US\$	360	N/A N/A	US\$	360	
	First Republic Bank		"	-	US\$	354	N/A N/A	US\$	354	
	Pernod Ricard SA	-	"	-	US\$ US\$	352	N/A N/A	US\$	352	
		-	"	-						
	Coöperatieve Rabobank U.A., New York Branch	-	"	-	US\$	345	N/A	US\$	345	
	Amgen Inc.	-	//	-	US\$	337	N/A	US\$	337	
	Mid-America Apartments, L.P.	-	"	-	US\$	328	N/A	US\$	328	
	The Allstate Corporation	-	"	-	US\$	321	N/A	US\$	321	
	BP Capital Markets p.l.c.	-	"	-	US\$	316	N/A	US\$	316	
	TotalEnergies Capital International	-	"	-	US\$	310	N/A	US\$	310	
	Philip Morris International Inc.	-	//	-	US\$	304	N/A	US\$	304	
	BOC Aviation (USA) Corporation	-	//	-	US\$	300	N/A	US\$	300	
	Alabama State Federal Aid Highway Finance Authority	-	//	-	US\$	298	N/A	US\$	298	
	salesforce.com, inc.	-	"	-	US\$	297	N/A	US\$	297	
	Aon Corporation	-	"	-	US\$	294	N/A	US\$	294	
	QatarEnergy	-	//	-	US\$	294	N/A	US\$	294	
	Johnson Controls International plc	-	//	-	US\$	290	N/A	US\$	290	
	Mondelez International, Inc.			1	US\$	275	N/A	US\$	275	

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Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	(Foreign	ing Value Currencies	Percentage of Ownership (%)	(Foreign	Value Currencies	No
					in Th	ousands)	• • •	in Th	ousands)	
IC Global	Southern Natural Gas Company, L.L.C.	-	Financial assets at fair value through other comprehensive income	-	US\$	274	N/A	US\$	274	
	Equitable Holdings, Inc.	-		-	US\$	253	N/A	US\$	253	
	The Huntington National Bank	-	//	-	US\$	253	N/A	US\$	253	
	Sales Tax Securitization Corporation Of Chicago	-	//	-	US\$	253	N/A	US\$	253	
	Capital One Bank (USA), National Association	-	//	-	US\$	250	N/A	US\$	250	
	E. I. du Pont de Nemours and Company	-	//	-	US\$	247	N/A	US\$	247	
	Waste Management, Inc.	-	//	-	US\$	243	N/A	US\$	243	
	Nasdaq, Inc.	-	//	-	US\$	220	N/A	US\$	220	
	Children's Hospital Of Orange County	-	"	-	US\$	219	N/A	US\$	219	
	The Pennsylvania State University	_	"	-	US\$	212	N/A	US\$	212	
	Deere & Company	-	"	-	US\$	209	N/A	US\$	209	
	Suncor Energy Inc.		11	-	US\$	205	N/A	US\$	205	
	Oregon Education Districts	_	"	_	US\$	203	N/A	US\$	203	
	Riverside County Infrastructure Financing Authority	_	"	-	US\$	204	N/A	US\$	204	
	Los Angeles Department of Water and Power, California	_	"	-	US\$	204	N/A	US\$	203	
	Saudi Arabian Oil Company	_		-	US\$	203	N/A	US\$	200	
	NongHyup Bank	_	"	_	US\$	198	N/A	US\$	198	
	San Francisco Public Utilities Commission	_	"	_	US\$	190	N/A	US\$	190	
	Nucor Corporation		"		US\$	187	N/A	US\$	182	
	Hoover Alabama Board Of Education	-	"	-	US\$	179	N/A N/A	US\$	179	
	Starbucks Corporation	-	"	-	US\$	179	N/A N/A	US\$	179	
	The New York State Urban Development Corporation	-	"	-	US\$ US\$	174	N/A N/A	US\$	174	
	Electricité de France S.A.	-	"	-	US\$ US\$	140	N/A N/A	US\$	140	
	Beth Israel Deaconess Medical Center, Inc.	-	"	-		107	N/A N/A	US\$ US\$	107	
		-	"	-	US\$					
	Municipal Improvement Corporation of Los Angeles	-	"	-	US\$	80 70	N/A N/A	US\$	80 70	
	Pima County, Arizona State of Wisconsin	-	"	-	US\$	79		US\$	79	
		-	"	-	US\$	64	N/A	US\$	64 50	
	Huntington Beach California	-	"	-	US\$	50	N/A	US\$	50	
	City of Worcester, MA	-	"	-	US\$	30	N/A	US\$	30	
	Nueces County	-		-	US\$	25	N/A	US\$	25	
	Citigroup Global Markets Inc.	-	Financial assets at amortized cost	-	US\$	99,968	N/A	US\$	99,742	
	The Goldman Sachs Group, Inc.	-	"	-	US\$	51,347	N/A	US\$	51,471	
	Wells Fargo & Company	-	"	-	US\$	30,399	N/A	US\$	30,883	
	JPMorgan Chase & Co.	-	"	-	US\$	10,054	N/A	US\$	10,068	
	Government bond									
	United States Department of The Treasury	_	Financial assets at fair value through other	_	US\$	768,483	N/A	US\$	768,483	
	Clined States Department of The Treasury	_	comprehensive income		UDΦ	700,405	14/11	ΟDΦ	700,405	
	Emirate of Abu Dhabi	-	//	-	US\$	1,495	N/A	US\$	1,495	
	Qatar	_	//	-	US\$	1,352	N/A	US\$	1,352	
						, -			× -	
	Agency bonds/Agency mortgage-backed securities									
	FEDERAL NATIONAL MORTGAGE ASSOCIATION	-	Financial assets at fair value through other	-	US\$	595,794	N/A	US\$	595,794	
			comprehensive income							
	Government National Mortgage Association	-	"	-	US\$	309,985	N/A		309,985	
	Federal Home Loan Mortgage Corporation	-	"	-	US\$	253,075	N/A	US\$	253,075	
	Asset-backed securities				TT00	10.022		T.T.C.A.	10.000	
	Hyundai Auto Receivables Trust 2021-C	-	Financial assets at fair value through other	-	US\$	10,922	N/A	US\$	10,922	
	JPMBB Commercial Mortgage Securities Trust 2014-C24		comprehensive income		TIGG	10,326	N/A	TICC	10,326	
	JI WIDD Commercial Wortgage Securities Trust 2014-C24	-	//	-	US\$	10,520	1N/A	US\$	10,520	

					-	December	31, 2021	- 1		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	(Foreign	ng Value Currencies usands)	Percentage of Ownership (%)	(Foreign	Value Currencies ousands)	Note
TSMC Global	Wells Fargo Commercial Mortgage Trust 2016-Bnk1	-	Financial assets at fair value through other	-	US\$	10,020	N/A	US\$	10,020	
	Ford Credit Auto Owner Trust 2021-Rev2		comprehensive income		US\$	8,355	N/A	US\$	8,355	
		-	"	-	US\$ US\$	8,333 7,211	N/A N/A	US\$ US\$	8,333 7,211	
	Ford Credit Auto Owner Trust 2020-REV2 Bank 2020-BNK26	-	"	-	US\$ US\$	7,211 6,974	N/A N/A	US\$ US\$		
		-	"	-					6,974	
	Morgan Stanley Capital I Trust 2021-L6	-	//	-	US\$	6,956	N/A	US\$	6,956	
	Morgan Stanley Bank America Merrill Lynch Trust 2016-C30	-	"	-	US\$	6,898	N/A	US\$	6,898	
	Bank 2017-Bnk6	-	"	-	US\$	6,310	N/A	US\$	6,310	
	Benchmark 2019-B11 Mortgage Trust	-	"	-	US\$	6,297	N/A	US\$	6,297	
	Wells Fargo Commercial Mortgage Trust 2016-C35	-	//	-	US\$	6,131	N/A	US\$	6,131	
	GM Financial Consumer Automobile Receivables Trust 2021-4	-	//	-	US\$	5,807	N/A	US\$	5,807	
	Citigroup Commercial Mortgage Trust 2014-GC21	-	"	-	US\$	5,760	N/A	US\$	5,760	
	Hudson Yards 2016-10HY Mortgage Trust	-	//	-	US\$	5,697	N/A	US\$	5,697	
	Citigroup Commercial Mortgage Trust 2021-PRM2	-	//	-	US\$	5,603	N/A	US\$	5,603	
	Wells Fargo Commercial Mortgage Trust 2021-C59	-	"	-	US\$	5,568	N/A	US\$	5,568	
	BBCMS 2018-Tall Mortgage Trust	-	//	-	US\$	5,438	N/A	US\$	5,438	
	CSAIL 2018-CX11	-	//	-	US\$	5,392	N/A	US\$	5,392	
	WFRBS Commercial Mortgage Trust 2013-C13	-	//	-	US\$	5,347	N/A	US\$	5,347	
	UBS-Barclays Commercial Mortgage Trust 2012-C2	-	"	-	US\$	5,242	N/A	US\$	5,242	
	GM Financial Revolving Receivables Trust 2021-1	-	"	-	US\$	4,910	N/A	US\$	4,910	
	Morgan Stanley Bank America Merrill Lynch Trust 2013-C10	-	"	-	US\$	4,870	N/A	US\$	4,870	
	Commerce 2015-CCRE24 Mortgage Trust	-	"	-	US\$	4,830	N/A	US\$	4,830	
	MRCD 2019-Prkc Mortgage Trust	-	"	-	US\$	4,749	N/A	US\$	4,749	
	Bank 2017 - BNK7	-	"	-	US\$	4,568	N/A	US\$	4,568	
	Honda Auto Receivables 2021 - 4 Owner Trust	-	"	-	US\$	4,548	N/A	US\$	4,548	
	Bank 2019-Bnk22	-	"	-	US\$	4,142	N/A	US\$	4,142	
	JPMCC 2017-JP7	-	"	-	US\$	4,120	N/A	US\$	4,120	
	BANK 2017-BNK5	-	"	-	US\$	4,102	N/A	US\$	4,102	
	Bank 2019-Bnk17	-	"	-	US\$	4,100	N/A	US\$	4,100	
	Msbam 2016-C29	-	"	-	US\$	3,840	N/A	US\$	3,840	
	Msbam 2016-C31	-	"	-	US\$	3,692	N/A	US\$	3,692	
	J.P. Morgan Chase Commercial Mortgage Securities Trust 2012- LC9	-	"	-	US\$	3,684	N/A	US\$	3,684	
	UBS Barclays Commercial Mortgage Trust 2013-C6	-	"	-	US\$	3,169	N/A	US\$	3,169	
	WFRBS Commercial Mortgage Trust 2014-C25	-	//	-	US\$	3,157	N/A	US\$	3,157	
	GS Mortgage Securities Trust 2015-GC32	-	//	-	US\$	3,140	N/A	US\$	3,140	
	Wells Fargo Commercial Mortgage Trust 2017-C40	-	"	-	US\$	3,040	N/A	US\$	3,040	
	GS Mortgage Securities Corporation Trust 2018-RIVR	-	"	-	US\$	2,973	N/A	US\$	2,973	
	UBS Commercial Mortgage Trust 2018-C10	-	"	-	US\$	2,973	N/A	US\$	2,973	
	Sreit Commercial Mortgage Trust 2021-Mfp	-	//	-	US\$	2,886	N/A	US\$	2,886	
	Benchmark 2018-B3 Commercial Mortgage Trust	-	//	-	US\$	2,882	N/A	US\$	2,882	
	JPMDB 2017-C7	-	//	-	US\$	2,870	N/A	US\$	2,870	
	Hyundai Auto Receivables Trust 2018-A	-	//	-	US\$	2,867	N/A	US\$	2,867	
	JPMBB Commercial Mortgage Securities Trust 2015-C28	-	//	-	US\$	2,762	N/A	US\$	2,762	
	GS Mortgage Securities Trust 2013-GCJ12	-	//	-	US\$	2,657	N/A	US\$	2,657	
	Morgan Stanley Bank of America Merrill Lynch Trust 2013-C7	-	//	-	US\$	2,633	N/A	US\$	2,633	
	Ford Credit Auto Owner Trust 2020-Rev1	-	"	-	US\$	2,544	N/A	US\$	2,544	
	Wells Fargo Commercial Mortgage Trust 2020-C55	-	"	-	US\$	2,498	N/A	US\$	2,498	
	UBS-Barclays Commercial Mortgage Trust 2012-C3	-	"	-	US\$	2,405	N/A	US\$	2,405	
	Citigroup Commercial Mortgage Trust 2015-P1	_	"	_	US\$	2,400	N/A	US\$	2,400	

						December	31, 2021			
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	(Foreign	ng Value Currencies usands)	Percentage of Ownership (%)	(Foreign	Value Currencies ousands)	Note
						usunus)			, asunus)	
SMC Global	BBCMS Mortgage Trust 2020-C8	-	Financial assets at fair value through other comprehensive income	-	US\$	2,383	N/A	US\$	2,383	
	Bank 2021-bnk33	-	//	-	US\$	2,371	N/A	US\$	2,371	
	Dolp Trust 2021-NYC	-	"	-	US\$	2,304	N/A	US\$	2,304	
	Mhc Commercial Mortgage Trust 2021-Mhc	-	//	-	US\$	2,285	N/A	US\$	2,285	
	Citigroup Commercial Mortgage Trust 2015-GC27	-	"	-	US\$	2,249	N/A	US\$	2,249	
	Morgan Stanley Capital I Trust	-	//	-	US\$	2,242	N/A	US\$	2,242	
	Morgan Stanley Bank of America Merrill Lynch Trust 2012-C6	-	//	-	US\$	2,110	N/A	US\$	2,110	
	Commerce 2013-CCRE12 Mortgage Trust	-	//	-	US\$	2,090	N/A	US\$	2,090	
	UBS Commercial Mortgage Trust 2018-C11	-	"	-	US\$	2,089	N/A	US\$	2,089	
	Morgan Stanley Capital I Trust 2018-H3	_	"	-	US\$	2,077	N/A	US\$	2,077	
	Benchmark 2018-B4 Mortgage Trust	_	"	_	US\$	2,068	N/A	US\$	2,068	
	CGCMT 2017-P8 Mortgage Trust	_	"	-	US\$	2,040	N/A	US\$	2,000	
	Wells Fargo Commercial Mortgage Trust 2015-C30	_	<i>"</i>		US\$ US\$	2,040 1,716	N/A N/A	US\$	2,040 1,716	
	Morgan Stanley Capital I Trust 2021-L5	-		-	US\$ US\$	1,710	N/A N/A	US\$ US\$		
		-	"	-					1,651	
	Wells Fargo Commercial Mortgage Trust 2018-C44	-	"	-	US\$	1,633	N/A	US\$	1,633	
	Morgan Stanley Bank of America Merrill Lynch Trust 2013-C8	-	//	-	US\$	1,568	N/A	US\$	1,568	
	COMM 2020-CBM Mortgage Trust	-	"	-	US\$	1,556	N/A	US\$	1,556	
	JPMBB Commercial Mortgage Securities Trust 2013-C12	-	"	-	US\$	1,517	N/A	US\$	1,517	
	Wells Fargo Commercial Mortgage Trust 2015-C29	-	//	-	US\$	1,364	N/A	US\$	1,364	
	WFRBS Commercial Mortgage Trust 2013-UBS1	-	//	-	US\$	1,309	N/A	US\$	1,309	
	Toyota Auto Receivables 2018-D Owner Trust	-	//	-	US\$	1,302	N/A	US\$	1,302	
	Dbgs 2018-Biod Mortgage Trust	-	"	-	US\$	1,299	N/A	US\$	1,299	
	Honda Auto Receivables 2021-2 Owner Trust	-	"	-	US\$	1,288	N/A	US\$	1,288	
	Toyota Auto Receivables 2021-D Owner Trust	-	//	-	US\$	1,192	N/A	US\$	1,192	
	Wells Fargo Commercial Mortgage Trust 2012-LC5	-	//	-	US\$	1,153	N/A	US\$	1,153	
	Morgan Stanley Capital I Trust 2015 - UBS8	-	//	-	US\$	1,071	N/A	US\$	1,071	
	Commerce 2014-Ccre17 Mortgage Trust	-	"	-	US\$	1,048	N/A	US\$	1,048	
	WFRBSCommercial Mortgage Trust 2013-C17	_	"	_	US\$	1,010	N/A	US\$	1,010	
	Citigroup Commercial Mortgage Trust 2013-GCJ11	_	"	_	US\$	958	N/A	US\$	958	
	GS Mortgage Securities Trust 2014-GC22	_	"	_	US\$	940	N/A	US\$	940	
	COMM 2013-LC6 Mortgage Trust	-	"	-	US\$	940 927	N/A N/A	US\$	940 927	
		-	"	-						
	COMM 2012-CCRE5 Mortgage Trust	-	//	-	US\$	917	N/A	US\$	917	
	Morgan Stanley Bank Of America Merrill Lynch Trust 2013-C13	-	//	-	US\$	914	N/A	US\$	914	
	Benchmark 2019-B14 Mortgage Trust	-	"	-	US\$	909	N/A	US\$	909	
	Morgan Stanley Capital I Trust 2019-H6	-	//	-	US\$	890	N/A	US\$	890	
	BX Trust 2021-BXMF	-	"	-	US\$	843	N/A	US\$	843	
	GS Mortgage Securities Trust 2019-GSA1	-	//	-	US\$	839	N/A	US\$	839	
	280 Park Avenue Trust 2017 - 280P	-	//	-	US\$	829	N/A	US\$	829	
	GS Mortgage Securities Trust 2014-GC24	-	//	-	US\$	825	N/A	US\$	825	
	Elp Commercial Mortgage Trust 2021-Elp	-	//	-	US\$	795	N/A	US\$	795	
	Bx 2021-21M Mortgage Trust	-	"	-	US\$	794	N/A	US\$	794	
	Wells Fargo Commercial Mortgage Trust 2015-LC20	-	//	-	US\$	776	N/A	US\$	776	
	Benchmark 2019-B9 Mortgage Trust	-	//	-	US\$	709	N/A	US\$	709	
	Bbcms Mortgage Trust 2017-C1	-	//	_	US\$	698	N/A	US\$	698	
	JPMBB Commercial Mortgage Securities Trust 2014-C19	_		_	US\$	663	N/A	US\$	663	
	Benchmark 2019-B15 Mortgage Trust	-	"		US\$	642	N/A N/A	US\$	642	
	Morgan Stanley Bank Of America Merrill Lynch Trust 2013-C12	-	",	-	US\$ US\$	639	N/A N/A	US\$ US\$	639	
		-		-	US\$ US\$	609	N/A N/A	US\$ US\$		
	CF 2019-CF1 Mortgage Trust	-	"	-					609	
	Gs Mortgage Securities Corporation Trust 2020-Uptn	-	//	-	US\$	602	N/A	US\$	602	

					~ •	December	31, 2021			
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	(Foreign	ng Value Currencies usands)	Percentage of Ownership (%)	(Foreign	· Value Currencies ousands)	Note
SMC Global	Equs 2021-Eqaz Mortgage Trust	-	Financial assets at fair value through other comprehensive income	-	US\$	597	N/A	US\$	597	
	Wells Fargo Commercial Mortgage Trust 2015-C28	-	"	-	US\$	581	N/A	US\$	581	
	Bank 2019-BNK23	-	//	-	US\$	579	N/A	US\$	579	
	Morgan Stanley Capital I Trust 2019-H7	-	//	-	US\$	568	N/A	US\$	568	
	Wells Fargo Commercial Mortgage Trust 2015-NXS3	-	//	-	US\$	555	N/A	US\$	555	
	Bx Commercial Mortgage Trust 2021-CIP	-	//	-	US\$	550	N/A	US\$	550	
	Citigroup Commercial Mortgage Trust 2018-C5	-	//	-	US\$	545	N/A	US\$	545	
	Citigroup Commercial Mortgage Trust 2014-GC23	-	//	-	US\$	522	N/A	US\$	522	
	COMM 2015-CCRE22 Mortgage Trust	-	//	-	US\$	464	N/A	US\$	464	
	JPMCC 2015 - JP1	-	//	-	US\$	382	N/A	US\$	382	
	JPMDB Commercial Mortgage Securities Trust 2019-COR6	-	//	-	US\$	374	N/A	US\$	374	
	UBS Barclays Commercial Mortgage Trust 2013-C5	-	//	-	US\$	364	N/A	US\$	364	
	Citigroup Commercial Mortgage Trust 2014-GC19	-	//	-	US\$	287	N/A	US\$	287	
	GS Mortgage Securities Trust 2014-GC26	-	//	-	US\$	275	N/A	US\$	275	
	Citigroup Commercial Mortgage Trust 2016-C3	-	//	-	US\$	243	N/A	US\$	243	
	Wells Fargo Commercial Mortgage Trust 2016-C36	-	//	-	US\$	235	N/A	US\$	235	
	Citigroup Commercial Mortgage Trust 2015-GC35	-	//	-	US\$	216	N/A	US\$	216	
	Ford Credit Auto Owner Trust 2019-A	-	//	-	US\$	152	N/A	US\$	152	
	Bank 2020-BNK28	-	//	-	US\$	132	N/A	US\$	132	
	COMM 2013-CCRE8 Mortgage Trust	-	//	-	US\$	122	N/A	US\$	122	
	COMM 2015-DC1 Mortgage Trust	-	//	_	US\$	109	N/A	US\$	109	
	BBCMS Mortgage Trust 2020-C7	-	//	-	US\$	91	N/A	US\$	91	
	Wells Fargo Commercial Mortgage Trust 2015-NXS1	-	//	-	US\$	36	N/A	US\$	36	
	Non-publicly traded equity investments Primavera Capital Fund II L.P.	-	Financial assets at fair value through other comprehensive income	-	US\$	89,495	4	US\$	89,495	
F II	Non-publicly traded equity investments Aether Systems, Inc.	-	Financial assets at fair value through other comprehensive income	1,085	US\$	392	20	US\$	392	
	5V Technologies, Inc.	-	11	4		-	-		-	
	Publicly traded stocks Sentelic Corporation	-	Financial assets at fair value through other comprehensive income	1,019	US\$	2,954	3	US\$	2,954	
AF III	Non-publicly traded equity investments LiquidLeds Lighting Corp.	-	Financial assets at fair value through other	1,952	US\$	800	14	US\$	800	
	Neoconix, Inc.	-	comprehensive income "	4,147	US\$	174	-	US\$	174	
wth Fund	Non-publicly traded equity investments Astera Labs, Inc.	_	Financial assets at fair value through other	637	US\$	2,142	-	US\$	2,142	
	CNEX Labs, Inc.	-	comprehensive income	24	US\$	214	-	US\$	214	
	Publicly traded stocks Marvell Technology Group Ltd.	-	Financial assets at fair value through other	45	US\$	3,903	_	US\$	3,903	
	warven Technology Group Liu.	-	comprehensive income	45	039	3,903	-	039	3,903	

					December	r 31, 2021		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencies in Thousands)	Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	Note
	Non-publicly traded equity investments Credo Technology Group Holding Ltd. Astera Labs, Inc.	-	Financial assets at fair value through other comprehensive income	861 1,487	US\$ 5,000 US\$ 5,000	1	US\$ 5,000 US\$ 5,000	

(Concluded)

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2021

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

					Beginnin	g Balance		Acqui	isition				Disp	oosal				Ending Bala	ance (Note	: 1)
Company Name	Marketable Securities Type and Name	Financial Statement Account	Counterparty	Nature of Relationship	Shares/Units (In Thousands)	Amou (Forei Currenc Thousa	ign ties in (Shares/Units (In Thousands)	(Fo Curre	nount oreign encies in usands)	Shares/Units (In Thousands)	(Fo Curr	nount oreign encies in usands)	(Fo Curre	ing Value oreign encies in usands)	Dis (Fo Curre	Loss on sposal oreign encies in usands)	Shares/Units (In Thousands)	Amou (Forei Currenc Thousa	eign cies in
TSMC	<u>Non-publicly traded equity</u> <u>investments</u> VisEra Tech	Investments accounted for using equity method	19 institutional investors, including: GIC, Capital Group, Fidelity International, Cathay Life Insurance Co., Ltd., Fubon Life Insurance Co., Ltd., Yuanta Securities, KGI Securities and Securities and Futures Investors Protection Center etc.	-	253,120	\$ 6,36	3,099	-		787,702	39,501	\$ 9	,451,798	\$ 1.	.045,516	N	ote 2	213,619		57,696
TSMC Partners	JASM <u>Non-publicly traded equity</u> investments	"	-	-	-		-	58	1,	,416,921	-		-		-		-	58	1,38	33,554
	Inpria Corporation	Financial assets at fair value through other comprehensive income	-	-	1,778	US\$	3,600	-	US\$	-	1,778	US\$	17,146	US\$	4,000	US\$	13,146	-	US\$	-
	<u>Corporate bond</u> Bank of America Corporation	Financial assets at fair value through other comprehensive income	-	-	-	US\$ 5	ŕ	-		36,173	-	US\$	18,692		18,526	US\$	166	-	US\$ 74	
	Citigroup Inc.	//	-	-	-		1,827	-		24,458	-	US\$	18,235	US\$	18,033	US\$	202	-		46,836
	The Goldman Sachs Group, Inc.	//	-	-	-		9,809	-		24,600	-	US\$	7,381	US\$	7,376	US\$	5	-		46,380
	JPMorgan Chase & Co.	//	-	-	-	US\$ 2	9,759	-	US\$	16,303	-	US\$	3,333	US\$	3,303	US\$	30	-	US\$ 4	41,525
					1	US\$ 3.			US\$		1	US\$	8,756	US\$	7,977	US\$	779	1	US\$ 3	

					Beginning	g Balance	e	Acqui	isition		-	Dis	posal		1		Ending Bal	ance (N	ote 1)
Company Name	Marketable Securities Type and Name	Financial Statement Account	Counterparty	Nature of Relationship	Shares/Units (In Thousands)	Amo (Ford Curren Thous	eign Icies in	Shares/Units (In Thousands)	Amount (Foreign Currencies Thousands	`) (I) Cur	Amount Foreign rencies in ousands)	(Fo Curre	ing Value preign encies in usands)	Disj (For Curre	Loss on posal reign ncies in sands)	Shares/Units (In Thousands)	(F Curr	mount oreign rencies in ousands)
TSMC Global	Wells Fargo & Company	Financial assets at fair value through other comprehensive income	-	-	-	US\$	26,074	-	US\$ 20,04	- 40	US\$	5 10,192	US\$	9,865	US\$	327	-	US\$	34,978
	Mitsubishi UFJ Financial Group, Inc.	"	-	-	-	US\$	34,946	-	US\$ 8,7	- 34	US\$	5 10,906	US\$	10,709	US\$	197	-	US\$	31,881
	HSBC Holdings plc	//	-	-	-	US\$	16,113	-	US\$ 15,0	- 14	US\$	3,508	US\$	3,365	US\$	143	-	US\$	26,960
	BNP Paribas SA	//	-	-	-	US\$	13,202	-	US\$ 14,4		US\$	5 7,154	US\$	6,882	US\$	272	-	US\$	19,983
	Oracle Corporation	//	-	-	-	US\$	7,822	-	US\$ 13,9	- 19	US\$	5 2,000	US\$	2,000	US\$	-	-	US\$	19,448
	Morgan Stanley	//	-	-	-	US\$	-	-	US\$ 18,02	.9 -	US\$		US\$	-	US\$	-	-	US\$	17,917
	Morgan Stanley	//	-	-	-	US\$	-	-	US\$ 17,2		US\$		US\$	-	US\$	-	_	US\$	
	Mizuho Financial Group, Inc.	//	-	-	-		20,795	-	US\$ 6,2		US\$		US\$	12,556	US\$	115	_	US\$	
	NTT Finance Corporation	//	_	_	-	US\$	-	-	US\$ 14,7		US\$		US\$	1,945	US\$	(4)	_	US\$	
	Morgan Stanley	//	_	_	-		23,053	-	US\$		US\$		US\$	11,125	US\$	265	_	US\$	
	Verizon Communications Inc.	//	_	_	-		10,558	-	US\$ 16,6	7 -	US\$		US\$	15,940	US\$	97	_	US\$	
	Bristol-Myers Squibb Company	"	_	-	-		21,090	_	US\$		US\$		US\$	10,613	US\$	415	_	US\$	
	AstraZeneca Finance LLC	//	-	-	-	US\$		-	US\$ 10,92		US\$		US\$	2,716	US\$	(13)	_	US\$	
	BP Capital Markets America, Inc.	//	_	_	-		15,621	-	US\$		US\$		US\$	12,545	US\$	303	_	US\$	
	NextEra Energy Capital Holdings, Inc.		-	-	-		9,527	-	US\$ 4,98	- 35	US\$			11,963	US\$	295	-	US\$	
	Citigroup Global Markets Inc.	Financial assets at amortized cost	-	-	-	US\$	99,965	-	US\$ 100,00	- 00	US\$	\$ 100,000	US\$	100,000	US\$	-	-	US\$	99,968
	The Goldman Sachs Group, Inc.	//	-	-	-	US\$	14,930	-	US\$ 36,4	- 55	US\$	5 -	US\$	-	US\$	-	-	US\$	51,347
	Wells Fargo & Company	//	-	-	-	US\$ 18	80,487	-	US\$		US\$	5 150,000	US\$	150,000	US\$	-	-	US\$	30,399
	JPMorgan Chase & Co.	"	-	-	-	US\$	95,058	-	US\$		US\$	\$ 85,000	US\$	85,000	US\$	-	-	US\$	10,054
	Government bond United States Department of The Treasury	Financial assets at fair value through other comprehensive income	-	-	_	US\$ 18		-	US\$1,298,3			5 980,985		985,925		(4,940)	-		488,297
	United States Department of The Treasury	//	-	-	-	US\$ 28	87,012	-	US\$ 74,14		US\$	\$ 107,638	US\$	108,069	US\$	(431)	-		245,475
	United States Department of The Treasury	//	-	-	-	US\$	-	-	US\$ 82,29	- 00	US\$	\$ 49,816	US\$	49,811	US\$	5	-	US\$	32,486
	United States Department of The Treasury	11	-	-	-	US\$	3,073	-	US\$ 13,44	-	US\$	\$ 14,389	US\$	14,218	US\$	171	-	US\$	2,225
	Agency bonds/Agency mortgage- backed securities Government National Mortgage Association	Financial assets at fair value through other comprehensive income	-	-	-	US\$	-	-	US\$ 436,64	- 40	US\$	\$ 207,178	US\$	207,916	US\$	(738)	-	US\$	226,295
	Federal National Mortgage Association	//	-	-	-	US\$	96,211	-	US\$ 355,02		US\$	\$ 368,077	US\$	370,120	US\$	(2,043)	-	US\$	79,577
	Federal National Mortgage Association	"	-	-	-	US\$	4,035	-	US\$ 895,8	- 5	US\$	\$ 845,383	US\$	845,168	US\$	215	-	US\$	54,626
	Federal National Mortgage Association	"	-	-	-	US\$	56,510	-	US\$ 2,4	- 50	US\$	5 14,850	US\$	15,495	US\$	(645)	-	US\$	42,003
	Federal Home Loan Mortgage Corporation	"	-	-	-	US\$	-	-	US\$ 35,7		US\$	432	US\$	433	US\$	(1)	-	US\$	35,138

					Beginning	g Balan	ce	Acqui	isition		Dis	posal			Ending Bala	nce (No	ote 1)
Company Name	Marketable Securities Type and Name	Financial Statement Account	Counterparty	Nature of Relationship	Shares/Units (In Thousands)	(Fo Curre	nount oreign encies in usands)	Shares/Units (In Thousands)	Amount (Foreign Currencies in Thousands)	Shares/Units (In Thousands)	Amount (Foreign Currencies in Thousands)	Carrying Value (Foreign Currencies in Thousands)	Gain/L Disp (For Curren Thous	oosal eign ncies in	Shares/Units (In Thousands)	(Fo Curre	nount oreign encies in usands)
TSMC Global	FEDERAL NATIONAL MORTGAGE ASSOCIATION	Financial assets at fair value through other comprehensive income	-	-	-	US\$	7,969	-	US\$ 253,784	-	US\$ 233,044	US\$ 233,517	US\$	(473)	-	US\$	28,206
	Federal National Mortgage Association	" "	-	-	-	US\$	49,027	-	US\$1,372,973	-	US\$1,393,352	US\$1,394,172	US\$	(820)	-	US\$	27,725
	Federal National Mortgage Association	//	-	-	-	US\$	-	-	US\$ 16,145	-	US\$ -	US\$ -	US\$	-	-	US\$	16,150
	Federal National Mortgage Association	"	-	-	-	US\$	-	-	US\$ 366,295	-	US\$ 350,795	US\$ 350,707	US\$	88	-	US\$	15,541
	Federal Home Loan Mortgage Corporation	"	-	-	-	US\$	-	-	US\$ 87,563	-	US\$ 72,465	US\$ 72,543	US\$	(78)	-	US\$	14,756
	Government National Mortgage Association	"	-	-	-	US\$	17,896	-	US\$ 498,925	-	US\$ 505,785	US\$ 506,704	US\$	(919)	-	US\$	10,073
	Federal National Mortgage Association	"	-	-	-	US\$	31,980	-	US\$ 184,032	-	US\$ 208,832	US\$ 208,922	US\$	(90)	-	US\$	6,857
	Government National Mortgage Association	"	-	-	-	US\$	30,307	-	US\$ 38,746	-	US\$ 61,172	US\$ 62,158	US\$	(986)	-	US\$	6,462
	Government National Mortgage Association	"	-	-	-	US\$	9,795	-	US\$ 214,076	-	US\$ 217,697	US\$ 217,835	US\$	(138)	-	US\$	6,025
	Government National Mortgage Association	"	-	-	-	US\$	14,244	-	US\$ 391,758	-	US\$ 399,817	US\$ 400,027	US\$	(210)	-	US\$	5,985
	Federal National Mortgage Association	"	-	-	-	US\$	18,997	-	US\$ 2,026	-	US\$ 15,566	US\$ 15,829	US\$	(263)	-	US\$	5,048
	Association Federal National Mortgage Association	//	-	-	-	US\$	24,084	-	US\$ -	-	US\$ 19,973	US\$ 19,293	US\$	680	-	US\$	3,923
	Federal National Mortgage Association	//	-	-	-	US\$	18,019	-	US\$ -	-	US\$ 13,821	US\$ 13,363	US\$	458	-	US\$	3,822
	Government National Mortgage Association	"	-	-	-	US\$	27,389	-	US\$ -	-	US\$ 23,510	US\$ 23,329	US\$	181	-	US\$	3,202
	Federal Home Loan Mortgage	"	-	-	-	US\$	20,247	-	US\$ 23,170	-	US\$ 40,219	US\$ 40,181	US\$	38	-	US\$	3,001
	Corporation Government National Mortgage Association	//	-	-	-	US\$	24,481	-	US\$ -	-	US\$ 20,977	US\$ 20,571	US\$	406	-	US\$	2,938
	Federal National Mortgage	//	-	-	-	US\$	23,776	-	US\$ 3,273	-	US\$ 24,212	US\$ 23,815	US\$	397	-	US\$	2,616
	Association Federal National Mortgage Association	//	-	-	-	US\$	19,673	-	US\$ 149,957	-	US\$ 167,446	US\$ 167,425	US\$	21	-	US\$	2,209
	Government National Mortgage	//	-	-	-	US\$	1,067	-	US\$ 30,360	-	US\$ 29,604	US\$ 29,632	US\$	(28)	-	US\$	1,791
	Association Federal National Mortgage	"	-	-	-	US\$	13,391	-	US\$ -	-	US\$ 12,337	US\$ 12,300	US\$	37	-	US\$	694
	Association Government National Mortgage	"	-	-	-	US\$	5,381	-	US\$ 46,006	-	US\$ 50,843	US\$ 50,855	US\$	(12)	-	US\$	529
	Association Federal National Mortgage	"	-	-	-	US\$	21,409	-	US\$ 162,780	-	US\$ 183,757	US\$ 183,736	US\$	21	-	US\$	426
	Association Federal Home Loan Mortgage	"	-	-	-	US\$	-	-	US\$ 145,065	-	US\$ 145,122	US\$ 145,065	US\$	57	-	US\$	-
	Corporation Government National Mortgage	"	-	-	-	US\$	199,835	-	US\$ 82,010	-	US\$ 278,349	US\$ 280,290	US\$	(1,941)	-	US\$	-
	Association Federal Home Loan Mortgage Corporation	"	-	-	-	US\$	-	-	US\$ 124,232	-	US\$ 124,218	US\$ 124,232	US\$	(14)	-	US\$	-

					Beginning	g Balanc	e	Acqui	isition				Disp	osal				Ending Bala	nnce (Note 1)
Company Name	Marketable Securities Type and Name	Financial Statement Account	Counterparty	Nature of Relationship	Shares/Units (In Thousands)	Curren	ount reign ncies in sands)	Shares/Units (In Thousands)	(I Cur	mount Foreign rencies in ousands)	Shares/Units (In Thousands)	(F Curr	nount oreign rencies in usands)	(Fo Curre	ing Value oreign encies in usands)	Gain/L Dispo (Fore Curren Thous	osal eign cies in	Shares/Units (In Thousands)	Amount (Foreign Currencies in Thousands)
TSMC Global	GOVERNMENT NATIONAL MORTGAGE ASSOCIATION	Financial assets at fair value through other comprehensive income	-	-	-	US\$	-	-	US\$	97,498	-	US\$	97,545	US\$	97,498	US\$	47	-	US\$ -
	Federal Home Loan Mortgage Corporation	//	-	-	-	US\$	11,872	-	US\$	-	-	US\$	11,654	US\$	11,120	US\$	534	-	US\$ -
	Federal National Mortgage Association	//	-	-	-	US\$	5,253	-	US\$		-	US\$			17,228	US\$	(213)	-	US\$ -
	GOVERNMENT NATIONAL MORTGAGE ASSOCIATION 2	"	-	-	-	US\$	-	-	US\$	93,686	-	US\$	93,420	US\$	93,686	US\$	(266)	-	US\$ -
	Government National Mortgage Association	"	-	-	-	US\$	18,900	-	US\$	121,784	-	US\$	140,660	US\$	140,610	US\$	50	-	US\$ -
	Federal National Mortgage Association	"	-	-	-	US\$	8,394	-	US\$	89,440	-	US\$	97,826	US\$	97,829	US\$	(3)	-	US\$ -
	<u>Asset-backed securities</u> Hyundai Auto Receivables Trust 2021-C	Financial assets at fair value through other comprehensive income	-	-	-	US\$	-	-	US\$	5 10,998	-	US\$	-	US\$	-	US\$	-	-	US\$ 10,922

Note 1: The ending balance includes the realized gain/loss on equity investment, the amortization of premium/discount on bonds investments and other related adjustment.

Note 2: To facilitate VisEra's IPO in Taiwan, 39,501 thousand common shares of VisEra at a price of NT\$240 were sold by TSMC and an increase of NT\$8,406,282 thousand in capital surplus was recognized. TSMC's shareholding in VisEra decreased from 87% to 73%. This disposal was accounted for as an equity transaction since the transaction did not change TSMC's control over VisEra. (Concluded)

ACQUISITION OF INDIVIDUAL REAL ESTATE PROPERTIES AT COSTS OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2021

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

			Transaction				Prio	or Transaction of 1	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate	February 09, 2021 (Note)	\$ 52,100,000 (Note)	Based on the terms in the purchase order	 85 counterparties(Note), including : ABB Ltd. Accudevice Co., Ltd. Air Liquide Far Eastern Ltd. Allis Electric Co., Ltd. Am-Power Machine International Enterprise Co., Ltd. Atlas Copco Taiwan Ltd. Atlas Technology Corp. Capital Machinery Limited Chen Yuan International Co., Ltd. Chenfull International Co., Ltd. Cheng Deh Fire Protection Industrial Corp. Chien Kuo Construction Co., Ltd. China Steel Structure Co., Ltd. Chung-Lin General Contractors, Ltd. Cica-Huntek Chemical Technology Taiwan Co., Ltd. Confederate Technology Co., Ltd. 		N/A	N/A	N/A	N/A	Price comparison and price negotiation	Manufacturing purpose	None

TABLE 5

			Transaction				Prio	r Transaction of	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate				Da-Cin Construction Co., Ltd. Desiccant Technology Corporation Evergreen Steel Corporation Exyte Taiwan Co., Ltd. Fortune Electric Co., Ltd. Fu Tsu Construction Co., Ltd. Hantech Engineering Co., Ltd. Hsieh Kun Co., Ltd. Hueng Luei Process Industry Co., Ltd. Ingersoll-Rand Southeast Asia (Pte) Ltd. Taiwan Branch (Singapore) J.C. Yang Architect and Associates JG Environmental Technology Co., Ltd. JJmr-Clean-Air Solution Tech.Services Co., Ltd. Jusun Instruments Co., Ltd. Kedge Construction Co., Ltd. Kinetics Technology Corporation L&K Engineering Co., Ltd. Lead-Fu Industrials Corporation Lee Ming Construction Co., Ltd. Li Jin Engineering Co., Ltd. Mandartech Interiors Inc. Marketech International Corp. Mega Union Technology Incorporated National Institute of Advanced Industrial Science & Technology								

			Transaction				Prio	r Transaction of	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate				Organo Technology Co., Ltd. Ovivo Taiwan Co., Ltd. Pan Asia (Engineers & Constructors) Corporation Ruentex Engineering & Construction Co., Ltd. San Fu Chemical Co., Ltd. Schneider Electric Taiwan Co., Ltd. Shihlin Electric & Engineering Corporation Siemens Limited Solomon Technology Corporation Swift Engineering Co., Ltd. Taiwan Gleno Enterprise Co., Ltd. Taiwan Obayashi Corporation Taiwan Puritic Corp. TASA Construction Corporation Techgo Industrial Co., Ltd. Trusval Technology Co., Ltd. Tung Kang Steel Structure Corp. Uangyih-Tech Industrial Co., Ltd. Unelectra International Corp. United Integrated Services Co., Ltd. Versum Materials Taiwan Co., Ltd. Weltall Technology Corporation Wholetech System Hitech Limited Yangtech Engineering Co., Ltd. Yankey Engineering Co., Ltd.								

			Transaction				Prior	r Transaction of	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate Real estate	April 22, 2021 (Note)	\$ 9,500,000 (Note)	Based on the terms in the purchase order	Ying Pao Technology Inc. Zhao-Cheng Corp. 70 counterparties(Note), including : J. Cypress Co., Ltd.	-	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Manufacturing purpose	None
	Real estate	June 09, 2021		Based on the terms in	L&K Engineering Co., Ltd. Marketech International Corp. Mega Union Technology Incorporated Organo Technology Co., Ltd Taiwan Puritic Corp. Uangyih-Tech Industrial Co. Ltd. United Integrated Services Co., Ltd. 101 counterparties(Note),		N/A	N/A	N/A	N/A	Price	Manufacturing	None
		(Note)	(Note)	the purchase order	including : ABB Ltd. Accudevice Co., Ltd. Air Liquide Far Eastern Ltd. Allis Electric Co., Ltd. Am-Power Machine International Enterprise Co., Ltd. Atlas Copco Taiwan Ltd. Atlas Technology Corp. Capital Machinery Limited Chen Yuan International Co. Ltd. Chenfull International Co., Ltd. Cheng Deh Fire Protection Industrial Corp.	,					comparison and price negotiation	purpose	(Continued)

			Transaction				Prio	r Transaction of	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
ΓSMC	Real estate				Chien Kuo Construction Co., Ltd. China Steel Structure Co., Ltd. Chun Yuan Steel Industry Co., Ltd. Chung-Lin General Contractors, Ltd. Cica-Huntek Chemical Technology Taiwan Co., Ltd. Confederate Technology Co., Ltd. Da-Cin Construction Co., Ltd. Desiccant Technology Corporation Evergreen Steel Corporation Exyte Taiwan Co., Ltd. Fortune Electric Co., Ltd. Fu Tsu Construction Co., Ltd. Hantech Engineering Co., Ltd. Hsieh Kun Co., Ltd. Hueng Luei Process Industry Co., Ltd. Ingersoll-Rand Southeast Asia (Pte) Ltd. Taiwan Branch (Singapore) J.C. Yang Architect and Associates JG Environmental Technology Co., Ltd. JJmr-Clean-Air Solution Tech.Services Co., Ltd. Kao Hsin Engineering Co., Ltd. Kedge Construction Co., Ltd. Kinetics Technology Corporation								

			Transaction				Prio	r Transaction of	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate				L&K Engineering Co., Ltd. Lead-Fu Industrials Corporation Lee Ming Construction Co., Ltd. Mandartech Interiors Inc. Marketech International Corp. Mega Union Technology Incorporated Organo Technology Co., Ltd. Ovivo Taiwan Co., Ltd. Pan Asia (Engineers & Constructors) Corporation Ruentex Engineering & Construction Co., Ltd. San Fu Chemical Co., Ltd. Schneider Electric Taiwan Co., Ltd. Shihlin Electric & Engineering Corporation Siemens Limited Solomon Technology Corporation Swift Engineering Co., Ltd. Taiwan Gleno Enterprise Co., Ltd. Taiwan Obayashi Corporation Taiwan Puritic Corp. TASA Construction Corporation Techgo Industrial Co., Ltd. Trane Taiwan Distribution Limited Trusval Technology Co., Ltd. Tung Kang Steel Structure Corp. Uangyih-Tech Industrial Co., Ltd.								Continued

			Transaction			Prior	r Transaction of	Related Counterp	oarty			
Company Name	Types of Property	Transaction Date	Amount (ForeignPayment TermCurrencies in Thousands)	Counterparty	Nature of Relationships	Owner	Relationships		Amount	Price Reference	Purpose of Acquisition	Other Terms
	Real estate	August 10, 2021 (Note)	\$168,000,000 (Note) Based on the terms in the purchase order	 Unelectra International Corp. United Integrated Services Co., Ltd. Versum Materials Taiwan Co., Ltd. Weltall Technology Corporation Wholetech System Hitech Limited Yangtech Engineering Co., Ltd. Ying Pao Technology Inc. Zhao-Cheng Corp. 100 counterparties(Note), including : ABB Enterprise Software Inc. ABB Ltd. Accudevice Co., Ltd. Air Liquide Far Eastern Ltd. Allied Supreme Corp. Allis Electric Co., Ltd. Am-Power Machine International Enterprise Co., Ltd. Atlas Copco Taiwan Ltd. Atlas Technology Corp. Capital Machinery Limited Chen Yuan International Co., Ltd. Chenfull International Co., Ltd. Cheng Deh Fire Protection Industrial Corp. Chien Kuo Construction Co., Ltd. 		N/A	N/A	N/A	N/A	Price comparison and price negotiation	Manufacturing purpose	None

			Transaction				Prio	r Transaction of 2	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate				China Steel Structure Co., Ltd. Chun Yuan Steel Industry Co., Ltd. Chung-Lin General Contractors, Ltd. Cica-Huntek Chemical Technology Taiwan Co., Ltd. Confederate Technology Co., Ltd. CTCI Corporation Da-Cin Construction Co., Ltd. Desiccant Technology Corporation Evergreen Steel Corporation Exyte Taiwan Co., Ltd. Fortune Electric Co., Ltd. Fu Tsu Construction Co., Ltd. Hantech Engineering Co., Ltd. Hantech Engineering Co., Ltd. Hueng Luei Process Industry Co., Ltd. Ingersoll-Rand Southeast Asia (Pte) Ltd. Taiwan Branch (Singapore) J.C. Yang Architect and Associates JG Environmental Technology Co., Ltd. JJmr-Clean-Air Solution Tech.Services Co., Ltd. Johnson Controls, Inc. Jusun Instruments Co., Ltd. Kao Hsin Engineering Co., Ltd. Kedge Construction Co., Ltd.								Continued

			Transaction				Prio	r Transaction of	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate				Kinetics Technology Corporation L&K Engineering Co., Ltd. Lead-Fu Industrials Corporation Lee Ming Construction Co., Ltd. Lumax International Corp., Ltd. Mandartech Interiors Inc. Marketech International Corp. Mega Union Technology Incorporated OBR Cooling Towers, Inc. Okland Construction Company, Inc. Organo Technology Co., Ltd. Ovivo Taiwan Co., Ltd. Pan Asia (Engineers & Constructors) Corporation Propersys Corp. Ruentex Engineering & Construction Co., Ltd. San Fu Chemical Co., Ltd. Schneider Electric Taiwan Co., Ltd. Shihlin Electric & Engineering Corporation Siemens Limited Solomon Technology Corporation Swift Engineering Co., Ltd. Taiwan Gleno Enterprise Co., Ltd. Taiwan Obayashi Corporation Taiwan Puritic Corp. Taiwan Valqua Engineering International, Ltd.								(Continued)

			Transaction			Prior	Transaction of	Related Counterp	oarty			
Company Name	Types of Property	Transaction Date	Amount (ForeignPayment TermCurrencies in Thousands)	Counterparty	Nature of Relationships		Relationships		Amount	Price Reference	Purpose of Acquisition	Other Terms
	Real estate		\$ 55,600,000 (Note) Based on the terms in the purchase order	 TASA Construction Corporation Techgo Industrial Co., Ltd. Trane Taiwan Distribution Limited Trusval Technology Co., Ltd. Tung Kang Steel Structure Corp. Uangyih-Tech Industrial Co., Ltd. Unelectra International Corp. United Integrated Services Co., Ltd. Versum Materials Taiwan Co., Ltd. Weltall Technology Corporation Wholetech System Hitech Limited Yangtech Engineering Co., Ltd. Ying Pao Technology Inc. Zhao-Cheng Corp. 122 counterparties(Note), including : ABB Ltd. Accudevice Co., Ltd. Air Liquide Far Eastern Ltd. Allis Electric Co., Ltd. Am-Power Machine International Enterprise Co., Ltd. Atlas Copco Taiwan Ltd. Atlas Technology Corp. 		N/A	N/A	N/A	N/A	Price comparison and price negotiation	Manufacturing purpose	None

			Transaction				Prio	r Transaction of 1	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
ΓSMC	Real estate				Capital Machinery Limited Chen Yuan International Co., Ltd. Chenfull International Co., Ltd. Cheng Deh Fire Protection Industrial Corp. Chien Kuo Construction Co., Ltd. China Steel Structure Co., Ltd. Chun Yuan Steel Industry Co., Ltd. Chung-Lin General Contractors, Ltd. Cica-Huntek Chemical Technology Taiwan Co., Ltd. Confederate Technology Co., Ltd. Da-Cin Construction Co., Ltd. Desiccant Technology Corporation Evergreen Steel Corporation Evergreen Steel Corporation Evergreen Steel Corporation Exyte Taiwan Co., Ltd. Fortune Electric Co., Ltd. Fu Tsu Construction Co., Ltd. Hantech Engineering Co., Ltd. Hsinchu Science Park Bureau, Ministry of Science and Technology Hueng Luei Process Industry Co., Ltd. Ingersoll-Rand Southeast Asia (Pte) Ltd. Taiwan Branch (Singapore) J.C. Yang Architect and Associates								

			Transaction				Prio	or Transaction of	Related Counter	oarty			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships			Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate				JG Environmental Technology Co., Ltd. JJmr-Clean-Air Solution Tech.Services Co., Ltd. Jusun Instruments Co., Ltd. Kajima Corporation Kao Hsin Engineering Co., Ltd. Kaohsiung City Government Kedge Construction Co., Ltd. Kikuyo-machi Kinetics Technology Corporation L&K Engineering Co., Ltd. Lead-Fu Industrials Corporation Lee Ming Construction Co., Ltd. Mandartech Interiors Inc. Marketech Internois Inc. Marketech Intern								(Continued)

			Transaction				Prio	or Transaction of I	Related Counter	party			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counterparty	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Real estate				 Taiwan Gleno Enterprise Co., Ltd. Taiwan Obayashi Corporation Taiwan Power Company Taiwan Puritic Corp. TASA Construction Corporation Techgo Industrial Co., Ltd. Trane Taiwan Distribution Limited Trusval Technology Co., Ltd. Tung Kang Steel Structure Corp. Uangyih-Tech Industrial Co., Ltd. Unelectra International Corp. United Integrated Services Co., Ltd. Versum Materials Taiwan Co., Ltd. Weltall Technology Corporation Wholetech System Hitech Limited Yangtech Engineering Co., Ltd. Yankey Engineering Co., Ltd. Ying Pao Technology Inc. Zhao-Cheng Corp. 								

Note: The disclosures are expected information based on the capital appropriation approved by the Board of Directors (Right-of-use assets are included). The actual information shall be subject to the final purchase order of TSMC.

(Concluded)

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2021 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

				Trans	action D	etails	Abnorm	al Transaction	Notes/Accounts Paya Receivable	able or	
Company Name	Related Party	Nature of Relationships	Purchases/ Sales	Amount (Foreign Currencies in Thousands)	% to Total	Payment Terms	Unit Price	Payment Terms	Ending Balance (Foreign Currencies in Thousands)	% to Total	Note
TSMC	TSMC North America	Subsidiary	Sales	\$ 1,040,985,786	66	Net 30 days from invoice date (Note)	-	(Note)	\$ 137,956,681	75	
	GUC	Associate	Sales	5,880,085	-	Net 30 days from the end of the month of when invoice is issued	-	-	391,647	-	
	TSMC Nanjing	Subsidiary	Purchases	27,070,065	22	Net 30 days from the end of the month of when invoice is issued	-	-	(2,761,080)	6	
	TSMC China	Subsidiary	Purchases	21,321,353	17	Net 30 days from the end of the month of when invoice is issued	-	-	(1,802,314)	4	
	WaferTech	Indirect subsidiary	Purchases	7,743,263	6	Net 30 days from the end of the month of when invoice is issued	-	-	(732,533)	1	
	SSMC	Associate	Purchases	3,843,482	3	Net 30 days from the end of the month of when invoice is issued	-	-	(349,211)	1	
	VIS	Associate	Purchases	3,726,305	3	Net 30 days from the end of the month of when invoice is issued	-	-	(357,151)	1	
TSMC North America	GUC	Associate of TSMC	Sales	(US\$ 1,825,047 (5,319)	-	Net 30 days from invoice date	-	-	(US\$ 205,941 (US\$ 7,442)	-	
VisEra Tech	Xintec	Associate of TSMC	Sales	750,373	8	Net 60 days from the end of the month of when invoice is issued	-	-	117,488	9	

Note: The tenor is determined by the payment terms granted to its clients by TSMC North America.

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL DECEMBER 31, 2021

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

						Overdue		
Company Name	Related Party	Nature of Relationships	Ending Balance (Foreign Currencies in Thousands)	Turnover Days (Note 1)	Amount	Action Taken	Amounts Received in Subsequent Period	Allowance for Bad Debts
TSMC	TSMC North America GUC	Subsidiary Associate	\$ 142,957,244 391,647	42 22	\$ - -		\$	\$ - -
TSMC North America	TSMC	Parent company	208,050 (US\$ 7,518)	Note 2	(US\$ 1,730 (US\$ 63)	-	16,049 (US\$ 580)	-
	GUC	Associate of TSMC	(US\$ 205,941 (US\$ 7,442)	26	4,014 (US\$ 145)	-	27,343 (US\$ 988)	-
TSMC 3DIC	TSMC	Parent company	(JPY 219,982 (JPY 911,277)	Note 2	-	-	-	-
TSMC China	TSMC Nanjing	The same parent company	24,390,011 (RMB 5,622,280)	Note 2	-	-	-	-
	TSMC	Parent company	(RMB 5,622,280) 1,802,314 (RMB 415,462)	29	-	-	-	-
TSMC Nanjing	TSMC	Parent company	(RMB 2,761,080 (800 636,473)	31	-	-	-	-
VisEra Tech	Xintec	Associate of TSMC	117,488	74	-	-	-	-
JASM	TSMC	Parent company	1,389,861 (JPY 5,757,500)	Note 2	-	-	-	-
TSMC Technology	TSMC	The ultimate parent of the Company	350,916 (US\$ 12,680)	Note 2	-	-	-	-
WaferTech	TSMC	The ultimate parent of the Company	(US\$ 732,533 26,470)	34	-	-	-	-

Note 1: The calculation of turnover days excludes other receivables from related parties.

Note 2: The ending balance is primarily consisted of other receivables, which is not applicable for the calculation of turnover days.

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS FOR THE YEAR ENDED DECEMBER 31, 2021 (Amounts in Thousands of New Taiwan Dollars)

			Nature of	Interco	mpany Transactions		
No.	Company Name	Counterparty	Nature of Relationship (Note 1)	Financial Statements Item	Amount	Terms (Note 2)	Percentage of Consolidated Net Revenue or Total Assets
0	TSMC	TSMC North America	1	Net revenue from sale of goods Receivables from related parties Other receivables from related parties Accrued expenses and other current liabilities Other noncurrent liabilities	\$ 1,040,985,786 137,956,681 5,000,563 20,650,062 127,361,560		66% 4% - 1% 3%
		TSMC JDC	1	Research and development expenses	359,899	-	-
		JASM	1	Accrued expenses and other current liabilities	1,389,861	-	-
		TSMC Europe	1	Marketing expenses - commission	465,783	-	-
		TSMC China	1	Purchases Payables to related parties	21,321,353 1,802,314	-	1% -
		TSMC Nanjing	1	Purchases Payables to related parties	27,070,065 2,761,080	-	2%
		TSMC Technology	1	Research and development expenses Payables to related parties	2,813,600 350,916	-	
		WaferTech	1	Purchases Payables to related parties	7,743,263 732,533	-	
1	TSMC China	TSMC Nanjing	3	Other receivables from related parties	24,390,011	-	1%

Note 1: No. 1 represents the transactions from parent company to subsidiary.

No. 3 represents the transactions between subsidiaries.

Note 2: The sales prices and payment terms of intercompany sales are not significantly different from those to third parties. For other intercompany transactions, prices and terms are determined in accordance with mutual agreements.

NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEES OVER WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INFORMATION ON INVESTMENT IN MAINLAND CHINA) FOR THE YEAR ENDED DECEMBER 31, 2021

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

				Original Inves	stment Amount	Balance as of December 31, 2021			Not Income	Share of	
Investor Company	Investee Company	Location	Main Businesses and Products	December 31, 2021 (Foreign Currencies in Thousands)	December 31, 2020 (Foreign Currencies in Thousands)	Shares (In Thousands)	Percentage of Ownership	Carrying Value (Foreign Currencies in Thousands)	Net Income (Losses) of the Investee (Foreign Currencies in Thousands)	Profits/Losses of Investee (Note 1) (Foreign Currencies in Thousands)	Note
ГSMC	TSMC Global	Tortola, British Virgin Islands	Investment activities	\$355,162,309	\$ 355,162,309	11	100	\$ 374,639,406	\$ 1,303,742	\$ 1,303,742	Subsidiary
	TSMC Partners	Tortola, British Virgin Islands	Investing in companies involved in the semiconductor design and manufacturing, and other investment activities	31,456,130	31,456,130	988,268	100	54,968,185	1,804,174		Subsidiary
	TSMC Arizona	Phoenix, Arizona, U.S.A.	Manufacturing, sales and testing of integrated circuits and other semiconductor devices	21,643,300	855,599	770	100	16,667,696	(4,810,127)	(4,810,127)	Subsidiary
	VIS	Hsin-Chu, Taiwan	Manufacturing, sales, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing and design service of masks	10,180,677	10,180,677	464,223	28	10,613,127	11,819,588	3,342,414	Associate
	SSMC	Singapore	Manufacturing and sales of integrated circuits and other semiconductor devices	5,120,028	5,120,028	314	39	6,795,699	2,544,371	986,962	Associate
	VisEra Tech	Hsin-Chu, Taiwan	Research, design, development, manufacturing, sales, packaging and test of color filter	5,005,171	5,005,171	213,619	73	6,521,231	2,165,280	1,631,948	Subsidiary
	TSMC North America	San Jose, California, U.S.A	Sales and marketing of integrated circuits and other semiconductor devices	333,718	333,718	11,000	100	4,871,149	375,611	375,611	Subsidiary
	Xintec	Taoyuan, Taiwan	Wafer level chip size packaging and wafer level post passivation interconnection service	1,988,317	1,988,317	111,282	41	3,046,961	1,877,082		Associate
	GUC	Hsin-Chu, Taiwan	Researching, developing, manufacturing, testing and marketing of integrated circuits	386,568	386,568	46,688	35	1,484,683	1,460,149		Associate
	JASM	Kumamoto, Japan	Manufacturing, sales, testing and computer-aided design of integrated circuits and other semiconductor devices	1,416,921	-	58	100	1,383,554	(6,426)	(6,426)	Subsidiary
	TSMC Europe	Amsterdam, the Netherlands	Customer service and supporting activities	15,749	15,749	-	100	509,880	21,875	21,875	Subsidiary
	TSMC JDC	Yokohama, Japan	Engineering support activities	410,680	302,560	15	100	368,144	13,803	13,803	Subsidiary
	VTAF III	Cayman Islands	Investing in technology start-up companies	1,321,594	1,318,846	-	98	300,401	(8,978)	(8,798)	Subsidiary
	Emerging Fund	Cayman Islands	Investing in technology start-up companies	298,618	-	-	99.9	286,205	(10,015)	(10,005)	Subsidiary
	TSMC 3DIC	Yokohama, Japan	Engineering support activities	278,986	-	11	100	270,513	4,197	4,197	Subsidiary
	TSMC Japan	Yokohama, Japan	Customer service and supporting activities	83,760	83,760	6	100	132,411	4,662	4,662	Subsidiary
	VTAF II	Cayman Islands	Investing in technology start-up companies	260,300	260,300	-	98	112,320	(1,073)	(1,052)	Subsidiary
	TSMC Korea	Seoul, Korea	Customer service and supporting activities	13,656	13,656	80	100	40,857	2,802		Subsidiary
TSMC Partners	TSMC Development	Delaware, U.S.A	Investing in companies involved in semiconductor manufacturing	16,242,944 (US\$ 586,939)	16,242,944 (US\$ 586,939)	-	100	30,557,431 (US\$1,104,193)	1,521,812 (US\$ 54,475)		Subsidiary
	TSMC Technology	Delaware, U.S.A	Engineering support activities	395,241 (US\$ 14,282)	395,241	-	100	835,888 (US\$ 30,205)	78,921		Subsidiary
	TSMC Canada	Ontario, Canada	Engineering support activities	63,650 (US\$ 2,300)	63,650	2,300	100	278,766 (US\$ 10,073)	25,324		Subsidiary
VTAF III	Growth Fund	Cayman Islands	Investing in technology start-up companies	72,057 (US\$ 2,604)	69,289 (US\$ 2,504)	-	100	(US\$ 219,604 (US\$ 7,935)	(1,217) (US\$ (44))		Subsidiary
	Mutual-Pak	New Taipei, Taiwan	Manufacturing of electronic parts, wholesaling and retailing of electronic materials, and researching, developing and testing of RFID	44,094	44,094 (US\$ 1,593)	4,693	28	22,948		Note 2	Associate

Investor Company	Investee Company	Location	Main Businesses and Products		December 31, 2020 (Foreign	Balance Shares (In Thousands)	as of December Percentage of Ownership	Carrying Value	Net Income (Losses) of the Investee (Foreign	Share of Profits/Losses of Investee (Note 1) (Foreign	Note
TSMC Development	WaferTech	Washington, U.S.A	Manufacturing, sales and testing of integrated circuits and other semiconductor devices	\$ -	\$ -	293,637	100	\$ 5,153,719 (US\$ 186,230)	\$ 1,456,072 (US\$ 52,123)		Subsidiary

Note 1: The share of profits/losses of investee includes the effect of unrealized gross profit on intercompany transactions.

Note 2: The share of profits/losses of the investee company is not reflected herein as such amount is already included in the share of profits/losses of the investor company.

(Concluded)

INFORMATION ON INVESTMENT IN MAINLAND CHINA FOR THE YEAR ENDED DECEMBER 31, 2021 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Investee Company	Main Businesses and Products	Total Amount of Paid-in Capital (RMB in Thousands)	Method of Investment	Accumulated Outflow of Investment from Taiwan as of January 1, 2021 (US\$ in Thousands)	Investmen Outflow (US\$ in Thousands)	t Flows Inflow	Accumulated Outflow of Investment from Taiwan as of December 31, 2021 (US\$ in Thousands)	Net Income (Losses) of the Investee Company	Percentage of Ownership	Share of Profits/Losses	Carrying Amount as of December 31, 2021	Accumulated Inward Remittance of Earnings as of December 31, 2021
TSMC China	Manufacturing, sales, testing and computer- aided design of integrated circuits and other semiconductor devices	\$ 18,939,667 (RMB 4,502,080)	Note 1	\$ 18,939,667 (US\$ 596,000)	\$ -	\$ -	\$ 18,939,667 (US\$ 596,000)	\$ 8,555,130	100%	\$ 8,619,026 (Note 2)	\$ 73,470,628	\$ -
TSMC Nanjing	Manufacturing, sales, testing and computer- aided design of integrated circuits and other semiconductor devices	30,521,412 (RMB 6,650,119)	Note 1	30,521,412 (US\$ 1,000,000)	-	-	30,521,412 (US\$ 1,000,000)	12,283,446	100%	12,283,460 (Note 2)	46,159,494	_

Accumulated Investment in Mainland China as of December 31, 2021 (US\$ in Thousands)	Investment Amounts Authorized by Investment Commission, MOEA (US\$ in Thousands)	Upper Limit on Investment
\$ 49,461,079	\$ 119,412,667	\$1,302,439,923
(US\$ 1,596,000)	(US\$ 3,596,000)	(Note 3)

Note 1: TSMC directly invested US\$596,000 thousand in TSMC China and US\$1,000,000 thousands in TSMC Nanjing.

Note 2: Amount was recognized based on the audited financial statements.

Note 3: The upper limit on investment in mainland China is determined by sixty percent (60%) of the Company's consolidated net worth.

Taiwan Semiconductor Manufacturing Company Limited

INFORMATION ON MAJOR SHAREHOLDERS DECEMBER 31, 2021

	Shares	
Shareholders (Note)	Total Shares Owned	
ADR-Taiwan Semiconductor Manufacturing Company, Ltd.	5,321,212,928	
National Development Fund, Executive Yuan	1,653,709,980	

Note: Major shareholders shows the list of all shareholders with ownership of 5 percent or greater.

<u>TABLE 11</u>

