KRAFTON, INC.

Separate Financial Statements

December 31, 2022 and 2021

(With Independent Auditors' Report Thereon)

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KPMG SAMJONG Accounting Corp.

152, Teheran-ro, Gangnam-gu, Seoul 06236 (Yeoksam-dong, Gangnam Finance Center 27th Floor) www.kr.kpmg.com Republic of Korea

Tel +82 (2) 2112 0100 Fax +82 (2) 2112 0101

Independent Auditors' Report

Based on a report originally issued in Korean

To the Board of Directors and Shareholders Krafton, Inc.

Opinion

We have audited the separate financial statements of Krafton, Inc. (the "Company"), which comprise the separate statement of financial position as of December 31, 2022, the separate statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and its financial performance and its cash flows for the year then ended in accordance with Korean International Financial Reporting Standards ("K-IFRS").

We also have audited, in accordance with Korean Standards on Auditing ("KSAs"), the Company's Internal Control over Financial Reporting (ICFR) as of December 31, 2022 based on the criteria established in Conceptual Framework for Designing and Operating Internal Control over Financial Reporting issued by the Operating Committee of Internal Control over Financial Reporting in the Republic of Korea, and our report dated March 13, 2023 expressed an unmodified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

We conducted our audit in accordance with KSAs. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Separate Financial Statements section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Republic of Korea, and we have fulfilled other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matter

A key audit matter is matter that, in our professional judgment, was of most significance in our audit of the separate financial statements as of and for the year ended December 31, 2022. This matter was addressed in the context of our audit of the separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on this matter.

Impairment Testing of Investment in Subsidiary (The Unknown Worlds Entertainment, Inc.)

Reasons For the Decision as a Key Audit Matter

The Company reviews its investments in subsidiaries for indication of impairment every year and performs impairment testing for investments in subsidiaries with indication of impairment. Management's significant judgment is involved in measuring the recoverable amount of investments in subsidiaries with indication of impairment, such as future cash flows, discount rates and growth rates of the subsidiaries.

As described in Note 12 to the separate financial statements, the carrying amount of investment in Unknown Worlds Entertainment, Inc., a subsidiary, in the Company's separate financial statements is KRW 733,530 million, which is significant at 84.69% of total investments in subsidiaries. In addition, the recoverable amount of the investment in subsidiary varies significantly depending on how management determines the valuation model and unobservable input variables. We determined the impairment testing of the Unknown Worlds Entertainment, Inc. as a key audit matter considering the uncertainty of these accounting estimates and the significance of Unknown Worlds Entertainment, Inc.'s carrying amount.

How the Key Audit Matter Was Addressed in the Audit

We performed audit procedures including the followings to address the key audit matter.:

- Understanding of the Company's policies, processes, and internal controls for identifying indication of impairment and accounting for investments in subsidiaries
- Evaluating the qualifications and independence of external experts engaged by the Company
- Testing the internal controls over management's review and approval of future cash flows estimates and evaluations for impairment testing.
- Evaluating the appropriateness of the valuation model used by management to estimate value in use.
- Evaluating the reasonableness of major assumptions such as future cash flows, discount rates and growth rates used by management in estimating value in use.
- Evaluating whether there is bias in the estimate by comparing the cash flows used in the estimate with actual performance and performing a retrospective review.

Other Matters

The separate financial statements of the Company for the year ended December 31, 2021, were audited by another auditor who expressed an unmodified opinion on thereon on March 14, 2022.

The procedures and practices utilized in the Republic of Korea to audit such separate financial statements may differ from those generally accepted and applied in other countries.

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

Management is responsible for the preparation and fair presentation of these separate financial statements in accordance with K-IFRS, and for such internal control as management determines is necessary to enable the preparation of separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the separate 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 are responsible for overseeing the Company's financial reporting process.

Auditors' Responsibilities for the Audit of the Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the separate 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 KSAs 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 separate financial statements.

As part of an audit in accordance with KSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the separate 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.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- Evaluate the appropriateness of accounting policies used in the preparation of the separate financial statements and the reasonableness of accounting estimates and related disclosures made by management.
- 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 separate 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.
- Evaluate the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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 separate financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's 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 partner on the audit resulting in this independent auditor's report is Chang-Bum Ahn.

DMG Samjory Accounting Corp.

Seoul, Korea March 13, 2023

This report is effective as of March 13, 2023, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying separate financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

KRAFTON, Inc. Separate Statements of Financial Position As of December 31, 2022 and December 31, 2021

(in thousands of Korean Won)	Notes	Dec	cember 31, 2022	December 31, 2021
Assets				
Current assets				
Cash and cash equivalents	5,6	₩	430,809,069	₩ 2,832,057,949
Current portion of financial assets at fair value through	/-			
profit or loss	5,6,10		2,450,603,157	-
Trade receivables	4,5,6,7		523,426,839	525,942,930
Other current financial assets	5,6,7,8,13		205,723,551	70,171,032
Other current assets	7		42,444,802	38,716,445
			3,653,007,418	3,466,888,356
Non-current assets				
Investments in subsidiaries and associates	12		1,320,163,045	1,304,761,957
Financial assets at fair value through profit or loss	5,6,10		143,591,695	88,809,217
Financial assets at fair value through other				
comprehensive income	4,5,6,11		83,079,911	109,880,530
Property and equipment	13		177,347,687	201,143,474
Intangible assets	14		9,058,975	10,801,730
Investment properties	15		202,173,260	183,259,225
Other non-current financial				
assets	5,6,7,8,13		82,713,298	42,012,852
Other non-current assets	7		27,319,649	4,658,866
Deferred tax assets	25		74,253,160	78,509,214
Derivative assets	5,6		1,757,481	844,177
			2,121,458,161	2,024,681,242
Total assets		₩	5,774,465,579	₩ 5,491,569,598

(continued)

KRAFTON, Inc. Separate Statements of Financial Position, (Cont'd) As of December 31, 2022 and December 31, 2021

(in thousands of Korean Won)	Notes	December 31, 2022	December 31, 2021
Liabilities			
Current liabilities			
Other current financial			
liabilities	4,5,6,9	217,134,923	328,791,361
Other current liabilities	9,21	74,732,134	73,385,230
Current provisions	17	2,902,828	37,529,676
Current tax liabilities		37,907,683	111,200,406
		332,677,568	550,906,673
Non-current liabilities			
Financial liabilities at fair value			
through profit or loss	4,5,6	201,143,514	205,865,216
Net defined benefit liability	16	7,659,997	10,772,823
Provisions	17	13,364,010	12,127,609
Other non-current financial			
liabilities	4,5,6,9	161,452,422	114,690,746
Derivative liabilities	4,5,6	15,863,801	5,127,343
		399,483,744	348,583,737
Total liabilities		732,161,312	899,490,410
Equity			
Share capital	19	4,908,155	4,896,705
Capital surplus	19	2,481,010,220	4,861,995,661
Other components of equity	19,20	69,243,284	134,804,394
Retained earnings			
(Accumulated deficits)	19	2,487,142,608	(409,617,572)
Total equity		5,042,304,267	4,592,079,188
Total liabilities and equity		₩ 5,774,465,579	₩ 5,491,569,598

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

(in thousands of Korean Won)

(in thousands of Korean Won)	Notes	December 31, 2022	December 31, 2021		
	Notoo				
Revenue	21	₩ 1,767,775,811	₩ 1,828,373,788		
Operating costs	22	1,029,953,898	1,131,998,343		
Operating profit		737,821,913	696,375,445		
Other income	23	283,725,510	146,011,673		
Other expenses	23	382,138,285	68,783,697		
Finance income	24	32,993,011	11,720,851		
Finance costs	24	6,148,544	5,848,123		
Profit before income tax		666,253,605	779,476,149		
Income tax expense	25	179,110,997	237,273,898		
Profit for the year		₩ 487,142,608	₩ 542,202,251		
Other comprehensive income (loss) Items that will not be reclassified to profit or loss Gain (loss) on valuation of financial assets at fair value through other comprehensive income Remeasurements of net defined benefit liability	16	(45,707,882) 4,585,201	22,657,183 (2,367,547)		
Items that may be subsequently reclassified to profit or loss					
Exchange differences on translation of foreign operations Other comprehensive income (loss) for the year, net of tax Total comprehensive income for the year		(28,935)	(8,873) ₩ 20,280,763 ₩ 562,483,014		
Earnings per share <i>(in Korean Won)</i> Basic earnings per share Diluted earnings per share	26	₩ 10,388 10,301	₩ 12,538 12,287		

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

KRAFTON, Inc. Separate Statements of Changes in Equity Years Ended December 31, 2022 and 2021

(in thousands of Korean Won)	Share Capital		С	apital surplus	Other Components of Equity		ļ	Accumulated Deficits		Total
Balance at January 1, 2021	₩	4,278,519	₩	2,026,668,321	₩	121,675,683	₩	(951,819,823)	₩	1,200,802,700
Total comprehensive income										
Profit for the year		-		-		-		542,202,251		542,202,251
Gain on valuation of financial assets at fair value through other comprehensive income		-		-		22,657,183		-		22,657,183
Remeasurements of net										
defined benefit liability		-		-		(2,367,547)		-		(2,367,547)
Exchange differences on translation of foreign operations		-		-		(8,873)		-		(8,873)
Transactions with shareholders r	ecoaniz	ed directly to e	auitv							
Exercise of share options	J	55,786	1	57,233,631		(56,524,681)		-		764,736
Share-based payment		,				(,,,,)				,
expenses		-		-		14,170,564		-		14,170,564
Grant of stock options to executives and										
employees of subsidiaries		-		-		1,491,680		-		1,491,680
Gain on disposal of										
treasury shares		-		6,452,617		-		-		6,452,617
Paid-in capital increase		562,400		2,771,641,092		-		-		2,772,203,492
Gift of shares		-		-		33,710,386		-		33,710,386
Balance at December 31, 2021	₩	4,896,705	₩	4,861,995,661	₩	134,804,395	₩	(409,617,572)	₩	4,592,079,189

(continued)

KRAFTON, Inc. Separate Statements of Changes in Equity, (Cont'd) Years Ended December 31, 2022 and 2021

(in thousands of Korean Won)	Sh	are Capital	c	apital surplus		Other Components of Equity		tained earnings Accumulated deficits)		Total
Balance at January 1, 2022	₩	4,896,705	₩	4,861,995,661	₩	134,804,395	₩	(409,617,572)	₩	4,592,079,189
Total comprehensive income Profit for the year		-		-		-		487,142,608		487,142,608
Loss on valuation of financial assets at fair value through other										<i></i>
comprehensive income Remeasurements of net		-		-		(45,707,882)		-		(45,707,882)
defined benefit liability		-		-		4,585,201		-		4,585,201
Exchange differences on translation of foreign operations		-		-		(28,935)		-		(28,935)
Transactions with shareholders re	cogniz	ed directly to e	quity							
Exercise and forfeiture of share options		11,450		2,907,876		(2,806,340)		-		112,986
Share-based payment expenses		-		-		10,186,062		-		10,186,062
Grant of stock options, etc. to executives and										
employees of subsidiaries		-		-		1,921,169		-		1,921,169
Gift of shares		-		25,724,255		(33,710,386)		-		(7,986,131)
Transfer to Capital Reserve		-		(2,409,617,572)		-		2,409,617,572		-
Balance at December 31, 2022	₩	4,908,155	₩	2,481,010,220	₩	69,243,284	₩	2,487,142,608	₩	5,042,304,267

The accompanying notes are an integral part of the separate financial statements

KRAFTON, Inc. Separate Statements of Cash Flows Years Ended December 31, 2022 and 2021

(in thousands of Korean Won)	Note	[December 31, 2022	December 31, 2021	
Cash flows from operating activities					
Cash generated from operations	27	₩	745,654,618	₩ 871,837,645	5
Interest received			30,981,849	10,777,611	
Interest paid			(5,559,440)	(5,307,912)	
Dividends received			6,844,857	570,827	
Income taxes paid			(233,261,492)	(201,062,664)	
Net cash flows provided by operating			(,,,		<u>~</u>
activities			544,660,392	676,815,507	7
Cash flows from investing activities					
Decrease in short-term financial					
instruments		₩	28,200,958	₩ 11,960,000)
Collection of short-term loans			16,838,815	11,554,160)
Disposal of financial assets at fair					
value through profit or loss			3,932,785,883	14,708,686	3
Disposal of investments in subsidiaries			2,845,639	-	-
Collection of long-term loans			579,711	2,948,290	
Disposal of property and equipment			137,264	264,480	
Decrease in deposits			88,847	2,546,237	
Decrease in long-term advanced payments			-	77,208	3
Collection of lease receivables			4,721,632	1,627,010	
Receipt of government subsidies			-	360,000	
Increase in short-term loans			(55,467,025)	(8,268,560))
Increase in long-term financial					
instruments			(35,578,034)	(1,787,649))
Acquisition of financial assets at fair value					
through profit or loss			(6,510,453,505)	(44,299,585))
Acquisition of financial assets at fair value				(0.400.000)	、
through other comprehensive income			(36,549,117)	(6,132,399)	
Increase in long-term loans			(98,335,825)	(25,810,929)	
Increase in advanced payments			(20,856,255)	(68,833)	·
Acquisition of property and equipment			(15,629,671) (1,071,226)	(53,954,884)	
Acquisition of intangible assets Acquisition of investment properties			(7,116,998)	(3,978,113) (106,803,541)	
Return of government subsidies			(902,950)	(100,003,341))
Increase in deposits			(2,779,063)	(19,310,585)	- \
Acquisition of investments in associates			(54,595,070)	(378,798,523)	
Acquisition of investments in subsidiaries			(112,249,112)	(696,878,017)	
Decrease in derivative liabilities			(,,0,,)	(520,159)	
Net cash flows used in investing activities		₩	(2,965,385,102)	₩ (1,300,565,706)	

KRAFTON, Inc. Separate Statements of Cash Flows, (Cont'd) Years Ended December 31, 2022 and 2021

(in thousands of Korean Won)	Note	C	December 31, 2022	December 31, 2021		
Cash flows from financing activities						
Increase in leasehold deposits received		₩	5,701,862	₩	2,339,819	
Increase in paid-in capital			-		2,772,203,492	
Exercise of share options			112,986		764,736	
Repayments of lease liabilities			(42,893,640)		(30,086,125)	
Decrease in leasehold deposits received			(4,490,958)		(30,780)	
Net cash flows provided by(used in)						
financing activities			(41,569,750)		2,745,191,142	
Net increase(decrease) in cash and cash						
equivalents			(2,462,294,460)		2,121,440,943	
Cash and cash equivalents at the beginning of the year			2,832,057,949		661,654,353	
Effects of exchange rate changes on cash and cash equivalents			61,045,580		48,962,653	
Cash and cash equivalents at the end of			· ·			
the year		₩	430,809,069	₩	2,832,057,949	

1. General Information

Krafton, Inc. (the "Company") was incorporated in the Republic of Korea on March 26, 2007 to engage in software development and related subsidiary businesses. The Company's headquarters is located at 231, Teheran-ro, Gangnam-gu, Seoul, the Republic of Korea. The Company changed its name from Bluehole, Inc. into Krafton, Inc on November 30, 2018.

The Company has been listed on the KOSPI Market of the Korea Exchange (KRX) since August 10, 2021.

As of December 31, 2022, the Company's share capital amounts to ordinary shares of $\forall 4,908$ million, through number of share option exercises, increase in paid-in capital and 5-for-1 share split effective on May 4, 2021. As of December 31, 2022, the Company's shareholders are as follows:

Number of shares	Percentage of ownership
7,133,651	14.53%
6,641,640	13.53%
3,087,545	6.29%
2,167,418	4.42%
30,051,291	61.23%
49,081,545	100.00%
	shares 7,133,651 6,641,640 3,087,545 2,167,418 30,051,291

2. Significant Accounting Policies

The principal accounting policies applied in the preparation of these separate financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

2.1 Basis of Preparation

The Company maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with Korean International Financial Reporting Standards ("KIFRS"). The accompanying financial statements have been condensed, restructured and translated into English from the Korean language financial statements. In the event of any differences in interpreting the separate financial statements or the independent auditor's report thereon, Korean version, which is used for regulatory reporting purposes, shall prevail.

Certain information attached to the Korean language financial statements, but not required for a fair presentation of the Company's financial position, financial performance or cash flows, is not presented in the accompanying financial statements.

The separate financial statements of the Company have been prepared in accordance with KIFRS. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board ("IASB") that have been adopted by the Republic of Korea.

2.1 Basis of Preparation, (cont'd)

The separate financial statements have been prepared on a historical cost basis, except for the following:

- Certain financial assets and liabilities (including derivative instruments), certain classes of property and equipment and investment properties measured at fair value
- · Assets held for sale measured at fair value less costs to sell, and
- Defined benefit pension plans plan assets measured at fair value.

The preparation of separate financial statements requires the use of critical accounting estimates. Management also needs to exercise judgment in applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the separate financial statements are disclosed in Note 3.

2.2 Changes in Accounting Policy and Disclosures

2.2.1 New and amended standards adopted by the Company

The Company has applied the following standards and interpretations for the first time for their annual reporting period commencing January 1, 2022.

(a) Amendment to KIFRS 1116 Leases - Covid-19 - Related Rent Concessions provided after June 30, 2021

The application scope of the practical expedient, in which a lessee may elect not to assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification, is extended to lease payments originally due on or before June 30, 2022. A lessee shall apply the practical expedient consistently to eligible contracts with similar characteristics and in similar circumstances. The application of amendments does not have a significant impact on The Company's separate financial statements.

(b) Amendments to KIFRS 1103 Business Combinations – Reference to the Conceptual Framework

The amendments were updated so that it refers to the amended conceptual framework for financial reporting for assets and liabilities recognized upon business combination. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of KIFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*, and KIFRS 2121 *Levies*. The amendments also confirm that contingent assets should not be recognized at the acquisition date. The application of amendments does not have a significant impact on The Company's separate financial statements.

(c) Amendments to KIFRS 1016 Property, Plant and Equipment - Proceeds before intended use

The amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. Instead, the entity will recognize the proceeds from selling such items, and the costs.

2.2 Changes in Accounting Policy and Disclosures, (cont'd)

of producing those items, in profit or loss. The application of amendments does not have a significant impact on The Company's separate financial statements.

(d) Amendments to KIFRS 1037 Provisions, Contingent Liabilities and Contingent Assets - Onerous Contracts: Cost of Fulfilling a Contract

The amendments clarify that the cost of fulfilling a contract comprises the costs that relate directly to the contract, and that costs that relate directly to a contract consist of both the incremental costs of fulfilling that contract and an allocation of other costs that relate directly to fulfilling contracts. The application of amendments does not have a significant impact on The Company's separate financial statements.

(e) Annual improvements to KIFRS 2018-2020

Annual improvements of KIFRS 2018-2020 Cycle should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The amendment does not have a significant impact on the separate financial statements.

- KIFRS 1101 First time Adoption of Korean International Financial Reporting Standards Subsidiaries that are first-time adopters
- KIFRS 1109 Financial Instruments Fees related to the 10% test for derecognition of financial liabilities
- KIFRS 1041 Agriculture Measuring fair value

2.2.2 New standards and interpretations not yet adopted by the Company

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the company's financial statements are disclosed below. The Company intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

(a) Amendments to KIFRS 1001 Presentation of Financial Statements - Classification of Liabilities as Current or Non-current

The amendments clarify that liabilities are classified as either current or non-current, depending on the substantive rights that exist at the end of the reporting period. Classification is unaffected by the likelihood that an entity will exercise right to defer settlement of the liability or the expectations of management. Also, the settlement of liability includes the transfer of the entity's own equity instruments, however, it would be excluded if an option to settle them by the entity's own equity instruments if compound financial instruments is met the definition of equity instruments and recognized separately from the liability. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted. The Company is assessing the impact of these amendments on the separate financial statements

2.2 Changes in Accounting Policy and Disclosures, (cont'd)

(b) Korean IFRS 1001 Presentation of Financial Statements - Disclosure of Accounting Policies

The amendments to Korean IFRS 1001 define and require entities to disclose their material accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Company is assessing the impact of these amendments on the separate financial statements

(c) Korean IFRS 1008 Accounting policies, changes in accounting estimates and errors -Definition of Accounting Estimates

The amendments define accounting estimates and clarify how to distinguish them from changes in accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Company does not expect these amendments to have a significant impact on the separate financial statements

(d) Korean IFRS 1012 Income Taxes - Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments include an additional condition to the exemption to initial recognition of an asset or liability that a transaction does not give rise to equal taxable and deductible temporary differences at the time of the transaction. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Company does not expect these amendments to have a significant impact on the separate financial statements

(e) New Standard: Korean IFRS 1117 Insurance Contract

Korean IFRS 1117 Insurance Contracts replaces Korean IFRS 1104 Insurance Contracts. This Standard estimates future cash flows of an insurance contract and measures insurance liabilities using discount rates applied with assumptions and risks at the measurement date. The entity recognizes insurance revenue on an accrual basis including services (insurance coverage) provided to the policyholder by each annual period. In addition, investment components (Refunds due to termination/maturity) repaid to a policyholder even if an insured event does not occur, are excluded from insurance revenue, and insurance financial income or expense and the investment income or expense are presented separately to enable users of the information to understand the sources of income or expenses. This Standard should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted for entities that applied Korean IFRS 1109 Financial Instruments. The Company does not expect these amendments to have a significant impact on the separate financial statements

Under the revisions to the standards, companies applying K-IFRS 1117 for the first time can apply optional classification adjustments ('overlay') to comparative periods. Such classification adjustments can be applied to all financial assets, including those without a connection to contracts within the scope of K-IFRS 1117. Companies applying classification adjustments to financial assets should present comparative information as if they had applied the classification and measurement

2.2 Changes in Accounting Policy and Disclosures, (cont'd)

requirements of K-IFRS 1109 to those assets, and such classification adjustments can be applied on an item-by-item basis.

(f) New Standard: K-IFRS 1001 'Presentation of Financial Statements' - Disclosure of gains and losses on financial liabilities with exercise price adjustment conditions

For financial instruments, all or part of which are classified as financial liabilities which have conditions that adjust the exercise price depending on the issuer's share price, the standard requires the disclosure of the carrying amount of those financial liabilities and the related gains and losses. The amendment is effective for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Company does not expect these amendments to have a significant impact on the separate financial statements.

2.3 Subsidiaries, Joint Ventures, and Associates

The financial statements of the Company are the separate financial statements prepared in accordance with KIFRS 1027 *Separate Financial Statements*. Investments in subsidiaries, joint ventures and associates are recognized at cost under the direct equity method. Management applied the carrying amounts under the previous K-GAAP at the time of transition to K-IFRS as deemed cost of investments. The Company recognizes dividend income from subsidiaries, joint ventures and associates in profit or loss when its right to receive the dividend is established. Investments in subsidiaries and associates are measured at cost method in accordance with KIFRS 1027.

2.4 Foreign Currency Translation

(a) Functional and presentation currency

Items included in the separate financial statements of the Company are measured using the currency of the primary economic environment in which each entity operates (the "functional currency"). The financial statements are presented in Korean won, which is the Company's functional and presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognized in profit or loss.

Gain or loss on foreign currency translation that relates to cash and cash equivalents, long and short-term financial instruments, loans and borrowings are presented in the statement of comprehensive income within 'other income or other expenses'.

2.4 Foreign Currency Translation, (cont'd)

Translation differences from non-monetary financial assets and liabilities are reported as part of the fair value gain or loss. For example, translation differences from equities held at fair value through other comprehensive income are recognized in other comprehensive income.

The functional currency of all the foreign operations are different from the presentation currency of the Company. Assets and liabilities of each foreign operation's statement of financial position presented are translated at the closing rate at the end of the reporting date, and income and expenses for each statement of comprehensive income are translated at average exchange rates.

The Company offsets translation gains and losses arising from the conversion of foreign operations' foreign currency financial statements into Korean Won and the consolidation of accounting data between the head office and foreign operations. The resulting balance is recorded as accumulated other comprehensive income (foreign operation translation gains and losses). When a foreign operation is partially disposed of or sold, the exchange differences that were recorded in equity are recognized in the statement of profit or loss.

(c) Presentation of Integrated Foreign Exchange Differences

In accordance with Paragraph 29 of K-IFRS 1001, The Company presents foreign exchange differences, including those recognized in other gains or losses and foreign currency translation differences, as integrated foreign exchange gains or losses.

2.5 Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, demand deposits, and short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of change in value.

2.6 Revenue Recognition

(a) Identification of Performance Obligation

The Company engages in game publishing business which it provides a right to access the game, and updating, planning, developing and maintaining services of game to customers. A publishing contract with a customer is identified as a single performance obligation since the benefits from the sales of game is significantly restricted without updating services. On the other hand, virtual item sales through online and mobile games are classified as a single performance obligation.

In addition, the Company recognizes royalty revenue by providing a license of the Company's intellectual property (IP) to publishing companies. The Company determines to recognize as a single performance obligation for providing updates and technical support services for incidental to the game service.

2.6 Revenue Recognition, (cont'd)

(b) A performance obligation satisfied over time

Game revenue consists of (i) revenue from providing a right to access games and (ii) revenue from sales of game items, and is deferred and recognized over the expected period of use, since the Company is required to provide games with updates during the period.

In addition, the Company recognizes royalty revenue from providing a license for the Company's IP. According to KIFRS 1115, royalty revenue from providing a right to access the entity's IP is recognized over the license period. However, the Company recognizes revenue for a sales-based or usage-based royalty promised in exchange for a license of intellectual property when the subsequent sale or usage occurs.

(c) Costs incurred to fulfill a contract

Costs to fulfill a contract are capitalized only if (i) the costs relate directly to the contract or to an anticipated contract that the Company can specifically identify; (ii) the costs generate or enhance resources of the Company that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and (iii) the costs are expected to be recovered. The capitalized costs are recognized as contract costs over service providing period under reasonable method.

(d) Contract assets and contract liabilities

A contract asset is the Company's right to receive consideration for goods or services transferred to a customer, and a contract liability is defined as the Company's obligation to transfer goods or services to the customer in proportion to the consideration received by the Company (or due consideration). The Company offsets the contract assets and contract liabilities arising from one contract and presents them in the statement of financial position in net terms.

2.7 Financial Assets

(a) Classification

The Company classifies its financial assets in the following measurement categories:

- those to be measured at fair value through profit or loss
- those to be measured at fair value through other comprehensive income, and
- those to be measured at amortized cost.

The classification depends on the Company's business model for managing the financial assets and the contractual terms of the cash flows.

2.7 Financial Assets, (cont'd)

For financial assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. The Company reclassifies debt investments when, and only when its business model for managing those assets changes.

For investments in equity instruments that are not held for trading, this will depend on whether the Company has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income. The fair value changes of investments in equity instruments not designated are recognized in profit or loss.

(b) Measurement

At initial recognition, the Company measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset or the issuance of the financial liability. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

A. Debt instruments

Subsequent measurement of debt instruments depends on the Company's business model for managing the asset and the cash flow characteristics of the asset. The Company classifies its debt instruments into one of the following three measurement categories:

- Amortized cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. A gain or loss on a debt investment that is subsequently measured at amortized cost and is not part of a hedging relationship is recognized in profit or loss when the asset is derecognized or impaired. Interest income from these financial assets is included in 'finance income' using the effective interest rate method.
- Fair value through other comprehensive income: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment loss (reversal of impairment loss), interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income from these financial assets is included in 'finance income' using the effective interest rate method. Foreign exchange gains and losses are presented in 'other expenses' and impairment losses are presented in 'other expenses'.

2.7 Financial Assets, (cont'd)

• Fair value through profit or loss: Assets that do not meet the criteria for amortized cost or fair value through other comprehensive income are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognized in profit or loss and presented net in the statement of profit or loss within 'other income or expenses' in the year in which it arises.

B. Equity instruments

The Company subsequently measures all equity investments at fair value. Where the Company's management has elected to present fair value gains and losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividend income from such investments continue to be recognized in profit or loss as 'other income' when the right to receive payments is established.

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'other income and expenses' in the statement of profit or loss as applicable. Impairment loss (reversal of impairment loss) on equity investments measured at fair value through other comprehensive income are not reported separately from other changes in fair value.

(c) Impairment

The Company assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Company applies the simplified approach, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables.

(d) Recognition and derecognition

Regular way purchases and sales of financial assets are recognized or derecognized on trade-date, the date on which the Company commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership.

If a transfer does not result in derecognition because the Company has retained substantially all the risks and rewards of ownership of the transferred asset, the Company continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The Company classified the financial liability as "borrowings" in the statement of financial position.

2.7 Financial Assets, (cont'd)

(e) Offsetting

Financial assets and liabilities are offset and the net amount reported in the statements of financial position where there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the assets and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

2.8 Derivative Instruments

Derivatives are initially recognized at fair value on the date when a derivative contract is entered into and are subsequently remeasured at their fair value at the end of each reporting period. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in profit or loss within 'other income(expenses)' based on the nature of transactions.

2.9 Trade Receivables

Trade receivables are recognized initially at the amount of consideration that is unconditional, unless they contain significant financing components when they are recognized at fair value. Trade receivables are subsequently measured at amortized cost using the effective interest method, less loss allowance.

2.10 Property and Equipment

Property and equipment are stated at historical cost less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items. The estimated costs of dismantling and removing an asset and restoring the site on which it is located are also included in the historical cost.

Depreciation of all property and equipment is calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives as follows:

Estimated Useful lives

Fixtures5 yearsFacilities5 - 7 years

The assets' depreciation method, residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

2.11 Government Grants

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Company will comply with all attached conditions. Government grants related to assets are presented in the statement of financial position by deducting the grant in arriving at the carrying amount of the asset, and government grants related to income are deferred and later deducted from the related expense.

2.12 Intangible Assets

Intangible assets are initially recognized at its historical cost, and carried at cost less accumulated amortization and accumulated impairment losses. Software development costs that are directly attributable to internally generated by the Company are recognized when the criteria; such as, technically feasible, generate probable future economic benefits and other, are met. Customer contracts acquired in a business combination are recognized at fair value at the acquisition date. Membership rights that have an indefinite useful life are not subject to amortization because there is no foreseeable limit to the period over which the assets are expected to be utilized. The Company amortizes intangible assets with a limited useful life using the straight-line method over the following periods.

	Estimated Useful lives
Industrial property rights	5 - 10 years
Software	5 years
	The Period of
Membership rights	membership
Other intangible assets	5 years

Goodwill arising from the business combination is measured as the excess of the acquisition cost over the identifiable assets required, the liabilities assumed and contingent liabilities in the fair value of the asset acquired and the liabilities assumed. Goodwill is initially recognized at acquisition cost and carried at cost less accumulated impairment losses.

2.13 Investment Properties

Investment property is property held to earn rentals or for capital appreciation or both. An investment property is measured initially at its cost. An investment property is measured after initial measurement at depreciated cost (less any accumulated impairment losses). After recognition as an asset, investment property is carried at cost less accumulated depreciation and impairment losses. The Company depreciates investment properties, except for land, using the straight-line method over their estimated useful lives of 40 years.

2.14 Impairment of Non-financial Assets

Goodwill and intangible assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

2.15 Financial Liabilities

(a) Classification and measurement

The Company classifies non-derivative financial liabilities, except for financial liabilities at fair value through profit or loss, financial guarantee contracts and financial liabilities that arise when a transfer of financial assets does not qualify for derecognition, as financial liabilities carried at amortized cost and present as 'trade payables', 'borrowings', and 'other financial liabilities' in the statement of financial position. Interest expenses recognized from financial liabilities are recognized in the statement of profit or loss as 'finance costs'.

Financial liabilities are classified at fair value through profit or loss when the financial liability is contingent consideration that may be paid by an acquirer as part of a business combination, or held for trading, or it is designated at fair value through profit or loss upon initial recognition.

The Company may, at initial recognition, irrevocably designate a financial liability as a financial liability measured at fair value through profit or loss in the following cases:

- Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise;
- The financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the group is provided internally on that basis; or
- It forms part of a contract containing one or more embedded derivatives, and KIFRS 1109 *Financial Instruments: Recognition and Measurement* permits the entire hybrid contract to be designated at fair value through profit or loss.

Financial liabilities at fair value through profit or loss are stated at fair value, with any valuation gain or loss arising from changes in fair value, excluding the portion designated as hedge relationships, recognized in profit or loss. Interest expenses paid for the financial liabilities at fair value through profit or loss are recognized as 'gain or loss on financial liabilities at fair value through profit or loss' included in the 'other income and expenses'.

2.15 Financial Liabilities, (cont'd)

However, for financial liabilities designated as financial liabilities measured at fair value through profit or loss, the amount of the change in the liability's fair value attributable to changes in its credit risk is recognized in other comprehensive income, unless this treatment of the credit risk component creates or enlarges a measurement mismatch. Other changes in the liability's fair value is recognized in profit or loss. The amount recognized as other comprehensive income is not subsequently reclassified to profit or loss, but rather transferred to retained earnings when financial liabilities are derecognized.

(b) Derecognition

Financial liabilities are removed from the statement of financial position when it is extinguished; for example, when the obligation specified in the contract is discharged or cancelled or expired or when the terms of an existing financial liability are substantially modified. The difference between the carrying amount of a financial liability extinguished or transferred to another party and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

2.16 Employee Benefits

(a) Post-employment benefits

The Company operates both defined contribution and defined benefit pension plans.

For defined contribution plans, the Company pays contribution to publicly or privately administered pension insurance plans on mandatory, contractual or voluntary basis. The contribution is recognized as employee benefit expense when they are due.

While the Company operates a defined contribution as its primary post-employment benefit plan, the Company pays additional amounts to the employees if each employee's investment results on the contributed amount is less than the payment amount under the defined benefit plan, according to the separate agreement with the employees. The Company measures the additional amount payable to the employees in the same manner as the Company measures the defined benefit obligation. Generally, post-employment benefits are payable after the completion of employment, and the benefit amount depended on the employee's age, periods of service or salary levels. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-guality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms approximating to the terms of the related obligation. Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized in the period in which they occur, directly in other comprehensive income.

2.16 Employee Benefits, (cont'd)

Changes in the present value of the defined benefit obligation resulting from plan amendments or curtailments are recognized immediately in profit or loss as past service costs.

(b) Other long-term employee benefits

The Company provides long-term employee benefits that are entitled to employees with long-term service. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. The Company recognizes service cost, net interest on other long-term employee benefits and remeasurements as profit or loss for the year. These liabilities are valued annually by an independent qualified actuary.

(c) Share-based payments

Equity-settled share-based payment is recognized at fair value of equity instruments granted, and employee benefit expense is recognized over the vesting period. At the end of each period, the Company revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognizes the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

When the options are exercised, the Company issues new shares. The proceeds received, net of any directly attributable transaction costs, are recognized as share capital (nominal value) and share premium.

The Company operates a cash-settled share-based payment and a share-based payment with cash alternatives to compensate the difference between the market price and the exercise price of stock options in return for services provided by employees. The total amount to be recognized as an expense over the vesting period is determined based on the fair value of the stock options granted, taking into account the terms of service. In addition, the fair value of the liability is remeasured at the end of each reporting period and settlement date until the liability is settled, and changes in fair value are recognized in profit or loss.

Moreover, if the Company grants stock options to the employees of its subsidiaries, the Company accounts for them as an additional contribution to the subsidiaries. The fair value of the employee's service, measured based on the fair value of equity investments granted, is accounted for as an increase in investments in subsidiaries over the vesting period with a corresponding amount recognized as other components of equity.

2.17 Provisions

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period, and the increase in the provision due to the passage of time is recognized as interest expense.

2.18 Dividends

Dividends declared are recognized as liabilities at a point in time when approved by the institution prescribed by the Commercial Law.

2.19 Current and Deferred Tax

The tax expense for the period consists of current and deferred tax. Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

The income tax expense is measured at the amount expected to be paid to the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted as of the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation, and considers whether it is probable that a taxation authority will accept an uncertain tax treatment. The Company measures its tax balances either based on the most likely amount or the expected value, depending on which method provides a better prediction of the resolution of the uncertainty.

Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the separate financial statements. However, deferred tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting profit nor taxable profit or loss. Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

The Company recognizes a deferred tax liability all taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint arrangements, except to the extent that The Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. In addition, the Company recognizes a deferred tax asset for all deductible temporary differences arising from such investments to the extent that it is probable the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis.

2.20 Leases

(a) Lessor

Lease income from operating leases where the Company is a lessor is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognized as an expense over the lease term on the same basis as the lease income. The respective leased assets are included in the statement of financial position based on their nature.

(b) Lessee

The Company has entered into various leases agreements including leases of offices. Lease contracts are typically entered into for fixed periods of 4 to 6 years, but may have extension options as described in (c) below.

Contracts may contain both lease and non-lease components. The Company allocates the consideration in the contract to the lease and non-lease components based on their relative standalone prices. However, for leases of real estate for which the Company is lessee, the Company applies the practical expedient which has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

The Company determines the lease term as the non-cancellable period of a lease, together with both (a) periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and (b) periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. When the lessee and the lessor each has the right to terminate the lease without permission from the other party, the Company should consider a termination penalty in determining the period for which the contract is enforceable.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable
- Variable lease payment that are based on an index or a rate, initially measured using the index or rate as of the commencement date

2.20 Leases, (cont'd)

- Amounts expected to be payable by the Company (the lessee) under residual value guarantees
- The exercise price of a purchase option if the Company (the lessee) is reasonably certain to exercise that option, and
- Payments of penalties for terminating the lease, if the lease term reflects the Company (the lessee) exercising that option

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

The Company is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs

The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Company is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases of fixtures and vehicles and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT-equipment and small items of office furniture.

(c) Extension and termination options

Extension and termination options are included in a number of property and equipment leases across the Company. These terms are used to maximize operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Company and not by the respective lessor.

2.21 Segment Reporting

Information of each operating segment is reported in a manner consistent with the internal business segment reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Management Committee that makes strategic decisions.

2.22 Earnings Per Share

The Company presents in the statement of comprehensive income basic and diluted earnings per share attributable to the ordinary shareholders of the Company. Basic earnings per share is calculated by dividing profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period. For the purpose of calculating diluted earnings per share, the Company adjusts profit or loss attributable to ordinary shareholders of the Company, and the weighted average number of shares outstanding, for the effects of all dilutive potential ordinary shares.

2.23 Share Capital

When the Company purchases its ordinary shares, the acquisition cost including direct transaction costs are deducted from equity until the redemption or reissuance of treasury shares.

Consideration received on the subsequent or issue of treasury shares is credited to equity.

2.24 Business Combination

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Company, liabilities incurred by the Company to the former owners of the acquiree and the equity interests issued by the Company in exchange for control of the acquiree. Acquisition-related costs are generally recognized in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value at the acquisition date, except that:

- Deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognized and measured in accordance with KIFRS 1012 *Income Taxes* and KIFRS 1019 *Employee Benefits*, respectively;

- Liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Company entered in to replace share-based payment arrangements of the acquiree are measured in accordance with KIFRS 1102 *Share-based Payment* at the acquisition date; and

- Assets that are classified as held for sale in accordance with KIFRS 1105 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that Standard.

2.24 Business Combination, (cont'd)

Goodwill is measured as the excess of the sum of the fair value of the consideration transferred over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of fair value of the consideration transferred, the excess is recognized immediately in profit or loss as a bargain purchase gain.

2.25 Business Combination under Common Control

The Company applies the book value method to account for business combinations of entities under common control. Identifiable assets acquired and liabilities assumed in a business combination are measured at their book values as measured on the consolidated financial statements of the ultimate parent company. However, in the case where no financial statements are prepared, the assets and liabilities of the acquiree are measured at book value. In addition, the difference between the sum of consolidated book values of the assets and liabilities transferred and accumulated other comprehensive income; and the consideration paid is recognized as capital surplus.

2.26 Approval of Issuance of the Financial Statements

The financial statements for the year ended December 31, 2022 were approved for issuance by the Board of Directors on February 7, 2023 and final approval will be obtained from the shareholders at their Annual General Meeting on March 28, 2023.

3. Critical Accounting Estimates and Assumptions

The preparation of financial statements requires the Company to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Company's accounting policies. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. As the resulting accounting estimates will, by definition, seldom equal the related actual results, it can contain a significant risk of causing a material adjustment.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. Additional information of significant judgement and assumptions of certain items are included in relevant notes.

(a) Revenue recognition

Game revenue consists of (i) revenue from sales of a right to access games and (ii) revenue from sales of items, and is deferred and recognized over the respective expected period of use. The Company estimates the expected period of use by analyzing customer's behavior pattern considering the attributes of the item and game, and it can be changed significantly according to changes of market and customer behavior pattern.

3. Critical Accounting Estimates and Assumptions, (cont'd)

(b) Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Company uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period.

(c) Impairment of financial assets

The provisions for impairment for financial assets are based on assumptions about risk of default and expected loss rates. The Company uses judgement in making these assumptions and selecting the inputs to the impairment calculation based on the Company's past history, existing market conditions as well as forward looking estimates at the end of each reporting period.

(d) Net defined benefit liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate.

(e) Income taxes

The Company's taxable income generated from these operations are subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain.

If certain portion of the taxable income is not used for investments or increase in wages or dividends in accordance with the Tax System For Recirculation of Corporate Income, the Company is liable to pay additional income tax calculated based on the tax laws. Accordingly, the measurement of current and deferred income tax is affected by the tax effects from the new tax system. As the Company's income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty measuring the final tax effects.

(f) Leases

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

Most extension options in offices and vehicles leases have not been included in the lease liability, because the Company could replace the assets without significant cost or business disruption.

The lease term is reassessed if an option is actually exercised (or not exercised) or the Company becomes obliged to exercise (or not exercise) it. The assessment of reasonable certainty is only revised if a significant event or a significant change in circumstances occurs, which affects this assessment, and that is within the control of the lessee.

4. Financial Risk Management

4.1 Financial Risk Factors

(a) The Company is exposed to market risk, credit risk and liquidity risk (market risk refers to foreign exchange risk, interest rate risk and market risk for equity securities). The Company establishes and operates financial risk management policy in place to monitor and actively manage these risk factors. The Company's financial assets that are under financial risk management are composed of cash and cash equivalents, trade receivables, other financial instruments at amortized cost, financial instruments at fair value through other comprehensive income and financial instruments at fair value through profit or loss. The Company's financial liabilities under financial risk management are composed of trade and other payables and others.

(b) Market risk

A. Foreign exchange risk

The Company is exposed to foreign exchange risk arising from international operations and transactions with different foreign currencies. Most widely used foreign currencies are the US Dollar, Euro, Japanese Yen and others. The risks of foreign currency exposure to receivables and payables are periodically evaluated, managed and reported.

Monetary assets and liabilities denominated in foreign currencies as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022					
		USD	EUR	JPY	Others	
Financial assets denominated in foreign currency Financial liabilities	₩	792,693,366 ₩	3,728,140 ₩	981,837 ₩	13,886,927	
denominated in foreign currency		46,155,990	371,350	49,565	3,145,590	
(in thousands of Korean won)			December 31,	2021		
		USD	EUR	JPY	Others	
Financial assets denominated in foreign currency	₩	1,094,247,616 ₩	2,810,642 ₩	1,871,151 ₩	14,968,364	
Financial liabilities denominated in foreign currency		54,828,985	4,093,297	204,882	5,713,728	

The table below summarizes the impact of weakened/strengthened Korean won on the Company's profit before income tax. The analysis is based on the assumption that Korean won has weakened/strengthened by 5% with all other variables held constant.

(in thousands of Korean won)	December 31, 2022				
	Strengthened			/eakened	
Assets denominated in foreign currency	₩	(40,564,514)	₩	40,564,514	
Liabilities denominated in foreign currency		2,486,125		(2,486,125)	
Net effect	₩	(38,078,389)	₩	38,078,389	

KRAFTON, Inc. Notes to the Separate Financial Statements, (Cont'd) December 31, 2022 and 2021

4.1 Financial Risk Factors, (cont'd)

(in thousands of Korean won)		December 31, 2021			
	St	rengthened	Weakened		
Assets denominated in foreign currency	₩	(55,694,889)	₩	55,694,889	
Liabilities denominated in foreign currency		3,242,045		(3,242,045)	
Net effect	$\forall \forall$	(52,452,844)	₩	52,452,844	

B. Interest rate risk

The Company implements certain measures including monitoring interest rate trends periodically and others in order to manage the uncertainties arising from changes in interest rate.

There are no financial assets and liabilities exposed to interest rate risk as of December 31, 2022.

C. Price risk

The effects on the separate statement of comprehensive income when price per share of listed share fluctuates by approximately 1% as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)		December 31, 2022		December 31, 2021	
Changes in other comprehensive income when price per share of listed shares fluctuates by approximately 1% (after deduction of tax effects)	₩	346,965	₩	724,071	

(c) Credit risk

Credit risk arises in connection with the normal course of transactions and investing activities, where clients or other parties fail to discharge an obligation. Credit risk also arises from cash and cash equivalents, savings and derivative instruments transactions with financial institutions. To mitigate or eliminate certain of those exposures, the Company transacts only with highly rated financial institutions. The maximum amount exposed to credit risks by each financial instrument is its book value.

A. Trade receivables

The Company applies the simplified approach to measure the loss allowance at an amount equal to lifetime expected credit losses for trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected credit losses include forward looking information. The loss allowance provision as of December 31, 2022, is determined as follows:

4.1 Financial Risk Factors, (cont'd)

(in thousands of Korean won)			Decembe	ər 31, 2022		
	Less than 90 days past due and within due	Less than 180 days past due	Less than 270 days past due	Less than 1 year past due	More than 1 year past due	Total
Expected loss rate	0.49%	85.60%	100%	100%	100%	
Gross carrying amount	₩ 525,967,403	₩ 198,249	₩ 127,144	₩ 521,688	₩ 1,762,894	₩ 528,577,378
Loss allowance provision	(2,569,114)	(169,698)	(127,144)	(521,688)	(1,762,894)	(5,150,538)

The amounts recognized in profit or loss within 'impairment loss' in relation to the impairment of trade receivables for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Decembe	r 31, 2022	December 31, 2021	
Operating costs	₩	3,271,519	₩	964,174

B. Other financial assets at amortized cost

All of other financial assets at amortized costs other than trade receivables are considered to be low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term, and thus the loss allowance provision recognized was limited to 12 months expected losses during the year. However, when a significant increase in credit risk is identified, the loss allowance provision for lifetime expected credit losses should be recognized.

The amounts recognized in profit or loss in relation to the impairment of other financial assets at amortized costs for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022		December 31, 2021	
Other expenses	₩	9,406,313	₩	20,555,462

(d) Liquidity risk

The ultimate responsibility for our liquidity risk management lies with the Board of Directors, which establishes basic policies to properly manage short-term and mid to long-term funding and liquidity management regulations. The Company maintains liquidity risk by maintaining sufficient reserves and borrowing limits, by continually monitoring forecast cash flows and actual cash flows, and by matching the maturity structure of financial assets and financial liabilities.

The table below summarizes the details of the Company's financial liabilities classified into relevant maturity groupings based on the remaining period as of December 31, 2022 and 2021, to the contractual maturity date:

4.1 Financial Risk Factors, (cont'd)

(in thousands of	December 31, 2022					
Korean won)	Book value	Contractual cash flows	Less than 1 year	Between 1 and 5 years	Over 5 years	Total
Other payables Accrued expenses	₩ 79,248,268121,684,093	₩ 79,258,716121,684,093	₩ 79,077,17390,134,315	₩ 181,543 31,549,778	₩ -	₩ 79,258,716 121,684,093
Lease liabilities	170,314,902	184,772,858	48,876,405	135,896,453	-	184,772,858
Leasehold deposits received	7,315,524	8,317,197	688,828	7,447,961	180,408	8,317,197
Financial guarantee liabilities(*)	24,559	6,191,551	6,191,551	-	-	6,191,551
Derivative liabilities	15,863,801	15,863,801	-	-	15,863,801	15,863,801
Financial liabilities at fair value through profit or loss	201,143,514	271,119,699	-	271,119,699	-	271,119,699
	₩ 595,594,661	₩ 687,207,915	₩ 224,968,272	₩ 446,195,434	₩ 16,044,209	₩ 687,207,915

(*) As financial guarantee contracts can be demanded for immediate payment, the total contract amount is included in the category within 1 year.

(in thousands of		December 31, 2021				
Korean won)	Book value	Contractual cash flows	Less than 1 year	Between 1 and 5 years	Over 5 years	Total
Other payables	₩ 60,839,516	₩ 60,883,708	₩ 59,898,883	₩ 984,825	₩ -	₩ 60,883,708
Accrued expenses	227,482,968	227,482,968	218,337,681	9,145,287	-	227,482,968
Lease liabilities	148,304,121	158,707,956	47,151,882	110,576,044	980,030	158,707,956
Leasehold deposits received	6,819,653	7,244,352	4,500,958	2,527,607	215,787	7,244,352
Financial guarantee liabilities(*)	35,850	6,236,755	6,236,755	-	-	6,236,755
Derivative liabilities	5,127,343	5,127,343	-	-	5,127,343	5,127,343
Financial liabilities at fair value through profit or loss	205,865,216	296,375,000	-	296,375,000	-	296,375,000
	₩ 654,474,667	₩ 762,058,082	₩ 336,126,159	₩ 419,608,763	₩ 6,323,160	₩ 762,058,082

(*) As financial guarantee contracts can be demanded for immediate payment, the total contract amount is included in the category within 1 year.

4.2 Capital Risk Management

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern. The Company considers the debt ratio, and it is calculated by dividing the Company's total liabilities by its total equity presented in the separate financial statements.

Debt-to-equity ratios as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022	December 31, 2021
Debt (A)	₩ 732,161,313	899,490,410
Equity (B)	5,042,304,267	4,592,079,188
Debt-to-equity ratio (A/B)	14.52%	19.59%

5. Fair Value Measurement

(a) The carrying amount and fair value of financial assets and liabilities as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2021				
	Carrying amount	Fair value	Carrying amount	Fair value	
Financial assets measured at fair	· value				
Current portion of financial assets at fair value through profit or loss	₩ 2,450,603,157	₩ 2,450,603,157	₩ -	₩ -	
Financial assets at fair value through profit or loss	143,591,695	143,591,695	88,809,217	88,809,217	
Financial assets at fair value through other comprehensive income	83,079,911	83,079,911	109,880,530	109,880,530	
Derivative assets	1,757,481	1,757,481	844,177	844,177	
Financial assets measured at am	ortized cost				
Cash and cash equivalents	430,809,069	430,809,069	2,832,057,949	2,832,057,949	
Trade receivables	523,426,839	523,426,839	525,942,930	525,942,930	
Other current financial assets	193,299,366	193,299,366	66,484,552	66,484,552	
Other non-current financial assets	49,034,310	49,034,310	36,425,377	36,425,377	
Other financial assets					
Current lease receivables	12,424,186	12,424,186	3,686,480	3,686,480	
Non-current lease receivables	33,678,987	33,678,987	5,587,475	5,587,475	
	₩ 3,921,705,001	₩ 3,921,705,001	₩ 3,669,718,687	₩ 3,669,718,687	

KRAFTON, Inc. Notes to the Separate Financial Statements, (Cont'd) December 31, 2022 and 2021

5. Fair Value Measurement, (cont'd)

(in thousands of Korean won)		Decembe	r 31	, 2022	December 31, 2021			
	Ca	rrying amount		Fair value	Са	rrying amount		Fair value
Financial liabilities measured at f	air va	alue						
Financial liabilities at fair value through profit or loss	₩	201,143,514	₩	201,143,514	₩	205,865,216	₩	205,865,216
Derivative liabilities		15,863,801		15,863,801		5,127,343		5,127,343
Financial liabilities measured at a	mort	ized cost						
Other current financial liabilities ¹		169,246,936		169,246,936		282,466,385		282,466,385
Other non-current financial								
liabilities ²		39,025,508		39,025,508		12,711,601		12,711,601
Other financial liabilities								
Current lease liabilities		47,887,988		47,887,988		46,324,976		46,324,976
Non-current lease liabilities		122,426,914		122,426,914		101,979,145		101,979,145
	₩	595,594,661	₩	595,594,661	₩	654,474,666	₩	654,474,666

¹ The amount includes liabilities related to employee compensation and share-based payment of 59,779,933 thousand (December 31, 2021: 163,847,735 thousand)

² The amount includes liabilities related to employee compensation and share-based payment of 31,549,779 thousand (December 31, 2021: 9,145,287 thousand)

(b) Fair value measurement of assets and liabilities measured at fair value

A. Fair value hierarchy and fair value measurement

The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The fair value measurement is to estimate the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date under current market conditions. When measuring fair value using valuation techniques, the Company maximizes the use of market information and minimizes the use of unobservable inputs.

The Company categorize asset and liabilities measured at fair value by fair value hierarchy levels, and defined levels are as follows:

- Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities accessible at the measurement date
- Level 2: Inputs other than quoted prices included within Level 1 that are directly or indirectly observable for the asset or liability
- Level 3: Unobservable inputs for the asset or liability

The fair value of financial instruments traded in active markets is based on quoted prices at the end of reporting period. It is regarded as an active market if quoted prices are readily and regularly available from exchange markets, dealers, brokers, industry groups, pricing services, or regulatory agencies, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted price used for financial assets held by the Company is the closing price as of the end of reporting period. These instruments are categorized in 'Level 1'. Instruments included in 'Level 1' are classified as financial assets at fair value through other comprehensive income.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The fair value of assets and liabilities is determined by using an internal valuation model developed by the Company or by an independent external pricing service. The Company uses discounted cash flow techniques and establishes an assumption based on the market condition as of the end of the reporting period. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in 'Level 2'.

If one or more of the significant inputs is not based on observable market data, the instrument is included in 'Level 3'. Assets and liabilities included in 'Level 3' use cost-based approach, Net asset valuation model, binomial model.

B. Financial assets and liabilities measured at fair value

Fair value hierarchy classifications of the financial assets and liabilities that are measured at fair value as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean	December 31, 2022							
won)	Level 1		Le	evel 2		Level 3		Total
Financial assets measured	at fair value							
Financial assets at fair value through profit or loss	₩	-	₩ 2,	450,603,157	₩	143,591,695	₩ 2	2,594,194,852
Financial assets at fair value through other comprehensive income	47,857	,219		-		35,222,692		83,079,911
Derivative assets		-		-		1,757,481		1,757,481
Financial liabilities measure	ed at fair value							
Financial liabilities at fair value through profit or loss	₩	-	₩	-	₩	201,143,514	₩	201,143,514
Derivative liabilities		-		-		15,863,801		15,863,801

KRAFTON, Inc. Notes to the Separate Financial Statements, (Cont'd) December 31, 2022 and 2021

5. Fair Value Measurement, (cont'd)

(in thousands of Korean		December 31, 2021									
won)	L	evel 1		Level 2			Level 3		Total		
Financial assets measured	at fair v	alue									
Financial assets at fair value through profit or loss	₩	-	₩		-	₩	88,809,217	₩	88,809,217		
Financial assets at fair value through other comprehensive income		99,871,898			-		10,008,632		109,880,530		
Derivative assets		-			-		844,177		844,177		
Financial liabilities measur	ed at fai	r value									
Financial liabilities at fair value through profit or loss	₩	-	₩		-	₩	205,865,216	₩	205,865,216		
Derivative liabilities		-			-		5,127,343		5,127,343		

Valuation techniques and inputs used in the fair value measurements categorized within Level 2 and Level 3 of the fair value hierarchy as of December 31, 2022 and 2021, are as follows:

(in thousands of	Fair	Value		Valuation T	echniques	Inputs
Korean won)	December 31, 2022	December 31, 2021	Level	December 31, 2022	December 31, 2021	
	₩ 2,450,603,157	- ₩	2	Discounted Cash Flow	-	Discount rate considering credit rating
Financial assets at	90,666,601	54,311,032	3	Net asset val	uation model	Fair value of the investee's assets
fair value through profit or loss	6,942,193	10,514,608	3	Binomial Model(T-F)		Annualized variability of stock prices(54.10%~63.38%) and others
	45,982,901	23,983,577	3	Cost-based approach ¹		Acquisition cost
Financial assets at fair value through other comprehensive	35,222,692	10,008,632	3	Cost-based approach ¹		Acquisition cost
Derivative assets	1,757,481	844,177	3	Binomial n	nodel(T-F)	Annualized variability of stock prices(56.41%~63.38%) and others
Financial liabilities at fair value through profit or loss	201,143,514	205,865,216	3	Discounted	Cash Flow ²	Estimated revenue of the investee company, Discount rate considering credit rating(8.80%~16.05%) and others
	4,119,095	5,127,343	3	Binomial n	nodel(T-F)	Annualized variability of stock prices(63.38%) and others
Derivative liabilities	11,744,706	-		Monte-Carlo	Simulation	Annualized variability of stock prices (56.41%) and others

¹ For financial assets at fair value through profit or loss held by the Company, the costs are deemed the best estimate of the fair value, since (i) the Company cannot obtain sufficient information for measuring fair value; and (ii) there are no significant changes in the value of investee during the past or the current year.

² The discounted cash flow method was applied to evaluate only the cash flows included in the contract terms.

C. Valuation processes for fair value measurements categorized as Level 2 and Level 3

Each finance department of the Company's segments is responsible for fair value measurements, which include fair value measurements categorized as Level 2 and Level 3, for the purpose of financial reporting. The department periodically reports the fair value valuation process and its outcome on reporting schedule at the end of each reporting period.

Sensitivity analysis of financial instruments is performed to measure the favorable and unfavorable changes in the fair value of financial instruments which are affected by the unobservable parameters, using a statistical technique. When the fair value is affected by more than two input parameters, the calculation is based on the most favorable or most unfavorable amount.

The results of the sensitivity analysis for the effect on profit or loss from changes in inputs for each financial instrument classified as Level 3 for the years ended December 31, 2022, and 2021 are as follows:

(in thousands of Korean won)	December 31, 2022								
	Favorable changes					Unfavorable changes			
	Pro	fit (loss)		Equity		Pr	ofit (loss)	Equity	
Financial assets at fair value through profit or loss	₩	529,292	₩		-	₩	(465,941)		-
Derivative assets		151,911			-		(150,797)		-
Financial liabilities at fair value through profit or loss		5,642,341			-		(5,854,664)		-
Derivative liabilities		2,810,713			-		(3,304,439)		-

(*) Sensitivity analysis for derivatives related to equity instruments were performed by increasing and decreasing correlation between the stock price and the variability by 10%.

(in thousands of Korean won)	December 31, 2021									
	Favorable changes					Unfavorable changes				
	Pro	fit (loss)		Equity		Pro	ofit (loss)	Equity		
Financial assets at fair value through profit or loss	₩	619,517	₩		-	₩	(546,990)		-	
Derivative assets		145,440			-		(160,041)		-	
Financial liabilities at fair value through profit or loss		7,092,918			-		(7,329,674)		-	
Derivative liabilities		145,536			-		(147,319)		-	

(*) Sensitivity analysis for derivatives related to equity instruments were performed by increasing and decreasing correlation between the stock price and the variability by 10%.

The changes in Level 3 classified assets and liabilities measured at fair value during the year ended December 31, 2022 are as follows

(in thousands of Korean won)	Beginning Balance	Acquisition	Disposal	Valuation	Ending Balance
Financial assets at fair value through profit or loss	₩ 88,809,217	₩ 37,797,092	₩ (1,814,638)	₩ 18,800,024	₩ 143,591,695
Financial assets at fair value through other comprehensive	10,008,632	24,549,116	-	664,944	35,222,692
Derivative assets	844,177	1,699,118	-	(785,814)	1,757,481
Financial liabilities at fair value through profit or loss	205,865,216	-	-	(4,721,702)	201,143,514
Derivative liabilities	5,127,343	12,563,953	-	(1,827,495)	15,863,801

(c) Offsetting financial assets and financial liabilities

The Company recognizes both trade receivables from and payables to platform providers, which satisfy the criteria for offsetting described in KIFRS 1032 paragraph 42. Therefore, the trade receivables are presented in net basis in the financial statements of the Company. Trade payables which are offset with trade receivables amount to $\forall 22,433$ million (December 31, 2021: $\forall 13,933$ million) as of December 31, 2022.

6. Financial Instruments by Category

6.1 Carrying Amounts of Financial Instruments by Category

Carrying amounts of financial assets and liabilities by category as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)		December 31, 2022	December 31, 2021		
Financial assets					
Financial assets at fair value:					
Current financial assets at fair value through profit or loss	₩	2,450,603,157	₩		
Financial assets at fair value	vv	2,430,003,137	vv	-	
through profit or loss		143,591,695		88,809,217	
Financial assets at fair value					
through other comprehensive income		83,079,911		109,880,530	
Derivative assets		1,757,481		844,177	
Financial assets at amortized cost:		.,,		••••,•••	
Cash and cash equivalents		430,809,069		2,832,057,949	
Trade receivables		523,426,839		525,942,930	
Other current financial assets		193,299,366		66,484,552	
Other non-current financial assets		49,034,310		36,425,377	
Other financial assets:					
Current lease receivables		12,424,186		3,686,480	
Non-current lease receivables		33,678,987		5,587,475	
	₩	3,921,705,001	₩	3,669,718,687	
(in thousands of Korean won)		December 31, 2022	De	ecember 31, 2021	
Financial liabilities					
Financial assets at fair value:					
Financial liabilities at fair value through profit or loss	¥	∀ 201,143,514	₩	205,865,216	
Derivative liabilities	•	15,863,801	vv	5,127,343	
Financial liabilities at amortized cost:		10,000,001		0,127,010	
Other current financial liabilities		169,246,935		282,466,385	
Other non-current financial					
liabilities		39,025,508		12,711,601	
Other financial liabilities:					
Current lease liabilities		47,887,988		46,324,976	
Non-current lease liabilities		122,426,914		101,979,145	
	Ą	∀ 595,594,660	₩	654,474,666	

Fair value of financial instruments is equal to the carrying amount, except for equity instruments that do not have a quoted price in an active market and whose fair value cannot be measured reliably.

6.2 Net Gains or Losses by Category of Financial Instruments

Net gains or losses on each category of financial instruments for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Dece	ember 31, 2022	December 31, 2021
Dividends income:			
Financial assets at fair value through profit or loss	₩	349,946	₩ 229,827
Interest income/expenses:			
Financial assets at amortized cost		32,076,145	11,486,266
Financial liabilities at amortized cost		(427,881)	(406,874)
Other financial assets		894,272	210,922
Other financial liabilities		(5,559,440)	(5,307,912)
Gain on disposal:			
Financial assets at fair value through profit or loss		(47,252,211)	891,732
Current derivative assets		-	253,841
Gain (loss) on valuation:			
Financial assets at fair value through profit or loss		(12,258,983)	20,226,300
Financial assets at fair value through other comprehensive income		(45,707,882)	22,657,183
Financial liabilities at fair value through profit or loss		4,721,702	(1,499,524)
Derivative assets		(785,814)	(1,499,324) (234,972)
Derivative assets		1,827,494	(436,042)
Net impairment loss:		1,027,494	(430,042)
Trade receivables		(3,271,519)	(964,174)
Financial assets at amortized cost		(9,406,313)	(20,555,462)
Net gain(loss) on foreign currency translation		(0,400,010)	(20,000,402)
Trade Receivables		46,257,380	58,337,024
Financial assets at amortized cost		93,803,258	49,912,841
Financial liabilities at amortized cost		(777,720)	(3,907,279)
	₩	54,482,434	₩ 130,893,697

7. Trade Receivables, Other Financial Assets and Other Assets

Details of trade receivables, other financial assets and other assets as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	D	December 31, 2021		
	Gross amount	impairment	Net amount	Net amount
Trade receivables Other current financial assets	₩ 528,577,378	₩ (5,150,538)	₩ 523,426,840	₩ 525,942,930
Short-term financial instruments	30,000,000	-	30,000,000	28,200,958
Short-term loans	149,415,775	(9,475,344)	139,940,431	18,536,622
Other receivables	17,867,902	(227,293)	17,640,609	13,646,668
Accrued income	1,818,260	(675,449)	1,142,811	809,426
Deposits	4,575,514	-	4,575,514	5,290,878
Lease receivables	12,424,186		12,424,186	3,686,480
	216,101,637	(10,378,086)	205,723,551	70,171,032
Other current assets				
Advanced payments	11,148,547	-	11,148,547	7,493,215
Prepaid expenses	31,296,255		31,296,255	31,223,230
	42,444,802		42,444,802	38,716,445
	258,546,439	(10,378,086)	248,168,353	108,887,477
Other non-current financial assets Long-term financial				
instruments	7,365,683	-	7,365,683	1,787,649
Long-term loans	77,652,019	(63,604,940)	14,047,079	9,403,518
Long-term accrued income	234,699	(5,637)	229,062	-
Deposits	27,392,487	-	27,392,487	25,234,210
Lease receivables	33,678,987		33,678,987	5,587,475
	146,323,875	(63,610,577)	82,713,298	42,012,852
Other non-current assets				
Advanced payments	27,319,649		27,319,649	4,658,866
	173,643,524	(63,610,577)	110,032,947	46,671,718
	₩ 960,767,341	₩ (79,139,201)	₩ 881,628,140	₩ 681,502,125

(in thousands of Korean won)	I	2	December 31, 2021		
	Gross amount	Provision for impairment	Net amount		
Third party receivables	₩ 788,008,457	₩ (5,353,389)	₩ 782,655,068	₩ 644,189,093	
Related party receivables	172,758,884	(73,785,812)	98,973,072	37,313,032	
	₩ 960,767,341	₩ (79,139,201)	₩ 881,628,140	₩ 681,502,125	

7. Trade Receivables, Other Financial Assets and Other Assets, (cont'd)

Changes in the provision for impairment for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of	December 31, 2022										
Korean won)			Ρ	rovision							
	E	Beginning	(reversal)		Write-off	Other		Ending		
Trade receivables	₩	1,937,790	₩	3,271,519	₩	(58,771)	₩	-	₩	5,150,538	
Other assets (current)											
Financial assets:											
Other receivables		698,335		-		(471,042)		-		227,293	
Accrued income		738,303		-		(57,217)		(5,637)		675,449	
Short-term loans		-		9,475,344		-		-		9,475,344	
Other assets (non-current)											
Financial assets:											
Long-term accrued income		-		-		-		5,637		5,637	
Long-term loans		78,824,941		(69,031)		(15,150,970)		-		63,604,940	
	₩	82,199,369		12,677,832	₩	(15,738,000)	₩	-	₩	79,139,201	

(in thousands of	December 31, 2021											
Korean won)			Pr	ovision								
	E	Beginning	(re	eversal)	Write-off			Other		Ending		
Trade receivables	₩	1,102,267	₩	964,174	₩	(128,651)	₩	-	₩	1,937,790		
Other assets (current)												
Financial assets:												
Other receivables		730,299		191,111		(223,075)		-		698,335		
Accrued income		928,590		(11,246)		(66,492)		(112,549)		738,303		
Other assets												
(non-current)												
Financial assets:												
Long-term loans		64,238,505		20,375,597		(5,901,710)		112,549		78,824,941		
	₩	66,999,661		21,519,636	₩	(6,319,928)	₩	-	₩	82,199,369		

As of December 31, 2022 and 2021, fair values of trade receivables, other current assets and other non-current assets are equal to their book value. The maximum exposure of trade and other receivables to credit risk is the book value of receivables mentioned above.

8. Restricted Financial Instruments

Financial instruments which are restricted in use as of December 31, 2022 and 2021, are summarized as follows:

(in thousands of Korean won)		De	ecember 31, 2022	De	ecember 31, 2021	Restriction
Short-term financial instruments	Korean Securities and Financial Services	₩	30,000,000	₩	-	Provided as collateral ¹
	Woori Bank		-		4,490,958	
Long-term financial	Woori Bank		5,578,034		-	Provided as collateral ²
instruments	Shinhan Bank		1,787,649		1,787,649	
		₩	37,365,683	₩	6,278,607	

¹ Pledged as a collateral for ESOP Loans (Note 18).

² Pledged as a collateral for leasehold deposits received (Note 18).

9. Other Liabilities

Details of other liabilities as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022	December 31, 2021
Other liabilities (current)		
Financial liabilities:		
Other payables	₩ 79,066,725	₩ 59,889,460
Accrued expenses ¹	90,134,314	218,337,681
Current portion of leasehold deposits received	6,853	12,892
Lease liabilities	39,043	4,226,352
Financial guarantee liabilities	47,887,988	46,324,976
	217,134,923	328,791,361
Contract liabilities and other liabilities:		
Withholdings	7,682,348	10,219,857
Unearned revenue	65,988,455	62,346,648
Advance receipts	1,061,331	818,725
	74,732,134	73,385,230
Other liabilities (non-current) Financial liabilities:		
Long-term other payable	181,543	950,056
Long-term accrued expenses ²	31,549,778	9,145,287
Leasehold deposits received	7,276,481	2,593,302
Lease liabilities	122,426,914	101,979,145
Financial guarantee liabilities	17,706	22,956
	161,452,422	114,690,746
	₩ 453,319,479	₩ 516,867,337

¹ Includes liabilities related to employee benefit and share-based payment amounting to₩ 59,779,933 thousand (2021: ₩ 163,847,735 thousand).

² Includes liabilities related to employee benefit and share-based payment amounting to $\forall 31,549,779$ thousand (2021: $\forall 9,145,287$ thousand).

10. Financial Assets at Fair Value through Profit or Loss

Details of financial assets at fair value through profit or loss as of December 31, 2022 and 2021, are as follows:

(in thousands of	December 31, 2022									
Korean won)	Acquisition cost	Accumulated gain (loss) on valuation	Book value	Current	Non-current					
Beneficiary certificates:										
BITKRAFT Esports Ventures Fund I, LP	₩ 1,159,002	₩ (16,783)	₩ 1,142,219	₩ -	₩ 1,142,219					
MAKERS FUND LP	2,979,747	23,621,595	26,601,342	-	26,601,342					
ESDF INTERNATIONAL HOLDINGS LLC.	513,328	(513,328)	-	-	-					
LAGUNA Young Entrepreneur Fund No. 1	1,500,000	(630)	1,499,370	-	1,499,370					
KNET VALUE-UP Venture Investment	4,878,224	10,148,443	15,026,667	-	15,026,667					
KJ& The 1 st Game Fund	1,000,000	-	1,000,000	-	1,000,000					
Kowloon Nights Fund LP	5,207,527	2,036,459	7,243,986	-	7,243,986					
Lumikai Fund I	1,547,283	67,022	1,614,305	-	1,614,305					
Progression Fund I, L.P.	512,756	41,688	554,444	-	554,444					
WindWalk Games Corp.	895,125	-	895,125	-	895,125					
NPTK Emerging Asia Fund 1 Private Equity Fund	1,111,200	-	1,111,200	-	1,111,200					
Hashed Venture Fund 1	2,000,000	-	2,000,000	-	2,000,000					
Makers Fund II LP	1,727,053	2,069,541	3,796,594	-	3,796,594					
Future Innovation Private										
Equity Joint Venture Company 3	18,106,400	1,027,739	19,134,139	-	19,134,139					
Impact Collective Korea Fund	500,000	-	500,000	-	500,000					
BITKRAFT Ventures Fund II, L.P.	1,334,430	59,600	1,394,030	-	1,394,030					
Hashed Venture Fund 2	1,400,000	-	1,400,000	-	1,400,000					
Intudo Ventures III, LP	1,434,850	70,069	1,504,919	-	1,504,919					
China Ventures Fund II, L.P.	16,086,357	2,777,516	18,863,873	-	18,863,873					
3one4 Capital – Fund III	3,910,264	20,708	3,930,972	-	3,930,972					
Griffin Gaming Partners II, L.P.	952,068	36,426	988,494	-	988,494					
Progression Fund 2	194,760	(4,665)	190,095	-	190,095					
Venture Reality Fund II LP	745,020	15,360	760,380	-	760,380					
Pantera Blockchain Offshore Fund LP	1,324,760	(57,460)	1,267,300	-	1,267,300					
Hiro Capital II SCSp	735,165	7,995	743,160	-	743,160					
GALAXY INTERACTIVE FUND II, LP	1,309,600	(42,300)	1,267,300	-	1,267,300					
Lifelike Capital Fund LP	1,320,300	(53,000)	1,267,300	-	1,267,300					
TBT Global Growth No.3 Investment Association	1,500,000	-	1,500,000	-	1,500,000					
SISU VENTURES III LP	777,600	(17,220)	760,380	-	760,380					

10. Financial Assets at Fair Value through Profit or Loss, (cont'd)

(in thousands of	December 31, 2022									
Korean won)	Acquisition cost	Accumulated gain (loss) on valuation	Book value	Current	Non-current					
Discretionary Investment service agreement Redeemable convertible preference shares:	2,481,662,163	(31,059,006)	2,450,603,157	2,450,603,157	-					
Super Awesome Inc.	500,000	(500,000)	-	-	-					
Hidden Sequence Co., Ltd.	2,976,787	832,185	3,808,972	-	3,808,972					
21 Studios, Inc	999,999	280,766	1,280,765	-	1,280,765					
Scatter Lab Co., Ltd.	1,000,013	-	1,000,013	-	1,000,013					
Thingsflow Inc.	5,894,925	(2,761,704)	3,133,221	-	3,133,221					
CINAMON, Inc.	3,999,984	-	3,999,984	-	3,999,984					
Cold Brew Tech Private Limited	6,074,646	-	6,074,646	-	6,074,646					
Simple Agreement for Future Equity:										
Unplay Inc.	4,401,600	33,950	4,435,550	-	4,435,550					
Trioscope Inc	2,106,300	(205,350)	1,900,950	-	1,900,950					
	₩ 2,586,279,236	₩ 7,915,616	₩ 2,594,194,852	₩ 2,450,603,157	₩ 143,591,695					

10. Financial Assets at Fair Value through Profit or Loss, (cont'd)

(in the wounds of	December 31, 2021									
(in thousands of Korean won)	Acq	uisition cost	Accumulated gain (loss) on valuation		Book value		Non-current			
Convertible bonds:										
Super Awesome Inc.	₩	500,000	₩ (500,000)₩	4 -	₩	-			
Beneficiary certificates:										
BITKRAFT Esports Ventures Fund I, LP		1,045,815	(87,175)	958,640		958,640			
MAKERS FUND LP		4,402,513	10,699,348	3	15,101,861		15,101,861			
ESDF INTERNATIONAL HOLDINGS LLC.		513,328	(513,328)	-		-			
LAGUNA Young Entrepreneur Fund No. 1		1,500,000	(630)	1,499,370		1,499,370			
KNET VALUE-UP Venture Investment		4,878,224	9,129,31	1	14,007,535		14,007,535			
KJ& The 1 st Game Fund		1,000,000		-	1,000,000		1,000,000			
Kowloon Nights Fund LP		5,534,046	175,31	1	5,709,357		5,709,357			
Lumikai Fund I		771,034	9,71	5	780,749		780,749			
Progression Fund I, L.P.		433,813	10,750)	444,563		444,563			
WindWalk Games Corp.		895,125		-	895,125		895,125			
NPTK Emerging Asia Fund 1 Private Equity Fund		1,111,200		-	1,111,200		1,111,200			
Hashed Venture Fund 1		2,000,000		-	2,000,000		2,000,000			
Makers Fund II LP		1,597,108	88,016	5	1,685,124		1,685,124			
Future Innovation Private Equity Joint Venture Company 3		18,106,400	427,23	9	18,533,639		18,533,639			
Impact Collective Korea Fund		500,000		-	500,000		500,000			
BITKRAFT Ventures Fund II, L.P.		344,220	11,430)	355,650		355,650			
Hashed Venture Fund 2		800,000		-	800,000		800,000			
Intudo Ventures III, LP		292,925	3,450)	296,375		296,375			
China Ventures Fund II, L.P.		11,537,145	78,263	3	11,615,408		11,615,408			
Redeemable convertible preference shares:										
Hidden Sequence Co., Ltd.		2,976,787	1,106,942	2	4,083,729		4,083,729			
21 Studios, Inc		999,999	280,766	5	1,280,765		1,280,765			
Scatter Lab Co., Ltd.		1,000,013		-	1,000,013		1,000,013			
Thingsflow Inc.		5,894,925	(744,811)	5,150,114		5,150,114			
	₩	68,634,620	₩ 20,174,59	7₩	4 88,809,217	₩	88,809,217			

11. Financial Assets at Fair Value through Other Comprehensive Income

Details of financial assets at fair value through other comprehensive income as of December 31, 2022 and 2021, are as follows:

(in thousands of	December 31, 2022									
Korean won)	Acquisition cost	Accumulated loss on valuation	Book value	Non-current						
Unlisted equity securities:										
Bunch. Live	₩ 2,380,400	₩ -	₩ 2,380,400	₩ 2,380,400						
APPETIZER GAMES CO., LTD.	20,000	-	20,000	20,000						
AccelByte Inc.	1,132,399	134,900	1,267,299	1,267,299						
SVA ZEPETO METAVERSE I PTE. LTD	5,000,000	598,604	5,598,604	5,598,604						
Moloco Inc.	1,107,100	160,200	1,267,300	1,267,300						
PLAYERUNKNOWN PRODUCTIONS B.V	5,117,432	(48,394)	5,069,038	5,069,038						
Covenant.dev	2,225,089	(30,408)	2,194,681	2,194,681						
LILA GAMES INC.	1,212,598	54,700	1,267,298	1,267,298						
Mythos Studios LLC	13,909,500	347,625	14,257,125	14,257,125						
AMAZEVR INC	1,436,497	(169,200)	1,267,297	1,267,297						
Sword and Wand Inc.	648,000	(14,350)	633,650	633,650						
Listed equity securities:										
Kakao Games Corp.	10,000,121	18,739,744	28,739,865	28,739,865						
Neptune Company	10,029,497	5,457,226	15,486,723	15,486,723						
Blitzway Co.,Ltd.	10,000,001	(6,369,370)	3,630,631	3,630,631						
	₩ 64,218,634	₩ 18,861,277	₩ 83,079,911	₩ 83,079,911						

(in thousands of	December 31, 2021										
Korean won)	Acq	Acquisition cost		umulated loss on valuation	I	Book value		Non-current			
Unlisted equity securities:											
Bunch. Live	₩	2,380,400	₩	-	₩	2,380,400	₩	2,380,400			
APPETIZER GAMES CO., LTD.		20,000		-		20,000		20,000			
AccelByte Inc.		1,132,399		53,100		1,185,499		1,185,499			
SVA ZEPETO METAVERSE I PTE. LTD		5,000,000		237,233		5,237,233		5,237,233			
Moloco Inc.		1,107,100		78,400		1,185,500		1,185,500			
Listed equity securities:											
Kakao Games Corp.		10,000,121		48,573,849		58,573,970		58,573,970			
Neptune Company		10,029,497		31,268,431		41,297,928		41,297,928			
	₩	29,669,517	₩	80,211,013	₩	109,880,530	₩	109,880,530			

12. Investments in Subsidiaries and Associates

Details of investments in subsidiaries and associates as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)			December 31, 2022						December 31, 2021
	Percentage of ownership	Location	A	cquisition cost		Net asset value		Carrying amount	Carrying amount
Subsidiaries									
Bluehole Studio, Inc.	100%	Korea	₩	21,536,646	₩	(6,784,985)	₩	-	₩ -
En Masse Entertainment, Inc.	100%	U.S.A		-		(42,878,863)		-	-
Rising Wings, Inc.	100%	Korea		14,994,742		(40,549,878)		-	-
PUBG Santa Monica, Inc.	100%	U.S.A		918,350		16,261,539		918,350	1,131,658
PUBG Amsterdam B.V.	100%	Netherlan d		13,025,716		10,406,874		-	-
PUBG Shanghai	100%	China		2,407,475		5,538,768		2,407,475	2,229,940
KP PTE. LTD.	100%	Singapore		1		5,970,919		1	1
Striking Distance Studios, Inc.	100%	U.S.A		10,007,464		41,058,159		10,007,464	10,901,762
PUBG Japan Corporation	100%	Japan		39,363		1,600,932		-	-
Striking Distance Studios Spain, S.L.	100%	Spain		1,348,493		1,535,113		1,348,493	1,348,493
KRAFTON Ventures, Inc.	100%	U.S.A		2,437,000		1,848,715		2,437,000	2,437,000
PUBG Entertainment, Inc.	100%	U.S.A		-		(899,228)		-	-
PUBG INDIA PRIVATE LIMITED	99.99%	India		4,068,983		3,391,128		4,068,983	2,435,256
SDS Interactive Canada Inc.	100%	Canada		470,300		816,151		470,300	-
Between Us Co. Ltd. ⁴	-	Korea		-		-		-	2,845,639
Dreamotion, Inc.	100%	Korea		37,867,657		7,477,847		19,841,212	19,651,628
Thingsflow Inc.	89.77%	Korea		18,070,904		(7,937,692)		6,760,521	8,649,651
Tiptoe Games, Inc.	100%	Korea		100,000		43,988		100,000	100,000
Krafton Global GP, LLC	100%	U.S.A		239,400		251,817		239,400	-
Krafton Global, LP	100%	U.S.A		1,915,200		1,631,864		1,915,200	-
Unknown Worlds Entertainment, Inc.	100%	U.S.A		857,512,819		84,424,322		733,530,021	855,186,033
5min lab Corp. ¹	100%	Korea		53,839,148		19,732,988		32,712,487	-
Neon Giant AB ¹	72.92%	Sweden		43,704,128		2,062,568		43,704,128	-
KRAFTON MONTREAL STUDIO, INC. ¹	100%	Canada		5,643,600		5,568,867		5,643,600	-
Sum of Subdidiaries				1,090,147,389		110,571,913		866,104,635	906,917,061

(in thousands of Korean won)				December 31, 20	22	December 31, 2021	
,	Ownership interest	Location	Acquisition cost	Net asset value	Carrying amount	Carrying amount	
Associates							
Shinhan Alpha REIT							
Co., Ltd. ²	1.35%	Korea	₩ 5,620,000		₩ 5,620,000	₩ 5,620,000	
1Up Ventures, L.P	33.53%	U.S.A	11,819,250	13,829,959	11,819,250	8,739,250	
Hidden Sequence Co.,	40 570/	14	0 000 070	(070.004)	0 000 070	0 000 070	
Ltd. ² Smart Krafton-	13.57%	Korea	2,022,872	(672,361)	2,022,872	2,022,872	
BonAngels Fund ³ Nodwin Gaming	54.55%	Korea	10,560,000	9,420,223	10,560,000	10,200,000	
Private Limited ²	15.00%	India	25,615,890	4,344,780	25,615,890	25,615,890	
Un Note Co., Ltd. ²	8.75%	Korea	1,478	616,163	1,478	1,478	
Loco Interactive Pte							
Limited ²	11.41%	India	8,307,162	3,747,398	-	3,407,400	
Nasadiya Technologies Private Limited ²	18.53%	India	52,238,006	2,194,167	52,238,006	52,238,006	
Mirae Asset Maps General Private Real Estate Investment							
Trust 66	42.96%	Korea	290,000,000	270,393,580	290,000,000	290,000,000	
Tamatem Inc. ^{1,2}	13.61%	Virgin Islands	7,728,554	2,635,497	7,728,554	-	
Seoul Auction Blue Co.,							
Ltd ^{1,2}	5.33%	Korea	2,999,945		2,999,945	-	
XXBLUE Co., Ltd ^{1,2}	10.26%	Korea	4,999,772	367,306	4,999,772	-	
Nautilus Mobile App Private Limited ¹	31.91%	India	C E 4 C 0 2 C	0.470.040	0 540 000		
Mebigo Labs Private	31.91%	India	6,546,036	2,179,249	6,546,036	-	
Limited ^{1,2}	12.20%	India	13,175,608	3,477,055	13,175,608	-	
Smart KNB Booster							
Fund ^{1,3}	75.86%	Korea	11,000,000	10,262,298	11,000,000	-	
NIRVANANA ¹	33.33%	Korea	5,000,000	292,428	5,000,000	-	
1Up Ventures Fund II,							
L.P ¹	47.51%	U.S.A	4,730,999		4,730,999	-	
Sum of Associates			462,365,572		454,058,410	397,844,896	
Total Sum			₩ 1,552,512,961	₩ 443,678,580	₩ 1,320,163,045	₩ 1,304,761,957	

¹ During the years ended December 31, 2022, the entity was included in the scope of subsidiaries or associates due to new investments made by the Company.

² Although the Company holds less than 20%, the Company classified the entities as associates, as the Company is considered to have significant influences over the entity as the Company participates in same or similar level of Board of Directors.

³ Although the Company holds more than 50%, due to legal and contractual restrictions on the investor's rights, the conditions for having control are not met. However, the Company classified it as investments in associates, as the Company is able to exercise significant influence over the entity. ⁴ During the years ended December 31, 2022, the entity was sold by the Company.

Changes in investments in subsidiaries and associates for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Dece	ember 31, 2022	December 31, 2021			
Beginning	₩	1,304,761,957	₩	35,876,845		
Acquisitions		201,545,725		1,294,453,407		
Disposals		(2,845,639)		-		
Grant of share options		1,921,169		1,491,680		
Impairment loss ¹		(185,220,167)		(27,059,975)		
Ending	₩	1,320,163,045	₩	1,304,761,957		

¹ The Company recognized impairment loss since the recoverable amount of investments in subsidiaries was less than their carrying amount.

Summarized financial information of investments in subsidiaries and associates as at and for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of							December 31, 2022									
Korean won)	Curr Asse		Non-Current Assets	Current Liabilities	L	on- Current Liabilities Current Liabilities		Revenue	fi cont	t(loss) om inuing ations		Profit(loss) from discontinu ed operation, net of tax		Other Comprehen sive Income		Total Comprehensi ve Income for the year
Subsidiaries																
Bluehole Studio, Inc.	₩ 4,25	52,582	₩ 4,083,745	₩ 10,531,061	₩	4,590,251	₩	18,188,319	₩ (7,00	7,860)	₩	-	₩	1,140,842	₩	(5,867,018)
En Masse Entertainment, Inc.	25	59,268	10,368,222	53,506,353		-		-	(2	0,960)		(238,892)		(3,435,907)		(3,695,759)
Rising Wings, Inc.		3,945	4,827,647	45,391,859		5,969,611		11,839,920	1,5	01,660		-		1,289,258		2,790,918
PUBG Santa Monica, Inc.	21,34	3,619	7,917,676	12,954,224		45,532		50,183,273	5,0	52,029		-		584,606		5,636,635
PUBG Amsterdam B.V.	16,62	2,840	4,740,958	10,936,222		20,702		26,507,405	(74	2,560)		-		65,099		(677,461)
PUBG Shanghai	13,57	0,456	2,445,846	9,392,744		1,084,790		6,466,198	(5,40	4,957)		-		2,386		(5,402,571)
KP PTE. LTD.	4,17	1,237	2,540,131	106,799		633,650		-	6,1	31,626		-		(119,811)		6,011,815
Striking Distance Studios, Inc.	123,1	16,595	21,704,544	84,170,816		19,592,164		190,904,723	27,3	05,793		-		968,727		28,274,520
PUBG Japan Corporation	4,93	8,585	3,099,928	2,997,163		3,440,418		8,611,929	4	03,900		-		(102,052)		301,848
Striking Distance Studios Spain, S.L.	1,19	92,730	1,802,264	619,319		840,562		2,606,366	(11	1,259)		-		9,184		(102,075)
KRAFTON Ventures, Inc.	3	80,934	2,416,830	599,049		-		-	(62	4,166)		-		14,758		(609,408)

KRAFTON, Inc. Notes to the Separate Financial Statements, (Cont'd) December 31, 2022 and 2021

PUBG	196,138		1,095,366		302,261	20,323		(59,717)	(39,394)
Entertainment, Inc.	190,130	-	1,095,300	-	302,201	20,323	-	(59,717)	(39,394)
PUBG INDIA PRIVATE	4 495 229	5,776,114	2 802 044	4,066,044	6 952 520	(120,205)		(157 617)	(297 022)
LIMITED	4,485,338	5,770,114	2,803,941	4,000,044	6,852,539	(130,305)	-	(157,617)	(287,922)
SDS Interactive Canada Inc.	4,348,100	-	3,531,949	-	3,529,998	216,147	-	(18,475)	197,672
Between Us Co. Ltd.	-	-	-	-	798,081	(60,755)	-	-	(60,755)
Dreamotion, Inc.	8,026,537	263,825	629,587	182,928	3,949,159	795,378	-	140,051	935,429
Thingsflow Inc.	2,928,611	2,578,621	11,873,511	2,475,976	9,740,269	(6,031,273)	-	159,200	(5,872,073)
Tiptoe Games, Inc.	46,152	9,442	6,712	4,894	-	(48,057)	-	-	(48,057)
Krafton Global GP, LLC	252,579	-	762	-	-	(1,674)	-	14,092	12,418
Krafton Global, LP	1,632,626	-	762	-	-	(296,281)	-	111,343	(184,938)
Unknown Worlds Entertainment, Inc.	108,113,473	2,677,393	26,366,544	-	47,796,599	19,793,458	-	3,691,645	23,485,103
5min lab Corp.	20,799,238	3,018,578	2,066,111	2,018,717	1,172,283	(6,114,634)	-	-	(6,114,634)
Neon Giant AB	2,564,060	1,415,299	630,488	520,435	-	-	-	(144,258)	(144,258)
KRAFTON									
MONTREAL STUDIO, INC.	5,612,264	-	43,397	-	-	(46,032)	-	(28,701)	(74,733)
Associates									
Shinhan Alpha REIT Co., Ltd. ¹	₩ 38,273,032	₩ 1,874,589,003	₩ 411,625,117	₩ 1,031,515,919 ₩	74,616,104	₩ 8,927,257	₩ -	₩ -	₩ 8,927,257
1Up Ventures, L.P	5,391,402	35,855,166	43	-	-	1,070,288	-	6,244,113	7,314,401
Hidden Sequence Co., Ltd.	13,173,305	2,277,122	12,177,922	8,060,842	13,698,836	(1,463,260)	-	-	(1,463,260)
Smart Krafton- BonAngels Fund	392,136	16,994,327	116,054	-	6,190	(235,808)	-	(1,506,405)	(1,742,213)
Nodwin Gaming Private Limited	40,023,832	21,525,407	25,505,444	5,401,691	40,841,403	209,734	-	3,310,740	3,520,474
Un Note Co., Ltd.	1,436,471	10,556,312	4,914,573	38,503	333,457	(6,255,601)	-	-	(6,255,601)
Loco Interactive Pte Limited	31,693,578	2,941,415	4,603,595	2,652,602	117,248	(30,227,952)	-	(7,932,389)	(38,160,341)

KRAFTON, Inc. Notes to the Separate Financial Statements, (Cont'd) December 31, 2022 and 2021

Nasadiya Technologies Private Limited Mirae Asset Maps	13,757,246	11,256,893	1,796,200	4,663,507	6,679,053	(33,556,643)	-	409,664	(33,146,979)
General Private Real Estate Investment Trust 66	41,454,564	1,304,439,262	16,529,459	700,000,000	2,355,117	(35,942,790)	-	-	(35,942,790)
Tamatem Inc.	21,064,295	533,727	1,604,122	631,720	28,809,149	(3,522,018)	-	2,912,373	(609,645)
Seoul Auction Blue Co., Ltd	25,390,717	2,769,565	7,712,688	(68,405)	13,043,602	(4,791,168)	-	-	(4,791,168)
XXBLUE Co., Ltd	6,231,701	934,334	3,700,541	(115,879)	1,900,885	(2,783,600)	-	-	(2,783,600)
Nautilus Mobile App Private Limited	7,552,854	159,015	750,652	132,903	4,209,531	55,296	-	(296,455)	(241,159)
Mebigo Labs Private Limited	33,519,415	572,230	5,521,646	64,450	5,393,994	(18,765,005)	-	(3,511,086)	(22,276,091)
Smart KNB Booster Fund	14,113,985	-	586,410	-	156,239	(972,425)	-	-	(972,425)
NIRVANANA	606,547	1,223,594	752,767	200,000	5,000	(4,123,626)	-	-	(4,123,626)
1Up Ventures Fund II, L.P	8,892,221	-	-	-	-	-	-	(1,066,533)	(1,066,533)

¹ The amount of profit and loss-related information of Shinhan Alpha REIT Co., Ltd., is adjusted from January 1, 2022 to December 31, 2022

	December 31, 2021								
(in thousands of Korean won)	Current Assets	Non-Current Assets	Current Liabilities			Profit(loss) from continuing operations	Other Comprehe nsive Income	Total Comprehen sive Income for the year	
Subsidiaries									
Bluehole Studio, Inc.	₩ 8,436,551	₩ 4,897,785	₩ 26,971,879	₩ 6,223,638	₩ 19,724,992	₩ (25,486,435)	₩ (1,728,833)	₩ (27,215,268)	
En Masse Entertainment, Inc.	483,507	10,368,222	50,252,251	-	(2,473)	(4,281,723)	(5,800,078)	(10,081,801)	
RisingWings Inc.	3,854,327	5,950,067	40,838,157	11,602,042	18,585,468	(24,812,697)	(537)	(24,813,234)	
KRAFTON Venture, Inc.	17,624,015	11,106,333	13,800,392	4,323,399	32,920,220	2,900,707	1,584,293	4,485,000	
PUBG Santa Monica, Inc.	20,369,014	3,366,864	12,017,895	1,046,230	24,296,089	6,900,749	(76,984)	6,823,765	
PUBG Amsterdam B.V.	14,009,723	3,661,846	4,285,052	2,219,651	15,742,019	3,563,027	1,614,912	5,177,939	
PUBG Shanghai	32,654	591,861	72,661	592,750	-	12,136	(7,923)	4,213	
KP PTE. LTD.	31,433,033	14,633,701	6,314,967	19,687,949	76,528,307	636,358	2,943,617	3,579,975	
Striking Distance Studios, Inc.	4,025,107	2,445,604	1,815,435	2,941,666	8,111,904	(1,121,152)	(39,313)	(1,160,465)	
PUBG Japan Corporation	2,748,058	1,174,821	943,208	1,282,482	2,740,525	(132,407)	11,225	(121,182)	
Striking Distance Studios Spain, S.L.	41,293	2,416,830	-	-	-	(9,261)	598,165	588,904	
PUBG Entertainment, Inc. PUBG INDIA	948	-	860,783	-	-	(532,403)	(88,937)	(621,340)	
PRIVATE LIMITED	2,925,385	72,627	807,584	-	2,923,982	(808,565)	96,803	(711,762)	

KRAFTON, Inc. Notes to the Separate Financial Statements, (Cont'd) December 31, 2022 and 2021

SDS Interactive Canada Inc.	534,376	-	485,797	-	534,376	48,580	-	48,580
Between Us Co. Ltd.	1,601,978	2,367,963	1,074,159	99,811	1,525,837	(7,796,281)	-	(7,796,281)
Dreamotion, Inc.	7,952,114	420,958	1,683,563	309,034	4,776,066	859,845	39,575	899,420
Thingsflow Inc.	5,631,325	832,082	10,446,055	1,753,778	2,631,610	(1,035,050)	(93,044)	(1,128,094)
Tiptoe Games, Inc. Krafton Global GP, LLC	90,488 -	12,069 -	3,078	7,433 -	-	(7,954) -	-	(7,954) -
Krafton Global, LP	1,576,787	-	1,675,186	-	-	(94,989)	(6,819)	(101,808)
Unknown Worlds Entertainment, Inc.	111,137,576	261,850	32,248,786	19,750,173	6,361,014	2,967,719	(537,642)	2,430,077
Associates								
Shinhan Alpha REIT Co., Ltd. ¹	52,792,035	1,852,725,440	178,571,390	1,383,119,294	62,105,548	7,038,375	-	7,038,375
1Up Ventures, L.P	3,202,821	21,326,137	11,262	-	-	(986,133)	1,690,817	704,684
Hidden Sequence Co., Ltd.	9,661,229	1,312,402	6,648,728	7,649,979	18,657,593	(406,615)	-	(406,615)
Smart Krafton- BonAngels Fund	3,614,309	14,852,917	114,605	-	-	(329,842)	-	(329,842)
Nodwin Gaming Private Limited	20,517,300	14,303,228	11,003,243	152,609	11,261,080	194,351	(370,414)	(176,063)
Un Note Co., Ltd.	4,648,369	10,866,609	4,189,950	71,371	9,679,601	8,778,745	-	8,778,745
Loco Interactive Pte Limited	7,425,839	2,965,670	1,855,678	7,008,272	37,966	(5,451,525)	(3,651,798)	(9,103,323)
Nasadiya Technologies Private Limited Mirae Asset Maps	45,479,473	7,164,767	1,924,681	2,858,852	495,614	(7,942,534)	(299,718)	(8,242,252)
General Private Real Estate Investment Trust 66	24,009,785	366,014,550	261,424	-	-	(237,089)	-	(237,089)

¹ The amount of profit and loss-related information of Shinhan Alpha REIT Co., Ltd., is adjusted from January 1, 2021 to December 31, 2021

The Company has acquired subsidiary Unknown Worlds Entertainment, Inc. on December 9, 2021 and was about to valuate fair value of contingent consideration via an independent valuer but have not completed the valuation until December 31, 2021. Therefore, fair value of contingent consideration valuation was completed via an independent valuer during the year ended December 31, 2022 and financial statement as of December 31, 2021 which is shown as the comparative information to financial statements as of December 31, 2022, have been retrospectively adjusted in accordance with paragraph 45 of KIFRS 1103 are as follows.

(in thousands of Korean won)	Dec	ncial Statement ember 31, 2021 re Adjustments)		Adjustments	Dece	ncial Statement ember 31, 2021 r Adjustments)
I. Current Assets	₩	3,466,888,355	₩	-	₩	3,466,888,355
II. Non-Current Assets		2,014,166,067		10,515,176		2,024,681,243
Subsidiaries and Associates		1,294,246,781		10,515,176		1,304,761,957
Total Assets		5,481,054,422		10,515,176		5,491,569,598
I. Current Liabilities		550,906,673		-		550,906,673
II. Non-Current Liabilities		338,068,561		10,515,176		348,583,737
Financial Liabilities at Fair Value through Profit or Loss		195,350,040		10,515,176		205,865,216
Total Liabilities		888,975,234		10,515,176		899,490,410
Total Equities		4,592,079,188		-		4,592,079,188
Total Liabilities and Equities		5,481,054,422		10,515,176		5,491,569,598

The Company has performed impairment assessments on its investments in subsidiaries as of December 31, 2022. The recoverable amount of the investments in subsidiaries was based on their value in use, and the value in use calculation was based on estimated cash flows derived from the 5-year business plan approved by management. The key assumptions used in the value in use calculation for the major investments in subsidiaries as of December 31, 2022 are as follows.

	Unknown Worlds Entertainment, Inc.	Investments In Other Subsidiaries
Average operating profit rate for estimated period ¹	41.19%	-13.68%~33.72%
Average annual growth rate for estimated period ¹	30.23%	-1.57%~87.55%
Perpetual growth rate ²	1.00%	0.00%~1.00%
Discount Rate ³	8.80%	12.73%~16.17%

¹ The average revenue growth rate and average operating profit margin, used for determining the projected cash flows for the next 5 years, were calculated based on the expected levels of future revenue and operating profit.

² The long-term growth rate is the weighted average growth rate used to estimate cash flows beyond the forecast period and does not exceed the anticipated growth rate from industry reports. ³ The discount rate reflects the unique risks associated with each subsidiary.

As a result of performing impairment assessments on investments in subsidiaries during the year ended December 31, 2022, it was recognized that the carrying amounts of Unknown Worlds Entertainment, Inc. and other investments in subsidiaries exceeded their recoverable amounts, resulting in impairment losses of 123,982,798 thousand and 52,930,207 thousand, respectively.

Meanwhile, the recoverable amount of investments in subsidiaries varies according to the assumptions made for the key assumptions used in the value in use calculation, and the effects of changes in these assumptions on the excess of the recoverable amount are as follows.

(in thousands of Korean won)		-	Increase in count Rate	1%p Decrease in Discount Rate			
Variation in Excess of Recoverable	Unknown Worlds Entertainment, Inc. Investments In	₩	108,370,125	₩	(83,366,390)		
Amount	Other Subsidiaries		2,080,364		(2,011,579)		

13. Property and Equipment and Leases

Details of property and equipment as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean	December 31, 2022												
won)	Fixtures			Facilities	R	ight-of-use assets	Construction-in- progress			Total			
Acquisition cost	₩	42,669,470	₩	43,071,878	₩	218,566,606	₩	3,911,123	₩	308,219,077			
Accumulated depreciation		(19,428,994)		(18,009,940)		(93,080,456)		-		(130,519,390)			
Government grants ¹		-		(352,000)		-		_		(352,000)			
	₩	23,240,476	₩	24,709,938	₩	125,486,150	₩	3,911,123	₩	177,347,687			

¹ There are no unfulfilled conditions or other contingencies related to the government grants as of December 31, 2022.

(in thousands of Korean	December 31, 2021											
won)	Fixtures		Facilities		Right-of-use assets		Construction-in- progress		Total			
Acquisition cost	₩	32,668,950	₩	43,094,647	₩	215,052,094	₩	15,711,218	₩	306,526,909		
Accumulated depreciation		(12,536,639)		(13,583,594)		(77,983,622)		-		(104,103,855)		
Government grants ¹		-		(1,279,581)		-		-		(1,279,581)		
	₩	20,132,311	₩	28,231,472	₩	137,068,472	₩	15,711,218	₩	201,143,473		

¹ There are no unfulfilled conditions or other contingencies related to the government grants as of December 31, 2021.

13. Property and Equipment and Leases, (cont'd)

Changes in property and equipment for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022												
,		Fixtures		Facilities	F	Right-of-use assets	-	onstruction- n-progress		Total			
Beginning	₩	20,132,311	₩	28,231,471	₩	137,068,473	₩	15,711,217	₩	201,143,472			
Acquisitions		10,437,869		4,138,755		68,674,022		1,154,519		84,405,165			
Disposals		(192,198)		(795,235)		(156,487)		-		(1,143,920)			
Depreciation Return of government		(7,181,890)		(8,505,299)		(41,225,869)		-		(56,913,058)			
subsidies		-		799,940		-		-		799,940			
Transfers ¹		44,384		840,306		(38,873,989)		(12,954,613)		(50,943,912)			
Ending	₩	23,240,476	₩	24,709,938	₩	125,486,150	₩	3,911,123	₩	177,347,687			

¹ Long-term advanced payments of ₩ 503,568 thousand is reclassified to fixtures and facilities, Construction in-progress of ₩ 12,542,402 thousand is reclassified to investment properties, respectively, for the years ended December 31, 2022.

(in thousands of Korean won)) December 31, 2021												
		Fixtures	Facilities		Right-of-use assets		Construction- in-progress			Total			
Beginning	₩	9,877,954	₩	10,800,598	₩	61,945,696	₩	22,898,371	₩	105,522,619			
Acquisitions		15,550,718		24,332,778		105,925,814		3,161,764		148,971,074			
Disposals		(276,376)		(1,567,944)		(18,690)		-		(1,863,010)			
Depreciation		(5,019,985)		(5,507,961)		(39,452,347)		-		(49,980,293)			
Transfers ¹		-		174,000		8,668,000		(10,348,917)		(1,506,917)			
Ending	₩	20,132,311	₩	28,231,471	₩	137,068,473	₩	15,711,218	₩	201,143,473			

¹ Construction in-progress of ₩ 174,000 thousand, ₩ 1,775,563 thousand and ₩ 8,399,354 thousand are reclassified to facilities, intangible assets and investment properties, respectively, for the years ended December 31, 2021.

13. Property and Equipment and Leases, (cont'd)

Leases

Lease related amounts recognized in the separate statements of financial position are as follows:

(in thousands of Korean won)	Dece	mber 31, 2022	December 31, 2021		
Right-of-use assets ¹					
Properties	₩	125,486,150	₩	137,068,473	
Lease receivables ²					
Current		12,424,186		3,686,480	
Non-current		33,678,987		5,587,475	
		46,103,173		9,273,955	
	₩	171,589,323	₩	146,342,428	
Lease liabilities ³					
Current	₩	47,887,988	₩	46,324,976	
Non-current		122,426,914		101,979,145	
	₩	170,314,902	₩	148,304,121	

¹ Included in the 'property and equipment' of the separate statements of financial position.

² Included in the 'other current financial assets' and 'other non-current financial assets' of the separate statements of financial position.

³ Included in the 'other current financial liabilities' and 'other non-current financial liabilities' of the separate statements of financial position.

Additions to the right-of-use assets for the years ended December 31, 2022 amounts to $\forall 68,674,022$ thousand (December 31, 2021: $\forall 105,925,814$ thousand).

13. Property and Equipment and Leases, (cont'd)

The Company has entered into a sublease contract for part of the right-of-use assets and classified them as operating leases. The future lease payments that the Company is expected to receive, are as follows:

(in thousands of Korean won)

			December	31, 202	22		
	Total contractual cash flows		Less than 1 year	1	Between and 5 years		Total
₩	11,940	₩	11,940	₩	-	₩	11,940
			December	31, 202	21		
	Total Contractual cash flows		Less than 1 year		Between and 5 years		Total
₩	5,447,194	₩	5,429,154	₩	18,040	₩	5,447,194

Lease related amounts recognized in the separate statements of comprehensive income are as follows:

(in thousands of Korean won)	December 31, 2022			December 31, 2021			
Revenue from sublease lease (included in revenue)	₩	5,683,984	₩	8,134,905			
Interest income relating to lease receivables (included in finance income)		894,272		210,898			
Total Revenue		6,578,256		8,345,803			
Depreciation of right-of-use assets							
Properties	\mathbf{W}	(41,225,869)	₩	(39,452,347)			
Interest expense relating to lease liabilities (included in finance costs)		(5,559,440)		(5,307,912)			
Expense relating to short-term leases (included in operating costs)		(499,917)		(439,224)			
Expense relating to leases of low-value assets (included in operating costs)		(254,984)		(224,573)			
Total Costs		(47,540,210)		(45,424,056)			

The total cash outflow for leases for the years ended December 31, 2022 amounts to $\forall 49,207,981$ thousand (December 31, 2021: $\forall 36,057,835$ thousand).

14. Intangible Assets

(in thousands of Korean	December 31, 2022											
won)	Acquisition cost			Accumulated amortization		ccumulated pairment loss	Book value					
Software Industrial property rights	₩	27,963,590 1,522,380	₩	(20,099,584) (886,731)	₩	(1,341,833) -	₩	6,522,173 635,649				
Membership rights		1,373,669		(104,152)		-		1,269,517				
Other intangible assets		1,054,670		(423,034)		-		631,636				
č	₩	31,914,309	₩	(21,513,501)	₩	(1,341,833)	₩	9,058,975				

Intangible assets as of December 31, 2022 and 2021, consist of:

(in thousands of Korean		December 31, 2021											
won)	Acquisition cost			Accumulated amortization	Accumulated impairment loss			Book value					
Software	₩	26,901,208	₩	(17,686,741)	₩	(1,341,833)	₩	7,872,634					
Industrial property rights		1,378,009		(630,435)		-		747,574					
Membership rights		1,373,669		(34,717)		-		1,338,952					
Other intangible assets		1,054,670		(212,100)		-		842,570					
-	₩	30,707,556	₩	(18,563,993)	₩	(1,341,833)	₩	10,801,730					

KRAFTON, Inc. Notes to the Separate Financial Statements, (Cont'd) December 31, 2022 and 2021

14. Intangible Assets, (cont'd)

(in thousands	December 31, 2022										
of Korean won)	Software	Industrial property rights	Membership rights	Other intangible assets	Total						
Beginning balance	₩ 7,872,633	₩ 747,575	₩ 1,338,952	₩ 842,570	₩ 10,801,730						
Acquisitions	1,062,382	14,261	-	-	1,076,643						
Amortization	(2,412,842)	(256,296)	(69,435)	(210,934)	(2,949,507)						
Transfers ¹		130,109		_	130,109						
Ending balance	₩ 6,522,173	₩ 635,649	₩ 1,269,517	₩ 631,636	₩ 9,058,975						

Changes in intangible assets for the years ended December 31, 2022 and 2021, are as follows:

¹Long-term advanced payments of $\forall 130,109$ thousand was reclassified to industrial property rights for the years ended December 31, 2022.

(in thousands	December 31, 2021									
of Korean won)	Software	Industrial property rights	Membership rights	Other intangible assets	Total					
Beginning balance	₩ 5,529,329	₩ 678,049	₩ 679,323	₩ 33,833	₩ 6,920,534					
Acquisitions	2,859,499	98,944	694,345	1,019,670	4,672,458					
Amortization	(2,291,757)	(223,553)	(34,717)	(210,934)	(2,760,961)					
Transfers ¹	1,775,563	194,135			1,969,698					
Ending balance	₩ 7,872,633	₩ 747,576	₩ 1,338,952	₩ 842,570	₩ 10,801,730					

¹Construction in-progress of \forall 1,775,563 thousand was reclassified to software and long-term advanced payments of \forall 194,135 thousand is reclassified to industrial property rights for the years ended December 31, 2021.

15. Investment Properties

Details of investment properties as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022								
		Acquisition Cost		ccumulated	Book value				
Land	₩	173,699,223	₩	-	₩	173,699,223			
Buildings		29,861,829		(1,387,792)		28,474,037			
	₩	203,561,052	₩	(1,387,792)	₩	202,173,260			

(in thousands of Korean won)	December 31, 2021								
		Acquisition Cost		cumulated preciation	Book value				
Land	₩	156,224,557	₩	-	₩	156,224,557			
Buildings		27,677,095		(642,427)		27,034,668			
	₩	183,901,652	₩	(642,427)	₩	183,259,225			

Changes in investment properties for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022						
		Land		Buildings		Total	
Beginning balance	₩	156,224,557	₩	27,034,668	₩	183,259,225	
Acquisitions		6,284,592		832,406		7,116,998	
Depreciation		-		(745,365)		(745,365)	
Transfers ¹		11,190,074		1,352,328		12,542,402	
Ending balance	₩	173,699,223	₩	28,474,037	₩	202,173,260	

¹ Construction in-progress of ₩ 12,542,402 thousand was reclassified to investment properties for the years ended December 31, 2022.

KRAFTON, Inc. Notes to the Separate Financial Statements, (Cont'd) December 31, 2022 and 2021

15. Investment Properties, (cont'd)

(in thousands of Korean won)	December 31, 2021						
		Land		Buildings		Total	
Beginning balance	₩	59,278,258	₩	9,400,874	₩	68,679,132	
Acquisitions		89,338,959		17,464,582		106,803,541	
Depreciation		-		(622,801)		(622,801)	
Transfers ¹		7,607,340		792,014		8,399,354	
Ending balance	₩	156,224,557	₩	27,034,668	₩	183,259,225	

¹Construction in-progress of ₩ 8,399,354 thousand was reclassified to investment properties for the years ended December 31, 2021.

During the year, rental income earned from operating leases of investment property is $\forall 145$ million (2021: $\forall 48$ million), and there are no direct operating expenses (including repairs and maintenance) from property that generated rental income. Direct operating expenses (including repairs and maintenance) from property that did not generate rental income are $\forall 377$ million (2021: $\forall 82$ million).

Fair value of investment properties as at December 31, 2022, is $\forall 277,469$ million (2021: $\forall 167,105$ million). The valuation of investment properties is performed by an independent valuer.

16. Net Defined Benefit Liabilities

Details of net defined benefit liabilities recognized in the statements of financial position as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Decem	ber 31, 2022	December 31, 2021		
Present value of defined benefit obligations	₩	7,659,997	₩	10,772,823	

Changes in the defined benefit obligations for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won) December 2022	r 31, December 31, 2021
Beginning ₩ 10,7	72,823 ₩ 6,604,271
Current service cost 3,5	76,300 1,779,287
Interest expense 3	02,717 139,790
Transfer-in(out) 1	08,266 310,462
Benefit payments (77	(1,326,569)
Remeasurements:	
Actuarial gain(loss) from change in financial (5,79 assumptions	00,734) (816,194)
5 () 1 ,	33,681) 2,528,068
Actuarial gain(loss) from change in demographic assumptions	- 1,553,708
Ending ₩ 7,6	59,997 ₩ 10,772,823

The amounts recognized in the statements of comprehensive income related to defined benefit plan for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Dec	ember 31, 2022	December 31, 2021		
Current service cost	₩	3,576,300	₩	1,779,287	
Interest expense	_	302,717		139,790	
	₩	3,879,017	₩	1,919,077	

16. Net Defined Benefit Liabilities, (cont'd)

The significant actuarial assumptions as of December 31, 2022 and 2021, are as follows:

(in percentage, %)	December 31, 2022	December 31, 2021
Discount rate	5.31%	2.89%
Salary growth rate	8.07%	8.05%

Discount rate is measured by reference to corporate bond rated AA+. Mortality rate for defined benefit pension plan announced by Korea Insurance Development Institute is adopted, and the retirement rate is measured by reference to the historical record of retirement.

The sensitivity of the defined benefit obligation to changes in the principal assumptions is:

(in thousands of Korean won)	1%p increase			1%p decrease		
Discount rate	₩	(1,986,724)	₩	1,825,468		
Salary growth rate		1,768,423		(1,969,453)		

Details of remeasurements incurred related to defined benefit plan for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	De	cember 31, 2022	December 31, 2021		
Remeasurements of net defined benefit liability	₩	(6,324,415)	₩	3,265,582	
Income tax effect		1,739,214		(898,035)	
Remeasurements of net defined benefit liability, after tax	₩	(4,585,201)	₩	2,367,547	

The weighted average duration of the defined benefit obligation is 6.39 years. The expected maturity analysis of undiscounted pension benefits as of December 31, 2022, is as follows:

(in thousands of Korean won)	-	ss than I year		etween 2 years		Between 2-5 years		Over 5 years		Total
Pension benefits	₩	647,536	₩	622,457	₩	2,024,579	₩	7,680,307	₩	10,974,879

The expense recognized in the current year in relation to the defined contribution plan amounted to $\forall 10,810,180$ thousand (2021: $\forall 8,397,503$ thousand).

The Company provides benefits to employees who have provided services for a long-term. The Company measures the long-term employee benefit liabilities using actuarial assumptions.

17. Provisions

Changes in provisions for restoration for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)		December 31, 2022						
		ovision for oration costs	Ot	ther provisions				
Beginning	₩	12,127,609	₩	37,529,676				
Additions ¹		1,236,401		3,379,732				
Reversal		-		(38,006,580)				
Others ¹		-	_	-				
Ending	$\forall \forall$	13,364,010	₩	2,902,828				
Current portion		-		2,902,828				
Non-current portion		13,364,010		_				

¹ Includes the reduction in the obligation for restoration at the end of the lease period due to the new sub-lease contract.

(in thousands of Korean won)	December 31, 2021						
	-	rovision for toration costs		Other provisions			
Beginning	₩	5,000,534	₩	44,762,724			
Addition		7,948,453		3,955,347			
Reversal		-		(11,188,395)			
Others ¹		(821,378)		-			
Ending	₩	12,127,609	₩	37,529,676			
Current portion		-		37,529,676			
Non-current portion		12,127,609		-			

¹ Includes the reduction in the obligation for restoration at the end of the lease period due to the new sub-lease contract.

18. Contingencies and Commitments

As of December 31, 2022, the Company is providing game services to end-users through contracts with the following major platform operators:

Game	Counterparty	Service region
PLAYERUNKNOWN'S BATTLEGROUNDS (PC)	Valve Corporation Epic Games, Inc. Hangzhou Shunwang Technology	Worldwide
	Co., Ltd.	China (except for Hong
	Qingfeng(Beijing) Technology Co.,Ltd.	Kong, Macau and Taiwan)
Thunder Tier One (PC)	Valve Corporation	Worldwide
MOONBREAKER (PC)	Valve Corporation	Worldwide
The Callisto Protocol (PC)	Valve Corporation	
	Epic Games, Inc.	Worldwide
The Callisto Protocol (Console)	Skybound Interactive, LLC	
PLAYERUNKNOWN'S BATTLEGROUNDS (Mobile)	Google Apple	Korea, Japan, India
	Samsung Electronics	Korea
	Coda Payments Pte.Ltd	India
PUBG NEW STATE (Mobile)	Google	
	Apple	Worldwide
	Samsung Electronics	
PLAYERUNKNOWN'S BATTLEGROUNDS (Stadia)	Google	Part of Europe and U.S.A

The Company has contracts with more than 10 domestic and foreign companies including the above contracts, and the contract period is 1~3 years or longer.

The Company collects considerations for game services from the end-users through the platform providers and pays a certain percentage of revenue generated from the end-users as a fee in exchange for using their platform.

Major publishing contracts of the Company as of December 31, 2022, are as follows:

Game	Counterparty	Service region
PLAYERUNKNOWN'S BATTLEGROUNDS (Console)	Microsoft Corporation Sony Interactive Entertainment LLC	Worldwide
PLAYERUNKNOWN'S BATTLEGROUNDS(PC)	Kakao Games Corp.	Korea
PLAYERUNKNOWN'S	Tencent Technology (Shenzhen) Company Limited	China
BATTLEGROUNDS (Mobile)	Proxima Beta Pte. Limited	Worldwide
The Colliste Protocol (Concele)	Microsoft Corporation	Worldwide
The Callisto Protocol (Console)	Sony Interactive Entertainment LLC	Worldwide

18. Contingencies and Commitments, (cont'd)

Major other contracts of the Company as of December 31, 2022, are as follows:

Game	Counterparty	Service region
PLAYERUNKNOWN'S BATTLEGROUNDS	Beijing Kuaishou Technology Ltd. Guangzhou Huya Information Technology Ltd.	China

The Company has entered into a license agreement with Epic Games International S.a.r.I. for the "Unreal Engine" required to drive the game, which the Company is obliged to pay a certain percentage of revenue as royalties.

As of December 31, 2022, there are five litigation cases filed against the Company (relating to claim for damages related to stock options, lawsuits related to India services, lawsuits related to incentives, lawsuits related to real estate registration, lawsuits related to delivery refusal) and six litigations (relating to claim for damages of purchased IT assets and others) filed by the Company. The Company's management believes that the ultimate results of these cases will not have a significant material impact on the financial statements of the Company, and the results of the cases cannot be reliably estimated as of December 31, 2022.

As of December 31, 2022, the Company has been provided guarantees up to \forall 1,775 million from Seoul Guarantee Insurance Co., Ltd. in connection with the repayment of contributions for supporting the workplace nursery installation.

As of December 31, 2022, ₩7,366 million of financial instruments are provided as collateral related to leasehold deposits received from sublessee of Greits Pangyo(formerly, Krafton Tower). Also, ₩30,000 million of financial instruments are provided as collateral related to loan for Employee Stock Ownership Plan (ESOP).

The Company has entered into an agreement to pay performance-based incentives in proportion to the sales performance to executives and employees, including key developers, who can contribute to the Company's long-term growth.

18. Contingencies and Commitments, (cont'd)

On June 25, 2021, the Company entered into a shareholder agreement with existing shareholders in relation to the acquisition of redeemable convertible preferred stock and common stock of Thingsflow Inc. The main terms and conditions of the contract are summarized as follows:

Туре	Contents
Put option	Existing shareholders can request the purchase of all the remaining shares within 3 months from the expiration date of the sale if the IPO is not completed by the deadline for the sale, or if the existing shareholders are unable to sell 50% or more of the shares held to a third party.
Call option	During the exercise period of the put option, the Company's call option contract allows the sale of all shares held by the existing shareholders at an amount equivalent to 120% of the put option exercise price.
Others	Existing shareholders cannot sell, transfer, set up as collateral, or other dispositions without prior written consent within the disposition restriction period.
	The Company retains the preferred right to purchase all or part of the shares held by the existing shareholders even after the existing shareholders have obtained prior signed consent or after the disposition restriction period has expired.

On November 23, 2022, the Company entered into a shareholder agreement with existing shareholders including employees holding stock options in relation to the acquisition of preferred stock and common stock of Neon Giant AB. The main terms and conditions of the contract are summarized as follows:

Туре	Contents
Drag along right	After 2 years after the date the contract is entered into, if the Company disposes its entire shares to a third-party purchaser, the Company shall have the right to require other shareholders to sell its shares to such third-party purchaser.
Tag along right	After 5 years after the date the contract is entered into, if a one or more than one shareholder desires to sell 60% of its shares, other shareholders shall have the right to participate in the sale of their shares at the same price.
Put option and call option	Employees who have stock options have a call option that grants them to sell 50% of their shares after full vesting and exercise, at the per-share acquisition price of the original share purchase agreement. Also, the Company has a put option that grants it to purchase the shares of the employees who have the stock options under the same condition.

Туре	Contents
Put option	The First put option : Existing shareholders hold a put option that allows them to sell up to 50% of their shares at a value obtained by applying a specific multiple to the performance index for one year after the release of a specific game.
	The second put option : Existing shareholders hold a put option that allows them to sell up to 100% of their remaining shares after exercising the first put option at a value obtained by applying a specific multiple to the maximum value of 12 months of performance indicators from 2023 to 2029.
call option	After the second put option expires, the Company holds a call option that allows the Company to purchase existing shareholders' stocks at a value obtained by applying a specific multiple to the annual performance indicator.
Back-up call option	If an existing shareholder voluntarily resigns or resigns for legitimate reasons, the above-mentioned put option will expire, and the Company holds a call option that allows the Company to purchase all remaining shares of the existing shareholders at a value obtained by applying a specific multiple to the performance indicators for the 12 months prior to the exercise of the backup call option.

The Company entered into a contract for contingent consideration to be paid in conjunction with the performance after the acquisition while acquiring a subsidiary Unknown Worlds Entertainment, Inc. and 5minlab Corp. The contingent consideration recognized as of December 31, 2022 is \forall 193,491,364 thousand and \forall 7,652,150 thousand, respectively.

The Company has entered into an agreement with the associate, Mirae Asset Maps General Private Equity Investment Trust No.66, regarding the business facilities and living facilities to be developed by the associate on 333-16 Seongsu-dong 2-ga, Seongdong-gu, Seoul, and 4 lots of land. Under the agreement, the Company has entered into responsible lease agreement for 10 years from completion of construction, and have the pre-emptive purchase right at the appraised value at a specific time.

19. Equity

(a) Share capital

Details of share capital as of December 31, 2022 and December 31, 2021, are as follows:

(in Korean won and in shares)	Decem	ber 31, 2022	December 31, 2021		
Authorized number of shares		300,000,000		300,000,000	
Par value in Korean won	₩	100	₩	100	
Issued and outstanding number of shares Ordinary shares		49,081,545		48,967,045	

19. Equity, (cont'd)

(b) Changes in share capital and capital surplus

Changes in share capital and capital surplus for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)

	Share cap	
Balance at January 1, 2021	₩	4,278,519
Exercise of share options and others Paid-in capital increase		55,786 562,400
Balance at December 31, 2021 Balance at January 1, 2022	₩	4,896,705 4,896,705
Exercise of share options and others		11,450
Balance at December 31, 2022	₩	4,908,155

	Capital surplus						
(in thousands of Korean won)	Share premium	remium Other capital surplus		Gain on disposal of treasury shares		Total	
Balance at January 1, 2021 Exercise of share options	₩ 1,001,694,447	₩	1,024,973,874	₩	-	₩	2,026,668,321
and others	57,233,631		-		-		57,233,631
Disposal of treasury shares	-		-		6,452,617		6,452,617
Paid-in capital increase	2,771,641,092		-		-		2,771,641,092
Balance at December 31, 2021	₩ 3,830,569,170	₩	1,024,973,874	₩	6,452,617	₩	4,861,995,661
Balance at January 1, 2022	₩ 3,830,569,170	₩	1,024,973,874	₩	6,452,617	₩	4,861,995,661
Exercise of share options and others	2,338,585		569,291		-		2,907,876
Gift of shares ¹	-		25,724,255		-		25,724,255
Transfer of capital reserve	(2,409,617,572)		-		-		(2,409,617,572)
Balance at December 31, 2022	₩ 1,423,290,183	₩	1,051,267,420	₩	6,452,617	₩	2,481,010,220

¹ During the year ended December 31, 2022, a shareholder of the Company has donated the Company's shares to executives and employees free of charge. Accordingly, the Company applied share-based payment accounting, and reclassified the ₩ 25,724,255 thousand of other capital which had been recognized during vesting period to other capital surplus at the completion of the donation.

19. Equity, (cont'd)

(c) Other components of equity

Other components of equity as of December 31, 2022 and 2021, consist of:

(in thousands of Korean won)	Decen	nber 31, 2022	December 31, 2021		
Treasury shares ¹	₩	-	₩	-	
Share-based payments (Note 20)		56,137,075		46,836,184	
Other capital adjustments		-		33,710,386	
Gain on valuation of financial assets at fair value through other comprehensive income(Note 11)		13,863,039		59,570,920	
Remeasurements of net defined benefit liability Note 16)		(689,205)		(5,274,406)	
Exchange differences on translation of foreign					
operations		(67,625)		(38,690)	
	₩	69,243,284	₩	134,804,394	

¹ The acquisition cost of treasury shares is $\forall 0$.

(d) Statements of appropriation of retained earnings(disposition of accumulated deficit)

The appropriation of retained earnings(disposition of accumulated deficit) for the year ended December 31, 2022, is expected to be disposed at the shareholders' meeting on March 28, 2023. The disposition date for the year ended December 31, 2021, was March 31, 2022.

The appropriation of retained earnings(disposition of accumulated deficit) for the years ended December 31, 2022 and 2021, are as follows:

(in Korean won)	D	ecember 31, 2022	D	ecember 31, 2021
Undisposed accumulated deficit Undisposed accumulated deficit carried over from prior year	₩	2,000,000,000,000	₩	(951,819,823,460)
Profit for the year	vv	487,142,607,927	vv	542,202,251,423
Accumulated deficit available for disposition		2,487,142,607,927		(409,617,572,037)
Disposition of accumulated deficit				
Transfer of capital reserve		-		2,409,617,572,037
Undisposed accumulated retained earnings (deficit) to be carried forward	₩	2,487,142,607,927	₩	2,000,000,000,000

20. Share-based Payments

The terms and conditions of stock options granted as of December 31, 2022, are as follows:

(in Korean won, except number of shares)	18 th -1	18 th -2	18 th -3	19 th -2	
Type of arrangement	Equity-settled	Equity-settled	Equity-settled	Equity-settl	ed
Grantee	Employees	Employees	Employees	Employee	s
Date of grant	Mar. 30, 2017	Mar. 30, 2017	Mar. 30, 2017	Oct. 20, 20	17
No. of shares granted	158,815	158,810	136,125	354,375	
Outstanding shares as of December 31, 2021	35,000	35,000	30,000	20,240	
No. of shares exercised during the year	35,000	35,000	30,000	-	
Outstanding shares as of December 31, 2022	-	-	-	20,240	
Exercise price	₩ 1,003 Provision of	₩ 1,003	₩ 1,003	₩ 1,452	
Vesting conditions	services to the date of vesting	Provision of service to the date of vestin			
Date of vesting	Apr. 1, 2019	Apr. 1, 2020	Apr. 1, 2021	Oct. 20, 20	20
Date of expiration	Mar. 31, 2026	Mar. 31, 2026	Mar. 31, 2026	Oct. 19, 20	26
(in Korean won, except number of shares)	19 th -3	19 th -5	20 th	21 st	22 nd
Type of arrangement	Equity-settled	Equity-settled	Equity-settled	Equity-settled	Equity-settled
Grantee	Employees	Employees	Employees	Employees	Employees
Date of grant	Oct. 20, 2017	Oct. 20, 2017	Jul. 1, 2019	Aug. 1, 2019	Oct. 1, 2019
No. of shares granted	303,750	150,000	37,500	29,500	6,500
Outstanding shares as of December 31, 2021	303,750	14,500	37,500	29,400	6,500
No. of shares exercised during the year	-	14,500	-	-	-
No. of shares cancelled during the year	-	-	37,500	29,400	6,500
Outstanding shares as of December 31, 2022	303,750	-	-	-	-
Exercise price	₩ 1,452	₩ 1,452	₩ 44,000	₩ 44,000	₩ 44,000
Vesting conditions	Provision of services to the date of vesting	Provision of services to the date of vesting	to the date of		Provision of services to the date of vesting
Date of vesting	Oct. 20, 2021	Oct. 20, 2020	Jun. 30, 2021 (35%) Jun. 30, 2022 (35%) Jun. 30, 2023 (30%)	Jul. 31, 2022 (35%)	Sept. 30, 2022(35%)
Date of expiration					

20. Share-based Payments, (cont'd)

(in Korean won,
excent number of

except number of					
shares)	23 rd	24 th	25 th	26 th	27 th
Type of arrangement	Equity-settled Cash-settled	Equity-settled Cash-settled	Equity-settled	Equity-settled	Equity-settled
Grantee	Employees	Employees	Employees	Employees	Employees
Date of grant	Nov. 5, 2020	Nov. 5, 2020	Mar. 31, 2021	Mar. 31, 2021	Mar. 31, 2022
No. of shares granted	50,000	650,000	178,750	2,500	60,000
Outstanding shares as of December 31, 2021	50,000	650,000	175,000	2,500	-
No. of shares granted during the year	-	-	-	-	60,000
No. of shares cancelled during the year	-	-	23,000	-	-
Outstanding shares as of December 31, 2022	50,000	650,000	152,000	2,500	60,000
Exercise price	₩ 144,000	₩ 144,000	₩ 190,000	₩ 190,000	₩ 279,310
Vesting conditions	Provision of services to the date of vesting	Achievement of the target share price after IPO	Provision of services to the date of vesting	Provision of services to the date of vesting	Provision of services to the date of vesting
Date of vesting	Nov. 5, 2022(35%) Nov. 5, 2023(35%) Nov. 5, 2024(30%)	25% each upon achievement of the target share price after IPO	Mar. 31, 2023(35%) Mar. 31, 2024(35%) Mar. 31, 2025(30%)	Mar. 31, 2023(70%) Mar. 31, 2024(30%)	Mar. 31, 2024(35%) Mar. 31, 2025(35%) Mar. 31, 2026(30%)
Date of expiration	Nov. 4, 2032	Nov. 4, 2032	Mar. 30, 2028	Mar. 30, 2025(70%) Mar. 30, 2027(30%)	

¹ The Company conducted a share split by lowering the par value from \forall 500 to \forall 100 on May 4, 2021, as the effective date. Accordingly, the quantity and exercise price of stock options have been adjusted.

The terms and conditions of performance-based incentives as of December 31, 2022, are as follows:

(in Korean won, except number of shares)	2 nd	3 rd -0	3 rd -1	3 rd -2
Date of grant	Oct. 31, 2017	Dec. 22, 2017	Dec. 22, 2017	Feb. 1, 2018
Type of arrangement	Equity-linked Cash Compensation	Equity-linked Cash Compensation	Equity-linked Cash Compensation	Equity-linked Cash Compensation
No. of shares granted	15,750	28,000	26,188	3,750
Outstanding shares as of December 31, 2022	7,500	6,000	7,490	1,125
Exercise price	₩ 1,452	₩ 1,452	₩ 1,452	₩ 1,452
Vesting conditions	Provision of services to the date of vesting	Provision of services to the date of vesting	Provision of services to the date of vesting	Provision of services to the date of vesting
Type of arrangement	Cash	Cash	Cash	Cash
Date of vesting	Nov. 1, 2019(35%) Nov. 1, 2020(35%) Nov. 1, 2021(30%)	Dec. 23, 2019(35%) Dec. 23, 2020(35%) Dec. 23, 2021(30%)	Dec. 23, 2019(35%) Dec. 23, 2020(35%) Dec. 23, 2021(30%)	Feb. 2, 2020(35%) Feb. 2, 2021(35%) Feb. 2, 2022(30%)
Date of expiration	4 years from date of vesting	4 years from date of vesting	4 years from date of vesting	4 years from date of vesting
(in Korean won, except number of shares)	4 th -1	4 th -2	5 th -1	5 th -2
•	4th-1 Mar. 31, 2018	4th-2 Mar. 31, 2018	5th-1 Jun. 30, 2018	5th-2 Jun. 30, 2018
number of shares)			Jun. 30, 2018 Equity-linked	Jun. 30, 2018 Equity-linked
number of shares) Date of grant	Mar. 31, 2018 Equity-linked	Mar. 31, 2018 Equity-linked	Jun. 30, 2018 Equity-linked	Jun. 30, 2018 Equity-linked
number of shares) Date of grant Type of arrangement	Mar. 31, 2018 Equity-linked Cash Compensation	Mar. 31, 2018 Equity-linked Cash Compensation	Jun. 30, 2018 Equity-linked Cash Compensation	Jun. 30, 2018 Equity-linked Cash Compensation
number of shares) Date of grant Type of arrangement No. of shares granted Outstanding shares as of	Mar. 31, 2018 Equity-linked Cash Compensation 34,000	Mar. 31, 2018 Equity-linked Cash Compensation 40,750	Jun. 30, 2018 Equity-linked Cash Compensation 6,250	Jun. 30, 2018 Equity-linked Cash Compensation 7,500
number of shares) Date of grant Type of arrangement No. of shares granted Outstanding shares as of December 31, 2022	Mar. 31, 2018 Equity-linked Cash Compensation 34,000 7,500	Mar. 31, 2018 Equity-linked Cash Compensation 40,750 14,000	Jun. 30, 2018 Equity-linked Cash Compensation 6,250 1,750	Jun. 30, 2018 Equity-linked Cash Compensation 7,500 7,500
number of shares) Date of grant Type of arrangement No. of shares granted Outstanding shares as of December 31, 2022 Exercise price	Mar. 31, 2018 Equity-linked Cash Compensation 34,000 7,500 ₩ 14,000 Provision of services to the date of	Mar. 31, 2018 Equity-linked Cash Compensation 40,750 14,000 ₩ 44,000 Provision of services to the date of	Jun. 30, 2018 Equity-linked Cash Compensation 6,250 1,750 ₩ 14,000 Provision of services to the date of	Jun. 30, 2018 Equity-linked Cash Compensation 7,500 7,500 ₩ 58,000 Provision of services to the date of
number of shares) Date of grant Type of arrangement No. of shares granted Outstanding shares as of December 31, 2022 Exercise price Vesting conditions	Mar. 31, 2018 Equity-linked Cash Compensation 34,000 7,500 ₩ 14,000 Provision of services to the date of vesting	Mar. 31, 2018 Equity-linked Cash Compensation 40,750 14,000 ₩ 44,000 Provision of services to the date of vesting	Jun. 30, 2018 Equity-linked Cash Compensation 6,250 1,750 ₩ 14,000 Provision of services to the date of vesting	Jun. 30, 2018 Equity-linked Cash Compensation 7,500 7,500 ₩ 58,000 Provision of services to the date of vesting

20. Share-based Payments, (cont'd)

(in Korean won, except number of shares)	6 th -2	7 th	8 th	9 th
Date of grant	Aug. 1, 2018	Aug. 31, 2018	Sep. 30, 2018	Nov. 12, 2018
Type of arrangement	Equity-linked Cash Compensation	Equity-linked Cash Compensation	Equity-linked Cash Compensation	Equity-linked Cash Compensation
No. of shares granted	5,000	25,000	6,250	7,500
Outstanding shares as of December 31, 2022	1,500	2,500	4,500	2,250
Exercise price	₩ 58,000	₩ 44,000	₩ 44,000	₩ 78,000
	Provision of services	Provision of services	Provision of services	Provision of services
Vesting conditions	to the date of vesting	to the date of vesting	to the date of vesting	to the date of vesting
Type of arrangement	Cash	Cash	Cash	Cash
Date of vesting	Aug. 2, 2020(35%) Aug. 2, 2021(35%) Aug. 2, 2022(30%)	Sep. 1, 2020(35%) Sep. 1, 2021(35%) Sep. 1, 2022(30%)	Oct. 1, 2020(35%) Oct. 1, 2021(35%) Oct. 1, 2022(30%)	Nov. 13, 2020(35%) Nov. 13, 2021(35%) Nov. 13, 2022(30%)
Date of expiration	4 years from date of vesting			
(in Korean won, except number of shares)	13 th -1			
Date of grant	Jan. 2, 2020			
Type of arrangement	Equity-linked Cash Compensation			
No. of shares granted	6,500			
Outstanding shares as of December 31, 2022	4,500			
Exercise price	₩ 1,452			
Vesting conditions	Provision of services to the date of vesting			
Type of arrangement	Cash			
Date of vesting	Dec. 23, 2020(54%) Dec. 23, 2021(46%)			
Date of expiration	4 years from date of vesting			

¹ The Company conducted a share split by lowering the par value from ₩500 to ₩100 on May 4, 2021, as the effective date. Accordingly, the quantity and exercise price of performance-based incentives have been adjusted.

² According to the contents of the performance-based incentives given by the company to its executives and employees, the compensation has been changed to be made in connection with the stock price at the time of the event after the listing.

The terms and conditions of restricted stock unit as of December 31, 2022, are as follows:

(in Korean won, except number of shares)	1 st	3rd	4 th -1	
Date of grant	Apr. 1, 2022	May. 2, 2022	Jun. 1, 2022	
Type of arrangement	Equity-settled	Equity-settled	Equity-settled	
No. of shares granted	1,000	1,000	35,540	
Outstanding shares as of December 31, 2022	1,000	1,000	35,180	
Vesting conditions	Provision of services to the date of vesting	Provision of services to the date of vesting	Provision of services to the date of vesting	
Type of arrangement	Stock	Stock	Stock	
Date of vesting	Apr. 1, 2023(35%) Apr. 1, 2024(35%) Apr. 1, 2025(30%)	May. 2, 2023 (35%) May. 2, 2024 (35%) May. 2, 2025 (30%)	Jun. 1, 2023(35%) Jun. 1, 2024(35%) Jun. 1, 2025(30%)	
Date of expiration	-	-	-	
(in Korean won, except number of shares)	4 th -2	4 th -3	4th-3 (Market performance conditions added)	5 th
Date of grant	Jun. 1, 2022	Jun. 1, 2022	Jun. 1, 2022	Oct. 10, 2022
Type of arrangement	Cash-settled	Equity-settled	Equity-settled	Cash-settled
No. of shares granted	430	27,000	18,000	2,000
Outstanding shares as of December 31, 2021	430	27,000	18,000	2,000
Vesting conditions		Provision of services to the date of vesting	Provision of services to the date of vesting and achievement of the target share price	Provision of services to the date of vesting
Type of arrangement	Cash	Stock	Stock	Cash
Date of vesting	Jun. 1, 2023(35%) Jun. 1, 2024(35%) Jun. 1, 2025(30%)	Jun. 1, 2023(35%) Jun. 1, 2024(35%) Jun. 1, 2025(30%)	satisfy the period of continued service and upon achievement of the target share price	Oct.10, 2023(35%) Oct.10, 2024(35%) Oct.10, 2025(30%)
Date of expiration	-	-	May. 31, 2025(35%) May. 31, 2026(35%) May. 31, 2027(30%)	-

Changes in the number of share options granted and weighted average exercise price for the years ended December 31, 2022 and 2021, are as follows:

(in Korean won,	Decembe	r 31, 2022	December 31, 2021				
except number of	Granted number	Weighted average Granted exercise price number		Weighted average exercise price			
Beginning	1,389,390	₩ 99,573	1,769,750	₩ 59,554			
Grant	60,000	279,310	181,250	190,000			
Forfeit / Expired	(96,400)	78,834	(3,750)	190,000			
Exercise	(114,500)	1,060	(557,860)	1,389			
Ending	1,238,490	₩ 119,003	1,389,390	₩ 99,573			

¹ The Company conducted a share split by lowering the par value from ₩500 to ₩100 on May 4, 2021, as the effective date. Accordingly, the quantity and exercise price of performance-based incentives have been adjusted.

Changes in the number of equity-linked cash compensation granted and weighted average exercise price for the year ended December 31, 2022 and 2021 are as follows:

(in Korean won,	December 31, 2022			December 31, 2021				
except number of shares)	Granted number	Weighted average exercise price		average		age Granted		eighted verage cise price
Beginning	144,455	₩	24,819	194,320	₩	25,281		
Exercise	(76,340)		23,520	(47,865)		27,148		
Transfer				(2,000)		14,000		
Ending	68,115	₩	26,274	144,455	₩	24,819		

Changes in the number of restricted stock unit for the year ended December 31, 2022 are as follows:

(in shares)

	Granted number
Beginning	-
Grant	84,970
Transfer	(360)
Ending	84,610

As of December 31, 2022, 341,490 of share options are exercisable and the weighted average exercise price is $\forall 8,757$.

As of December 31, 2022, 68,115 of equity-linked cash compensation are exercisable and the weighted average exercise price is $\forall 26,274$.

As of December 31, 2022, there is no exercisable restricted stock unit.

The Company measured the cost of the share options granted for the years ended December 31, 2022 and 2021, by fair value using the binomial model method. The related assumptions and variables to measure the cost of the stock options granted are as follows:

(in Korean won)	December 31, 2022			December 31, 2021
Weighted average fair value of share options granted during				
the year	₩	96,894	₩	92,629
Weighted average share price				
at grant date	₩	275,500	₩	241,811
Price volatility		50.17%		41.90%
Risk-free interest rate		2.36%~2.85%		0.92%~1.46%

The Company measured the cost of the share options granted as of December 31, 2022 and 2021, by fair value using the binomial model and Monte Carlo method. The related assumptions and variables to measure the cost of the stock options granted are as follows:

(in Korean won)	December 31, 2022 D		December 31, 2021	
Weighted average fair value of share options granted during				
the year	₩	75,310	₩	153,904
Weighted average share price				
at grant date	₩	168,000	₩	460,000
Price volatility		53.22%		57.22%
Risk-free interest rate		3.73%~3.80%		0.97%~2.21%

The Company measured the cost of the performance-based incentives granted as of December 31, 2022 and 2021 by fair value using the Monte Carlo method. The related assumptions and variables to measure the cost of the stock options granted are as follows:

(in Korean won)	December 31, 2022			December 31, 2021
Weighted average fair value of share options granted during				
the year	₩	144,491	₩	444,810
Weighted average share price				
at grant date	₩	168,000	₩	460,000
Price volatility		53.22%		57.22%
Risk-free interest rate		3.66%~3.79%		0.97%~1.65%

The Company measured the cost of the restricted stock units granted for the year ended December 31, 2022 by fair value using the binomial model and Monte Carlo method. The related assumptions and variables to measure the cost of the restricted stock units granted are as follows:

(in Korean won)	December 31, 2022		
Weighted average fair value of share options granted during the year	₩	239,080	
Weighted average share price at grant date	₩	259,627	
Price volatility		48.70%~50.19%	
Risk-free interest rate		1.84%~3.85%	

The Company measured the cost of the restricted stock units granted as of December 31, 2022 by fair value using the binomial model. The related assumptions and variables to measure the cost of the restricted stock units granted are as follows:

(in Korean won)	December 31, 2022		
Weighted average fair value of share options granted during the year	₩	163,576	
Weighted average share price at grant date	₩	168,000	
Price volatility		53.22%	
Risk-free interest rate		3.71%~3.78%	

Details of the expenses in relation to the share options granted to employees for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022		December 31, 2021			
Total share-based payment expenses						
Operating costs ¹	₩	(53,568,297)	₩	125,599,572		
Investments in subsidiaries		1,921,169		1,491,680		
	₩	(51,647,128)	₩	127,091,252		

¹During the year ended December 31, 2022, a shareholder of the Company has donated the Company's shares to executives and employees free of charge. Accordingly, the Company applied share-based payment accounting, and recognized W(-)7,986,131 thousand in share-based payment expenses which was caused from changes in the fair value of the shares and the elapsed vesting period during the year ended December 31, 2022.

21. Revenue from Contracts with Customers and Contract Assets and Liabilities

(a) Revenue from contracts with customers

Revenue for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)

		December 31, 2022	December 31, 2021		
Revenue from contracts with					
customers	₩	1,761,946,627	₩	1,820,190,883	
Revenue from other sources		5,829,184		8,182,905	
	₩	1,767,775,811	₩	1,828,373,788	

The Company derives revenue from the transfer of goods and services over time or at a point in time in the following major services:

(in thousands of Korean won)

		December 31, 2022	December 31, 2021		
Transfer over time					
PC	₩	416,417,340	₩	380,081,318	
Mobile		1,239,552,586		1,399,667,288	
Console		17,548,555		14,260,047	
Others		24,013,299		34,365,135	
Transfer at a point in time					
PC		11,661,753		-	
Console		58,582,278		-	
	₩	1,767,775,811	₩	1,828,373,788	

Details of the Company's revenue by geographic areas for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Decembe	r 31, 2022		December	r 31, 20)21
	Revenue	Ratio		Revenue		Ratio
Asia	₩ 1,474,693,239	₩ 8	3.42% ₩	√ 1,618,649,357	₩	88.53%
Korea	92,152,361		5.21%	105,115,796		5.75%
America / Europe	189,434,731	1	0.72%	81,857,677		4.48%
Others	11,495,480		0.65%	22,750,958		1.24%
	₩ 1,767,775,811	₩ 10	0.00% ₩	↓ 1,828,373,788	₩	100.00%

21. Revenue from Contracts with Customers and Contract Assets and Liabilities, (cont'd)

(b) Contract liabilities

The Company has recognized the following assets and liabilities related to contracts with customers:

(in thousands of Korean won)	Decem	nber 31, 2022	December 31, 2021		
Contracts liabilities (unearned revenue)	₩	65,988,455	₩	62,346,648	

(c) Significant changes in contract assets and liabilities

Contract liabilities are unearned revenue recognized over time, and the amount changes when there are new customers and time elapses.

(d) Revenue recognized in relation to contract liabilities

The following table shows how much of the revenue recognized in the current and prior reporting periods relates to contract liabilities.

(in thousands of Korean won)		ember 31, 2022	December 31, 2021		
Revenue recognized that was included in the contract liability balance	₩	59,981,570	₩	67,361,142	

22. Operating Costs

Operating costs for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)		December 31, 2022		December 31, 2021
Application fees / Cost of				
sales	₩	197,670,163	₩	186,721,161
Salaries and bonuses		138,144,705		175,844,583
Post-employment benefits		14,689,197		10,316,580
Employee benefits		30,583,354		23,001,429
Travel		4,886,438		2,196,433
Depreciation		56,913,058		49,980,293
Depreciation – Investment				
properties		745,365		622,801
Amortization		2,949,507		2,760,961
Insurance		7,487,489		2,853,966
Supplies		1,763,167		2,410,142
Commissions and fees		573,336,516		487,399,905
Advertising		45,445,107		57,124,175
Share-based payment				
expenses		(53,568,297)		125,599,571
Bad debts expense		3,271,519		964,174
Others		5,636,610		4,202,169
	₩	1,029,953,898	₩	1,131,998,343

23. Other Income and Expenses

Other income and expenses for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Dec	December 31, 2022		cember 31, 2021
Other income				
Gain on foreign exchange	₩	195,086,614	₩	116,994,595
Commission income		451,482		2,927,320
Gain on disposal of property and equipment		107,775		10,873
Gain on transactions of derivatives		1,827,494		253,841
Gain on disposal of leases		3,787,063		886,326
Gain on disposal of financial assets at fair value through profit or loss		19,093,865		891,732
Gain on valuation of financial assets at fair value through profit or loss		43,185,227		21,058,286
Gain on valuation of financial liabilities at fair value through profit or loss		12,373,852		-
Dividends income		7,194,005		570,827
Others		618,133		2,417,873
	₩	283,725,510	₩	146,011,673
Other expenses				
Loss on foreign exchange	₩	55,803,696	₩	12,652,009
Impairment loss on investments in subsidiaries		176,913,004		27,059,975
Impairment loss on investments in associates		8,307,162		-
Loss on disposal of property and equipment		1,056,412		769,334
Loss on valuation of derivative instruments		785,814		671,015
Loss on disposal of leases		20,058		11,254
Loss on disposal of financial assets at fair value through profit or loss		66,346,075		-
Loss on valuation of financial assets at fair value through profit or loss		55,444,210		831,986
Loss on valuation of financial liabilities at fair value through profit or loss		7,652,150		1,499,524
Donations		298,200		3,844,000
Other impairment loss		9,406,313		20,555,462
Others		105,191		889,138
	₩	382,138,285	₩	68,783,697

24. Finance Income and Costs

Finance income and finance costs for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022			December 31, 2021		
Finance income						
Interest income	₩	32,970,417	₩	11,697,187		
Financial guarantee income		22,594		23,664		
	₩	32,993,011	₩	11,720,851		
Finance costs						
Interest expenses	₩	6,148,544	₩	5,848,123		

25. Income Tax Expense

Income tax expense for the years ended December 31, 2022 and 2021, consists of:

(in thousands of Korean won)	De	cember 31, 2022	De	cember 31, 2021
Current tax	₩	160,941,329	₩	264,829,660
Deferred tax due to temporary differences		4,256,054		(17,415,515)
Income tax expense charged directly to equity		13,913,614		(10,140,247)
Income tax expense(benefit)	₩	179,110,997	₩	237,273,898

Reconciliation between profit(loss) before income tax and income tax expense (benefit) for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	De	cember 31, 2022	De	cember 31, 2021
Profit (loss) before income tax	₩	666,253,605	₩	779,476,150
Income tax based on statutory tax rate		172,857,741		203,993,941
Adjustments:				
Income not subject to tax and others		6,775,218		12,481,958
Foreign tax credit		(2,799,810)		29,138,564
Effect of consolidated tax expense		(7,444,749)		(7,647,883)
Recognition of previously unrecognized deferred taxes		11,196,889		8,081,437
Additional tax on corporate income		(373,268)		5,243,268
Claim for rectification		(1,617,585)		6,056,749
Others		516,561		(20,074,136)
Income tax expense (benefit)	₩	179,110,997		237,273,898
Effective tax rate		26.88%		30.44%

25. Income Tax Expense, (cont'd)

Changes in the temporary differences and related deferred tax assets and liabilities for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of						December	31, 20	22				
Korean won)		Temp	orary dif	ferences and oth	ers			Def	erred	tax assets (liabilitie	es)	
			I	ncrease						Increase		
	В	Beginning	(d	ecrease)		Ending		Beginning		(decrease)		Ending
Unearned revenue	₩	3,525,224	₩	670,171	₩	4,195,395	₩	969,437	₩	142,343	₩	1,111,780
Depreciation		11,663		(8,145)		3,518		3,207		(2,275)		932
Government grants		1,279,581		(927,581)		352.000		351.885		(258,605)		93,280
Allowance for depreciation		(1,279,581)		927,581		(352,000)		(351,885)		258,605		(93,280)
Amortization		268,477		(165,001)		103,476		73,831		(46,410)		27,421
Impairment loss on		,				,		,				,
intangible assets		425,618		(249,059)		176,559		117,045		(70,257)		46,788
Accrued expenses		145,582,835		(60,776,338)		84,806,497		40,035,280		(17,561,558)		22,473,722
Investments in subsidiaries		10,446,268		(101,883,661)		(91,437,393)		2,872,724		(27,103,633)		(24,230,909)
Financial assets at fair value						···· · · · · · · · · · · · · · · · · ·						
through profit or loss		(17,743,950)		1,269,874		(16,474,076)		(4,879,586)		513,956		(4,365,630)
Financial assets at fair value												
through other		(76,652,613)		61,349,736		(15,302,877)		(21,079,468)		17,024,206		(4,055,262)
comprehensive income						(· · ·)		(· · ·)				(, , ,
Bad debt expenses		119,265		-		119,265		32,798		(1,193)		31,605
Provision for impairment		79,563,244		(5,801,873)		73,761,371		21,879,892		(2,333,129)		19,546,763
Post-employment benefit		10,772,823		(3,112,826)		7,659,997		2,962,526		(932,627)		2,029,899
obligation												
Accrued income		(878,811)		(71,206)		(950,017)		(241,673)		(10,081)		(251,754)
Provision for restoring costs		12,127,609		1,236,401		13,364,010		3,335,093		206,370		3,541,463
Facilities		(624,286)		256,608		(367,678)		(171,679)		74,244		(97,435)

25. Income Tax Expense, (cont'd)

Korean won) Temporary differences and others Determed tax assets (liabilities) Korean woni Increase Increase Increase Ending Beginning (decrass) Ending General water and tax assets (liabilities) M 1,044,358 Present value discounts W 5,371,669 W (1,430,714) W 3,3069,75 W 1,477,214 W (432,666) W 1,044,358 Right-of-use assets (148,304,121 22,010,718 (170,514,002 40,786,553 4,440,000 (43,253,449) Lease liabilities (48,273,955) (36,829,218) (46,103,173) (2,550,337) (9,667,004) (12,217,341) Bonus 33,001 (33,091) (47,429) (40,543) 1,474 (39,069) Accured income (deferred revenue) 58,406,206 3,363,743 61,769,949 16,061,707 307,330 16,369,037 Prepaid expenses (deferred assets (12,672,693) (2,794,403) (15,467,168) (1,177,870 2,560,305 3,738,175 Commissions 147,490	(in thousands of						December	31, 202	2				
Image: big	Korean won)		Temp	orary di	fferences and oth	ers			Det	ferred t	ax assets (liabilitio	es)	
Present value discounts ₩ 5,371,689 ₩ (1,430,714) ₩ 3,940,975 ₩ 1,477,214 ₩ (422,856) ₩ 1,044,358 Right-of-use assets (137,068,473) 11,582,323 (125,486,150) (37,693,830) 4,440,000 (33,253,830) Lease receivables (19,273,955) (38,629,218) (46,103,173) (2,550,337) (9,667,004) (12,217,341) Borus 33,091 (33,091) - 9,100 (9,100) - Other receivables (147,429) - (147,429) (40,543) 1,474 (39,069) Accrucel income (deferred revenue) 58,406,206 3,363,743 61,769,949 16,061,707 307,330 16,369,037 Prepaid expenses (deferred expenses) (12,672,693) (2,794,493) (15,467,186) (3,484,991) (613,813) (4,098,804) Derivative instruments 4,283,165 9,823,155 14,106,320 1,177,870 2,560,305 3,738,175 Commissions 147,490 - 147,490 40,568 2,962					Increase						Increase		
Notified up and the construction of		В	eginning	(decrease)		Ending	E	Beginning		(decrease)		Ending
Lease liabilities 148,304,121 22,010,781 170,314,902 40,783,633 4,349,816 45,133,449 Lease receivables (9,273,955) (36,829,218) (46,103,173) (2,550,337) (9,667,004) (12,217,341) Bonus 33,091 (33,091) - 9,100 (9,100) - Other receivables (147,429) - (147,429) (40,543) 1,474 (39,069) Accrued income (deferred revenue) 58,406,206 3,363,743 61,769,949 16,061,707 307,330 16,369,037 Prepaid expenses (deferred expenses (deferred instruments 4,283,165 9,823,155 14,106,320 1,177,870 2,560,305 3,738,175 Other receivables 147,490 - 147,490 40,656 (14,75) 39,085 Other provisions 37,529,676 (34,626,848) 2,902,828 10,320,661 (9,551,412) 769,249 Financial guarantee liabilities 12,893 11,666 24,559 3,546 2,962 6,508 Share-based payment 59,650,111 (30,868,	Present value discounts	₩	5,371,689	₩	(1,430,714)	₩	3,940,975	₩	1,477,214	₩	(432,856)	₩	1,044,358
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Right-of-use assets		(137,068,473)		11,582,323		(125,486,150)		(37,693,830)		4,440,000		(33,253,830)
Bonus (13,09) (13,09) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (147,429) (1613,813) (16,369,037) Prepaid expenses (deferred expenses) (12,672,693) (2,794,493) (15,467,186) (3,484,991) (613,813) (4,098,804) Derivative instruments 4,283,165 9,823,155 14,106,320 1,177,870 2,560,305 3,738,175 Commissions 147,490 - 147,490 40,560 (1,475) 39,085 Other provisions 37,529,676 (34,626,848) 2,902,828 10,320,661 (9,551,412) 7,69,249 Financial guarantee liabilities 12,893 11,666 24,559 3,546 2,962 6,508 S	Lease liabilities		148,304,121		22,010,781		170,314,902		40,783,633		4,349,816		45,133,449
Other receivables (147,429) - (147,429) (40,543) 1,474 (39,069) Accrued income (deferred revenue) 58,406,206 3,363,743 61,769,949 16,061,707 307,330 16,369,037 Prepaid expenses (deferred expenses) (12,672,693) (2,794,493) (15,467,186) (3,484,991) (613,813) (4,098,804) Derivative instruments 4,283,165 9,823,155 14,106,320 1,177,870 2,560,305 3,738,175 Commissions 147,490 - 147,490 40,560 (1,475) 39,085 Other provisions 37,529,676 (34,626,848) 2,902,828 10,320,661 (9,551,412) 7,69,249 Financial guarantee liabilities 12,893 11,666 24,559 3,546 2,962 6,508 Share-based payment 59,650,111 (30,868,838) 28,781,273 16,403,781 (8,776,744) 7,627,037 Membership rights 42,155 (4,437) 37,718 11,593 (1,598) 9,995 Exchange differences on - 201,143,514 </td <td>Lease receivables</td> <td></td> <td>(9,273,955)</td> <td></td> <td>(36,829,218)</td> <td></td> <td>(46,103,173)</td> <td></td> <td>(2,550,337)</td> <td></td> <td>(9,667,004)</td> <td></td> <td>(12,217,341)</td>	Lease receivables		(9,273,955)		(36,829,218)		(46,103,173)		(2,550,337)		(9,667,004)		(12,217,341)
Accrued income (deferred revenue) 58,406,206 3,363,743 61,769,949 16,061,707 307,330 16,369,037 Prepaid expenses (deferred expenses) (12,672,693) (2,794,493) (15,467,186) (3,484,991) (613,813) (4,096,804) Derivative instruments 4,283,165 9,823,155 14,106,320 1,177,870 2,560,305 3,738,175 Commissions 147,490 - 147,490 40,560 (1,475) 39,085 Other provisions 37,529,676 (34,626,848) 2,902,828 10,320,661 (9,551,412) 769,249 Financial guarantee liabilities 12,893 11,666 24,559 3,546 2,962 6,508 Share-based payment 59,650,111 (30,868,38) 28,781,273 16,403,781 (8,776,744) 7,627,037 Membership rights 42,155 (4,437) 37,718 11,593 (1,598) 9,995 Exchange differences on - 201,143,514 201,143,514 - 53,303,031 53,303,031 Investments in associates - 8,3	Bonus		33,091		(33,091)		-		9,100		(9,100)		-
revenue) 58,406,206 3,363,743 61,769,949 16,061,707 307,330 16,369,037 Prepaid expenses (deferred expenses) (12,672,693) (2,794,493) (15,467,186) (3,484,991) (613,813) (4,098,804) Derivative instruments 4,283,165 9,823,155 14,106,320 1,177,870 2,560,305 3,738,175 Commissions 147,490 - 147,490 40,560 (1,475) 39,085 Other provisions 37,529,676 (34,626,848) 2,902,828 10,320,661 (9,551,412) 769,249 Financial guarantee liabilities 12,893 11,666 24,559 3,546 2,962 6,508 Share-based payment 59,650,111 (30,868,838) 28,781,273 16,403,781 (8,776,744) 7,627,037 Membership rights 42,155 (4,437) 37,718 11,565 10,156 21,721 operations - 201,143,514 201,143,514 - 53,303,031 53,303,031 Investments in associates - 80,832,013 -	Other receivables		(147,429)		-		(147,429)		(40,543)		1,474		(39,069)
expenses) (12,672,693) (2,794,493) (15,467,186) (3,484,991) (613,813) (4,088,804) Derivative instruments 4,283,165 9,823,155 14,106,320 1,177,870 2,560,305 3,738,175 Commissions 147,490 - 147,490 40,550 (1,475) 39,085 Other provisions 37,529,676 (34,626,848) 2,902,828 10,320,661 (9,551,412) 769,249 Financial guarantee liabilities 12,893 11,666 24,559 3,546 2,962 6,508 Share-based payment 59,650,111 (30,868,838) 28,781,273 16,403,781 (8,776,744) 7,627,037 expenses 59,650,111 (30,868,838) 28,781,273 16,403,781 (8,776,744) 7,627,037 Membership rights 42,155 (4,437) 37,718 11,593 (1,598) 9,995 Exchange differences on translation of foreign 42,056 39,909 81,965 11,565 10,156 21,721 operations - 201,143,514 20	(58,406,206		3,363,743		61,769,949		16,061,707		307,330		16,369,037
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			(12,672,693)		(2,794,493)		(15,467,186)		(3,484,991)		(613,813)		(4,098,804)
Other provisions 37,529,676 (34,626,848) 2,902,828 10,320,661 (9,551,412) 769,249 Financial guarantee liabilities 12,893 11,666 24,559 3,546 2,962 6,508 Share-based payment expenses 59,650,111 (30,868,838) 28,781,273 16,403,781 (8,776,744) 7,627,037 Membership rights 42,155 (4,437) 37,718 11,593 (1,598) 9,995 Exchange differences on translation of foreign 42,056 39,909 81,965 11,565 10,156 21,721 operations - 201,143,514 201,143,514 - 53,303,031 53,303,031 Investments in associates - 8,307,162 8,307,162 - 2,201,398 2,201,398 Tax losses 80,832,013 - 80,832,013 22,228,804 (808,320) 21,420,484 Tax credits 5,634,466 (273,274) 5,361,192 5,634,466 (273,274) 5,361,192 W 408,069,948 42,136,021 W 450,205,969	Derivative instruments		4,283,165		9,823,155		14,106,320		1,177,870		2,560,305		3,738,175
Financial guarantee liabilities 12,893 11,666 24,559 3,546 2,962 6,508 Share-based payment expenses 59,650,111 (30,868,838) 28,781,273 16,403,781 (8,776,744) 7,627,037 Membership rights 42,155 (4,437) 37,718 11,593 (1,598) 9,995 Exchange differences on translation of foreign 42,056 39,909 81,965 11,565 10,156 21,721 operations - 201,143,514 201,143,514 - 53,303,031 53,303,031 Investments in associates - 8,307,162 8,307,162 - 2,201,398 2,201,398 Tax losses 80,832,013 - 80,832,013 22,228,804 (808,320) 21,420,484 Tax credits <u>5,634,466</u> (27,274) <u>5,361,192</u> 5,634,466 (273,274) 5,361,192 W 408,069,948 W 42,136,021 W 450,205,969 W 116,304,226 W 6,940,832 W 123,245,058 Unrecognized deferred assets W (48,991,898) W (48,991,898) W (Commissions		147,490		-		147,490		40,560		(1,475)		39,085
Share-based payment expenses 59,650,111 (30,868,838) 28,781,273 16,403,781 (8,776,744) 7,627,037 Membership rights 42,155 (4,437) 37,718 11,593 (1,598) 9,995 Exchange differences on translation of foreign 42,056 39,909 81,965 11,565 10,156 21,721 operations - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td>Other provisions</td> <td></td> <td>37,529,676</td> <td></td> <td>(34,626,848)</td> <td></td> <td>2,902,828</td> <td></td> <td>10,320,661</td> <td></td> <td>(9,551,412)</td> <td></td> <td>769,249</td>	Other provisions		37,529,676		(34,626,848)		2,902,828		10,320,661		(9,551,412)		769,249
expenses59,650,111(30,868,838) $28,781,273$ $16,403,781$ $(8,776,744)$ $7,627,037$ Membership rights $42,155$ $(4,437)$ $37,718$ $11,593$ $(1,598)$ $9,995$ Exchange differences on $11,565$ $10,156$ $21,721$ translation of foreign $42,056$ $39,909$ $81,965$ $11,565$ $10,156$ $21,721$ operations $11,565$ $10,156$ $21,721$ $21,721$ Financial liabilities at fair value through profit or loss $ 201,143,514$ $201,143,514$ $ 53,303,031$ $53,303,031$ Investments in associates $ 8,307,162$ $8,307,162$ $ 2,201,398$ $2,201,398$ Tax losses $80,832,013$ $ 80,832,013$ $22,228,804$ $(808,320)$ $21,420,484$ Tax credits $5,634,466$ $(273,274)$ $5,361,192$ $5,634,466$ $(273,274)$ $5,361,192$ W $408,069,948$ Ψ $42,136,021$ Ψ $450,205,969$ Ψ $116,304,226$ Ψ $6,940,832$ Ψ Unrecognized deferred assets Ψ $(37,795,012)$ Ψ $(11,196,886)$ Ψ $(48,991,898)$	Financial guarantee liabilities		12,893		11,666		24,559		3,546		2,962		6,508
Exchange differences on translation of foreign 42,056 39,909 81,965 11,565 10,156 21,721 operations - 201,143,514 201,143,514 - 53,303,031 53,303,031 Financial liabilities at fair value through profit or loss - 201,143,514 201,143,514 - 53,303,031 53,303,031 Investments in associates - 8,307,162 8,307,162 - 2,201,398 2,201,398 Tax losses 80,832,013 - 80,832,013 22,228,804 (808,320) 21,420,484 Tax credits 5,634,466 (273,274) 5,361,192 5,634,466 (273,274) 5,361,192 W 408,069,948 W 42,136,021 W 450,205,969 W 116,304,226 W 6,940,832 W 123,245,058 Unrecognized deferred assets W (37,795,012) W (11,196,886) W (48,991,898)			59,650,111		(30,868,838)		28,781,273		16,403,781		(8,776,744)		7,627,037
translation of foreign operations 42,056 39,909 81,965 11,565 10,156 21,721 operations Financial liabilities at fair value through profit or loss - 201,143,514 - 53,303,031 53,303,031 Investments in associates - 8,307,162 8,307,162 - 2,201,398 2,201,398 Tax losses 80,832,013 - 80,832,013 22,228,804 (808,320) 21,420,484 Tax credits 5,634,466 (273,274) 5,361,192 5,634,466 (273,274) 5,361,192 Unrecognized deferred assets - - - 450,205,969 + 116,304,226 + 6,940,832 + 123,245,058	Membership rights		42,155		(4,437)		37,718		11,593		(1,598)		9,995
operations Financial liabilities at fair - 201,143,514 201,143,514 - 53,303,031 53,303,031 value through profit or loss - 8,307,162 8,307,162 - 2,201,398 2,201,398 Investments in associates - 8,307,162 8,307,162 - 2,201,398 2,201,398 Tax losses 80,832,013 - 80,832,013 22,228,804 (808,320) 21,420,484 Tax credits 5,634,466 (273,274) 5,361,192 5,634,466 (273,274) 5,361,192 W 408,069,948 W 42,136,021 W 450,205,969 W 116,304,226 W 6,940,832 W 123,245,058 Unrecognized deferred assets W (37,795,012) W (11,196,886) W (48,991,898)	Exchange differences on												
value through profit or loss- $201,143,514$ $201,143,514$ - $53,303,031$ $53,303,031$ Investments in associates- $8,307,162$ $8,307,162$ - $2,201,398$ $2,201,398$ Tax losses $80,832,013$ - $80,832,013$ $22,228,804$ $(808,320)$ $21,420,484$ Tax credits $5,634,466$ $(273,274)$ $5,361,192$ $5,634,466$ $(273,274)$ $5,361,192$ W $408,069,948$ \forall $42,136,021$ \forall $450,205,969$ \forall $116,304,226$ \forall $6,940,832$ \forall $123,245,058$ Unrecognized deferred assets \forall $(37,795,012)$ \forall $(11,196,886)$ \forall $(48,991,898)$	Ŭ		42,056		39,909		81,965		11,565		10,156		21,721
Tax losses $80,832,013$ - $80,832,013$ $22,228,804$ $(808,320)$ $21,420,484$ Tax credits $5,634,466$ $(273,274)$ $5,361,192$ $5,634,466$ $(273,274)$ $5,361,192$ \forall $408,069,948$ \forall $42,136,021$ \forall $450,205,969$ \forall $116,304,226$ \forall $6,940,832$ \forall $123,245,058$ Unrecognized deferred assets \forall $(37,795,012)$ \forall $(11,196,886)$ \forall $(48,991,898)$			-		201,143,514		201,143,514		-		53,303,031		53,303,031
Tax credits 5,634,466 (273,274) 5,361,192 5,634,466 (273,274) 5,361,192 W 408,069,948 W 42,136,021 W 450,205,969 W 116,304,226 W 6,940,832 W 123,245,058 Unrecognized deferred assets W (37,795,012) W (11,196,886) W (48,991,898)	Investments in associates		-		8,307,162		8,307,162		-		2,201,398		2,201,398
₩ 408,069,948 ₩ 42,136,021 ₩ 450,205,969 ₩ 116,304,226 ₩ 6,940,832 ₩ 123,245,058 Unrecognized deferred assets ₩ (37,795,012) ₩ (11,196,886) ₩ (48,991,898)	Tax losses		80,832,013		-		80,832,013		22,228,804		(808,320)		21,420,484
Unrecognized deferred assets $\#$ (37,795,012) $\#$ (11,196,886) $\#$ (48,991,898)	Tax credits		5,634,466		(273,274)	_	5,361,192		5,634,466		(273,274)	_	5,361,192
		₩	408,069,948	₩	42,136,021	₩	450,205,969	₩	116,304,226	₩	6,940,832	₩	123,245,058
	Unrecognized deferred assets					_		₩	(37,795,012)	₩	(11,196,886)	₩	(48,991,898)
	J							₩	78,509,214	₩	(4,256,054)	₩	74,253,160

25. Income Tax Expense, (cont'd)

(in thousands of						December	31, 20	21				
Korean won)		Temp	orary di	fferences and oth	ers			Def	ferred	tax assets (liabilitio	es)	
				Increase						Increase		
	В	eginning	(decrease)		Ending		Beginning		(decrease)		Ending
Unearned revenue	₩	17,901,278	₩	(14,376,054)	₩	3,525,224	₩	4,332,109	₩	(3,362,672)	₩	969,437
Depreciation		18,287		(6,624)		11,663		4,425		(1,218)		3,207
Government grants		1,145,763		133,818		1,279,581		277,275		74,610		351,885
Allowance for depreciation		(1,145,763)		(133,818)		(1,279,581)		(277,275)		(74,610)		(351,885)
Amortization		9,159		259,318		268,477		2,217		71,614		73,831
Impairment loss on		4 404 754		(000,400)		405.040		070 404				447.045
intangible assets		1,124,754		(699,136)		425,618		272,191		(155,146)		117,045
Accrued expenses		107,926,170		37,656,665		145,582,835		26,118,133		13,917,147		40,035,280
Investments in subsidiaries		(25,114,094)		35,560,362		10,446,268		(6,077,611)		8,950,335		2,872,724
Financial assets at fair value		1,990,294		(19,734,244)		(17,743,950)		481,651		(5,361,237)		(4,879,586)
through profit or loss												
Financial assets at fair value		(45,404,000)		(04.054.007)		(70.050.040)		(40.007.404)		(40,000,047)		(04.070.400)
through other comprehensive income		(45,401,326)		(31,251,287)		(76,652,613)		(10,987,121)		(10,092,347)		(21,079,468)
Bad debt expenses		119,265		-		119,265		28,862		3,936		32,798
Provision for impairment		65,867,972		13,695,272		79,563,244		15,940,049		5,939,843		21,879,892
Post-employment benefit obligation		6,604,271		4,168,552		10,772,823		1,598,234		1,364,292		2,962,526
Accrued income		(1,242,764)		363,953		(878,811)		(300,749)		59,076		(241,673)
Provision for restoring costs		5,000,534		7,127,075		12,127,609		1,210,129		2,124,964		3,335,093
Facilities		(1,998,378)		1,374,092		(624,286)		(483,608)		311,929		(171,679)

25. Income Tax Expense, (cont'd)

(in thousands of						December	31, 202	:1				
Korean won)		Temp	orary di	fferences and oth	ers			Def	ferred	tax assets (liabilitie	es)	
				Increase						Increase		
	В	eginning	(decrease)		Ending	E	Beginning		(decrease)		Ending
Present value discounts	₩	2,391,430	₩	2,980,259	₩	5,371,689	₩	578,726	₩	898,488	₩	1,477,214
Right-of-use assets		(61,945,696)		(75,122,777)		(137,068,473)		(14,990,858)		(22,702,972)		(37,693,830)
Lease liabilities		65,132,480		83,171,641		148,304,121		15,762,060		25,021,573		40,783,633
Lease receivables		(1,865,489)		(7,408,466)		(9,273,955)		(451,448)		(2,098,889)		(2,550,337)
Other payables		(32,148)		32,148		-		(7,780)		7,780		-
Bonus		231,640		(198,549)		33,091		56,057		(46,957)		9,100
Other receivables		(147,429)		-		(147,429)		(35,678)		(4,865)		(40,543)
Accrued income (deferred revenue)		50,984,357		7,421,849		58,406,206		12,338,214		3,723,493		16,061,707
Prepaid expenses (deferred expenses)		(11,562,158)		(1,110,535)		(12,672,693)		(2,798,042)		(686,949)		(3,484,991)
Derivative instruments		774,000		3,509,165		4,283,165		187,308		990,562		1,177,870
Accumulated												
depreciation(conversion to		(26)		26		-		(6)		6		-
KIFRS)												
Commissions		12,877		134,613		147,490		3,116		37,444		40,560
Other provisions		44,762,724		(7,233,048)		37,529,676		10,832,579		(511,918)		10,320,661
Financial guarantee liabilities		12,236		657		12,893		2,961		585		3,546
Share-based payment expenses		-		59,650,111		59,650,111		-		16,403,781		16,403,781
Membership rights		-		42,155		42,155		-		11,593		11,593
Exchange differences on												
translation of foreign operations		-		42,056		42,056		-		11,565		11,565
Tax losses		95,723,478		(14,891,465)		80,832,013		23,165,082		(936,278)		22,228,804
Tax credits		11,886,863		(6,252,397)		5,634,466		11,886,863		(6,252,397)		5,634,466
	₩	329,164,561	₩	78,905,387	₩	408,069,948	₩	88,668,065	₩	27,636,161	₩	116,304,226
Unrecognized deferred assets							₩	(27,574,366)	₩	(10,220,646)	₩	(37,795,012)
Ŭ							₩	61,093,699	₩	17,415,515	₩	78,509,214
							· · ·	,,		,,		.,,

25. Income Tax Expense, (cont'd)

The analysis of deferred tax assets and liabilities as of December 31, 2022 and 2021, is as follows:

(in thousands of Korean won)	December 31, 2022			cember 31, 2021
Deferred tax assets				
Deferred tax asset to be recovered within 12 months	₩	39,961,046	₩	57,328,062
Deferred tax asset to be recovered after more than 12 months		122,726,271		91,675,145
Deferred tax liabilities				
Deferred tax liability to be recovered within 12 months		(4,350,559)		(3,767,207)
Deferred tax liability to be recovered after more than 12 months		(84,083,598)		(66,726,786)
Deferred tax assets, net	₩	74,253,160	₩	78,509,214

The tax effect that is charged or credited directly to other comprehensive income (expenses) for the years ended December 31, 2022 and 2021, is as follows:

(in thousands of Korean won)		De	ecen	nber 31, 2022	2			ſ	Dece	ember 31, 202	1
	E	Before tax		Tax effect		After tax		Before tax		Tax effect	After tax
Remeasurements of net defined benefit liability	₩	6,324,415	₩	(1,739,214)	₩	4,585,201	₩	(3,265,582)	₩	898,035	₩ (2,367,547)
Gain on disposal of treasury shares		-		-		-		8,900,161		(2,447,544)	6,452,617
Exchange differences on translation of foreign operations		(39,910)		10,975		(28,935)		(12,239)		3,366	(8,873)
Gain on valuation of financial assets at fair value through other											
comprehensive income	(61,349,735)	_	15,641,853	(4	45,707,882)		31,251,286		(8,594,104)	22,657,182
	₩ (55,065,230)	₩	13,913,614	₩ (4	41,151,616)	₩	36,873,626	₩	(10,140,247)	₩ 26,733,379

Details of deductible temporary differences not recognized as deferred tax assets as of December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	De	ecember 31, 2022	December 31, 2021		
Deductible(taxable) temporary differences	₩	104,043,074 80.832.013	₩	56,604,384 80.832.013	
Tax losses		80,832,013		80,8	

25. Income Tax Expense, (cont'd)

As of December 31, 2022 and 2021, the Company recognized deferred tax assets only to the extent that it is probable that taxable profit will be available against which the deductible temporary differences can be utilized and the deferred tax deduction effect will be realized in the foreseeable future. In addition, deferred tax assets were not recognized for tax losses and tax credits.

As of December 31, 2022, the Company did not recognize deferred tax assets arising from the certain deductible (taxable) temporary differences associated with investments in subsidiaries amounting to $\forall 104,043,074$ thousand, since it is probable that the temporary differences will not reverse in the foreseeable future.

The maturity of unused tax losses as of December 31, 2022 and 2021, is as follows:

(in thousands of Korean won)	December :	31. 2022	December	31. 2021
	Amount	Maturity	Amount	Maturity
2017	37,611,924	2027	37,611,924	2027
2018	43,220,089	2028	43,220,089	2028
	₩ 80,832,013		₩ 80,832,013	

26. Earnings per Share

Basic earnings per share is calculated by dividing the profit attributable to owners of the Company by the weighted average number of ordinary shares outstanding during the financial year excluding treasury shares.

(a) Basic earnings per share

(in thousands of Korean won)	Decen	nber 31, 2022	December 31, 2021				
Profit attributable to the ordinary equity holders of the Company Weighted average number of ordinary shares outstanding	₩	487,142,608 46,894,298 shares	₩	542,202,251 43,245,333 shares			
Basic earnings per share (in Korean won)	₩	10,388	₩	12,538			

26. Earnings per Share, (cont'd)

(b) Diluted earnings per share

Diluted earnings per share are calculated by applying the weighted average number of outstanding ordinary shares adjusted to the assumption that all dilutive potential ordinary shares are converted into ordinary shares. The Company has one category of dilutive potential ordinary shares: share options(including restricted stock units). For the share options, a calculation is done to determine the number of shares that could have been acquired at fair value (determined as average market price for the year) based on the monetary value of the subscription rights attached to outstanding share options.

(in thousands of Korean won)	De	cember 31, 2022	De	cember 31, 2022
Profit attributable to ordinary equity holders	₩	487,142,608	₩	542,202,251
<i>(in shares)</i> Weighted average number of ordinary shares in issue Adjustment for:		46,894,298		43,245,333
Share options		398,033		881,545
Weighted average number of ordinary shares for diluted earnings per share		47,292,331		44,126,877
<i>(in Korean won)</i> Diluted earnings per share:	₩	10,301	₩	12,287

26. Earnings per Share, (cont'd)

(c) Weighted average number of ordinary shares outstanding

Details of weighted average number of ordinary shares outstanding calculation for the years ended December 31, 2022 and 2021, are as follows:

(in shares)		December 31, 2022	
	Shares	Weight (Days)	Multiple
Beginning	48.967.045	365	17,872,971,425
Acquisition of treasury shares	(2,167,418)	365	(791,107,570)
Exercise of share options	5,000	353	1,765,000
Exercise of share options	100,000	326	32,600,000
Exercise of share options	9,500	20	190,000
		_	17,116,418,855
Days			365
Weighted average number of ordinary shares outstanding		-	46,894,298

(in shares)	Γ	December 31, 2021	
	Shares	Weight (Days)	Multiple
Beginning	42,785,185	365	15,616,592,525
Acquisition of treasury shares	(2,192,760)	365	(800,357,400)
Exercise of share options	1,000	348	348,000
Exercise of share options	318,630	266	84,755,580
Exercise of share options	169,255	222	37,574,610
Disposal of treasury shares	25,342	212	5,372,504
Paid-in capital increases	5,624,000	148	832,352,000
Exercise of share options	53,375	136	7,259,000
Exercise of share options	100	81	8,100
Exercise of share options	5,000	80	400,000
Exercise of share options	10,500	23	241,500
		-	15,784,546,419
Days		_	365
Weighted average number of ordinary shares outstanding		-	43,245,333

27. Statements of Cash Flows

(a) Cash generated from operations	De eensken 24	December 24
(in thousands of Korean won)	December 31, 2022	December 31, 2021
Profit for the year	₩ 487,142,608	₩ 542,202,251
Adjustments for:		
Addition of expenses, etc. without cash outflow	524,629,301	511,218,158
Performance-based incentive	(1,659,226)	33,226,000
Post-employment benefits	3,879,017	1,919,076
Depreciation	56,913,058	49,980,293
Depreciation – investment properties	745,365	622,801
Amortization	2,949,507	2,760,961
Share-based payment expenses	(53,568,297)	125,599,571
Impairment loss	3,271,519	964,174
Loss on Foreign exchange	35,527,789	1,624,711
Other impairment loss	9,406,313	20,555,462
Impairment loss on investments in subsidiaries	176,913,004	27,059,975
Impairment loss on investments in associates	8,307,162	-
Loss on valuation of financial assets at fair value through profit or loss	55,444,210	831,986
Loss on disposal of financial assets at fair value through profit or loss Loss on valuation of financial liabilities at fair value	66,346,075	-
through profit or loss	7,652,150	1,499,524
Loss on valuation of derivative instruments	785,814	671,015
Loss on disposal of property and equipment	1,056,412	769,334
Loss on disposal of leases	20,058	11,254
Interest expenses	6,148,544	5,848,123
Other expense	(34,620,170)	-
Income tax expense	179,110,997	237,273,898
Deduction of income, etc. without cash inflow	(189,164,351)	(100,104,755)
Gain on Foreign Exchange	(68,564,071)	(61,953,150)
Gain on valuation of financial assets at fair value		
through profit or loss	(43,185,227)	(21,058,286)
Gain on disposal of financial assets at fair value through profit or loss	(19,093,865)	(891,732)
Gain on valuation of financial liabilities at fair value	(10,000,000)	(001,102)
through profit or loss	(12,373,852)	-
Gain on transactions of derivative instruments	(1,827,494)	(253,841)
Gain on disposal of property and equipment	(107,775)	(10,873)
Gain on disposal of leases	(3,787,063)	(886,326)
Interest income	(32,970,418)	(11,697,188)
Dividend income	(7,194,005)	(570,827)
Financial guarantee income	(22,593)	(23,664)
Other income	(37,988)	(2,758,868)

27. Statements of Cash Flows, (cont'd)

(in thousands of Korean won)	December 31, 2022	December 31, 2021
Change in operating assets and liabilities:	(76,952,940)	(81,478,009)
Trade receivables	(30,403,278)	(58,386,936)
Other receivables	(3,034,422)	(1,001,840)
Advance payment	(9,587,632)	(663,105)
Prepaid expenses	(7,625,654)	270,265
Long-term advance payment	(3,629,637)	-
Other payables	16,478,785	19,907,810
Accrued expenses	(49,398,385)	(26,065,028)
Withholdings	5,043,203	(282,006)
Advance receipts	242,606	541,617
Unearned revenue	3,732,396	(7,950,131)
Other provisions	-	(4,474,180)
Long-term accrued expenses	2,004,772	(2,047,906)
Payments of net defined benefit liability	(775,694)	(1,326,569)
Cash provided by(used in) operations	₩ 745,654,618	₩ 871,837,645

27. Statements of Cash Flows, (cont'd)

(b) Non-cash transactions

(in thousands of Korean won)	December 31, 2022	December 31, 2021
Current portion of long-term loan	₩ 101,281,645	₩ 6,528,000
Current portion of long-term financial instruments	30,000,000	-
Reclassification from construction-in-progress	12,954,613	10,348,917
Increase in right-of-use assets	68,674,022	105,925,814
Reclassification to lease receivables from right-of-use assets	42,517,341	-
Current portion of lease receivables	13,459,339	2,968,431
Current portion of lease liabilities	40,471,439	21,328,911
Reclassification to investment in associates from advance payment	7,123,732	-
Change in other payables related to acquisition of property and equipment	101,472	262,771
Change in other payables related to acquisition of intangible assets	5,417	-
Reclassification to intangible assets from long-term advanced payments	633,677	194,135
Distribution of treasury shares as purchase consideration of investments in subsidiaries	-	8,900,161
Increase in financial liabilities at fair value through profit or loss related to acquisition of investments in		
subsidiaries	-	204,365,692
Change in other payables related to acquisition of investments in subsidiaries	2,268,702	1,898,863
Increase in net derivative liabilities related to acquisition of investments in subsidiaries	10,864,835	3,612,150
Reclassification to investment in subsidiaries from financial assets at fair value through profit or loss	11,642,400	-
Reclassification to investment in associates from financial assets at fair value through profit or loss Reclassification to investment in associates from	801,875	-
financial assets at fair value through other comprehensive income	2,000,000	-

27. Statements of Cash Flows, (cont'd)

(c) Changes in liabilities arising from financing activities

Changes in liabilities arising from financial activities for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)						December 31, 2022				
				sh flows from		Non-cash flows				
	I	Beginning		financing activities		New lease		Others		Ending
Leasehold deposits received	₩	6,819,653	₩	1,210,904	₩	-	₩	(715,034)	₩	7,315,523
Lease liabilities		148,304,121		(42,893,640)		4,367,476		60,536,945		170,314,902
	₩	155,123,774	₩	(41,682,736)	₩	4,367,476	₩	59,821,911	₩	177,630,425

(in thousands of

Korean won)		December 31, 2021										
			Cas	sh flows from		Non-cas						
	E	Beginning		financing activities		New lease		Others		Ending		
Leasehold deposits received	₩	4,439,227	₩	2,309,038	₩	-	₩	71,388	₩	6,819,653		
Lease liabilities		65,132,480		(30,086,125)		96,794,628		16,463,138		148,304,121		
	₩	69,571,707	₩	(27,777,087)	₩	96,794,628	₩	16,534,526	₩	155,123,774		

28. Related Party Transactions

As of December 31, 2022 and 2021, the subsidiaries, associate and other important related parties of the Company are as follows:

Туре	December 31, 2022	December 31, 2021
Subsidiaries	Bluehole Studio, Inc.	Bluehole Studio, Inc.
	Rising Wings, Inc.	Rising Wings, Inc.
	PUBG Santa Monica, Inc.	PUBG Santa Monica, Inc.
	PUBG Amsterdam B.V.	PUBG Amsterdam B.V.
	PUBG Mad Glory, LLC	PUBG Mad Glory, LLC
	PUBG Shanghai	PUBG Shanghai
	KP PTE. LTD.	KP PTE. LTD.
	Striking Distance Studios, Inc.	Striking Distance Studios, Inc.
	PUBG JAPAN Corporation	PUBG JAPAN Corporation
	Krafton Ventures, L.L.C.	Krafton Ventures, L.L.C.
	Krafton Ventures Fund, L.P.	Krafton Ventures Fund, L.P.
	KRAFTON Ventures, Inc.	KRAFTON Ventures, Inc.
	PUBG Entertainment, Inc.	PUBG Entertainment, Inc.
	Indestructible Frying Pan, LLC	Indestructible Frying Pan, LLC
	Striking Distance Studios Spain, S.L.	Striking Distance Studios Spain, S.L.
	En Masse Entertainment Texas, Inc. ¹	En Masse Entertainment Texas, Inc. ¹
	PUBG INDIA PRIVATE LIMITED	PUBG INDIA PRIVATE LIMITED
	SDS Interactive Canada Inc.	SDS Interactive Canada Inc.
	Dream Motion, Inc.	Dream Motion, Inc.
	Thingsflow Inc.(Domestic)	Thingsflow Inc.(Domestic)
	Tiptoe Games Inc.	Tiptoe Games Inc.
	Krafton Global GP, LLC	Krafton Global GP, LLC
	Krafton Global, LP	Krafton Global, LP
	Thingsflow Inc.	Thingsflow Inc.
	Unknown Worlds Entertainment, Inc.	Unknown Worlds Entertainment, Inc.
	Unknown Worlds Entertainment,Ltd(UK)	Unknown Worlds Entertainment,Ltd(UK
	En Masse Entertainment, Inc.	En Masse Entertainment, Inc.
	5minlab Corp.	Between Us Co. Ltd. ²
	Neon Giant AB	
	KRAFTON MONTREAL STUDIO, INC.	
Associates	Shinhan Alpha REIT Co., Ltd.	Shinhan Alpha REIT Co., Ltd.
	Hidden Sequence Co., Ltd.	Hidden Sequence Co., Ltd.
	1Up Ventures, L.P.	1Up Ventures, L.P.
	Smart Krafton-BonAngels Fund	Smart Krafton-BonAngels Fund
	Nodwin Gaming Private Limited	Nodwin Gaming Private Limited
	Un Note Co., Ltd.	Un Note Co., Ltd.
	Loco Interactive Pte Limited	Loco Interactive Pte Limited
	Nasadiya Technologies Private Limited	Nasadiya Technologies Private Limited
	Mirae Asset Maps General Private Real Estate Investment Trust 66	Mirae Asset Maps General Private Real Estate Investment Trust 66
	Seoul Auction Blue Co., Ltd.	-

	XXBLUE Co., Ltd.	-
	Tamatem Inc.	-
	Nautilus Mobile App Private Limited	-
	Mebigo Labs Private Limited	-
	Smart KNB Booster Fund	-
	NIRVANANA	-
	1Up Ventures Fund II	-
Other Related	Chicken Dinner Industries, LLC ³	Chicken Dinner Industries, LLC ³
Parties	Voyager X, Inc	Voyager X, Inc
	BonAngels Pacemaker Fund 2	BonAngels Pacemaker Fund 2

- ¹ During the years ended December 31, 2022, Bonus XP, Inc. changed its name to En Masse Entertainment Texas, Inc.
- ² During the years ended December 31, 2022, the entity was Merged with Thingsflow Inc. and ceased to exist during the period
- ³ During the years ended December 31, 2022, Spetznatz Helmet, LLC changed its name to Chicken Dinner Industries, LLC.

Significant transactions with related parties for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean	December 31,					31, 20	, 2022					
won)	Revenue Expenses											
			F	inance		Other	0	perating		inance		Other
A I I I I I I I	F	Revenue	i	ncome ¹	i	ncome		costs		costs ¹	e	kpenses ²
Subsidiaries ³			14/		14/		14				144	
Bluehole Studio, Inc.	₩	2,604,210	₩	42,928	₩	394,270	₩	-	₩	3,757	vv	-
Rising Wings, Inc.		211,108		-		44,139		-		-		1,000,000
PUBG Santa Monica, Inc.		-		119,107		6,463		49,883,215		-		-
PUBG Amsterdam B.V.		897,609		-		-		25,383,788		-		-
PUBG Mad Glory, LLC		-		-		7,588		21,586,857		-		-
PUBG Shanghai		5,667,020		-		-		12,993,574		-		-
KP PTE. LTD		-		21,889		7,882		-		-		-
Striking Distance Studios, Inc		510,172		732,037		8,543	1	91,457,741		-		-
PUBG Japan Corporation		-		10,121		-		8,585,686		-		-
PUBG Entertainment, Inc.		-		-		-		299,079		-		-
Striking Distance Studios Spain, S.L.		-		-		-		2,610,218		-		-
En Masse Entertainment								-				6,968,455
Texas, Inc. PUBG INDIA PRIVATE		-		-		-				-		
		-		-		-		7,607,927		-		-
Between Us Co. Ltd.		8,357		1,030		107,919		-		149		1,351
Dream Motion, Inc.		40,662		-		7,973		60,000		-		-
Thingsflow Inc. ⁴		276,918		259,287		6,460,270		-		2,231		18,707
Tiptoe Games Inc.		23		356		-		-		54		-
SDS Interactive Canada Inc.		-		-		-		3,498,872		-		-
5minlab Corp.		147,722		-		-		-		-		-
En Masse Entertainment, Inc.		-		-		-		-		-		1,506,889
Sub Total	₩	10,363,801	₩	1,186,755	₩	7,045,047	₩ 3	23,966,957	₩	6,191	₩	9,495,402
Associates												
Shinhan Alpha REIT Co., Ltd.	₩	-	₩	389,756	₩	387,398	₩	254,023	₩	1,651,400	₩	-
Nodwin Gaming Private Limited								361,630				
		-		-		-				-		-
Tamatem Inc. NIRVANANA		-		-		-		15,756		-		-
				1,389	14/	-	1.4	-		-		-
Sub Total	₩	-	₩	391,145	₩	387,398	₩	631,409	₩	1,651,400	۸Ą	-
Other Related Parties			1.4.7		1.4.1		14				1.4.1	
Voyager X, Inc	₩	-	₩	-	₩	-	₩	88,000	₩	-	₩	-
Total	₩	10,363,801	₩	1,577,900	₩	7,432,445	₩ 3	24,686,366	₩	1,657,591	₩	9,495,402

¹ Includes lease related profit or loss.

² Includes $\forall 9,475,344$ thousand of bad debt expense.

³Company's purchasing agency services for group purchases to the subsidiaries are not included.

⁴ Includes ₩ 6,456,661 thousand of other income which is recognized by selling 100% shares of Between Us Co. Ltd.

28. Related Party Transactions, (cont'd)

(in thousands of Korean			December 31, 2021									
won)			R	evenue					Ex	penses		
	R	evenue	-	inance ncome¹	h	Other ncome ²	C)perating costs	-	inance costs ¹		Other Denses ²
Subsidiaries ³											•	
Bluehole Studio, Inc.	₩	2,336,815	₩	75,537	₩	2,651,537	₩	-	₩	3,678	₩	-
Rising Wings, Inc.		-		5,063		240,183		-		5,555		-
PUBG Santa Monica, Inc.		-		146,342		-		32,992,968		-		-
PUBG Amsterdam B.V.		897,609		132,058		-		23,168,261		-		-
PUBG Mad Glory, LLC		-		8,847		-		19,493,386		-		-
PUBG Shanghai		-		-		-		10,471,361		-		-
KP PTE. LTD		-		25,134		-		-		-		-
Striking Distance Studios, Inc		-		221,004		-		76,807,359		-		-
PUBG Japan Corporation		-		11,309		-		8,119,417		-		-
Striking Distance Studios Spain, S.L.		-		-		-		2,738,679		-		-
PUBG INDIA PRIVATE LIMITED		-		-		-		2,941,344		-		-
Red Sahara Studio Co., Ltd		1,992		-		-		-		897		-
Between Us Co. Ltd.		157		2,133		15,089		102,820		149		2,126
Dream Motion, Inc.		-		-		20,511		-		-		-
Thingsflow Inc.		721		70,807		12,073		-		688		3,765
Tiptoe Games Inc.		167		176		431		-		13		-
Sub Total	₩	3,237,461	₩	698,410	₩	2,939,824	₩	176,835,595	₩	10,980	₩	5,891
Associates												
Shinhan Alpha REIT Co., Ltd. Nodwin Gaming Private	₩	-	₩	395,595	₩	341,000	₩	276,176	₩	1,726,717	₩	-
Limited		-		-		-		2,005,515		-		-
Sub Total	₩	-	₩	395,595	₩	341,000	₩	2,281,691	₩	1,726,717	₩	-
Other Related Parties												
Voyager X, Inc	₩	-	₩	-	₩		₩	670,100	₩	-	₩	-
Total	₩	3,237,461	₩	1,094,005	₩	3,280,824	₩	179,787,386	₩	1,737,697	₩	5,891

¹ Includes lease related profit or loss.

² Includes $\forall 14,555,710$ thousand of bad debt expense, and $\forall 11,246$ thousand of reversal of allowance for bad debts.

³Company's purchasing agency services for group purchases to the subsidiaries are not included.

28. Related Party Transactions, (cont'd)

Outstanding balances arising from sales/purchases of goods and services as of December 31, 2022 and December 31, 2021, are as follows:

(in thousands of			December 31, 202	2				
Korean won)		Receivables	Payables					
	Account		Other	Account	Other Payables ²			
Subsidiaries	Receivables ¹	Loans ¹	Loans ¹ Receivables ^{1,2} Payables					
Bluehole Studio, Inc.	₩ 444,133	₩ -	₩ 2,375,677	₩ 50,104	₩ 178,246			
Rising Wings, Inc.	226,575	21,300,000	3,260,123	194	-			
PUBG Santa Monica, Inc.		5,697,193	1,347,775	4,900,681	73,155			
PUBG Amsterdam B.V.	-	-	938,046	3,663,075	2,225,519			
PUBG Mad Glory, LLC	-	-	179,334	1,726,366	(470,712)			
PUBG Shanghai	6,056,696	-	467,429	3,056,543	(137,738)			
KP PTE. LTD	-	646,108	106,799	-	-			
Striking Distance Studios, Inc	510,172	56,862,129	9,687,076	35,848,695	3,936			
PUBG Japan Corporation	-	2,635,650	25,377	1,083,265	(173,260)			
Krafton Ventures, L.L.C.	-	-	41	-	-			
Krafton Ventures Fund, L.P.	-	-	50	-	-			
KRAFTON Ventures, Inc.	-	-	41	-	-			
PUBG Entertainment, Inc.	-	-	50	31,535	-			
Striking Distance Studios Spain, S.L.	-	-	340	-	-			
En Masse Entertainment Texas, Inc.	-	21,741,443	5,637	-	-			
PUBG INDIA PRIVATE LIMITED	-	-	6,742	762,839	(10,525)			
Dream Motion, Inc.	2,924	-	105,515	-	-			
Thingsflow Inc.	20,270	5,500,000	152,734	-	79,899			
Tiptoe Games Inc.	-	-	8,580	4	2,122			
Unknown Worlds Entertainment, Inc.	-	-	15,055	167,741	21,642			
SDS Interactive Canada Inc.	-	-	7,969	493,881	-			
5minlab Corp.	9,371	-	1,363	-	-			
KRAFTON MONTREAL STUDIO, INC.	-	-	43,397	-	-			
En Masse Entertainment, Inc.	-	27,403,192	440,614	-	-			
Sub Total	₩ 7,270,141	₩ 141,785,715	₩ 19,175,764	₩ 51,784,923	₩ 1,792,284			
Associates								
Shinhan Alpha REIT Co., Ltd.	₩ -	₩ -	₩ 3,771,819	₩ -	₩ 61,956,634			
Tamatem Inc.	-	-	114,057	-	-			
NIRVANANA		640,000	1,389					
Sub Total	₩ -	₩ 640,000	₩ 3,887,265	₩ -	₩ 61,956,634			
Total	₩ 7,270,141	₩ 142,425,715	₩ 23,063,029	₩ 51,784,923	₩ 63,748,918			

 $^{_1}\text{Receivables}$ are before loss provisions, and provisions for receivables are $\forall 73,785,812$ thousand.

² Includes lease related receivables or payables.

(in thousands of	December 31, 2021									
Korean won)	Receivables							Pa	yables	
		ccount			Other		Account			
Cubaidiariaa	Rec	eivables ¹		Loans ¹	Rec	eivables ^{1,2}	F	Payables	Othe	er Payables ²
Subsidiaries Bluehole Studio, Inc.	₩	568,859	₩	-	₩	1,579,429	₩	367,214	₩	180,337
Rising Wings, Inc.		227,900		20,300,000		273,482		24		-
PUBG Santa Monica, Inc.		-		8,266,164		1,134,401		6,043,941		5,573
PUBG Amsterdam B.V.		-		-		922,638		3,746,295		2,911,629
PUBG Mad Glory, LLC		-		-		153,071		2,807,534		23,234
PUBG Shanghai		448,955		-		269,934		3,210,684		-
KP PTE. LTD		-		612,748		72,661		-		-
Striking Distance Studios, Inc		-		12,761,228		120,344		6,936,896		7,042
PUBG Japan Corporation		-		2,635,650		9,350		1,372,810		-
Striking Distance Studios Spain, S.L.		-		-		451		316,950		-
En Masse Entertainment Texas, Inc.		-		14,772,988		5,637		-		-
PUBG INDIA PRIVATE LIMITED		-		-		1,022		537,992		-
Between Us Co. Ltd.		2,609		-		75,962		2,445		15,397
Dream Motion, Inc.		3,760		-		1,484		-		-
Thingsflow Inc.		-		5,500,000		513,781		-		87,243
Tiptoe Games Inc.		-		-		11,076		2		2,276
En Masse Entertainment, Inc.		-		25,896,303		440,614		-		-
Sub Total	₩	1,252,083	₩	90,745,081	₩	5,585,337	₩	25,342,787	₩	3,232,731
Associates Shinhan Alpha REIT Co., Ltd.	₩	_	₩		₩	4,040,999	₩	-	₩	43,779,530
Sub Total	₩	-	₩	-	₩	4,040,999	₩	-	₩	43,779,530
Total	₩	1,252,083	₩	90,745,081	₩	9,626,336	₩	25,342,787	₩	47,012,261

¹Receivables are before loss provisions, and provisions for receivables are $\forall 64,310,468$ thousand.

² Includes lease related receivables or payables.

Financing transactions with related parties for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of	December 31, 2022											
Korean won)	Loan transactions				Lease transactions				Contributions in cash			
Subsidiaries	Loans		llection		ayment of lease iabilities		lection of lease eivables	Р	ayment of Capital		Acquisition of Convertible bonds	
Bluehole Studio, Inc.	₩	- ₩	_	₩	_	₩	613,909	₩	20,000,000	₩	-	
Rising Wings, Inc.	1,000,00	 1	_		-		-		20,000,000		-	
PUBG Santa Monica,	1,000,00	0										
Inc.		-	2,855,750		-		-		-		-	
Striking Distance												
Studios, Inc. En Masse	45,359,40	0	-		-		-		-		-	
Entertainment Texas,												
Inc.	6,951,64	5	-		-		-		-		-	
PUBG INDIA PRIVATE												
LIMITED		-	-		-		-		1,123,034		-	
Between Us Co. Ltd.		-	-		-		7,954		-		-	
Thingsflow Inc.		-	-		-		51,965		9,302,205		-	
Tiptoe Games Inc.		-	-		-		2,508		-		-	
Krafton Global GP, LLC		-	-		-		-		239,400		-	
Krafton Global, LP		-	-		-		-		1,915,200		-	
SDS Interactive									(=0.000			
Canada Inc.		-	-		-		-		470,299		-	
5minlab Corp. En Masse		-	-		-		-		29,999,948		-	
Entertainment, Inc.	1,515,98	0	-		-		-		-		-	
Sub Total	₩ 54,827,02		2,855,750	₩	-	₩	676,336	₩	63,050,086		-	
Associates	- ,- ,-	_	,,				,					
Shinhan Alpha REIT	14/	14/										
Co., Ltd.	$\forall \forall$	- ₩	-	₩	16,329,206	₩	-	₩	-	₩	-	
1Up Ventures, L.P		-	-		-		-		3,080,000		-	
Smart Krafton-												
BonAngels Fund		-	-		-		-		360,000		-	
Loco Interactive Pte Limited		_	_		_		_		4,097,888		801,875	
Mebigo Labs Private									4,007,000		001,010	
Limited		-	-		-		-		4,744,122		-	
30,000	640,00	00			-				-			
Sub Total	₩ 640,00	5 ₩	-	₩	16,329,206	₩	-	₩	12,282,010	₩	801,875	
Total	₩ 55,467,02	5 ₩	2,855,750	₩	16,329,206	₩	676,336	₩	75,332,096	₩	801,875	

(in thousands of	December 31, 2021										
Korean won)									Cor	tributions in	
		Loan transactions					ansacti	ons		cash	
		Loono	~	ollection		ayment of lease iabilities		ection of receivables	P	ayment of	
Subsidiaries		Loans	U	onection	1	labilities	lease	receivables		Capital	
Bluehole Studio, Inc.	₩	-	₩	-	₩	-	₩	565,280	₩	-	
Rising Wings, Inc.		10,100,000		-		-		53,783		-	
PUBG Santa Monica, Inc.		-		5,440,000		-		-		-	
PUBG Amsterdam B.V.		2,768,560		6,114,160		-		-		-	
Striking Distance Studios, Inc.		4,485,600		-		-		-		1,125,500	
En Masse Entertainment Texas,		10,425,329		-		-		-		-	
		. , -									
PUBG INDIA PRIVATE LIMITED		-		-		-		-		2,289,004	
Red Sahara Studio Co., Ltd		-		2,650,000		-		-		-	
Between Us Co. Ltd.		-		-		-		15,152		-	
Thingsflow Inc.		5,500,000		-		-		27,471		-	
Tiptoe Games Inc.		-		-		-		806		100,000	
Sub Total	₩	33,279,489	₩	14,204,160	₩	-	₩	662,492	₩	3,514,504	
Associates											
Shinhan Alpha REIT Co., Ltd.	₩	-	₩	-	₩	15,875,229	₩	-	₩	-	
1Up Ventures, L.P		-		-		-		-		935,750	
Smart Krafton- BonAngels Fund		-		-		-		-		6,600,000	
Nodwin Gaming Private Limited		-		-		-		-		25,615,890	
Un Note Co., Ltd.		-		-		-		-		1,478	
Loco Interactive Pte Limited		-		-		-		-		3,407,400	
Nasadiya Technologies Private Limited		-		-		-		-		52,238,006	
Mirae Asset Maps General Private Real Estate Investment Trust 66		-		-		-		-		290,000,000	
Sub Total	₩	-	₩	-	₩	15,875,229	₩	-	₩	378,798,524	
Total	₩	33,279,489	₩	14,204,160	₩	15,875,229	₩	662,492	₩	382,313,028	

Details of payment guarantee and collateral provided by the Company to the related parties as of December 31, 2022, are as follows:

<i>(in USD)</i> Subsidiaries	Description	Beneficiary of guarantee	Currency	Guaranteed amount
Striking Distance Studios, Inc.	Payment guarantee related to rent	Sunset Building Company, LLC	USD	2,280,000
PUBG Santa Monica, Inc.	Payment guarantee related to rent	Water Garden Realty Holdings LLC and others	USD	813,600
PUBG Santa Monica, Inc., PUBG Mad Glory LLC, Striking Distance Studios, Inc.	Corporate card issuance guarantee	Citibank N.A.	USD	600,000
PUBG Mad Glory, LLC	Office Rent Guarantee	25 West Main Office LLC	USD	1,807,624

Key management includes registered directors and the executives who have significant authority and responsibility in respect to planning, operating and controlling of the Company's business activities. Compensation for key management for the years ended December 31, 2022 and 2021, consists of:

(in thousands of Korean won)	Decer	nber 31, 2022	December 31, 2021		
Salaries and bonuses	₩	1,416,079	₩	2,382,411	
Share-based payment expenses		(29,448,623)		64,200,320	
Post-employment benefits		179,833		86,567	
	₩	(27,852,711)	₩	66,669,298	

In the event when Shinhan Alpha REIT Co., Ltd., a related party, proposes to sell Greits Pangyo(formerly, Krafton Tower) to a third party, the Company has a preemption right to purchase the real estate.

Tencent Technology (Shenzhen) Company Limited.(including subsidiaries) has been excluded from related parties during the year ended December 31, 2021. The Company recognized revenue and operating costs amounting to $\forall 1,095,781,823$ thousand and $\forall 43,411,154$ thousand respectively, from transactions with Tencent for the year ended December 31, 2021.

The Company purchased 3,433 convertible redeemable preferred stocks held by BonAngels Pacemaker Fund 2, a related party, at $\forall 1,280,001$ thousand during the year ended December 31, 2021.

29. Operating Segment

The Company has a single operating segment. The financial information reported to the Chief Executive Officer is identical to the disclosed financial statements.

Revenue per revenue stream for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Dece	ember 31, 2022	December 31, 2021			
PC	₩	428,079,093	₩	380,081,318		
Mobile		1,239,552,586		1,399,667,288		
Console		76,130,833		14,260,047		
Others		24,013,299		34,365,135		
	₩	1,767,775,811	₩	1,828,373,788		

Revenue by geographical area for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	December 31, 2022				December 31, 2021				
Region	Revenue		Ratio		Revenue		Ratio		
Asia	₩ 1,474,693,239	%	83.42	₩	1,618,649,357	%	88.53		
Korea	92,152,361		5.21		105,115,796		5.75		
America / Europe	189,434,731		10.72		81,857,677		4.48		
Other area	11,495,480		0.65		22,750,958		1.24		
Total	₩ 1,767,775,811	%	100.00	₩	1,828,373,788	%	100.00		

Revenue derived from major external customer contributing more than 10% of the Company's revenue for the years ended December 31, 2022 and 2021, are as follows:

(in thousands of Korean won)	Decembe	er 31, 2022	December 31, 2021			
Major Customer A	$\forall \forall$	1,031,843,813	₩	1,178,710,320		

30. Uncertainties Arising from COVID-19

In order to contain the spread of Coronavirus disease 2019 ("COVID-19"), various preventive and regulatory measures have been implemented globally, including restrictions on travel. As a result, the global economy has been impacted extensively. In addition, governments have announced various policies to aid and provide relief from the impact of COVID-19.

The Company's business is mainly accessible by customers through personal computers and mobile platforms. Potential areas which might be impacted by COVID-19 include recoverability of trade receivables, impairment of tangible and intangible assets, and others. The Company has reasonably estimated the impact of COVID-19 in preparing the separate financial statements.

However, at this stage, significant uncertainties exist in estimating the duration and severity of COVID-19 as well as the ultimate impact of COVID-19 on the Company's separate financial statements.



KPMG SAMJONG Accounting Corp.

152, Teheran-ro, Gangnam-gu, Seoul 06236 (Yeoksam-dong, Gangnam Finance Center 27th Floor) Republic of Korea

Tel +82 (2) 2112 0100 Eax +82 (2) 2112 0101

Independent Auditors' Report on Internal Control over Financial Reporting

Based on a report originally issued in Korean

To the Board of Directors and Shareholders Krafton, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Krafton, Inc.'s (the "Company") internal control over financial reporting ("ICFR") as of December 31, 2022 based on the criteria established in the Conceptual Framework for Designing and Operating ICFR ("ICFR Design and Operation Framework") issued by the Operating Committee of Internal Control over Financial Reporting in the Republic of Korea (the "ICFR Committee").

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on ICFR Design and Operation Framework.

We also have audited, in accordance with Korean Standards on Auditing ("KSAs"), the separate financial statements of the Company, which comprise the separate statement of financial position as of December 31, 2022, the separate statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information, and our report dated March 13, 2023 expressed an unmodified opinion on those separate financial statements.

Basis for Opinion

We conducted our audit in accordance with KSAs. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Internal Control over Financial Reporting section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the internal control over financial reporting in Republic of Korea, 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.

Responsibilities of Management and Those Charged with Governance for the Internal Control over Financial Reporting

The Company's management is responsible for designing, operating and maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report on the Effectiveness of Internal Control over Financial Reporting.

Those charged with governance are responsible for overseeing the Company's internal control over financial reporting.

Auditors' Responsibilities for the Audit of the Internal Control over Financial Reporting

Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We conducted our audit in accordance with KSAs. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk.

Definition and Limitations of Internal Control over Financial Reporting

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

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

The engagement partner on the audit resulting in this independent auditors' report is Chang-Bum Ahn.

PMG Samjory Accounting Corp.

Seoul, Korea March 13, 2023

This report is effective as of March 13, 2023, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the internal control over financial reporting. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

KRAFTON

Report on the Effectiveness of Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

To the Shareholders, Board of Directors and Audit Committee of KRAFTON, Inc.

We, as the Chief Executive Officer (CEO) and the Internal Control over Financial Reporting Officer of KRAFTON, Inc. (the Company), assessed the effectiveness of the design and operation of the Company's Internal Control over Financial Reporting (ICFR) for the year ended December 31, 2022.

The Company's management, including ourselves, is responsible for designing and operating ICFR.

We assessed the design and operating effectiveness of ICFR in the prevention and detection of an error or fraud which may cause material misstatements in the preparation and disclosure of reliable financial statements.

We designed and operated ICFR in accordance with Conceptual Framework for Designing and Operating Internal Control over Financial Reporting established by the Operating Committee of Internal Control over Financial Reporting in Korea (the ICFR Committee). And, we conducted an evaluation of ICFR based on Best Practice Guideline for Evaluating and Reporting Effectiveness of Internal Control over Financial Reporting established by the ICFR Committee.

Based on the assessment results, we believe that the Company's ICFR, as at December 31, 2022, is designed and operating effectively, in all material respects, in accordance with Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.

We certify that this report does not contain any untrue statement of a fact, or omit to state a fact necessary to be presented herein.

We also certify that this report does not contain or present any statement which cause material misunderstandings, and we have reviewed and verified this report with sufficient due care.

KRAFTON

February 7, 2023

7 1 25 F Chang Han Kim,

Chang Han Kim, Chief Executive Officer

-5 2

Dong Keun Bae, Internal Control over Financial Reporting Officer