FINANCIAL STATEMENTS

Table of Contents

SIX Consolidated Financial Statements 2022

Full-Year Report of SIX as at 31 December 2022

For a description of the 2022 results, see pages 10 to 12.

Balance sheet as at 31 December 2022

As at 31 December 2022, total assets stood at CHF 17,171.7 million, which constitutes a decrease of CHF 811.7 million compared to 31 December 2021. This development mainly resulted from:

- decrease in cash at central banks of CHF 2,044.0 million (included in cash and cash equivalents)
- increase in receivables from clearing & settlement of CHF 2,400.9 million
- decrease in bonds at amortized cost and at FVtOCI of CHF 204.6 million (included in current and non-current financial assets)
- decrease in derivatives of CHF 591.2 million (included in current and non-current financial assets)
- decrease in intangible assets of CHF 82.4 million mainly due to amortization and negative foreign exchange effects
- decrease in investments in associates and joint ventures of CHF 116.7 million mainly due to the full acquisition of REGIS-TR and negative foreign exchange effects
- decrease in pension assets of CHF 120.4 million due to higher discount rates, negative performance of the plan assets and asset ceiling (included in other assets)

Liabilities amounted to CHF 12,139.2 million in total as at the balance sheet date, which constitutes a decrease of CHF 631.8 million compared to 31 December 2021. This development mainly resulted from:

- increase of bank overdrafts of CHF 471.8 million related to the business of SECB Swiss Euro Clearing Bank GmbH (SECB)
- decrease in payables from clearing & settlement of CHF 429.1 million
- decrease in derivatives of CHF 587.6 million (included in financial liabilities)

Equity decreased by CHF 179.9 million to CHF 5,031.1 million during the reporting period. This decrease was mainly driven by:

- dividends paid (CHF –89.9 million)
- total comprehensive income for 2022 (CHF –91.9 million)

Consolidated Income Statement

CHF million	Notes	2022	2021 restated[1]
Transaction revenues		597.7	600.6
Service revenues		822.7	825.9
Net interest income from interest margin business	6	47.2	44.5
Other operating income		26.5	27.3
Total operating income	**5**	**1,494.1**	**1,498.3**
Employee benefit expenses	7, 33	–610.1	–601.0
Other operating expenses	8	–486.2	–475.6
Total operating expenses		**–1,096.4**	**–1,076.6**
Earnings before interest, tax, depreciation and amortization (EBITDA)		**397.7**	**421.7**
Depreciation, amortization and impairment	19, 20	–177.5	–173.6
Operating profit		**220.3**	**248.0**
Financial income	9	80.2	49.7
Financial expenses	9	–78.1	–48.4
Share of profit or loss of associates and joint ventures	28	21.6	–102.1
Earnings before interest and tax (EBIT)		**243.9**	**147.2**
Interest income	10	0.9	0.7
Interest expenses	10	–8.6	–11.0
Earnings before tax (EBT)		**236.2**	**136.9**
Income tax expenses	12	–51.2	–63.4
Group net profit		**185.0**	**73.5**
of which attributable to shareholders of SIX Group Ltd		*185.4*	*73.9*
of which attributable to non-controlling interests		*–0.4*	*–0.4*
Earnings per share (CHF)			
Basic profit for the period attributable to shareholders of SIX Group Ltd	11	9.80	3.91
Diluted profit for the period attributable to shareholders of SIX Group Ltd		9.80	3.91

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

[1] See note 2 (under 2.4 Restatement) for further information on the restatement.

Consolidated Statement of Comprehensive Income

CHF million	Notes	2022	2021
Group net profit		**185.0**	**73.5**
Change in actuarial gains/(losses) on defined benefit plans recognized in the reporting period	33	–100.2	159.0
Income taxes on changes in actuarial gains/(losses) on defined benefit plans		21.0	–30.8
Share of other comprehensive income of associates and joint ventures		9.0	2.6
Total items that will not be reclassified to income statement		**–70.2**	**130.8**
Translation adjustment of foreign operations recognized in the reporting period		–144.9	–139.9
Changes in fair value of financial instruments measured at FVtOCI		–4.8	–1.1
Income taxes on changes in fair value of financial instruments measured at FVtOCI		1.1	0.1
Gains/(losses) on net investment hedges	25	33.2	32.5
Income taxes on gains/(losses) on net investment hedges	25	–8.5	–8.3
Translation adjustment of associates and joint ventures recognized in the reporting period		–76.3	–73.1
Accumulated translation adjustments of associates and joint ventures reclassified to income statement		0.9	0.1
Share of other comprehensive income of associates and joint ventures		–7.2	24.1
Accumulated share of other comprehensive income of associates and joint ventures reclassified to income statement		–0.1	–0.0
Total items that are or may subsequently be reclassified to income statement		**–206.6**	**–165.6**
Total other comprehensive income, net of tax		**–276.8**	**–34.9**
Total comprehensive income for the period		**–91.9**	**38.7**
of which attributable to shareholders of SIX Group Ltd		*–91.1*	*39.0*
of which attributable to non-controlling interests		*–0.7*	*–0.3*

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

Consolidated Balance Sheet

CHF million	Notes	31/12/2022	31/12/2021
Assets			
Cash and cash equivalents	14	4,320.5	6,473.5
Trade and other receivables	15	201.9	189.5
Receivables from clearing & settlement	16	4,938.0	2,537.1
Financial assets	17, 26	1,314.9	1,594.6
Current income tax receivables		60.1	66.1
Other current assets	18	74.2	56.4
Current assets		**10,909.6**	**10,917.2**
Property, plant and equipment	19	395.9	409.9
Intangible assets	20	2,756.2	2,838.6
Investments in associates and joint ventures	28	1,494.1	1,610.8
Financial assets	17, 26	1,533.3	2,038.6
Other non-current assets	18	66.8	154.5
Deferred tax assets	13	15.7	13.8
Non-current assets		**6,262.0**	**7,066.2**
Total assets		**17,171.7**	**17,983.4**
Liabilities			
Bank overdrafts	14	472.0	0.2
Trade and other payables		31.7	15.7
Payables from clearing & settlement	16	8,837.5	9,266.6
Financial liabilities	17, 26	723.9	1,307.9
Provisions	23	0.9	0.2
Contract liabilities	5	16.3	22.6
Current income tax payables		53.2	61.1
Other current liabilities	24	183.7	184.7
Current liabilities		**10,319.2**	**10,859.0**
Financial liabilities	17, 26	1,494.9	1,528.9
Provisions	23	12.4	14.4
Contract liabilities	5	16.4	26.4
Other non-current liabilities	24	34.1	43.7
Deferred tax liabilities	13	262.2	298.7
Non-current liabilities		**1,820.0**	**1,912.1**
Total liabilities		**12,139.2**	**12,771.0**
Equity			
Share capital		19.5	19.5
Capital reserves		234.1	234.1
Other reserves		−446.3	−251.0
Retained earnings		5,223.7	5,208.4
Shareholders' equity	**22**	**5,031.1**	**5,211.0**
Non-controlling interests		1.4	1.4
Total equity		**5,032.5**	**5,212.3**
Total liabilities and equity		**17,171.7**	**17,983.4**

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

Consolidated Statement of Changes in Equity

CHF million	Notes	Share capital	Capital reserves	Other reserves	Retained earnings	Share-holders' equity	Non-controlling interests	Total equity
Balance at 1 January 2022		**19.5**	**234.1**	**–251.0**	**5,208.4**	**5,211.0**	**1.4**	**5,212.3**
Group net profit					185.4	**185.4**	–0.4	**185.0**
Total other comprehensive income	22			–195.2	–81.3	**–276.5**	–0.3	**–276.8**
Total comprehensive income for the period				**–195.2**	**104.1**	**–91.1**	**–0.7**	**–91.9**
Dividends paid	21, 22				–89.8	**–89.8**	–0.1	**–89.9**
Capital contribution						**–**	0.8	**0.8**
Share of other changes in equity of associates	28				1.1	**1.1**		**1.1**
Change in scope of consolidation						**–**	–0.1	**–0.1**
Balance at 31 December 2022		**19.5**	**234.1**	**–446.3**	**5,223.8**	**5,031.1**	**1.4**	**5,032.5**

CHF million	Notes	Share capital	Capital reserves	Other reserves[1]	Retained earnings	Share-holders' equity	Non-controlling interests	Total equity
Balance at 1 January 2021		**19.5**	**234.1**	**–62.2**	**5,062.3**	**5,253.7**	**1.4**	**5,255.1**
Group net profit					73.9	**73.9**	–0.4	**73.5**
Total other comprehensive income	22			–188.8	153.8	**–35.0**	0.1	**–34.9**
Total comprehensive income for the period				**–188.8**	**227.8**	**39.0**	**–0.3**	**38.7**
Dividends paid	21, 22				–81.3	**–81.3**	–0.1	**–81.4**
Capital contribution						**–**	0.4	**0.4**
Share of other changes in equity of associates	28				6.9	**6.9**		**6.9**
Non-controlling interest arising on business combination	29					**–**	1.4	**1.4**
Acquisition of non-controlling interests					–7.3	**–7.3**	–1.4	**–8.7**
Balance at 31 December 2021		**19.5**	**234.1**	**–251.0**	**5,208.4**	**5,211.0**	**1.4**	**5,212.3**

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

[1] The presentation was changed in 2022. The details of the movement of treasury shares and translation differences within "Other reserves" are now separately disclosed in note 22. The presentation of prior year figures has been adjusted accordingly.

Consolidated Statement of Cash Flows

CHF million	Notes	2022	2021
Group net profit (incl. non-controlling interests)		185.0	73.5
Adjustments for:			
Depreciation, amortization and impairment	19, 20	177.5	173.6
Increase/(decrease) in provisions		–0.4	–5.8
Increase/(decrease) in pension fund assets and liabilities		12.6	15.0
Share of profit or loss of associates and joint ventures	28	–21.6	102.1
Net financial result		11.2	48.8
Other non-cash income and expenses		–0.6	0.1
Income tax expense	12	51.2	63.4
Changes in:			
Trade and other receivables		–8.8	–17.1
Trade and other payables		14.1	2.4
Receivables from clearing & settlement		–2,404.2	344.5
Payables from clearing & settlement		–133.6	–306.8
Financial assets		104.6	2.6
Financial liabilities		6.5	6.8
Other assets		–11.2	7.6
Other liabilities		4.5	–16.7
Contract liabilities		–15.0	–12.7
Interest paid		–8.0	–10.6
Interest received		1.0	0.9
Income tax (paid)/received		–84.0	–96.0
Net cash flow from/(used in) operating activities		**–2,119.4**	**375.8**
Investments in subsidiaries (net of cash acquired)	29	–51.0	–49.4
Investments in associates and joint ventures		–6.1	–23.8
Disposal of subsidiaries and associates (net of cash disposed)	28	4.7	–
Purchase of property, plant, equipment and intangible assets	19, 20	–77.2	–82.2
Sale proceeds from property, plant, equipment and intangible assets		0.8	11.0
Investments in financial assets		–25.2	–13.2
Divestments of financial assets		2.2	1.8
Dividends received and other financial income		1.0	1.3
Net cash flow from/(used in) investing activities		**–150.8**	**–154.4**
Proceeds from financial liabilities	17	–	644.6
Payment of financial liabilities	17	–20.2	–363.3
Payment of lease liabilities	17	–18.9	–15.3
Dividends paid to shareholders of the parent company	21	–89.8	–81.3
Dividends paid to non-controlling interests		–0.1	–0.1
Net cash flow from/(used in) financing activities		**–129.0**	**184.5**
Net impact of foreign exchange rate differences on cash		–225.5	–230.0
Net change in cash and cash equivalents		**–2,624.7**	**175.9**
Balances of cash and cash equivalents			
Cash and cash equivalents at 1 January	14	6,473.3	6,297.4
Cash and cash equivalents at 31 December	14	3,848.6	6,473.3

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

Basis of Preparation

1. General Information

The consolidated financial statements of SIX as at and for the year ended 31 December 2022 cover SIX Group Ltd (referred to as “Company” or “Parent Company”) and its subsidiaries (together referred to as “Group” or “SIX”). A table of the Group subsidiaries and interests in associates is set out in note 28.

SIX Group Ltd is an unlisted public limited company domiciled in Switzerland with its registered office in Zurich, at Hardturmstrasse 201. The Company is owned by 120 national and international financial institutions.

SIX provides a comprehensive range of services in the areas of securities trading and post-trading, financial information processing and cashless payment transactions.

The Board of Directors of SIX approved the issuance of these consolidated financial statements on 1 March 2023.

2. Significant Accounting Policies

2.1 Basis of preparation

The consolidated financial statements of SIX have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The reporting period covers twelve months. For all consolidated companies, the financial year corresponds to the calendar year. Unless otherwise indicated, all amounts are stated in millions of Swiss francs (CHF) and are rounded to the nearest hundred thousand.

The consolidated financial statements provide comparative information in respect of the previous period.

The consolidated financial statements of SIX have been prepared on a historical cost basis, except for certain financial instruments which have been measured at fair value, as disclosed in the accounting policies below.

2.2 Summary of significant accounting policies

2.2.1 Principles of consolidation and equity accounting

Business combinations

Business combinations are accounted for using the acquisition method at the date of acquisition, which is the date on which SIX obtains control. SIX has control over an investee when it is exposed to, or has rights to, variable returns from its involvement with the investee and has the ability to affect those returns through its power over the relevant activities of the investee.

At the time of acquisition, all identifiable assets and liabilities that satisfy the recognition criteria are recognized at their fair values. The difference between the consideration transferred and the fair value of the identifiable assets acquired and liabilities assumed is accounted for as goodwill after taking into account any non-controlling interests. Directly attributable transaction costs are reported as other operating expenses.

Subsidiaries

Consolidation of a subsidiary begins when SIX obtains control over the subsidiary and ceases when control is lost.

Non-controlling interests arise when SIX Group Ltd directly or indirectly holds less than 100% of a subsidiary, but still controls the subsidiary. Non-controlling interests in subsidiaries are reported separately within equity. Profit or loss and other comprehensive income (OCI) are attributed to the shareholders of the Parent Company and to the non-controlling interests. SIX has applied the partial goodwill method to the business combinations occurring in 2021 and accordingly has measured non-controlling interests at their proportionate share in the recognized amounts of the acquiree’s identifiable net asset.

The accounting for call and put options depends on the terms of the options. For put options held by non-controlling shareholders, SIX has decided to apply IFRS 10.

The key terms of such options and the corresponding accounting treatment are described in note 29.

All intra-Group balances, transactions, any unrealized gains and losses resulting from intra-Group transactions and dividends are eliminated in full.

Upon loss of control, SIX ceases to recognize the assets and liabilities of a subsidiary, any non-controlling interests and other components of equity related to the subsidiary. Any gain or loss arising from the loss of control is presented in financial income or financial expenses. The interest retained is measured at fair value at the date on which SIX loses control. Subsequently, it is accounted for as an investment in associate using the equity method or as a financial asset, depending on the level of influence retained.

Investments in associates and joint ventures

Investments in associates and joint ventures are accounted for using the equity method. Associates are those entities in which SIX has significant influence over the financial and operating policies, but does not exercise control or joint control. Significant influence is generally assumed to exist when SIX holds between 20% and 50% of the voting rights. In the event that the Group holds less than 20% of the voting rights, there is a strong indication of significant influence if SIX is represented on the board of the investee. A joint venture is an arrangement in which the Group has joint control, whereby SIX has rights to the net assets of the arrangement rather than to its assets and obligations for its liabilities.

Under the equity method, investments in associates and joint ventures are initially recognized at cost at the date of acquisition. Cost comprises the fair value of the consideration transferred and acquisition-related costs. In subsequent accounting periods, the carrying amount of the investment is adjusted for the share of profit or loss and items recognized in equity, less dividends received. The share of profit or loss is adjusted for the effects of subsequent measurement of assets and liabilities identified in a purchase price allocation. An impairment test is performed if there is objective evidence of impairment. Objective evidence of impairment includes, among other things, a significant or prolonged decline in the fair value. An impairment is recognized when the carrying amount exceeds the fair value. Goodwill is included in the carrying amount of the investment and any impairment loss is allocated to the carrying amount of the equity-accounted investee as a whole.

The ownership percentage held by SIX may be reduced if SIX does not participate in a capital increase (deemed disposal). Gains or losses resulting from deemed disposals, including amounts reclassified from other comprehensive income, are recognized in the income statement within financial income or financial expenses.

2.2.2 Foreign currency translation

Functional and presentation currency

These consolidated financial statements are presented in Swiss francs, which is also the functional currency of SIX Group Ltd. Each subsidiary prepares its own financial statements in its functional currency, i.e. in the currency of the primary economic environment in which it operates. Finance subsidiaries that have no other operating activity than borrowing money on behalf of the parent have the functional currency of the parent.

Foreign currency transactions and balances

Transactions in foreign currencies are initially recorded by the Group's entities in their respective functional currencies using the exchange rates prevailing at the dates of the transactions.

Exchange rate gains and losses arising between the date of a transaction and its settlement and from the translation of monetary assets and liabilities denominated in foreign currencies at closing exchange rates are recognized in the income statement within financial income or expenses.

Non-monetary items recognized at historical cost are measured at historical exchange rates.

The main exchange rates at the closing dates were the following:

Currency	31/12/2022	31/12/2021
EUR	0.9837	1.0347
USD	0.9237	0.9144

The main annual average exchange rates were the following:

Currency	2022	2021
EUR	1.0055	1.0815
USD	0.9550	0.9139

Foreign operations

The income statements of subsidiaries with a functional currency other than the Swiss franc are translated at average monthly exchange rates. Assets and liabilities, including goodwill and fair value adjustments arising from acquisition, are translated at the closing exchange rate. Foreign exchange translation differences are recognized as currency translation adjustments in other comprehensive income and presented in equity under other reserves. Upon loss of control of a subsidiary, the accumulated exchange rate differences previously recognized in equity are reclassified to the income statement as part of the gain or loss on disposal.

2.2.3 Financial assets

SIX classifies its financial assets into the following categories:

- Financial assets at amortized cost
- Financial assets at fair value through other comprehensive income (FVtOCI)
- Financial assets at fair value through profit or loss (FVtPL)

The classification depends on the contractual cash flow characteristics of the financial assets and the business model of SIX for managing these assets. Financial assets are recognized at the trade date with the exception of non-fulfilled transactions from the central counterparty (CCP) business which are recognized at the settlement date.

Financial assets are classified as current if payment is due or expected to be settled within one year. If not, they are presented as non-current.

Financial assets and liabilities are offset and the net amount is reported in the balance sheet only when the Group has a currently legally enforceable right to offset during the regular course of business, in the event of default and when there is an intention either to settle on a net basis or to realize the asset and settle the liability simultaneously.

Financial assets are derecognized when the contractual rights to receive cash flows have expired or when all the risks and rewards of ownership of the financial assets are substantially transferred.

Financial assets at amortized cost

A financial asset is carried at amortized cost if both of the following criteria are met:

- The contractual terms of the financial asset give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.
- The financial asset is held within a business model whose objective is to hold these assets in order to collect contractual cash flows.

Financial assets measured at amortized cost are initially recognized at fair value plus directly attributable transaction costs. Subsequent to initial recognition, they are measured at amortized cost using the effective interest method less expected impairment losses. Gains or losses are recognized in the income statement when the financial asset is derecognized, modified or impaired. This category consists of cash and cash equivalents, deposits, receivables, bonds and loans. Specific characteristics of each class of financial assets at amortized cost, if any, are provided below.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, postal and bank accounts, giro and demand deposits at the Swiss National Bank or central banks and short-term deposits with a maximum maturity of three months from the date of initial recognition.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits as defined above, net of bank overdrafts, if any.

Trade and other receivables

Trade and other receivables represent the Group’s unconditional right of payment. This item also includes unbilled receivables, i.e. positions for which the Group has fulfilled its performance obligations for services, but has not yet invoiced the customers.

Receivables and payables from clearing & settlement
Receivables and payables from clearing & settlement in the Securities Services business arise from acting as a central counterparty (CCP) or a central securities depository (CSD), and in the Banking Services business – from the processing of electronic payments.

In the Securities Services business, SIX also provides securities financing services. Securities purchased under agreements to resell (reverse repurchase transactions) and securities sold under agreements to repurchase (repurchase agreements) are generally treated as collateralized financing transactions. In reverse repurchase transactions, the cash delivered is derecognized and a corresponding receivable from clearing & settlement is recorded. Securities received in reverse repurchase transactions are disclosed in the notes if SIX has the right to resell or repledge them. In repurchase agreements, the cash received is recognized in the balance sheet with a corresponding obligation to return it. The securities transferred comprise securities that SIX has received as collateral with the right to resell or repledge. These securities are not recognized in or derecognized from the balance sheet unless the risks and rewards of ownership are also transferred.

Securities borrowing and lending transactions in the settlement business are treated as collateralized financing transactions, similar to repurchase and reverse repurchase transactions, if they are covered with cash collateral and daily margin settlements. Securities borrowing and lending transactions that are not covered with cash collateral are not recognized in the balance sheet. Cash collateral received is recognized as a payable from clearing & settlement, and cash collateral delivered is derecognized with a corresponding receivable from clearing & settlement. Securities received in a lending or borrowing transaction are disclosed in the notes if SIX has the right to resell or repledge them. Financial assets recognized in the balance sheet which have been transferred under a securities lending agreement are disclosed in the notes as financial assets not derecognized.

For further information about receivables and payables from clearing & settlement, see note 16.

Impairment of financial assets at amortized cost
The Group recognizes loss allowances for expected credit losses (ECL) on the following financial assets that are measured at amortized cost:
- Cash and cash equivalents
- Trade and other receivables
- Bonds
- Receivables from clearing & settlement
- Other financial assets at amortized cost (e.g. loans)

The Group measures the loss allowances at an amount equal to the 12-month ECL (Stage 1), except for the following assets, for which the loss allowance is measured at an amount equal to the lifetime ECL (Stage 2):
- Trade and other receivables (simplified approach according to IFRS 9)
- Financial assets at amortized cost whose credit risk has increased significantly since initial recognition

When a default event occurs, the loss allowance is measured at an amount equal to the lifetime ECL and the financial asset is presented as credit-impaired (Stage 3).

The Group applies the "low credit risk" simplification in order to track the increase in credit risk. A low credit risk is assumed when the credit rating of a financial asset is equivalent to the globally understood definition of "investment grade" (i.e. a Standard & Poor's rating of BBB – or higher).

The creation and release of loss allowances are recognized in other operating expenses for cash and cash equivalents, trade and other receivables, and receivables from clearing & settlement. For bonds and other financial assets at amortized cost, the creation and release of loss allowance is presented in financial expenses.

The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since the initial recognition of the respective financial assets. Recoveries are recognized in profit and loss.

The Group writes off a financial asset when the collection activities are completed and there is no realistic prospect of recovery. This is generally the case when the Group receives evidence of insolvency (e.g. loss certificate). Financial assets that have been written off may still be subject to enforcement action even if recovery is highly unlikely.

Financial assets at FVtOCI (debt instruments)
Financial assets at fair value through other comprehensive income (FVtOCI) include debt securities for which the contractual cash flows consist solely of principal and interest, and the objective of the Group's business model is achieved both by collecting contractual cash flows and selling financial assets. Interest income, foreign exchange revaluation and impairment losses or reversals are recognized in the income statement and are determined in the same manner as for financial assets measured at amortized cost. The remaining fair value changes are recognized in OCI. Upon derecognition, the cumulative fair value change recognized in OCI is recycled to profit or loss.

Financial assets at FVtPL
If the criteria for financial assets at amortized cost and financial assets at FVtOCI are not met, financial assets are classified and measured at fair value through profit or loss (FVtPL). These financial assets are initially recognized and subsequently measured at fair value. Transaction costs that are directly attributable to the acquisition of the financial asset are immediately expensed. Gains and losses arising from changes in fair value are reported in financial income or financial expenses. This category consists of equity instruments, units in investment funds, derivatives, financial instruments from the settlement business, and other debt instruments.

Derivatives
Derivatives are initally recognized and subsequently measured at fair value.

Derivatives comprise, in particular, derivatives arising from the clearing and settlement business of Securities Services. They include the fair value of unsettled trading transactions of equities and fixed income and the accumulated changes in fair value of traded derivatives. The settlement of equities and fixed income takes place two days after the trade date if the buyer and seller fulfill their obligations. The change in fair value of unsettled transactions is presented as equities and fixed income forwards. The settlement of derivatives takes place on the trade date. If the daily changes in fair value are not settled on a daily basis, the accumulated changes in fair value are presented as options and energy derivatives from clearing and settlement.

Additionally, SIX uses derivatives to mitigate its exposure to foreign exchange risks. Gains or losses relating to changes in fair value of foreign currency derivatives are recognized immediately in financial income or financial expenses.

All derivatives are included under financial assets if their fair value is positive, and under financial liabilities if their fair value is negative.

2.2.4 Property, plant and equipment
Assets included under property, plant and equipment are measured at historical cost less accumulated depreciation and accumulated impairment losses, if any. Historical cost includes expenditure directly attributable to the acquisition and installation. Repair and maintenance costs are recognized in the income statement as incurred.

Land has an unlimited useful life and is therefore not depreciated. Property, plant and equipment is depreciated on a straight-line basis over the estimated useful life of each component.

Asset class	Estimated useful life
Land	Impairment only
Buildings (excluding land)	8–60 years
Technical infrastructure	3–30 years
Leasehold improvements	Amortized in line with the term of the property lease
IT mainframes	4–5 years
IT midrange	3 years
Other IT hardware	3–5 years
Office equipment and furniture	3–7 years
Other fixed assets	3–5 years

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

Depreciation starts when the asset is available for use.

Gains or losses on disposals are calculated as the difference between the net proceeds and the carrying amount and are recognized in the income statement.

2.2.5 Intangible assets

Intangible assets with indefinite useful lives

Intangible assets with indefinite useful lives include goodwill, brands and licenses.

SIX initially measures intangible assets with indefinite useful lives at cost. These assets are not subject to amortization and are tested for impairment on an annual basis and whenever there is an indication that an asset may be impaired.

Gains and losses on disposals of operations include the carrying amount of goodwill relating to the operation sold.

Intangible assets with finite useful lives

Acquired intangible assets with a finite useful life are measured at cost less accumulated amortization and impairment losses, if any. Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset it relates to. Other subsequent expenditure is recognized as an expense in the period in which it is incurred.

Expenditure for internally developed software is capitalized only if it meets the capitalization criteria. This requires, in particular, that SIX obtains control over the asset and that the future economic benefits are probable. Amortization of internally developed assets begins when they are available for use. This is generally when the business acceptance test has been successfully completed.

Implementation costs related to Software as a Service (SaaS) arrangements are capitalized as intangible assets if SIX obtains control over the software. If SIX does not assume control over the software, implementation costs are expensed as incurred, with the exception of costs for non-distinctive services of the cloud arrangement provider, which are expensed over the term of the arrangement.

Research costs are expensed as incurred.

Intangible assets with a finite useful life are amortized on a straight-line basis over their estimated useful lives:

Asset class	Estimated useful life
Licenses, brands and customer relationships	5–20 years
Software	3–7 years
Other intangible assets	3–7 years

Useful lives are reassessed annually and adjusted if appropriate.

2.2.6 Impairment of non-financial assets

Intangible assets with an indefinite useful life and intangible assets not yet ready for use are tested for impairment on an annual basis and whenever there is an indication that an asset may be impaired. All other intangible assets and property, plant and equipment are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

For the purposes of impairment testing, assets are tested individually or grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units, CGUs). Goodwill is allocated to the CGU at which it is monitored for internal management purposes and which is not larger than an operating segment.

If the carrying amount of the assets exceeds the recoverable amount, an impairment equal to the difference between the carrying amount and the recoverable amount is recognized as an impairment loss in the income statement. The recoverable amount is determined based on the value in use of an asset. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects the current market assessment of the time value of money and the risks specific to the asset or CGU.

Any impairment loss on goodwill recognized in prior periods may not be reversed in subsequent periods. For other assets, an impairment loss is reversed only to the extent that the carrying amount of an asset does not exceed the carrying amount that would have been determined net of depreciation or amortization if no impairment loss had been recognized.

2.2.7 Financial liabilities
SIX classifies its financial liabilities either as financial liabilities at amortized cost or financial liabilities at fair value through profit or loss (FVtPL).

Financial liabilities are classified as current if payment is due within one year or less. If not, they are presented as non-current liabilities.

A financial liability is derecognized when the obligation under the liability is discharged, cancelled or expires.

Financial liabilities at amortized cost
Financial liabilities at amortized cost are initially recognized at fair value less directly attributable transaction cost. Subsequent to initial recognition, such financial liabilities are measured at amortized cost using the effective interest method. This category consists of trade and other payables, borrowings and lease liabilities. For further details on leases, see section 2.2.9.

Financial liabilities at FVtPL
Financial liabilities at fair value through profit or loss (FVtPL) include derivatives and NCI liabilities. These liabilities are initially recognized and subsequently measured at fair value. NCI liabilities result from acquisitions of subsidiaries where minority shareholders hold put options to sell their shares to SIX. NCI liabilities are measured at the discounted value of the exercise price. For further details on derivatives, see section 2.2.3.

2.2.8 Hedge accounting
SIX may designate non-derivative financial liabilities as hedging instruments to hedge the foreign exchange risk on a net investment in a foreign operation. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized in OCI, while any gains or losses relating to the ineffective portion are recognized in the income statement. On disposal of a foreign operation, the cumulative value of any such gains or losses recorded in equity is transferred to the income statement.

At the inception of a designated hedging relationship, the Group documents the risk management objective and strategy for undertaking the hedge. The Group also documents the economic relationship between the hedged item and the hedging instrument, including whether the changes in cash flows of the hedged item and hedging instrument are expected to offset each other.

2.2.9 Leases
At the inception of a contract, SIX assesses whether a contract is or contains a lease. A contract is or contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

SIX as lessee
SIX is a lessee of premises, IT equipment and vehicles. Leases are accounted for by recognizing a right-of-use asset and a lease liability at the lease commencement date. SIX has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

SIX has elected not to separate non-lease components from lease components for all classes of underlying assets.

Lease liabilities are initially measured at the present value of the following future lease payments:
- fixed payments
- variable lease payments that depend on an index or rate using the index or rate at the commencement date
- lease payments in an optional renewal period or any penalties payable for terminating a lease, if SIX is reasonably certain to exercise an extension or not to exercise a termination option

Variable lease payments that do not depend on an index or a rate are expensed in the period to which they relate.

Lease liabilities are discounted using the incremental borrowing rate available at the contract commencement date, as the interest rates implicit in the leases cannot be readily determined.

Subsequent to initial recognition, lease liabilities are measured at amortized cost using the effective interest method. Lease liabilities are remeasured when there is a change in an index or rate, or if there is a change in the lease term because the Group changes its assessment of whether it will exercise an option to extend or terminate a lease. When a lease liability is remeasured for one of these reasons, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in the income statement if the carrying amount has been reduced to zero.

Right-of-use assets are initially measured at the initial amount of the lease liability, less any lease incentives received, plus any lease payments made at or before the commencement of the lease and initial direct costs incurred.

Right-of-use assets are subsequently depreciated using the straight-line method from the commencement date to the end of their useful lives or the end of the lease term, whichever is earlier. The estimated useful lives of right-of-use assets are determined on the same basis as those of property, plant and equipment. In addition, the right-of-use asset may be reduced by impairment losses or adjusted for certain remeasurements of the lease liability.

SIX recognizes right-of-use assets within property, plant and equipment, and lease liabilities within financial liabilities.

SIX as lessor

SIX is a lessor of business premises. When SIX acts as a lessor, it determines at the inception of a lease whether the lease is a finance or an operating lease. To classify leases, SIX makes an overall assessment of whether a lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, the lease is a finance lease; if not, it is an operating lease. As part of this assessment, SIX considers certain indicators such as whether the lease is for the major part of the economic life of the asset. Currently, all lease agreements are classified and recorded as operating leases.

Operating lease equipment is initially carried at its acquisition cost. Leased assets are depreciated on a straight-line basis according to the depreciation policies of SIX for property, plant and equipment. Rental income from operating leases is recognized on a straight-line basis over the term of the lease agreement as part of other operating income.

2.2.10 Provisions

Provisions are recognized for present legal or constructive obligations arising from past events if there is a probable outflow of resources that can be reliably estimated. Provisions are not recognized for future operating losses.

The amount recognized as a provision is the amount which represents the best estimate required to settle the present obligation. If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as an interest expense.

Provisions are regularly reviewed and adjusted as further information develops or circumstances change.

Restructuring provisions

Restructuring provisions are recognized only when the Group has a legal or constructive obligation, which is when a detailed formal plan identifies the business concerned, the location and number of employees affected, a detailed estimate of the associated costs and an appropriate timeline, and when the employees affected have been notified of the plan’s main features.

Asset retirement obligation

If a lease agreement requires SIX to remove any assets it has installed in the leased property (such as internal walls or partitions), the removal obligation arises immediately upon installation. In such a situation, the Group recognizes a provision for the present value of the future cost of removal at the date the assets are installed.

The costs of removal are capitalized as part of the acquisition costs of the leasehold improvements and depreciated over their useful lives or the lease term, whichever is shorter.

Contingent liabilities

Contingent liabilities are not recognized, but are disclosed, unless the possibility of an outflow of economic resources is remote.

2.2.11 Equity

Ordinary shares

Ordinary shares in SIX Group Ltd are classified as share capital.

Treasury shares

Own shares held by SIX Group Ltd itself and by other entities of the Group are recognized at cost within other reserves and deducted from equity. Gains or losses on the disposal or cancellation of treasury shares are recorded in other reserves.

2.2.12 Operating revenues

Revenue represents the consideration to which SIX expects to be entitled in exchange for transferring services, net of amounts collected on behalf of third parties. When SIX acts as a principal, revenue is recorded gross. When SIX acts only as an agent, revenue is limited to the commission or fee that it retains. The main indicators that SIX is a principal are the responsibility to provide the promised services and the discretion in establishing prices.

Volume discounts are generally based on the number of transactions within a month or calendar year. Therefore, no estimates are required at the end of the financial year. During the financial year, the estimated average selling price is recognized as revenue.

Transaction revenues

Transaction revenues are generated from services which relate to a single transaction (e.g. trading in securities, clearing & settlement transactions, payment transactions, ATM transactions, etc.) or services which are triggered and remunerated on an incident or order basis. The performance obligation of a service is satisfied when the transaction or order has been executed. Transaction revenues are recognized at a point in time.

Exchanges and Securities Services recognize transaction fees for trading and clearing services on the trade date and transaction fees for settlement services on the settlement date.

Service revenues

Revenue from providing services is recognized in the period in which the services are rendered (e.g. listing of securities, custody services, providing reference and market data, etc). Revenue is generally recognized over time, as most services are provided over a fixed contract period.

Exchanges recognize listing fees over the estimated listing period. The estimated listing period of the securities is reassessed on an annual basis to reflect the most recent market developments.

Net interest income from interest margin business

The interest margin business is part of the core business activities of Securities Services and Banking Services. Accordingly, net interest income from interest margin business is presented within operating income. Net interest income from interest margin business is recognized by applying the effective interest method. Negative interest on financial assets is presented within interest expenses from interest margin business, and the related interest earned from the recharge of negative interest is presented within interest income from interest margin business.

Other operating income

Other operating income includes income earned from sale of assets and non-standard services such as lease income. Most of the non-standard services are recognized over time. For further details on the accounting for leases, see section 2.2.9.

Contract costs

Costs to obtain a contract

Incremental costs incurred in obtaining a customer contract are recognized as an asset if the Group expects to recover them. They include sales commissions that are amortized over the average contract period, which is based on past experience with services rendered to similar customers in similar circumstances.

Contract balances

Contract liabilities

If the payments received exceed the services rendered, a contract liability is recognized.

2.2.13 Employee benefits

SIX maintains a number of different pension plans based on the respective legislation in each country. The retirement benefit plans include both defined benefit and defined contribution plans.

Defined contribution plans

Contributions to defined contribution plans are recognized as an employee benefit expense in the period during which the related services are rendered by employees.

Defined benefit plans

The net liability or asset recognized in the balance sheet in respect of defined benefit plans is the present value of the defined benefit obligation less the fair value of plan assets. If the fair value of the plan's assets is higher than the present value of the defined benefit obligation, the recognition of the resulting net asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan ('asset ceiling'). Actuarial assumptions used for calculation include the discount rate, future salary and pension increases, staff turnover and life expectancy. The calculations are performed annually by qualified actuaries using the projected unit credit method. Pension plan assets are valued annually at market values. Defined benefit costs consist of three components:

- service costs, curtailments and settlements
- net interest income or expenses
- remeasurements

Service costs include current and past service costs and are presented within employee benefit expenses. The Group recognizes gains and losses on plan curtailments or settlements in the income statement when they occur.

Net interest income or expenses are calculated by multiplying the net defined benefit liability or asset at the beginning of the reporting period with the discount rate used to measure the defined benefit obligation. Net interest income or expenses are recognized within employee benefit expenses.

Remeasurements comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of asset ceilings, if any. SIX recognizes remeasurements in other comprehensive income. They are not recycled to the income statement.

Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and expensed in the period in which the related services are rendered.

Termination benefits

Termination benefits are payable when employment is terminated before the normal retirement date, or when an employee accepts voluntary redundancy in exchange for these benefits. SIX recognizes a liability for termination benefits at the earlier of when SIX can no longer withdraw the offer of those benefits or when the Group recognizes restructuring costs. In the event that an offer is made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than twelve months after the end of the reporting period are discounted to their present value.

Other long-term employee benefits

The Group's obligation in respect of long-term employee benefits is the amount of future benefits that employees have earned in return for their service in the current and prior periods. The actuarial assumptions used are reassessed annually. Remeasurements are recognized in profit or loss in the period in which they arise. Other long-term employee benefits include in particular long-service awards (or "jubilees"). The liability is determined by applying the projected unit credit method.

2.2.14 Interest and dividends

Interest income and expenses

For all financial instruments measured at amortized cost, interest income and expenses are recorded using the effective interest method. Negative interest on financial assets is presented within interest expenses. Negative interest on financial liabilities is presented within interest income.

Dividend income

Dividends are recognized when the right to receive payment is established and are included in financial income.

2.2.15 Income taxes

The tax expense for the period comprises current and deferred tax. Taxes are recognized in the income statement except to the extent that the underlying transaction is recorded either in other comprehensive income or directly in equity.

Current income taxes

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the tax authorities based on the taxable profit. The tax rates and tax laws used to calculate the amount are those that are enacted or substantively enacted at the reporting date in the countries in which SIX operates and generates taxable income.

Deferred taxes

Deferred tax is recognized by applying the liability method in respect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized for taxable temporary differences arising from the initial recognition of goodwill.

Deferred tax assets are recognized for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that sufficient future taxable profit will be available against which they can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are reassessed at each reporting date and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Calculation of deferred taxes is based on the country-specific tax rates expected to apply in the accounting period in which these tax assets will be realized or tax liabilities settled. Deferred tax assets and liabilities are offset if they relate to the same taxable entity and the same tax authority and if there is an entitlement to offset current taxes.

2.3 Changes in the Group's accounting policies

New standards, interpretations and amendments adopted by SIX

The adoption of the following amendments had no significant impact on the consolidated financial statements of the Group as at 31 December 2022.

- Annual Improvements to IFRS standards 2018 – 2020
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16)
- Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37)
- Reference to the Conceptual Framework (Amendments to IFRS 3)
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12)

2.4 Restatement

Change in presentation of operating income

Management has reviewed the presentation of revenues and noted that certain revenues have not been presented in line with the accounting policies and must be reclassified. As a result of the reclassification, transaction revenues for the 2021 financial year decreased by CHF 128.0 million, service revenues increased by CHF 117.2 million and other operating income increased by CHF 10.8 million. The changes had no impact on total operating income.

2.5 IFRS standards and interpretations that have been issued but are not yet effective

The following new and/or revised standards and interpretations have been issued, but are not yet effective. They have not been applied early in these consolidated financial statements.

Standard/interpretation	**Effective date**	**Date planned for adoption by SIX**
Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)	1 January 2023	1 January 2023[1]
Definition of Accounting Estimates (Amendments to IAS 8)	1 January 2023	1 January 2023[1]
Lease Liability in a Sale and Leaseback (Amendment to IFRS 16)	1 January 2024	1 January 2024[1]
Classification of Liabilities as Current or Non-current (Amendments to IAS 1)	1 January 2024	1 January 2024[1]
Non-current Liabilities with Covenants (Amendment to IAS 1)	1 January 2024	1 January 2024[1]
Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Amendments to IFRS 10 and IAS 28)	To be determined by the IASB	To be determined by SIX[2]

[1] The adoption of the amendment is not expected to have any significant impact on the consolidated financial statements of SIX.

[2] The impact on the consolidated financial statements of SIX has not yet been fully assessed.

3. Use of Judgments and Estimates

The application of some accounting policies requires the use of assumptions, estimates and judgments that may affect the reported assets and liabilities, income and expenses and also the disclosure of contingent assets and liabilities in the reporting period. Additionally, there is a significant risk that these estimation uncertainties could result in material adjustments to the carrying amount of assets and liabilities within the next financial year. The assumptions and estimates are continually reviewed and based on historical experience and other factors, including anticipated developments arising from probable future events. Actual future occurrences may differ from these assumptions and estimates.

Areas that may incorporate a greater number of uncertain assumptions, estimates and judgments are listed below.

Fair value of assets and liabilities recognized in a business combination
In the case of business combinations, assets acquired and liabilities assumed are measured at fair value at the date of acquisition. In determining the fair value and the useful lives of intangible assets acquired, as well as the fair value of liabilities assumed, certain assumptions are made. The measurement is based on projected cash flows and information available at the date of acquisition see note 29.

Fair value of level 3 instruments
The fair value of financial instruments that are not traded in an active market is determined by using several valuation techniques. SIX uses judgment in determining the valuation methods and makes assumptions in estimating the inputs to the calculations, as the parameters for the calculation of the fair values are not readily available in the markets. The calculations are based on information available as at the reporting date. The estimated fair values for each class of financial instruments and the sensitivity analysis are disclosed in note 26.

Capitalization of development costs
SIX develops various software applications for internal and external use. Development costs for self-developed intangible assets are capitalized if the applicable criteria of IAS 38 are fulfilled. Initial capitalization of costs is based on the management's judgment that the feasibility is confirmed. Projects are broken down into three main phases. Costs incurred in the inception and transition phase are treated as non-capitalizable, whereas costs incurred in the construction phase are treated as capitalizable. Development costs that do not satisfy the requirements for capitalization are expensed as incurred.

In determining the amounts to be capitalized, management makes assumptions regarding the expected future cash flows generated from the project and the discount rates to be applied. The status of the key projects is monitored on a monthly basis by the Executive Board of SIX Group (ExB).

Utilization of tax losses and recognition of deferred tax assets
Deferred tax assets are recognized for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based on the estimated future taxable profits within the planning period. At each closing, the entity assesses the recoverability of deferred tax assets, including those recognized in previous periods. Further details on recognized deferred tax assets and unrecognized tax losses are disclosed in note 13.

Assessment of uncertain tax positions
If facts or circumstances change or if new information becomes available, SIX reassesses the judgement or estimate used to determine the accounting for its uncertain tax treatments. When analyzing uncertain tax treatments, SIX must consider whether it is probable that the tax authority would accept the treatment of SIX. The potential effect of the uncertainty is disclosed if it is material. For further details on uncertain tax positions and the potential effect of uncertainty, see note 12.

Measurement of defined benefit obligations
Accounting for defined benefit obligations requires the application of certain actuarial assumptions (e.g.

discount rate, salary trend, interest rate on retirement savings capital and life expectancy). Changes in actuarial assumptions can materially affect pension obligations and the expenses arising from employee benefit plans. The actuarial assumptions are reviewed with the independent actuaries at each reporting date. A sensitivity analysis of the key factors is presented in note 33.

Impairment of non-financial assets

For the purpose of impairment testing, goodwill and intangible assets with indefinite useful life are allocated to cash-generating units ("CGU"). The carrying value of a CGU is compared to its recoverable amount, which is determined on a value-in-use basis.

The value in use is derived from the discounted future free cash flows of a CGU. Cash flow projections are based on the budget and mid-term financial plan approved by the Board of Directors (BoD). The budget and mid-term financial plan cover three years and are updated annually. Cash flows beyond the financial planning period are extrapolated using a perpetual growth rate. Estimating future earnings involves judgment, as the developments in the respective markets and in the overall macroeconomic environment need to be estimated based on the currently available information. The discount rates are determined by applying the capital asset pricing model. A change in the key assumptions used to determine the recoverable amounts of each CGU may have a significant effect on the result of the impairment test. The key assumptions are tested for sensitivity by applying reasonably possible changes to those assumptions. For a description of the key assumptions, see note 20.

For the impairment test of listed associated companies, the cash flow projections are based on publicly available data such as investor guidance and growth rates published by a company or the analyst consensus for earnings and free cash flows. The discount rates are determined by applying the capital asset pricing model. A change in the key assumptions used to determine the recoverable amounts may have a significant effect on the result of the impairment test. In 2022, no impairment was recognized.

Performance for the Year

4. Segment Information

Determination of operating segments

Operating segments are reported in a manner consistent with the internal reporting to the Executive Board of SIX and the chief operating decision maker (CODM). The CODM, who is responsible for allocating resources and assessing the performance of the operating segments, has been identified as the CEO.

For the purpose of the segment reporting, SIX is broken down into five reportable segments (four business units and IT) and Corporate & Others. The latter includes SIX Exchange Regulation and corporate activities that support the Group as a whole, i.e. Risk, Legal & Compliance, Finance & Services, Human Resources and Marketing & Communications. Thus, Corporate & Others does not qualify as a reportable operating segment under IFRS 8.

The reportable segments and Corporate & Others offer the following products and services:

Service	Service description
Exchanges	
Trading	Exchanges generates transaction revenues by providing a cash market for trading in shares, private and public debt, warrants, funds, financial and electricity derivatives and exchange-traded products (ETPs), as well as a securitized derivatives market for structured products and warrants. Transaction revenues are invoiced on a monthly basis. The trading business also generates service revenues for access, admission of securities to trading and ongoing listing.
Data	Exchanges distributes raw market data and index products, which generate service revenues. Depending on the market, service fees are invoiced on a monthly, quarterly or annual basis.
Securities Services	
Custody business	Operating as the central securities depository (CSD) for Switzerland and Spain as well as an international custodian across various markets worldwide, Securities Services delivers comprehensive custody services for Swiss, Spanish and other international securities. Securities Services generate service revenues with issuer services, asset servicing/shareholder services, banking services/cash management, queries and reporting, and tax services. Transaction revenues are generated with settlement services, tax services, repos and fund processing. The custody business also generates interest income from interest margin business. Revenues from the custody business are generally invoiced on a monthly basis.
CCP clearing	Securities Services provides multi-asset clearing services and acts as a highly diversified central counterparty (CCP) with access to multiple trading venues and matching platforms across Europe. Transaction revenues are generated from the clearing of trades and the settlement of transactions. Further revenues are recognized from the transfers and management of pledges on securities and access charges for infrastructures and other facilities. Transaction revenues from clearing and CCP settlements are invoiced monthly and/or quarterly. Interest income from interest margin business is generated from repo transactions.
Securities Finance revenues	Securities Finance Services includes repo trading (CO:RE) and collateral management triparty services for various products (repo, TCM, inital margin calls, structured products, securities lending & borrowing) as well as Securities Financing Transactions Regulation (SFTR) reporting. The Securities Finance business generates revenues in trading and post-trading activities, which are invoiced on a monthly basis, except for service related to SFTR, which are invoiced on an annual basis.

Service	Service description
Banking Services	
Billing and payments	Banking Services offers payment transaction processing services between financial institutions through the legal entity SIX Interbank Clearing Ltd (SIC). SIC processes retail and wholesale payments in Swiss francs on behalf of the Swiss National Bank. It also provides a gateway for euro payments for the Swiss financial community (euroSIC). Banking Services is an infrastructure provider for digital billing in Switzerland with solutions such as eBill and direct debits. The revenues are mainly generated from transaction fees. Service revenues are generated from base fees and consultancy services. Additionally, Banking Services generates interest income from interest margin business. Transaction and service fees are generally invoiced on a monthly basis.
ATM processing and services	Banking Services provides ATM transaction processing and infrastructure services in Switzerland. Banking Services mainly generates transaction revenues through processed transactions and service fees based on the number of ATMs. The location fee received in the ATM business is presented net in transaction income, as SIX does not control the service. Service fees are generally invoiced on an annual basis.
Debit processing and services	Banking Services provides issuing processing services for debit card issuers. Transactions processed generate transaction revenues and issuing service fees. Besides that, Banking Services also generates service revenues by providing operational support to card issuers (e.g. hotline services or fraud management). Service fees are generally invoiced on a monthly basis.
Connectivity and data	Banking Services offers digital solutions for transactions with land registers through its legal entity SIX Terravis Ltd and operates bLink, an open banking platform that provides standardized interfaces for the exchanges of different types of financial data. The main part of revenues is generated from service revenues based on the volume of registered customer assets at SIX Terravis Ltd. Service fees are generally invoiced on a monthly basis.
Financial Information	
Reference data & pricing	Financial Information offers procurement, processing and distribution of reference data and pricing information. The business generates service revenues. Subscription fees are generally invoiced on an annual basis.
Market data & display	Financial Information provides procurement, processing and distribution of (real-time) market data and offers display products. The business generates service revenues. Subscription fees are generally invoiced on an annual basis. Royalties for financial data paid to stock exchanges are presented net in service income, as SIX does not control the service.
Tax & regulatory services	Financial Information provides complete reference data required for local and cross-border regulatory and tax compliance. The business generates service revenues. Subscription fees are generally invoiced on an annual basis.
Indices	Financial Information provides index services by calculating indices and offering licenses for SIX indices. The business generates service revenues. Subscription fees for the index services are generally invoiced quarterly for variable fees and annually for fixed fees.
IT	
Corporate IT	IT provides corporate services (e.g. Digital Workplace) and operates the IT infrastructure and applications (e.g. trading platforms) for the business units. Service revenues are mainly generated by providing services to associated companies.
Corporate & Others	
Corporate & other services	Corporate activities include Risk, Security & Compliance, Legal & Regulatory, Finance & Services, Human Resources and Marketing & Communications. Corporate & Others also includes SIX Exchange Regulation.

The performance of business units is measured based on business unit profit as set out in the internal management reports, which are reviewed regularly by the CODM. IT and Corporate & Others are measured based on the operating expenses.

CHF million	Exchanges	Securities Services	Banking Services	Financial Infor-mation	Total business units	IT	Corporate & Others	Elimi-nation	Total SIX
									2022
Revenues from third parties	360.0	457.1	223.5	385.6	**1,426.2**	42.3	25.7	–	**1,494.1**
Revenues from intra-Group	7.4	8.8	2.1	7.1	**25.5**	285.5	105.5	–416.4	**–**
Total operating income	**367.4**	**465.9**	**225.7**	**392.6**	**1,451.7**	**327.7**	**131.2**	**–416.4**	**1,494.1**
Total operating expenses	**–249.7**	**–308.6**	**–196.3**	**–336.6**	**–1,091.2**	**–298.0**	**–123.6**	**416.4**	**–1,096.4**
Earnings before interest, tax, depreciation and amortization (EBITDA)	**117.7**	**157.3**	**29.3**	**56.0**	**360.4**	**29.7**	**7.6**	**–**	**397.7**
Depreciation, amortization and impairment	–16.5	–10.1	–13.4	–12.5	**–52.6**	–21.4	–103.5	–	**–177.5**
Business unit profit	**101.2**	**147.2**	**15.9**	**43.5**	**307.8**	**8.3**	**–95.9**	**–**	**220.3**
Financial income									80.2
Financial expenses									–78.1
Share of profit or loss of associates and joint ventures									21.6
Earnings before interest and tax (EBIT)									**243.9**
Interest income									0.9
Interest expenses									–8.6
Earnings before tax (EBT)									**236.2**
Income tax expenses									–51.2
Profit for the period									**185.0**

CHF million	Exchanges[1]	Securities Services[1]	Banking Services[1]	Financial Infor-mation[1]	Total business units	IT	Corporate & Others	Elimi-nation	Total SIX
									2021 (restated)
Revenues from third parties	380.7	459.7	206.7	380.7	**1,427.8**	42.8	27.7	–	**1,498.3**
Revenues from intra-Group	9.6	9.9	6.3	7.6	**33.4**	273.9	90.3	–397.5	**–**
Total operating income	**390.2**	**469.7**	**213.0**	**388.3**	**1,461.2**	**316.7**	**118.0**	**–397.5**	**1,498.3**
Total operating expenses	**–234.6**	**–333.3**	**–185.9**	**–324.1**	**–1,077.9**	**–294.9**	**–101.4**	**397.5**	**–1,076.6**
Earnings before interest, tax, depreciation and amortization (EBITDA)	**155.6**	**136.3**	**27.1**	**64.2**	**383.3**	**21.8**	**16.6**	**–**	**421.7**
Depreciation, amortization and impairment	–10.3	–5.9	–12.1	–11.9	**–40.2**	–23.7	–109.8	–	**–173.6**
Business unit profit	**145.4**	**130.5**	**14.9**	**52.3**	**343.1**	**–1.9**	**–93.2**	**–**	**248.0**
Financial income									49.7
Financial expenses									–48.4
Share of profit or loss of associates and joint ventures									–102.1
Earnings before interest and tax (EBIT)									**147.2**
Interest income									0.7
Interest expenses									–11.0
Earnings before tax (EBT)									**136.9**
Income tax expenses									–63.4
Profit for the period									**73.5**

[1] Prior year figures have been restated due to internal reorganizations effective 1 January 2022. The impact on business unit profit was as follows: Exchanges: CHF +2.4 million, Securities Services: CHF –3.4 million, Banking Services: CHF +2.9 million, Financial Information: CHF –1.9 million.

Disclosures by geographical area

SIX operates mainly in Switzerland, Spain and in other European countries. The geographical analysis of the operating income from external customers and non-current assets is based on the location of the entity in which the transactions and assets were recorded.

Non-current assets mainly consist of property, plant and equipment, intangible assets, investments in associates and other non-current assets, and exclude financial instruments, deferred tax and post-employment benefit assets in accordance with the provisions of IFRS 8.

	Total operating income		Non-current assets	
CHF million	**2022**	**2021**	**31/12/2022**	**31/12/2021**
Switzerland	978.8	962.0	2,042.0	2,090.7
Spain	280.2	312.5	2,457.3	2,710.0
France	47.1	48.9	4.2	6.4
Luxembourg	33.6	17.6	128.4	0.9
Germany	33.6	40.3	1.6	1.9
United Kingdom	27.8	20.9	53.5	54.1
Italy	15.0	16.9	1.0	1.1
Rest of Europe	36.9	40.7	3.1	3.7
North America	30.4	26.7	5.0	6.5
Asia/Pacific	9.2	10.1	3.2	4.2
North Africa	1.5	1.6	0.2	0.2
Total	**1,494.1**	**1,498.3**	**4,699.5**	**4,879.9**

Disclosures of major customers

SIX has a large number of customers. In 2022 and 2021, there was no major customer whose revenues represented more than 10% of the Group’s revenue.

5. Operating Income

In the following table, revenue is disaggregated by revenue type and by major service lines:

					2022
CHF million	Transaction revenues	Service revenues	Net interest income from interest margin business	Other operating income	Total
Exchanges					
Trading	196.4	73.7	–	0.2	270.3
Data	–	81.8	–	–	81.8
Other services	3.3	4.4	–	0.3	7.9
Total Exchanges	**199.6**	**159.9**	**–**	**0.5**	**360.0**
Securities Services					
Custody business	120.5	165.7	24.6	0.1	310.9
CCP clearing	43.2	5.8	14.5	0.0	63.5
Securities finance	23.0	8.4	–	0.1	31.5
Other services	39.3	11.7	–	0.2	51.2
Total Securities Services	**225.9**	**191.6**	**39.1**	**0.5**	**457.1**
Banking Services					
Billing and payments	53.2	11.9	8.1	0.1	73.4
ATM processing and services	32.5	6.2	–	0.3	39.0
Debit processing and services	85.0	8.0	–	–	92.9
Connectivity and data	1.5	10.1	–	0.1	11.7
Other services	–	6.4	–	–	6.4
Total Banking Services	**172.2**	**42.7**	**8.1**	**0.6**	**223.5**
Financial Information					
Reference data & pricing	–	204.5	–	0.2	204.7
Market data & display	–	91.7	–	–	91.7
Tax & regulatory services	–	43.6	–	–	43.6
Indices	–	26.0	–	–	26.0
Other services	–	19.4	–	0.1	19.5
Total Financial Information	**–**	**385.3**	**–**	**0.3**	**385.6**
IT					
Corporate IT	–	41.5	–	0.8	42.3
Total IT	**–**	**41.5**	**–**	**0.8**	**42.3**
Corporate & Others					
Corporate & other services	–	1.8	–	23.8	25.7
Total Corporate & Others	**–**	**1.8**	**–**	**23.8**	**25.7**
Total operating income	**597.7**	**822.7**	**47.2**	**26.5**	**1,494.1**

					2021 (restated)
CHF million	Transaction revenues[1]	Service revenues[1]	Net interest income from interest margin business	Other operating income[1]	Total
Exchanges					
Trading	217.2	71.6	–	0.2	289.0
Data	–	82.6	–	–	82.6
Other services[2]	4.0	5.0	–	0.1	9.1
Total Exchanges	**221.2**	**159.1**	**–**	**0.3**	**380.7**
Securities Services					
Custody business	141.8	177.8	14.2	–	333.9
CCP clearing	43.1	8.7	16.8	0.2	68.8
Securities finance	15.2	7.0	–	0.1	22.4
Other services[2]	22.3	12.3	–	0.2	34.7
Total Securities Services	**222.4**	**205.7**	**31.1**	**0.5**	**459.7**
Banking Services					
Billing and payments	56.4	8.5	13.4	0.4	78.7
ATM processing and services	29.2	6.2	–	0.2	35.7
Debit processing and services	68.9	5.3	–	–	74.2
Connectivity and data	2.5	8.9	–	0.5	11.8
Other services[2]	–	6.2	–	–	6.2
Total Banking Services	**157.0**	**35.2**	**13.4**	**1.1**	**206.7**
Financial Information					
Reference data & pricing	–	231.7	–	0.1	231.8
Market data & display	–	72.2	–	–	72.2
Tax & regulatory services	–	39.8	–	–	39.8
Indices	–	22.0	–	–	22.0
Other services[2]	–	14.8	–	0.1	14.9
Total Financial Information	**–**	**380.6**	**–**	**0.1**	**380.7**
IT					
Corporate IT	–	42.6	–	0.2	42.8
Total IT	**–**	**42.6**	**–**	**0.2**	**42.8**
Corporate & Others					
Corporate & other services	–	2.6	–	25.1	27.7
Total Corporate & Others	**–**	**2.6**	**–**	**25.1**	**27.7**
Total operating income	**600.6**	**825.9**	**44.5**	**27.3**	**1,498.3**

[1] See note 2 (under 2.4 Restatement) for further information on the restatement.

[2] Prior year figures have been restated due to internal reorganizations effective 1 January 2022.

Transaction price allocated to the remaining performance obligations

The following table provides information about performance obligations that have already been contractually agreed upon, but are unsatisfied (or partially unsatisfied) at year-end. Customer contracts with an initial term of 12 months or less and services with transaction-based fees are not included.

CHF million	31/12/2022	31/12/2021
Within one year	85.6	90.5
Within two years	63.2	63.9
Within three years	54.7	51.7
Thereafter	132.3	188.6
Total	**335.8**	**394.7**

Contract liabilities

The following table shows a reconciliation from the opening to the closing balances of contract liabilities:

CHF million	2022	2021
Carrying amount at 1 January	**49.0**	**60.3**
Revenue recognized that was included in contract liabilities at 1 January	–29.3	–28.3
Increases due to cash received, excluding amounts recognized as revenue during the period	11.0	14.8
Additions due to changes in the scope of consolidation [1]	2.0	2.2
Carrying amount at 31 December	**32.7**	**49.0**
of which current	*16.3*	*22.6*
of which non-current	*16.4*	*26.4*

[1] The figure includes the net change of contract liabilities during the year related to acquired companies, see note 29.

6. Net Interest Income from Interest Margin Business

CHF million	2022	2021
Interest income from interest margin business	92.7	83.1
Interest expenses from interest margin business	–45.5	–38.6
Net interest income from interest margin business	**47.2**	**44.5**

In 2022, interest expenses from interest margin business included interest arising from negative interest rates on financial assets in the amount of CHF 29.3 million (2021: CHF 34.8 million), of which CHF 1.5 million (2021: CHF 1.5 million) related to financial instruments at FVtOCI.

Net interest income from interest margin business includes interest received of CHF 103.0 million (2021: CHF 95.1 million), whereas interest expenses from interest margin business include interest paid of CHF 44.0 million (2021: CHF 37.1 million).

7. Employee Benefit Expenses

CHF million	2022	2021
Salaries and wages	–466.8	–458.3
Social security expenses	–114.1	–114.2
Others	–29.2	–28.6
Total employee benefit expenses	**–610.1**	**–601.0**

Expenses recognized for defined contribution plans are included in social security expenses and amount to CHF 3.7 million (2021: CHF 3.4 million). For further information on defined benefit plans, see note 33.

8. Other Operating Expenses

CHF million	2022	2021
Contractor costs	–151.3	–163.6
Sales-related costs	–135.0	–148.8
Expenses for IT infrastructure	–99.2	–92.4
Expenses for data procurement & operation	–46.9	–46.1
VAT & tax expenses	–19.3	–15.6
Expenses for building infrastructure	–16.9	–16.2
Marketing and advertising expenses	–13.4	–12.0
Legal and audit fees	–9.1	–10.3
Travel expenses	–6.9	–2.8
Others	–20.6	–18.1
Own work capitalized	32.3	50.4
Total other operating expenses	**–486.2**	**–475.6**

Contractor costs primarily include consulting, outsourcing, external staff and software development.

Own work capitalized includes costs incurred for the development and implementation of software and Software as a Service arrangements.

CHF million	2022	2021
Total expenses for software development	53.0	87.9
of which capitalized	*32.3*	*50.4*

In 2022, 61.0% of the project costs incurred for development and implementation were capitalized (2021: 57.4%). The capitalization ratio mainly depends on the nature of the costs incurred, the stage of projects and the costs of maintenance projects.

9. Financial Income and Expenses

CHF million	2022	2021
Income from financial instruments at fair value	4.9	3.8
Foreign exchange rate gains	53.8	38.3
Other financial income	21.5	7.6
Total financial income	**80.2**	**49.7**
Expenses from financial instruments at fair value	–3.4	–3.2
Expenses from financial instruments at amortized cost	–5.5	–0.0
Foreign exchange rate losses	–51.1	–37.6
Other financial expenses	–18.1	–7.6
Total financial expenses	**–78.1**	**–48.4**

Foreign exchange rate gains and losses comprise gains and losses from financial instruments at amortized cost and financial instruments at fair value. The latter also includes the fair value changes of foreign currency derivatives. In 2022, the net foreign exchange losses on financial instruments at amortized cost amounted to CHF 16.8 million (2021: net loss of CHF 2.8 million), which was largely compensated by gains of financial instruments at fair value.

In 2022, other financial income mainly included the remeasurement gain related to REGIS-TR of CHF 10.3 million (see note 29), a remeasurement gain of CHF 5.8 million on the NCI liabilities of Orenda (see note 17) and a gain of CHF 3.7 million from the deconsolidation of F10 Group (see note 28). In 2021, other financial income included the gain from the sale of the e-Invoicing business to Postfinance Ltd.

In 2022, expenses from financial instruments at amortized cost included losses from disposals of bonds related to a restructuring of the SECB bond portfolio.

In 2022, other financial expenses mainly comprised the loss on the sale of Custodigit of CHF 11.9 million (see note 28) and deemed disposals of CHF 5.2 million (2021: CHF 5.3 million) arising from new shares issued under employee share purchase plans of Worldline SA.

10. Interest Income and Expenses

CHF million	2022	2021
Interest income bonds	0.6	0.6
Others	0.2	0.1
Total interest income	**0.9**	**0.7**
Interest expenses bonds	–0.5	–0.1
Cash and cash equivalents	–4.2	–5.5
Borrowings	–1.1	–2.5
Interest expenses on lease liabilities	–2.8	–2.9
Total interest expenses	**–8.6**	**–11.0**

In 2022, total interest expenses included interest charges arising from negative interest rates on financial assets in the amount of CHF 4.2 million (2021: CHF 5.5 million).

11. Earnings per Share

Basic earnings per share are calculated by dividing the profit for the year attributable to shareholders of SIX by the weighted average number of shares outstanding during the year.

	Notes	2022	2021
Net profit attributable to shareholders of SIX Group Ltd (in CHF million)		185.4	73.9
Weighted average number of shares outstanding	22	18,914,041	18,914,041
Basic earnings per share (in CHF)		**9.80**	**3.91**

There was no dilution of earnings per share in 2022 or 2021.

Income Taxes

12. Income Taxes

Income tax expenses

The major components of income tax expenses for the years ending 31 December 2022 and 31 December 2021 were as follows:

CHF million	2022	2021
Current tax		
Current tax on profits for the year	–74.4	–88.2
Adjustments in respect of prior years	–2.4	2.0
Total current tax expenses	**–76.8**	**–86.2**
Deferred tax		
Origination and reversal of temporary differences	22.2	23.1
Deferred tax on tax losses	3.4	–0.5
Other changes in deferred tax	–0.1	0.1
Total deferred tax benefits/(expenses)	**25.6**	**22.8**
Total income tax expenses	**–51.2**	**–63.4**

In 2022, an extensive commentary on the Pillar II rules (Minimum Taxation) was published by the OECD. Pillar II requires multinational enterprises with an annual global turnover exceeding EUR 750 million to pay at least 15% tax per jurisdiction. It is expected that most countries, among them Switzerland, will incorporate the Pillar II rules into national tax law per 1 January 2024. As SIX exceeds the threshold and thus is in scope of Pillar II, in future years the income taxes of SIX may be affected by the application of the new taxation rules. SIX will not be affected by Pillar I (Taxing rights for market jurisdictions of multinational enterprises) as the global turnover of SIX will be below the required threshold and also because the financial services industries are expected to be out of scope of Pillar I.

The remaining value of the tax asset related to the brand "SIX", which was built as a measure from the Swiss tax reform in 2019, was amortized in 2022. As another measure from the Swiss tax reform, the super-deduction of R&D expenses is used for selected Swiss entities. The recognized income tax expenses are subject to possible adjustments in the final tax assessments.

Tax reconciliation

The following breakdown shows the reconciliation of the income tax expenses reflected in the financial statements and the amount calculated at the weighted average tax rate:

CHF million		2022		2021
Income from operating activities, gross of tax expenses		236.2		136.9
Group's weighted average applicable tax rate/ Group's expected tax expenses	**19.4%**	**–45.7**	**21.6%**	**–29.6**
Impact of differences in tax rates and tax bases	–0.3%	0.8	–0.2%	0.3
Utilization of previously unrecognized tax losses	–0.7%	1.7	–1.0%	1.4
Deferred tax recognized for tax losses of prior years	–1.7%	4.1	–0.2%	0.3
Deferred tax not recognized for tax losses of the year	13.4%	–31.7	10.0%	–13.7
Adjustments of deferred tax for tax losses of prior years	0.4%	–0.9	0.1%	–0.2
Impact of permanent differences	–9.7%	23.0	17.8%	–24.3
Adjustments of previous years	1.0%	–2.4	–2.0%	2.7
Intercompany effects	–0.0%	0.1	0.2%	–0.2
Group's effective tax rate/tax expenses	**21.7%**	**–51.2**	**46.3%**	**–63.4**

The expected tax expenses at the weighted average applicable tax rate are the result of applying the domestic statutory tax rates to the earnings before tax of each entity in the country in which it operates and of reversing intercompany effects. The change in the weighted average tax rate was mainly due to a further reduction of income tax rates in Switzerland in 2022 and by the share of loss of Worldline in 2021.

Permanent differences include tax-exempt income, non-deductible expenses and the impact of specific tax regulations and participation exemptions. In 2022, permanent differences included the non-taxable share of profit of Worldline and other associates and the tax-deductible impairments on investments in the local accounts. In 2021, permanent differences included in particular the non-taxable share of loss of Worldline.

Income tax receivables and payables

The estimated amounts of current income tax receivables and payables, including any amounts related to uncertain tax positions, are based on currently known facts and circumstances.

The Tax Authorities of the Canton of Zurich have announced a re-assessment of possible tax effects from the disposal of the former cards business on SIX Group Ltd and SIX Financial Information Ltd in the tax period 2018. The possible tax claim would amount to a maximum of CHF 26.0 million. Management believes that it has strong arguments to defend its current position and that the re-assessment will not lead to a payment. Accordingly, no provision for any liability has been made in these financial statements.

13. Deferred Tax Assets and Liabilities

Deferred taxes relating to items in the balance sheet

Deferred tax assets and liabilities relate to the following items:

	31/12/2022		31/12/2021	
CHF million	Assets	Liabilities	Assets	Liabilities
Trade and other receivables	0.1	0.8	0.1	0.7
Financial assets	0.0	3.3	0.0	5.1
Other assets	0.2	1.0	0.3	1.0
Property, plant and equipment	0.0	8.7	0.0	9.9
Intangible assets	0.3	251.0	0.9	263.3
Investments in subsidiaries, associates and joint ventures	–	1.2	–	0.2
Assets from pension fund benefits	0.0	2.3	0.0	26.0
Provisions	1.0	0.0	1.0	0.1
Other liabilities	5.2	0.0	5.6	0.0
Financial liabilities	6.0	0.1	7.2	0.2
Pension fund liabilities	4.2	–	4.6	–
Tax loss carryforwards	5.1	–	1.8	–
Total deferred tax assets/liabilities	**22.1**	**268.6**	**21.5**	**306.4**
Offsetting	–6.4	–6.4	–7.7	–7.7
Deferred tax assets/liabilities on the balance sheet	**15.7**	**262.2**	**13.8**	**298.7**

Net deferred tax assets and liabilities changed as follows:

CHF million	Notes	2022	2021
Carrying amount at 1 January		**–284.9**	**–288.3**
Business combinations	29	–21.1	–0.8
Changes affecting the income statement		25.6	22.8
Changes affecting OCI		21.0	–30.7
Translation adjustments		12.9	12.1
Carrying amount at 31 December		**–246.5**	**–284.9**
of which deferred tax assets		*15.7*	*13.8*
of which deferred tax liabilities		*–262.2*	*–298.7*

Expiry dates of recognized and unrecognized unused tax loss carryforwards

The gross values of recognized and unrecognized unused tax loss carryforwards, with their expiry dates, are as follows:

CHF million	31/12/2022 Not recognized	31/12/2022 Recognized	31/12/2022 Total	31/12/2021 Not recognized	31/12/2021 Recognized	31/12/2021 Total
One year	15.0	–	15.0	11.4	1.7	13.1
Two years	14.7	–	14.7	13.3	1.7	15.0
Three years	4.7	–	4.7	14.6	0.2	14.8
Four years	43.5	–	43.5	4.9	–	4.9
Five years	55.1	7.9	63.0	50.6	–	50.6
Six years	55.9	8.8	64.7	64.6	–	64.6
More than six years	167.9	7.5	175.4	82.8	4.5	87.3
Total	**356.9**	**24.2**	**381.1**	**242.2**	**8.1**	**250.3**
Potential tax saving	57.1		57.1	49.3		49.3

No deferred tax assets have been recognized for tax loss carryforwards of CHF 356.9 million (31 December 2021: CHF 242.2 million), as it is uncertain whether the losses will be utilized in the future. As at 31 December 2022, the potential tax saving from unrecognized tax loss carryforwards was CHF 57.1 million (31 December 2021: CHF 49.3 million). For tax loss carryforwards which will have no tax effect when used, no potential tax savings are considered.

As at 31 December 2022, tax loss carryforwards of CHF 24.2 million (31 December 2021: CHF 8.1 million) were recognized, resulting in deferred tax assets of CHF 5.1 million (31 December 2021: CHF 1.8 million).

Assets, Equity and Liabilities

14. Cash and Cash Equivalents

CHF million	31/12/2022	31/12/2021
Cash at central banks	3,600.3	5,644.3
Cash at other banks and on hand	649.9	773.5
Short-term bank deposits	70.3	55.7
Cash and cash equivalents	**4,320.5**	**6,473.5**

Cash and cash equivalents include the following items for the purposes of the statement of cash flows:

CHF million	31/12/2022	31/12/2021
Cash and cash equivalents	4,320.5	6,473.5
Bank overdrafts	−472.0	−0.2
Cash and cash equivalents in the statement of cash flows	**3,848.6**	**6,473.3**

Bank overdrafts increased by CHF 471.8 million due to temporary withdrawals of customer deposits at SECB as at the balance sheet date. SECB used its securities portfolio to obtain liquidity from Deutsche Bundesbank as part of a Lombard transaction.

15. Trade and Other Receivables

CHF million	31/12/2022	31/12/2021
Trade receivables	148.6	141.3
Unbilled receivables	26.9	28.6
Other receivables	26.4	19.6
Total trade and other receivables	**201.9**	**189.5**

The exposure of SIX in relation to credit risk and details of expected credit losses on trade and other receivables are disclosed in note 25. The maximum exposure to credit risk at the reporting date corresponds to the carrying amount.

Trade and other receivables due from related parties are disclosed in note 34.

16. Receivables and Payables from Clearing & Settlement

CHF million	31/12/2022	31/12/2021
Receivables from clearing & settlement	750.9	434.2
Receivables from reverse repurchase transactions	3,803.8	1,915.8
Total receivables from clearing & settlement – Securities Services	**4,554.7**	**2,350.0**
Receivables from ATM and debit processing	382.6	186.5
Receivables from euro clearing business	0.7	0.5
Total receivables from clearing & settlement – Banking Services	**383.3**	**187.1**
Total receivables from clearing & settlement	**4,938.0**	**2,537.1**
Payables from clearing & settlement	1,909.6	1,426.1
Cash collateral received	5,586.9	6,427.1
Payables from repurchase agreements	18.7	–
Payables from settled suspense	55.9	29.6
Total payables from clearing & settlement – Securities Services	**7,571.1**	**7,882.8**
Payables from ATM and debit processing	371.0	160.9
Payables from euro clearing business	895.4	1,222.9
Total payables from clearing & settlement – Banking Services	**1,266.4**	**1,383.8**
Total payables from clearing & settlement	**8,837.5**	**9,266.6**

Receivables and payables from clearing & settlement – Securities Services

Receivables and payables from clearing & settlement in the post-trading area derive from SIX acting as a central counterparty (CCP) or a central securities depository (CSD) for securities trading. The CCP steps into the contracts as an intermediary, representing the buyer to each seller and the seller to each buyer.

Receivables from clearing & settlement include deposits at correspondence banks for cross-border settlements, unsettled margin calls and unsettled daily variation margins from derivatives.

Reverse repurchase transactions are conducted under the usual terms and conditions applying to such agreements. The fair value of securities received as collateral from third parties under reverse repurchase transactions with unconditional right to sell or repledge totaled CHF 3,813.8 million (31 December 2021: CHF 1,915.4 million). As at 31 December 2022, SIX had repledged securities received as collateral under reverse repurchase transactions in the amount of CHF 475.0 million (31 December 2021: CHF 99.7 million).

Participants hold deposits with SIX, which are presented as payables from clearing & settlement. To ensure that participants meet all their obligations, a portion of the deposits is blocked as collateral. As at 31 December 2022, cash collateral received totaled CHF 5,586.9 million (31 December 2021: CHF 6,427.1 million). For further information on collateral received, see note 25. Additionally, payables from clearing & settlement include unsettled daily variation margins from derivatives.

Payables from settled suspense relate to cross-border transactions where a seller is short of securities. In such an event, SIX SIS Ltd borrows the securities required and recognizes a corresponding liability.

As at 31 December 2022, the fair value of securities transferred as collateral for repurchase agreements totaled CHF 18.7 million (31 December 2021: none).

Receivables and payables from clearing & settlement – Banking Services

Receivables from clearing & settlement include receivables due from issuers of debit cards and those from the euro clearing business. Payables from clearing & settlement include payables due to ATM providers, card schemes and acquirers. In the euro clearing business, where SIX acts as a correspondent bank through its subsidiary SECB, payables from clearing & settlement mainly relate to deposits received by participants of the euro clearing system. The funds received from the participants are held at Deutsche Bundesbank or invested in bonds, see note 17.

17. Financial Assets and Liabilities (Current and Non-current)

CHF million	31/12/2022	31/12/2021
Current and non-current financial assets		
Bonds at amortized cost	1,783.6	1,976.4
Bonds at FVtOCI	200.8	212.5
Other debt instruments	111.5	106.6
Equity instruments at FVtPL	43.4	34.9
Units in investment funds at FVtPL	2.3	2.0
Financial instruments from settlement business	11.8	14.7
Derivative financial assets	694.8	1,286.0
Total	**2,848.2**	**3,633.2**
of which current	*1,314.9*	*1,594.6*
of which non-current	*1,533.3*	*2,038.6*
Current and non-current financial liabilities		
Lease liabilities	151.1	165.8
Borrowings	1,273.5	1,273.9
Derivative financial liabilities	697.4	1,285.0
Other financial liabilities	96.9	112.2
Total	**2,218.8**	**2,836.8**
of which current	*723.9*	*1,307.9*
of which non-current	*1,494.9*	*1,528.9*
Carrying amount of financial assets not derecognized		
Securities lending agreements	–	61.7

Bonds at amortized cost

In 2022, bonds at amortized cost decreased by CHF 192.8 million. This decrease mainly resulted from adverse foreign currency effects of CHF 100.6 million (2021: CHF 86.3 million), which largely resulted from translating the assets of foreign operations and were accordingly recognized on Group level in other comprehensive income, net disposals of CHF 81.6 million (2021: net investments of CHF 6.5 million), and amortization of premiums paid of CHF 5.2 million (2021: CHF 7.1 million).

Bonds at FVtOCI

Bonds at FVtOCI include a portfolio of government bonds which is held to fulfill the interoperability collateral requirements of SIX x-clear Ltd against other central counterparties. The objective of the business model is achieved both by collecting contractual cash flows and by selling bonds. In 2022, bonds at FVtOCI decreased by CHF 11.7 million due to fair value changes.

Other debt instruments

Other debt instruments include loans, fixed deposits and funds received for sanctioned persons. In 2022, other debt instruments increased mainly due to amounts granted to fintech companies.

Equity instruments at FVtPL

Equity instruments at FVtPL comprise listed and unlisted shares held by SIX. The increase in 2022 and 2021 mainly resulted from investments in unlisted fintech companies.

Financial instruments from settlement business

These financial instruments represent listed financial instruments that SIX acquires in its role as a CCP. Usually, this occurs when the securities of a trade are only partially delivered on the intended settlement date. In such cases, the delivered securities are acquired by SIX. Upon delivery of the remaining securities, the trade is completely settled and the securities are derecognized.

Derivatives (positive and negative replacement values)

Besides derivatives from clearing and settlement, derivatives include foreign currency forwards and swaps for the purpose of hedging foreign exchange effects, with no application of hedge accounting.

	31/12/2022		31/12/2021	
CHF million	**Positive replacement values**	**Negative replacement values**	**Positive replacement values**	**Negative replacement values**
Trading derivatives				
Foreign currency forwards and swaps	0.9	0.3	0.5	0.5
Derivatives from clearing & settlement	693.9	697.1	1,285.4	1,284.5
Equities and fixed income forwards	*242.4*	*245.6*	*111.2*	*110.3*
Options	*98.4*	*98.4*	*526.1*	*526.1*
Energy derivatives	*353.0*	*353.0*	*648.1*	*648.1*
Total trading derivatives	**694.8**	**697.4**	**1,286.0**	**1,285.0**
Total derivative financial instruments	**694.8**	**697.4**	**1,286.0**	**1,285.0**

The positive replacement values represent the amount that SIX would receive if the derivative contracts were settled in full on the reporting date. The negative replacement values, on the other hand, represent the amount that SIX would need to pay if the derivative instruments were settled in full on the reporting date.

Lease liabilities

In 2022, the lease liabilities decreased mainly due to the amortization of CHF 18.9 million (2021: CHF 15.3 million). The net increase in lease liabilities arising from index adjustments and changes in the lease terms totaled CHF 5.6 million (2021: CHF 8.9 million).

Borrowings

Borrowings include bonds issued by SIX and loans. Further details of movements in borrowings are provided below under “Changes in liabilities from financing activities”. The key terms of the bonds were as follows:

CHF million						Carrying amount	
Instruments	Issuer	Year of issuance	Nominal value in million	Maturity	Effective interest rate	31/12/2022	31/12/2021
0.0% bond [1] ISIN ES0305523005	SIX Finance (Luxembourg) SA	2020	EUR 650.0	02/12/2025	0.04%	638.6	671.4
0.125% dual part bond Part A: ISIN CH1142754337 Part B: ISIN CH1142754345	SIX Group Ltd	2021	CHF 150.0	27/11/2026	0.21%	149.5	149.3
0.2% bond ISIN CH1132966347	SIX Group Ltd	2021	CHF 450.0	28/09/2029	0.21%	449.8	449.8
Total						**1,237.9**	**1,270.6**

[1] This bond has been designated as a hedging instruments for a net investment hedge to hedge the foreign currency exposure. For further details on hedge accounting, see note 25.

Other financial liabilities

Other financial liabilities include, in particular, liabilities due to non-controlling interests and liabilities to pass on the funds received for sanctioned persons (see “Other debt instruments” above). The NCI liabilities result from the acquisitions of 12H Limited, Ultumus and Orenda in the previous years. As at 31 December 2022, the NCI liabilities totaled CHF 2.7 million (31 December 2021: CHF 11.7 million). The decrease mainly resulted from a payment to the minority shareholders of 12H Limited and a remeasurement of the NCI liability of Orenda, which has been recognized in other financial income (see note 9).

Changes in liabilities arising from financing activities

The following table provides a reconciliation of the liabilities arising from financing activities.

				2022
CHF million	Lease liabilities	Borrowings	Other	Total
Carrying amount at 1 January	**165.8**	**1,273.9**	**0.5**	**1,440.2**
Cash paid	–18.9	–20.2	–	–39.1
Changes in scope of consolidation	0.5	–1.2	–	–0.8
Changes through P&L	–	7.2	–0.5	6.7
Other non-cash	5.6	46.9	–	52.5
Translation adjustments	–1.9	–33.1	–0.0	–35.0
Carrying amount at 31 December	**151.1**	**1,273.5**	**–**	**1,424.5**
of which current	*12.9*	*13.6*	–	*26.5*
of which non-current	*138.1*	*1,259.9*	–	*1,398.0*

				2021
CHF million	**Lease liabilities**	**Borrowings**	**Other**	**Total**
Carrying amount at 1 January	**173.7**	**1,017.8**	**–**	**1,191.5**
Cash received	–	644.6	–	644.6
Cash paid	–15.3	–363.3	–	–378.6
Additions due to changes in scope of consolidation	–	0.8	0.5	1.3
Changes through P&L	–	7.0	–	7.0
Other non-cash	8.9	–0.9	–	8.0
Translation adjustments	–1.5	–32.1	–0.0	–33.6
Carrying amount at 31 December	**165.8**	**1,273.9**	**0.5**	**1,440.2**
of which current	*16.8*	*2.0*	*–*	*18.8*
of which non-current	*148.9*	*1,271.9*	*0.5*	*1,421.4*

18. Other Assets (Current and Non-current)

CHF million	**Notes**	**31/12/2022**	**31/12/2021**
Accrued revenues and prepaid expenses		47.1	32.8
Accrued interest		11.9	11.3
Receivables from other taxes		12.1	12.2
Other short-term assets		3.0	0.0
Total other current assets		**74.2**	**56.4**
Services to be received		25.3	–
Assets from pension fund benefits	33	13.6	134.0
Costs to obtain a contract		7.6	6.7
Other long-term assets		20.3	13.9
Total other non-current assets		**66.8**	**154.5**

Receivables from other taxes primarily relate to receivables from value added taxes and withholding taxes.

Services to be received include maintenance services for a period of up to five years which are financed through loans.

Other long-term assets primarily include prepaid expenses.

19. Property, Plant and Equipment

CHF million	Notes	Land, buildings and leasehold improvements	Technical installations	IT hardware	Other tangible assets	Total
						2022
Historical cost at 1 January		**671.7**	**208.4**	**141.8**	**27.2**	**1,049.0**
Additions		4.5	6.3	32.4	2.8	45.9
Disposals		–13.3	–1.2	–38.2	–0.8	–53.6
Business combinations	29	0.4	–	0.1	–0.1	0.3
Reclassifications		–	–2.5	2.5	–0.0	–
Translation adjustments		–5.6	–0.4	–2.1	–0.2	–8.3
Historical cost at 31 December		**657.7**	**210.5**	**136.4**	**28.8**	**1,033.4**
Accumulated depreciation at 1 January		**–356.9**	**–157.1**	**–106.2**	**–18.9**	**–639.1**
Annual depreciation on assets owned		–6.2	–7.3	–17.8	–2.9	–34.2
Annual depreciation on right-of-use assets		–15.4	–	–1.2	–0.2	–16.9
Disposals		11.3	1.2	35.0	0.8	48.3
Disposals due to changes in scope of consolidation		–	–	0.0	0.1	0.1
Reclassifications		–	0.5	–0.5	0.0	–
Translation adjustments		2.6	0.1	1.5	0.1	4.3
Accumulated depreciation at 31 December		**–364.6**	**–162.6**	**–89.3**	**–21.0**	**–637.5**
Net carrying amount at 31 December		**293.1**	**47.9**	**47.1**	**7.8**	**395.9**
of which assets owned, used by SIX		*127.9*	*36.1*	*41.3*	*7.1*	*212.5*
of which assets owned, subject to an operating lease		*30.8*	*11.7*	*0.0*	*0.3*	*42.8*
of which right-of-use assets		*134.5*	*–*	*5.7*	*0.4*	*140.6*

CHF million	Notes	Land, buildings and leasehold improvements	Technical installations	IT hardware	Other tangible assets	Total
						2021
Historical cost at 1 January		**679.3**	**215.5**	**134.4**	**33.2**	**1,062.4**
Additions		8.9	4.7	20.8	2.3	36.7
Disposals		–12.3	–11.3	–12.0	–8.3	–43.9
Business combinations	29	–	–	0.0	0.1	0.2
Translation adjustments		–4.1	–0.5	–1.6	–0.1	–6.3
Historical cost at 31 December		**671.7**	**208.4**	**141.8**	**27.2**	**1,049.0**
Adjusted accumulated depreciation at 1 January		**–342.6**	**–159.8**	**–98.0**	**–23.2**	**–623.6**
Annual depreciation on assets owned		–7.1	–8.0	–18.4	–3.6	–37.2
Annual depreciation on right-of-use assets		–17.0	–	–0.8	–0.2	–18.0
Impairments, net		–0.4	–0.6	–	–	–1.1
Disposals		8.8	11.2	10.0	8.1	38.0
Translation adjustments		1.4	0.1	1.1	0.1	2.7
Accumulated depreciation at 31 December		**–356.9**	**–157.1**	**–106.2**	**–18.9**	**–639.1**
Net carrying amount at 31 December		**314.8**	**51.3**	**35.6**	**8.3**	**409.9**
of which assets owned, used by SIX		*135.5*	*38.2*	*30.5*	*7.9*	*212.1*
of which assets owned, subject to an operating lease		*31.9*	*13.0*	*0.1*	*–*	*45.0*
of which right-of-use assets		*147.4*	*–*	*5.0*	*0.4*	*152.8*

Additions

During 2022, SIX acquired items of property, plant and equipment at a cost of CHF 45.9 million (2021: CHF 36.7 million). Investments in property, plant and equipment primarily relate to buildings under lease, and midrange and mainframe servers. The total of property, plant and equipment under construction as at 31 December 2022 was CHF 1.3 million (31 December 2021: CHF 0.6 million). The additions in right-of-use assets totaled CHF 6.7 million in 2022 (2021: CHF 13.4 million). For further details of the leases, see note 32. Additions of IT hardware include non-cash additions of CHF 6.3 million (2021: none).

20. Intangible Assets and Goodwill

Reconciliation of carrying amount

								2022
		Indefinite useful life		Finite useful life				
CHF million	Notes	Goodwill	Trademarks, licenses & others	Customer relation-ships	Acquired software	Internally generated software	Other intangible assets	Total
Historical cost at 1 January		**1,654.0**	**293.0**	**583.4**	**106.6**	**940.9**	**17.4**	**3,595.3**
Additions		–	0.1	–	13.2	35.2	–	48.5
Disposals		–	–	–	–9.6	–24.8	–	–34.4
Business combinations	29	41.3	2.7	76.0	–	12.4	–	132.3
Disposals due to changes in scope of consolidation		–	–	–	–0.6	–	–0.1	–0.7
Reclassifications		–	–	–	–0.1	0.1	–	–
Translation adjustments		–79.9	–14.6	–32.3	–0.5	–15.0	–0.1	–142.4
Historical cost at 31 December		**1,615.4**	**281.2**	**627.0**	**109.0**	**948.8**	**17.2**	**3,598.7**
Accumulated amortization at 1 January		**–7.2**	**–**	**–61.6**	**–88.6**	**–587.4**	**–11.8**	**–756.7**
Annual amortization		–	–	–41.4	–8.9	–70.1	–1.0	–121.4
Impairments, net		–1.4	–0.1	–	–0.3	–3.3	–	–5.0
Disposals		–	–	–	6.1	24.6	–	30.7
Disposals due to changes in scope of consolidation		–	–	–	0.6	–	0.1	0.7
Reclassifications		–	–	–	1.2	–1.2	–	–
Translation adjustments		–	–	3.9	0.5	4.7	0.1	9.3
Accumulated amortization at 31 December		**–8.6**	**–0.1**	**–99.1**	**–89.4**	**–632.7**	**–12.7**	**–842.5**
Net carrying amount at 31 December		**1,606.8**	**281.2**	**527.9**	**19.7**	**316.1**	**4.5**	**2,756.2**

								2021
		Indefinite useful life		Finite useful life				
CHF million	Notes	Goodwill	Trademarks, licenses & others	Customer relation-ships	Acquired software	Internally generated software	Other intangible assets	Total
Historical cost at 1 January		**1,723.6**	**307.0**	**611.3**	**101.9**	**906.1**	**17.1**	**3,667.0**
Additions		–	–	–	8.7	49.8	0.4	58.9
Disposals		–	–	–	–3.5	–5.4	–	–8.8
Business combinations	29	6.8	–	–	–	4.1	–	10.9
Translation adjustments		–76.4	–14.0	–27.9	–0.5	–13.7	–0.1	–132.7
Historical cost at 31 December		**1,654.0**	**293.0**	**583.4**	**106.6**	**940.9**	**17.4**	**3,595.3**
Accumulated amortization at 1 January		**–7.2**	**–**	**–22.9**	**–81.0**	**–529.8**	**–11.2**	**–652.1**
Annual amortization		–	–	–41.6	–9.5	–65.3	–0.5	–116.9
Impairments, net		–	–	–	–0.1	–0.1	–0.2	–0.4
Disposals		–	–	–	1.5	4.3	–	5.8
Translation adjustments		–	–	2.8	0.5	3.5	0.0	6.9
Accumulated amortization at 31 December		**–7.2**	**–**	**–61.6**	**–88.6**	**–587.4**	**–11.8**	**–756.7**
Net carrying amount at 31 December		**1,646.8**	**293.0**	**521.8**	**18.0**	**353.5**	**5.5**	**2,838.6**

Software and other intangible assets

Additions

Expenses for development projects are capitalized when they meet the recognition criteria. Intangible assets under construction as at 31 December 2022 amounted to CHF 28.8 million (31 December 2021: CHF 43.4 million). Additions of acquired software include non-cash additions of CHF 3.3 million (2021: none).

Goodwill and other intangible assets with indefinite useful life

Besides goodwill, SIX owns trademarks and licenses which have an indefinite useful life. The trademarks and licenses assets were recognized upon the acquisition of BME and REGIS-TR. The licenses are needed to maintain the trading and post-trading business of BME as well as the trade repository business of REGIS-TR.

Reallocation of goodwill and other intangible assets with indefinite useful life

As of 1 January 2022, the Open Finance business in Spain was transferred from the Financial Information business unit to that of Securities Services. The reorganization triggered a reallocation of goodwill and other intangible assets with indefinite useful life from the Financial Information CGU (Spain) to the Securities Services CGU (Spain). The transferred carrying amount of goodwill and other intangible assets amounted to CHF 19.2 million and CHF 1.8 million, respectively. An impairment test was conducted before and after reallocation. No impairment had to be recognized.

The following table provides a breakdown of goodwill and other intangible assets with indefinite useful life per cash generating unit.

CHF million	31/12/2022	31/12/2021
Exchanges (Spain)	960.2	1,010.0
Securities Services (Spain) [1]	531.9	540.3
Financial Information (Spain) [1]	2.2	21.5
12H Ltd	16.6	17.5
Financial Information (Ultumus Limited)	50.0	49.5
REGIS-TR	39.3	–
Others	6.6	8.0
Goodwill, net	**1,606.8**	**1,646.8**
Exchanges (Spain)	182.8	192.3
Securities Services (Spain) [1]	95.5	98.6
Financial Information (Spain) [1]	0.2	2.1
REGIS-TR	2.5	–
Others	0.1	–
Intangible assets with indefinite useful life	**281.2**	**293.0**

[1] Goodwill and intangible assets with indefinite useful life have been reallocated due to organizational changes (see above).

Impairment test for CGUs containing goodwill or other intangible assets with indefinite useful life

The goodwill items and other intangible assets with indefinite useful life are subject to an annual impairment test conducted in the fourth quarter of each year. If events or a change of circumstances indicate a possible impairment, the test is carried out more frequently to determine whether the carrying amount of the relevant organizational unit exceeds its recoverable amount.

For the purpose of impairment testing, goodwill and other intangible assets with indefinite useful life have been allocated to the following CGUs. The table includes only material CGUs:

CHF million					31/12/2022
Cash-generating unit	Carrying amount	Projection period	Perpetual growth rate	Discount rate	Method
Exchanges (Spain)	1,487.5	3 years	1.5%	7.2%	Value in use
Securities Services (Spain)	745.7	3 years	1.5%	7.1%	Value in use
Financial Information (Spain)	5.4	3 years	1.5%	9.7%	Value in use
12H Ltd	25.9	3 years	0.4%	7.4%	Value in use
Financial Information (Ultumus Limited)	188.5	3 years	0.4%	8.2%	Value in use
REGIS-TR	124.2	3 years	1.0%	6.6%	Value in use
Total	**2,577.1**				

CHF million					**31/12/2021**
Cash-generating unit	**Carrying amount**	**Projection period**	**Perpetual growth rate**	**Discount rate**	**Method**
Exchanges (Spain)	1,562.7	3 years	1.5%	6.7%	Value in use
Securities Services (Spain)	829.0	3 years	1.5%	6.4%	Value in use
Financial Information (Spain)	39.7	3 years	1.5%	9.1%	Value in use
12H Ltd	31.8	3 years	0.0%	7.6%	Value in use
Financial Information (Ultumus Limited)	107.9	3 years	1.5%	8.0%	Value in use
Total	**2,571.2**				

The recoverable amounts for the CGUs have been determined based on a value in use calculation using the discounted cash flow method (DCF). These calculations use post-tax cash flow projections based on financial projections approved by the BoD. Based on the 2022 impairment test, none of the material CGUs are impaired.

Key assumptions

The calculation of value in use is most sensitive to the following assumptions:

Cash flows within the projection period

The free cash flows of the first year of the plan are based on the budgets of the CGUs. For the second and third years of the plan, the free cash flows are calculated using growth rates from the mid-term financial plan of the respective business unit to which the CGU belongs.

Perpetual growth rate

Cash flows beyond the financial plan period are extrapolated using a perpetual growth rate which does not exceed the long-term average growth rate for the businesses in which the CGUs operate.

Discount rate

The discount rate calculation is based on the specific circumstances of SIX and its operating segments. It is derived from the capital asset pricing model and considers the risk-free interest rate based on long-term government bond yields and market risk premiums. Since 2022, an average for the risk-free rate has been applied in order to address short-term fluctuations in the interest rate markets. The discount rate used also takes into consideration the specific risks relating to the cash-generating unit. Beta and equity/debt ratio are derived from peer groups.

Key assumptions used to determine the recoverable amounts of each CGU are tested for sensitivity by applying a reasonably possible change to those assumptions. Undiscounted free cash flows available to shareholders were changed by 10%, the discount rate by 1%, and the perpetual growth rate by 1%. Management believes that no reasonably possible change in any of the above key assumptions would cause the carrying amount of any cash-generating unit to exceed its recoverable amount except for the CGU Exchanges (Spain).

At 31 December 2022, the recoverable amount of Exchanges (Spain) exceeded its carrying amount by CHF 303.0 million. If the discount rate for Exchanges (Spain) is increased by 0.7% or the perpetual growth rate is decreased by 0.8%, the CGU’s recoverable amount will be equal to its carrying amount.

21. Capital Management

SIX capital management ensures adequate equity to maintain shareholder and market confidence, as well as sufficient capital to drive the future development of the business, while complying with regulatory capital requirements for the relevant group entities.

In June 2022, Standard & Poor's Global Ratings (S&P) affirmed the issuer credit ratings of SIX Group Ltd (A/A-1) and its operating companies, SIX x-clear Ltd and SIX SIS Ltd (A+/A-1). The outlooks are stable.

SIX considers both equity and debt as relevant components of funding. SIX uses the equity ratio and net debt to adjusted EBITDA ratio to monitor capital and leverage, and the return on equity to monitor the financial performance. These ratios are reported to the Executive Board and the Board of Directors on a regular basis through the internal financial reporting.

The ratios are shown in the following table:

CHF million	2022	2021
Return on equity		
Group net profit for the year	185.0	73.5
Total equity (average previous 12 months)	5,092.0	5,343.4
Return on equity	**3.6%**	**1.4%**
Equity ratio		
Total liabilities (average previous 12 months)	14,532.8	13,948.4
– Payables from clearing & settlement (average previous 12 months)	10,823.6	10,425.6
– Negative replacement values from clearing & settlement (average previous 12 months)	1,440.8	1,401.4
Total adjusted liabilities (average previous 12 months)	**2,268.4**	**2,121.4**
Total equity (average previous 12 months)	**5,092.0**	**5,343.4**
Equity ratio	**69.2%**	**71.6%**
Net debt to adjusted EBITDA		
Lease liabilities	151.1	165.8
Borrowings	1,273.5	1,273.9
Other debt	9.4	16.6
Total debt	**1,433.9**	**1,456.3**
Free unencumbered cash	–736.0	–789.4
Net debt	**697.9**	**666.9**
EBITDA	397.7	421.7
Adjustments	1.6	2.2
Adjusted EBITDA	**399.3**	**423.9**
Net debt to adjusted EBITDA	**1.75**	**1.57**

For the calculation of the net debt to adjusted EBITDA ratio, SIX follows the methodology applied by S&P Global Ratings. Other debt includes the defined benefit pension obligations net of tax. Free unencumbered cash comprises unpledged cash net of bank overdrafts, cash equivalents and securities, minus net payables from clearing and settlement, operating cash reserves and cash restricted due to regulatory requirements, respectively. The EBITDA adjustments include in particular dividend income from equity investments. SIX remains committed to deleveraging over the medium term.

The dividend policy of SIX takes into account the local requirements of each subsidiary to make dividend payments. On 2 May 2022, the Annual General Meeting approved the distribution of a dividend of CHF 4.75 (2021: CHF 4.30) per registered share. The total amount distributed to holders of outstanding shares was CHF 89.8 million (2021: CHF 81.3 million). The dividend was recorded against retained earnings as in the previous year.

For the year ending 31 December 2022, the Board of Directors has proposed an ordinary dividend of CHF 5.10, corresponding to a total of CHF 96.5 million for 2022. No dividend will be paid on treasury shares held directly by SIX Group Ltd. There are no tax consequences. The dividend proposal will be submitted for approval by the Annual General Meeting to be held in the second quarter of 2023.

Regulatory capital requirements

The Group is not subject to regulatory capital requirements. However, regulatory capital adequacy requirements apply to the following entities of the Group: SIX SIS Ltd, SIX x-clear Ltd, SIX Digital Exchange Ltd, BME Clearing SAU, Iberclear, SECB, REGIS-TR SA and REGIS-TR UK Ltd. The regulatory capital requirements are monitored by the management of the respective group entities.

	Minimum requirement	31/12/2022	31/12/2021
Capital fulfilment ratio			
SIX SIS Ltd	110.0%	164.2%	154.8%
SIX x-clear Ltd	110.0%	169.2%	187.3%
SIX Digital Exchange Ltd	110.0%	154.1%	166.2%
BME Clearing SAU	110.0%	314.9%	337.0%
Iberclear	110.0%	593.0%	558.1%
Basel III capital ratio			
SECB Swiss Euro Clearing Bank GmbH	13.3%	56.6%	36.8%

The CSDs SIX SIS Ltd, SIX Digital Exchange Ltd and the CCP SIX x-clear Ltd are obliged to fulfill requirements arising from the Financial Market Infrastructure Act and Ordinance (FMIA/FMIO). Eligible capital must be available to support business activities, in accordance with both the internal assessment of the Company and the requirements of the regulators, in particular those of the lead regulators, FINMA and the SNB. These capital requirements contain all elements of the Basel III framework pertaining to credit, non-counterparty, market and operational risks, as well as additional FMI-specific capital requirements for recovery capital, wind-down, intraday credit risks and potential defaults of participants. To calculate the capital requirements for credit risks, market risks and operational risks, FMIs may choose from a number of different approaches under Basel III. SIX SIS Ltd, SIX x-clear Ltd and SIX Digital Exchange Ltd use the international Basel III standard approach (SA-BIZ) for credit risks, the standard approach for market risks and the basic indicator approach for operational risks.

BME is supervised by the National Securities Market Commission (CNMV) and Banco de España. The capital requirements of BME are based on Spanish law and European Parliament Regulations related to trading, CSD and CCP business. The EU regulations for CSDs and CCPs require that the capital covers the risks stemming from the activities of the CSD/CCP and shall be at all times sufficient to ensure adequate protection against credit, counterparty, market, operational, legal, custody, investment and business risks so that the CSD/CCP can continue to provide its services and, if required, ensure an orderly winding-down or restructuring.

SECB has a banking license and is regulated by the Federal Financial Supervisory Authority (BaFin). The bank is obliged to fulfil the capital requirements according to the European Union Capital Requirements Regulation (CRR). To calculate the capital requirements, SECB uses the standard approach according to CRR for credit risk and the basic indicator approach for operational risk.

REGIS-TR SA is supervised by the European Markets and Securities Authority (ESMA) and REGIS-TR UK Ltd is supervised by the Financial Conduct Authority (FCA). In accordance with article 21 (b) of the EU delegated regulation 150/2013, REGIS-TR SA has to maintain an amount of liquid net assets funded by equity sufficient to cover potential general business losses in order to continue providing services as a going concern, and an assessment of the sufficiency of its financial resources to cover operational costs in a wind-down or reorganization of critical operations and services over at least a six month period with respect to its continuance as a trade repository company within the EU. The regulatory requirement has been fully adopted by the FCA and therefore also applies to REGIS-TR UK Ltd. At 31 December 2022, the regulatory own fund requirements for REGIS-TR amounted to CHF 9.8 million. The coverage ratio of own funds was 186.9%.

22. Capital and Reserves

Share capital

Number of shares	31/12/2022	31/12/2021
Shares issued	19,521,905	19,521,905
Treasury shares	−607,864	−607,864
Shares outstanding	**18,914,041**	**18,914,041**

As at 31 December 2022, the total number of shares issued remained unchanged from the prior year at 19,521,905 and corresponds to the number of authorized shares. All shares issued have a par value of CHF 1.00 and are fully paid up.

The shares rank equally with regard to the company's residual assets.

The holders of the shares are entitled to one vote per share at the shareholders' meeting of SIX Group Ltd. The proposed dividend per share for financial year 2022 is disclosed in note 21.

Other reserves

CHF million	2022 Treasury shares	Translation reserves	Total other reserves	2021 Treasury shares	Translation reserves	Total other reserves
Balance at 1 January	**–23.3**	**–227.7**	**–251.0**	**–23.3**	**–38.9**	**–62.2**
Translation adjustment of foreign operations	–	–144.9	–144.9	–	–139.9	–139.9
Translation adjustment of associates and joint ventures	–	–76.3	–76.3	–	–73.1	–73.1
Translation adjustment reclassified to income statement	–	0.9	0.9	–	0.1	0.1
Gains/(losses) on net investment hedges	–	33.2	33.2	–	32.5	32.5
Income taxes on gains/(losses) on net investment hedges	–	–8.5	–8.5	–	–8.3	–8.3
Less: translation adjustment of non-controlling interests	–	0.3	0.3	–	–0.1	–0.1
Balance at 31 December	**–23.3**	**–422.9**	**–446.3**	**–23.3**	**–227.7**	**–251.0**

Treasury shares

The reserve for own shares comprises the cost of the shares held by SIX. At 31 December 2022, SIX held 607,864 shares directly or indirectly via its subsidiaries. There was no change in the number of treasury shares compared with 31 December 2021.

Translation reserve

Reserves arising from foreign currency translation adjustments comprise the differences arising from the foreign currency translation of the financial statements of subsidiaries and associated companies from their respective functional currencies into Swiss francs.

Retained earnings

The total amount of dividends distributed to holders of outstanding shares was CHF 89.8 million (2021: CHF 81.3 million), which has been recorded against retained earnings as in the prior year.

23. Provisions (Current and Non-current)

Provisions are classified as follows:

CHF million	Notes	Provisions for legal claims	Provisions for restruc-turing	Provisions for asset retirement obligations	Other provisions	2022 Total	2021 Total
Carrying amount at 1 January		**3.6**	**0.2**	**4.4**	**6.4**	**14.6**	**20.6**
Increase in provisions		–	–	0.0	0.7	0.7	0.4
Business combinations		0.4	–	–	–	0.4	–
Financial cost related to the unwinding of discount rates		–	–	0.0	–	0.0	–
Dissolution		–	–	–1.3	–	–1.3	–0.5
Usage		–0.4	–0.2	–	–0.2	–0.8	–5.7
Translation adjustments		–0.0	–0.0	–0.0	–0.1	–0.2	–0.2
Carrying amount at 31 December		**3.6**	**–**	**3.0**	**6.8**	**13.4**	**14.6**
of which current		*–*	*–*	*0.2*	*0.7*	*0.9*	*0.2*
of which non-current		*3.6*	*–*	*2.8*	*6.1*	*12.4*	*14.4*

Provisions for legal claims

SIX is involved in legal and judicial proceedings and claims arising from the ordinary business activities. Provisions and contingencies in connection with these matters are periodically assessed based on the latest information available, usually with the assistance of lawyers and other specialists.

Provisions for asset retirement obligations

The provisions for asset retirement obligations mainly relate to cost estimates for the decommissioning of premises in Switzerland, France and the UK.

Other provisions

Other provisions mainly concern risks relating to the financial information and business activities in Spain.

24. Other Liabilities (Current and Non-current)

CHF million	Notes	31/12/2022	31/12/2021
Accruals for staff-related costs		92.1	91.0
Accrued expenses		51.0	47.1
Liabilities from other taxes		30.6	31.4
Other short-term liabilities		10.0	15.1
Total other current liabilities		**183.7**	**184.7**
Pension fund liabilities	33	12.5	21.1
Other employee benefit liabilities		21.6	22.6
Total other non-current liabilities		**34.1**	**43.7**

Accruals for staff-related expenses are for vacation leave, overtime, jubilees and bonuses. The long-term portion of liabilities for jubilees and bonuses is included in other employee benefit liabilities. The methods used to measure pension fund liabilities are explained in note 33.

Financial Instruments

25. Financial Risk Management

Risk governance

The Board of Directors (BoD) of SIX Group Ltd bears the ultimate responsibility for the supervision of the overall risk situation, approves the overall risk policy and decides on risk appetite limits.

The Risk Committee of the BoD acts as a representative of the BoD and approves risk governance, organization and methodologies, as well as reviews their implementation, adequacy and effectiveness.

The BoD has also delegated responsibility for accounting, financial reporting and internal control systems to the Audit Committee. External and internal auditors report to the Audit Committee of the BoD. Internal auditors are responsible for monitoring risk management and control, in particular, the risks related to business processes.

The Executive Board of SIX Group Ltd (ExB) has the ultimate operational decision-making authority concerning risk matters. As a member of the ExB, the Chief Risk Officer is responsible for the independent oversight of the overall risk situation. He has managerial responsibility for the “second line of defense” functions, i.e. Risk Management, Security and Compliance.

A “three lines of defense” governance model forms the basis of the risk governance framework. Each line has its specific role and responsibilities. Close collaboration between all lines ensures the identification, assessment and mitigation of risks.

Senior executives form the “first line of defense” and are accountable for managing the specific risks faced by business management. They maintain effective processes and manage their risks with care, including comprehensive controls and documented procedures.

Within the “second line of defense”, risk control measures are defined by the Head Risk Management and dedicated Risk Management Teams. The Head Risk Management reports to the Chief Risk Officer and is not part of the line management structure of business units.

Independent assurance providers, such as Internal and External Audit, form the “third line of defense”, which supervises the overall risk situation, internal controls and risk management. They monitor risk management and controlling to evaluate their effectiveness, including an assessment of how the first and second lines of defense meet their risk objectives.

Legal and Compliance functions within SIX are responsible for implementing the instructions and requirements issued by the legislator, the supervisor and other relevant institutions. They ensure that the business management of SIX complies with the requirements and meets the current rules, regulations and obligations of a financial intermediary.

Financial Market Infrastructures (FMIs) are supervised by the FINMA, the SNB, the National Securities Market Commission of Spain (CNMV) and Banco de España. FMIs which act as central counterparties (CCP) or central securities depositories (CSD) within the Securities Services business unit need to comply with increased capital requirements. At SIX SIS Ltd, SIX x-clear Ltd, BME Clearing SAU and Iberclear, counterparty limits, margin requirements and risk model parameterization are managed by the risk management organization. These FMIs have dedicated Chief Risk Officers (CRO) who are also members of the respective Management Committees and are responsible for independent oversight of the FMIs’ risk situation.

SECB is supervised by the German Federal Financial Supervisory Authority (BaFin) and pursues a financial risk policy in line with local requirements. The main counterparty as well as market and interest rate risks arise from the part of the EUR cash balances invested in a portfolio of high-quality, repo-eligible bonds .

SIX Digital Exchange Ltd is supervised by FINMA and operates a central securities depository for digital assets.

REGIS-TR SA is supervised by the ESMA and REGIS-TR UK Ltd is supervised by the FCA. The entities act as trade repositories in the EU and in UK for various regulations.

The capital requirements of these entities are described in note 21.

Credit risk

General

Counterparty credit risk is defined as the risk of a loss caused by a counterparty not fulfilling its contractual obligations or commitments. Given the nature of its core business activities, SIX monitors the counterparty default risk for all its major risk-related activities, in particular for the following financial positions:

- cash at banks and short-term deposits
- trade and other receivables
- receivables from clearing & settlement
- derivatives
- bonds
- other debt instruments

Within the post-trading area of the Securities Services business unit, credit exposures mainly relate to short-term interim financing undertaken for the purpose of settling securities transactions. With the exception of the Swiss National Bank and SIX affiliates, all short-term financing for settlement purposes is fully covered by collateral in the form of cash and repo-eligible securities. For further details, see also the section on collateral management below.

At the traditional trading venues such as SIX Swiss Exchange and Bolsas y Mercados Españoles, trading and settlement are separate transactions. For example, settlement in equities and fixed income markets usually takes place two days after the trading. Between trading and settlement, SIX has to manage counterparty risks. The exposure related to open clearing & settlement transactions is reflected in the derivatives from the clearing & settlement business. As SIX acts as a CCP, positive replacement values generally equal negative replacement values. At SDX, settlement is an integral part of the trading process. The trading venue verifies that participants have sufficient assets or funds available for the planned transaction before confirming it. As a result, no counterparty risk needs to be managed after the trade is completed and there are no financial risks stemming from clearing & settlement.

In the Securities Services business unit, credit risk management is executed via limits granted to the customers by the relevant bodies within SIX, in accordance with the competency rules. Each participant with a credit limit is subject to an initial credit risk assessment and rating assignment, as well as a periodic review. No credit limits are granted without a prior risk assessment and rating assignment. Credit limits are continuously monitored to ensure that the risk profile is always in line with the risk appetite and credit risk policy. Based on the amount of risk-equivalent limits and the creditworthiness, each counterparty is assigned to a risk group which defines the depth and frequency of the review. Counterparties in higher risk groups (high “risk-equivalent limits”, low credit rating) are reviewed more frequently and monitored more closely than those in lower risk groups.

In businesses other than post-trading, counterparty credit risk arises in particular from investments of operating liquidity of SIX, which primarily takes the form of cash deposits with banks or fixed income investments. As in the post-trading business area, such credit exposures are constrained by investment limits, which vary in size depending on the creditworthiness of the counterparty. Risk Management is responsible for monitoring exposures against investment limits and tracks counterparty risk indicators on a daily basis.

As at 31 December 2022, the bond portfolio of SECB amounted to CHF 1,680.6 million (31 December 2021: CHF 1,886.5 million) and was composed of bonds rated as investment grade with an average remaining term of 2.4 years (31 December 2021: 3.1 years). New portfolio investments are subject to different levels of approval based on the counterparty rating and security type.

In the context of strategic investments, SIX has an investment policy in place that imposes minimum credit ratings for direct and indirect investments in debt instruments. Treasury regularly monitors strict compliance with this policy.

With regard to trade and other receivables, SIX has a large number of debtors, which are internationally dispersed. The credit risks in this respect are considered insignificant. As credit ratings are unavailable for some non-financial customers, their creditworthiness is assessed by either the operating business unit or the local finance departments, taking into account the customer’s financial strength, past experience and other factors. Acting as the first line and overseen by the second line of defense, each business unit has primary responsibility for managing and monitoring its credit risks.

Aggregated credit risk exposures are closely monitored against the risk appetite thresholds of SIX and regularly reported to the ExB and the BoD.

The gross carrying amounts of financial assets measured at amortized costs, bonds measured at FVtOCI and the related credit ratings of the counterparties are summarized in the following table. The net carrying amounts (net of loss allowances) represent the maximum exposure to credit risk.

						31/12/2022
CHF million	Investment grade	Non-investment grade	Not rated	Gross carrying amount	Loss allowance	Net carrying amount
Exposure for which loss allowance equals 12-month ECL (Stage 1)						
Cash at bank and short-term deposits [1]	4,319.2	0.3	0.0	4,319.5	–0.0	4,319.5
Receivables from clearing & settlement	3,617.2	13.9	1,306.9 [2]	4,938.1	–0.0	4,938.0
Bonds	1,985.9	–	–	1,985.9	–1.5	1,984.4
Others	95.2	–	4.8	99.9	–	99.9
Total	**10,017.5**	**14.2**	**1,311.7**	**11,343.5**	**–1.6**	**11,341.9**

						31/12/2021
CHF million	Investment grade	Non-investment grade	Not rated	Gross carrying amount	Loss allowance	Net carrying amount
Exposure for which loss allowance equals 12-month ECL (Stage 1)						
Cash at bank and short-term deposits [1]	6,472.3	0.2	0.0	6,472.6	–0.0	6,472.6
Receivables from clearing & settlement	2,307.6	2.7	226.9	2,537.1	–0.0	2,537.1
Bonds	2,190.7	–	–	2,190.7	–1.8	2,188.9
Others	99.5	–	1.9	101.4	–	101.4
Total	**11,070.1**	**2.9**	**228.8**	**11,301.8**	**–1.8**	**11,300.0**

[1] The balances exclude cash on hand.

[2] The increase in unrated receivables from clearing & settlement is mainly due from reverse repurchase agreements with banks for which no rating is available.

The following table shows the gross carrying amounts of trade and other receivables and the related past due status. The net carrying amounts (net of loss allowances) represent the maximum exposure to credit risk.

31/12/2022

	Lifetime ECL (Stage 2)		Lifetime ECL credit impaired (Stage 3)			
CHF million	**Not past due**	**Within 6 months**	**From 6 to 12 months**	**More than 12 months**	**Receivables with objective evidence of impairment**	**Total**
Trade and other receivables, gross	170.3	27.9	4.5	2.7	0.8	206.2
Loss allowance	–0.0	–0.0	–1.1	–2.3	–0.8	–4.2
Net carrying amount	**170.3**	**27.9**	**3.4**	**0.4**	**–**	**201.9**

31/12/2021

	Lifetime ECL (Stage 2)		Lifetime ECL credit impaired (Stage 3)			
CHF million	**Not past due**	**Within 6 months**	**From 6 to 12 months**	**More than 12 months**	**Receivables with objective evidence of impairment**	**Total**
Trade and other receivables, gross	165.6	21.5	3.0	2.8	1.3	194.2
Loss allowance	–0.0	–0.0	–0.9	–2.5	–1.3	–4.7
Net carrying amount	**165.5**	**21.5**	**2.1**	**0.4**	**–**	**189.5**

Collateral management

As part of short-term interim financing for the purpose of settling securities transactions, SIX SIS Ltd provides intraday credit lines and securities lending and borrowing services to its counterparties to increase settlement efficiency and reduce settlement failures. Intraday credit and lending services rendered to counterparties are established on a fully collateralized basis, and collateral is provided by SIX SIS Ltd participants in the form of cash or highly liquid repo-eligible securities.

In order to protect SIX x-clear Ltd and BME Clearing SAU, which act as central counterparties, against the risk of default by a clearing member before it has settled its outstanding transactions, clearing members are required under the applicable version of the clearing terms to provide collateral in the form of cash or highly liquid repo-eligible securities under a full-title transfer regime. The margin requirement includes an initial margin for possible future price fluctuations, a variation margin for actual changes in value and certain add-ons that are called in periods of higher market volatility according to the rulebook. In addition, all counterparties are required to contribute to a default fund to cover the potential risk that is not covered by the margin model (confidence level of at least 99%) in the event of a member's default. The margin model is regularly calibrated and back-tested.

The following table shows the collateral received:

CHF million	Notes	31/12/2022	31/12/2021
Cash collateral	16	5,586.9	6,427.1
of which related to securities lending		*13.3*	*50.2*
Fair value of securities received with a right to repledge or sell		5,139.0	3,242.9
of which related to securities lending		*7.6*	*8.3*
of which related to reverse repurchase transactions		*3,813.8*	*1,915.4*
Total fair value of collateral received		**10,725.9**	**9,670.0**

Cash collateral is recognized on the balance sheet, whereas collateral received in the form of securities are off-balance sheet items. Due to the collateral received and the potential to pass on losses to market participants in the CSD business, the Group has not designated expected credit losses on receivables from clearing and settlement of the Securities Services business unit.

Expected credit losses measurement

Significant increase in credit risk

In order to assess a significant increase in credit risk, the Group applies a low credit risk threshold equivalent to the "investment grade" and past due status information. When the credit risk increases significantly, the loss allowance is measured at an amount equal to the lifetime ECL (i.e. stage 2).

Definition of default

SIX considers a financial asset to be in default when a counterparty is unable or likely to be unable to fully meet its financial obligation when due.

In assessing whether a counterparty is in default, the following information is considered:
- qualitative, e.g. the counterparty has been declared in default; and/or
- quantitative, i.e. overdue status

The assessment of whether a financial asset is in default may vary by instrument type. The following reasons give rise to a default event for the respective financial assets:
- Trade and other receivables: A default situation occurs when receivables are more than 180 days past due. The Group performs an analysis showing that 90 days past due is not an appropriate default definition for trade and other receivables and rebuts the 90 days past due presumption. This rebuttal is reviewed on an annual basis.
- Debt instruments: A default situation occurs when (re-)payments of interests and/or notional amounts are not received in full on time.

In management's opinion, the above events best represent the default situations of the respective financial assets. A default event results in a transfer to the credit-impaired financial asset category (i.e. stage 3).

Measuring expected credit losses

The measurement of expected credit losses for financial assets at amortized costs – except for trade and other receivables – is a function of the probability of default (PD), the exposure at default (EAD) and loss given default (LGD):
- The PD represents the likelihood of a counterparty defaulting on its financial obligation either over 12 months or over the remaining lifetime of the obligation. The PDs are generally derived from internally developed statistical models and are updated at least annually. The Group has established global PDs per rating classes which are applied to the exposures based on the counterparty rating (i.e. exposures are grouped by counterparty rating). PDs are based on credit default swaps (CDS) spreads observed in the market. These CDS spreads include the market expectation of default (i.e. forward-looking information). The 12 month PDs are adjusted when the contractual period is less than 12 months (i.e. on-demand deposits have a contractual period of 1 day). If no rating is available for the counterparty, the PD level is assumed to be in the sub-investment grade range.

- EAD is based on the amounts outstanding at the time of default. SIX assumes that the EAD is equal to the gross carrying amount.
- LGD represents the expectation of SIX regarding the extend of loss on a defaulted exposure. LGD considers the availability of collaterals received and the potential to pass on losses to market participants in the CSD business.

The expected credit losses for trade and other receivables are based on historical loss rate data adjusted for current conditions and future expectation. The loss rate is applied to the gross carrying amount of these assets. Generally, trade and other receivables overdue by more than 180 days are considered to be C-rated, and the corresponding PD is applied to them in order to calculate the impairment amount. Exposures which are more than 360 days past due are generally considered to be D-rated. D-rated assets are fully credit impaired. The policy described above may be adapted by entities for specific conditions on local markets.

The expected credit losses as at 31 December 2022 and 31 December 2021 are presented in the General section above.

Liquidity risk

General

Liquidity risk is the risk that SIX will encounter difficulties in meeting current and future obligations arising from its financial liabilities. Specific to the post-trading business area of SIX, liquidity risk exists mainly as a result of day-to-day operational flows, such as repayments of cash collateral to clearing members and provision of liquidity to facilitate settlement.

Liquidity management is governed by the treasury policy of SIX. Its main purpose is to provide subsidiaries with financial resources at any time so that they are able to meet their payment obligations. The continuous monitoring of liquidity at Group level and the allocation of resources allow Treasury to maintain a sound level of liquidity at all times. The liquidity status is reported on a monthly or quarterly basis to various committees. SIX maintains credit lines with a limited number of financial institutions to cover exceptional liquidity requirements. The total amount of credit lines as at 31 December 2022 was CHF 691.9 million (31 December 2021: CHF 463.1 million). Additionally, SIX SIS Ltd has foreign currency settlement limits in connection with the cross-border business in the amount of CHF 2,987.7 million (31 December 2021: CHF 3,026.0 million). As at 31 December 2022, none of these credit facilities had been utilized (31 December 2021: CHF 0.2 million). Liquidity is managed for various currencies. The main currencies are the Swiss franc, euro and US dollar.

The Group’s operational liquidity as at 31 December 2022 was CHF 3,848.6 million (31 December 2021: CHF 6,473.5 million). The operational liquidity is deposited with appropriate investment limits at commercial banks, the Swiss National Bank (SNB) and European central banks. Operational liquidity of the Swiss and various foreign subsidiaries, with the exception of SIX SIS Ltd, SIX x-clear Ltd, the BME entities and SECB, is held and managed centrally at SIX as part of a cash pool. Treasury is responsible for the management of the cash pool. The liquidity in excess of operational liquidity required by the subsidiaries is provided by Treasury to cover any short to medium-term structural liquidity requirements.

Liquidity management is one of the main operating activities of Securities Services. Liquidity risk in the post-trading business area is managed by ensuring that the expected inflows match the expected outflows in the respective currency. On a day-to-day basis, the Collateral and Liquidity Management team is tasked with ensuring that the Group can meet its financing needs at all times, in particular to ensure that the business continues to operate smoothly in the event of default by a clearing member.

SECB reported a bank overdraft of CHF 472.0 million as at 31 December 2022 (31 December 2021: liquidity of CHF 6.9 million). The liquidity risk (also during the day) is observed to the extent that current accounts of customers should generally be held with credit balances. In the event of an unexpected liquidity bottleneck, the securities portfolio held by SECB can be used at any time to obtain liquidity from Deutsche Bundesbank as part of Lombard transactions.

Once a year, the liquidity strategy of the Group is reviewed by the Chief Financial Officer and approved by the Board of Directors. Treasury monitors the implementation and execution of the liquidity strategy.

Maturity analysis for financial liabilities

The following table shows the contractual maturities of the financial liabilities held by SIX at the reporting date and in the previous year.

31/12/2022

CHF million	Within 3 months	Between 3 and 12 months	Between 1 and 5 years	More than 5 years	Total contractual cash flows	Carrying amount
Liabilities						
Bank overdrafts	472.0	–	–	–	472.0	472.0
Trade and other payables	31.0	0.7	–	–	31.7	31.7
Payables from clearing & settlement	8,837.5	–	–	–	8,837.5	8,837.5
Borrowings	–	13.6	812.1	456.1	1,281.8	1,273.5
Lease liabilities	5.1	11.3	56.4	101.0	173.8	151.1
Other financial liabilities	–	–	2.7	94.3[1]	96.9	96.9
Non-derivative financial liabilities	**9,345.6**	**25.6**	**871.2**	**651.3**	**10,893.7**	**10,862.6**
Derivative financial instruments, net[2]	2.6	–	–	–	2.6	2.6
Derivative financial liabilities	**2.6**	**–**	**–**	**–**	**2.6**	**2.6**
Total financial liabilities	**9,348.2**	**25.6**	**871.2**	**651.3**	**10,896.3**	**10,865.2**

31/12/2021

CHF million	Within 3 months	Between 3 and 12 months	Between 1 and 5 years	More than 5 years	Total contractual cash flows	Carrying amount
Liabilities						
Bank overdrafts	0.2	–	–	–	0.2	0.2
Trade and other payables	15.0	0.6	–	–	15.7	15.7
Payables from clearing & settlement	9,266.6	–	–	–	9,266.6	9,266.6
Borrowings	–	2.0	823.6	458.2	1,283.8	1,273.9
Lease liabilities	5.3	14.2	62.8	105.5	187.7	165.8
Other financial liabilities	3.1	1.0	9.1	98.9[1]	112.2	112.2
Non-derivative financial liabilities	**9,290.2**	**17.8**	**895.5**	**662.6**	**10,866.2**	**10,834.3**
Total financial liabilities	**9,290.2**	**17.8**	**895.5**	**662.6**	**10,866.2**	**10,834.3**

[1] Includes funds received for sanctioned persons, which cannot be accessed until the sanctions are lifted.

[2] Derivative financial instruments from clearing & settlement business are considered on a net basis. The net amount is only included if it is a liability.

The fair value of the derivative financial instruments best represents the cash flows that would have to be paid if these positions had to be settled or closed.

Market risk

General

Market risk is the risk of losses on financial assets arising from movements in market prices. With regard to SIX, market prices carry three types of risk: foreign currency risk, interest rate risk and equity risk.

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of financial instruments will fluctuate because of changes in foreign exchange rates. The risk arises mainly from revenues, expenses, financial investments and borrowings denominated in foreign currencies. The foreign currency risk affects mainly the group entities in Switzerland. Treasury and SIX SIS Ltd manage the exposure to foreign currency risk by using forwards and swaps.

A significant portion of the Group's earnings are generated from foreign operations, such as the entities of BME. This exposes SIX to a foreign currency risk, as the income statement of foreign operations is translated into CHF on a monthly basis. The BoD of SIX has defined the maximum foreign currency risk appetite SIX is willing to take. The foreign currency exposures are monitored monthly to ensure they do not exceed the defined thresholds.

Further, SIX is exposed to a foreign currency translation risk due to the translation of net assets of foreign operations. Net investments in foreign operations are partially hedged by using non-derivative financial liabilities. The carrying amount of items designated as hedging instruments for net investment hedges were as follows:

CHF million	31/12/2022	31/12/2021
Bonds	638.6	671.4
Borrowings	**638.6**	**671.4**
NCI liabilities	2.7	8.4
Others	–	1.0
Other financial liabilities	**2.7**	**9.4**
Total carrying amount	**641.3**	**680.8**

The net investment hedge using the EUR senior bond as a hedging instrument will be maintained until the bond expires in 2025. For further details on the bond, see note 17.

SIX established a hedge ratio of 100% for all net investment hedges. The investments in the foreign operations and the designated hedging instruments are in the same currency for all hedging relationships. There are no imbalances in the net investment hedges that would create ineffectiveness. To maintain the hedge effectiveness, SIX ensures that the designated liabilities do not exceed the value of the net investment during the term of the hedging relationship. Gains and losses on hedging instruments recognized in OCI were as follows:

CHF million	31/12/2022	31/12/2021
Gains/(losses) on net investment hedges recognized in the current/previous year, net of tax	24.7	24.2
Accumulated gains/(losses) held in the translation reserve, net of tax	41.9	17.3
of which continuing net investment hedges	*49.6*	*25.5*
of which terminated net investment hedges	*–7.7*	*–8.3*

The table below illustrates a hypothetical sensitivity of earnings before tax to changes in foreign exchange rates at year-end due to revaluation of financial instruments and assuming that all other variables remain unchanged. The changes in exchange rates used for 2022 and 2021 are based on historical volatility. Positive figures represent an increase in earnings before tax.

	2022			2021		
	Change in exchange rate[1]	Effect on earnings before tax		Change in exchange rate[1]	Effect on earnings before tax	
Amounts in CHF million	+/–	+	–	+/–	+	–
CHF/EUR	6.3%	–0.1	0.1	3.8%	0.0	–0.0
CHF/USD	9.1%	–0.7	0.7	6.0%	–0.2	0.2
Total		**–0.8**	**0.8**		**–0.1**	**0.1**

[1] A positive change in the exchange rate represents a strengthening of the foreign currency.

Interest rate risk

SIX is exposed to the interest rate risk due to the volatility of market interest rates. The interest rate risk is the risk of market price movements of interest-bearing assets and liabilities due to changes in interest rates.

In the interest margin business, interest rate changes could have a major impact on earnings, especially when there is a mismatch in the maturity of assets and liabilities. The cash received from business partners presented as payables from clearing and settlement is invested in overnight interest-bearing accounts, short-term financial instruments or secured reverse repos with a term to maturity of less than one year, and in current and non-current bonds. It is mainly the non-current portion of the bond portfolio of SECB that carries interest rate risk given the asset and liability maturity mismatch with the deposit side and the fixed interest rate nature of the bond portfolio itself. From the interest earned or negative interest paid, SIX may pay or charge interest less or plus a margin to its business partners for the deposits on their ordinary cash vostro accounts. For simplicity, this interest margin has not been considered in the interest risk sensitivity below.

For the purpose of the sensitivity analysis, non-current investments and liabilities at amortized cost with fixed interest rates have been excluded, since fair value fluctuations, which would reflect a change in market interest rates, are not recognized in the income statement for these instruments. For current investments and liabilities, it is assumed that the contracts must be renewed in the near future. Therefore, the exposures have been considered in the sensitivity analysis. The effect on other comprehensive income related to bonds measured at FVtOCI has been included, as the fair value of these instruments is affected by the fluctuation in interest rates. The table below illustrates a hypothetical sensitivity of earnings before tax and other comprehensive income before tax to a reasonably possible change of a +/–50 basis point parallel shift in yield curves. Positive figures represent an increase in earnings and other comprehensive income before tax.

2022

Amounts in CHF million	Change in interest rate +/–	Effect on earnings before tax +	–	Effect on other comprehensive income before tax +	–
Cash and cash equivalents	50 bps	21.6	–21.6	–	–
Receivables from clearing & settlement	50 bps	22.8	–22.8	–	–
Financial assets	50 bps	2.5	–2.5	–1.3	1.3
Bank overdrafts	50 bps	–2.4	2.4	–	–
Payables from clearing & settlement	50 bps	–42.3	42.3	–	–
Total		**2.2**	**–2.2**	**–1.3**	**1.3**

2021

Amounts in CHF million	Change in interest rate +/–	Effect on earnings before tax +	–	Effect on other comprehensive income before tax +	–
Cash and cash equivalents	50 bps	32.4	–32.4	–	–
Receivables from clearing & settlement	50 bps	11.8	–11.8	–	–
Financial assets	50 bps	1.4	–1.4	–2.2	2.3
Bank overdrafts	50 bps	–0.0	0.0	–	–
Payables from clearing & settlement	50 bps	–45.5	45.5	–	–
Total		**0.0**	**–0.0**	**–2.2**	**2.3**

Equity risk

Equity risk is the financial risk associated with the holding of unlisted equity investments. SIX invests in minority shareholdings for strategic and financial reasons. For this purpose, SIX established a corporate investment management framework in addition to the Group's competency rules.

Depending on the size and type of a minority investment, investment decisions are taken by the SIX Fintech Venture Fund Investment Committee (i.e. mainly for unlisted start-up companies), the ExB, the Chairman or the Board of Directors of SIX. The ultimate responsibility for the execution of the corporate investment management framework lies with the CFO of SIX. It includes the involvement of particular specialist functions in order to maintain the right level of investment oversight, collection of relevant financials, adherence to disclosure requirements and maintenance of relevant documents by SIX. For each investment, responsibility is assigned to one ExB member.

The investments that fall within the scope of the corporate investment management framework are regularly reviewed by the ExB and the BoD/AC. Finance and Services, in coordination with a relevant business unit, is responsible for tracking the financial and operational performance. In the case of material performance deviations, the situation is escalated in the first place to the relevant ExB member who shall decide whether to bring it to the attention of the ExB and/or BoD. Ultimately, the BoD may decide to introduce additional governance measures including, but not limited to additional management and/or BoD oversight of the particular investment.

No sensitivity analysis is presented as the fair value of these equity investments tends to be dominated by factors specific to the investee company.

26. Fair Value of Financial Instruments

Classification of financial instruments

The table below shows the classification for each class of financial instruments and, if applicable, the fair value level.

							31/12/2022
		At fair value					
CHF million	Notes	Level 1	Level 2	Level 3	Total	At amortized cost	Total
Assets							
Cash and cash equivalents	14				–	4,320.5	4,320.5
Trade and other receivables	15				–	201.9	201.9
Receivables from clearing & settlement	16				–	4,938.0	4,938.0
Current and non-current financial assets	17	228.2	694.8	41.7	964.7	1,883.5	2,848.2
Bonds		*200.8*	*–*	*–*	*200.8*	*1,783.6*	*1,984.4*
Other debt instruments		*–*	*–*	*11.5*	*11.5*	*99.9*	*111.5*
Equity instruments		*13.3*	*–*	*30.2*	*43.4*	*–*	*43.4*
Units in investment funds		*2.3*	*–*	*–*	*2.3*	*–*	*2.3*
Financial instruments from settlement business		*11.8*	*–*	*–*	*11.8*	*–*	*11.8*
Derivative financial assets		*–*	*694.8*	*–*	*694.8*	*–*	*694.8*
Total carrying amounts [1]		**228.2**	**694.8**	**41.7**	**964.7**	**11,344.0**	**12,308.7**
Bonds		9.0	1,679.9	–	1,688.8		
Fair values of financial assets measured at amortized cost		**9.0**	**1,679.9**	**–**	**1,688.8**		
Liabilities							
Bank overdrafts	14				–	472.0	472.0
Trade and other payables					–	31.7	31.7
Payables from clearing & settlement	16				–	8,837.5	8,837.5
Current and non-current financial liabilities	17	–	697.4	2.7	700.0	1,518.8	2,218.8
Lease liabilities					*–*	*151.1*	*151.1*
Borrowings					*–*	*1,273.5*	*1,273.5*
Derivative financial liabilities		*–*	*697.4*	*–*	*697.4*	*–*	*697.4*
Other financial liabilities		*–*	*–*	*2.7*	*2.7*	*94.3*	*96.9*
Total carrying amounts [1]		**–**	**697.4**	**2.7**	**700.0**	**10,860.0**	**11,560.0**
Borrowings		–	1,140.7	–	1,140.7		
Fair values of financial liabilities measured at amortized cost		**–**	**1,140.7**	**–**	**1,140.7**		

[1] Accrued interests are presented within other assets and other liabilities (in accrued expenses).

31/12/2021

		At fair value					
CHF million	**Notes**	Level 1	Level 2	Level 3	**Total**	**At amortized cost**	**Total**
Assets							
Cash and cash equivalents	14				–	6,473.5	6,473.5
Trade and other receivables	15				–	189.5	189.5
Receivables from clearing & settlement	16				–	2,537.1	2,537.1
Current and non-current financial assets	17	242.4	1,286.0	27.0	1,555.4	2,077.8	3,633.2
Bonds		*212.5*	*–*	*–*	*212.5*	*1,976.4*	*2,188.9*
Other debt instruments		*–*	*–*	*5.2*	*5.2*	*101.4*	*106.6*
Equity instruments		*13.1*	*–*	*21.8*	*34.9*	*–*	*34.9*
Units in investment funds		*2.0*	*–*	*–*	*2.0*	*–*	*2.0*
Financial instruments from settlement business		*14.7*	*–*	*–*	*14.7*	*–*	*14.7*
Derivative financial assets		*–*	*1,286.0*	*–*	*1,286.0*	*–*	*1,286.0*
Total carrying amounts [1]		**242.4**	**1,286.0**	**27.0**	**1,555.4**	**11,277.9**	**12,833.3**
Bonds [2]		8.9	1,976.8	–	1,985.7		
Fair values for financial assets measured at amortized cost		**8.9**	**1,976.8**	**–**	**1,985.7**		
Liabilities							
Bank overdrafts	14				–	0.2	0.2
Trade and other payables					–	15.7	15.7
Payables from clearing & settlement	16				–	9,266.6	9,266.6
Current and non-current financial liabilities	17	–	1,285.0	9.6	1,294.6	1,542.2	2,836.8
Lease liabilities					*–*	*165.8*	*165.8*
Borrowings					*–*	*1,273.9*	*1,273.9*
Derivative financial liabilities		*–*	*1,285.0*	*–*	*1,285.0*	*–*	*1,285.0*
Other financial liabilities		*–*	*–*	*9.6*	*9.6*	*102.5*	*112.2*
Total carrying amounts		**–**	**1,285.0**	**9.6**	**1,294.6**	**10,824.7**	**12,119.3**
Borrowings [2]		–	1,272.6	–	1,272.6		
Fair values for financial liabilities measured at amortized cost		**–**	**1,272.6**	**–**	**1,272.6**		

[1] Accrued interests are presented within other assets and other liabilities (in accrued expenses).

[2] Prior year figures have been adjusted in line with the current year's updated definition of an active market. Bonds and borrowings in the amount of CHF 1,939.9 million and CHF 1,269.3 million, respectively, have therefore been reclassified from level 1 to level 2.

SIX assumes that the carrying amount approximates the fair value for all financial assets and liabilities measured at amortized cost, except for bonds and borrowings.

Fair value valuation methods for financial assets and liabilities

Recurring fair value measurements for financial assets and liabilities are described below. The fair value measurements are assigned to the different levels of the fair value hierarchy. These levels are defined as follows:

- Level 1: The fair value of listed financial instruments with a price established in an active market is determined based on current quoted market prices.
- Level 2: Valuation methods are used to determine the fair value of financial instruments if no direct market prices are available. The underlying assumptions are based on observable market data, either directly or indirectly, as at the reporting date.
- Level 3: If neither current market prices nor valuation methods based on observable market data can be drawn on for the purpose of determining fair value, then valuation methods are based on unobservable market data. Those inputs reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.

The following methods and assumptions were used to estimate the fair values:

Level 1 instruments

- The fair value of listed equity instruments, units in investment funds and bonds is determined by reference to published price quotations at the reporting date. Bonds are considered to be listed on an active market if the trading frequency and volume generally exceed the defined minimum levels. The valuation of financial instruments from settlement business is performed with reference to quoted prices from the markets to which they relate. Such financial assets thus fall under level 1 of the fair value hierarchy.

Level 2 instruments

- The fair value of bonds listed on an inactive market is determined by reference to published price quotations at the reporting date.
- The fair value of unlisted bonds such as promissory notes is determined by discounting the expected future payments at a risk and maturity-adjusted discount rate. As the input factors are readily available in the market, these instruments are assigned to level 2 of the fair value hierarchy.
- The fair value of loans is determined by discounting the expected future payments at a maturity-adjusted discount rate. For borrowings with a variable interest rate, it is generally assumed that the fair value approximates the carrying amount. As the input factors are readily available in the market, these borrowings are assigned to level 2 of the fair value hierarchy.
- Foreign exchange swaps and forwards are not traded publicly. The inputs to the calculation include foreign exchange spot rates and interest rates. In general, these inputs are readily observable in the markets or provided by consensus data providers. Thus, foreign exchange swaps, forwards and other foreign exchange derivatives are categorized as level 2 instruments of derivatives.
- For derivatives from the clearing and settlement business as a CCP, the fair value is determined as the difference between the fair value of the underlying instrument at the trade date and its fair value at the reporting date. All derivatives from clearing and settlement are categorized as level 2 instruments, as the inputs used are readily available in the market. For derivatives from the clearing and settlement of European options, the fair value is determined based on the Black-Scholes model. For derivatives from the clearing and settlement of American options, the fair value is determined based on the Binomial Option Pricing model. The inputs to the calculation of both models include share price, implied volatility, strike price, risk-free interest rate and expected dividends.
- For bonds issued by SIX listed on an inactive market, the fair value is determined by reference to published price quotations at the reporting date. For other borrowings, such as loans, it is generally assumed that the fair value approximates the carrying amount. As the input factors are readily available in the market, borrowings are assigned to level 2 of the fair value hierarchy.

Level 3 instruments

- The fair value of unlisted shares – which may be classified as equity instruments at FVtPL or debt instruments at FVtPL, depending on the rights attached to the instrument – is derived from the proportionate net asset value of the entity. Such investments are categorized within level 3 of the fair value hierarchy. If the net asset value were to increase, the price per share would increase proportionately.

- For other debt instruments at FVtPL such as convertible loans, the fair value is determined by discounting the expected future payments at a risk-adjusted discount rate. As the input factors are not readily available in the market, these instruments are assigned to level 3 of the fair value hierarchy. An increase or decrease of 10% in the estimated cash flows would lead to an increase or decrease of approximately 10% in the fair value. The estimated fair value would increase if the risk-adjusted discount rate were lower.
- For NCI liabilities with variable exercise prices, the fair value is measured by using probability weighted forecasts. The inputs into the calculation include in particular revenue or cash flow forecast scenarios and the probability of each scenario. The forecast scenarios are reviewed at least bi-annually and based on the business plans prepared by the management.

Transfers between levels

SIX recognizes transfers between the levels of the fair value hierarchy at the date of the event or change in circumstances that caused the transfer. In 2022 and 2021, there were no transfers between level 1 and level 2 or between level 2 and level 3.

Movements in level 3 financial assets and liabilities

CHF million	31/12/2022 Financial assets	31/12/2022 Financial liabilities	31/12/2021 Financial assets	31/12/2021 Financial liabilities
Carrying amount at the beginning of the year	**27.0**	**–9.6**	**17.6**	**–2.2**
Additions	19.2	–	8.3	–8.7
Disposals	–	1.0	–1.1	1.1
Disposals due to changes in the scope of consolidation	–2.8	–	–	–
Reclassifications from / to associates	0.7	–	–0.6	–
Business combinations	–	–	1.8	–
Gains (losses) recognized in the income statement [1]	–2.1	6.0	1.3	–0.1
Gains (losses) recognized in other comprehensive income	–	0.0	–	0.4
Translation adjustments	–0.3	–	–0.2	–
Carrying amount at closing	**41.7**	**–2.7**	**27.0**	**–9.6**
Income/expenses on holdings at closing				
Unrealized gains (losses) recognized in the income statement [1]	–2.1	6.0	1.3	–0.1
Unrealized gains (losses) recognized as other comprehensive income [2]	–	0.0	–	0.4

[1] Gains (losses) were recognized as financial income and financial expenses.
[2] Gains (losses) were recognized as gains/(losses) on net investment hedges.

SIX invests in fintech companies for strategic and financial purposes. These investments are classified as financial instruments at fair value (equity or debt instruments) or as associates. During 2022, SIX invested CHF 19.2 million (2021: CHF 7.0 million) in fintech companies. In 2022, the gains recognized in the income statement on financial liabilities mainly included the remeasurement gain of the NCI liability of Orenda (see note 9).

In 2021, the increase in level 3 financial liabilities related to the NCI liabilities incurred upon the acquisition of Orenda and Ultumus. For further details, see note 29.

27. Offsetting

The following tables show the effects of offsetting on the balance sheet and the related amounts not offset for financial assets and financial liabilities that are subject to enforceable netting arrangements:

31/12/2022

	Assets subject to enforceable netting arrangements							
	Effects of offsetting on balance sheet			Related amounts not offset				
CHF million	Gross assets before balance sheet netting	Balance sheet netting with gross liabilities	**Net assets reported on the balance sheet**[1]	Financial liabilities	Collateral received[2]	**Assets after consideration of netting potential**	**Assets not subject to enforceable netting arrangements**[1]	**Balance sheet total**[1]
Receivables from C&S	4,870.3	–315.6	4,554.7	–21.3	–4,533.4	0.0	383.3	4,938.0
Reverse repurchase transactions	*3,803.8*	*–*	*3,803.8*	*–*	*–3,803.8*	*0.0*	*–*	*3,803.8*
Other receivables from C&S	*1,066.5*	*–315.6*	*750.9*	*–21.3*	*–729.6*	*–*	*383.3*	*1,134.2*
Financial assets (current and non-current)	3,524.8	–2,486.2	1,038.5	–77.2	–723.3	238.0	1,809.7	2,848.2
Derivatives	*3,180.7*	*–2,486.2*	*694.5*	*–77.2*	*–617.3*	*–*	*0.3*	*694.8*
Other financial assets (current)	*149.2*	*–*	*149.2*	*–*	*–11.8*	*137.4*	*470.9*	*620.1*
Other financial assets (non-current)	*194.9*	*–*	*194.9*	*–*	*–94.3*	*100.6*	*1,338.5*	*1,533.3*
Total assets	**8,395.1**	**–2,801.8**	**5,593.3**	**–98.5**	**–5,256.8**	**238.0**	**2,192.9**	**7,786.2**

31/12/2021

	Assets subject to enforceable netting arrangements							
	Effects of offsetting on balance sheet			Related amounts not offset				
CHF million	Gross assets before balance sheet netting	Balance sheet netting with gross liabilities	**Net assets reported on the balance sheet**[1]	Financial liabilities	Collateral received[2]	**Assets after consideration of netting potential**	**Assets not subject to enforceable netting arrangements**[1]	**Balance sheet total**[1]
Receivables from C&S	2,350.0	–	2,350.0	–23.2	–2,325.7	1.2	187.1	2,537.1
Reverse repurchase transactions	1,915.8	–	*1,915.8*	–	*–1,914.6*	*1.2*	–	*1,915.8*
Other receivables from C&S	*434.2*	–	*434.2*	*–23.2*	*–411.0*	–	*187.1*	*621.3*
Financial assets (current and non-current)	3,251.1	–1,623.0	*1,628.1*	–619.5	–779.6	229.0	2,005.0	3,633.2
Derivatives	*2,908.4*	*–1,623.0*	*1,285.5*	*–619.5*	*–666.0*	–	*0.5*	*1,286.0*
Other financial assets (current)	*31.2*	–	*31.2*	–	*–14.7*	*16.5*	*277.4*	*308.6*
Other financial assets (non-current)	*311.5*	–	*311.5*	–	*–98.9*	*212.5*	*1,727.1*	*2,038.6*
Total assets	**5,601.2**	**–1,623.0**	**3,978.2**	**–642.7**	**–3,105.3**	**230.2**	**2,192.1**	**6,170.3**

[1] The balance sheet total is the sum of “Net assets reported on the balance sheet” that are subject to enforceable netting arrangements and “Assets not subject to enforceable netting arrangements”.

[2] Financial collateral is reflected at its fair value, but has been limited to the net balance sheet exposure so as not to include any over-collateralization.

31/12/2022

CHF million	Liabilities subject to enforceable netting arrangements							
	Effects of offsetting on balance sheet			Related amounts not offset				
	Gross liabilities before balance sheet netting	Balance sheet netting with gross assets	**Net liabilities reported on the balance sheet**[1]	Financial assets	Collateral pledged[2]	**Liabilities after consideration of netting potential**	**Liabilities not subject to enforceable netting arrangements**[1]	**Balance sheet total**[1]
Payables from C&S	7,884.5	–315.6	7,569.0	–21.3	–127.2	7,420.4	1,268.6	8,837.5
Payables from C&S	*7,865.9*	*–315.6*	*7,550.3*	*–21.3*	*–108.6*	*7,420.4*	*1,268.6*	*8,818.9*
Payables from repurchase agreements	*18.7*	*–*	*18.7*	*–*	*–18.7*	*–*	*–*	*18.7*
Financial liabilities (current and non-current)	3,277.6	–2,486.2	791.3	–77.2	–714.2	–	1,427.5	2,218.8
Derivatives	*3,183.3*	*–2,486.2*	*697.1*	*–77.2*	*–619.9*	*–*	*0.3*	*697.4*
Other financial liabilities (current)	*–*	*–*	*–*	*–*	*–*	*–*	*26.5*	*26.5*
Other financial liabilities (non-current)	*94.3*	*–*	*94.3*	*–*	*–94.3*	*–*	*1,400.7*	*1,494.9*
Total liabilities	**11,162.1**	**–2,801.8**	**8,360.3**	**–98.5**	**–841.4**	**7,420.4**	**2,696.1**	**11,056.4**

31/12/2021

CHF million	Liabilities subject to enforceable netting arrangements							
	Effects of offsetting on balance sheet			Related amounts not offset				
	Gross liabilities before balance sheet netting	Balance sheet netting with gross assets	**Net liabilities reported on the balance sheet**[1]	Financial assets	Collateral pledged[2]	**Liabilities after consideration of netting potential**	**Liabilities not subject to enforceable netting arrangements**[1]	**Balance sheet total**[1]
Payables from C&S	7,882.8	–	7,882.8	–23.2	–	7,859.6	1,383.8	9,266.6
Financial liabilities (current and non-current)	3,006.4	–1,623.0	1,383.4	–619.5	–763.9	–	1,453.4	2,836.8
Derivatives	*2,907.5*	*–1,623.0*	*1,284.5*	*–619.5*	*–665.0*	*–*	*0.5*	*1,285.0*
Other financial liabilities (current)	*–*	*–*	*–*	*–*	*–*	*–*	*22.9*	*22.9*
Other financial liabilities (non-current)	*98.9*	*–*	*98.9*	*–*	*–98.9*	*–*	*1,430.0*	*1,528.9*
Total liabilities	**10,889.3**	**–1,623.0**	**9,266.3**	**–642.7**	**–763.9**	**7,859.6**	**2,837.2**	**12,103.4**

[1] The balance sheet total is the sum of “Net liabilities reported on the balance sheet” that are subject to enforceable netting arrangements and “Liabilities not subject to enforceable netting arrangements”.

[2] Financial collateral is reflected at its fair value, but has been limited to the net balance sheet exposure so as not to include any over-collateralization.

Enforceable netting arrangements

In the post-trading business, enforceable netting arrangements are in place. SIX x-clear Ltd and BME Clearing SAU operate as central counterparties. A CCP is an entity that interposes itself between trading partners to become a buyer to every seller and a seller to every buyer, thereby ensuring settlement even if one of the original trading partners fails to meet their obligations. In order to protect the CCPs against the potential losses in the event of a participant’s default, SIX requires the participants to provide collateral and to make contributions to a collective default fund. The transactions are subject to netting arrangements, which are part of the clearing rules of SIX x-clear Ltd and BME Clearing SAU. SIX SIS Ltd and Iberclear act as CSDs. CSDs may provide short-term credits to their clients and hold cash placements with custodians. These assets are covered by the credit balances of the clients and by collaterals which are subject to netting arrangements (i.e. member agreements). Additionally, receivables and payables related to reverse repurchase transactions are subject to enforceable netting agreements, such as the Swiss Master Agreement for Repo Trades and/or Global Master Repurchase Agreement.

Balance sheet netting

Unsettled positions from clearing and settlement are offset to the extent that netting is legally enforceable, based on the respective clearing rules. For equities and fixed income, the maximum netting which can be applied is on a counterparty and instrument level. For derivatives, the unsettled positions are shown net on a margin account level.

Related amounts not offset

Reverse repurchase transactions

The agreements stipulate that all outstanding transactions with the same counterparty can be offset, and close-out netting applies across all outstanding transactions covered by the agreements if a default event or another predetermined event occurs. The arrangements, however, do not provide a legally enforceable right in the normal course of business. Financial collateral typically comprises cash and highly liquid securities which may be liquidated in the event of counterparty default.

Other receivables/payables from clearing & settlement

Receivables from clearing & settlement include deposits at correspondence banks for cross-border settlements, unsettled margin calls and unsettled daily variation margins from derivatives. Except for unsettled margin calls and unsettled daily variation margins, financial liabilities against these counterparties are generally not offset in the normal course of business. The remaining amount of the assets is covered by the credit balances of the clients and by collaterals which may be realized in a default event or if another predetermined event occurs.

Positive/negative replacement values of derivatives

The netting agreements for clearing transactions stipulate that close-out netting applies across all outstanding transactions with the same clearing member and the same currency if a default event or another predetermined event occurs. Such arrangements, however, do not provide a legally enforceable right in the normal course of business. The collateral may be realized in a default event or if another predetermined event occurs.

Group Composition

28. Interests in Other Entities

Subsidiaries

The list below shows SIX Group Ltd and its subsidiaries. The share capital of all subsidiaries consists solely of ordinary shares and the ownership interest held by SIX equals the share of voting rights. All subsidiaries are consolidated in the Group's financial statements.

Name of entity	Principal place of business	Principal activities		Share capital in 1,000	31/12/2022 Equity interest in %	31/12/2021 Equity interest in %
SIX Group Ltd	Zurich	Holding company	CHF	19,522	–	–
12H Ltd	Zurich	Provider of low-latency solutions	CHF	100	100.0	90.0
BME Clearing SAU	Madrid	Clearing	EUR	18,030	100.0	100.0
BME LATAM SAS	Bogota	Consulting services	COP	150,000	100.0	100.0
BME Post Trade Services SAU	Madrid	Services for Group companies and third parties	EUR	60	100.0	100.0
BME Regulatory Services SAU	Madrid	Regulatory compliance services	EUR	60	100.0	100.0
BME Servicios Corporativos SA	Madrid	Services for Group companies	EUR	25,000	100.0	100.0
Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros SA	Madrid	Holding company	EUR	250,847	100.0	100.0
Bolsas y Mercados Españoles Group Services SAU	Madrid	Services for Group companies	EUR	60	100.0	100.0
Bolsas y Mercados Españoles InnTech SAU	Madrid	IT and consulting services	EUR	331	100.0	100.0
Bolsas y Mercados Españoles Market Data SA	Madrid	Financial information services	EUR	4,165	100.0	100.0
Bolsas y Mercados Españoles Renta Fija SAU	Madrid	Fixed income exchange	EUR	3,005	100.0	100.0
Bolsas y Mercados Españoles Sistemas de Negociación SA	Madrid	Stock exchange and stock exchange services	EUR	60	100.0	100.0
F10 (Switzerland) Ltd	Zurich	Innovation and startup consulting	CHF	100	–	100.0
F10 Global Innovation Network Spain SL	Madrid	Innovation and startup consulting	EUR	3	–	100.0
F10 Investment Ltd	Zurich	Investment in startups	CHF	100	–	75.0
Finaccess SIX Financial Information SA	Casablanca	Financial information services	MAD	8,548	55.0	55.0
Instituto Bolsas y Mercados Españoles SLU	Madrid	Financial training	EUR	10	100.0	100.0
LATAM Exchanges Data Inc.	Miami	Financial information services	USD	5,644	51.0	51.0
MEFF Sociedad Rectora del Mercado de Productos Derivados SAU	Madrid	Derivatives exchange	EUR	6,650	100.0	100.0
MEFF Tecnología y Servicios SAU	Barcelona	Electricity market CCP	EUR	60	100.0	100.0
Open Finance SL	Valencia	Consultancy services to financial entities	EUR	4	100.0	100.0
Orenda Software Solutions Inc.	Membertou	ESG and alternative data services	CAD	0	62.6	62.6
REGIS-TR SA	Luxembourg	Trade repository	EUR	3,600	100.0	–[1]
REGIS-TR UK Ltd	London	Trade repository	GBP	1,641	100.0	–[1]
SDX Trading Ltd	Zurich	Digital exchange services	CHF	1,000	100.0	100.0
SDX Web3 Ltd	Zurich	Digital exchange services	CHF	100	100.0	–
SECB Swiss Euro Clearing Bank GmbH	Frankfurt a. M.	Clearing services	EUR	30,000	100.0	100.0
SIX BBS Ltd	Zurich	Banking services	CHF	100	100.0	100.0
SIX Digital Exchange Ltd	Zurich	Digital exchange services	CHF	5,500	100.0	100.0
SIX Exchange Group Ltd	Zurich	Holding company	CHF	10,000	100.0	–

[1] As at 31 December 2021, REGIS-TR SA and REGIS-TR UK Ltd were accounted for using the equity method. See below.

Name of entity	Principal place of business	Principal activities	Share capital in 1,000		31/12/2022 Equity interest in %	31/12/2021
SIX Exchange Regulation Ltd	Zurich	Exchange regulation	CHF	100	100.0	100.0
SIX Exfeed Ltd	Zurich	Distribution of financial information	CHF	1,100	100.0	100.0
SIX Finance (Luxembourg) SA	Leudelange	Financing services	EUR	31	100.0	100.0
SIX Financial Information Belgium SA	Brussels	Financial information services	EUR	505	100.0	100.0
SIX Financial Information Denmark A/S	Copenhagen	Financial information services	DKK	1,600	100.0	100.0
SIX Financial Information Deutschland GmbH	Frankfurt a. M.	Financial information services	EUR	512	100.0	100.0
SIX Financial Information España SA	Madrid	Financial information services	EUR	424	100.0	100.0
SIX Financial Information France SAS	Paris	Financial information services	EUR	44,900	100.0	100.0
SIX Financial Information Hong Kong Limited	Hong Kong	Inactive	HKD	4,000	100.0	100.0
SIX Financial Information Italia Srl	Milan	Financial information services	EUR	100	100.0	100.0
SIX Financial Information Japan Ltd	Tokyo	Financial information services	JPY	40,000	100.0	100.0
SIX Financial Information Ltd	Zurich	Financial information services	CHF	5,400	100.0	100.0
SIX Financial Information Luxembourg SA	Leudelange	Financial information services	EUR	31	100.0	100.0
SIX Financial Information Monaco SAM	Monaco	Financial information services	EUR	150	100.0	100.0
SIX Financial Information Nederland BV	Amsterdam	Financial information services	EUR	250	100.0	100.0
SIX Financial Information Nordic AB	Stockholm	Financial information services	SEK	100	100.0	100.0
SIX Financial Information Singapore Pte Ltd	Singapore	Financial information services	SGD	25	100.0	100.0
SIX Financial Information UK Ltd	London	Financial information services	GBP	500	100.0	100.0
SIX Financial Information USA Inc.	Stamford	Financial information services	USD	0	100.0	100.0
SIX Global Services Ltd	Zurich	Services for Group companies and third parties	CHF	100	100.0	100.0
SIX Group Services Ltd	Zurich	IT and management services	CHF	11,550	100.0	100.0
SIX Index Ltd	Zurich	Indices services	CHF	100	100.0	100.0
SIX Interbank Clearing Ltd	Zurich	Interbank payment services	CHF	1,000	100.0	100.0
SIX NCS Ltd	Zurich	Banking services	CHF	100	100.0	100.0
SIX Paynet Ltd	Zurich	E-billing and direct debit services	CHF	–	–	100.0
SIX Repo Ltd	Zurich	Swiss money market trading platform	CHF	1,000	100.0	100.0
SIX Securities Services Ltd	Zurich	Holding company	CHF	26,000	100.0	100.0
SIX SIS Ltd	Olten	Settlement and custody	CHF	26,000	100.0	100.0
SIX SIS Singapore Private Limited	Singapore	Settlement and custody	SGD	1,000	100.0	100.0
SIX SIS USA Inc.	Stamford	Settlement and custody	USD	1	100.0	100.0
SIX Swiss Exchange Ltd	Zurich	Stock exchange and stock exchange services	CHF	10,000	100.0	100.0
SIX Terravis Ltd	Zurich	Real estate information portal	CHF	4,100	100.0	100.0
SIX Trade Repository Ltd	Zurich	Trade repository	CHF	500	100.0	100.0
SIX x-clear Ltd	Zurich	Clearing	CHF	30,000	100.0	100.0
Sociedad de Bolsas SA	Madrid	Stock exchange and stock exchange services	EUR	8,414	100.0	100.0
Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores SAU (Iberclear)	Madrid	Settlement and custody	EUR	114,380	100.0	100.0
Sociedad Rectora de la Bolsa de Valores de Barcelona SAU	Barcelona	Stock exchange and stock exchange services	EUR	8,564	100.0	100.0
Sociedad Rectora de la Bolsa de Valores de Bilbao SAU	Bilbao	Stock exchange and stock exchange services	EUR	2,957	100.0	100.0

Name of entity	Principal place of business	Principal activities		Share capital in 1,000	31/12/2022 Equity interest in %	31/12/2021
Sociedad Rectora de la Bolsa de Valores de Madrid SAU	Madrid	Stock exchange and stock exchange services	EUR	21,348	100.0	100.0
Sociedad Rectora de la Bolsa de Valores de Valencia SAU	Valencia	Stock exchange and stock exchange services	EUR	4,111	100.0	100.0
SWISSTRADINGBOX Ltd	Zurich	IT services	CHF	100	–	50.1
Ultumus (SGP) Pte Ltd	Singapore	Index and ETF services	SGD	0	94.5	94.5
Ultumus (US) Inc.	Wilmington	Index and ETF services	USD	0	94.5	94.5
Ultumus Limited	London	Index and ETF services	USD	0	94.5	94.5

Changes in the composition of the Group during 2022

SIX Paynet Ltd

In January 2022, SIX Paynet Ltd was merged with SIX BBS Ltd. The merger had no impact on the Group's consolidated figures as at 31 December 2022.

REGIS-TR

In March 2022, SIX established control of REGIS-TR SA and REGIS-TR UK Ltd (REGIS-TR) by acquiring the remaining stake of 50.0%. For further details, see note 29.

F10 Group

In April 2022, a partial management buyout and capital increase was carried out, which resulted in a change of control for F10 (Switzerland) and its subsidiaries. Since then, SIX has maintained a significant influence with a stake of 43.4% (31 December 2021: 100.0%) in F10 (Switzerland) Ltd, which is accounted for under the equity method. As a result of the transaction, SIX recognized a gain in financial income of CHF 3.7 million, CHF 2.5 million of which is attributable to the investment retained.

Cash and cash equivalents in the entities over which SIX lost control totaled CHF 2.0 million.

SWISSTRADINGBOX Ltd

In December 2022, SWISSTRADINGBOX Ltd was sold without any material effect on the income statement.

Newly incorporated entities

In 2022, the following entities were incorporated as fully owned subsidiaries:

- SDX Web3 Ltd: The purpose is to provide services in the area of distributed ledger and Web3 technology.
- SIX Exchange Group Ltd: The purpose is to hold the Group entities except for Banking Services.

Changes in the composition of the Group during 2021

Orenda Software Solutions Inc.

In March 2021, SIX acquired an ownership stake of 62.6% in Orenda Software Solutions Inc. For further details, see note 29.

Ultumus Group

In July 2021, SIX acquired 94.5% of Ultumus Limited, which is the parent company of Ultumus Group. The Group also includes the fully-owned subsidiaries Ultumus (US) Inc. and Ultumus (SGP) Pte Ltd. For further details, see note 29.

F10 Group

In June 2021, the association F10 FinTech Incubator and Accelerator was converted into a stock corporation with a paid-up capital of CHF 0.1 million and renamed F10 (Switzerland) Ltd.

With the incorporation of F10 (Switzerland) Ltd, SIX also obtained control over the subsidiaries F10 Investment Ltd and F10 Global Innovation Network Spain SL. F10 Investment Ltd was owned by SIX, F10 (Switzerland) Ltd and other investors with 40%, 35% and 25%, respectively. SIX obtained control over F10 Investment Ltd, as the direct and indirect ownership totaled 75%. Previously, the 40% direct interest of SIX was accounted for using the equity method. Obtaining control over both subsidiaries of F10 (Switzerland) Ltd did not result in any fair value adjustments or goodwill.

Newly incorporated entities

In 2021, the following entities were incorporated as fully owned subsidiaries:

- SIX SIS USA Inc.: The purpose is to support SIX SIS Ltd in providing settlement and custody services.
- SIX SIS Singapore Private Limited: The purpose is to support SIX SIS Ltd in providing settlement and custody services.
- SIX Index Ltd: The purpose is to provide indices services for the Financial Information business unit.
- Bolsas y Mercados Españoles Group Services SAU: The purpose is to provide services for Group companies.

Significant associates and joint ventures

Name of entity	Principal place of business	Principal activities		Share capital in 1,000	31/12/2022 Equity interest in %	31/12/2021 Equity interest in %
Custodigit Ltd	Zurich	Digital asset services	CHF	1,750	–	42.9
Keyrock SA [1]	Brussels	Liquidity provider for digital assets	EUR	1,190	9.5	9.6
REGIS-TR SA	Luxembourg	Trade repository	EUR	3,600	– [2]	50.0
REGIS-TR UK Ltd	London	Trade repository	GBP	1,641	– [2]	50.0
TWINT Ltd	Zurich	Mobile payment solutions	CHF	12,750	26.7	26.7
Worldline SA	Bezons	Electronic payment and transactional services	EUR	191,603	10.6 [3]	10.6 [3]

[1] As a result of an additional investment in September 2022, Keyrock SA has become a significant associated company.

[2] As at 31 December 2022, REGIS-TR SA and REGIS-TR UK Ltd were fully consolidated. See above.

[3] Voting rights as at 31 December 2022: 18.4% (31 December 2021: 18.8%)

Changes during 2022

REGIS-TR

In March 2022, SIX established control over REGIS-TR SA and REGIS-TR UK Ltd (REGIS-TR) by acquiring the remaining stake of 50.0%. For further details, see note 29.

Custodigit Ltd

In September 2022, SIX sold its shares in Custodigit Ltd. The transaction resulted in a loss of CHF 11.9 million which has been included in other financial expenses, see note 9.

Changes during 2021

Custodigit Ltd

In January 2021, SIX acquired 42.9% of the shares in Custodigit Ltd. The business of Custodigit involves the development, operation and commercialization of information technology platforms and services for handling and storage of digital assets. The participation in Custodigit is classified as investment in associates and accounted for using the equity method. The total purchase price was CHF 15.0 million.

SwissSign Group Ltd

In October 2021, SIX disposed of the shares in SwissSign Group Ltd. The transaction had no impact on the Group's consolidated figures.

The following table presents the carrying amount and share of other comprehensive income of individually material associates, and in aggregate for individually non-material associates and joint ventures:

CHF million	Worldline	Others	Total 31/12/2022	Worldline	Others	Total 31/12/2021
Carrying amount	**1,472.4**	**21.7**	**1,494.1**	**1,525.8**	**85.1**	**1,610.8**
Share of profit	24.2	–2.7	21.6	–95.8	–6.3	–102.1
Share of other comprehensive income incl. currency translation adjustments	–74.2	–0.3	–74.5	–46.6	0.2	–46.4
Share of total comprehensive income	**–50.0**	**–2.9**	**–52.9**	**–142.4**	**–6.1**	**–148.5**
Share of other changes in equity of associates	**1.1**	**–**	**1.1**	**6.9**	**–**	**6.9**

The following table summarizes financial information for material associates:

CHF million	Worldline SA 31/12/2022	Worldline SA 31/12/2021
Current assets	7,674.5	8,034.5
Non-current assets	13,826.6	12,704.9
Current liabilities	–6,936.3	–5,711.7
Non-current liabilities	–4,199.0	–4,769.0
Non-controlling interests	–1,135.8	–901.2
Net assets attributable to shareholders	**9,230.0**	**9,357.4**
SIX share of associates' net assets	977.9	995.9
Goodwill and other adjustments	494.5	529.8
Total carrying amount	**1,472.4**	**1,525.8**
Revenues	**4,388.1**	**3,990.2**
Net profit/(loss) from continuing operations	216.0	217.5
Net profit/(loss) from discontinued operations	89.0	–1,019.3
Net profit/(loss)	**305.0**	**–801.7**
of which attributable to shareholders of Worldline SA	*300.8*	*–812.8*
Other comprehensive income	–0.1	252.0
Total comprehensive income	**304.9**	**–549.6**
of which attributable to shareholders of Worldline SA	*317.9*	*–562.0*
Fair value of investment	1,072.7	1,513.8

29. Acquisitions of Subsidiaries

Acquisitions in 2022

REGIS-TR

In March 2022, SIX established control of REGIS-TR SA and REGIS-TR UK Ltd (REGIS-TR) by acquiring the remaining stake of 50.0%. Since then, SIX has fully owned the capital and voting rights. At closing, SIX transferred a cash consideration of CHF 64.5 million.

Previously, SIX had held an interest of 50.0% and accounted for the investment by applying the equity method. The fair value of the interest previously held was CHF 64.5 million. The remeasurement gain recognized in financial income amounted to CHF 10.3 million.

REGIS-TR is a leading trade repository that offers reporting services covering all major European trade repository obligations. The trade repository has long been an integral part of the portfolio of SIX, constituting an important business line adjacent to the core SIX Securities Services. The full consolidation of the business represents an opportunity for SIX to further integrate and deliver services to customers across Europe.

From the date of acquisition, the business has contributed CHF 18.9 million of Group revenues and positively impacted Group earnings before tax by CHF 5.9 million for the period ended on 31 December 2022. Assuming that the acquisition had taken place on 1 January 2022, the management estimates that Group revenues and Group earnings before tax would have been CHF 6.8 million and CHF 1.3 million higher, respectively.

The transaction costs of the acquisition amounted to CHF 0.4 million, CHF 0.1 million of which was included in other operating expenses and personnel expenses in 2022.

Identifiable assets acquired and liabilities assumed

The following table summarizes the assets acquired and liabilities assumed on the acquisition date:

CHF million	Fair value recognized on acquisition
Cash and cash equivalents	17.4
Trade and other receivables	5.0
Other current assets	2.1
Current assets	**24.5**
Intangible assets	91.1
Other non-current assets	1.0
Non-current assets	**92.1**
Total assets	**116.6**
Trade and other payables	2.6
Contract liabilities	2.0
Other current liabilities	1.6
Current liabilities	**6.1**
Deferred tax liabilities	21.6
Other non-current liabilities	1.1
Non-current liabilities	**22.8**
Total liabilities	**28.9**
Net assets acquired	**87.7**
Goodwill	41.3
Fair value of pre-existing interest	–64.5
Total purchase price	**64.5**
of which cash considerations	*64.5*

Trade and other receivables

The fair value of acquired trade and other receivables was CHF 5.0 million. The gross contractual amount for trade and other receivables was CHF 5.1 million, CHF 0.2 million of which was expected to be uncollectible.

Customer relationships

The multi-period excess earnings method (MEEM) has been applied to assess the fair value of customer relationships. The aggregate fair value of customer relationships constituted a total of CHF 76.0 million.

Other intangible assets

The relief from royalty method has been applied to assess the fair value of brands and software. The aggregated fair value of brands amounted to CHF 2.7 million and the fair value of software totaled CHF 12.4 million.

Goodwill

The recognized goodwill of CHF 41.3 million represents the growth potential and the acquired workforce. REGIS-TR is considered to be a cash-generating unit (CGU) and the goodwill was allocated entirely to the

CGU. None of the goodwill recognized is expected to be deductible for income tax purposes.

Acquisitions in 2021

Orenda Software Solutions Inc.

In March 2021, SIX acquired 62.6% of Orenda Software Solutions Inc. (Orenda), a Canadian-based AI platform specializing in ESG and alternative data sets. This acquisition is part of the strategy of SIX to help its customers drive more insights with data, providing consumption-ready data and analytics for faster and better informed decisions. At closing, SIX transferred a cash consideration of CHF 3.7 million.

Both SIX and the minority shareholders have options to either buy or sell the remaining stake in Orenda. The options are exercisable three and five years after the closing. The exercise price of the options depends on the revenues at the time of exercise. The call options have been measured by using probability weighted forecasts. The fair value of the call options is currently immaterial. As of the closing, the estimated probability weighted exercise price of the put options totaled CHF 6.2 million. SIX firstly recognized the non-controlling interests of CHF 1.3 million by applying the partial goodwill method. Secondly, the non-controlling interests were derecognized by recognizing a financial liability of CHF 6.2 million and by reducing retained earnings by CHF 4.8 million. As at 31 December 2021, the liability totaled CHF 6.1 million. Changes in the liability are recognized as financial income or financial expenses. If the options expire unexercised, the financial liability will be derecognized and the non-controlling interests will be reinstated.

From the date of acquisition, the business has negatively impacted Group earnings before tax by CHF 1.7 million. Assuming that the acquisition had taken place on 1 January 2021, the management estimates that Group earnings before tax would have been CHF 0.1 million lower.

Net assets acquired

The net assets acquired amounted to CHF 3.6 million. The assets included in particular cash and identified intangible assets of CHF 3.7 million and CHF 1.2 million, respectively. The liabilities comprised in particular payables and financial liabilities of CHF 1.0 million.

Goodwill

SIX has decided to apply the partial goodwill method. The recognized goodwill of CHF 1.5 million comprises the value of expected synergies arising from the acquisition. The goodwill is allocated entirely to the financial information business area. None of the goodwill recognized is expected to be deductible for income tax purposes.

Ultumus Limited

In July 2021, SIX acquired 94.5% of Ultumus Limited (Ultumus), an international London-based index and ETF data specialist. The acquisition aims at enhancing the data offering of SIX and to support its overall strategy to bring new data to its clients in a fast-growing market. The cash consideration totaled CHF 50.2 million.

Both SIX and the minority shareholders have options to either buy or sell the remaining stake in Ultumus. Generally, the options are exercisable four years after the closing at fair value and have been measured by using probability weighted forecasts. The fair value of the call options is currently immaterial. As of the closing, the estimated probability weighted exercise price of the put options totaled CHF 2.5 million. SIX firstly recognized the non-controlling interests by applying the partial goodwill method. This resulted in a minor amount of non-controlling interests. Secondly, the non-controlling interests were derecognized by recognizing a financial liability of CHF 2.5 million and by reducing retained earnings by CHF 2.5 million. As at 31 December 2021, the liability totaled CHF 2.5 million. Changes in the liability are recognized as financial income or financial expenses. If the options expire unexercised, the financial liability will be derecognized and the non-controlling interests will be reinstated.

From the date of acquisition, the business has contributed CHF 2.3 million of Group revenues and negatively impacted Group earnings before tax by CHF 1.8 million in 2021. Assuming that the acquisition had taken place on 1 January 2021, the management estimates that Group revenues and Group earnings before tax would have been CHF 2.4 million higher and CHF 1.6 million lower, respectively.

The transaction costs of the acquisition amounted to CHF 0.9 million and were included in other operating expenses and personnel expenses in 2021.

Identifiable assets acquired and liabilities assumed
The following table summarizes assets acquired and liabilities assumed on the acquisition date.

CHF million	Fair value recognized on acquisition
Cash and cash equivalents	0.6
Trade and other receivables	0.7
Other current assets	0.7
Current assets	**2.0**
Intangible assets	2.8
Non-current assets	**2.8**
Total assets	**4.9**
Trade and other payables	0.4
Other current liabilities	3.2
Current liabilities	**3.7**
Deferred tax liabilities	0.6
Non-current liabilities	**0.6**
Total liabilities	**4.2**
Net assets acquired	**0.6**
Goodwill	49.5
Non-controlling interests	0.0
Total purchase price	**50.2**
of which cash considerations	*50.2*

Trade and other receivables
Trade and other receivables comprised gross contractual amounts of CHF 0.7 million, none of which were expected to be uncollectible at the date of acquisition.

Goodwill
SIX has decided to apply the partial goodwill method. The recognized goodwill of CHF 49.5 million comprises the value of expected synergies arising from the acquisition. The goodwill is allocated entirely to the financial information business area. None of the goodwill recognized is expected to be deductible for income tax purposes.

Additional Information

30. Assets Pledged or Assigned to Secure Own Liabilities

The following table presents the carrying amount of assets pledged or restricted in use:

CHF million	31/12/2022	31/12/2021
Cash and cash equivalents	5.3	5.8
Bonds at amortized cost	490.4	16.5
Bonds at FVtOCI	43.8	212.5
Other debt instruments	96.3	101.2
Total	**635.8**	**336.0**

As at 31 December 2022, SIX x-clear Ltd had pledged bonds in the amount of CHF 62.2 million for the interoperability and the intraday credit facility used in connection with the Norwegian equities settlement (31 December 2021: CHF 229.0 million). Additionally, SECB had pledged bonds in the amount of CHF 472.0 million and used its securities portfolio to obtain liquidity from Deutsche Bundesbank as part of a Lombard transaction (31 December 2021: none).

SIX holds funds at correspondent banks which originate from corporate actions and are linked to securities of sanctioned persons. The funds cannot be accessed until the sanctions are lifted. As at 31 December 2022, the sanctioned accounts amounted to CHF 94.3 million (31 December 2021: CHF 98.9 million).

Additionally, SIX has pledged assets and provided cash deposits as security for operating lease agreements. These amounts are restricted in use.

31. Contingent Liabilities

Except for the uncertainties regarding the final tax assessment (see note 12), SIX had no significant contingent liabilities as at 31 December 2022 (31 December 2021: none).

32. Leases

SIX as lessee

In particular, SIX leases office space, vehicles and IT equipment.

Leases of office space are negotiated on an individual basis and contain a wide range of different terms and conditions. Typically, they run for periods up to 13 years and may include an option to renew the lease for an additional period and/or to terminate the lease early. Some leases include variable lease payments that depend on local price indices. SIX subleases some of the leased office space.

The leases of vehicles and IT equipment typically run for periods of three to five years. Some leases of IT equipment may lead to variable lease payments depending on the usage. The leases of printers are usually leases of low-value items. The Group has elected not to recognize right-of-use assets and lease liabilities for these leases.

Right-of-use assets

For the quantitative disclosures on the right-of-use assets, see note 19.

Lease liabilities

The maturity analysis of the contractual undiscounted cash flows is set out in note 25.

Extension and termination options

Some leases of office space contain extension or termination options only exercisable by SIX. The termination options are subject to a termination fee of up to 15 monthly rentals. SIX assesses at lease commencement whether it is reasonably certain to exercise the extension option or not to exercise a termination option and performs a reassessment if there is a significant event or significant change in the circumstances within its control.

CHF million	Notes	31/12/2022	31/12/2021
Amounts recognized in the income statement			
Income from subleasing of right-of-use assets		0.4	0.8
Interest expenses on lease liabilities	10	–2.8	–2.9
Expenses related to variable lease payments		–0.3	–0.1
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets		–0.0	–0.2
Amounts recognized in the statement of cash flows			
Lease payments directly recognized in the income statement		0.5	0.3
Interest expenses on lease liabilities		2.8	2.9
Payment of lease liabilities		18.9	15.7
Lease commitments and undiscounted potential future lease payments not included in the lease liabilities			
Future lease payments related to leases not yet commenced to which SIX is committed		3.0	–
Extension options not reasonably certain to be exercised		0.5	0.6

SIX as lessor

SIX partially leases out some office buildings owned and subleases some office space. These leases are classified as operating leases, because they do not transfer substantially all the risk and rewards incidental to ownership of the assets.

Operating lease income also includes fees earned for the renting of conference rooms and the income from recharges of ancillary costs. In 2022, the operating lease income totaled CHF 10.8 million (2021: CHF 11.4 million).

The table below sets out a maturity analysis of the future undiscounted lease payments:

CHF million	31/12/2022	31/12/2021
Within one year	7.0	6.6
Between one and five years	24.5	22.9
More than five years	5.6	11.2
Total	**37.1**	**40.8**

The breakdown of property, plant and equipment in assets used by SIX and assets leased to third parties is provided in note 19.

33. Defined Benefit Plans

SIX has established its own pension plan in Switzerland. Outside of Switzerland, SIX uses different, generally legally independent pension providers. Defined benefit plans are in place for Switzerland, Spain, France and Luxembourg. Independent actuarial valuations for the plans are performed as required for the defined benefit plans. The defined benefit plan for Switzerland represents more than 98% of the total present value of the defined benefit obligation. For this reason, SIX does not present the defined benefit plans in Spain, France and Luxembourg separately.

Swiss pension plan

The Swiss pension plan covers all SIX employees in Switzerland and exceeds the minimum benefit requirements under the Swiss law (BVG). The benefits covered include retirement, disability and death benefits. Pension plan contributions are paid by the employees and the employer and calculated as a percentage of the covered salary. The rate of contribution depends on the age of the employee. All entities are responsible for the timely payment of contributions for each employee.

The Swiss plan provides employees with a choice between three saving plans: the budget plan, the standard plan and the maximum plan. The three plans differ only in the amount of employee contributions. At retirement, the employees' individual savings capital is multiplied by the conversion rate, which is defined by the pension fund regulations, and can be paid out as either a lifetime annuity or a lump-sum payment. In the event of disability, the pension plan pays a disability pension until the ordinary retirement age. In the event of death, the surviving spouse, registered partner or life partner is entitled to receive a pension.

Although the Swiss pension plan is a defined contribution plan under Swiss pension law, it qualifies and is therefore accounted for as a defined benefit plan under IAS 19 *Employee Benefits*. According to the relevant affiliation agreements, there is no provision for SIX to be liable to the plan for other affiliated companies' obligations. Any deficit or surplus of the pension plan will be allocated between the affiliated companies according to the relevant defined benefit obligation.

The employer contributions expected to be made to the Swiss pension plan in 2023 are CHF 40.4 million.

Plan assets and defined benefit obligation

The overall investment policy and strategy for the Swiss defined benefit plans are guided by the objective of achieving an investment return which, together with the contributions paid, is sufficient to maintain reasonable control over the various funding risks of the plan. The foundation board is responsible for determining the mix of asset types and target allocations. Actual asset allocation is determined by a variety of current and expected economic and market conditions and in consideration of specific asset class risks, the risk profile and the maturity pattern of the plan.

The plan assets of the Group comprise the following:

CHF million	31/12/2022	31/12/2021
Listed equity instruments	418.4	569.9
Listed debt instruments	572.9	646.6
Listed real estate	337.6	359.6
Cash and cash equivalents	35.9	19.7
Other financial investments	190.1	148.7
Total plan assets	**1,555.0**	**1,744.5**

All equity and most of the debt instruments have quoted prices in active markets. All government bonds excluding emerging markets have investment grade ratings.

An asset-liability matching (ALM) study is performed periodically by an external investment advisor to analyze the consequences of strategic investment policies. The strategic investment policy of the Swiss pension fund for 2022 can be summarized as follows:

- The strategic asset allocation comprises 24.0% to 40.0% (neutral: 32.0%) equity instruments; 28.0% to 52.0% (neutral: 38.0%) debt instruments and cash; and 20.0% to 39.0% (neutral: 30.0%) other investments (e.g. real estate and alternative investments).
- The interest rate risk is not managed actively, but the pension plan is underweighted in duration.
- The foreign currency risk of the main currencies is managed by a currency overlay program or foreign currency hedge directly in the funds.

The following table summarizes the changes in the present value of the defined benefit obligation:

CHF million	2022	2021
Present value of obligation at 1 January	**–1,631.6**	**–1,635.5**
Effect of business combinations and disposals	–0.7	–
Interest expenses on defined benefit obligation	–5.8	–2.6
Current service costs (employer)	–54.0	–56.1
Employee contributions	–30.9	–29.8
Benefits paid	85.4	43.0
Actuarial gains or (losses)	250.2	48.8
Administration costs	–0.8	–0.8
Translation adjustments	1.4	1.4
Present value of obligation at 31 December	**–1,386.8**	**–1,631.6**

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

CHF million	2022	2021
Fair value of plan assets at 1 January	**1,744.5**	**1,603.6**
Effect of business combinations and disposals	0.3	–
Employer contributions	42.1	42.2
Employee contributions	30.9	29.8
Interest income on assets	6.1	2.4
Return on plan assets (excl. contributions in interest income)	–183.2	110.2
Benefits paid	–85.3	–43.3
Translation adjustments	–0.4	–0.4
Fair value of plan assets at 31 December	**1,555.0**	**1,744.5**

Amounts recognized in the balance sheet:

CHF million	31/12/2022	31/12/2021
Present value of defined benefit obligation	–1,386.8	–1,631.6
Fair value of plan assets	1,555.0	1,744.5
Overfunding/(underfunding)	**168.2**	**112.9**
Adjustment to asset ceiling	–167.1	–
Recognized pension assets/(liabilities)	**1.1**	**112.9**
of which presented as pension assets	*13.6*	*134.0*
of which presented as pension fund liabilities	*–12.5*	*–21.1*

All benefits were vested at the end of the reporting period. The weighted average duration of the defined benefit obligation at the reporting date was 12 years (31 December 2021: 15 years).

The following table provides information on pension costs for defined benefit plans:

CHF million	2022	2021
Current service costs	–54.0	–56.1
Net interest income/(expenses)	0.3	–0.1
Administration costs	–0.8	–0.8
Total pension expense for the period	**–54.5**	**–57.1**

Remeasurements recognized in other comprehensive income:

CHF million	2022	2021
Actuarial gains/(losses)	250.2	48.8
Return on plan assets excl. interest income	–183.2	110.2
Change in effect of asset ceiling excl. interest income/expenses	–167.1	–
Total income/(expense) recognized in OCI	**–100.2**	**159.0**

The actuarial gains/(losses) arising from changes in financial assumptions totaled CHF 321.2 million (2021: CHF 2.0 million).

Assumptions used to determine the defined benefit obligation

The following were the principal actuarial assumptions at the reporting date:

	31/12/2022	31/12/2021
Discount rate	2.20%	0.35%
Salary trend	2.50%	0.85%
Interest rate on retirement savings capital	1.50%	1.00%
Mortality tables	BVG 2020 GT	BVG 2020 GT

Sensitivity analysis

The calculation of the defined benefit obligation is sensitive to the assumptions set out above. The following table summarizes the positive or negative impact on the defined benefit obligation at the reporting date as a result of a change in the principal actuarial assumptions.

	Present value of defined benefit obligation	
CHF million	**31/12/2022**	**31/12/2021**
Defined benefit obligation based on current actuarial assumptions	–1,386.8	–1,631.6
Discount rate		
Change in actuarial assumption – decrease of 50 bps	–1,474.2	–1,762.4
Change in actuarial assumption – increase of 50 bps	–1,309.4	–1,517.3
Salary trend		
Change in actuarial assumption – decrease of 25 bps	–1,382.9	–1,624.5
Change in actuarial assumption – increase of 25 bps	–1,390.7	–1,638.8
Interest rate on retirement savings capital		
Change in actuarial assumption – decrease of 50 bps	–1,362.2	–1,600.4
Change in actuarial assumption – increase of 50 bps	–1,412.5	–1,664.2
Life expectancy		
Change in actuarial assumption – decrease of 1 year	–1,361.7	–1,591.9
Change in actuarial assumption – increase of 1 year	–1,411.3	–1,671.0

The above sensitivities are based on the average duration of the benefit obligation determined at the date of the last full actuarial valuation in 2022 and are applied to adjust the defined benefit obligation at the reporting date based on the assumptions concerned. While the analysis does not take into account the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity to the assumptions shown.

34. Related Party Disclosures

SIX defines related parties as:
- shareholders that have significant influence by delegating a member into the Board of Directors of SIX
- associated companies that are significantly influenced by SIX
- post-employment benefit plans for SIX employees
- key management personnel
- entities that are directly or indirectly controlled or jointly controlled by key management personnel

SIX shares are held by 120 banks, but no bank holds more than 20% of the Group's shares issued. The shares are widely distributed, i.e. no bank category has an absolute majority. All shareholders are bound by a shareholders' agreement.

Transactions with related parties and companies are conducted on terms equivalent to those that prevail in arm's length transactions. The price schedules for transactions with third parties also apply to transactions with related parties.

Transactions and outstanding balances with related parties of SIX are summarized in the tables below.

				2022
CHF million	**Qualifying shareholders**	**Associates and joint ventures**	**Post-employment benefit plans**	**Total**
Income statement				
Operating income	264.9	50.0	–	314.9
Other operating expenses	–0.5	–33.5	–	–34.0
Net financial expenses	–0.2	–0.7	–	–1.5
Net interest expenses	–1.6	0.0	–	–1.6
Contributions	–	–	–41.8	–41.8

				31/12/2022
CHF million	**Qualifying shareholders**	**Associates and joint ventures**	**Post-employment benefit plans**	**Total**
Balance sheet				
Cash and cash equivalents	139.5	–	–	139.5
Trade and other receivables	22.7	16.1	–	38.8
Receivables from clearing & settlement	45.9	–	–	45.9
Financial assets	18.2	3.4	–	21.6
Payables from clearing & settlement	750.0	262.6	–	1,012.6
Financial liabilities current	13.5	–	–	13.5
Other liabilities	2.2	12.4	–	14.7

				2021
CHF million	**Qualifying shareholders**	**Associates and joint ventures**	**Post-employment benefit plans**	**Total**
Income statement				
Operating income	314.0	54.0	–	368.1
Other operating expenses	−0.7	−40.4	–	−41.1
Net financial expenses	−0.3	−0.5	–	−0.7
Net interest expenses	−0.8	–	–	−0.8
Contributions	–	–	−41.6	−41.6

				31/12/2021
CHF million	**Qualifying shareholders**	**Associates and joint ventures**	**Post-employment benefit plans**	**Total**
Balance sheet				
Cash and cash equivalents	203.8	–	–	203.8
Trade and other receivables	30.5	8.0	–	38.5
Receivables from clearing & settlement	38.4	–	–	38.4
Financial assets	38.2	–	–	38.2
Payables from clearing & settlement	754.9	135.9	–	890.9
Financial liabilities current	9.5	–	–	9.5
Other liabilities	6.4	12.7	–	19.1

Operating income with associates and joint ventures included, in particular, office rental income and infrastructure as a service revenues (IAAS) with an associated company. Operating expenses with associates and joint ventures included mainly debit card and ATM processing fees paid to an associated company. The IAAS and processing fees are fixed and adjusted annually if the business volume changes.

Receivables from clearing & settlement due from related parties amounting to CHF 25.9 million are collateralized (31 December 2021: CHF 37.8 million). No loss allowance for doubtful receivables (i.e. lifetime expected credit losses under stage 3 of the impairment model) for amounts due from related parties were recorded as at 31 December 2022 or 31 December 2021.

Compensation paid to key management personnel

Key management personnel are defined as members of the Board of Directors and the Executive Board. This definition is based on the requirements of IAS 24 *Related Party Disclosures*.

The members of the Board of Directors and the Executive Board and their immediate relatives do not have any ownership interest in the Group's companies.

Apart from the compensation paid and the regular contributions to the pension fund institutions, no transactions with key management personnel took place. The amounts disclosed in the table are the amounts recognized as an expense during the reporting period.

CHF million	2022	2021
Salaries and other short-term employee benefits	–13.9	–13.9
Other long-term benefits	–3.0	–3.0
Total compensation to key management	**–16.9**	**–16.9**

35. Events after the Balance Sheet Date

As at 1 March 2023, the date of approval for issue of the financial statements by the Board of Directors, the Group had undergone no subsequent events warranting a modification of the value of the assets and liabilities or an additional disclosure.

Report of the Statutory Auditor

To the General Meeting of SIX Group Ltd, Zurich
Zurich, 2 March 2023

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of SIX Group Ltd and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2022, the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (pages 45 to 131) give a true and fair view of the consolidated financial position of the Group as at 31 December 2022 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

Basis for opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISA) and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report. We are independent of the Group in accordance with the provisions of Swiss law, together with the requirements of the Swiss audit profession, as well as those of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the consolidated financial statements.

Valuation of goodwill and purchased intangible assets

Risk

As at 31 December 2022, SIX Group holds intangible assets in the amount of CHF 2,756.2 million, corresponding to 16.1% of the total assets. These relate predominantly to goodwill and purchased intangible assets (trademarks & licenses, customer relationships and internally generated software acquired in a business combination).

We focused on this area due to the significance on the balance sheet and because of the judgements and assumptions used by management for the purpose of impairment testing. Impairment testing is performed on an annual basis or more frequently if indicators for impairment are present by comparing the carrying value of a cash-generating unit (CGU) to its recoverable amount. This assessment involves judgements and assumptions on key parameters within the valuation models, such as on future free cash flows, long-term growth rates and discount rates.

The applied accounting policies for goodwill and purchased intangible assets are described in note 2 and further details are disclosed in note 3 and note 20 to the consolidated financial statements.

Our audit response

We have confirmed our understanding of the impairment testing process and assessed the design effectiveness of key controls, concluding that a substantive audit approach should be adopted. We evaluated, with the support of our valuation experts, the reasonableness of the valuation models and the appropriateness of the significant assumptions related to the valuation parameters. Specifically, we verified the calculation method for the determination of the discount rates and long-term growth rates and compared the rates with market- and industry specific reference values.

Furthermore, we assessed the projected cash flows and compared these forecasts to the business plans approved by the Board of Directors and appraised the reliability of the forecasts in previous years by back testing. Based on discussions with management we also gained an understanding about the budgeting process. We inspected the sensitivity analysis performed by management and performed our own sensitivity analysis on the key valuation parameters, understanding the impact that reasonably possible changes to these key inputs would have on the overall carrying value of the goodwill and purchased intangible assets at the balance sheet date.

In addition, we assessed the appropriateness of the relevant disclosures for this audit focus area in the consolidated financial statements.

Our audit procedures did not lead to any reservations regarding valuation of goodwill and purchased intangible assets.

Other information

The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Board of Directors' responsibilities for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements, which give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditor’s responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s 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 Swiss law, ISA and SA-CH will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located on EXPERTsuisse’s website at: https://www.expertsuisse.ch/en/audit-report. This description forms an integral part of our report.

Report on other legal and regulatory requirements

In accordance with Art. 728a para. 1 item 3 CO and PS-CH 890, we confirm that an internal control system exists, which has been designed for the preparation of the consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

Ernst & Young Ltd

Bruno Patusi
Licensed audit expert
(Auditor in charge)

Slaven Cosic
Licensed audit expert

SIX Group Ltd
Financial Statements 2022

1. Balance Sheet

CHF million	Notes	31/12/2022	31/12/2021
Assets			
Cash and cash equivalents	3.2.2	292.7	351.8
Current financial assets	3.2.5	14.4	16.8
Trade receivables	3.2.3	6.2	6.8
Other receivables	3.2.4	392.0	306.5
Positive replacement values of derivatives		0.5	0.9
Accrued income and prepaid expenses		12.6	12.9
Current assets		**718.4**	**695.6**
Non-current financial assets	3.2.5	132.9	141.1
Investments in subsidiaries and associated entities	3.2.6	6,730.0	6,624.5
Non-current assets		**6,862.9**	**6,765.6**
Total assets		**7,581.3**	**7,461.1**
Liabilities			
Trade payables	3.2.7	8.7	2.3
Current interest-bearing liabilities	3.2.8	255.3	280.2
Other current liabilities	3.2.9	1.1	1.0
Negative replacement values of derivatives		0.5	0.8
Accrued expenses and deferred income		12.0	12.3
Current liabilities		**277.5**	**296.7**
Non-current interest-bearing liabilities	3.2.10	1,264.0	1,298.4
Other non-current liabilities	3.2.11	–	8.2
Non-current provisions		3.2	3.2
Non-current liabilities		**1,267.2**	**1,309.8**
Total liabilities		**1,544.7**	**1,606.5**
Equity			
Share capital		19.5	19.5
Legal capital reserves			
Reserves from capital contributions		230.2	230.2
Reserves for indirectly held treasury shares		23.3	23.3
Free reserves			
Profit carried forward		5,488.9	5,312.8
Profit for the year		274.6	268.8
Treasury shares	3.2.14	–0.0	–0.0
Total equity		**6,036.6**	**5,854.7**
Total liabilities and equity		**7,581.3**	**7,461.1**

2. Income Statement

CHF million	Notes	2022	2021
Dividend income from investments		266.2	216.3
Service revenues		14.9	14.8
Other trade revenues		9.1	9.0
Total operating income		**290.3**	**240.0**
Consulting and other professional fees		–20.0	–16.5
Valuation adjustments and losses	3.2.15	–18.1	–31.5
Other operating expenses		–3.1	–2.5
Total operating expenses		**–41.2**	**–50.5**
Operating profit before interest and tax		**249.1**	**189.5**
Financial income	3.2.16	79.6	81.9
Financial expenses	3.2.16	–50.5	–54.7
Earnings before tax and extraordinary items		**278.2**	**216.7**
Extraordinary income	3.2.18	20.1	57.0
Extraordinary expenses	3.2.18	–23.2	–
Earnings before tax		**275.1**	**273.7**
Taxes		–0.5	–4.9
Profit for the year		**274.6**	**268.8**

3. Notes to the Financial Statements

3.1 Principles of the financial statements

3.1.1 General principles

These financial statements were prepared according to the principles of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations). Where not prescribed by law, the significant accounting and valuation principles applied are described below. The financial statements may be influenced by the creation and release of hidden reserves.

The amounts stated in the financial statements are rounded. The total may therefore differ from the sum of the individual values, which are calculated to the decimal point.

3.1.2 Foreign currency translation

Transactions in foreign currencies are recorded at the current exchange rates. Monetary items are translated using the closing rates. Non-monetary items are translated using historical exchange rates. Exchange rate gains and losses are credited or debited to the income statement.

Foreign currency positions were translated into CHF using the following closing rates:

Foreign currency	31/12/2022	31/12/2021
EUR	0.9837	1.0347
USD	0.9237	0.9144

3.1.3 Investments in subsidiaries and associated entities

Investments in subsidiaries and associated entities are carried at cost less accumulated impairment losses.

3.1.4 Financial assets

Bonds are measured at the lower of amortized cost or market value. Financial assets which are due within one year are presented within current assets. Loans are carried at nominal value less accumulated impairment losses.

3.1.5 Derivative financial instruments

Derivatives are recognized initially at cost. Subsequent to initial recognition derivatives are measured at market value.

3.1.6 Treasury shares

At initial recognition, treasury shares are recognized at cost as a negative position within equity. Gains or losses arising on subsequent sale are recognized as financial income or expense.

3.1.7 Revenue recognition

Revenues for services are recognized when invoiced. This occurs when the services have been provided.

3.2 Disclosure on balance sheet and income statement items and other information

3.2.1 Number of full-time equivalents

The annual average number of full-time equivalents in the reporting year was nil (2021: nil).

3.2.2 Cash and cash equivalents

CHF million	31/12/2022	31/12/2021
Due from third parties	5.5	12.0
Due from shareholders	287.3	339.8
Cash and cash equivalents	**292.7**	**351.8**

3.2.3 Trade receivables

CHF million	31/12/2022	31/12/2021
Due from Group and associated entities	6.2	6.8
Trade receivables	**6.2**	**6.8**

3.2.4 Other receivables

CHF million	31/12/2022	31/12/2021
Due from third parties	0.2	1.8
Due from Group and associated entities	391.8	304.7
Other receivables	**392.0**	**306.5**

3.2.5 Financial assets

CHF million	31/12/2022	31/12/2021
Loans due from Group and associated entities	93.7	91.8
Bonds	35.3	45.7
Equity and convertible loans	18.3	20.3
Financial assets	**147.3**	**157.8**
of which current	*14.4*	*16.8*
of which non-current	*132.9*	*141.1*

3.2.6 Investments in subsidiaries and associated entities

A list of direct and significant indirect Group companies held by SIX Group Ltd with the percentage of capital controlled is included in the SIX Consolidated Financial Statements.

3.2.7 Trade payables

CHF million	31/12/2022	31/12/2021
Due to third parties	7.2	0.2
Due to Group and associated entities	1.4	2.1
Trade payables	**8.7**	**2.3**

3.2.8 Current interest-bearing liabilities

CHF million	31/12/2022	31/12/2021
Due to third parties	0.0	0.1
Due to Group and associated entities	255.3	280.1
Current interest-bearing liabilities	**255.3**	**280.2**

3.2.9 Other current liabilities

CHF million	31/12/2022	31/12/2021
Due to third parties	0.1	1.0
Due to Group and associated entities	1.0	–
Other current liabilities	**1.1**	**1.0**

3.2.10 Non-current interest-bearing liabilities

CHF million			31/12/2022	31/12/2021
Due to third parties			600.0	600.0
thereof 0.125% dual part bond	*ISIN CH1142754337 / CH1142754345*	*Maturity: 27/11/2026*	*150.0*	*150.0*
thereof 0.2% bond	*ISIN CH1132966347*	*Maturity: 28/09/2029*	*450.0*	*450.0*
Due to Group and associated entities [1]			664.0	698.4
Non-current interest-bearing liabilities			**1,264.0**	**1,298.4**

[1] Related to the issue of EUR 650.0 million Senior Bond by SIX Finance (Luxembourg) SA, see note 3.2.13.

3.2.11 Other non-current liabilities

CHF million	31/12/2022	31/12/2021
Due to Group and associated entities	–	8.2
Other non-current liabilities	**–**	**8.2**

3.2.12 Liabilities due to pension fund

CHF million	31/12/2022	31/12/2021
Liabilities due to pension fund	–	0.1

3.2.13 Contingent liabilities

CHF million	31/12/2022	31/12/2021
Total amount of guarantees and warranty obligations		
Group and associated obligors	750.7	864.1
Joint liability from consolidated value added tax filing status	p.m.	p.m.

The Tax Authorities of the Canton of Zurich have announced a re-assessment of possible tax effects from the disposal of the former cards business on SIX Group Ltd in the tax period 2018. The possible tax claim would amount to a maximum of CHF 6.0 million. Management believes that is has strong arguments to defend its current position and that the re-assessment will not lead to a payment. Accordingly, no provision has been made in the financial statements.

Apart from that, different legal opinions between the Company and third parties (contractual partners, authorities, etc.) may arise in the course of business, which could possibly lead to legal disputes. The Company assesses the corresponding risks and recognizes provisions if it considers the occurrence to be probable. No provisions are recognized for risks that the Company currently considers to be unlikely or highly unlikely to occur. However, it cannot be ruled out that risks will be assessed differently in the future as a result of new findings and that there will be cash outflows. This is particularly the case as the assessment of legal uncertainties involves a degree of discretion and legal developments may also lead to new assessments.

Group and associated obligors include:
- CHF 47.0 million (2021: CHF 47.0 million) guarantee in the event of insolvency of a cash pooling member
- CHF 2.1 million (2021: CHF 2.1 million) contingent liability related to credit facilities granted to Group entities
- nil (2021: CHF 103.0 million) guarantee related to an intraday facility
- CHF 13.6 million (2021: CHF 13.6 million) guarantee related to the VISA license for SIX BBS Ltd
- CHF 664.0 million (2021: CHF 698.4 million) guarantee related to the issue of EUR Senior Bond by SIX Finance (Luxembourg) SA
- CHF 24.0 million (2021: nil) guarantee related to Worldline Switzerland Ltd

3.2.14 Treasury shares including treasury shares held by Group entities

	31/12/2022		31/12/2021	
Values in CHF million	**Number**	**Value**	**Number**	**Value**
Held by SIX Group Ltd	10	0.0	10	0.0
Held by subsidiaries	607,854	23.3	607,854	23.3

There were no transactions with treasury shares in the reporting and in the previous year.

3.2.15 Valuation adjustments and losses

CHF million	2022	2021
Current assets	–0.0	–0.0
Current financial assets	–3.0	–31.5
Investments in subsidiaries and associated entities	–15.1	–
Valuation adjustments and losses	**–18.1**	**–31.5**

In the reporting year, loans were impaired in the amount of CHF 3.0 million (2021: CHF 31.5 million). Additionally, the valuation adjustments consist of an impairment of CHF 15.1 million of investments in associated entities (2021: nil).

3.2.16 Financial result

CHF million	2022	2021
Foreign exchange gains	76.6	79.8
Gain on disposal of financial assets	–	0.1
Other income	3.0	2.0
Financial income	**79.6**	**81.9**
Foreign exchange losses	–44.7	–46.5
Loss on disposal of financial assets	–	–0.1
Other expenses	–5.8	–8.1
Financial expenses	**–50.5**	**–54.7**

3.2.17 Hidden reserves released

There are no hidden reserves in 2022 and 2021.

3.2.18 Explanations of extraordinary positions in the income statement

Investments in subsidiaries are valued individually. As a result, a reversal of impairment of CHF 20.1 million was recognized in extraordinary income (2021: CHF 57.0 million). An impairment of an investment of CHF 23.2 million was recognized as extraordinary expense (2021: nil).

3.2.19 Significant events after the balance sheet date

None.

4. Statement of Changes in Equity

CHF million	Share capital	Legal capital reserves Reserves from capital contributions	Legal retained earnings Reserves for treasury shares	Free reserves Profit carried forward	Treasury shares	Total equity
Balance at 1 January 2021	**19.5**	**230.2**	**23.3**	**5,396.7**	**–0.0**	**5,669.8**
Dividends paid	–	–	–	–83.9	–	–83.9
Profit for the year	–	–	–	268.8	–	268.8
Balance at 31 December 2021	**19.5**	**230.2**	**23.3**	**5,581.6**	**–0.0**	**5,854.7**
Dividends paid	–	–	–	–92.7	–	–92.7
Profit for the year	–	–	–	274.6	–	274.6
Balance at 31 December 2022	**19.5**	**230.2**	**23.3**	**5,763.5**	**–0.0**	**6,036.6**

The share capital consists of 19,521,905 registered shares with a par value of CHF 1.00 each.

An ordinary dividend of CHF 4.75 per registered share was paid during the reporting period.

5. Appropriation of Profit

CHF million	2022	2021
Profit carried forward from previous year	**5,488.9**	**5,312.8**
Profit for the year	274.6	268.8
Available profit carried forward	**5,763.5**	**5,581.6**
Dividend of CHF 5.10 per registered share of CHF 1.00 nominal value (previous year: CHF 4.75)	99.6	92.7
Profit carried forward to the following year	**5,664.0**	**5,488.9**

The Board of Directors proposes to the General Meeting of Shareholders that the profit be appropriated in accordance with the table above.

Report of the Statutory Auditor

To the General Meeting of SIX Group Ltd, Zurich
Zurich, 2 March 2023

Report on the audit of the financial statements

Opinion

We have audited the financial statements of SIX Group Ltd (the Company), which comprise the balance sheet as at 31 December 2022, the income statement for the year then ended, notes to the financial statements, including a summary of significant accounting policies and the statement of changes in equity.

In our opinion, the financial statements (pages 137 to 144) comply with Swiss law and the Company's articles of incorporation.

Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report. We are independent of the Company in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the "Auditor's responsibilities for the audit of the financial statements" section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the financial statements.

Valuation of investments in subsidiaries

Risk

As at 31 December 2022, SIX Group Ltd holds investments in subsidiaries in the amount of CHF 5,113.3 million, corresponding to 67.4% of the total assets, which are accounted for at acquisition cost less accumulated impairment losses.

We focused on this area due to the significance on the balance sheet and because of the judgements and assumptions over the valuation of investments in subsidiaries. Where indicators of impairment are identified, management assesses the potential need of impairment of each subsidiary individually by comparing the carrying amount of the investment in subsidiary with the recoverable amount, which is calculated based on the value of capitalized earnings. This calculation involves several judgements including assumptions on future free cash flows, discount rates and long-term growth rates.

The applied accounting policy for this position is described in note 3.1.3 and further details related to investments in subsidiaries are disclosed in note 3.2.6 to the financial statements.

Our audit response

We have confirmed our understanding of the impairment assessment process and assessed the design effectiveness of key controls, concluding that a substantive audit approach should be adopted. To test the appropriateness of management's assessment, we evaluated the impairment indicators identified. In case indicators were present, we compared the carrying amount of the investment with the amount of capitalized earnings. In respect to the value of capitalized earnings, we have assessed the valuation model used. We verified, with the support of our valuation experts, the key assumptions used, including the discount rate and long-term growth rate.

In addition, we assessed the appropriateness of the relevant disclosures for this audit focus in the financial statements.

Our audit procedures did not lead to any reservations regarding the valuation of investments in subsidiaries.

Other information

The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements and our auditor's reports thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Board of Directors' responsibilities for the financial statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the Company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors 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 the Board of Directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's 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 Swiss law and SA-CH 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 financial statements.

A further description of our responsibilities for the audit of the financial statements is located on EXPERTsuisse's website at: https://www.expertsuisse.ch/en/audit-report. This description forms an integral part of our report.

Report on other legal and regulatory requirements

In accordance with Art. 728a para. 1 item 3 CO and PS-CH 890, we confirm that an internal control system exists, which has been designed for the preparation of the financial statements according to the instructions of the Board of Directors.

Furthermore, we confirm that the proposed appropriation of available earnings complies with Swiss law and the Company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

Ernst & Young Ltd

Bruno Patusi Licensed audit expert (Auditor in charge)	Slaven Cosic Licensed audit expert