CROATIAN NATIONAL BANK

FINANCIAL STATEMENTS

For the year ended 31 December 2019

This version of the financial statements and Auditors' report is a translation from the original, which was prepared in the Croatian language. All possible care has been taken to ensure that the translation is an accurate representation of the original. However, in all matters of interpretation of information, views or opinions, the original language version of the financial statements and Auditors' report takes precedence over translation.

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Independent Auditors' Report to the Council of the Croatian National Bank

Opinion

We have audited the financial statements of the Croatian National Bank, which comprise the statement of financial position as at 31 December 2019, the income statement and the statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information (further referred to as "the financial statements").

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Croatian National Bank as at 31 December 2019, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union ("EU IFRS").

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing. Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Croatian National Bank in accordance with the ethical requirements that are relevant to our audit of the financial statements in Croatia 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.

Other Matter

The financial statements of the Croatian National Bank as at and for the year ended 31 December 2018 were audited by another auditor who expressed an unmodified opinion on those financial statements on 15 March 2019.

Responsibilities of the Council of the Croatian National Bank for the Financial Statements

The Council of the Croatian National Bank is responsible for the preparation of the financial statements that give a true and fair view in accordance with EU IFRS, and for such internal control as the Council of the Croatian National Bank 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 Council of the Croatian National Bank is responsible for assessing the Croatian National Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting in accordance with the relevant legislation.

The Council of the Croatian National Bank is responsible for overseeing the Croatian National Bank's financial reporting process.



Independent Auditors' Report to the Council of the Croatian National Bank (continued)

Auditors' 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 auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing 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.

As part of an audit in accordance with International Standards on Auditing, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

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



Independent Auditors' Report to the Council of the Croatian National Bank (continued)

Auditors' Responsibilities for the Audit of the Financial Statements (continued)

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

KPMG Croatia d.o.o. za reviziju Croatian Certified Auditors Eurotower, 17th floor Ivana Lučića 2a 10000 Zagreb Croatia KPMG Baltics AS Vesetas iela 7 Riga, LV 1013 Latvia

For and on behalf of KPMG Croatia d.o.o.:

For and on behalf of KPMG Baltics AS:

IG Croatia

d.o.o. za reviziju Eurotower, 17. kat Ivana Lučića 2a, 10000 Zagreb

Goran Horvat

President of the Management Board,

Croatian Certified Auditor

Zagreb, 13 March 2020

Armine Movsisjana Managing Partner

Riga, 13 March 2020

INCOME S	TATEMI	ENT	
(All amounts are expressed in thousands of kuna)	Notes	2019	2018
Interest income calculated using the effective			
interest method	3	659,380	589,978
Other interest income	3	169,471	135,722
Interest expenses	4	(324,986)	(233,094)
Net interest income		503,865	492,606
Fee and commission income	5a	53,762	49,513
Fee and commission expenses	5b	(22,834)	(20,927)
Net fee and commission income	5	30,928	28,586
Dividend income		5,419	5,111
Net investment result – equity method		2,119	3,407
Net result from financial assets at fair value through profit or loss	6	(116,317)	(76,623)
Net result from debt securities at fair value through other comprehensive income	7	74,821	53,330
Net exchange differences	8	833,626	(602,950)
Other income	9	11,038	5,634
Operating profit/(loss)		1,345,499	(90,899)
Operating expenses	10	(395,251)	(373,964)
Impairment losses	11	(10,109)	(4,493)
Decrease/(increase) in provisions	12	(13,001)	983
Profit/(Loss)	35	927,138	(468,373)
- Allocated to general reserves		(809,729)	_
- Allocated to the State Budget		(117,409)	460 777
 Covered from general reserves 			468,373

STATEMENT OF COMPREHENSIVE INCOME

(All amounts are expressed in thousands of kuna)	Notes	2019	2018
Profit/(Loss)		927,138	(468,373)
Other comprehensive income/(loss)		952,541	(108,234)
Other comprehensive income items that will not be reclassified to profit or loss in subsequent periods		23,308	_
Change in revaluation reserves for fixed assets Other comprehensive income items that are or will be		23,308	_
reclassified to profit or loss in subsequent periods		929,233	(108,234)
Debt securities at fair value through other comprehensive income:		929,233	(108,234)
Gains/(losses) from remeasurement		1,003,403	(52,609)
(Gains)/losses from trading transferred to profit or loss		(74,821)	(53,330)
Net changes in loss allowances for expected credit losses		651	(2,295)
Total comprehensive income/(loss)	-	1,879,679	(576,607)

STATEMENT OF FINANCIAL POSITION

(All amounts are expressed in thousands of kuna)	Notes	31/12/2019	31/12/2018
Assets			
Cash and current accounts with other banks	13	7,351,114	9,524,804
Deposits with other banks	14	15,321,900	11,426,141
Financial assets at fair value through profit or loss	15	39,405,122	39,709,543
Loans	16	1,914,408	2,029,317
Reverse repo agreements	17	11,467,170	21,278,988
Debt securities at amortised cost	18	14,365,394	682,112
Balances with the International Monetary Fund Debt securities at fair value through other comprehensive	19	9,428,524	9,248,636
income	20	47,439,374	43,995,277
Equity securities at fair value through other comprehensive income – irrevocable election	21	50 165	60.219
	21	59,165	60,218 23,617
Investments accounted for using the equity method		25,736	
Other assets	23 24	5,007,400	2,577,237
Property, plant, equipment and intangible assets	24	620,824	579,046
TOTAL ASSETS		152,406,131	141,134,936
Liabilities			
Banknotes and coins in circulation	25	38,734,616	35,046,160
Due to banks and other financial institutions	26	74,624,796	69,807,221
Repo agreements	27	5,998,829	9,219,306
Due to the State and State institutions	28	6,712,594	2,898,000
Due to the International Monetary Fund	29	9,414,492	9,230,974
Other liabilities	30	687,097	461,838
Total liabilities		136,172,424	126,663,499
Equity			
Initial capital	31	2,500,000	2,500,000
Reserves	31	13,733,707	11,971,437
Total equity		16,233,707	14,471,437
TOTAL EQUITY AND LIABILITIES		152,406,131	141,134,936

The financial statements set out on pages 4 to 90 were approved on 13 March 2020:

Director of the Accounting Department:

Mario Varović

Governor:

Boris Vujčić 4 × Jagoba (vafer

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Croatian National Bank Financial Statements for the year ended 31 December 2019

STATEMENT OF CHANGES IN EQUITY

(All amounts are expressed in thousands of kuna)	Initial capital	General reserves	Fair value reserves for debt securities at fair value through other comprehensive income	Revaluation reserves on property	Total reserves	Profit or loss for the year	Total equity
As at 1 January 2018	2,500,000	11,284,037	930,127	333,880	12,548,044	l	15,048,044
Profit/(Loss)			1	•	1	(468,373)	(468,373)
Other comprehensive income/(loss)	ı	ì	(108,234)	1	(108,234)	ı	(108,234)
Total comprehensive income/(loss)			(108,234)	I	(108,234)	(468,373)	(576,607)
Depreciation of revalued property	ı	5,233	ı	(5,233)	1	1	1
Loss covered from general reserves (Note 35)	1	(468,373)	I	I	(468,373)	468,373	ı
As at 31 December 2018	2,500,000	10,820,897	821,893	328,647	11,971,437	I	14,471,437
As at 1 January 2019	2,500,000	10,820,897	821,893	328,647	11,971,437	ŀ	14,471,437
Profit/(Loss)	ļ	I	I	-	1	927,138	927,138
Other comprehensive income/(loss)	ſ		929,233	23,308	952,541	1	952,541
Total comprehensive income/(loss)	I	1	929,233	23,308	952,541	927,138	1,879,679
Depreciation of revalued property	1	5,234	I	(5,234)	ı	l	I
Profit allocated to general reserves (Note 35)	I	809,729	1	1	809,729	(809,729)	I
Profit allocated to the State Budget (Note 35)	ı	1	1	1	1	(117,409)	(117,409)
As at 31 December 2019	2,500,000	11,635,860	1,751,126	346,721	13,733,707		16,233,707

The notes on pages 9 to 90 form an integral part of these financial statements.

STATEMENT OF CASH FLOWS

(All amounts are expressed in thousands of kuna)	2019	2018
Cash flows from operating activities		
Interest received	959,561	924,676
Interest paid	(307,182)	(251,999)
Fees and commissions received	53,029	49,010
Fees and commissions paid	(12,710)	(11,321)
Dividends received and proceeds from share in profit	5,419	6,933
Other receipts	91,879	66,796
Payment of material, administrative and other expenses, services		
and staff costs	(324,575)	(324,156)
Inflows/(outflows) in deposits and reverse repo agreements		
with other banks	6,220,402	(12,703,865)
Inflows/(outflows) in loans	134,507	(750,091)
Sale/(purchase) of held-for-trading securities	502,715	(12,131,436)
Inflows/(outflows) in assets under management with		
international financial institutions	39,453	24,523
Sale/(purchase) of securities held at amortised cost	(13,677,771)	(683,331)
Sale/(purchase) of securities held at fair		
value through other comprehensive income	(2,284,580)	4,073,147
Inflows/(outflows) in other assets	(266,294)	(110,788)
Outflows in amounts due to the International Monetary Fund	(50)	(51)
Issuance/(withdrawal) of currency in circulation	3,688,456	3,354,736
Inflows/(outflows) in repo agreements and other		
amounts due to banks and other financial institutions	(942,434)	8,760,785
Inflows/(outflows) in amounts due to the State and State		
institutions	3,710,334	(42,311)
Inflows/(outflows) in other liabilities	249.382	(263.244)
Net cash from operating activities	(2.160.459)	(10.011.987)
Cash flows from investing activities		
Purchase of property, equipment and intangible assets	(30,061)	(30,056)
Repayment of part of paid-up capital to the ECB	1,053	
Net cash from investing activities	(29,008)	(30,056)
Cash flows from financing activities		
Inflows/(outflows) in lease liabilities	(992)	_
Net cash from financing activities	(992)	
The cubit from manning unit the	(332)	
Effect of changes in exchange rates – positive/(negative)		
exchange differences on cash and cash equivalents	67,280	(174,602)
Net increase/(decrease) in cash and cash equivalents	(2,123,179)	(10,216,645)
Cash and cash equivalents at beginning of year	12,278,317	22,494,962
Cash and cash equivalents at end of year (Note 34)	10,155,138	12,278,317

NOTE 1 – GENERAL INFORMATION AND ACCOUNTING STANDARDS

1.1 General information

The Croatian National Bank is the central bank of the Republic of Croatia with headquarters in Zagreb, Trg hrvatskih velikana 3. Its status has been defined by the Act on the Croatian National Bank. The Croatian National Bank is owned by the Republic of Croatia, which guarantees for all its obligations. The Croatian National Bank is autonomous and independent in fulfilling its objective and carrying out its tasks. The primary objective of the Croatian National Bank is maintaining price stability.

The Croatian National Bank reports to the Croatian Parliament on the financial condition, the degree of price stability and the fulfilment of monetary policy goals, and is represented by the Governor of the Croatian National Bank.

The tasks performed by the Croatian National Bank as provided by the Constitution and the Act include:

- Determining and implementing monetary and foreign exchange policies;
- Maintaining and managing international reserves of the Republic of Croatia;
- Issuing of banknotes and coins;
- Issuing and withdrawing authorisations and approvals in accordance with laws regulating credit institutions, credit unions, payment institutions, electronic money institutions and payment systems, foreign exchange operations and operations of authorised foreign exchange offices;
- Performing supervision and oversight in accordance with laws regulating the operations of credit institutions, credit unions, payment institutions and electronic money institutions and payment systems;
- Maintaining accounts of credit institutions and performing payment transactions on those accounts,
 issuing loans to, and receiving deposit funds from credit institutions;
- Regulating and improving the payment system;
- Performing tasks on behalf of the Republic of Croatia as defined by law;
- Promulgating regulations from its area of competence;
- Contributing to overall stability of the financial system; and
- Performing other tasks specified by law.

The bodies of the Croatian National Bank are the Council of the Croatian National Bank and the Governor of the Croatian National Bank.

The Council of the Croatian National Bank comprises eight members: Governor, Deputy Governor and six Vicegovernors of the Croatian National Bank.

The Council of the Croatian National Bank is competent and responsible for the achievement of the objective and for the carrying out of the tasks of the Croatian National Bank and defines policies with respect to the activities of the Croatian National Bank.

Members of the Council of the Croatian National Bank:

- Prof. D. Sc. Boris Vujčić, Governor
- D. Sc. Sandra Švaljek, Deputy Governor
- D. Sc. Michael Faulend, Vicegovernor (until 5 July 2019 and from 12 July 2019)
- Bojan Fras, Vicegovernor (until 5 July 2019 and from 12 July 2019)
- Neven Barbaroša, Vicegovernor (until 25 October 2019)
- M. Sc. Slavko Tešija, Vicegovernor
- D. Sc. Roman Šubić, Vicegovernor
- M. Sc. Martina Drvar, Vicegovernor.

1.2 Accounting standards

The separate financial statements of the Croatian National Bank have been prepared in accordance with the International Financial Reporting Standards, which comprise the International Accounting Standards (IAS), together with the related Amendments and Interpretations, and the International Financial Reporting Standards (IFRS), together with the related Amendments and Interpretations, as adopted by the European Commission, and published in the Official Journal of the European Union. The preparation of the financial statements of the Croatian National Bank in accordance with the International Financial Reporting Standards as adopted in the European Union is regulated by the Act on the Croatian National Bank and the Accounting Act.

1.2.1 Application of new and revised standards and changes in accounting policies

In 2017, 2018 and 2019, a new standard, amendments to the existing standard and interpretation of the International Financial Reporting Interpretations Committee as well as amendments to the existing standards with mandatory application in the EU for the annual periods commencing from 1 January 2019 were published, as presented in the following table.

Official Journal of the EU	Standard
OJ L 291, 9.11.2017	IFRS 16 – Leases (new)
OJ L 82, 26.3.2018	IFRS 9 – Financial Instruments (amendments)
OJ L 265, 24.10.2018	IFRIC 23 – Uncertainty over Income Tax Treatments
OJ L 39, 11.2.2019	IAS 28 – Investments in Associates and Joint Ventures (amendments)
OJ L 72, 14.3.2019	IAS 19 – Employee Benefits (amendments)
	Annual Improvements to IFRS Standards, 2015 – 2017 Cycle:
	IAS 12 – Income Taxes (amendments)
OJ L 73, 15.3.2019	IAS 23 – Borrowing Costs (amendments)
	IFRS 3 – Business Combinations (amendments)
	IFRS 11 – Joint Arrangements (amendments)

These standards and interpretation were applied in the compilation of the financial statements for 2019 and did not have a significant impact on the financial statements of the Croatian National Bank.

The accounting policies of the Croatian National Bank applicable to reporting periods beginning on 1 January 2019 are different from accounting policies applied in the preparation of the last financial statements of the Croatian National Bank with regard to the method of recognising leases as the former IAS 17 – Leases was superseded by the new standard IFRS 16 – Leases. Under IAS 17, there were two types of leases (finance and operating) and the lease was classified as operating lease if it did not transfer substantially all the risks and rewards incidental to ownership. The Croatian National Bank classified all its leases as operating leases under IAS 17 and lease payments under an operating lease were recognised as an expense on a straight-line basis over the lease term. Under IAS 17, operating leases were not included in the statement of financial position. In contrast, IFRS 16 introduces one model of lease accounting for lessees according to which lease assets and liabilities are recognised in the lessee's financial statements.

At inception of a contract, the Croatian National Bank assesses whether the contract is, or contains, a lease. Under IFRS 16, 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. The Croatian National Bank does not separate non-lease components from lease components, and instead accounts for each lease component and any associated non-lease components as a single lease component.

In accordance with IFRS 16, the Croatian National Bank recognises a right-of-use asset and a lease liability at the commencement date. The right-of-use asset is initially measured at costs, and after the commencement date, the right-of-use asset is measured applying a cost model. The Croatian National Bank does not recognise the right-of-use asset of short-term leases and leases for which the underlying asset is of low value.

The Croatian National Bank has applied IFRS 16 to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 Determining whether an Arrangement contains a Lease. The Croatian National Bank has applied IFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognised as an adjustment to the opening balance of retained earnings at the date of initial application. Accordingly, the comparative information has not been restated. The Croatian National Bank has recognised the right-of-use asset at the date of initial application for leases previously classified as an operating lease applying IAS 17. The right-of-use asset is measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the statement of financial position immediately before the date of initial application.

The effect of the implementation of IFRS 16 is presented in the following table.

(All amounts are expressed in thousands of kuna)

Item	Book value as at 1 January	Book value as at 31
nem	2019	December 2019
Right-of-use asset	256	7,761
Lease liability	256	6,834

As the right-of-use asset was recognised in the amount equal to the lease liability, the implementation of IFRS 16 had no effect on the opening balance of the general reserves of the Croatian National Bank as at 1 January 2019.

1.2.2 Standards and interpretations endorsed in the EU which were not applied in the preparation of the financial statements for 2019

In 2019, amendments to the existing standards with mandatory application in the EU for annual periods commencing from 1 January 2020 were published, as presented in the following table.

Official Journal of the EU	Standard
OJ L 316, 6.12.2019	Amendments to References to the Conceptual Framework in IFRS Standards (several standards and interpretations)
OJ L 318, 10.12.2019	Definition of the term "material": IAS 1 – Presentation of Financial Statements (amendments) IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors (amendments)

The application of these amendments to IFRS standards will not have a significant impact on the financial statements of the Croatian National Bank.

The Croatian National Bank did not early adopt new standards, amendments to standards and their interpretations, adopted by the EU, whose adoption in 2019 is optional (non-binding), given that the commencement of the financial year is set as 1 January.

1.2.3 Standards and interpretations which are not endorsed in the EU

The International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC) issued additional standards and interpretations, which have not yet been endorsed in the European Union. It is estimated that their application will not have a significant impact on the preparation of the financial statements of the Croatian National Bank.

1.3 Basis of preparation

The financial statements have been prepared under the accrual basis of accounting and using the historical cost convention, except for financial assets at fair value through profit or loss, debt securities in financial assets at fair value through other comprehensive income and buildings and land measured at revalued amount, which is their fair value at the revaluation date less subsequent accumulated depreciation of buildings and subsequent accumulated impairment losses.

The functional and presentation currency of the Croatian National Bank is the kuna. The financial statements are expressed in thousands of kunas.

These financial statements are prepared using going concern assumption.

1.4 Use of judgements and estimates

In preparing the financial statements for 2019, the management has made judgements, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities, income and expense. The estimates are based on the management's best estimate of current events and operations, and actual results may differ from these estimates.

The costs of printing banknotes are initially deferred and recognised in the Income Statement over a period of ten years, and the cost of minting coins over a period of twelve years. Deferrals are based on the assessment of the useful life of banknotes and coins which includes the storage of banknotes and coins in the vault (the logistic cash reserves for regular supply of cash centres and the strategic cash reserves, as well as the storage of banknotes and coins unfit for circulation until they are destroyed) and the average time of their circulation.

The significant judgements made by the management in applying the accounting policies and the key sources of estimation uncertainty were the same as those used in the preparation of the annual financial statements for 2018.

1.4.1 Fair value and fair value hierarchy

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price).

Valuation techniques that are used in determining the fair values are the market approach, cost approach and income approach. The market approach uses prices and other relevant information from market transactions with identical or similar assets or liabilities. The cost approach is a valuation technique that reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost). The income approach converts future amounts (e.g. cash flows or income and expenses) to a single current (i.e. discounted) amount.

The fair value hierarchy consists of three levels of data included in the valuation techniques which are used to measure fair value:

- Level 1 inputs are quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs other than quoted prices observable for the asset or liability, either directly or indirectly;
- Level 3 inputs are unobservable inputs for the asset or liability (not available and verifiable market data).

In the process of fair value measurements, suitable valuation techniques for which the necessary data are available are used, with maximum use of observable inputs and minimal use of inputs that are not observable in an active market.

The Croatian National Bank recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

More detailed disclosures on fair value measurements of financial assets and liabilities are presented in Note 36.

1.4.2 Losses on impairment of financial assets

Financial assets are reviewed at each reporting date to determine whether there is objective evidence of impairment as described in the accounting policy Impairment of financial assets.

1.4.3 Estimation uncertainty relating to litigations and claims

The Croatian National Bank provided HRK 36,545 thousands (2018: HRK 24,822 thousands) in respect of liabilities for court cases. The management estimates these provisions as sufficient. Detailed disclosures regarding provisions for court cases are stated in Note 30.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

2.1 Interest income and expense

Interest income includes coupons earned on fixed income financial instruments. Interest income is increased for amortised discount and reduced for amortised premium on purchased securities.

Interest income on financial instruments at amortised cost and financial assets at fair value through other comprehensive income are recognised in the Income Statement using the effective interest method.

When calculating interest income, the effective interest rate is applied to gross carrying amount of financial assets, except in:

- a purchased or originated credit-impaired financial asset (for such financial assets the effective interest rate adjusted by credit risk is applied to amortised cost of the financial assets from initial recognition); and
- a financial asset that is not a purchased or originated credit-impaired financial asset, but which has subsequently become a credit-impaired financial asset (for such financial assets the effective interest rate is applied to amortised cost).

Interest income on debt securities at fair value through profit or loss is recognised based on the nominal coupon interest rate and presented in line item Other interest income in the Income Statement.

Accrued interest on financial assets with negative interest rate is recognised as interest expense.

Accrued interest on financial liabilities with negative interest rate is recognised as interest income.

2.2 Fee and commission income and expense

Fee and commission income from services provided by the Croatian National Bank is recognised when the

service is provided.

Fee and commission expense is included in the Income Statement for the period in which services are received.

2.3 Dividend income

Dividend income on equity investments is recognised in the Income Statement when the right to receive

dividends is established.

2.4 Foreign exchange gains and losses

Transactions in foreign currencies are translated into Croatian kuna at the rates of exchange in effect at the

dates of the transactions. At each reporting date, items denominated in foreign currencies are retranslated at

the exchange rates in effect on that date. Gains and losses on translation of monetary items are recognised in

profit or loss in the period in which they arise. Translation is performed using the midpoint exchange rates of

the Croatian National Bank.

Gains and losses arising from trading in foreign currencies are included in realised income and expenses in the

period in which they occur. All other foreign exchange differences are reported as unrealised gains or losses in

the period in which they occur.

Non-monetary assets and liabilities denominated in foreign currencies stated at historical cost at the exchange

rate valid on the date of transaction are not retranslated at the date of the Statement of Financial Position, i.e.

the exchange differences are not recognised for these items.

The exchange rates of major foreign currencies at 31 December 2019 were as follows:

USD 1 = HRK 6.649911 (2018: HRK 6.469192)

EUR 1 = HRK 7.442580 (2018: HRK 7.417575)

XDR 1 = HRK 9.227696 (2018: HRK 9.047556).

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2.5 Provisions

Provisions are recognised in the Income Statement at the end of the reporting period.

The Croatian National Bank recognises a provision when it has a present legal or constructive obligation as a result of a past event; when it is probable that an outflow of resources will be required to settle the obligation; and when a reliable estimate can be made of the obligation. No provision is recognised unless all of these conditions have been met.

2.6 Financial instruments

At recognition, valuation and classification of financial assets, the Croatian National Bank applies the provisions of IFRS 9 – Financial Instruments.

2.6.1 Recognition and derecognition of financial assets

The Croatian National Bank recognises a financial asset in its Statement of Financial Position only when it becomes party to the contractual provisions of the instrument.

A regular way purchase or sale of financial assets is recognised and derecognised using settlement date accounting. The settlement date is the date that an asset is delivered to or by the CNB.

Deposits and loans are initially recognised on the commitment date.

The Croatian National Bank derecognises a financial asset only when:

- the contractual rights to the cash flows from the financial asset expire;
- it transfers the financial asset in a way that it transfers the contractual rights to receive the cash flows of the financial asset or retains the contractual rights to receive the cash flows of the financial asset, but assumes a contractual obligation to pay the cash flows to one or more recipients;
- it transfers substantially all the risks and rewards of ownership of the financial asset; and
- it neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, and it has not retained control of the financial asset.

2.6.2 Initial and subsequent measurement of financial assets

Financial assets at fair value through profit and loss are initially measured at fair value without transaction

costs, whereas for financial assets not designated at fair value through profit and loss fair value is increased by transaction costs.

Following the initial measurement, the Croatian National Bank measures financial assets:

- at amortised cost;
- at fair value through other comprehensive income; or
- at fair value through profit or loss.

The cost of the sold securities is determined using the weighted average cost method.

Measurement at amortised cost

The amortised cost of financial assets is the amount according to which financial assets are measured at initial recognition, minus principal repayments, plus or minus cumulative amortisation, using the effective interest method of any differences between the initial amount and the maturity amount and adjusted for any loss allowance.

The effective interest method is the method of calculating amortised cost of financial assets and allocating and recognising interest income through profit and loss during a certain period.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial assets instrument against the gross carrying amount of financial assets.

The gross carrying amount of financial assets is the amortised cost of financial assets prior to loss allowance provisions.

2.6.3 Classification of financial assets

The Croatian National Bank classifies financial assets as assets subsequently measured at amortised cost, at fair value through other comprehensive income or through profit or loss based on:

- the business model of financial asset management; and
- the characteristics of financial assets with contractual cash flows.

The business model reflects the manner in which the Croatian National Bank manages its financial assets to generate cash flows. The Croatian National Bank applies the following business models:

• the business model to hold the financial assets in order to collect contractual cash flows;

- the business model whose objective is achieved by both collecting contractual cash flows and selling financial assets;
- other business models.

The Croatian National Bank manages the financial assets, held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, to realise cash flows by collecting contractual payments over the life of the instrument. In determining whether cash flows are going to be realised by collecting the financial assets' contractual cash flows, it is necessary to consider the frequency, value and timing of sales in prior periods, the reasons for those sales and expectations about future sales activity. In particular, such sales may be consistent with a business model whose objective is to hold financial assets in order to collect contractual cash flows if those sales are infrequent or insignificant in value both individually and in aggregate.

The Croatian National Bank holds financial assets in a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Compared to a business model whose objective is to hold financial assets to collect contractual cash flows, this business model will typically involve greater frequency and value of sales. This is because selling financial assets is integral to achieving the business model's objective instead of being only incidental to it.

The Croatian National Bank manages the financial assets held within other business models whose objective is to realise cash flows through the sale of the assets. The decision is made based on the assets' fair values. Even though the Croatian National Bank will collect contractual cash flows while it holds the financial assets, the objective of such a business model is not achieved by both collecting contractual cash flows and selling financial assets.

For financial assets that are held within a business model whose objective is to hold assets in order to collect contractual cash flows or within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, it is necessary to determine whether the contractual cash flows of the assets are solely payments of principal and interest on the principal amount outstanding. Only those financial assets that meet the "solely payments of principal and interest" condition can be classified into the category of financial assets measured at amortised cost or into the category of financial assets at fair value through other comprehensive income.

It is estimated that the contractual cash flows of the financial assets are solely payments of principal and interest and that they comply with the conditions of the so-called SPPI test (Solely Payments of Principal and Interest) if the financial assets have the following characteristics:

- if they contain a fixed coupon;
- if the principal value is paid at the bond maturity date;
- if they have no linked options, such as conversion, call or put option.

The Croatian National Bank is obliged, only if it changes its business model of financial asset management, to reclassify all financial assets affected by the change of the business model.

2.6.3.1 Financial assets at amortised cost

A financial asset is measured at amortised cost if both of the following conditions are met:

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

For financial assets classified into the category of financial assets measured at amortised cost, interest income calculated using the effective interest method, foreign currency gains or losses and expected credit losses are recognised directly in profit or loss. In the event of derecognition of financial assets, gains or losses are recognised in profit or loss.

The category of financial assets measured at amortised cost comprises debt securities, cash, deposits with banks and financial institutions, reverse repo agreements, loans, trade and other receivables complying with the definition of financial instruments.

2.6.3.2 Financial assets at fair value through other comprehensive income

A financial asset is measured at fair value through other comprehensive income if both of the following conditions are met:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A gain or loss on debt securities measured at fair value through other comprehensive income are recognised in other comprehensive income, except for loss allowance gains or losses and foreign exchange gains and losses,

until the financial asset is derecognised or reclassified.

All foreign exchange gains and losses on monetary assets are recognised in profit or loss.

If debt securities are derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment.

Interest calculated using the effective interest method is recognised in profit or loss.

For debt securities measured at fair value through other comprehensive income, the amounts that are recognised in profit or loss are the same as the amounts that would have been recognised in profit or loss if the asset had been measured at amortised cost.

Debt securities held within the business model aimed at collecting contractual cash flows and sales, while cash flows represent solely principal and interest payments, are classified as financial assets at fair value through other comprehensive income.

2.6.3.3 Financial assets at fair value through profit or loss

Financial assets are measured at fair value through profit or loss if they are not measured at amortised cost or at fair value through other comprehensive income.

The Croatian National Bank may, at initial recognition, designate a financial asset as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency ("accounting mismatch") that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases.

Gains or losses on financial assets at fair value through profit or loss are recognised in profit or loss.

2.6.3.4 Investment in equity instruments

The Croatian National Bank subsequently measures investments in equity instruments at fair value through other comprehensive income.

A change in the fair value of investment in equity instruments is recognised in other comprehensive income.

The amounts recognised in other comprehensive income are not subsequently transferred to profit and loss. Cumulative gain or loss may be transferred within equity.

Such an investment is not a monetary item. Accordingly, the gain or loss that is presented in other comprehensive income includes any related foreign exchange component.

Dividends on investment in equity instruments are recognised in profit or loss.

Investments in equity securities are designated as financial assets at fair value through other comprehensive income and include investments in BIS shares, SWIFT shares and ECB paid-up capital. These investments are measured at cost because they do not have quoted market prices on an active market and their fair value cannot be reliably measured.

The Croatian National Bank is obliged, only if it changes its business model of financial asset management, to reclassify all financial assets affected by the change of the business model.

2.6.4 Impairment of financial assets

The Croatian National Bank recognises loss allowances for expected credit losses on a financial asset measured at amortised cost and at fair value through other comprehensive income, a lease receivable and a contract asset.

Loss allowances for financial assets measured at fair value through other comprehensive income are recognised through other comprehensive income and are not reduced from book value of financial assets in the statement of financial position.

If the credit risk of a financial instrument has not increased significantly since initial recognition until the reporting date, the loss allowance is measured at an amount equal to expected credit losses in a twelve month period.

If the credit risk of a financial instrument has increased significantly since initial recognition, the loss allowance is measured at an amount equal to lifetime expected credit losses of the instrument.

The Croatian National Bank recognises impairment gain or loss in profit or loss in the amount of expected credit losses or reversals.

At each reporting date it is determined whether the credit risk of a financial instrument has increased significantly since initial recognition.

It is assumed that the credit risk of a financial instrument has not had a significant increase since initial recognition if the credit risk of a financial instrument is determined as low at the reporting date.

The credit quality of a financial instrument at initial recognition and a change in the credit quality of a financial instrument since initial recognition are monitored through three stages of credit quality.

Stage 1 includes financial instruments with a low credit risk at initial recognition or with no significant increase in credit risk after initial recognition. For this stage loss allowances are calculated at an amount equal to the amount of expected credit losses in a twelve month period, with interest calculated on the gross carrying amount of the financial asset.

Stage 2 includes financial instruments with a significant increase in credit risk since initial recognition. For financial instruments in this stage loss allowances are calculated at an amount equal to lifetime expected credit losses of the instrument, with interest calculated on the gross carrying amount of the financial asset.

Stage 3 includes financial instruments with a significant increase in credit risk since initial recognition and the financial asset is considered credit impaired. For financial instruments in this stage expected credit losses are calculated for a lifetime of the instrument, with interest calculated based on the amortised cost of the financial asset.

It is assumed that a significant increase in the credit risk of a financial instrument has occurred if the longterm credit rating of a financial instrument, which at initial recognition was within the investment grade, fell below investment grade.

The basic criteria for the transfer of a financial instrument from stage 1 to stage 2 include:

- a downgrade of the long-term credit rating of the financial instrument below the Fitch rating agency's
 investment grade, and if there is no rating, then the ratings of Moody's and Standard&Poor's are used
 as a secondary source; and
- contractual payments are more than 30 days past due.

The basic criteria for the classification of a financial instrument into stage 3 include:

- a downgrade of the long-term credit rating of the financial instrument below the Fitch rating agency's investment grade, and if there is no rating, then the ratings of Moody's and Standard&Poor's are used as a secondary source; and
- contractual payments are more than 90 days past due.

The value of a financial asset is credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired include important data about the following events:

- significant financial difficulty of the issuer or the borrower;
- a breach of contract, such as a default or past due event;
- the granting of a concession(s) by the lender(s) to the borrower for economic or contractual reasons related to the borrower's financial difficulties, which the lender would not otherwise consider;
- probability that the borrower will enter bankruptcy or other financial reorganisation;
- the disappearance of an active market for that financial asset because of financial difficulties; and
- the purchase or origination of a financial asset at a deep discount that reflects the incurred credit loss.

In addition to the basic criteria for determining the stage of credit quality when determining whether a significant increase in credit risk has occurred after initial recognition also taken into account is reasonable and supportable information that is available without undue costs or effort, which may influence the credit risk of a financial instrument.

The Croatian National Bank measures expected credit losses on a financial instrument in the manner that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and
- reasonable and supportable information that is available on the reporting date without undue costs or effort about past events, current conditions and forecasts of future economic conditions.

If the credit risk of a financial instrument, for which loss allowances were calculated at an amount equal to lifetime expected credit losses of the instrument in the previous reporting period, decreases to the extent that the financial instrument is transferred to stage 1, loss allowances are calculated at an amount equal to the amount of expected credit losses in a twelve month period.

Expected credit losses represent an assessment of credit losses based on probability (current value of all cash shortfalls) through the expected lifetime of the financial instrument. The cash shortfall is the difference between all contractual cash flows that are due to the Croatian National bank and cash flows expected by the Croatian National Bank. The model for the calculation of expected credit losses is described in Note 37.1.3.

Write-off

The gross carrying amount of a financial asset is directly reduced when there are no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. A write-off constitutes a derecognition event.

2.6.5 Financial liabilities

The Croatian National Bank recognises a financial liability in its Statement of Financial Position only when it becomes party to the contractual provisions of the instrument. A financial liability is initially recognised on the commitment date.

A financial liability is removed from the Statement of Financial Position when, and only when, it is extinguished – i.e. when the obligation specified in the contract is discharged or cancelled or expires.

At initial recognition, a financial liability is measured at fair value minus, in the case of a financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the issue of the financial liability.

The Croatian National Bank classifies its liabilities as liabilities subsequently measured at amortised cost, with the exception of banknotes and coins in circulation which are measured at their nominal value. Financial liabilities are not reclassified.

2.7 Repo and reverse repo agreements

The Croatian National Bank enters into securities purchase/sale agreements under which it agrees to resell/repurchase the same instrument on a specific future date at a fixed price. Securities purchased with the obligation to resell them in the future are not recognised in the Statement of Financial Position.

Payments arising from those agreements are recognised as amounts due from banks or other financial institutions, and are collateralised by securities underlying the repurchase agreement. Securities sold under

repurchase agreements are not derecognised and continue to be recognised in the Statement of Financial Position. Receipts from sales of securities are recognised as amounts due to banks and other financial institutions. The difference between the sale and the repurchase price is included in interest income or expense and accrued over the period of the transaction.

2.8 Deposits with other banks

Amounts due from domestic and foreign banks represent balances on non-transactional accounts.

2.9 International Monetary Fund

Balances with the International Monetary Fund consist of membership quota, current account and deposit with the International Monetary Fund and the due to the International Monetary Fund consists of bills of exchange, International Monetary Fund accounts number 1 and 2 and net cumulative allocations.

The current account and deposit as well as the net cumulative allocations with the International Monetary Fund are denominated in Special Drawing Rights (XDR). Other accounts with the International Monetary Fund are denominated in kunas.

2.10 Investments accounted for using the equity method

The Croatian National Bank has significant influence in the Croatian Monetary Institute and under IAS 28 the Croatian Monetary Institute represents an associate. The Croatian National Bank accounts for its investment in an associate using the equity method.

The equity method is a method of accounting whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the investor's share of the investee's net assets. The investor's profit or loss includes its share of the investee's profit or loss and the investor's other comprehensive income includes its share of the investee's other comprehensive income.

2.11 Precious metals

Precious metals that are quoted on the world markets are recognised at their market price. Gains and losses on changes in fair value are included in the Income Statement for the period in which they arise.

2.12 Currency in circulation

The official currency in the Republic of Croatia is the Croatian kuna. Banknotes and coins in circulation are carried at nominal value.

2.13 Cash and cash equivalents

For the purpose of the Statement of Cash Flows, cash and cash equivalents is defined as cash on hand, foreign currency cash in the CNB treasury vault, current accounts with foreign banks, balances with the International Monetary Fund, funds in the CNB's account at the Croatian Large Value Payment System (CLVPS) and in the account of the CNB in the TARGET2 system.

2.14 Taxation

In accordance with relevant legislation the Croatian National Bank is not subject to Croatian income tax.

2.15 Property, plant, equipment and intangible assets

Property, plant, equipment and intangible assets are reported in the Statement of Financial Position at cost less accumulated depreciation and impairment losses, except for land and buildings which are carried at revalued amount, representing their fair value at the revaluation date, decreased by accumulated depreciation for buildings, and any impairment losses. Depreciation is provided under the straight-line method.

Gains on revaluation are included as a separate component of other comprehensive income. Losses on revaluation are charged to the revaluation reserve account to the extent of the revaluation surplus previously recognised in equity, and any loss in excess of the previously recognised surplus is charged to the Income Statement for the reporting period.

The revaluation surplus included in equity in respect of an item of property, plant and equipment may be transferred directly to general reserves when the asset is derecognised. This may involve transferring the whole of the surplus when the asset is retired or disposed of. However, the revaluation surplus is transferred as the asset is used. In such a case, the amount of the surplus transferred would be the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost. Transfers from revaluation surplus to general reserves are not made through profit or loss.

The following annual depreciation and amortization rates are used:

Asset class	Expected useful life in	Expected useful life in
	2019	2018
	(number of years)	(number of years)
Property	20 – 50	20 – 50
Computers and computing infrastructure	5 – 8	5 – 8
Furniture and equipment	4 – 20	4 – 20
Motor vehicles	4	4
Software and licences	2 – 10	2 – 10

2.16 Impairment of non-financial assets

The carrying value of non-financial assets is assessed at the end of each reporting period to determine whether there is any indication that the asset may be impaired. If any such indication exists, the recoverable amount of that asset is estimated. For assets with indefinite useful life and intangible assets not yet available for use, recoverable amount is estimated on every reporting date.

An impairment loss is recognised if the carrying amount of an asset or cash-generating unit is greater than its recoverable amount. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The cash-generating unit for the Croatian National Bank is the Croatian National Bank as a whole.

Impairment loss is recognised in profit or loss.

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs of disposal and its value in use. Value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit.

Value in use is estimated by discounting expected future cash flows with the discount rate that reflects current market assessments of time value of money and the risks specific to these assets.

An impairment loss recognised in prior periods is assessed at the end of each reporting period to determine if there is any indication that impairment may have decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of an asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior years.

2.17 Staff costs

The Croatian National Bank pays contributions to the obligatory pension funds. The Croatian National Bank has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefits in the Income Statement as they are incurred.

Liabilities for long-term employee benefits, such as jubilee rewards and statutory severance pay, are presented in the balance sheet as the net amount of present value of liabilities for defined benefits on a reporting date. The projected credit unit method is used in the calculation of present value of these liabilities.

2.18 Allocation of the surplus of income over expenditures and coverage of the shortfall between income and expenditures

The surplus of income over expenditures is allocated to general reserves and to the State Budget in accordance with Article 57 of the Act on the Croatian National Bank. The Council of the Croatian National Bank determines the amount of the surplus of income over expenditures to be allocated to general reserves. General reserves for the current financial year may neither be lower than net profit from the value adjustment of balance sheet items to changes in the exchange rate or market prices, nor higher than 20% of the accumulated surplus of income over expenditures. By way of exception, if the surplus of income over expenditures is lower than net profit from the value adjustment of balance sheet items to changes in the exchange rate or market prices, the total surplus of income over expenditures shall be allocated to general reserves. The surplus of income over expenditures remaining after the allocation to general reserves constitutes extraordinary revenue to the State Budget. The Croatian National Bank covers any shortfall between income and expenditures from general reserves. Any shortfall between income and expenditures that cannot be covered from general reserves is covered from the State Budget.

NOTE 3 – INTEREST INCOME		
(All amounts are expressed in thousands of kuna)	2019	2018
Foreign currency deposits	62,608	6,438
Securities at amortised cost	3,945	2,431
Debt securities at fair value		
through other comprehensive income	412,740	432,487
Loans to domestic banks	24,874	16,028
Foreign currency reverse repo agreements	101,322	75,659
Foreign currency repo agreements (negative interest)	53,122	54,382
Other	769	2,553
Total interest income calculated using the effective interest		
method	659,380	589,978
Held-for-trading securities	169,471	135,722
Total other interest income	169,471	135,722
Total interest income	828,851	725,700
NOTE 4 – INTEREST EXPENSES (All amounts are expressed in thousands of kuna)	2019	2018
(in uniounis are expressed in mousultus of land)	2013	2010
Foreign currency deposits (negative interest)	56,687	44,754
Foreign currency repo agreements	89,310	65,079
Foreign currency reverse repo agreements (negative interest)	119,135	121,741
Ministry of Finance deposits	59,776	1,520
Leases	78	
	324,986	233,094
NOTE 5 – NET FEE AND COMMISSION INCOME		
(All amounts are expressed in thousands of kuna)	2019	2018
Fee and commission income	53,762	49,513
Fee and commission expenses	(22,834)	(20,927)
	30,928	28,586

a) Fee and commission income

(All amounts are expressed in thousands of kuna)	2019	2018
Fees for the supervision of credit institutions Other	46,511 7,251	42,351 7,162
	53,762	49,513

The Croatian National Bank charges the fee for the supervision of credit institutions based on the Credit Institutions Act. Entities subject to supervision fees are credit institutions with head offices in the Republic of Croatia and branches of credit institutions with head offices outside the Republic of Croatia. The level, calculation method and payment method for the supervision fee is determined by the Decision on supervision fees for credit institutions issued by the Governor of the Croatian National Bank.

b) Fee and commission expenses

(All amounts are expressed in thousands of kuna)	2019	2018
Securities deposit and custody costs	11,660	10,144
Obligatory contribution to EBA budget	4,011	3,806
Other	7,163	6,977
	22,834	20,927

Regulation (EU) No 1093/2010 establishing a European Supervisory Authority (European Banking Authority – EBA), defines that competent authorities shall form part of a European System of Financial Supervision (ESFS), which also comprises the European Banking Authority (EBA). In accordance with the above Regulation, the Croatian National Bank, as the authority competent for the supervision of credit institutions, forms part of the European System of Financial Supervision (ESFS), and a representative of the Croatian National Bank participates as a member in the Board of Supervisors (BoS), EBA's managing authority. Every year, the EBA budget is adopted by the Board of Supervisors, in the manner laid down in Article 63 of the Regulation. The revenues of EBA funding the budget also consist, among other things, of obligatory contributions from the national competent authorities, which are made in accordance with a formula based on the weighting of votes.

NOTE 6 – NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

(All amounts are expressed in thousands of kuna)	2019	2018
Net securities trading result, including net changes in fair value of		
held-for-trading securities	(156,365)	(101,903)
Net result from assets under management with international		
financial institutions	38,762	25,391
Net result from revaluation of precious metals	1,286	(111)
	(116,317)	(76,623)

NOTE 7 – NET RESULT FROM DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

(All amounts are expressed in thousands of kuna)	2019	2018
Net result from sale of debt securities	74,821	53,330
	74,821	53,330

In 2019, the Croatian National Bank generated gain from the sale of debt securities at fair value through other comprehensive income in the amount of HRK 74,821 thousands.

NOTE 8 – NET EXCHANGE DIFFERENCES

(All amounts are expressed in thousands of kuna)	2019	2018
Net unrealised exchange differences Net realised exchange differences	809,729 23,897	(592,039) (10,911)
The realised exchange unferences	833,626	(602,950)

Increase in the EUR/HRK exchange rate (0.34%) and increase in the USD/HRK exchange rate (2.79%) between the two reporting dates had the biggest effect on the net exchange differences.

NOTE 9 – OTHER INCOME		
(All amounts are expressed in thousands of kuna)	2019	2018
Sale of numismatics and investment gold	3,880	315
Other revenues	7,158	5,319
	11,038	5,634
NOTE 10 – OPERATING EXPENSES		
(All amounts are expressed in thousands of kuna)	2019	2018
Staff costs (Note 10.1)	186,407	173,649
Materials, services and administrative expenses	104,858	103,352
Costs of production of banknotes and coins of Croatian kuna	68,002	62,166
Depreciation and amortisation costs	35,984	34,797
	395,251	373,964

Materials, services and administrative expenses include the costs of maintenance of office buildings and other fixed assets, overheads, network programmes maintenance costs, office supplies costs, small inventory costs, professional development costs and other current costs. Rental costs for short-term leases and leases for which the underlying asset is of low value amounted to HRK 1,862 thousands in 2019.

Depreciation costs for the right-of-use asset amount to HRK 1,208 thousands and are reported under Depreciation and amortisation costs. The right-of-use asset is depreciated under the straight-line method, from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

NOTE 10.1 – STAFF COSTS

(All amounts are expressed in thousands of kuna)	2019	2018
Net salaries	93,157	85,121
Contributions from and contributions on salaries	49,399	46,675
Taxes and surtaxes	20,217	18,617
Other employee related expenses	23,634	23,236
	186,407	173,649

The average number of employees during 2019 was 671 (2018: 659). Total staff costs for 2019 amount to HRK 186,407 thousands, of which the amount of HRK 30,503 thousands relates to contributions for pension

insurance (2018: HRK 173,649 thousands, of which HRK 28,403 thousands was related to contributions for pension insurance).

NOTE 11 - IMPAIRMENT LOSSES

(All amounts are expressed in thousands of kuna)	2019	2018
Impairment for expected credit losses (Note 11.a) Impairment of property (Note 11.b)	9,519 590	4,493 -
	10,109	4,493
a) Impairment for expected credit losses		
(All amounts are expressed in thousands of kuna)	2019	2018
Loss allowances for expected credit losses New loss allowances for expected credit losses according to IFRS 9 Reversal of loss allowances for expected credit losses according to	47,787	20,390
IFRS 9	(38,268)	(15,897)
	9,519	4,493

There was no collection of financial assets that are referred to as stage 3 of credit quality of financial instruments. Changes in loss allowances for expected credit losses during the year are presented in Note 37.1.4.

b) Impairment of property

(All amounts are expressed in thousands of kuna)	2019	2018
Impairment losses on property (Note 24)	590	
	590	

NOTE 12 – INCREASE/(DECREASE) IN PROVISIONS		
(All amounts are expressed in thousands of kuna)	2019	2018
Provisions for risks and charges		
New provisions	23,223	9,146
Released provisions	(10,222)	(10,129)
	13,001	(983)
NOTE 13 – CASH AND CURRENT ACCOUNTS WITH C	THER BANKS	
(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/ 2018
Cash on hand	970	1,286
Foreign currency cash in the CNB treasury vault	2,962,825	2,955,058
Current accounts with foreign banks	4,327,949	6,513,329
CNB account in TARGET2 system	59,574	55,428
	7,351,318	9,525,101
Loss allowance for expected credit losses	(204)	(297)
	7,351,114	9,524,804
NOTE 14 – DEPOSITS WITH OTHER BANKS		
(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Deposits with foreign central banks	15,194,343	11,297,498
Deposits with foreign commercial banks	133,421	130,025
Deposits with domestic commercial banks	2,946	5,368
	15,330,710	11,432,891
Loss allowance for expected credit losses	(8,810)	(6,750)
	15,321,900	11,426,141

Geographical concentration of deposits with other banks:		
(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Croatia	2,938	5,347
Europe	15,318,962	11,420,794
	15,321,900	11,426,141
NOTE 15 – FINANCIAL ASSETS AT FAIR VALUE THROUGH	PROFIT OR LOSS	
(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Held-for-trading securities (Note 15.a)	38,065,903	38,407,144
Assets under management with international financial institutions (Note 15.b)	1,331,694	1,296,161
Precious metals	7,525	6,238
	39,405,122	39,709,543
a) Held-for-trading securities		
(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
EUR-denominated securities	32,265,349	32,471,228
USD-denominated securities	5,800,554	5,935,916
	38,065,903	38,407,144
Held-for-trading securities include accrued interest in the amount of 2019 (31 December 2018: HRK 90,083 thousands).	HRK 93,281 thousand	ds at 31 December
b) Assets under management with international financial instituti	ons	
(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
USD-denominated funds entrusted to the management of	1 771 604	1.006.161
international financial institutions	1,331,694	1,296,161
	1,331,694	1,296,161

NOTE 16 – LOANS

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Loans to domestic banks Other loans	1,914,914 34	2,029,851
	1,914,948	2,029,892
Loss allowance for expected credit losses	(540)	(575)
	1,914,408	2,029,317

Loans to domestic banks comprise collateralised credits, which are the instrument to be used to conduct open market operation regulated by the Decision on monetary policy implementation of the Croatian National Bank. A collateralised credit is a reverse transaction used by the Croatian National Bank to provide liquidity to a counterparty against collateral by securities transferred to the pool of eligible assets.

Total fair value of collateral obtained for collateralised credits as at 31 December 2019 amounted to HRK 2,144,026 thousands (31 December 2018: HRK 2,457,666 thousands).

NOTE 17 – REVERSE REPO AGREEMENTS

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Foreign currency reverse repo agreements	11,467,741	21,280,067
	11,467,741	21,280,067
Loss allowance for expected credit losses	(571)	(1,079)
	11,467,170	21,278,988

Total fair value of collateral obtained by foreign currency reverse repo agreements (sovereign bonds of countries rated Aaa to Baa1, securities of international financial institutions rated Aaa to Aa1 and guaranteed bonds rated Aaa) as at 31 December 2019 amounts to HRK 11,492,828 thousands (31 December 2018: HRK 21,584,610 thousands).

NOTE 18 – DEBT SECURITIES AT AMORTISED COST

Investments in foreign currency securities at amortised cost comprise the following:

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Debt securities	14,308,359	679,403
Accrued interest	64,722	2,793
	14,373,081	682,196
Loss allowance for expected credit losses	(7,687)	(84)
	14,365,394	682,112

NOTE 19 – BALANCES WITH THE INTERNATIONAL MONETARY FUND

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Membership quota	6,619,913	6,490,722
Special Drawing Rights (XDR)	2,803,820	2,753,217
Deposits	4,791	4,697
	9,428,524	9,248,636

NOTE 20 – DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Investments in securities at fair value through other comprehensive income comprise the following:

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Debt securities Accrued interest	47,174,201 265,173	43,756,015 239,262
	47,439,374	43,995,277

Loss allowances for expected credit losses on debt securities at fair value through other comprehensive income amount to HRK 12,363 thousands (2018: HRK 11,712 thousands).

NOTE 21 – EQUITY SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME – IRREVOCABLE ELECTION

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
BIS shares SWIFT shares	41,914 80	41,914 80
ECB paid-up capital	17,171	18,224
	59,165	60,218

Equity securities comprise paid-up capital of the European Central Bank (ECB), BIS shares and SWIFT shares. In line with goods practices of the central banks, these investments are measured at cost because they do not have quoted market prices on an active market and their fair value cannot be reliably measure. The Croatian National Bank does not intent to sell them in the future.

Based on the ownership holding of 2,441 shares of the Bank for International Settlements (BIS), in the nominal value of XDR 5,000 per share, the Croatian National Bank is a member of the BIS, which enables it the option to use services which the BIS provides to central banks and other financial organisations. In accordance with the Statute of the BIS, 25% of the shares subscribed was paid, while the remaining 75% is payable upon call for payment. In 2019, the Croatian National Bank received a dividend in the amount of HRK 5,419 thousands (2018: HRK 5,111 thousands).

The Croatian National Bank is also a member of the Society for Worldwide Interbank Financial Telecommunication (SWIFT). Based on this membership, the Croatian National Bank participates in international transfers of financial messages. Six SWIFT shares in the nominal value of EUR 125 per share which the Croatian National Bank holds are fully paid in.

The paid-up capital of the European Central Bank (ECB) represents participating interest of the Croatian National Bank in the ECB. According to Article 28 of the Statute of the European System of Central Banks (ESCB), the national central banks (NCBs) of the ESCB are the only subscribers of the ECB's capital. Subscriptions depend on the shares which are regulated by Article 29 of the Statute of the ESCB and the amounts are adjusted every five years. The last adjustment of the capital keys was made with effect from 1 January 2019.

In accordance with the Council Decision (2003/517/EC) of 15 July 2003 on the statistical data to be used for the adjustment of the key for subscription to the capital of the European Central Bank, NCBs' shares in the key for capital subscription are adjusted from 1 January 2019 by means of transfer of funds between the NCBs.

Table 1: Key for subscription to the ECB's capital

	Key for subscription to the ECB's capital	
NCB	until 31 December from 1 January 20	
	2018 (%)	(%)
Nationale Bank van België/	2,4778	2.5200
Banque Nationale de Belgique	2.4778	2.5280
Deutsche Bundesbank	17.9973	18.3670
Eesti Pank	0.1928	0.1968
Central Bank of Ireland	1.1607	1.1754
Bank of Greece	2.0332	1.7292
Banco de España	8.8409	8.3391
Banque de France	14.1792	14.2061
Banca d'Italia	12.3108	11.8023
Central Bank of Cyprus	0.1513	0.1503
Latvijas Banka	0.2821	0.2731
Lietuvos bankas	0.4132	0.4059
Banque centrale du Luxembourg	0.2030	0.2270
Central Bank of Malta	0.0648	0.0732
De Nederlandsche Bank	4.0035	4.0677
Oesterreichische Nationalbank	1.9631	2.0325
Banco de Portugal	1.7434	1.6367
Banka Slovenije	0.3455	0.3361
Národná banka Slovenska	0.7725	0.8004
Suomen Pankki – Finlands Bank	1.2564	1.2708
Subtotal for euro area NCBs	70.3915	69.6176
Българска народна банка (Bulgarian National Bank)	0.8590	0.8511
Česká národní banka	1.6075	1.6172
Danmarks Nationalbank	1.4873	1.4986
Hrvatska narodna banka	0.6023	0.5673
Magyar Nemzeti Bank	1.3798	1.3348
Narodowy Bank Polski	5.1230	5.2068
Banca Naţională a României	2.6024	2.4470
Sveriges Riksbank	2.2729	2.5222
Bank of England	13.6743	14.3374
Subtotal for non-euro area NCBs	29.6085	30.3824
TOTAL	100.00	100.00

Since the Republic of Croatia is not part of the euro area, transitional provisions of Article 47 of the ESCB's Statute are applied, according to which the Croatian National Bank had an obligation to subscribe and pay in 3.75% of the capital to the ECB as a contribution to cover ECB's operating costs. The Croatian National Bank, as a national central bank outside the euro area is not entitled to receive an appropriate share of the profit distribution of the ECB, and there is no obligation to cover the loss of the ECB. Following the changes in ECB's capital keys effective since 1 January 2019, the contribution of the Croatian National Bank in paid-up capital was decreased and amounts to EUR 2,302,884.94.

Table 2: Subscribed and paid-up capital of the ECB

(All amounts are expressed in euro)

(All amounts are expressed i	Subscribed capital until	Paid-up capital until	Subscribed capital	Paid-up capital
Neb	31 December 2018	31 December 2018	1 January 2019	1 January 2019
Nationale Bank van België/ Banque Nationale de Belgique	268,222,025.17	268,222,025.17	273,656,178.72	273,656,178.72
Deutsche Bundesbank	1,948,208,997.34	1,948,208,997.34	1,988,229,048.48	1,988,229,048.48
Eesti Pank	20,870,613.63	20,870,613.63	21,303,613.91	21,303,613.91
Central Bank of Ireland	125,645,857.06	125,645,857.06	127,237,133.10	127,237,133.10
Bank of Greece	220,094,043.74	220,094,043.74	187,186,022.25	187,186,022.25
Banco de España	957,028,050.02	957,028,050.02	902,708,164.54	902,708,164.54
Banque de France	1,534,899,402.41	1,534,899,402.41	1,537,811,329.32	1,537,811,329.32
Banca d'Italia	1,332,644,970.33	1,332,644,970.33	1,277,599,809.38	1,277,599,809.38
Central Bank of Cyprus	16,378,235.70	16,378,235.70	16,269,985.63	16,269,985.63
Latvijas Banka	30,537,344.94	30,537,344.94	29,563,094.31	29,563,094.31
Lietuvos bankas	44,728,929.21	44,728,929.21	43,938,703.70	43,938,703.70
Banque centrale du Luxembourg	21,974,764.35	21,974,764.35	24,572,766.05	24,572,766.05
Central Bank of Malta	7,014,604.58	7,014,604.58	7,923,905.17	7,923,905.17
De Nederlandsche Bank	433,379,158.03	433,379,158.03	440,328,812.57	440,328,812.57
Oesterreichische Nationalbank	212,505,713.78	212,505,713.78	220,018,268.69	220,018,268.69
Banco de Portugal	188,723,173.25	188,723,173.25	177,172,890.71	177,172,890.71
Banka Slovenije	37,400,399.43	37,400,399.43	36,382,848.76	36,382,848.76
Národná banka Slovenska	83,623,179.61	83,623,179.61	86,643,356.59	86,643,356.59
Suomen Pankki – Finlands Bank	136,005,388.82	136,005,388.82	137,564,189.84	137,564,189.84
Subtotal for euro area NCBs*	7,619,884,851.40	7,619,884,851.40	7,536,110,121.69	7,536,110,121.69
Българска народна банка (Bulgarian National Bank)	92,986,810.73	3,487,005.40	92,131,635.17	3,454,936.32
Česká národní banka	174,011,988.64	6,525,449.57	175,062,014.33	6,564,825.54
Danmarks Nationalbank	161,000,330.15	6,037,512.38	162,223,555.95	6,083,383.35
Hrvatska narodna banka	65,199,017.58	2,444,963.16	61,410,265.11	2,302,884.94
Magyar Nemzeti Bank	149,363,447.55	5,601,129.28	144,492,194.37	5,418,457.29
Narodowy Bank Polski	554,565,112.18	20,796,191.71	563,636,468.10	21,136,367.55
Banca Naţională a României	281,709,983.98	10,564,124.40	264,887,922.99	9,933,297.11
Sveriges Riksbank	246,041,585.69	9,226,559.46	273,028,328.31	10,238,562.31
Bank of England	1,480,243,941.72	55,509,147.81	1,552,024,563.60	58,200,921.14
Subtotal for non-euro area NCBs*	3,205,122,218.22	120,192,083.17	3,288,896,947.92	123,333,635.55
TOTAL*	10,825,007,069.61	7,740,076,934.57	10,825,007,069.61	7,659,443,757.27

^{*} Due to rounding, the amount does not have to equal the sum of individual amounts presented.

NOTE 22 – INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Investment in Croatian Monetary Institute	25,736	23,617
	25,736	23,617

The investment of the Croatian National Bank in the Croatian Monetary Institute represents investment in an associate in accordance with IAS 28 and it is accounted for using the equity method. The Croatian Monetary Institute does not have quoted market prices on an active market. The portion of the Croatian National Bank share in the capital of the Croatian Monetary Institute is 42.6%.

The portion of the Croatian National Bank share in the profit of the Croatian Monetary Institute for the year 2019 amounts to HRK 2,119 thousands (2018: HRK 3,407 thousands) and is calculated by multiplying realised profit or loss of the Croatian Monetary Institute for the respective year and the share of 42.6%.

The Croatian Monetary Institute is a domestic company whose core operation is the production of coins and medals of gold and other precious metals, production of coins and commemorative circulation coins, manufacturing of jewellery and related products, trade in gold and other precious metals, trade with jubilee coins and with medals of gold and other precious metals, production of license plates and other registered activities associated with those listed here.

The following table presents summarised financial information of the Croatian Monetary Institute:

(All amounts are expressed in thousands of kuna)	2019	2018
Total assets	106,074	74,503
Non-current assets	36,522	26,376
Current assets	69,275	47,816
Prepayments and accrued income	277	311
Total liabilities	44,784	19,033
Provisions	500	500
Current liabilities	44,274	18,522
Accruals and deferred income	10	11
Equity and provisions	61,290	55,470

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(All amounts are expressed in thousands of kuna)	2019	2018
Total revenue	87,026	86,515
Total expenses	(79,929)	(77,848)
Profit before tax	7,097	8,667
Income tax	(1,277)	(1,588)
Profit for the period	5,820	7,079
Other comprehensive income	_	_
Total comprehensive income	5,820	7,079

The summarised financial information of the Croatian Monetary Institute for 2019 is presented based on the preliminary financial statements of the Croatian Monetary Institute for 2019 as the final official financial statements of the Croatian Monetary Institute for 2019 were not yet available at the time of preparation of these financial statements.

NOTE 23 – OTHER ASSETS

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Accrued interest	7,917	10,742
Other participants funds in TARGET2	4,467,861	2,061,243
Other financial assets	27,889	48,768
	4,503,667	2,120,753
Loss allowance for expected credit losses	(7,526)	(7,564)
Total other financial assets	4,496,141	2,113,189
Prepaid expenses	443,181	431,888
Numismatics	9,458	12,415
Other non-financial assets	58,620	19,745
Total other non-financial assets	511,259	464,048
Total other assets	5,007,400	2,577,237

The major portion of prepaid expenses in the amount of HRK 429,393 thousands (2018: HRK 418,184 thousands) relates to the prepaid expenses of printing banknotes and minting coins.

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Croatian National Bank Financial Statements for the year ended 31 December 2019

NOTE 24 – PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS

(All amounts are expressed in thousands of kuna)	Property (land and buildings)	Computers and computing infrastructure	Furniture and equipment	Motor vehicles	Assets under development – property, plant, equipment	TOTAL PROPERTY, PLANT AND EQUIPMENT	Software and licences	Assets under development – intangible assets	TOTAL INTANGI- BLE ASSETS	TOTAL property, plant, equipment and intangible assets
Balance at 1 January 2018 Cost or revaluation Accumulated depreciation/amortisation	500,282 (29,110)	193,654	41,996	9,431	9,736	755,099	87,336	9,739	97,075	852,174 (267,877)
Net book value	471,172	57,968	6,496	251	9,736	545,623	28,935	9,739	38,674	584,297
For the year ended 31 December 2018 Opening net book amount	471,172	57,968	6,496	251	9,736	545,623	28,935	9,739	38,674	584,297
Additions	1	I	ı	1	27,487	27,487	1	2,067	2,067	29,554
Brought into use	666	19,037	1,788	229	(22,053)	l	1,940	(1,940)	1	I
Net written off	I	I	(8)	ı	I	(8)	I	1	1	(8)
Depreciation/amortisation (charge for the year)	(8,191)	(19,532)	(2,178)	(103)	1	(30,004)	(4,793)	1	(4,793)	(34,797)
Closing net book amount	463,980	57,473	6,098	377	15,170	543,098	26,082	9,866	35,948	579,046
As at 31 December 2018 Cost or revaluation	501,282	211,511	43,230	9,241	15,170	780,434	89,270	998'6	99,136	879,570
Accumulated depreciation annot be book value	463,980	57,473	860'9	377	15,170	543,098	26,082	9,866	35,948	579,046
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Croatian National Bank Financial Statements for the year ended 31 December 2019

NOTE 24 – PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS

(All amounts are expressed in thousands of kuna)	Property owned by the CNB (land and buildings)	Right-of-use buildings (office buildings)	Computers	Furniture and equipment	Motor vehicles	Assets under development – property, plant, equipment	TOTAL PROPERTY, PLANT AND EQUIPMENT	Software and licences	Assets under develop- ment – intangible assets	TOTAL INTANGI- BLE ASSETS	TOTAL property, plant, equipment and intangible assets
Balance at 1 January 2019 (reported)											
Cost or revaluation	501,282	ı	211,511	43,230	9,241	15,170	780,434	89,270	9,866	99,136	879,570
Accumulated depreciation/amortisation	(37,302)	I	(154,038)	(37,132)	(8,864)	1	(237,336)	(63,188)	1	(63,188)	(300,524)
Net book value	463,980	ı	57,473	860'9	377	15,170	543,098	26,082	9,866	35,948	579,046
First application of IFRS 16	1	256	1				256	-	1		256
Balance at 1 January 2019 (restated)	463,980	256	57,473	6,098	377	15,170	543,354	26,082	9,866	35,948	579,302
For the year ended 51 December 2019											
Opening net book amount	463,980	256	57,473	6,098	377		543,354	26,082	9,866	35,948	579,302
Additions	1	8,713	ı	1	1	43,140	51,853	I	2,949	2,949	54,802
Brought into use	2,911	I	32,115	3,394	208	(38,628)	l	10,364	(10,364)	I	1
Revaluation	23,308	I	1	1	I		23,308	I	l	1	23,308
Impairment	(200)	1	1		ł	1	(290)	I	I	ſ	(290)
Net written off	I	1	(1)	(14)	***	1	(15)	I	1	ı	(15)
Depreciation/amortisation (charge for the year)	(8,228)	(1,208)	(19,582)	(2,493)	(117)	1	(31,628)	(4,355)		(4,355)	(35,983)
Closing net book amount	481,381	7,761	70,005	6,985	468	19,682	586,282	32,091	2,451	34,542	620,824
As at 31 December 2019	481 381	8 969	238.696	45.707	9,449	19.682	803.884	99.634	2.451	102.085	902.969
Cost or revaluation	50,60	(2)(2)							î		
Accumulated depreciation/amortisation	1	(1,208)	(168,691)	(38,722)	(8,981)	1	(217,602)	(67,543)	1	(67,543)	(285,145)
Net book value	481,381	7,761	70,005	6,985	468	19,682	586,282	32,091	2,451	34,542	620,824

NOTE 24 – PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS (CONTINUED)

Revalued amounts of land and buildings were determined based on appraisals performed by independent experts in 2019, and the revaluation effect is presented in other comprehensive income. Valuation technique used to determine fair value was the cost method. Certain significant inputs for valuation were not observable market data (Level 3 of fair value hierarchy).

The input data were data from the property market information system "eNekretnine" and construction indicators for a model object from the Bulletin of Institut IGH d.d. which were used in individual assessments of the property value pursuant to the Property Valuation Act and the Ordinance on the property valuation methods as well as other relevant regulations on property valuation.

If the land and buildings were carried at cost less depreciation, their net book value as at 31 December 2019 would be HRK 134,660 thousands. Property, plant and equipment of the Croatian National Bank are not pledged, either as part of mortgage agreements or as a fiduciary relationship. At the reporting date, there were no intangible assets with indefinite useful life. As at 31 December 2019, contractual commitments for the acquisition of property, plant and equipment amounted to HRK 1,798 thousands, and contractual commitments for the acquisition of intangible assets amounted to HRK 2,191 thousands.

The gross carrying amount of fully depreciated assets amounts to HRK 152,516 thousands (2018: 143,544 thousands). The carrying amount of land that is not depreciated amounts HRK 114,178 thousands (2018: HRK 91,329 thousands).

NOTE 25 – BANKNOTES AND COINS IN CIRCULATION

(All amounts are expressed in thousands of kuna)	2019	2018
Banknotes and coins in circulation as at January 1 Increase/(decrease) of banknotes and coins in circulation during the	35,046,160	31,691,425
year	3,688,456	3,354,735
Banknotes and coins in circulation – total as at December 31	38,734,616	35,046,160

		31/	12/2019	31/1	2/2018
In HRK	Nominal	Pieces	Value	Pieces	Value
III IIKK	value		in thousands of		in thousands of
			kuna		kuna
Coins	0.01	127,787,238	1,278	127,112,305	1,271
Coins	0.02	85,742,921	1,715	85,032,936	1,701
Coins	0.05	405,827,534	20,291	388,085,489	19,404
Coins	0.10	587,529,874	58,753	562,603,334	56,260
Coins	0.20	455,328,197	91,066	432,115,443	86,423
Coins	0.50	266,209,895	133,105	252,008,177	126,004
Coins	1	302,798,298	302,798	285,547,074	285,547
Coins	2	186,122,191	372,244	173,131,930	346,264
Coins	5	125,010,988	625,055	115,028,414	575,142
Coins	25	1,315,613	32,890	1,242,984	31,075
Banknotes	5	4,124,081	20,620	4,126,781	20,634
Banknotes	10	52,586,315	525,863	49,360,032	493,600
Banknotes	20	37,171,874	743,438	34,932,870	698,658
Banknotes	50	20,042,177	1,002,109	20,042,044	1,002,102
Banknotes	100	45,031,262	4,503,126	41,562,344	4,156,234
Banknotes	200	89,916,703	17,983,341	82,108,672	16,421,734
Banknotes	500	8,971,768	4,485,884	7,500,941	3,750,471
Banknotes	1,000	7,831,040	7,831,040	6,973,636	6,973,636
TOTAL			38,734,616	,	35,046,160

NOTE 26 – DUE TO BANKS AND OTHER FINANCIAL INSTITUTIONS

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Kuna reserve requirements	24,890,304	23,482,632
Foreign currency accounts of TARGET2 system participants	4,467,861	2,061,243
Other deposits from domestic banks	44,993,153	44,210,060
Deposits from foreign banks and other financial institutions	72	72
Court-mandated deposits	273,406	53,214
	74,624,796	69,807,221

Due to banks and other financial institutions also comprises foreign currency accounts of participants in TARGET2 system. TARGET2 (Trans-European Automated Real-time Gross settlement Express Transfer system) is a payment system for the settlement of payment transactions in euro on a gross basis in real time. TARGET2 is a system with the Single Shared Platform (SSP), jointly administered by Banca d'Italia, Banque de France and Deutsche Bundesbank on behalf of the Eurosystem. In addition to this Note to the financial statements, business activities related to TARGET2 are presented in the balance sheet positions "Cash and current accounts with other banks" (Note 13) and "Other assets" (Note 23).

Court-mandated deposits of banks are assets foreclosed pursuant to the Act on the Execution of Enforcement over Monetary Assets.

NOTE 27 – REPO AGREEMENTS

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Foreign currency repo agreements	5,998,829	9,219,306
	5,998,829	9,219,306

Total fair value of collateral given in repo agreements as at 31 December 2019 amounted to HRK 5,956,987 thousands (31 December 2018: HRK 9,239,198 thousands).

NOTE 28 – DUE TO THE STATE AND STATE INSTITUTIONS

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Domestic currency account balances Foreign currency deposits	6,642,591	2,866,339
roreign currency deposits	70,003 6,712,594	2,898,000

NOTE 29 – DUE TO THE INTERNATIONAL MONETARY FUND

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Kuna-denominated bills of exchange	6,600,618	6,472,018
Net cumulative allocations	2,797,255	2,742,649
Other IMF's accounts	16,619	16,307
	9,414,492	9,230,974

The bills of exchange denominated in the Croatian kuna relate to the membership of the Republic of Croatia in the International Monetary Fund.

Pursuant to the Resolution of the Board of Governors of the International Monetary Fund approving allocation of special drawing rights for the ninth basic period adopted in 2009, the Republic of Croatia has been assigned funds in the amount of SDR 271 million (general allocation). Moreover, pursuant to the Resolution of the Board of Governors of the International Monetary Fund on the Fourth Amendment of the Articles of Agreement, the Republic of Croatia has been provided a special one-time allocation of SDRs in the amount of SDR 32 million in 2009. The Government of the Republic of Croatia may adopt a special decision on the withdrawal of funds or a portion of funds provided through the general and special one-time allocations.

NOTE 30 - OTHER LIABILITIES

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Accrued interest	13,694	17,647
Amounts due to employees	8,241	7,459
Taxes and contributions	6,764	6,478
Obligations to European Commission in EUR	484	793
Obligations to European Commission in HRK	414,609	334,614
Due to the Ministry of Finance	133,153	15,202
Trade payables	31,339	17,807
Long-term provisions for risks and charges	59,767	46,766
Other liabilities	19,046	15,072
	687,097	461,838

The European Commission has opened EUR and HRK transaction accounts and the European Development Fund Account in euro with the Croatian National Bank for the performance of payment transactions.

Included in long-term provisions for risks and charges HRK 36,545 thousands (2018: HRK 24,822 thousands) are in respect of legal actions and HRK 23,222 thousands (2018: HRK 21,944 thousands) in respect of provisions for employee benefits.

Line item Other liabilities for the year 2019 shows the present value of the lease liability of HRK 6,834 thousands and the liabilities for short-term leases and leases for which the underlying asset is of low value of

HRK 176 thousands. The present value of the lease liability is calculated using the discount rate of the Croatian National Bank which stood at 3% on 31 December 2019.

The following tables present movements in long-term provisions for risks and charges:

(All amounts are expressed in thousands of kuna)	Court cases	Employee benefits	Total
As at 1 January 2019	24,822	21,944	46,766
Released provisions	_	(10,222)	(10,222)
New provisions	11,723	11,500	23,223
Recognised in profit or loss	11,723	1,278	13,001
As at 31 December 2019	36,545	23,222	59,767
(All amounts are expressed in thousands of kuna)	Court cases	Employee	Total
		benefits	
As at 1 January 2018	24,822	22,927	47,749
Released provisions	_	(10,129)	(10,129)
New provisions	-	9,146	9,146
Recognised in profit or loss		(983)	(983)

NOTE 31 – EQUITY

The equity funds of the Croatian National Bank consist of the capital and reserves.

The capital in the amount of HRK 2,500,000 thousands may not be transferred or pledged. Reserves comprise general and specific reserves. General reserves are formed for the purpose of covering general operational risks of the Croatian National Bank, they are not limited in size, and they are formed in accordance with the Act on the Croatian National Bank. Specific reserves are formed for the purpose of covering identified losses in accordance with decisions of the Council of the Croatian National Bank.

Total reserves as at 31 December 2019 amount to HRK 13,733,707 thousands, which is an increase of HRK 1,762,270 thousands from 31 December 2018 when they stood at HRK 11,971,437 thousands. The increase

in total reserves resulted from the rise in general reserves brought about by the allocation of a portion of the profit for 2019 into the general reserves (HRK 809,729 thousands), as well as from other comprehensive income of HRK 952,541 thousands.

NOTE 32 – MATURITY ANALYSIS OF ASSETS AND LIABILITIES

The following table presents maturity analysis of assets and liabilities depending on the expected maturity date or the settlement date:

- twelve months after the reporting period,
- more than twelve months after the reporting period.

32.1 Maturity analysis of assets and liabilities

(All amounts are expressed in thousands of kuna)	Up to 12 months	More than 12 months	Total
As at 31 December 2019			
Assets			
Cash and current accounts with other banks	7,351,114	_	7,351,114
Deposits with other banks	15,318,962	2,938	15,321,900
Financial assets at fair value through profit or loss	38,065,903	1,339,219	39,405,122
Loans	94,721	1,819,687	1,914,408
Reverse repo agreements	11,467,170	_	11,467,170
Debt securities at amortised cost	_	14,365,394	14,365,394
Balances with the International Monetary Fund Debt securities at fair value through other	2,803,820	6,624,704	9,428,524
comprehensive income	47,439,374		47,439,374
Equity securities at fair value through other			
comprehensive income – irrevocable election	_	59,165	59,165
Investments accounted for using the equity method	_	25,736	25,736
Other assets	4,578,007	429,393	5,007,400
Property, plant, equipment and intangible assets	48	620,776	620,824
Total assets	127,119,119	25,287,012	152,406,131
Liabilities			
Banknotes and coins in circulation	38,734,616	_	38,734,616
Due to banks and other financial institutions	74,624,724	72	74,624,796
Repo agreements	5,998,829	_	5,998,829
Due to the State and State institutions	6,712,594	_	6,712,594
Due to the International Monetary Fund	_	9,414,492	9,414,492
Other liabilities	686,581	516	687,097
Total liabilities	126,757,344	9,415,080	136,172,424
Net position	361,775	15,871,932	16,233,707

Note: According to convention, the amount of the kuna component of reserve requirements of HRK 24,890,304 thousands is stated in the position Due to banks and other financial institutions with a maturity of less than 12 months. The calculation, maintenance and allocation of reserve requirements is performed on a monthly basis, and a change in the amount of reserves may result from changes in the base for calculation, the reserve requirement rate and the percentage of the reserves banks are required to hold in their accounts with the Croatian National Bank. In practice, these liabilities may be considered as having a maturity of over 12 months and in that case the short-term liabilities would be lower than the short-term assets. Debt securities at fair value through other comprehensive income and at fair value through profit or loss are included in the period up to 12 months due to their high tradability in the secondary market, regardless of their contractual maturities. Assets and liabilities without contractual maturities are included in the period over 12 months.

32.1 Maturity analysis of assets and liabilities (continued)

(All amounts are expressed in thousands of kuna)	Up to 12 months	More than 12 months	Total
As at 31 December 2018			
Assets			
Cash and current accounts with other banks	9,524,804	_	9,524,804
Deposits with other banks	11,420,794	5,347	11,426,141
Financial assets at fair value through profit or loss	38,407,144	1,302,399	39,709,543
Loans	_	2,029,317	2,029,317
Reverse repo agreements	21,278,988	_	21,278,988
Debt securities at amortised cost	-	682,112	682,112
Balances with the International Monetary Fund Debt securities at fair value through other	2,753,217	6,495,419	9,248,636
comprehensive income	43,995,277	_	43,995,277
Equity securities at fair value through other			
comprehensive income – irrevocable election	_	60,218	60,218
Investments accounted for using the equity method	_	23,617	23,617
Other assets	2,159,053	418,184	2,577,237
Property, plant, equipment and intangible assets	6	579,040	579,046
Total assets	129,539,283	11,595,653	141,134,936
Liabilities			
Banknotes and coins in circulation	35,046,160	· -	35,046,160
Due to banks and other financial institutions	69,807,149	72	69,807,221
Repo agreements	9,219,306	_	9,219,306
Due to the State and State institutions	2,898,000	_	2,898,000
Due to the International Monetary Fund	_	9,230,974	9,230,974
Other liabilities	461,215	623	461,838
Total liabilities	117,431,830	9,231,669	126,663,499
Net position	12,107,453	2,363,984	14,471,437

Note: According to convention, the amount of the kuna component of reserve requirements of HRK 23,482,632 thousands is stated in the position Due to banks and other financial institutions with a maturity of less than 12 months. The calculation, maintenance and allocation of reserve requirements is performed on a monthly basis, and a change in the amount of reserves may result from changes in the base for calculation, the reserve requirement rate and the percentage of the reserves banks are required to hold in their accounts with the Croatian National Bank. In practice, these liabilities may be considered as having a maturity of over 12 months and in that case the short-term liabilities would be lower than the short-term assets. Debt securities at fair value through other comprehensive income and at fair value through profit or loss are included in the period up to 12 months due to their high tradability in the secondary market, regardless of their contractual maturities. Assets and liabilities without contractual maturities are included in the period over 12 months.

NOTE 33 – CONTINGENT LIABILITIES AND COMMITMENTS AND TREASURY INVENTORY SYSTEM

Legal actions: At 31 December 2019, there were several legal actions outstanding against the Croatian National Bank. In the opinion of the management and internal legal advisers of the Croatian National Bank, the Bank may lose certain cases. As a result, provisions for potential losses on such cases were made by the Bank in the amount of HRK 36,545 thousands (refer to Note 30).

Capital commitments: As at 31 December 2019, the capital commitments of the Croatian National Bank amounted to HRK 3,754 thousands (2018: HRK 4,050 thousands).

Treasury inventory system

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Banknotes and coins not in circulation	44,546,507	50,672,208
Inventory of government stamps and bill-of-exchange forms	102,318	141,629
	44,648,825	50,813,837
NOTE 34 – CASH AND CASH EQUIVALENTS		
(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Cash on hand (Note 13)	970	1,286
Foreign currency cash in the CNB treasury vault (Note 13)	2,962,825	2,955,058
Current accounts with foreign banks (Note 13)	4,327,949	6,513,329
Funds with the IMF (Note 19)	2,803,820	2,753,216
CNB account in TARGET2 system (Note 13)	59,574	55,428
	10,155,138	12,278,317
NOTE 35 – RESULT FOR THE YEAR		
(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Surplus of income over expenditures/(shortfall between income and		
expenditures)	927,138	(468,373)
Allocated to general reserves	(809,729)	_
Allocated to the State Budget	(117,409)	
Covered from general reserves		468,373

The Croatian National Bank realised the surplus of income over expenditures for the year 2019 in the amount of HRK 927,138 thousands.

Given that in 2019 net unrealised exchange differences of HRK 809,729 thousands (refer to Note 8) were positive and higher than 20% of the surplus of income over expenditures of HRK 185,428 thousands and that the sum of the net unrealised losses on financial assets at fair value through profit or loss and the results from investment measured under equity method was negative (HRK 124,689 thousands), net unrealised exchange differences are allocated to the general reserves. The rest is allocated to the State Budget.

The Croatian National Bank realised the shortfall between income and expenditures for the year 2018 in the amount of HRK 468,373 thousands. The financial result was mainly due to the impact of net unrealised exchange differences for 2018 which were negative and amounted to HRK 592,039 thousands (refer to Note 8). The shortfall between income and expenditures for 2018 in the amount of HRK 468,373 thousands was covered from general reserves.

NOTE 36 - FAIR VALUES AND CLASSIFICATION OF FINANCIAL ASSETS AND LIABILITIES

In the process of determination of the fair value of financial assets and liabilities a market approach is used as a valuation technique. As a part of a hierarchical approach to the determination of fair value, the Croatian National Bank uses the first hierarchical valuation level (Level 1), which means that inputs are observable market values which reflect quotation prices for the same assets or liabilities in active markets. If price quotations are not available, fair value is calculated based on the models recognized by GIPS standards (Global Investment Performance Standards). The input data used are observable market values (interest rates), which correspond to Level 2 of fair value hierarchy.

During the reporting period there were no reclassifications between the levels of fair value hierarchy.

36.1 Financial assets and liabilities measured at fair value

The following table presents the fair value hierarchy for financial assets measured at fair value.

_		31/12/2019	
(All amounts are expressed in thousands of kuna)	Level 1	Level 2	Total
Financial assets at fair value through profit or loss			
Foreign currency securities held for trading			
Government securities	24,949,818	7,673,427	32,623,245
Guaranteed bonds	3,416,440	_	3,416,440
Securities of international financial institutions	685,337	219,450	904,787
Bank bonds with government guarantees	677,569	443,862	1,121,431
Total securities held for trading (Note 15.a)	29,729,164	8,336,739	38,065,903
Assets under management with international financial institutions (Note 15.b)	1,331,694		1,331,694
Precious metals	7,525	_	7,525
Total financial assets at fair value through profit or loss	31,068,383	8,336,739	39,405,122
Financial assets at fair value through other comprehensive income			
Foreign currency securities at fair value through other comprehensive income			
Government securities	43,170,073	_	43,170,073
Guaranteed bonds	657,082	_	657,082
Securities of international financial institutions	2,541,175	_	2,541,175
Bank bonds with government guarantees	838,478	232,566	1,071,044
Total debt securities at fair value through other comprehensive income (Note 20)	47,206,808	232,566	47,439,374
Total financial assets at fair value through other			
comprehensive income	47,206,808	232,566	47,439,374
Total	78,275,191	8,569,305	86,844,496

		31/12/2018	
(All amounts are expressed in thousands of kuna)	Level 1	Level 2	Total
Financial assets at fair value through profit or loss			
Foreign currency securities held for trading			
Government securities	22,194,327	12,445,864	34,640,191
Guaranteed bonds	1,671,505	_	1,671,505
Securities of international financial institutions	1,448,282	_	1,448,282
Bank bonds with government guarantees	298,237	348,929	647,166
Total securities held for trading (Note 15.a)	25,612,351	12,794,793	38,407,144
Assets under management with international financial institutions (Note 15.b)	1,296,161	_	1,296,161
Precious metals	6,238	_	6,238
Total financial assets at fair value through profit or loss	26,914,750	12,794,793	39,709,543
Financial assets at fair value through other comprehensive income			
Foreign currency securities at fair value through other comprehensive income			
Government securities	40,991,916	257,318	41,249,234
Securities of international financial institutions	2,221,105	_	2,221,105
Bank bonds with government guarantees	524,938		524,938
Total debt securities at fair value through other comprehensive income (Note 20)	43,737,959	257,318	43,995,277
Total financial assets at fair value through other comprehensive income	43,737,959	257,318	43,995,277
Total	70,652,709	13,052,111	83,704,820

36.2 Financial assets and liabilities not measured at fair value

The comparison of book and fair values of loans and debt securities at amortised cost is presented in the following table.

		31/1:	2/2019	
(All amounts are expressed in thousands of kuna)	Level 1	Level 2	Total fair value	Book value
Loans	_	1,912,469	1,912,469	1,914,408
Debt securities at amortised cost	14,292,217	_	14,292,217	14,365,394

		31/1	2/2018	
(All amounts are expressed in thousands of kuna)	Level 1	Level 2	Total fair value	Book value
Loans	_	2,027,992	2,027,992	2,029,317
Debt securities at amortised cost	693,107		693,107	682,112

Investments in equity securities are designated as financial assets at fair value through other comprehensive income and include investments in BIS shares, SWIFT shares and ECB paid-up capital. For these investments, the cost represents the best estimate of fair value.

Special drawing rights within Balances with the IMF are short-term assets translated into kuna using XDR exchange rate at the reporting date; hence, their book value may be regarded as their fair value. Membership quota and liabilities with the IMF have no contractual maturities and because of their nature, they are considered long-term instruments and their fair value cannot be reliably estimated.

The fair values of remaining financial assets and liabilities of the Croatian National Bank are approximately equal to the book values due to the short maturities of the instruments.

Croatian National Bank Financial Statements for the year ended 31 December 2019

36.3 Classification of financial assets and liabilities

Classification of financial assets and liabilities for 2019

(All amounts are expressed in thousands of kuna)				Income statement			Other comprehensive income	ensive income
Category of financial assets/liabilities	Book value as at 31/12/2019	Interest income calculated using the effective interest method	Other interest income	Interest expenses	Net result from financial assets at fair value through profit or loss	Net result from financial assets at fair value through other comprehensive income	Net changes in fair value	Transferred to profit or loss
Financial assets at amortised cost: *	64,344,651	192,749	1	(175,822)	1	I		1
Cash and current accounts with other banks Deposits with other banks	7,351,114	62,608	l	(56,687)	. 1	ı		I
Loans	1,914,408	24,874	1	ı	ı	I	ı	ĺ
Reverse repo agreements	11,467,170	101,322	I	(119,135)	1	ı	1	1
Debt securities at amortised cost	14,365,394	3,945	I	1	ı	ı	1	ı
Balances with the International Monetary Fund Other assets**	9,428,524 4,496,141	I	1	1	ı	I	1	I
Financial assets at fair value through other comprehensive income:	47,498,539	412,740				74,821	1,004,054	(74,821)
Debt securities at fair value through other	47,439,374	412,740	1	1	1	74,821	1,004,054	(74,821)
comprehensive income Equity securities at fair value through other comprehensive income – irrevocable election	59,165	1	l	1	. 1	l	1	I
Financial assets at fair value through profit or loss:	39,405,122	1	169,471	Test	(116,317)	1		1
Held-for-trading securities	38,065,903	I	169,471	ı	(156,365)	ì		1
Non-trading financial assets mandatorily at fair value through profit or loss	1,339,219	i	l	ľ	40,048	l	I	I
Assets under management with international financial institutions	1,331,694	1	I	1	38,762	i	ı	i
Precious metals	7,525	ı	1	1	1,286	1	ĺ	1
Financial liabilities at amortised cost:*	97,378,041	53,891	-	(149,164)	I	1	I	1
Due to banks and other financial institutions	74,624,796	9	1	I	1		1	1
Repo agreements	5,998,829	53,122	1	(89,310)	1	1	ı	1
Due to the State and State institutions	6,712,594	732	1	(59,776)	i	1	1	1
Due to the International Monetary Fund	9,414,492	1	I	I	1	1	I	1
Other liabilities**	627,330	31	I	(78)	i	l	ı	ľ

Croatian National Bank Financial Statements for the year ended 31 December 2019

36.3 Classification of financial assets and liabilities (continued)

Classification of financial assets and liabilities for 2018	es for 2018							
(All amounts are expressed in thousands of kuna)				Income statement			Other comprehensive income	ensive income
Category of financial assets/liabilities	Book value as at 31/12/2018	Interest income calculated using the effective interest method	Other interest income	Interest expenses	Net result from financial assets at fair value through profit or loss	Net result from financial assets at fair value through other comprehensive income	Net changes in fair value	Transferred to profit or loss
Financial assets at amortised cost:	56,303,187	100,556	I	(166,495)				
Cash and current accounts with other banks	9,524,804	1	[1]	1	1
Deposits with other banks	11,426,141	6,438	ı	(44,754)	•	1	1	1
Loans	2,029,317	16,028	l	ı	•	1	•	i
Reverse repo agreements	21,278,988	75,659	ļ	(121,741)	ı	ı	1	1
Debt securities at amortised cost	682,112	2,431	l	•	ı	1	1	1
Balances with the International Monetary Fund	9,248,636	I						
Other assets*	2,113,189	ı	1	1	_	1	1	•
Financial assets at fair value through other comprehensive income:	44,055,495	432,487	1	1		53,330	(54,904)	(53,330)
Debt securities at fair value through other	43,995,277	432,487		1		53,330	(54,904)	(53,330)
comprehensive income Equity securities at fair value through other comprehensive income – irrevocable election	60,218	l	I	I	l	1	1	1
Financial assets at fair value through profit or loss:	39,709,543	1	135,722	1	(76,623)	ı	ī	1
Held-for-trading securities	38,407,144	-	155,722		(101,905)	1	I	
Non-trading financial assets mandatorily at fair value	1,302,399	i	ſ	1	25,280	ı	ı	1
through profit or loss Assets under management with international financial institutions	1,296,161	I	I	I	25,391	ı	l	í
Precious metals	6,238	1	1	dama.	(111)	1	***	1
Financial liabilities at amortised cost:	91,570,573	56,935	1:	(66,599)				
Due to banks and other financial institutions	69,807,221	8	-	**		ľ		ı
Repo agreements	9,219,306	54,382	ı	(62,079)	1	1	1	I
Due to the State and State institutions	2,898,000	2,497	ı	(1,520)	ı	ı	1	1
Due to the International Monetary Fund	9,230,974	1 :	1	ı	1	1	1	1
Other liabilities*	415,072	48	1	1	1	1	ı	1

*During the reporting period there were no effects of the derecognition of financial assets at amortised cost.
**Other assets include negative interest on repo agreements, and other liabilities include negative interest on financial assets.

NOTE 37 – RISK MANAGEMENT

The Croatian National Bank manages international reserves of the Republic of Croatia based on the principles of liquidity and safety. The Bank maintains high liquidity of international reserves and appropriate risk

exposures, and seeks to achieve a favourable return on its investments within the defined limits.

Risks inherent to managing international reserves consist primarily of financial risks such as credit risk, liquidity

risk and market risk. However, attention is given also to operating risk.

Operating risk is the risk of loss due to inappropriate or inefficient internal processes, employees or systems or

due to the events external to the Bank. Operating risk is managed by strict segregation of duties and

responsibilities, formalised methodologies and procedures and by conducting regular internal and external

audits.

NOTE 37.1 – CREDIT RISK

Credit risk is the risk that the counterparty will not settle its liability i.e. the possibility that invested funds will

not be recovered in full or within the planned schedule.

The Croatian National Bank manages its credit risk exposure by investing its international reserve funds into

high-quality instruments with minimum risk, such as government bonds, government guaranteed bonds, bank

bonds with government guarantees and guaranteed bonds, into instruments of international financial

institutions with high credit rating and into both collateralised and non-collateralised deposits. Collateralised

deposits represent deposits secured by government bonds in the amount equal to, or in excess of the value of

the deposit. Uncollateralised deposits are invested only with central banks and international financial

institutions.

Its assessment of counterparties' creditworthiness is based on ratings of major internationally recognized rating

agencies (Moody's, Standard & Poor's, and Fitch).

International reserves placements are limited per types of issuer and per types of financial institutions, which

diversifies credit risk.

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The Croatian National Bank invests the international reserve funds in government bonds and government guaranteed bonds of countries rated Aaa to Baa3 (Moody's), guaranteed bonds with ratings from Aaa to Aa2, reverse repo agreements with commercial banks with ratings of Aaa to Baa3, deposits with central banks rated Aaa to Baa3, instruments with international financial institutions rated Aaa to A2, and deposits placed with commercial banks rated Aaa to A3 for the purpose of carrying out foreign currency transactions.

Presentation of financial assets exposed to credit risk in the tables Maximum exposure to credit risk and credit risk by counterparty credit rating and Geographical concentration of credit risk (Notes 37.1.1 and 37.1.2) differ from the presentation in the Statement of Financial Position as they are based on management reports. Reconciliation is not practicable. Some of the differences are:

- Line item Deposits in Notes 37.1.1 and 37.1.2 includes line items Cash and current accounts with other banks, Deposits with other banks and Balances with the International Monetary Fund from the Statement of Financial Position. Additionally, deposits are split by currency and recipient (international financial institutions, foreign and domestic banks). Balances of deposits presented in Notes 37.1.1 and 37.1.2 include accrued negative interest, included in line item Other liabilities in the Statement of Financial Position.
- Securities are divided by financial asset category in the Statement of Financial Position, while they are additionally divided by issuer and currency in tables Maximum exposure to credit risk and credit risk by counterparty credit rating and Geographical concentration of credit risk.
- Line item Reverse repo agreements from the Statement of Financial Position is divided per currency in Notes 37.1.1 and 37.1.2 and includes accrued negative interest presented in line item Other liabilities in the Statement of Financial Position.
- Line item Other financial assets denominated in foreign currency and Other financial assets in kuna presented in Notes 37.1.1 and 37.1.2 are part of line item Other assets in the Statement of Financial Position.

NOTE 37.1 – CREDIT RISK (continued)

37.1.1 Maximum exposure to credit risk and credit risk by counterparty credit rating

Potential parameter securities Aaaa 18,683,460 16,405,704 16	(All amounts are expressed in thousands of kuna)	Rating (Moody's)		31/12/2019	31/12/2018
Aaa 18,683,460 16,405,704 Aa1 853,951 541,447 Aa2 4,133,020 9,133,250 Aa3 67,922 188,661 A2 -	Foreign currency securities held for trading				
Aa1	Government securities				
Aa2		Aaa		18,683,460	16,405,704
Aa3 67,922 185,661 A2 - 371,597 Baa1 1,192,419 3,045,501 AAA 4 3,256,714 3,598,877 AAA 4 3,222,420 559,210 AA+ 6 - 37,247 AA 113,339 820,717 AAA 4 3,2623,245 34,640,191 AAA 5,23,757 - AAA 6 523,757 - AAA 7 523,757 - AAA AAA 7 5,275 AAA AAA 8 2,892,683 1,671,505 AAA AAA 8 4,893,793 A43,71,893,893 A43,71,893,893 A43,71,893,893 A43,71,893,893 A43,71,893,893 A43,71,893,893 A43,71,893,893,893,893,893,893,893,893,893,893		Aa1		853,951	541,447
A2		Aa2		4,133,020	9,133,250
Baal 1,192,419 3,045,501 Baa3 4,356,714 3,559,857 AAA a 3,222,420 539,210 AAA a 113,339 820,717 Total government securities a 3,623,245 34,640,191 Guaranteed bonds Aaa 2,892,683 1,671,505 AAA a 523,757 — Total guaranteed bonds AAA a 523,757 — Securities of international financial institutions Aaa 219,450 248,105 Securities of international financial institutions a 904,787 1,448,282 Bank bonds with government guarantees 904,787 1,448,282 Bank bonds with government guarantees 32,2500 223,402 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aa1 650,268 — Aa2 1,326,726 — Aa3 1,538,187 —		Aa3		67,922	185,661
Baa3 4,356,714 3,559,857 AAA a 3,222,420 539,210 AAA b — 37,247 AAA b — 37,247 AAA a 113,339 820,717 Total government securities 32,623,245 34,640,191 Guaranteed bonds Aaa 2,892,683 1,671,505 AAAA a 523,757 — Total guaranteed bonds Aaa 219,450 248,105 Securities of international financial institutions Aaa 219,450 248,105 Securities of international financial institutions a 904,787 1,651,631 Total securities of international financial institutions a 904,787 1,448,282 Bank bonds with government guarantees Aaa 798,931 423,764 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities at amortised cost 882,150 79,168 Government securities Aaa 822,150 79,168		A2		_	371,597
AAA a AAA a 3,222,420 559,210 AAA b AAA a 113,339 820,717 Total government securities 32,623,245 34,640,191 Guaranteed bonds Aaa 2,892,683 1,671,505 AAAA a 523,757 — Total guaranteed bonds AAA 523,757 — Securities of international financial institutions Aaa 219,450 248,105 Securities of international financial institutions Aaa 219,450 248,105 Aa1 Aa58,337 1,051,631 Aa 148,546 Total securities of international financial institutions 904,787 1,448,282 Bank bonds with government guarantees Aaa 798,931 423,764 Total bank bonds with government guarantees 38,065,903 38,407,144 Foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa2 1,326,726 —		Baa 1		1,192,419	3,045,501
AAA		Baa3		4,356,714	3,559,857
AA		AAA	а	3,222,420	539,210
Total government securities 32,623,245 34,640,191 Guaranteed bonds Aaa 2,892,683 1,671,505 AAAA a 523,757 — Total guaranteed bonds Securities of international financial institutions Aaa 219,450 248,105 Aa1 685,337 1,051,631 No rating d — 148,546 Total securities of international financial institutions Bank bonds with government guarantees Aaa 798,931 425,764 Aa1 322,500 223,402 Total bank bonds with government guarantees Total foreign currency securities held for trading Aaa 822,150 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 — Aa2 1,326,726 — Aa3 1,538,187 — Aa2 1,326,726 — Aa3 1,538,187 — Aa3 1,538,187 — Aa3 784,369 257,788 AAAA 6 784,369 257,788 AAAA 6 784,369 257,788 AAAA 6 784,369 257,788		AA+	ь	_	37,247
Aaa 2,892,683 1,671,505 AAA a 523,757 — Total guaranteed bonds 3,416,440 1,671,505 Total guaranteed bonds Aaa 219,450 248,105 Aa1 685,337 1,051,631 No rating d — 148,546 Aa1 322,500 223,402 Aa1 322,500 223,402 Aa1 Aaa 322,500 223,402 Aa1 Aaa 322,500 Aa1 Aaa Aaaa Aaa A		AA	а	113,339	820,717
Aaa 2,892,683 1,671,505 AAAA a 523,757 — Total guaranteed bonds 3,416,440 1,671,505 Securities of international financial institutions Aaa 219,450 248,105 Aa1 685,337 1,051,631 No rating d — 148,546 Total securities of international financial institutions 904,787 1,448,282 Bank bonds with government guarantees Aaa 798,931 423,764 Aa1 322,500 223,402 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 — Aa2 1,326,726 — Aa3 1,538,187 — A2 2,211,561 — Baa1 3,771,556 — AAA c 784,369<	Total government securities		_	32,623,245	34,640,191
AAA a 523,757 - Total guaranteed bonds 3,416,440 1,671,505 Securities of international financial institutions Aaa 219,450 248,105 Aa1 685,337 1,051,631 No rating d - 148,546 Total securities of international financial institutions 904,787 1,448,282 Bank bonds with government guarantees Aaa 798,931 423,764 Aa1 322,500 223,402 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 - Aa2 1,326,726 - Aa3 1,538,187 - Aa2 2,211,561 - Baa1 3,771,556 - AAA c 784,369 257,788 AAA c 784,369 257,788	Guaranteed bonds				
Total guaranteed bonds 3,416,440 1,671,505 Securities of international financial institutions Aaa 219,450 248,105 Aa1 685,337 1,051,631 No rating d		Aaa		2,892,683	1,671,505
Securities of international financial institutions Aaa 219,450 248,105 Aa1 685,337 1,051,631 No rating d — 148,546 Total securities of international financial institutions 904,787 1,448,282 Bank bonds with government guarantees Aaa 798,931 423,764 Aa1 322,500 223,402 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 — Aa2 1,326,726 — Aa3 1,538,187 — A2 2,211,561 — Baa1 3,771,556 — AAA e 784,369 257,788 AA+ b 148,822 —		AAA	a	523,757	_
Aaa 219,450 248,105 Aa1 685,337 1,051,631 No rating d — 148,546 Total securities of international financial institutions 904,787 1,448,282 Bank bonds with government guarantees Aaa 798,931 423,764 Aa1 322,500 223,402 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 — Aa2 1,326,726 — Aa3 1,538,187 — A2 2,211,561 — Baa1 3,771,556 — AAA 6 784,369 257,788 AA+ b 148,822 —	Total guaranteed bonds		_	3,416,440	1,671,505
Aa1	Securities of international financial institutions				
No rating d		Aaa		219,450	248,105
Total securities of international financial institutions		Aa1		685,337	1,051,631
Aaa 798,931 423,764 Aa1 322,500 223,402 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aaa 822,150 79,168 Aaa 822,150 79,168 Aaa 822,150 79,168 Aaa 1,336,726 -		No rating	d _	_	148,546
Aaa 798,931 423,764 Aa1 322,500 223,402 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 - Aa2 1,326,726 - Aa3 1,538,187 - A2 2,211,561 - Baa1 3,771,556 - AAA e 784,369 257,788 AA+ b 148,822 -	Total securities of international financial institutions			904,787	1,448,282
Aa1 322,500 223,402 Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost	Bank bonds with government guarantees				
Total bank bonds with government guarantees 1,121,431 647,166 Total foreign currency securities held for trading 38,065,903 38,407,144 Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 - Aa2 1,326,726 - Aa3 1,538,187 - A2 2,211,561 - Baa1 3,771,556 - AAA e 784,369 257,788 AA+ b 148,822 -					
Total foreign currency securities held for trading Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 - Aa2 1,326,726 - Aa3 1,538,187 - A2 2,211,561 - Baa1 3,771,556 - Baa1 3,771,556 - AAA e 784,369 257,788 AA+ b 148,822 -		Aa1	-		· · · · · · · · · · · · · · · · · · ·
Foreign currency securities at amortised cost Government securities Aaa 822,150 79,168 Aa1 650,268 - Aa2 1,326,726 - Aa3 1,538,187 - A2 2,211,561 - Baa1 3,771,556 - AAA e 784,369 257,788 AA+ b 148,822 -			_		647,166
Government securities Aaa 822,150 79,168 Aa1 650,268 — Aa2 1,326,726 — Aa3 1,538,187 — A2 2,211,561 — Baa1 3,771,556 — AAA e 784,369 257,788 AA+ b 148,822 —	Total foreign currency securities held for trading			38,065,903	38,407,144
Aaa 822,150 79,168 Aa1 650,268 — Aa2 1,326,726 — Aa3 1,538,187 — A2 2,211,561 — Baa1 3,771,556 — AAA e 784,369 257,788 AA+ b 148,822 —	Foreign currency securities at amortised cost				
Aa1 650,268 — Aa2 1,326,726 — Aa3 1,538,187 — A2 2,211,561 — Baa1 3,771,556 — AAA e 784,369 257,788 AA+ b 148,822 —	Government securities				
Aa2 1,326,726 — Aa3 1,538,187 — A2 2,211,561 — Baa1 3,771,556 — AAA e 784,369 257,788 AA+ b 148,822 —		Aaa		822,150	79,168
Aa3 1,538,187 — A2 2,211,561 — Baa1 3,771,556 — AAA e 784,369 257,788 AA+ b 148,822 —		Aa1		650,268	_
A2 2,211,561 — Baa1 3,771,556 — AAA e 784,369 257,788 AA+ b 148,822 —		Aa2		1,326,726	– ,
A2 2,211,561 Baa1 3,771,556 AAA e 784,369 257,788 AA+ b 148,822		Aa3		1,538,187	_
Baa1 3,771,556 — AAA e 784,369 257,788 AA+ b 148,822 —		A2		2,211,561	-
AA+ b 148,822 -		Baa 1			_
AA+ b148,822		AAA	e	784,369	257,788
Total government securities 11,253,639 336,956		AA+	Ь	148,822	_
	Total government securities		-	11,253,639	336,956

NOTE 37.1 – CREDIT RISK (continued)

37.1.1 Maximum exposure to credit risk and credit risk by counterparty credit rating (continued)

(All amounts are expressed in thousands of kuna)	Rating (Moody's)		31/12/2019	31/12/2018
Guaranteed bonds				
	Aaa		975,132	_
	AAA	ь _	222,629	-
Total guaranteed bonds			1,197,761	_
Securities of international financial institutions				
	Aaa		298,626	145,176
	Aa1	_	869,868	200,064
Total securities of international financial institutions			1,168,494	345,240
Bank bonds with government guarantees				
	Aa1	_	753,187	
Total bank bonds with government guarantees		_	753,187	-
Foreign currency securities at amortised cost		_	14,373,081	682,196
Expected credit losses		_	(7,687)	(84)
Total foreign currency securities at amortised cost			14,365,394	682,112
Foreign currency debt securities at fair value through other comprehensive income				
Government securities				
	Aaa		9,117,069	6,583,197
	Aa1		6,110,833	6,861,422
	Aa2		19,134,683	19,250,254
	Aa3		5,854,725	6,203,176
	A2	e	896,384	891,057
	AAA	ь	856,618	830,818
	AA+	a	612,663	597,032
Total government consuiting	AA		587,098	32,278
Total government securities Guaranteed bonds			43,170,073	41,249,234
Guaranteeu bonus	Aaa		657,082	
Total guaranteed bonds	Ada	_	657,082	-
Securities of international financial institutions			037,082	_
	Aaa		1,556,041	1,469,999
	Aa1		985,134	751,106
Total securities of international financial institutions		· -	2,541,175	2,221,105
Bank bonds with government guarantees			, ,	., .,
	_. Aaa		232,566	
	Aa1		838,478	524,938
Total bank bonds with government guarantees		_	1,071,044	524,938
Foreign currency debt securities at fair value through other comprehensive income		_	47,439,374	43,995,277
Total foreign currency securities			99,870,671	83,084,533

NOTE 37.1 – CREDIT RISK (continued)

37.1.1 Maximum exposure to credit risk and credit risk by counterparty credit rating (continued)

(All amounts are expressed in thousands of kuna)	Rating (Moody's)		31/12/2019	31/12/2018
Foreign currency reverse repo agreements				
	Aaa		6,637,485	7,395,964
	Aa1		_	2,594,708
	Aa2		807,767	3,146,014
	Aa3		731,316	1,004,569
	Baa 1		2,155,779	5,440,351
	AAA	е	187,272	777,228
	AAA	a	193,328	_
	AA+	b	748,791	909,795
Foreign currency reverse repo agreements		_	11,461,738	21,268,629
Expected credit losses		_	(571)	(1,079)
Total foreign currency reverse repo agreements			11,461,167	21,267,550
Foreign currency deposits				
	Aaa		4,383,099	6,566,970
	Aa1		96	70
	Aa2		2,198,573	2,099,459
	Aa3		3,139	510
	A1		237	318
	A2		12,990,052	9,193,360
	A3		32	162
	No rating	c _	60	55
Total deposits			19,575,288	17,860,904
Deposits with international financial institutions	No rating	d 	2,942,032	2,887,939
Foreign currency deposits		_	22,517,320	20,748,843
Expected credit losses			(9,006)	(7,026)
Total foreign currency deposits			22,508,314	20,741,817

NOTE 37.1 – CREDIT RISK (continued)

37.1.1 Maximum exposure to credit risk and credit risk by counterparty credit rating (continued)

(All amounts are expressed in thousands of kuna)	Rating (Moody's)	31/12/2019	31/12/2018
Other foreign currency financial assets			
	Aaa	4,467,861	2,061,243
	Aa3	359	1,180
	A1	273	319
	A2	331	_
	Baa 1	22	2,311
Other foreign currency financial assets		4,468,846	2,065,053
Expected credit losses			
Total other foreign currency financial assets		4,468,846	2,065,053
Kuna loans			
	No rating	1,914,948	2,029,892
Expected credit losses		(540)	(575)
Total loans in kuna		1,914,408	2,029,317
Kuna deposits			
Other deposits of domestic commercial banks			
	BBB—	1,129	1,232
V 1	No rating	1,817	4,136
Kuna deposits		2,946	5,368
Expected credit losses		(8)	(21)
Total kuna deposits		2,938	5,347
Other financial assets in kuna			
	No rating	34,821_	55,700
Expected credit losses		(7,526)	(7,564)
Total other financial assets in kuna		27,295	48,136
TOTAL		140,253,639	129,241,753

 ^a The ratings according to Fitch Ratings and Standard&Poor's.
 ^b The ratings according to Standard & Poor's.
 ^c Demand funds with Clearstream.
 ^d Investments in the BIS and IMF which are not rated, but are considered institutions of high-credit score.
 ^c The ratings according to Fitch Ratings.

NOTE 37.1 – CREDIT RISK (continued)

37.1.2 Geographical concentration of credit risk

(All amounts are expressed in thousands of kuna)

As at 31 December 2019

Instrument	Euro area	Other	Total
Government securities	77,667,745	9,379,212	87,046,957
Guaranteed bonds	5,271,283	_	5,271,283
Securities of international financial institutions	3,910,446	704,010	4,614,456
Bank bonds with government guarantees	2,945,662	-	2,945,662
Total foreign currency securities	89,795,136	10,083,222	99,878,358
Foreign currency reverse repo	6,210,319	5,251,419	11,461,738
agreements			
Deposits	19,566,492	8,796	19,575,288
Deposits with international financial institutions	-	2,942,032	2,942,032
Total foreign currency deposits	19,566,492	2,950,828	22,517,320
Other foreign currency financial assets	_	4,468,846	4,468,846
Loans in Croatia	-	1,914,948	1,914,948
Kuna deposits		2,946	2,946
Other financial assets in kuna		34,821	34,821
TOTAL 31 December 2019	115,571,947	24,707,030	140,278,977
•		Total expected credit losses	(25,338)
		TOTAL	140,253,639

Note: The table shows gross carrying amount of financial instruments.

NOTE 37.1 – CREDIT RISK (continued)

37.1.2 Geographical concentration of credit risk (continued)

(All amounts are expressed in thousands of kuna)

As at 31 December 2018

Instrument	Euro area	Other	Total
Government securities	69,007,855	7,218,526	76,226,381
Guaranteed bonds	1,671,505	_	1,671,505
Securities of international financial institutions	3,522,728	491,899	4,014,627
Bank bonds with government guarantees	1,172,104	_	1,172,104
Total foreign currency securities	75,374,192	7,710,425	83,084,617
Foreign currency reverse repo	11,885,761	9,382,868	21,268,629
agreements			
Deposits	17,855,781	5,123	17,860,904
Deposits with international financial institutions	_	2,887,939	2,887,939
Total foreign currency deposits	17,855,781	2,893,062	20,748,843
Other foreign currency financial assets	· –	2,065,053	2,065,053
Loans in Croatia	_	2,029,892	2,029,892
Kuna deposits	_	5,368	5,368
Other financial assets in kuna	_	55,700	55,700
TOTAL 31 December 2018	105,115,734	24,142,368	129,258,102
-		Total expected credit losses	(16,349)
		TOTAL	129,241,753

Note: The table shows gross carrying amount of financial instruments.

37.1.3 Model for the calculation of expected credit losses

The calculation of expected credit losses at the Croatian National Bank is made according to the following formula:

$ECL = EAD \times LGD \times PD$

where:

- EAD is exposure at default;
- LGD is loss given default;
- PD is probability of default.

In the ECLC application the CNB calculates the ECL at the lowest technically possible analytical level, taking into account the logic of granularity of the ECL calculation, but guided by the conservatism principle typical of central bank operations.

The estimate of ECL reflects an unbiased and probability weighted amount that is determined by the assessment of three possible scenarios (realistic, pessimistic and optimistic scenarios). According to peer review results, three different PD values are defined according to the realistic, pessimistic and optimistic scenario for ECL calculation. In the pessimistic scenario, the PD/ECL value is 25% higher than in the real scenario, whereas in the optimistic scenario it is 25% lower than in the realistic scenario.

EAD is the gross carrying amount of a financial instrument on the date of initial recognition, that is, on the date of the ECL calculation.

LGD or loss given default means the ratio of loss on exposure due to the default of the other contractual party and the exposure amount at the time of default. LGD determines the amount of the possible loss, that is, the part of the exposure that the CNB can lose.

PD is the probability of default of the other contractual party during a one-year period.

PD for the twelve-month period is calculated by means of three internally developed models:

- 1. internal model for the calculation of PD for foreign currency financial instruments that are part of international reserves;
- 2. internal model for the calculation of PD for kuna financial instruments;
- 3. internal model for other receivables.

PD for the lifetime period is calculated by means of the matrix multiplication concept, with the starting point being the calculated PD value for 12-month ECL calculation.

37.1.4 Changes in loss allowances for expected credit losses

Changes in loss allowances for expected credit losses 1 January – 31 December 2019 (All amounts are expressed in thousands of kuna)

Financial assets	Loss allowance for expected credit losses as at 1 January 2019	(Decrease) in loss allowance during the period	Increase in loss allowance during the period	Net effect of (decrease)/increase in loss allowances	Loss allowance for expected credit losses as at 31 December 2019
Cash and current accounts with other banks	297	(333)	240	(93)	204
Deposits with other banks	6,750	(29,217)	31,277	2,060	8,810
Loans	575	(663)	628	(35)	540
Reverse repo agreements	1,079	(5,886)	5,378	(508)	571
Debt securities at amortised cost	84	(1,112)	8,715	7,603	7,687
Financial assets at fair value through other comprehensive income — debt instruments	11,712	(2,317)	2,968	651	12,363
Other financial assets	7,564	(42)	4	(38)	7,526
TOTAL	28,061	(39,570)	49,210	9,640	37,701

Gains from and losses on loss allowances for expected credit losses are translated into kuna based on the exchange rate valid on the transaction date, while loss allowances for expected credit losses reported in foreign currencies are again translated at the date of the Statement of Financial Position using the exchange rate valid on that date. The total increase in loss allowances for expected credit losses in the reporting period is HRK 9,640 thousands. In the income statement, line item Decrease/(increase) in impairment shows an increase in loss allowances for expected credit losses in the amount of HRK 9,519 thousands (see Note 11), while net negative exchange differences in line items loss allowances for expected credit losses totalling HRK 121 thousands are shown in line item Net unrealised exchange differences (see Note 8).

Changes in loss allowances for expected credit losses 1 January - 31 December 2018

(All amounts are expressed in thousands of kuna)

Financial assets	Loss allowance for expected credit losses as at 1 January 2018	(Decrease) in loss allowance during the period	Increase in loss allowance during the period	Net effect of (decrease)/increase in loss allowances	Loss allowance for expected credit losses as at 31 December 2018
Cash and current accounts with other banks	758	(1,594)	1,133	(461)	297
Deposits with other banks	259	(7,024)	13,515	6,491	6,750
Loans	242	(339)	672	333	575
Reverse repo agreements	853	(4,687)	4,913	226	1,079
Debt securities at amortised cost	-	(9)	93	84	84
Financial assets at fair value through other comprehensive income — debt instruments	14,008	(3,763)	1,467	(2,296)	11,712
Other financial assets	7,603	(47)	8	(39)	7,564
TOTAL	23,723	(17,463)	21,801	4,338	28,061

Gains from and losses on loss allowances for expected credit losses are translated into kuna based on the exchange rate valid on the transaction date, while loss allowances for expected credit losses reported in foreign currencies are again translated at the date of the Statement of Financial Position using the exchange rate valid on that date. The total increase in loss allowances for expected credit losses in the reporting period is HRK 4,338 thousands. In the income statement, line item Decrease/(increase) in impairment shows an increase in loss allowances for expected credit losses in the amount of HRK 4,493 thousands (see Note 11), while net positive exchange differences in line items loss allowances for expected credit losses totalling HRK 155 thousands are shown in line item Net unrealised exchange differences (see Note 8).

37.1.5 Loss allowances for expected credit losses by the stage of credit quality of financial instruments

Loss allowances for expected credit losses by the stage of credit quality of financial instruments in 2019 (All amounts are expressed in thousands of kuna)

Pinanial anni		Loss allowance for expected credit losses as at 1 January 2019				Loss allowance for expected credit losses as at 31 December 2019			
Financial assets	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	
Cash and current accounts with other banks	297	-		297	204	-	_	204	
Deposits with other banks	6,750		-	6,750	8,810		_	8,810	
Loans	573	_	2	575	538	_	2	540	
Reverse repo agreements	1,079	_	_	1,079	571	_	_	571	
Debt securities at amortised cost	84	_	_	84	7,687	-	_	7,687	
Financial assets at fair value through other comprehensive income – debt instruments	11,712	_	_	11,712	12,363	-	_	12,363	
Other financial assets	74	_	7,490	7,564	36	_	7,490	7,526	
TOTAL	20,569	_	7,492	28,061	30,209		7,492	37,701	

Loss allowances for expected credit losses by the stage of credit quality of financial instruments in 2018 (All amounts are expressed in thousands of kuna)

F:		Loss allowance for expected credit losses as at 1 January 2018				Loss allowance for expected credit losses as at 31 December 2018			
Financial assets	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	
Cash and current accounts with other banks	758	-	_	758	297	_	-	297	
Deposits with other banks	259	_	_	259	6,750	_		6,750	
Loans	240		2	242	573	· –	2	575	
Reverse repo agreements	853	_		853	1,079	_	-	1,079	
Debt securities at amortised cost	_	_	-	_	84	-	_	84	
Financial assets at fair value through other comprehensive income – debt instruments	14,008	_	_	14,008	11,712	-	_	11,712	
Other financial assets	113	_	7,490	7,603	74	_	7,490	7,564	
TOTAL	16,231		7,492	23,723	20,569		7,492	28,061	

Note: Financial assets in stage 3 are not secured by collateral.

NOTE 37.2 – LIQUIDITY RISK

Liquidity risk is the risk of inability to settle all the liabilities and obligations arising from the operations of the Croatian National Bank as they fall due. Hence, the Croatian National Bank has to ensure, through its strategy, sufficient liquid funds on a daily basis to settle all of its liabilities and commitments.

Liquidity risk is controlled by investing the international reserve funds into highly marketable bonds and partly in deposit instruments with short maturities.

Liquid funds include all assets that are convertible into cash within a period of one to three days. The Croatian National Bank invests international reserves into deposits with maturities of up to three months and into securities with maturities of less than ten years, provided that those securities are readily convertible into cash at any time.

At 31 December 2019, approximately 68% of net international reserves were liquid (2018: approximately 70% of net international reserves were liquid).

NOTE 37.2 - LIQUIDITY RISK (continued)

In the following tables, the financial liabilities of the Croatian National Bank are classified into relevant groupings by remaining contractual maturity from the reporting date. The tables have been drawn up based on the undiscounted cash flows of financial liabilities on the earliest date on which payment could be required and include both interest and principal cash flows, as well as future interest expenses.

(All amounts are expressed in thousands of kuna)

As at 31 December 2019

As at 31 December 2013	Up to 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	Over 5 years	Total	Carrying amount
Liabilities							
Banknotes and coins in							
circulation	38,734,616	-	_	_	_	38,734,616	38,734,616
Due to banks and other							
financial institutions	74,624,724	_	_	_	72	74,624,796	74,624,796
Repo agreements	6,000,453	_		_	_	6,000,453	5,998,829
Due to the State and							
State institutions	6,712,594	_	_	_	_	6,712,594	6,712,594
Due to the International							
Monetary Fund	_	_	_	_	9,414,492	9,414,492	9,414,492
Other liabilities	492,706	138,962	59,767	_	516	691,951	687,097
Total liabilities	126,565,093	138,962	59,767		9,415,080	136,178,902	136,172,424

As at 31 December 2018

	Up to 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	Over 5 years	Total	Carrying amount
Liabilities							
Banknotes and coins in							
circulation	35,046,160	-	_	_	_	35,046,160	35,046,160
Due to banks and other							
financial institutions	69,807,149		_		72	69,807,221	69,807,221
Repo agreements	9,219,390	_		_	_	9,219,390	9,219,306
Due to the State and							
State institutions	2,898,000		_	_	_	2,898,000	2,898,000
Due to the International							
Monetary Fund	_	-	_	_	9,230,974	9,230,974	9,230,974
Other liabilities	400,752	24,556	46,766		623	472,697	461,838
Total liabilities	117,371,451	24,556	46,766		9,231,669	126,674,442	126,663,499

NOTE 37.3 – MARKET RISK

Market risk is the risk of fluctuations in fair value or future cash flows of a financial instrument due to changes in market prices. Market risk includes currency risk, interest rate risk and other price risks.

Foreign exchange risk (risk of changes in value of one currency against another) is the risk of fluctuation in fair value or future cash flows of a financial instrument due to changes in foreign exchange rates.

Interest rate risk is the risk of fluctuations in fair value or future cash flows of a financial instrument due to changes in market interest rates.

Other price risks include the risk of fluctuations in fair value or future cash flows of financial instruments due to changes in market prices that do not arise from interest rate or foreign exchange risk.

NOTE 37.3.1 - Foreign exchange risk

The Croatian National Bank holds most of its assets in foreign currencies, which exposes it to foreign exchange risk in terms of fluctuations in the exchange rates of the kuna against the euro and the US dollar, which affect the Income Statement and, consequently, the financial performance of the Croatian National Bank.

The Croatian National Bank takes on exposure to foreign exchange risk only in respect of the net international reserves, covering part of the reserves it manages in accordance with its own guidelines. A high proportion of the euro contributes to reducing volatility due to the stable exchange rate of the euro against the kuna. Although VaR analysis for foreign exchange risk and various stress tests are made, the currency structure is not defined by these measures but primarily by the currency structure of debt and imports. Accordingly, VaR limits are not set, nor is back-testing implemented.

The portion of international reserves formed out of the allocated foreign exchange reserve requirement, the Ministry of Finance funds, repo deals and funds in Special Drawing Rights (XDR) is managed passively, based on the currency structure of foreign currency obligations; hence, there is no exposure to foreign exchange risk on this basis.

Currency VaR for a period of one year with a confidence level of 95% is HRK 3.6 billion.

NOTE 37.3.1 – Foreign exchange risk (continued)

37.3.1.1 Sensitivity analysis – impact of percentage fluctuations in exchange rates on the Income Statement

2019 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2019	USD	EUR
Exchange rate appreciation/depreciation	+/-5%	+/-1%
Impact of fluctuations in exchange rates on the	1,004,136/(1,004,136)	1,074,532/(1,074,532)
Income Statement		

The table above shows the sensitivity of the result of the CNB reported in the Income Statement for the year in the case of an increase/decrease in the EUR/HRK exchange rate by $\pm 1\%$ and in the case of an increase/decrease in the USD/HRK exchange rate by $\pm 5\%$. Historically, the yearly volatility of the USD/HRK exchange rate has been five times higher than the EUR/HRK exchange rate volatility.

A positive figure denotes an increase in the result of the Income Statement if the Croatian kuna exchange rate appreciates against the relevant currency by the percentages specified above (i.e. the kuna value depreciates in relation to the relevant currency), while the negative figure denotes a decrease in the result of the Income Statement if the Croatian kuna exchange rate depreciates against the relevant currency (i.e. the kuna value appreciates in relation to relevant currency).

In case of a 1% decrease in the EUR/HRK exchange rate as at 31 December 2019, the result of the CNB reported in the Income Statement for the year would be lower by approximately HRK 1,074,532 thousands, while for a 5% decrease in the USD/HRK exchange rate, the result would be lower by approximately HRK 1,004,136 thousands.

Calculation methodology

The amount of the net euro and net US dollar international reserves as at balance sheet date is multiplied by the difference between the EUR/HRK exchange rate or the USD/HRK exchange rate valid at that date and those rates increased/decreased by the relevant percentages.

2018 Sensitivity analysis

2018	USD	EUR
Exchange rate appreciation/depreciation	+/-5%	+/-1%
Impact of fluctuations in exchange rates on the Income Statement	816,681/(816,681)	1,010,146/(1,010,146)

NOTE 37.3.1 – Foreign exchange risk (continued)

37.3.1.2 CNB exposure to foreign exchange risk – analysis of assets and liabilities by currency

As at 31 December 2019

As at 31 December 2019						
	EUR	USD	XDR	Other foreign currencies	HRK	Total
Assets						
Cash and current accounts						
with other banks	7,341,123	4,283		5,344	364	7,351,114
Deposits with other banks	14,772,299	546,663	-	-	2,938	15,321,900
Financial assets at fair value						
through profit or loss	32,265,349	7,132,248		_	7,525	39,405,122
Loans	_	_	_	_	1,914,408	1,914,408
Reverse repo agreements Debt securities at amortised	9,274,570	2,192,600		_	_	11,467,170
cost Balances with the International	14,365,394	-	_	-	-	14,365,394
Monetary Fund Debt securities at fair value through other comprehensive	-	-	9,428,524	-	-	9,428,524
income Equity securities at fair value through other comprehensive	35,297,696	12,141,678	_	_	_	47,439,374
income – irrevocable election Investments accounted for	-	-	-	-	59,165	59,165
using the equity method	_	_	_	_	25,736	25,736
Other assets Property, plant, equipment and	4,471,050	9	_	1	536,340	5,007,400
intangible assets					620,824	620,824
Total assets	117,787,481	22,017,481	9,428,524	5,345	3,167,300	152,406,131
Liabilities Banknotes and coins in						
circulation Due to banks and other	-	_	-		38,734,616	38,734,616
financial institutions	4,467,861	_	_		70,156,935	74,624,796
Repo agreements Due to the State and State	4,065,227	1,933,602	_	_	_	5,998,829
institutions Due to the International	59,153	6,336	-	4,514	6,642,591	6,712,594
Monetary Fund	_	-	9,414,492	-	_	9,414,492
Other liabilities	17,259	15	6,422	15	663,386	687,097
Total liabilities	8,609,500	1,939,953	9,420,914	4,529	116,197,528	136,172,424
Net position	109,177,981	20,077,528	7,610	816	(113,030,228)	16,233,707

NOTE 37.3.1 – Foreign exchange risk (continued)

37.3.1.2 CNB exposure to foreign exchange risk – analysis of assets and liabilities by currency (continued)

(All amounts are expressed in thousands of kuna)

As at 31 December 2018

Name	As at 31 December 2016				0.1		
Cash and current accounts with other banks 9,518,562 3,783 — 2,106 353 9,524,804 Deposits with other banks 10,986,223 434,571 — 6 5,547 11,426,141 Financial assets at fair value through profit or loss 32,471,228 7,232,077 — 6 — 2,029,317 2,029,517 Reverse repo agreements Debt securities at amortised cost 682,112 — 6 — 7 — 2,029,317 2,029,317 Balances with the International Monetary Fund — 7 9,248,636 — 7 — 9,248,636 Debt securities at fair value through other comprehensive income 35,654,483 8,360,794 — 7 — 7 43,995,277 Equity securities at fair value through other comprehensive income — irrevocable election — 7 — 7 — 7 — 7 43,995,277 Equity securities at fair value through other comprehensive income — irrevocable election — 7 — 7 — 7 — 60,218 60,218 Investments accounted for using the equity method — 7 — 7 — 7 — 7 — 7 23,617 23,617 23,617 23,617 20,77,237 Prope		EUR	USD	XDR		HRK	Total
with other banks 9,518,562 3,783 — 2,106 353 9,524,804 Deposits with other banks 10,986,223 434,571 — 2 5,347 11,426,141 Financial assets at fair value through profit or loss 32,471,228 7,232,077 — 6 2,029,317 2,029,317 2,029,317 2,029,317 2,029,318 2,029,317 2,029,317 2,029,318 2,029,317 2,029,318 6,0218 1,029,318 2,029,318 2,029,318 2,029,318 2,029,318 2,029,318 2,029,318 2,029,318 2,029,317 2,029,317 2,029,317 2,029,317 2,029,317 2,029,317 2,029,318 2,029,318 2,029,317	Assets						
Prinancial assets at fair value through profit or loss 32,471,228 7,232,077	Cash and current accounts						
Financial assets at fair value through profit or loss 32,471,228 7,232,077 - - 6,238 39,709,543	with other banks	9,518,562	3,783	_	2,106	353	9,524,804
through profit or loss 32,471,228 7,232,077 — — 6,238 39,709,543 Loans — — — — 2,029,317 2,029,317 2,029,317 Reverse repo agreements 20,841,834 437,154 — — 2,029,317 2,029,317 Reverse repo agreements 20,841,834 437,154 — — 2,029,317 2,029,317 2,029,317 Reverse repo agreements 20,841,834 437,154 — — — 2,1278,988 2,128 3,123 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 3,124,328 <	Deposits with other banks	10,986,223	434,571	-	_	5,347	11,426,141
through profit or loss 32,471,228 7,232,077 — — 6,238 39,709,543 Loans — — — — 2,029,517 2,029,517 2,029,517 Reverse repo agreements 20,841,834 437,154 — — 2,029,317 2,1278,988 20,248,636 — — 2,1278,988 2,1288,128	Financial assets at fair value						
Reverse repo agreements		32,471,228	7,232,077	_	_	6,238	39,709,543
Debt securities at amortised cost 682,112 Cost Cos	Loans		_	_	_	2,029,317	2,029,317
Balances with the International Monetary Fund		20,841,834	437,154	_	_	_	21,278,988
Monetary Fund – 9,248,636 – – 9,248,636 Debt securities at fair value through other comprehensive income 35,634,483 8,360,794 – – – 43,995,277 Equity securities at fair value through other comprehensive income – irrevocable election Investments accounted for using the equity method – – – 60,218 60,218 Investments accounted for using the equity method – – – – 23,617 23,617 Other assets 2,066,974 17 – – 510,246 2,577,237 Property, plant, equipment and intangible assets – – – – 579,046 579,046 Total assets 112,201,416 16,468,396 9,248,636 2,106 3,214,382 141,134,936 Liabilities Banknotes and coins in circulation – – – – 579,046 35,046,160 35,046,160 35,046,160 Due to banks and other financial institutions 2,061,243 – – – 67,745,978 69,807,221 Re			-	_	_	_	682,112
income 35,634,483 8,360,794 — — — 43,995,277 Equity securities at fair value through other comprehensive income – irrevocable election Investments accounted for using the equity method — — — 60,218 60,218 Investments accounted for using the equity method — — — — 23,617 23,617 Other assets 2,066,974 17 — — 510,246 2,577,237 Property, plant, equipment and intangible assets — — — — 579,046 579,046 Total assets 112,201,416 16,468,396 9,248,636 2,106 3,214,382 141,134,936 Liabilities Banknotes and coins in circulation — — — — 35,046,160 35,046,160 Due to banks and other financial institutions 2,061,243 — — — 67,745,978 69,807,221 Repo agreements 9,091,635 127,671 — — — 9,219,306 Due to the State and State institutions 23,467 <td>Monetary Fund Debt securities at fair value</td> <td>_</td> <td>-</td> <td>9,248,636</td> <td>-</td> <td>_</td> <td>9,248,636</td>	Monetary Fund Debt securities at fair value	_	-	9,248,636	-	_	9,248,636
Income – irrevocable election – – – 60,218 60,218 Investments accounted for using the equity method – – – – 23,617 Other assets 2,066,974 17 – – 510,246 2,577,237 Property, plant, equipment and intangible assets – – – – 579,046 579,046 Total assets 112,201,416 16,468,396 9,248,636 2,106 3,214,382 141,134,936 Liabilities 8 – – – – 579,046 579,046 Due to banks and coins in circulation – – – – 35,046,160 35,046,160 Due to banks and other financial institutions 2,061,243 – – – 67,745,978 69,807,221 Repo agreements 9,091,635 127,671 – – – 9,219,306 Due to the State and State institutions 23,467 6,965 – 1,229 2,866,339 2,898,000 Due to the International Mone	income Equity securities at fair value	35,634,483	8,360,794	-	-	-	43,995,277
Other assets 2,066,974 17 — — 510,246 2,577,237 Property, plant, equipment and intangible assets — — — 579,046 579,046 Total assets 112,201,416 16,468,396 9,248,636 2,106 3,214,382 141,134,936 Liabilities Banknotes and coins in circulation — — — — 35,046,160 35,046,160 Due to banks and other financial institutions 2,061,243 — — — 67,745,978 69,807,221 Repo agreements 9,091,635 127,671 — — — 9,219,306 Due to the State and State institutions 23,467 6,965 — 1,229 2,866,339 2,898,000 Due to the International Monetary Fund — — 9,230,974 — — — 9,230,974 Other liabilities 22,281 18 10,429 2 429,108 461,838 Total liabilities 11,198,626 134,654 9,241,403 1,231	income – irrevocable election	-	_	_	_	60,218	60,218
Property, plant, equipment and intangible assets — — — — — — — — — — — — 579,046 — 579,046 Total assets — — — — — — — — — — — — — — — — — — —	using the equity method	_	-	-	_	23,617	23,617
Intangible assets — — — — 579,046 579,046 Total assets 112,201,416 16,468,396 9,248,636 2,106 3,214,382 141,134,936 Liabilities Banknotes and coins in circulation — — — — — 35,046,160 35,046,160 Due to banks and other financial institutions 2,061,243 — — — 67,745,978 69,807,221 Repo agreements 9,091,635 127,671 — — — 9,219,306 Due to the State and State institutions 23,467 6,965 — 1,229 2,866,339 2,898,000 Due to the International Monetary Fund — — 9,230,974 — — 9,230,974 Other liabilities 22,281 18 10,429 2 429,108 461,838 Total liabilities 11,198,626 134,654 9,241,403 1,231 106,087,585 126,663,499			17	_	-	510,246	2,577,237
Liabilities Banknotes and coins in circulation — — — — 35,046,160 35,046,160 Due to banks and other financial institutions 2,061,243 — — — 67,745,978 69,807,221 Repo agreements 9,091,635 127,671 — — — 9,219,306 Due to the State and State institutions 23,467 6,965 — 1,229 2,866,339 2,898,000 Due to the International Monetary Fund — — 9,230,974 — — 9,230,974 Other liabilities 22,281 18 10,429 2 429,108 461,838 Total liabilities 11,198,626 134,654 9,241,403 1,231 106,087,585 126,663,499						579,046	579,046
Banknotes and coins in circulation — — — — — — — — — — — — — — — — — — —	Total assets	112,201,416	16,468,396	9,248,636	2,106	3,214,382	141,134,936
circulation - - - - - 35,046,160 35,046,160 Due to banks and other financial institutions 2,061,243 - - - 67,745,978 69,807,221 Repo agreements 9,091,635 127,671 - - - 9,219,306 Due to the State and State institutions 23,467 6,965 - 1,229 2,866,339 2,898,000 Due to the International Monetary Fund - - 9,230,974 - - 9,230,974 Other liabilities 22,281 18 10,429 2 429,108 461,838 Total liabilities 11,198,626 134,654 9,241,403 1,231 106,087,585 126,663,499							
Repo agreements 9,091,635 127,671 - - - 9,219,306 Due to the State and State institutions 23,467 6,965 - 1,229 2,866,339 2,898,000 Due to the International Monetary Fund - - 9,230,974 - - 9,230,974 Other liabilities 22,281 18 10,429 2 429,108 461,838 Total liabilities 11,198,626 134,654 9,241,403 1,231 106,087,585 126,663,499	circulation	_	-	_	-	35,046,160	35,046,160
Due to the State and State institutions 23,467 6,965 - 1,229 2,866,339 2,898,000 Due to the International Monetary Fund - - 9,230,974 - - 9,230,974 Other liabilities 22,281 18 10,429 2 429,108 461,838 Total liabilities 11,198,626 134,654 9,241,403 1,231 106,087,585 126,663,499	financial institutions	2,061,243	_	-	-	67,745,978	69,807,221
Due to the International Monetary Fund – – 9,230,974 – – 9,230,974 Other liabilities 22,281 18 10,429 2 429,108 461,838 Total liabilities 11,198,626 134,654 9,241,403 1,231 106,087,585 126,663,499		9,091,635	127,671	_	_	_	9,219,306
Other liabilities 22,281 18 10,429 2 429,108 461,838 Total liabilities 11,198,626 134,654 9,241,403 1,231 106,087,585 126,663,499		23,467	6,965	-	1,229	2,866,339	2,898,000
Total liabilities 11,198,626 134,654 9,241,403 1,231 106,087,585 126,663,499	Monetary Fund	-	_	9,230,974	_	_	9,230,974
		22,281	18	10,429	2	429,108	461,838
Net position 101,002,790 16,333,742 7,233 875 (102,873,203) 14,471,437	Total liabilities	11,198,626	134,654	9,241,403	1,231	106,087,585	126,663,499
	Net position	101,002,790	16,333,742	7,233	875	(102,873,203)	14,471,437

Note: Line items of the Statement of financial position are shown at net carrying amount (minus expected credit losses), as presented in the Statement of financial position.

NOTE 37.3.2 – Interest rate risk

Interest rate risk is the risk of a decline in the value of the Croatian National Bank's foreign currency portfolios of international reserves due to possible changes in interest rates on the fixed-yield instrument markets.

Net international reserves, which are managed in accordance with its own guidelines, are invested in trading and investment portfolios. An investment portfolio may be formed as a portfolio measured at fair value through other comprehensive income and as a portfolio measured at amortised cost that serve as a long-term source of stable income and are of long average maturity.

The Croatian National Bank has, through the Income Statement, an open exposure to interest rate risk only with the trading portfolios, while with the investment portfolios, it almost has no exposure to interest rate risk.

Trading portfolios have short duration, and thus interest rate risk is minimised. The portfolio measured at amortised cost, from the standpoint of interest rate risk, has no effect on the Income Statement, while securities of the portfolio measured at fair value through other comprehensive income are, generally, sold only in situations favourable to the CNB. However, regardless of that, even for portfolios measured at fair value through other comprehensive income, their duration and interest rate risk are taken into account.

The part of the reserves that consists of the Ministry of Finance funds, the funds based on repo agreements with banks, swap interventions in the domestic foreign exchange market, the membership in the IMF and other property owned by other legal entities, the CNB operates in accordance with commitments, in order to protect it against interest rate risk.

NOTE 37.3.2 – Interest rate risk (continued)

37.3.2.1 Sensitivity analysis – exposure of the CNB's net international reserves to fluctuations in interest rates

2019 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2019	USD	EUR
Yield curve increase/decrease	+/-1 b. p.	+/-1 b. p.
Effect of a change in the level of the yield curve on the financial result	(529)/529	(3,300)/3,300

Should as at 31 December 2019 the entire USD yield curve increase by 1 basis point (0.01%), the result of the Croatian National Bank reported in the Income Statement for the year would be lower by approximately HRK 529 thousands, while in the case of the EUR yield curve increasing by 1 basis point, the result would be lower by approximately HRK 3,300 thousands.

For a 1 basis point decrease of the yield curve, the result reported in the Income Statement would be higher by approximately the same amounts.

Calculation methodology

The values of USD and EUR trade portfolios as at 31 December 2019 were multiplied by modified duration and by 1 basis point (0.01%). Modified duration denotes by how many basis points the value of the portfolio will decrease should the interest rate curve increase by 1 percentage point.

2018 Sensitivity analysis

2018	USD	EUR
Yield curve increase/decrease	+/-1 b. p.	+/–1 b. p.
Effect of a change in the level of the yield curve on the financial result	(445)/445	(3,602)/3,602

NOTE 37.3.2 – Interest rate risk (continued)

37.3.2.2 Interest rate risk analysis

(All amounts are expressed in thousands of kuna)

As at 31 December 2019

As at 31 December 2019				4				
	Up to 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	Over 5 years	Non-interest bearing	Total	Average EIR as at 31/12
Assets								31/12
Cash and current								
accounts with other banks	4,387,522		_	-		2,963,592	7,351,114	-0.62
Deposits with other								
banks	12,673,261	2,652,995	_	_	_	(4,356)	15,321,900	-0.42
Financial assets at fair								
value through profit or loss	37,972,622	_	_	_	_	1,432,500	39,405,122	-0.10
Loans		62,000	27,000	1,792,000	35	33,373	1 014 409	1.22
	_	02,000	27,000	1,792,000	33	33,373	1,914,408	1.22
Reverse repo agreements	11,466,449	_	_	_	_	721	11,467,170	-0.09
Debt securities at				2722762	11 005 000		1.4.765.704	0.00
amortised cost	_	-	_	2,322,360	11,985,999	57,035	14,365,394	0.06
Balances with the	2 907 920					6 604 704	0.400.504	0.74
International Monetary Fund	2,803,820	_		_	_	6,624,704	9,428,524	0.74
Debt securities at fair								
value through other	47,174,201		_	_	_	265,173	47,439,374	1.01
comprehensive income								
Equity securities at fair value through other								
comprehensive income		_		_		59,165	59,165	_
 irrevocable election 								
Investments accounted						~		
for using the equity method	_	_		-	_	25,736	25,736	_
Other assets		_	_	_	_	5,007,400	5,007,400	
Property, plant,								
equipment and	-	_	_	_	_	620,824	620,824	
intangible assets								
Total assets	116,477,875	2,714,995	27,000	4,114,360	11,986,034	17,085,867	152,406,131	
Liabilities								
Banknotes and coins in						38,734,616	70 774 616	
circulation		-		_		36,734,010	38,734,616	
Due to banks and other financial institutions	4,467,861	_	_	_	_	70,156,935	74,624,796	_
Repo agreements	5,997,962	-	_	_	_	867	5,998,829	0.14
Due to the State and	4,897,969	_	_	_	_	1,814,625	6,712,594	4 0.30
State institutions Due to the	.,007,000	_			_	1,017,023	5,712,594	0.50
International Monetary	2,797,255		_	_	_	6,617,237	9,414,492	0.74
Fund	2,771,200					0,017,207	3,111,132	0.71
Other liabilities	_	_	_	_	_	687,097	687,097	_
Total liabilities	18,161,047		_			118,011,377	136,172,424	
Net position	98,316,828	2,714,995	27,000	4,114,360	11,986,034	(100,925,510)	16,233,707	
								-

NOTE 37.3.2 – Interest rate risk (continued)

37.3.2.2 Interest rate risk analysis (continued)

As at 31 December 2018 (All amounts are expressed in thousands of kuna)

	Up to 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	Over 5 years	Non-interest bearing	Total	Average EIR as at 31/12
Assets								
Cash and current accounts with other banks	6,568,757	_	-	-	-	2,956,047	9,524,804	-0.53
Deposits with other banks Financial assets at fair	5,731,651	5,694,631	-	-	-	(141)	11,426,141	-0.31
value through profit or loss	38,317,061	-	-	-	-	1,392,482	39,709,543	0.12
Loans	_	_	_	2,015,500	41	13,776	2,029,317	1.24
Reverse repo agreements	16,816,159	4,463,460	-	-	· –	(631)	21,278,988	-0.49
Debt securities at amortised cost Balances with the	-	-	-	-	679,403	2,709	682,112	0.43
International Monetary Fund	2,753,217	_	_	_	-	6,495,419	9,248,636	1.10
Debt securities at fair value through other comprehensive income Equity securities at fair	43,756,015	-	-	-	-	239,262	43,995,277	0.96
value through other comprehensive income – irrevocable election Investments accounted	-	-	-	-	-	60,218	60,218	-
for using the equity method	_	-	-	-	-	23,617	23,617	-
Other assets	_	_	_	_	_	2,577,237	2,577,237	_
Property, plant, equipment and intangible assets	-		_			579,046	579,046	_
Total assets	113,942,860	10,158,091		2,015,500	679,444	14,339,041	141,134,936	-
Liabilities							,	
Banknotes and coins in circulation	_	-	_	_	_	35,046,160	35,046,160	_
Due to banks and other financial institutions	2,061,243	-	-	_	-	67,745,978	69,807,221	_
Repo agreements	9,219,130	_	_	_	_	176	9,219,306	-0.69
Due to the State and State institutions Due to the	2,022,914	-	-	-	-	875,086	2,898,000	0.00
International Monetary Fund	2,742,648	-	-	-	-	6,488,326	9,230,974	1.10
Other liabilities	-	-			-	461,838	461,838	-
Total liabilities	16,045,935	_		_	_	110,617,564	126,663,499	_
Net position	97,896,925	10,158,091	_	2,015,500	679,444	(96,278,523)	14,471,437	
•								

Note: Line items of the Statement of financial position are shown at net carrying amount (minus expected credit losses), as presented in the Statement of financial position. Accrued interest and expected credit losses are shown in column Non-interest bearing.

Fixed interest rate is charged on presented interest bearing amounts, except on the part of the position Cash and current accounts with other banks, amounting to HRK 4,387,522 thousands (31 December 2018: HRK 6,568,757 thousands), and the part of the position Financial assets at fair value through profit or loss (floaters) in the amount of HRK 320,221 thousands (31 December 2018: HRK 715,290 thousands), as well as on the part of the position Due to the State and State institutions, amounting to HRK 4,897,969 thousands (31 December 2018: HRK 2,022,914 thousands), on which variable floating rate is charged.

NOTE 37.3.3 - Other price risks

The Croatian National Bank is exposed to other price risks on funds entrusted to the management of international financial institutions and precious metals since price risks affect the change in value of these financial instruments.

37.3.3.1 Sensitivity analysis — impact of changes in prices of financial instruments on the Income Statement

2019 Sensitivity analysis – funds entrusted to the management of international financial institutions

(All amounts are expressed in thousands of kuna)

2019

Financial assets price exposed to price risk increase/decrease	+/-1%
Effect of change in the level of price on the Income Statement	13,317/(13,317)

The table shows the sensitivity of the Croatian National Bank Income Statement result in the case of a rise or fall of prices of financial instruments by \pm 1%.

A positive number implies an increase in the Income Statement if there is an increase in the prices of financial instruments by the selected percentage, while a negative number implies a reduction in the Income Statement if prices of financial instruments fall.

In the case of increase in prices of a financial instrument by 1% compared to the prices recorded on 31 December 2019, the result of Croatian National Bank in the Income Statement would be higher by approximately HRK 13,317 thousands, while the fall in prices by 1% would result in the Income Statement being lower by approximately HRK 13,317 thousands.

2019 Sensitivity analysis – precious metals

(All amounts are expressed in thousands of kuna)

2019

Financial assets price exposed to price risk increase/decrease	+/-5%
Effect of change in the level of price on the Income Statement	376/(376)

The table shows the sensitivity of the Croatian National Bank Income Statement result in the case of a rise or fall of prices of precious metals by \pm 5%.

A positive number implies an increase in the Income Statement if there is an increase in the prices of financial instruments by the selected percentage, while a negative number implies a reduction in the Income Statement if prices of financial instruments fall.

In the case of increase in prices of precious metals by 5% compared to the prices recorded on 31 December 2019, the result of Croatian National Bank in the Income Statement would be higher by approximately HRK 376 thousands, while the fall in prices by 5% would result in the Income Statement being lower by approximately HRK 376 thousands.

Calculation methodology

Investments in financial assets exposed to price risks as at 31 December 2019 in the balance sheet has been increased or reduced by the selected percentage change in the price of financial instruments.

2018 Sensitivity analysis – funds entrusted to the management of international financial institutions

(All amounts are expressed in thousands of kuna)

2018

Financial assets price exposed to price risk increase/decrease	+/-1%
Effect of change in the level of price on the Income Statement	12,962/(12,962)

2018 Sensitivity analysis - precious metals

(All amounts are expressed in thousands of kuna)

2018

Financial assets price exposed to price risk increase/decrease	+/-5%
Effect of change in the level of price on the Income Statement	312/(312)

NOTE 38 – RELATED PARTIES

While performing regular activities, the Croatian National Bank enters into transactions with related parties. In accordance with IAS 24 Related Party Disclosures, related parties are the State and state bodies of the Republic of Croatia, the Croatian Monetary Institute and key management of the Croatian National Bank. For the purpose of disclosure in this note, companies and other legal entities owned by the Republic of Croatia (including credit institutions) are not considered to be related parties. Transactions with related parties took place at normal market conditions.

a) Relations with the State and State bodies of the Republic of Croatia

The Croatian National Bank is in the exclusive ownership of the Republic of Croatia, but in achieving its objective and in carrying out its tasks the Croatian National Bank is independent and autonomous.

In relations with the State bodies of the Republic of Croatia, the Croatian National Bank acts as a depository institution, that is, keeps the accounts of the Republic of Croatia and executes payment transactions across these accounts. Under market conditions, the Croatian National Bank can perform fiscal agency services for the Republic of Croatia related to:

- issuance of debt securities of the Republic of Croatia, as a registrar or as a transfer agent of the entire issuance,
- payment of the amount of principal, interest and other charges related to securities,
- other issues associated with these operations, if they are consistent with the objective of the Croatian National Bank.

Relations with the Croatian State and Croatian State bodies are presented in the following table:

(All amounts are expressed in thousands of kuna)	2	019	2018	
	State	State entities	State	State entities
ASSETS				
Other assets	1,690	424	1,788	246
TOTAL	1,690	424	1,788	246
LIABILITIES				
Deposits	5,089,638	1,621,585	2,174,061	723,938
Accrued interest and other liabilities	118,780	· · -	_	_
TOTAL	5,208,418	1,621,585	2,174,061	723,938
REVENUES				
Other interest income	732	_	2,497	_
TOTAL	732		2,497	
EXPENDITURE				
Interest expenses	59,776		1,520	_
TOTAL	59,776	-	1,520	

State bodies that are considered related parties are the State Agency for Deposit Insurance and Bank Resolution and the Croatian Health Insurance Fund.

b) Associated entities

The investment of the Croatian National Bank in the Croatian Monetary Institute represents the investment in an associate in accordance with IAS 28. The share of ownership of the Croatian National Bank in the Croatian Monetary Institute capital is 42.6%. Detailed disclosures on the investment in an associate are presented in Note 22.

Relations with the Croatian Monetary Institute are presented in the following table:

(All amounts are expressed in thousands of kuna)	2019	2018
ASSETS		
Investments accounted for using the equity method	25,736	23,617
Other assets	52,447	14,846
TOTAL	78,183	38,463
LIABILITIES		
Other liabilities	-	167
TOTAL	_	167
REVENUES		
Gains in the alignment of investments in the Croatian	2,479	3,407
Monetary Institute		
Other revenues	11	76
TOTAL	2,490	3,483
EXPENDITURE		
Losses from the alignment of investments in the Croatian Monetary Institute	360	-
Minting of Kuna and Lipa coins*	79,211	76,386
Other	541	124
TOTAL	80,112	76,510

^{*} Total coins production cost invoiced by the Croatian Monetary Institute in the reporting period. The presented costs differ from costs recognised in profit or loss in the reporting period, since the cost of minting coins are recognised in the Income Statement in accordance with the cost deferral policy (refer to Note 10).

c) Key management of the Croatian National Bank

The Council of the Croatian National Bank is responsible for the achievement of the objective and performance of tasks of the Croatian National Bank. The Council of the Croatian National Bank establishes policies related to the activities of the Croatian National Bank. In line with the aforementioned, key management of the Croatian National Bank is composed of members of the Council of the Croatian National Bank.

The Council of the Croatian National Bank comprises Governor, Deputy Governor and six Vicegovernors.

Short-term compensations to the key management of the Croatian National Bank for 2019 amounted to HRK 9,201 thousands, of which HRK 1,311 thousands refers to pension insurance contributions (2018: HRK 8,731 thousands, of which HRK 1,235 thousands refers to pension insurance contributions).

Provisions for employee benefits of the key management of the Croatian National Bank amount to HRK 475 thousands (2018: HRK 415 thousands).

NOTE 39 – EVENTS AFTER THE REPORTING PERIOD

As a result of the departure of the United Kingdom from the European Union on 31 January 2020 and the consequent withdrawal of the Bank of England from the European System of Central Banks, the weightings assigned to the remaining NCBs in the key for subscription to the ECB's capital were adjusted with effect from 1 February 2020 as follows:

Table 1: The adjustment of the key for subscription to the capital of the ECB as of 1 February 2020

	Key for subscription to the ECB's capital			
NCB	until 31 January 2020	from 1 February 2020		
	(%)	(%)		
Nationale Bank van België/	2.5280	2,9630		
Banque Nationale de Belgique	2.3280	2.9030		
Deutsche Bundesbank	18.3670	21.4394		
Eesti Pank	0.1968	0.2291		
Central Bank of Ireland	1.1754	1.3772		
Bank of Greece	1.7292	2.0117		
Banco de España	8.3391	9.6981		
Banque de France	14.2061	16.6108		
Banca d'Italia	11.8023	13.8165		
Central Bank of Cyprus	0.1503	0.1750		
Latvijas Banka	0.2731	0.3169		
Lietuvos bankas	0.4059	0.4707		
Banque centrale du Luxembourg	0.2270	0.2679		
Central Bank of Malta	0.0732	0.0853		
De Nederlandsche Bank	4.0677	4.7662		
Oesterreichische Nationalbank	2.0325	2.3804		
Banco de Portugal	1.6367	1.9035		
Banka Slovenije	0.3361	0.3916		
Národná banka Slovenska	0.8004	0.9314		
Suomen Pankki – Finlands Bank	1.2708	1.4939		
Subtotal for euro area NCBs	69.6176	81.3286		

	Key for subscription to the ECB's capital			
NCB	until 31 January 2020 (%)	from 1 February 2020 (%)		
Българска народна банка (Bulgarian National Bank)	0.8511	0.9832		
Česká národní banka	1.6172	1.8794		
Danmarks Nationalbank	1.4986	1.7591		
Hrvatska narodna banka	0.5673	0.6595		
Magyar Nemzeti Bank	1.3348	1.5488		
Narodowy Bank Polski	5.2068	6.0335		
Banca Naţională a României	2.4470	2.8289		
Sveriges Riksbank	2.5222	2.9790		
Bank of England	14.3374	-		
Subtotal for non-euro area NCBs	30.3824	18.6714		
TOTAL	100.00	100.00		

The European Central Bank kept its subscribed capital unchanged at EUR 10,825 million after the Bank of England's withdrawal from the European System of Central Banks. The share of the Bank of England in the ECB's subscribed capital, which stood at 14.3%, was reallocated among both euro area and remaining non-euro area NCBs. Accordingly, the share of the Croatian National Bank in the ECB's subscribed capital increased from 0.5673% to 0.6595%. As a result, the Croatian National Bank paid up its increased subscription to the ECB's capital of EUR 374,274.62 in 2020.

After 31 December 2019 there were no other significant events that would have an impact on the financial statements of the Croatian National Bank.