Central Counterparty National Clearing Centre

Financial Statements
For the Year Ended
December 31, 2019

Central Counterparty National Clearing Centre

Contents

Deloitte.

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INDEPENDENT AUDITOR'S REPORT

To the Shareholder and Supervisory Board of Central Counterparty National Clearing Centre

Opinion

We have audited the financial statements of Central Counterparty National Clearing Centre ("the Organization"), which comprise the statement of financial position as at December 31, 2019 and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Organization as at December 31, 2019, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs").

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Organization in accordance with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (the "IESBA Code") together with the ethical requirements that are relevant to our audit of the financial statements in the Russian Federation, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the financial statements and our auditor's report thereon. The Annual report is expected to be made available to us after the date of this auditor's report.

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

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

When we read the Annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

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

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRSs, and for such internal control as management 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, management is responsible for assessing the Organization's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Organization or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Organization's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs 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 ISAs, we exercise professional judgment and maintain professional skepticism 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 Organization's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Organization's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's 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 auditor's report. However, future events or conditions may cause the Organization 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.

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

Report on procedures performed in accordance with the Federal Law No. 395-1 "On Banks and Banking Activities" dated December 2, 1990

Management of the Organization is responsible for compliance with the obligatory ratios established by the Bank of Russia (the "obligatory ratios"), as well as for compliance of the Organization's internal control and risk management systems with the Bank of Russia (the "CBRF") requirements.

According to Article 42 of the Federal Law No. 395-1 "On Banks and Banking Activities" dated December 2, 1990 (hereinafter, the "Federal Law") in the course of our audit of the Organization's annual financial statements for 2019 we performed procedures with respect to the Organization's compliance with the obligatory ratios as at January 1, 2020 and compliance of its internal control and risk management systems with the CBRF requirements.

We have selected and performed procedures based on our judgment, including inquiries, analysis and review of documentation, comparison of the Organization's policies, procedures and methodologies with the CBRF requirements, as well as recalculations, comparisons and reconciliations of numeric values and other information.

We report our findings below:

1. with respect to the Organization's compliance with the obligatory ratios: the obligatory ratios as at January 1, 2020 were within the limits established by the CBRF.

   We have not performed any procedures with respect to the Organization's financial information other than those we considered necessary to express our opinion on whether the financial statements of the Organization present fairly, in all material respects, the financial position of the Organization as at December 31, 2019 its financial performance and its cash flows for 2019 in accordance with International Financial Reporting Standards and Russian accounting standards.

2. with respect to compliance of the Organization's internal control and risk management systems with the CBRF requirements:
   (a) In accordance with the CBRF requirements and recommendations as at December 31, 2019 the Organization's internal audit service was subordinated and accountable to the Organization's Supervisory Board and the Organization's risk management departments were not subordinated or accountable to the departments undertaking the respective risks, the heads of the Organization's risk management departments and internal audit service comply with qualification requirements established by the CBRF;
   (b) As at December 31, 2019, the Organization had duly approved in accordance with the CBRF requirements and recommendations the internal policies regarding identification and management of significant risks, including credit, operating, market, interest rate, legal, liquidity, and reputational risks, as well as regarding performance of stress-testing; as at December 31, 2019, the Organization had a reporting system with regard to the Organization's significant credit, operating, market, interest rate, legal, liquidity and reputational risks, and with regard to the Organization's capital;
   (c) Frequency and sequential order of reports prepared by the Organization's risk management departments and internal audit service in 2019 on management of credit, operating, market, interest rate, legal, liquidity and reputational risks were in compliance with the Organization's internal policies; these reports included results of monitoring by the Organization's risk management departments and internal audit service of effectiveness of the Organization's respective methodologies and improvement recommendations;
   (d) As at December 31, 2019, the authority of the Organization's Supervisory Board and the Organization's executive bodies included control over compliance with the risk limits and capital adequacy ratios established by the Organization.
   In order to control effectiveness and consistency of application of the Organization's risk management policies, during 2019 the Organization's Supervisory Board and the Organization's executive bodies have regularly discussed reports prepared by the risk management departments and internal audit service and have considered proposed corrective measures.

We have carried out procedures with respect to the Organization’s internal control and risk management systems solely to report on the findings related to compliance of the Organization’s internal control and risk management systems with the CBRF requirements.

Shvetsov Andrei Viktorovich
Engagement partner

АКЦИОНЕРНОЕ ОБЩЕСТВО «ДЕЛОЙТ И ТУШ СНГ»
для аудиторских заключений и отчетов
Россия, г. Москва, ул. Лесная, д. 5

March 27, 2020

The Entity: Central Counterparty National Clearing Centre

General Banking License № 3466-CC, issued by the Central Bank of Russian Federation by 28.11.2017

Primary State Registration Number: 1067711004481

Certificate of registration in the Unified State Register № 77№010075586 of 30.05.2006, issued by Administration of Federal Tax Service of Moscow.

Address: 125009, Moscow, Bolshoy Kislovsky per. 13

Audit Firm: AO “Deloitte & Touche CIS”

Certificate of state registration № 018.482, issued by the Moscow Registration Chamber on 30.10.1992.

Primary State Registration Number: 1027700425444

Certificate of registration in the Unified State Register № 77 004840299 of 13.11.2002, issued by Moscow Interdistrict Inspectorate of the Russian Ministry of Taxation № 39.

Member of Self-regulatory organization of auditors Association “Sodruzhestvo”, ORNZ 12006020384.

Central Counterparty National Clearing Centre
Statement of comprehensive income
(in thousands of Russian rubles)

	Notes	Year ended December 31, 2019	Year ended December 31, 2018
Interest income	5	11 941 066	16 138 085
Interest expense	5	(2 940 099)	(446 782)
Net interest income		**9 000 967**	**15 691 303**
Fee and commission income	6	9 489 044	8 090 995
Net gain /(loss) on financial assets at fair value through through profit or loss		144 534	(9 562)
Net gain on financial assets at fair value through other comprehesive income	7	1 463 212	239 230
Foreign exchange gains less losses	8	3 222 479	(1 926 608)
Other operating income	9	899 269	156 122
Operating income		**24 219 505**	**22 241 480**
Personnel expenses	10	(723 837)	(663 537)
Administrative and other operating expenses	11	(844 908)	(846 565)
Other expenses	13	(2 329 902)	(1 729 925)
Profit before tax		**20 320 858**	**19 001 453**
Income tax expense	14	(3 901 149)	(3 501 959)
Net profit		**16 419 709**	**15 499 494**
Other comprehensive income / (loss) that may be reclassified subsequently to profit or loss			
Movement in investment revaluation reserve for financial assets at fair value through other comprehesive income		5 441 828	(3 864 408)
Movement in the credit risk of financial assets at fair value through other comprehesive income	12	13 727	(139 397)
Net gain on investments at fair value through other comprehesive income reclassified to profit or loss		(1 463 212)	(99 833)
Deferred income tax	14	(798 469)	820 728
Other comprehensive gain / (loss) that may be reclassified subsequently to profit or loss		**3 193 874**	**(3 282 910)**
Total comprehensive income		**19 613 583**	**12 216 584**

Chairman of the Management Board
Khavin Alexey Sergeevich

March 27, 2020
Moscow

Chief Accounting Officer
Gorina Marianna Petrovna

March 27, 2020
Moscow

Небанковская кредитная организация-центральный контрагент «Национальный Клиринговый Центр» • Акционерное общество • Москва • НКО НКЦ (АО)

Notes 1-32 form an integral part of these financial statements.

(in thousands of Russian rubles)

	Notes	December 31, 2019	December 31, 2018
ASSETS			
Cash and cash equivalents	15	525 471 871	419 965 855
Financial assets at fair value through profit or loss	16	13 472 611	4 211 680
Due from banks and other financial institutions	17	52 634 587	86 993 582
Financial assets of central counterparty	18	3 262 670 622	3 312 020 089
Financial assets at fair value though other comprehesive income	19	145 050 758	197 860 427
Property and equipment and intangible assets	20	614 806	200 227
Deferred tax assets	14	1 582 914	-
Current income tax assets		923 562	424 088
Other assets	21	3 383 429	2 206 247
Total assets		**4 005 805 160**	**4 023 882 195**
LIABILITIES			
Customer accounts	22	619 267 584	639 066 596
Overnight bank loans	23	49 229 140	5 003 111
Derivatives recognized at fair value through profit and loss		32 831	120 776
Financial liabilities of central counterparty	18	3 262 670 622	3 312 020 089
Deferred tax liabilities	14	-	1 023 095
Current income tax liabilities		451 395	-
Other liabilities	24	928 690	1 661 542
Total liabilities		**3 932 580 262**	**3 958 895 209**
EQUITY			
Share capital	25	16 670 000	16 670 000
Paid-in capital	25	347 144	347 144
Investments revaluation reserve		1 460 727	(1 733 147)
Payments based on the shares of the parent company		65 472	41 363
Retained earnings		54 681 555	49 661 626
Total equity		**73 224 898**	**64 986 986**
Total liabilities and equity		**4 005 805 160**	**4 023 882 195**

Notes 1-32 form an integral part of these financial statements.

Central Counterparty National Clearing Centre
Statement of cash flows
(in thousands of Russian rubles)

	Notes	Year ended December 31, 2019	Year ended December 31, 2018
Cash flows from / (used in) operating activities:			
Profit before tax		20 320 858	19 001 453
Adjustments for:			
Gain on disposal of financial assets at FVTOCI		(1 463 212)	(239 230)
Revaluation of derivatives		880 773	(490 581)
Change in interest accruals, net		2 658 117	3 439 886
Net change in deferred commission income	24	(250 340)	(71 173)
Unrealized (gain) / loss on foreign exchange operations		(1 251 626)	(239 308)
Other accruals		-	(30 392)
Depreciation and amortization charge	11	117 265	50 327
Payments based on the shares of the parent company	10	24 109	35 315
Change in allowance for expected credit losses	12	2 298 242	(124 339)
Change in other provisions	9, 13	(841 380)	873 040
Cash flows from operating activities before changes in operating assets and liabilities		**22 492 806**	**22 204 998**
Changes in operating assets and liabilities:			
Mandatory cash balances with Central Bank of the Russian Federation		-	6 010 627
Financial assets at fair value though profit or loss		(10 659 244)	4 319 494
Due from banks and other financial institutions		23 344 052	(21 615 589)
Financial assets of central counterparty		47 208 052	(804 923 618)
Other assets		(1 244 183)	606 842
Customer accounts		61 511 392	47 350 031
Overnight bank loans		44 223 792	5 000 000
Financial liabilities of central counterparty		(49 544 193)	804 923 618
Other liabilities		6 864	69 881
Net cash flows from / (used in) operating activities before income tax		**137 339 338**	**63 946 284**
Income tax paid		(7 353 706)	(1 706 663)
Cash from / (used in) operating activities		**129 985 632**	**62 239 621**
CASH FLOWS USED IN INVESTING ACTIVITIES:			
Purchase of financial assets at fair value through other comprehesive income		(94 694 393)	(134 025 322)
Purchase of financial assets at fair value through other comprehesive income		139 672 609	135 464 452
Purchase of property and equipment and intangible assets		(160 725)	(68 841)
Net cash flows from investing activities		**44 817 491**	**1 370 289**

Notes 1-32 form an integral part of these financial statements.

(in thousands of Russian rubles)

	Notes	Year ended December 31, 2019	Year ended December 31, 2018
CASH FLOWS FROM FINANCING ACTIVITIES:			
Dividends paid		(11 399 780)	(3 799 927)
Cash outflow for lease liabilities		(19 230)	-
Cash flows used in financing activities		**(11 419 010)**	**(3 799 927)**
Effect of changes in foreign exchange rates on cash and cash equivalents		(57 881 003)	53 660 684
Net increase / (decrease) in cash and cash equivalents		**105 503 110**	**113 470 667**
Cash and cash equivalents, beginning of the period	15	**419 970 493**	**306 499 826**
Cash and cash equivalents, end of the period	15	**525 473 603**	**419 970 493**

Interest received and paid for the year ended December 31, 2019 amounted to RUB 14 594 894 thousand and RUB 2 935 810 thousand, respectively.

Interest received and paid for the year ended December 31, 2018 amounted to RUB 19 581 816 thousand and RUB 450 627 thousand, respectively.

Central Counterparty National Clearing Centre
Statement of changes in equity
(in thousands of Russian rubles)

	Notes	Share capital	Paid-in capital	Investments revaluation reserve	Payments based on the shares of the parent	Retained earnings	Total equity
December 31, 2017		**16 670 000**	**347 144**	**1 291 659**	**29 178**	**38 226 142**	**56 564 123**
Effect of IFRS 9 adoption				**258 104**		**(287 213)**	**(29 109)**
Comprehensive income for the period		**-**	**-**	**(3 282 910)**	**-**	**15 499 494**	**12 216 584**
Transactions with owners							
Dividends declared		-	-	-	-	(3 799 927)	(3 799 927)
Payments based on the shares of the parent company	10	-	-	-	12 185	23 130	35 315
Total transactions with owners		**-**	**-**	**-**	**12 185**	**(3 776 797)**	**(3 764 612)**
December 31, 2018		**16 670 000**	**347 144**	**(1 733 147)**	**41 363**	**49 661 626**	**64 986 986**
Comprehensive income for the period		**-**	**-**	**3 193 874**	**-**	**16 419 709**	**19 613 583**
Transactions with owners							
Dividends declared		-	-	-	-	(11 399 780)	(11 399 780)
Payments based on the shares of the parent company	10	-	-	-	24 109	-	24 109
Total transactions with owners		**-**	**-**	**-**	**24 109**	**(11 399 780)**	**(11 375 671)**
December 31, 2019		**16 670 000**	**347 144**	**1 460 727**	**65 472**	**54 681 555**	**73 224 898**

Notes 1-32 form an integral part of these financial statements.

1. Organization

Non-banking credit institution - Central Counterparty National Clearing Centre (NCC) is a joint-stock organization, which was incorporated in the Russian Federation in 2006. NCC is regulated by the Central Bank of the Russian Federation ("Bank of Russia") and conducts its banking and clearing activities under general license No.3466-CC and license No. 077-00003-000010, respectively.

NCC is a member of Moscow Exchange Group ("Group") and as at December 31, 2019 and December 31, 2018 100% of NCC's shares are held by PJSC Moscow Exchange MICEX-RTS ("Moscow Exchange").

NCC acts as a central counterparty (CCP) and specializes in providing clearing services on foreign exchange and precious metals market, securities, deposit, derivatives, commodity markets and standardized OTC derivatives market, including determination and measurement of liabilities of clearing participants, setting off and settling them.

The registered office of NCC is located at: 13, Bolshoy Kislovsky per., Moscow, 125009, Russian Federation.

Financial statements approval. Financial statements of NCC were approved for issue by the Management on March 27, 2020.

2. Basis of presentation

Significant accounting policies

Statement of compliance

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), including all Interpretations originated by the International Financial Reporting Interpretations Committee ("IFRIC").

Basis of presentation

These financial statements have been prepared on the assumption that NCC is a going concern and will continue in operation for the foreseeable future.

These financial statements are presented in thousands of Russian rubles ("RUB thousand"). These financial statements have been prepared on a historical cost basis, except for certain financial instruments that are measured at fair value.

NCC maintains its accounting records in accordance with Russian Accounting Standards ("RAS"). These financial statements have been prepared from NCC's statutory accounting records and have been adjusted to conform to IFRS.

3. Significant accounting policies

The Russian ruble exchange rates applied in the preparation of these Financial Statements are presented below:

	December 31, 2019	December 31, 2018
USD	61,9057	69,4706
EUR	69,3406	79,4605

The accounting policies adopted by NCC in the preparation of these Financial Statements are consistent with those followed in the preparation of NCC's Financial Statements for the year ended December 31, 2018, except the adoption of IFRS 16 "Leases" since January 1, 2019.

(in thousands of Russian rubles, unless otherwise indicated)

3. Significant accounting policies (continued)

In the current period, NCC has adopted all of the new and revised Standards and Interpretations issued by the IASB and IFRIC of the IASB that are relevant to its operations and effective for reporting periods ending on December 31, 2019:

IFRS 16	"Leases"
Amendments to IFRS 9	"Prepayment Features with Negative Compensation"
Amendments to IAS 28	"Long-term interests in Associates and Joint Ventures"
Amendments to other IFRS/IAS	Annual Improvements to IFRS Standards 2015-2017 Cycle Amendments to IFRS 3 "Business Combinations", IFRS 11 "Joint Arrangements", IAS 12 "Income Taxes", IAS 23 "Borrowing Costs"
Amendments to IAS 19	"Employee Benefits Plan Amendment Curtailment or Settlement"
IFRIC 23	"Uncertainty over Income Tax Treatments"

The adoption of these new and revised Standards and Interpretations (except the adoption of IFRS 16 "Leases") has not resulted in significant changes to NCC's accounting policies that have affected the amounts reported for the current or prior years.

The effects of the adoption of IFRS 16 "Leases"

In the current period, NCC for the first time has applied IFRS 16 "*Leases*". The date of initial application of IFRS 16 for NCC is 1 January 2019.

IFRS 16 introduces new or amended requirements with respect to lease accounting. It introduces significant change to the lessee accounting by removing the distinction between operating and finance requires and requiring the recognition of a right-of-use asset and a lease liability at commencement for all leases, except for short-term leases and leases of low value assets. Details of these new requirements are described below.

NCC has applied IFRS 16 using modified retrospective approach recognising the cumulative effect of initial application as an adjustment to the opening balance of retained earnings which is zero as right-of-use assets equal lease liabilities. Therefore, comparative information is not restated.

The change in definition of a lease mainly relates to the concept of control. IFRS 16 determines whether a contract contains a lease on the basis of whether the customer has the right to control the use of an identified asset for a period of time in exchange for consideration.

Impact on the lessee accounting (former operating leases). IFRS 16 changes how NCC accounts for leases previously classified as operating leases under IAS 17, which were off-balance-sheet.

NCC assesses whether a contract is or contains a lease, at inception of the contract. NCC recognizes a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with lease term of 12 months or less) and leases of low value assets. For these leases, NCC recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the incremental borrowing rate as the rate implicit in the lease cannot be readily determined. The incremental borrowing rate is determined using the most recent CBR statistics on loan interest rates in the same currency and of the same term.

The lease payments included in the measurement of the lease liability comprise:

(a) Fixed payments (including in-substance fixed payments), less any lease incentives;
(b) Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
(c) Amounts expected to be payable by the lessee under residual value guarantees;
(d) The exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
(e) Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

3. Significant accounting policies (continued)

The effects of the adoption of IFRS 16 "Leases" (continued)

The lease liability is presented within other liabilities in the statement of financial position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

NCC remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

(a) The lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate;
(b) There is a change in future lease payments resulting from a change in an index or a rate used to determine those payments, or a change in expected payment under a guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised lease payments using the initial discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case the revised discount rate is used);
(c) A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.

The right-of-use asset comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever the obligation for costs to dismantle and remove a leased asset is incurred or an obligation to restore the site on which it is located or restore the underlying asset to the condition required by the terms of the lease, a provision is recognized and measured under IAS 37. The costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that NCC expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The right-of-use assets are presented within the line property and equipment in the statement of financial position.

NCC applies IAS 36 *Impairment of Assets* to determine whether a right-of-use asset is impaired and to account for the impairment.

Variable rents that do not depend on an index or rate are not included in the measurement of the lease liability and the right-of-use asset. The related payments are recognised as an expense in the period in which the event or condition that triggers those payments occurs and are included in the line "general and administrative expenses" in the statement of profit or loss.

As a practical expedient, IFRS 16 permits a lessee not to separate non-lease components, and instead account for any lease and associated non-lease components as a single arrangement. NCC has not used this practical expedient.

The application of IFRS 16 has the following impact on the statement of cash flows of NCC:

(a) Short-term lease payments, payments for leases of low-value assets and variable lease payments not included in the measurement of the lease liability are presented as part of operating activities;
(b) Cash payments for the principal portion for lease liability are presented as part of financing activities;
(c) Cash payments for the interest portion for lease liability can be presented as either operating activities of financing activities, as permitted by IAS 7. NCC has opted to include interest paid as part of financing activities.

(in thousands of Russian rubles, unless otherwise indicated)

3. Significant accounting policies (continued)

The effects of the adoption of IFRS 16 "Leases" (continued)

Under IAS 17 all lease payments were presented as part of cash flows from operating activities.

The adoption of IFRS 16 did not have an impact on net cash flows.

Impact on assets, liabilities and equity as at January 1, 2019. The weighted average lessee's incremental borrowing rate applied to lease liabilities recognised in the statement of financial position at the date of initial application is 8,88%.

Reconciliation of the operating lease commitments to lease liability as at January 1, 2019 is as follows:

	January 1, 2019
Lease payments under operating lease	**30 011**
Future lease payments that are due in periods subject to lease extension options that are reasonably certain to be exercised	538 018
Recognition exemption: short-term leases	(1 731)
Future lease payments under IFRS 16	**566 298**
Effect of discounting	(173 762)
Lease liabilities under IFRS 16	**392 536**
Right-of-use assets under IFRS 16	**392 536**

Cash and cash equivalents. Cash and cash equivalents in the Statement of Financial Position include cash on hand, unrestricted balances on correspondent and deposit accounts with banks with maturity up to one business day. Accrued interest on the above balances that is receivable in more than one business day is excluded from cash and cash equivalents the purpose of statement of cash flows. Amounts that are subject to restrictions on their availability, including minimum reserve deposits with the CBR, are not included in cash and cash equivalents.

Financial assets and liabilities of central counterparty. NCC acts as a central counterparty and guarantees settlements of certain exchange transactions. Assets and liabilities on such deals are recognized in the statement of financial position at the net fair value based on daily settlement prices, except for assets and liabilities under repo transactions, which are measured at amortized cost.

Collateral provided by central counterparty. NCC guarantees settlement of transactions, in which NCC acts as central counterparty,. NCC as central counterparty applies a multi-level collateral system. The key component of this approach is daily determination of the overall risk per trading/clearing participant (margin) that should be covered by collateral in the form of cash, securities or commodities (individual clearing collateral or other collateral).

In addition to such collateral, trading/clearing participants are required to make contributions to guarantee funds as described in Note 30.

Financial assets. All financial assets are measured at fair value at initial recognition, including transaction costs, except for those financial assets classified as at fair value through profit or loss (further – FVTPL). Transaction costs directly attributable to the acquisition of financial assets classified as at FVTPL are recognised immediately in profit or loss.

3. Significant accounting policies (continued)

All recognised financial assets that are within the scope of IFRS 9 are required to be subsequently measured at amortised cost (further – AC) or fair value on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. Specifically:

- financial assets should be measured at amortised cost if both of the following criteria are met:
  a. financial asset is held within a business model with the objective to collect the contractual cash flows, and
  b. the contractual cash flows of financial asset are solely payments of principal and interest on the principal amount outstanding (SPPI);
- financial assets should be measured at fair value through other comprehensive income (FVTOCI) if both of the following criteria are met:
  a. financial asset is held within a business model with the objective both to collect the contractual cash flows and to sell the financial assets and
  b. the contractual cash flows of financial assets are SPPI;
- all other debt instruments (e.g. debt instruments managed on a fair value basis, or held for sale) and equity investments are subsequently measured at FVTPL.

An assessment of business models for managing financial assets is performed at the date of initial application of IFRS 9 to determine the classification of a financial asset. The business model is applied prospectively to all financial assets existing at the date of initial application of IFRS 9. An assessment of business models for managing financial assets is fundamental to the classification of a financial asset. NCC determines the business models on the basis that reflects how groups of financial assets are managed together to achieve a particular business objective. NCC's business models do not depend on management's intentions for an individual instrument, therefore the business model assessment is performed at a higher level of aggregation rather than on an instrument-by-instrument basis.

NCC has several business models for managing its financial instruments that reflect how NCC manages its financial assets in order to generate cash flows. NCC's business models determine whether cash flows will result from collecting contractual cash flows, selling financial assets or both.

NCC considers all relevant information available when making the business model assessment. However, this assessment is performed not on the basis of scenarios that NCC does not reasonably expect to occur, such as so-called 'worst case' or 'stress case' scenarios. NCC takes into account the following relevant evidence available such as:

- how the performance of the business model and the financial assets held within that business model are evaluated and reported to NCC's key management personnel;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and, in particular, the way those risks are managed.

At initial recognition of a financial asset, NCC determines whether newly recognised financial asset is part of an existing business model or whether it reflects the commencement of a new business model, if the asset does not match the existing business models. NCC reassesses its business models every reporting period to determine whether they have changed or not since the preceding period. For the current reporting period, NCC has not identified a change in its business models.

Debt instruments at amortised cost or at FVTOCI. NCC assesses the classification and measurement of a financial asset based on contractual cash flow characteristics of the asset and NCC's business model for managing the asset.

For an asset to be classified and measured at amortised cost or at FVTOCI, its contractual terms should give rise to cash flows that are solely payments of principal and interest on the principal outstanding (SPPI).

For the purpose of SPPI test, principal is the fair value of the financial asset at initial recognition. That principal amount may change over the life of the financial asset (e.g. if there are repayments of principal). Interest accrued on principal amount outstanding consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs, as well as a profit margin. The SPPI assessment is performed in the currency in which the financial asset is denominated.

3. Significant accounting policies (continued)

Contractual cash flows that are SPPI are consistent with a basic lending arrangement. Contractual terms that introduce exposure to risks or volatility in the contractual cash flows that are not related to a basic lending arrangement, such as exposure to changes in equity prices or commodity prices, do not give rise to contractual cash flows that are SPPI. An originated or an acquired financial asset can be a basic lending arrangement irrespective of whether it is a loan in its legal form.

When a debt instrument measured at FVTOCI is derecognised, the cumulative gain/loss previously recognised in OCI is reclassified from equity to profit or loss.

Debt instruments that are subsequently measured at amortised cost or at FVTOCI are subject to impairment.

Financial assets at FVTPL are:

- assets with contractual cash flows that are not SPPI; or/and
- assets that are held in a business model other than held to collect contractual cash flows or held to collect and sell.

NCC does not designate assets at FVTPL using the fair value option.

These assets are measured at fair value, with any gains/losses arising on remeasurement recognised in profit or loss.

Reclassifications. If the business model under which NCC holds financial assets changes, the financial assets affected are reclassified. The classification and measurement requirements related to the new category apply prospectively from the first day following the change in business model that results in reclassification NCC's financial assets. Changes in contractual cash flows are considered under the accounting policy on Modification and derecognition of financial assets described below.

Impairment. NCC recognises loss allowances for expected credit losses (ECLs) on the following financial instruments, not measured at FVTPL:

- due from financial institutions;
- cash and cash equivalents;
- debt investment securities;
- other financial assets subject to credit risk.

No loss allowances for expected credit losses are recognised on equity investments, financial assets arising from central counterparty (CCP) activity.

ECLs are required to be measured through a loss allowance at an amount equal to:

- 12-month ECL, i.e. lifetime ECL that result from those possible default events on the financial instrument that are possible within 12 months after the reporting date, (referred to as Stage 1); or
- full lifetime ECL, i.e. lifetime ECL that result from all possible default events over the life of the financial instrument, (referred to as Stage 2 and Stage 3).

Loss allowance for full lifetime ECL is required for a financial instrument if the credit risk attributable to that financial instrument has increased significantly since initial recognition. For all other financial instruments, ECLs are measured at an amount equal to the 12-month ECL. More details on the determination of a significant increase in credit risk are provided below.

ECLs are a probability-weighted estimate of the present value of potential credit losses. ECLs are measured as the present value of the difference between the cash flows due to NCC under the contract and the cash flows that NCC expects to receive arising from the weighting of multiple future economic scenarios. NCC measures ECLs on an individual basis or on a collective basis for portfolios of debtors that share similar value and economic risk characteristics.

3. Significant accounting policies (continued)

NCC does not form any loss allowance on ECLs for CCP activities. The CCP is acting as an intermediary between the parties: i.e. as a seller for each buyer and as a buyer for each seller, so that replacing their contractual relations between each other with relevant contracts with a central counterparty. CCP assets and liabilities are simultaneously reflected in NCC's statement of financial position due to the following:

- the net market value of those deals at the end of each day is equal to zero (if there are no defaulted market participants);
- there are no uncollateralised receivables in case all the obligations are duly fulfilled by the clearing participants.

The risks of non-fulfilment or improper fulfilment of clearing participants obligations on the CCP deals are managed using the following risk-management system measures, organised according to the federal law as of 07.02.2011 №7-FZ "On clearing, clearing activities and the central counterparty":

- setting the requirements for individual and collective clearing collateral to mitigate expected losses in case of non-fulfilment or improper fulfilment of clearing participants obligations;
- forming the CCP's guarantee fund – part of net assets designated according to the Clearing Rules to mitigate possible losses caused by non-fulfilment or improper fulfilment of clearing participants obligations;
- conducting regular stress-tests of the CCP capital adequacy, including the control of statutory ratios calculation;
- limitation of the CCP's liabilities.

Definition of default. Critical to the determination of ECLs is the definition of default. The definition of default is used in measuring the amount of ECLs and in the determination of whether the loss allowance is based on 12-month or lifetime ECLs, as default is a component of the probability of default (PD) which affects both the measurement of ECLs and the identification of a significant increase in credit risk.

NCC considers the following as constituting an event of default:

- the counterparty has gone bankrupt;
- a third party has filed a claim with the court to call the counterparty bankrupt and it has been accepted for hearing;
- the counterparty is permanently insolvent, i.e. has obligations to NCC that are past due for over 90 days; or
- the borrower's licence has been revoked by the CBR.

Significant increase in credit risk. NCC monitors all financial assets that are subject to the impairment requirements to assess whether there has been a significant increase in credit risk since initial recognition. If there has been a significant increase in credit risk NCC will measure the loss allowance based on lifetime ECL.

When assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, NCC compares the risk of a default occurring to the financial instrument at the reporting date based on the remaining maturity of the instrument with the risk of a default that was anticipated for the remaining maturity at the reporting date when the financial instrument was first recognised. In making this assessment, NCC considers both quantitative and qualitative information that is reasonable, including historical experience and forward-looking information that is available without undue cost or effort, based on NCC's historical experience and expert credit assessment including forward-looking information.

When an asset becomes past due for up to 30 days, and not less than a half of the counterparty's credit ratings issued by international rating agencies declined or internal credit rating declined by 3 grades or more since initial recognition, NCC considers that a significant increase in credit risk has occurred and the asset is in stage 2 of the impairment model, i.e. the loss allowance is measured as the lifetime ECLs.

Probability of default (PD). Multiple economic scenarios form the basis of determination of the probability of default at initial recognition and for the future. It is the weighting of these different scenarios that forms the basis of a weighted average probability of default that is used to determine whether credit risk has significantly increased.

3. Significant accounting policies (continued)

To determine PD NCC uses:

- available data from international rating agencies;
- internal ratings if the data mentioned above is unavailable.

NCC allocates its counterparties to a relevant internal rating depending on their credit quality based on quantitative and qualitative information. The historical PD is identified using a migration matrix, where internal ratings are mapped to the rating scales of international rating agencies for those counterparties that are not rated by international rating agencies.

Modification and derecognition of financial assets. A modification of a financial asset occurs when the contractual terms governing cash flows of a financial asset are renegotiated or otherwise modified between initial recognition and maturity of the financial asset. A modification affects the amount and/or timing of the contractual cash flows either immediately or at a future date.

When a financial asset is modified NCC assesses whether this modification results in derecognition. In accordance with NCC's policy a modification results in derecognition when it gives rise to substantially different terms. To determine whether the modified terms differ substantially from the original contractual terms considers the following qualitative factors:

(a) contractual cash flows after modification are no longer SPPI;
(b) change in currency;
(c) change of counterparty;
(d) the extent of change in interest rates;
(e) maturity.

If these do not clearly indicate a substantial modification, then quantitative assessment is performed to compare the present value of the remaining contractual cash flows under the original terms with the contractual cash flows under the revised terms, both amounts discounted at the original effective interest. If the difference in present value is greater than 10% NCC deems the arrangement is substantially different leading to derecognition.

In the case when the financial asset is derecognised the loss allowance for ECLs is remeasured at the date of derecognition to determine the net carrying amount of the asset at that date. The difference between this revised carrying amount and the fair value of the new financial asset with the new terms will lead to a gain or loss on derecognition. The new financial asset will have a loss allowance measured based on 12-month ECL except in the eventual occasions where the new asset is considered to be originated-credit impaired. NCC monitors credit risk of modified financial assets by evaluating qualitative and quantitative information.

When the contractual terms of a financial asset are modified and the modification does not result in derecognition, NCC determines whether the credit risk associated with the financial asset has increased significantly since initial recognition by comparing:

- the remaining lifetime PD estimated based on data at initial recognition and the original contractual terms; with
- the remaining lifetime PD at the reporting date based on the modified terms.

Where a modification does not lead to derecognition NCC calculates the modification gain/loss comparing the gross carrying amount before and after the modification (excluding the ECL allowance). Then NCC measures ECL for the modified asset, where the expected cash flows arising from the modified financial asset are included in calculating the expected cash shortfalls from the original asset.

NCC derecognises a financial asset only when the contractual rights to the asset's cash flows expire (including expiry arising from a modification with substantially different terms), or when the financial asset and substantially all the risks and rewards of ownership of the asset are transferred to another entity. If NCC neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, NCC recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If NCC retains substantially all the risks and rewards of ownership of a transferred financial asset, NCC continues to recognise the financial asset.

3. Significant accounting policies (continued)

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain/loss that had been recognised in OCI and accumulated in equity is recognised in profit or loss. The cumulative gain/loss on equity investment designated as measured at FVTOCI, previously recognised in OCI is not subsequently reclassified to profit or loss.

On derecognition of a financial asset other than in its entirety (e.g. when NCC retains an option to repurchase part of a transferred asset), NCC allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognised and the sum of the consideration received for the part no longer recognised and any cumulative gain/loss allocated to it that had been recognised in OCI is recognised in profit or loss. A cumulative gain/loss that had been recognised in OCI is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair values of those parts. This does not apply for equity investments designated as measured at FVTOCI, as the cumulative gain/loss previously recognised in OCI is not subsequently reclassified to profit or loss.

Write-off. Financial assets are written off when NCC has no reasonable expectations of recovering the financial asset (either in its entirety or a portion of it). This is the case when NCC determines that the counterparty does not have assets and/or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. A write-off constitutes a derecognition event. NCC may apply enforcement activities to financial assets written off. Recoveries resulting from NCC's enforcement activities will result in impairment gains.

Presentation of allowance for ECL in the statement of financial position. Loss allowances for ECL are presented in the statement of financial position as follows:

- for financial assets measured at amortised cost: as a deduction from the gross carrying amount of the assets;
- for debt instruments measured at FVTOCI: no loss allowance is recognised in the statement of financial position as the carrying amount is at fair value. However, the loss allowance is included as part of the revaluation amount in the investments revaluation reserve.

Financial liabilities at FVTPL. Financial liabilities are classified as at FVTPL when the financial liability is (i) held for trading, or (ii) it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that NCC manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration that may be paid by an acquirer as part of a business combination may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with NCC's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and IFRS 9 permits the entire hybrid (combined) contract to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains/losses arising on remeasurement recognized in profit or loss to the extent that they are not part of a designated hedging relationship.

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

3. Significant accounting policies (continued)

When NCC exchanges with the existing lender one debt instrument into another one with substantially different terms, such exchange is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, NCC accounts for substantial modification of terms of an existing liability or part of it as an extinguishment of the original financial liability and the recognition of a new liability. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective rate is at least 10 per cent different from the discounted present value of the remaining cash flows of the original financial liability. If the modification is not substantial, the difference between: (1) the carrying amount of the liability before the modification; and (2) the present value of the cash flows after modification should be recognised in profit or loss as the modification gain or loss within other gains and losses.

Precious metals. Precious metals are represented by physical precious metals and accounts in precious metals. Precious metals are recorded on the reporting date at CBR prices. Corresponding accounts in precious metals are recorded within Due from financial institutions and physical precious metals are recorded within Other assets. Clients' accounts in precious metals are recorded within Customer accounts. Precious metals are not financial instruments and therefore are excluded from financial risk management disclosures in accordance with IFRS 7.

Property and equipment. Property and equipment is carried at historical cost less accumulated depreciation and impairment losses.

Useful lives of property and equipment. Depreciation is recognized so as to write off the cost or revalued amount of property and equipment less their residual value over their useful lives, using the straight-line method. The estimated useful lives, carrying amounts and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis. Depreciation rate used in 2019: 20%-48% (2018: 20%-48%).

Intangible assets. Intangible assets with finite useful lives are carried at cost less any accumulated amortization and any accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. Estimated useful lives and amortization method are reviewed at the end of each reporting period with the effect of any changes in estimates being accounted for on a prospective basis. Amortization rates used for intangibles assets in 2019 were 10%-33% (2018: 10%-33%).

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

Interest income and interest expense. Interest income and expense for all financial instruments except for those classified as held for trading or those measured or designated as at fair value through profit or loss (FVTPL) are recognized in 'Interest and other finance income' and 'Interest expense' in the profit or loss using the effective interest method.

The effective interest rate (EIR) is the rate that exactly discounts estimated future cash flows of the financial instrument through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. The future cash flows are estimated taking into account all the contractual terms of the instrument.

The calculation of the EIR includes all fees and points paid or received between parties to the contract that are incremental and directly attributable to the specific transaction costs, and all other premiums or discounts. For financial assets at FVTPL transaction costs are recognized in profit or loss at initial recognition.

The interest income/ interest expense is calculated by applying the EIR to the gross carrying amount of non-credit impaired financial assets (i.e. at the amortised cost of the financial asset before adjusting for any expected credit loss allowance), or to the amortised cost of financial liabilities. For credit-impaired financial assets the interest income is calculated by applying the EIR to the amortised cost of the credit-impaired financial assets (i.e. the gross carrying amount less the allowance for expected credit losses (ECLs)). For financial assets originated or purchased credit-impaired (POCI) the EIR reflects the ECLs in determining the future cash flows expected to be received from the financial asset.

Fee and commission income and expense. Fee and commission income and expense include fees other than those that are an integral part of EIR (see above). Revenue for services provided over a period is recognized pro rata over the contractual term and consists of commission income on operations with long-term exchange instruments, listing fees, depository fees, and other.

3. Significant accounting policies (continued)

Fee and commission expenses with regards to services are accounted for as the services are received.

Taxation. Income tax expense comprises current and deferred tax.

Current income tax. Current tax expense is calculated based on taxable profit for the year. Taxable profit differs from profit as reported in the statement of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. Current income tax liabilities are measured using statutory tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax. Deferred income tax is recognized for all temporary differences arising between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are recognized for all deductible temporary differences provided it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Tax assets and liabilities are not recognized if temporary differences arise from the initial recognition of other assets or liabilities in transactions that affect neither taxable nor accounting profit.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and deferred tax assets reflects tax consequences that would follow from the manner in which NCC expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

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

Operating taxes. The Russian Federation also has various other taxes, which are assessed on NCC’s activities. These taxes are included as a component of operating expense in the statement of comprehensive income.

Payments based on the shares of the parent company. NCC grants the right to some employees of NCC to purchase equity instruments of Moscow Exchange on the terms settled in individual contracts.

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity within Payments based on the shares of the parent company reserve, over the period in which the performance and/or service conditions are fulfilled.

The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and NCC’s best estimate of the number of equity instruments that will ultimately vest. The income statement expense or credit for a period represents the movement in cumulative expense recognised as at the beginning and end of that period (Note 10).

Contingencies. Contingent liabilities are not recognized in the statement of financial position but are disclosed unless the possibility of any outflow in settlement is remote. A contingent asset is not recognized in the statement of financial position but disclosed when an inflow of economic benefits is probable.

Foreign currencies. Monetary assets and liabilities denominated in foreign currencies are translated into the Russian rubles at the CBR rates at the reporting date. Transactions in currencies other than functional currency are accounted for at the exchange rates prevailing at the date of the transaction. Profits and losses from these translations are included in net gain on foreign exchange operations.

Equity reserves. Reserves recorded in equity (other comprehensive income) at NCC’s statement of financial position include investment revaluation reserve which comprises changes in fair values of FVTOCI financial assets.

(in thousands of Russian rubles, unless otherwise indicated)

3. Significant accounting policies (continued)

New or amended standards issued but not yet effective

NCC has not applied the following new and revised IFRSs that have been issued but are not yet effective:

New or amended standard or interpretation	Effective date – for annual periods beginning on or after
IFRS 17 *"Insurance Contracts"*	1 January 2021
Amendments to IFRS 10 and IAS 28 "*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"*	Date to be determined by the IASB
Amendments to IFRS 3 "*Definition of business"*	1 January 2020
Amendments to IAS 1 and IAS 8 "*Definition to Material"*	1 January 2020

IFRS 17 "Insurance Contracts". The new Standard establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes IFRS 4 "Insurance Contracts".

The Standard outlines a General Model, which is modified for insurance contracts with direct participation features, described as the Variable Fee Approach. The General Model is simplified if certain criteria are met by measuring the liability for remaining coverage using the Premium Allocation Approach.

The General Model will use current assumptions to estimate the amount, timing and uncertainty of future cashflows and it will explicitly measure the cost of that uncertainty, it takes into account market interest rates and the impact of policyholders' options and guarantees.

The Standard is effective for annual reporting periods beginning on or after January 1, 2021, with early application permitted. It is applied retrospectively unless impracticable, in which case the modified retrospective approach or the fair value approach is applied.

For the purpose of the transition requirements, the date of initial application is the start if the annual reporting period in which the entity first applies the Standard, and the transition date is the beginning of the period immediately preceding the date of initial application. The management of NCC do not anticipate that the application of the Standard in the future will have an impact on NCC's financial statements as NCC does not have instruments in scope of this standard.

IFRS 10 "Consolidated Financial Statements" and IAS 28 (amendments) "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture". The amendments to IFRS 10 and IAS 28 deal with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. Specifically, the amendments state that gains or losses resulting from the loss of control of a subsidiary that does not contain a business in a transaction with an associate or a joint venture that is accounted for using the equity method, are recognised in the parent's profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, gains and losses resulting from the remeasurement of investments retained in any former subsidiary (that has become an associate or a joint venture that is accounted for using the equity method) to fair value are recognised in the former parent's profit or loss only to the extent of the unrelated investors'interests in the new associate or joint venture.

The effective date of the amendments has yet to be set by the IASB; however, earlier application of the amendments is permitted. The management of NCC anticipate that the application of these amendments may have an impact on NCC's financial statements in future periods should such transactions arise. The management of NCC do not anticipate that the application of the amendments in the future will have an impact on NCC's financial statements.

Amendments to IFRS 3 "Definition of business". The amendments clarify that to be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. The definitions of a business and of outputs were narrowed by focusing on goods and services provided to customers and by removing the reference to an ability to reduce costs.

The amendments also remove the assessment of whether market participants are capable of replacing any missing inputs or processes and continuing to produce outputs and add an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The amendments are effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 January 2020 and to asset acquisitions that occur on or after the beginning of that period. Earlier application is permitted. The management of NCC do not anticipate that the application of the amendments in the future will have an impact on NCC's financial statements.

3. Significant accounting policies (continued)

Amendments to IAS 1 and IAS 8 "Definition to Material". The amendments are intended to make the definition of material in IAS 1 easier to understand and are not intended to alter the underlying concept of materiality in IFRS Standards.

The concept of 'obscuring' material information with immaterial information has been included as part of the new definition. The threshold for materiality influencing users has been changed from 'could influence' to 'could reasonably be expected to influence'.

The definition of material in IAS 8 has been replaced by a reference to the definition of material in IAS 1. In addition, the IASB amended other Standards and the Conceptual Framework that contain a definition of material or refer to the term 'material' to ensure consistency. The amendments are applied prospectively for annual periods beginning on or after1 January 2020, with earlier application permitted. The management of NCC do not anticipate that the application of the amendments in the future will have an impact on NCC's financial statements.

4. Critical accounting judgments and key sources of estimation uncertainty

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

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

Critical accounting judgements

Business model assessment. Classification and measurement of financial assets depends on the results of the SPPI and the business model test. NCC determines the business model at a level that reflects how groups of financial assets are managed together to achieve a particular business objective (for more details refer to Note 3). NCC monitors financial assets measured at amortised cost or fair value through other comprehensive income that are derecognised prior to their maturity to understand the reason for their disposal and whether the reasons are consistent with the objective of the business for which the asset was held. NCC conducts assessment of whether the business model for which the remaining financial assets are held continues to be appropriate and if it is not appropriate whether there has been a change and so a prospective change to the classification of those assets.

Significant increase of credit risk. As explained in Note 3, expected credit losses are measured as an allowance equal to 12-month ECL for stage 1 assets, or lifetime ECL for stage 2 or stage 3 assets. An asset moves to stage 2 when its credit risk has increased significantly since initial recognition. IFRS 9 does not define what constitutes a significant increase in credit risk. In assessing whether the credit risk of an asset has significantly increased NCC takes into account the information listed in Note 3.

Recoverability of deferred tax assets. The management of the NCC is confident that no valuation allowance against deferred tax assets at the reporting date is considered necessary, because it is more likely than the deferred tax asset will be fully realised. The carrying value of deferred tax assets amounted to RUB 1 582 914 thousand as at December 31, 2019 (December 31, 2018: none).

Key sources of estimation uncertainty

Probability of default. PD constitutes a key input in measuring ECL. PD is an estimate of the likelihood of default over a given time horizon, the calculation of which includes historical data, assumptions and expectations of future conditions. See Note 30 for more details, including analysis of the sensitivity of the reported ECL to changes in PD resulting from changes in economic drivers.

Loss Given Default. LGD is an estimate of the loss arising on default. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, taking into account cash flows from collateral and integral credit enhancements. See Note 3 for more details.

(in thousands of Russian rubles, unless otherwise indicated)

4. Critical accounting judgments and key sources of estimation uncertainty (continued)

Provision. NCC is subject to litigation. Such litigation may lead to orders to pay against NCC. If it is more likely than not that an outflow of resources will occur, a provision will be recognised based on an estimate of the most probable amount necessary to settle the obligation if such amount is reasonably estimable. NCC determines whether there is a possible obligation from past events, evaluates the probability that an outflow will occur and estimates the potential amount of the outflow. As the outcome of litigation is usually uncertain, the judgement is reviewed continuously. See Note 9, Note 13 and Note 26 for further information.

NCC may also assess the possibility of occurrence of other commitments and create appropriate provision. Acting as a Commodity Delivery Operator, NCC has applied a conservative approach to creating provisions within the value of commodities for which NCC provides safekeeping.

Valuation of financial instruments. For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include:

- using recent arm's length market transactions;
- reference to the current fair value of another instrument that is substantially the same;
- a discounted cash flow analysis or other valuation models.

An analysis of fair values of financial instruments and further details as to how they are measured are provided in Note 28.

5. Interest income and expense

	Year ended December 31, 2019	Year ended December 31, 2018
Interest income on financial assets at fair value		
Interest income on financial assets at fair value through other comprehesive income	8 090 847	10 819 012
Interest income on financial assets at fair value through profit or loss	255 132	153 980
Total interest income on financial assets at fair value	**8 345 979**	**10 972 992**
Interest income on financial assets at amortized cost		
Interest income on due from banks and other financial institutions	2 173 925	3 986 191
Interest income on cash and cash equivalents	1 421 162	1 178 902
Total interest income on financial assets at amortized cost	**3 595 087**	**5 165 093**
Total interest income	**11 941 066**	**16 138 085**
Interest expense		
Interest expense on interbank deposits	(2 477 565)	(155 344)
Interest expense on accounts of clearing participants	(389 249)	(271 154)
Interest expense on stress collateral	(37 064)	(17 589)
Interest expense on lease liabilities	(31 419)	-
Interest expense on REPO deals and other borrowed funds	(4 802)	(2 695)
Total interest expense	**(2 940 099)**	**(446 782)**
Total net interest income	**9 000 967**	**15 691 303**

(in thousands of Russian rubles, unless otherwise indicated)

6. Fee and commission income

	Year ended December 31, 2019	Year ended December 31, 2018
Clearing services for money market	4 633 914	4 243 059
Clearing services for securities market	2 008 579	1 700 484
Clearing services for foreign exchange market	1 531 883	1 741 887
Clearing services for derivatives market	1 219 597	216 829
Other commissions	95 071	188 736
Total fee and commission income	**9 489 044**	**8 090 995**

The fee and commission income is reduced by paid expenses incurred by NCC in relation to interest accrued on negative interest rates on correspondent accounts placed with non-resident banks as a part of clearing activities for execution of client orders and re-issued to customers in accordance with the clearing rules.

7. Net gain on financial assets at fair value through other comprehesive income

	Year ended December 31, 2019	Year ended December 31, 2018
Bonds issued by Russian Federation	1 378 708	236 005
Bonds issued by Russian companies	51 664	56 213
Bonds issued by Russian commercial banks	24 245	(45 936)
Bonds issued by international financial organizations	8 667	(527)
Bonds issued by CBR	(72)	(6 525)
Net gain on financial assets at fair value through other comprehesive income	**1 463 212**	**239 230**

8. Net gain / (loss) on foreign exchange operations

	Year ended December 31, 2019	Year ended December 31, 2018
Foreign exchange swaps	2 960 366	(1 935 588)
Net other foreign exchange gain	262 113	8 980
Total foreign exchange gains less losses	**3 222 479**	**(1 926 608)**

Net gain on foreign exchange swaps includes gains/(losses) from swap deals used to hedge open foreign currency position of NCC and gain from swap transactions used to earn interest income from ruble-denominated funds.

(in thousands of Russian rubles, unless otherwise indicated)

9. Other operating income

	Year ended December 31, 2019	Year ended December 31, 2018
Reversal of legal case provision	873 040	-
Movement in allowance for expected credit losses (Note 12)	-	124 339
Other income	26 229	31 783
Total other operating income	**899 269**	**156 122**

In December 2015 a brokerage company defaulted on its liabilities NCC that were foreclosed via standard default management procedures explicitly stipulated by the Law "On clearing, clearing activities and the central counterparty" to cover the liabilities to bona fide market and clearing participants. In September 2016 the broker was declared bankrupt. In October 2017 the bankruptcy manager filed a lawsuit with the arbitration court, seeking to declare the deals on foreclosure as void. During the year 2018 the courts of first and second instances ruled to fulfil plaintiffs demands. NCC made a 100% provision and filed a cassation which was satisfied. In January 2019 the plaintiffs applied to the Supreme Court. As at March 31, 2019 NCC performed additional risk-assessment and recovered the provision in full. In the second quarter 2019 The Supreme Court rejected to satisfy the plaintiffs' claim.

10. Personnel expenses

	Year ended December 31, 2019	Year ended December 31, 2018
Personnel expenses	591 577	531 581
Payroll taxes and charges	108 151	96 641
Payments based on the shares of the parent company	24 109	35 315
Total personnel expenses	**723 837**	**663 537**

Payments based on the shares of the parent company

Rights to purchase equity instruments granted to some employees give holders a choice either to only purchase the full number of shares at exercise price or also to sell back shares at the market price for the same ruble value. The majority of the rights vest when the employee continues to be employed by the Group at the vesting date. The maximum contractual term of the contracts is four years. The maximum contractual term of the contracts granted in 2017 is three and a half years. The fair value of the rights is measured at the grant date using a binomial model taking into account the terms and conditions under which the instruments were granted.

The following table illustrates the number and weighted average exercise prices (WAEP) of, and movements in, rights to purchase equity instruments of the parent company:

	Number	WAEP
Outstanding as at December 31, 2017	**3 116 667**	**68,3**
Granted during the year	3 000 000	115,4
Exercised	(1 166 667)	66,7
Outstanding as at December 31, 2018	**4 950 000**	**112,9**
Granted during the year	625 000	89,0
Forfeited	(825 000)	93,9
Outstanding as at December 31, 2019	**4 750 000**	**113,1**

WAEP for exercised rights in the table above is calculated based on the contractual exercise price.

(in thousands of Russian rubles, unless otherwise indicated)

10. Personnel expenses (continued)

The weighted average remaining contractual life for the rights outstanding as at December 31, 2019 was 0,6 year (December 31, 2018: 1 year). The weighted average fair value of rights granted during the year ended December 31, 2019 was RUB 12,13 per 1 right (December 31, 2018: 17,87 per 1 right). Exercise prices for rights outstanding as at December 31, 2019 were RUB 107,96 – RUB 115,38 (December 31, 2018: RUB 107,96 – RUB 115,38).

The number of equity rights exercisable as at December 31, 2019 is 1 475 000 with WAEP of RUB 111,6 (December 31, 2018: 390 000 with WAEP of RUB 109,1).

11. Administrative and other operating expenses

	Year ended December 31, 2019	Year ended December 31, 2018
Professional services	218 119	329 198
Depository services	129 703	72 820
Maintenance of property and equipment and intangible assets	129 199	94 361
Depreciation and amortization charge	117 265	50 327
Settlement services and bank fees	102 896	87 214
Taxes, other than income tax	62 761	59 971
Information and technological services	54 617	54 893
Communications services	7 246	7 080
Lease of property and equipment	-	59 808
Other	23 102	30 893
Total administrative and other operating expenses	**844 908**	**846 565**

Professional services comprise consulting, audit, legal services and other services.

12. Movement in allowance for expected credit losses

	Cash and cash equivalents	Due from credit institutions	Financial assets at fair value through other comprehensive income	Other financial assets	Total
Note	*15*	*17*		*21*	
December 31, 2017	**-**	**-**	**-**	**465**	**465**
Effect of IFRS 9 adoption	5 220	23 644	323 236	9 353	361 453
January 01, 2018	**5 220**	**23 644**	**323 236**	**9 818**	**361 918**
Net (recovery) / charge for the period	(582)	12 225	(139 397)	3 415	(124 339)
December 31, 2018	**4 638**	**35 869**	**183 839**	**13 233**	**237 579**
Net (recovery) / charge for the period	(2 906)	(35 869)	13 727	2 323 290	2 298 242
December 31, 2019	**1 732**	**-**	**197 566**	**2 336 523**	**2 535 821**

The allowance for expected credit losses of NCC consists of the loss allowance measured at an amount equal to 12-month expected credit losses for Stage 1 assets, and the loss allowance measured at an amount equal to lifetime expected credit losses for Stage 2 and Stage 3 assets. As at December 31, 2019 and December 31, 2018 all financial assets of NCC, except for other financial assets as at December 31, 2019, relate to Stage 1.

(in thousands of Russian rubles, unless otherwise indicated)

12. Movement in allowance for expected credit losses (continued)

The tables below analyzes information about the significant changes in the gross carrying amount of other financial assets during the period that contributed to changes in the loss allowance as well as the movement of the loss allowance during the 2019:

	Stage 1	Stage 3	Total
Gross carrying amount as at January 1, 2019	**191 209**	**-**	**191 209**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	2 338 821	-	2 338 821
Transfer to stage 3	(2 336 141)	2 336 141	-
Gross carrying amount as at December 31, 2019	**193 889**	**2 336 141**	**2 530 030**
Loss allowance as at December 31, 2019	**(382)**	**(2 336 141)**	**(2 336 523)**

	Stage 1	Stage 3	Total
Loss allowance as at January 1, 2019	**13 233**	**-**	**13 233**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	23 388	-	23 388
Transfer to stage 3	(23 361)	23 361	-
Net increase/(decrease) in credit risk	(12 878)	2 336 141	2 323 263
Loss allowance as at December 31, 2019	**382**	**2 336 141**	**2 336 523**

13. Other expenses

	Year ended December 31, 2019	Year ended December 31, 2018
Movement in allowance for expected credit losses (Note 12)	2 298 242	-
Provision for losses related to potential commodity market shortages (Note 24)	31 660	-
Legal case provision (Note 24)	-	873 040
Loss due to operational errors (Note 24)	-	856 885
Total other expenses	**2 329 902**	**1 729 925**

Grain. In the first quarter of 2019 NCC operating as a Commodity Delivery Operator (CDO) found, during regular inspections of commodities stored in grain warehouses, several instances where grain stockpiles used as collateral under swap trades were missing, allegedly due to theft. This risk related to use of a partner's infrastructure for storing commodity assets is inherent exclusively to the agricultural products market. NCC's risk protection system and risk monitoring on the grain market consists of evaluation of technical condition and financial position of the counterparty (certification), regular independent surveys with rotation of surveyors, and insurance coverage, including covering the risk of fraud, which size was sufficient to cover possible losses based on previous cases in the market. NCC has undertaken all nesessary actions, such as: has filed 12 claims for the initiation of criminal and civil proceedings, demanding the execution of trades, reclaiming missing collateral and claiming insurance.

The amount receivable from the accredited elevators is presented as other assets (Note 21), for which a 100% provision has been created.

(in thousands of Russian rubles, unless otherwise indicated)

13. Other expenses (continued)

Sugar. Despite the fact that there have been no instances of missing sugar stocks, NCC has applied a conservative approach to creating provisions for sugar stockpiles at wharehouses. On a regular basis, NCC conducts on-site inspections to ensure the security and quality of sugar stockpiles.

The total amount of provision for CDO operations is RUB 2 367 801 thousand.

Money market default. In the first quarter 2018 a professional participant in the money market defaulted. During the default management procedure a partial release of collateral was triggered due to an operational error. The remaining collateral on the participant's accounts within NCC was insufficient to cover its corresponding liabilities to NCC as a result RUB 856 885 thousand were paid out from the NCC's funds and the related amount receivable from the participant was written off as bad debt. In June 2018 NCC filed a claim to declare that professional participant bankrupt due to non-fulfillment of its liabilities. Bankruptcy proceedings were initiated. NCC implemented a set of measures to preclude the recurrence of such an operational event in the future.

14. Income tax expense

	Year ended December 31, 2019	Year ended December 31, 2018
Current income tax expense	7 305 627	974 837
Current income tax expense related to previous years	-	507 504
Deferred taxation movement	(3 404 478)	2 019 618
Total income tax expense	**3 901 149**	**3 501 959**

NCC calculates its income tax for the current period based on the tax accounts maintained and prepared in accordance with the requirements of the Russian tax legislation which may differ from IFRS.

As the certain expenses are not tax-deductible, it results in permanent tax differences. A reconciliation of the income tax expense based on the statutory rate with actual income tax is as follows:

	Year ended December 31, 2019	Year ended December 31, 2018
Profit before income tax	**20 320 858**	**19 001 453**
Tax at the statutory tax rate (20%)	4 064 172	3 800 291
Tax effect of income taxed at rates other than the 20% rate	(249 062)	(324 212)
Adjustments in respect of current income tax of previous years	-	507 504
Deferred tax from a previously unrecognised temporary difference of a prior period	-	(507 504)
Tax effect of permanent differences	86 039	25 880
Income tax expense	**3 901 149**	**3 501 959**

Deferred taxes reflect net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes. Temporary differences relate mostly to different methods of income and expense recognition, as well as the difference between the accounting and tax base of certain assets.

(in thousands of Russian rubles, unless otherwise indicated)

14. Income tax expense (continued)

Tax effect of temporary differences as at December 31, 2019 and December 31, 2018 comprise:

	Statement of financial position		Recognized in statement of comprehensive income	
	December 31, 2019	**December 31, 2018**	**Year ended December 31, 2019**	**Year ended December 31, 2018**
Effect of deductible temporary differences				
Due from banks and other financial institutions	346	8 101	(7 755)	825
Financial assets and liabilities at fair value through profit or loss	86 918	-	86 918	(152 682)
Financial assets at fair value though other comprehesive income	794 711	-	794 711	-
Property and equipment and intangible assets	4 374	1 715	2 659	499
Other assets	641 151	174 056	467 095	174 056
Other liabilities	55 414	266 400	(210 986)	149 861
Total effect of deductible temporary differences	**1 582 914**	**450 272**	**1 132** 642	**172 559**
Effect of taxable temporary differences				
Financial assets and liabilities at fair value through profit or loss	-	(180 486)	180 486	(97 762)
Financial assets at fair value though other comprehesive income	-	(1 292 881)	2 091 350	(2 113 609)
Other assets	-	-	-	19 194
Total effect of taxable differences	**-**	**(1 473 367)**	**2 271 836**	**(2 192 177)**
Total deferred income tax expense			**3 404 478**	**(2 019 618)**
Deferred tax (liabilities) / assets	**1 582 914**	**(1 023 095)**		

	Year ended December 31, 2019	**Year ended December 31, 2018**
Beginning of the period – deferred tax assets (liabilities)	**(1 023 095)**	**168 519**
Beginning of the period – deferred tax assets (liabilities) (with IFRS 9 effect)	**(1 023 095)**	**175 795**
Change in deferred tax recognized in profit or loss	3 404 478	(2 019 618)
Change in deferred tax recognized in other comprehensive income	(798 469)	820 728
End of the period – deferred tax (liabilities) /assets	**1 582 914**	**(1 023 095)**

(in thousands of Russian rubles, unless otherwise indicated)

15. Cash and cash equivalents

	December 31, 2019	December 31, 2018
Correspondent accounts and overnight deposits with other credit organizations	477 218 022	405 502 331
Balances with the CBR	48 253 066	14 463 577
Cash on hand	2 341	3 518
Settlements on brokerage operations	174	1 067
Total cash and cash equivalents	**525 473 603**	**419 970 493**
Less allowance for impairment (Note 12)	(1 732)	(4 638)
Total cash and cash equivalents	**525 471 871**	**419 965 855**

As at December 31, 2019 cash and cash equivalents include balances with twelve counterparties (December 31, 2018: with nine counterparties) in the amount of RUB 522 134 552 thousand (December 31, 2018: RUB 410 329 819 thousand), which represents a significant concentration.

16. Financial Assets at Fair Value through Profit or Loss

	December 31, 2019	December 31, 2018
Corporate debt securities issued by non-residents	13 418 522	3 188 474
Fair value of foreign currency derivatives (Note 30)	49 978	1 018 696
Shares issued by foreign companies	4 111	4 510
Total financial assets at fair value though profit or loss	**13 472 611**	**4 211 680**

As at December 31, 2019 and December 31, 2018 corporate debt securities issued by non-residents consist of debt securities issued only by OECD subsidiaries of Russian companies.

17. Due from banks and other financial institutions

	December 31, 2019	December 31, 2018
Reverse repurchase agreements with financial institutions	48 445 455	48 382 748
Correspondent accounts in precious metals	4 189 132	285 926
Term deposits	-	34 344 925
Deposits in precious metals	-	4 015 852
Total due from banks and other financial institutions	**52 634 587**	**87 029 451**
Less allowance for impairment (Note 12)	-	(35 869)
Total due from financial institutions	**52 634 587**	**86 993 582**

As at December 31, 2019 due from banks and other financial institutions include balances with two counterparties (December 31, 2018: with five counterparties) in the amount of RUB 48 445 456 thousand (December 31, 2018: RUB 82 727 672 thousand), which represents a significant concentration.

As at December 31, 2019 the fair value of bonds pledged under reverse repurchase agreements with financial institutions was RUB 60 190 176 thousand (December 31, 2018: RUB 59 455 333 thousand).

(in thousands of Russian rubles, unless otherwise indicated)

18. Financial assets and liabilities of central counterparty

	December 31, 2019	December 31, 2018
Repo transactions	3 259 579 211	3 310 008 235
Currency transactions	3 091 411	2 011 854
Total financial assets and liabilities of central counterparty	**3 262 670 622**	**3 312 020 089**

Assets from repo transactions represent amounts receivable under reverse repurchase agreements, and liabilities from repo transactions represent amounts payable under respective direct repurchase agreements entered by NCC in its capacity of central counterparty. Fair value of securities pledged as collateral under direct repo transactions is RUB 3 771 234 861 thousand (December 31, 2018: RUB 3 706 037 111 thousand).

CCP financial assets and liabilities under currency transactions represent fair values of overnight currency deals. Gross claims and liabilities with individual counterparties are offset in accordance with IAS 32. Information about financial assets offset against financial liabilities in the statement of financial position is disclosed in Note 31.

As at December 31, 2019 there was no allowance created for financial assets of central counterparty (December 31, 2018: no allowance) and these financial assets were not overdue (December 31, 2018: not overdue).

19. Financial assets at fair value though other comprehesive income

	December 31, 2019	December 31, 2018
Bonds issued by Russian companies	66 373 953	44 881 749
Bonds issued by Russian Federation	61 928 992	121 718 704
Bonds issued by Russian commercial banks	14 160 581	17 590 730
Bonds issued by international financial organizations	2 587 232	3 592 798
Bonds issued by CBR	-	10 076 446
Financial assets at fair value though other comprehesive income	**145 050 758**	**197 860 427**

As at December 31, 2019 financial assets at fair value through other comprehensive income of RUB 63 694 304 thousand (December 31, 2018: RUB 65 796 355 thousand) were included in the "Blocked by the CBR" section of NCC's securities account and could be used as a collateral for NCC's borrowings within the limit set by the CBR (see CBR Regulation No. 4801–U, "On the methods and criteria of collateralized refinancing of credit organizations" dated May 22, 2018).

(in thousands of Russian rubles, unless otherwise indicated)

20. Property, equipment and intangible assets

	Furniture & Equipment	Intangible assets	Trademark	Intangible assets in progress	Right-of-use assets	Total
Cost						
December 31, 2017	**73 499**	**223 901**	**1 830**	**45 800**	**-**	**345 030**
Additions	1 740	67 101	-	-	-	68 841
Transfer	-	33 131	-	(33 131)	-	-
Disposals	-	(198)	-	-	-	(198)
December 31, 2018	**75 239**	**323 935**	**1 830**	**12 669**	**-**	**413 673**
January 1, 2019 (with IFRS 16 effect)	**75 239**	**323 935**	**1 830**	**12 669**	**392 536**	**806 209**
Additions	7 012	87 515	-	58 256	-	152 783
Write-off	-	(829)	-	-	-	(829)
Transfer	-	12 373	-	(12 373)	-	-
Revaluation of Right-of-use assets	-	-	-	-	(13 475)	(13 475)
December 31, 2019	**82 251**	**422 994**	**1 830**	**58 552**	**379 061**	**944 688**
Accumulated depreciation						
December 31, 2017	**48 412**	**114 720**	**186**	**-**	**-**	**163 318**
Charge for the period	14 055	36 011	261	-	-	50 327
Eliminated on disposal	-	(199)	-	-	-	(199)
December 31, 2018	**62 467**	**150 532**	**447**	**-**	**-**	**213 446**
January 1, 2019 (with IFRS 16 effect)	**62 467**	**150 532**	**447**	**-**	**-**	**213 446**
Charge for the period	14 003	63 101	261	-	39 900	117 265
Eliminated on disposal	-	(829)	-	-		(829)
December 31, 2019	**76 470**	**212 804**	**708**	**-**	**39 900**	**329 882**
Net book value						
December 31, 2018	**12 772**	**173 403**	**1 383**	**12 669**	**-**	**200 227**
December 31, 2019	**5 781**	**210 190**	**1 122**	**58 552**	**339 161**	**614 806**

As at December 31, 2019 NCC's historical cost of fully depreciated property and equipment amounts to RUB 73 020 thousand (December 31, 2018: RUB 47 267 thousand).

(in thousands of Russian rubles, unless otherwise indicated)

21. Other assets

	December 31, 2019	December 31, 2018
Other financial assets		
Receivables on services rendered and other operations	2 530 030	191 209
Less allowance for impairment (Note 12)	(2 336 523)	(13 233)
Total other financial assets	**193 507**	**177 976**
Other non-financial assets		
Precious metals	3 134 287	1 976 758
Prepayments and advances	53 001	50 281
Taxes receivable other than income tax	2 634	1 232
Total other non-financial assets	**3 189 922**	**2 028 271**
Total other assets	**3 383 429**	**2 206 247**

As at December 31, 2019 receivables on services rendered and other operations include receivables from grain warehouses (Note 13) in the amount of RUB 2 336 141 thousand, fully covered by the allowance for expected credit losses.

22. Customer accounts

	December 31, 2019	December 31, 2018
Accounts of clearing participants	584 831 575	608 809 621
Current accounts	21 582 914	16 897 517
Accounts in precious metals	7 336 259	6 278 435
Guarantee fund on securities, deposit and derivatives markets	3 264 750	3 612 447
Guarantee fund on foreign currency market and precious metals market	2 251 507	2 489 009
Margin account	579	979 567
Total customer accounts	**619 267 584**	**639 066 596**

Accounts of clearing participants include margins deposited by clearing participants to cover risks arising from open positions and to guarantee payment of commissions.

Guarantee funds consist of collective clearing collateral contributed by clearing members. The purpose of these funds is to provide market participants with additional assurance of NCC's ability to guarantee proper settlements of open positions in case of a market participant default.

23. Overnight bank loans

	December 31, 2019	December 31, 2018
Overnight bank loans	49 229 140	5 003 111
Total overnight bank loans	**49 229 140**	**5 003 111**

As at December 31, 2019 overnight bank loans include balances with one counterparty, which is greater than 10% of equity (December 31, 2018: none). The amount of this balance is RUB 31 741 404 thousand or 64% of the total overnight bank loans as at December 31, 2019 (December 31, 2018: none).

(in thousands of Russian rubles, unless otherwise indicated)

24. Other liabilities

	December 31, 2019	December 31, 2018
Other financial liabilities		
Lease liabilities	351 889	-
Payables to personnel	1 372	952
Payables for depositary and settlement operations	176 188	127 210
Payables to clearing participants with revoked licences	154	91 430
Payables for unused vacations	28 360	21 861
Payables on information and technological services	17 981	16 957
Other	76 426	37 891
Total other financial liabilities	**652 370**	**296 301**
Other non-financial liabilities		
Personnel remuneration provision	202 098	202 118
Provision (Note 9, 13)	31 660	873 040
Deferred commission income	-	250 340
Taxes payable, other than income tax	42 562	39 743
Total other liabilities	**928 690**	**1 661 542**

The movement of provision for the year ended December 31, 2019 and the year ended December 31, 2018 is provided below:

	Year ended December 31, 2019	Year ended December 31, 2018
Beginning of the period	**873 040**	**-**
Net charge for the period (Note 13)	31 660	1 729 925
Write-offs (Note 13)	-	(856 885)
Recovery of legal case provision (Note 9)	(873 040)	-
End of the period	**31 660**	**873 040**

25. Share capital and paid-in capital

As at December 31, 2019 and December 31, 2018 NCC's share capital consists of 16 670 000 issued and paid ordinary shares with the nominal value of RUB 1 thousand each.

NCC's reserves distributable between the shareholders are limited by the amounts disclosed in its statutory RAS accounts. Non-distributable reserves are represented by a Reserve fund and part of NCC's own funds, segregated in accordance with regulations of CBR relating to CCP activities.

Reserve fund is created as required by the regulations of the Russian Federation, to cover general banking risks, including future losses and other unforeseen risks or contingencies. As at December 31, 2019 the reserve fund amounted to RUB 966 775 thousand (December 31, 2018: RUB 966 775 thousand). Reserve fund is stated as a part of retained earnings.

Part of NCC's own funds, segregated in accordance with regulations of CBR relating to CCP activities, as a part of retained earnings, is represented by:

- dedicated capital of CCP which is intended to cover possible losses resulting from a default or improper performance of their obligations by clearing participants, in amount of RUB 10 100 000 thousand (December 31, 2018: RUB 9 500 00 thousand);
- funds for termination or restructuring of CCP activities, in amount of RUB 690 479 thousand (December 31, 2018: RUB 693 200 thousand);
- funds to cover possible losses from deterioration of the CCP's financial position, not associated with defaults of clearing participants, in the amount of RUB 345 240 thousand (December 31, 2018: RUB 346 600 thousand).

26. Commitments and contingencies

Legal proceedings. In the normal course of business, claims against NCC may be received from customers and counterparties. NCC has made a provision for potential losses on legal cases, which included in these financial statements (Note 9, Note 13 and Note 24).

Operating Environment. Emerging markets such as Russia are subject to different risks than more developed markets, including economic, political and social, and legal and legislative risks. Laws and regulations affecting businesses in Russia continue to change rapidly, tax and regulatory frameworks are subject to varying interpretations. The future economic direction of Russia is heavily influenced by the fiscal and monetary policies adopted by the government, together with developments in the legal, regulatory, and political environment.

Because Russia produces and exports large volumes of oil and gas, its economy is particularly sensitive to the price of oil and gas on the world market. In March 2020 oil prices dropped for more than 40%, which resulted in weakening of Russian Ruble against major currencies.

Starting from 2014, sanctions have been imposed in several packages by the U.S. and the E.U. on certain Russian officials, businessmen and companies. This led to reduced access of the Russian businesses to international capital markets.

The impact of further economic and political developments on future operations and financial position of the Group might be significant.

In addition to that, starting from early 2020 a new coronavirus disease (COVID-19) has begun rapidly spreading all over the world resulting in announcement of the pandemic status by the World Health Organization in March 2020. Responses put in place by many countries to contain the spread of COVID-19 are resulting in significant operational and financial disruption for many companies and have significant impact on global economy and global financial markets. The significance of the effect of COVID-19 on the Group's business largely depends on the duration of the pandemic effects and the impact of new coronavirus spread prevention measures on the world and Russian economy. Management believes it is taking appropriate measures to support sustainability of NCC's business in current circumstances.

Commodities. Acting as CDO NCC provides safekeeping of commodities required for clearing purposes. As at December 31, 2019 NCC had 3 800 tonns of sugar and 5,1 tonns of grain in safekeeping (December 31, 2018: 1 480 tonns of sugar and 292 755,6 tonns of grain). NCC accepts the operational risk on these activities, but the NCC's customers bear the credit and market risks associated with such operations.

Taxation. Major part of NCC's business activity is carried out in the Russian Federation. Russian tax, currency and customs legislation as currently in effect is vaguely drafted and is subject to varying interpretations, selective and inconsistent application and changes, which can occur frequently, at short notice and may apply retrospectively. NCC's interpretation of such legislation as applied to the transactions and activity of NCC may be challenged by the relevant regional and federal authorities. Tax authorities may be taking a more assertive position in their interpretation and application of this legislation and tax settlements review. However, the probability of unfavorable outcome in case of suits from tax authorities cannot be reliably measured.

In 2017, 2018 and 2019 the tax service of the Russian Federation conducted a tax monitoring of NCC on accuracy of calculation, completeness and payment (transfer) timeliness of taxes and fees which is entrusted on taxpayers (tax agents) in accordance with the Tax Code of the Russian Federation. In October 2019 the tax service of the Russian Federation decided to conduct a tax monitoring of NCC in 2020.

Tax monitoring is a type of tax control that has been in force in the Russian Federation since January 1, 2015. Tax monitoring is hold based on the decision of tax authority, with the permission and by the request of taxpayer. Peculiarity of tax monitoring is that the tax authority receives access to information that allows to testify correctness of calculation, completeness and timeliness tax payments and fees by the taxpayer on regular basis. Participation in the system of tax monitoring will allow NCC to eliminate emerging tax risks and legal uncertainty on tax issues and obtain a reasoned opinion on disputable tax accounting issues for both accomplished and planned "tax ruling" transactions. At the same time during the period of tax monitoring, tax inspections (cameral, field) by the tax authority are not conducted.

Field tax control may cover three calendar years preceding the year of the first tax monitoring, for NCC this is 2016 respectively. Under certain conditions, in accordance with tax laws, earlier periods may also be subject to control.

(in thousands of Russian rubles, unless otherwise indicated)

26. Commitments and contingencies (continued)

In 2019 amendments were introduced to the Tax Code of the Russian Federation and certain other legislative acts, which provides, among other things, an increase in the general rate of Value Added Tax (VAT) from 18% to 20%. The new rates will apply to goods, work, services, and property rights supplied starting from January 1, 2019.

As at December 31, 2019 management believes that its interpretation of the relevant legislation is appropriate and that NCC's tax, currency and customs positions will be sustained.

27. Transactions with related parties

Control relationships. As at December 31, 2019 and December 31, 2018 NCC is a wholly owned subsidiary of Moscow Exchange. Russian Federation exercized significant influence over Moscow Exchange.

The statement of comprehensive income as of December 31, 2019 and December 31, 2018 includes the following amounts with related parties:

	Year ended December 31, 2019		Year ended December 31, 2018	
	Parent	**Other related parties**	**Parent**	**Other related parties**
Interest expense	(23 760)	(7 748)	-	(225)
Comission income (recoverable expenses)	2 844	(25 113)	5 662	(97 295)
Net loss on foreign exchange operations	-	(1 095 616)	-	(159 697)
Administrative and other operating expenses	(103 118)	(237 124)	(115 098)	(161 985)

The statement of financial position as of December 31, 2019 and December 31, 2018 includes the following amounts with related parties:

	December 31, 2019		December 31, 2018	
	Parent	**Other related parties**	**Parent**	**Other related parties**
Cash and cash equivalents	-	74 898 667	-	32 505 276
Other assets	800	9 230	856	10
Derivatives recognized at fair value through profit and loss	-	154	-	(17 018)
Customer accounts	(1 476 478)	(135 837 685)	(13 914 108)	(76 053 326)
Other liabilities	(280 192)	(142 329)	(16 968)	(48 698)

Transactions with key management. Key management personnel comprises members of the Management Board and the Supervisory Board. The total remuneration of key management personnel includes short-term benefits (salary, bonuses, payroll related taxes, insurance, health care, etc.), long-term benefits, and share-based payment expense.

Included in the Statement of Financial Position are the following amounts that arose on transactions with key management personnel:

	Year ended December 31, 2019	**Year ended December 31, 2018**
Other liabilities	27 763	21 317
Payments based on the shares of the parent company	65 472	41 363

(in thousands of Russian rubles, unless otherwise indicated)

27. Transactions with related parties (continued)

Included in the Statement of Comprehensive Income are the following amounts that arose due to transactions with key management personnel:

	Year ended December 31, 2019	Year ended December 31, 2018
Short-term employee benefits, except for share-based payments	123 496	125 484
Share-based payment expense	24 109	35 315
Long-term employee benefits	19 166	19 736
Total remuneration of key management personnel	**166 771**	**180 535**

Transactions with government-related entities. In the ordinary course of business NCC provides trading, clearing and depositary services to government-related entities, places funds with government-related banks and bonds issued by the Russian Federation and government-related entities. According to p.26 (b) of IAS 24 NCC discloses the following significant outstanding balances and financial results on operations with government-related entities As at December 31, 2019 and December 31, 2018 and for the years ended December 31, 2019 and December 31, 2018:

	Year ended December 31, 2019	Year ended December 31, 2018
Fee and commission income	3 109 354	2 458 284
Interest income	7 041 345	10 642 383
Interest expense	(2 601 273)	(223 319)
Net gain on financial assets at fair value though other comprehesive income	1 392 108	235 591
Other operating income	2 314	-
Administrative and other operating expenses	(10 299)	(71 294)

	December 31, 2019	December 31, 2018
Assets		
Cash and cash equivalents	130 046 350	138 114 788
Due from financial institutions	-	4 015 853
Financial assets of central counterparty	947 804 960	987 644 188
Financial assets at fair value though other comprehesive income	89 340 731	174 594 758
Other assets	82 765	41 200
Liabilities		
Customer accounts	185 569 388	248 290 355
Overnight bank loans	42 343 144	-
Central counterparty financial liabilities	1 853 104 305	1 806 265 500
Other liabilities	32 536	71 995

28. Fair Value Measurements

NCC uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities;
- Level 2: Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable;
- Level 3: Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

(in thousands of Russian rubles, unless otherwise indicated)

28. Fair Value Measurements (continued)

The foreign currency forward contracts are measured based on observable spot exchange rates and the yield curves of the respective currencies.

The fair value of the unquoted debt securities has been determined using a discounted cash flow model, by reference to quoted market prices for similar instruments.

Information on techniques applied by NCC to measure fair value of financial instruments is as follows:

	December 31, 2019			
	Level 1	**Level 2**	**Level 3**	**Total**
Financial assets at fair value though profit or loss	13 418 522	49 978	4 111	13 472 611
Central counterparty financial assets and liabilities (foreign currency operations)	3 091 411	-	-	3 091 411
Financial assets at fair value though other comprehesive income	136 765 397	8 285 361	-	145 050 758
Derivatives recognized at fair value through profit and loss	-	32 831	-	32 831

	December 31, 2018			
	Level 1	**Level 2**	**Level 3**	**Total**
Financial assets at fair value though profit or loss	3 188 474	1 018 696	4 510	4 211 680
Central counterparty financial assets and liabilities (foreign currency operations)	2 011 854	-	-	2 011 854
Financial assets at fair value though other comprehesive income	182 023 127	15 837 300	-	197 860 427
Derivatives recognized at fair value through profit and loss	-	120 776	-	120 776

NCC considers that the fair value of all financial assets and liabilities approximates their carrying value.

The fair value of "Cash and cash equivalents", "Due from banks and other financial institutions", "Other financial assets", "Customer accounts" and "Other financial liabilities" as of December 31, 2019 and December 31, 2018 refer to level 2 hierarchy of fair value.

There were no changes in fair value of level 3 assets during 2019 and 2018.

Transfers between level 1 and 2

For assets and liabilities that are recognised at fair value on a recurring basis, NCC determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The following table shows total amount of transfers of financial assets between level 1 and level 2. Transfers from level 2 to level 1 (from level 1 to level 2) occurred due to fact that markets for certain financial assets became (ceased to be) active during the period.

	Transfers between Level 1 and Level 2	
	Year ended December 31, 2019	**Year ended December 31, 2018**
From Level 1 to Level 2		
Financial assets at fair value through other comprehensive income	1 706 744	7 008 589
From Level 2 to Level 1		
Financial assets at fair value through other comprehensive income	5 031 115	5 151 138

(in thousands of Russian rubles, unless otherwise indicated)

29. Capital management

NCC manages its capital to ensure that it will be able to continue to operate as a going concern and keep the required balance between ensuring financial stability in any economic environment, minimizing expenses of the market players and ensuring the return to stakeholders at a high level.

Issues related to NCC's capital management are reviewed by the Supervisory Board. As part of this review, Supervisory Board in particular analyzes capital adequacy and risks associated with each class of capital. On the basis of recommendations of the Supervisory Board, NCC adjusts its capital structure by dividend payments, additional issue of shares or repurchase of shares from active shareholders.

NCC's general policy with respect the risks associated with capital management has not changed compared to 2018.

Under the current capital requirements set by the Central Bank of Russia, banks have to maintain a ratio of capital to risk weighted assets ("statutory capital ratio") above the prescribed minimum level. As at December 31, 2019 his minimum level was 100% (December 31, 2018: 100%). NCC was in compliance with the statutory capital ratio during the years ended December 31, 2019 and December 31, 2018.

	December 31, 2019	**December 31, 2018**
Equity	70 580 566	65 700 949
Risk weighted assets	42 859 647	42 885 737
Capital adequacy ratio (H1cc)	**164,7%**	**153,2%**
Statutory ratio of capital adequacy	100%	100%

From the assignment of status of non-banking credit organization – central counterparty (November 28, 2017) NCC daily calculates ratios according to Instruction of Bank of Russia №175-I as of November 14, 2016.

30. Risk management policies

As a central counterparty and systemically important financial markets infrastructure institution, NCC has a specific risk structure, which consists of the following interrelated and interdependent risk groups:

- risks specific to NCC as a central counterparty and clearing organization;
- the risks inherent in banking activities of NCC;
- risks specific to NCC as a commodities delivery operator.

The key objectives of NCC are financial system risks reduction and ensuring stability of the financial and commodity markets where NCC operates. For these purposes NCC implemented a comprehensive risk management system (RMS), consistent with international standards, which helps to perform a thorough analysis of risks arising in the course of all activities of NCC. This integrated approach to RMS organization is based on a single holistic unit responsible for the RMS in NCC that accumulates information on all risk types.

The key objectives of the RMS are the following:

- mitigate risk exposures across all segments of financial and commodity markets;
- ensure the adequacy of NCC funds to cover potential losses through the accumulation of financial resources, including own capital, individual clearing collateral, guarantee funds and other types of collateral;
- ensure the reliable functioning of exchange trading systems, clearing and settlements by means of timely risks identification and measures of alert and adequate response in case of risk events.

The most recent risks' identification procedure revealed NCC is exposed to the following significant risks: credit risk, market risk, liquidity risk, operational risk, strategic risk, legal risk, compliance and reputational risks.

The main tasks of risk management include risk identification, risk measurement, development of internal RMS policies and implementation of control mechanisms, including limits system and subsequent compliance control.

30. Risk management policies (continued)

Significant types of risks for NCC are credit, market, liquidity and operational risks. Significant risks stress-tested by NCC on a monthly basis. Information on stress-testing is disclosed in reporting forms prepared in accordance with requirements of the Bank of Russia.

The key changes of NCC risk management system implemented within a reporting period are the following:

- Amendments to documents in terms of commodities market risk management controls aiming to enhance monitoring of commodity market members' affiliates, enhance warehouse requirements including their equipment, infrastructure and documentation provided, set requirements for warehouse principals and guarantors:
  - Rules of warehouse accreditation,
  - Commodity storage regulations,
  - Methodology for defining maximum storage limits,
  - Warehouse accreditation internal interaction guide,
  - Clearing Rules on the Commodities Market;
- Amendments to NCC Regulations on loss provisions, which imply the creation of reserves in advance for the potential loss of stored assets and their recognition in financial statements;
- Initiation of a separate business line focused on work with distressed assets;
- Risk-appetite indicators for NCC were revised to account for events occurred in the reporting period and changes developed in the new NCC Strategy;
- The procedure of preliminary risk-assessment for new products providing a more detailed and thorough risk analysis, project review as well as product analysis after its launch;
- According to external audit of controls performed for all key business areas of NCC, a detailed roadmap has been prepared. The roadmap encompasses upcoming internal process improvements and document amendments aiming to mitigate residual risk.

A description of NCC's risk management policies in relation to each significant risk is as follows.

Credit risk. Credit risk is the risk of losses resulting from a default or improper performance of their financial obligations to NCC by its counterparties.

The goal of credit risk management is to define and evaluate the level of risk necessary to ensure sustainable growth determined by NCC's development strategy.

Key objectives of NCC's credit risk management:

- implement a systemic and enhanced approach to optimize the structure of the assets in order to limit credit risk exposure;
- enhance the competitive advantages of NCC through implementation of more precise risk measures;
- maintain stability during the introduction of new complex products and services.

NCC controls credit risk by setting limits on counterparties and groups of related counterparties. Credit risk limits are set on the basis of a comprehensive and in-depth evaluation of the counterparties' financial conditions, analysis of the macroeconomic environment of counterparties' activities, the level of information transparency, business reputation and other financial and non-financial factors.

NCC has developed and constantly improves an internal ratings system, providing a prudent assessment of its counterparties and the level of accepted credit risk.
Credit risk limits are approved by the Management Board. Credit risk limits are monitored and reviewed on a regular basis. Also NCC constantly monitors the concentration of credit risk in compliance with applicable prudential requirements.

To reduce credit risk NCC applies specific requirements to financial conditions of its counterparties and to the types and quality of collateral accepted by NCC. Accepted collateral includes liquid securities and cash contributions in Rubles and foreign currencies. Eligible types of collateral depends on the market and the type of exposure. Moreover NCC can aply discounts to collateral accepted.

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

One of the major risks of NCC is exposed to within its centralized clearing activity is the CCP credit risk. To mitigate credit risk from its CCP activities NCC has introduced a multi-level default waterfall structure in compliance with the highest international standards and consisting of various lines of defence applicable in case of a clearing participant default. In 2015 NCC has formed Dedicated capital as an additional defence level in its waterfall to limit its liabilities in case of a counterparty default. Moreover NCC has updaded the guarantee funds contribution policy: now it is unified across all markets. Should one or more clearing members default, CCP takes necessary measures to perform its obligations to non-defaulting clearing members.

In all markets of NCC there is a unified multi-level safeguard structure, which includes:

- Individual clearing collateral (including stress collateral);
- Dedicated capital of CCP;
- Collective clearing collateral (guarantee funds);
- Additional capital of CCP;
- CCP liability limitation pocedure.

Should a clearing member defaults and its individual and collective clearing collateral turns out to be insufficient to cover the losses, the rest of CCP safeguard structure is used in respective order listed above. In addition to safeguard structure NCC has implemented a cross-default procedure, which regulates the use of defaulting clearing member funds across all markets. General action plan in case of a default is described in clearing rules for each market of NCC.

As explained in Note 4, NCC monitors all financial assets that are subject to impairment requirements to assess whether there has been a significant increase in credit risk since initial recognition. If there has been a significant increase in credit risk NCC will measure the loss allowance based on lifetime rather than 12-month ECL.

NCC uses forward-looking information that is available without undue cost or effort in its assessment of significant increase of credit risk as well as in its measurement of ECL. NCC employs experts who use external and internal information to generate a 'base case' scenario of future forecast of relevant economic variables. The external information used includes economic data and forecasts published by governmental bodies and monetary authorities.

The base case scenario is the single most-likely outcome and consists of information used by NCC for strategic planning and budgeting. NCC has identified and documented key drivers of credit risk and credit losses for each portfolio of financial instruments and, using a statistical analysis of historical data, has estimated relationships between macro-economic variables and credit risk and credit losses.

The table below summarizes the principal macroeconomic indicators included in the economic scenarios used at December 31, 2019 for the years 2019-2021, for Russia which is the country where NCC operates and therefore is the country that has a material impact in ECLs.

	2020	2021	2022
GDP growth	1,9%	3,1%	3,2%
Consumer price index	3%	4%	4%
Average nominal wage growth	2,4%	2,2%	2,4%
Money supply growth	9,5%	9,5%	9,5%
USD/RUB rate	63,9	66,1	66,5

Predicted relationships between the key indicators and default and loss rates on various portfolios of financial assets have been developed based on analyzing historical data over the past 5 years.

NCC has performed a sensitivity analysis on how ECL on the main portfolios will change if the key assumptions used to calculate ECL change by a certain percentage. The table below outlines the total ECL per portfolio as at December 31, 2019 if the assumptions used to measure ECL remain as expected (amount as presented in the statement of financial position), as well as if each of the key assumptions used change by plus or minus a certain percentage. The changes are applied in isolation for illustrative purposes, in order to develop the estimate of expected credit losses. In reality there will be interdependencies between the various economic inputs and the exposure to sensitivity will vary across the economic scenarios.

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

	As expected	Average PD	ECL Cum
	-3,0%	89,42%	2 437 573
GDP	-	92,13%	2 511 541
	+3,0%	94,85%	2 585 510
	-3,0%	82,26%	2 242 392
Consumer price index	-	92,13%	2 511 541
	+3,0%	100,00%	2 780 690
	-3,0%	92,50%	2 521 509
Average nominal wage	-	92,13%	2 511 541
	+3,0%	91,77%	2 501 574
	-5,0%	92,75%	2 528 329
Money supply	-	92,13%	2 511 541
	+5,0%	91,52%	2 494 753
	-15,0%	85,85%	2 340 126
USD/RUB rate	-	92,13%	2 511 541
	+15,0%	98,42%	2 682 957

As at December 31, 2019 and December 31, 2018 NCC has no modified financial assets as a result of NCC's forbearance activities and no amounts outstanding on financial assets that were written off during the reporting period and are still subject to enforcement activity.

Maximum credit risk exposure. Financial assets are classified according to the current credit ratings issued by international rating agencies (Fitch Ratings, Standard & Poor's and Moody's Investor Service). The highest possible rating is AAA. Investment grade financial assets have ratings from AAA to BBB-. Financial assets which have ratings lower than BBB- are classed as speculative grade.

Cash and cash equivalents (Note 15) include accounts with National Settlement Depository ("NSD") of RUB 74 898 667 thousand (December 31, 2018: RUB 32 505 276 thousand). NSD has not been rated by the above-mentioned rating agencies, however the company was rated by Thomas Murray, which is a rating agency specializing in assigning ratings to custodians. As at December 31, 2019 NSD had AA- rating (December 31, 2018: AA-) which corresponds to the low risk level.

As at December 31, 2019 and December 31, 2018 balances with the CBR classified at the sovereign credit rating level of the Russian Federation. The following tables detail the credit ratings of financial assets held by NCC as at December 31, 2019 and December 31, 2018:

	AA	A	BBB	less BBB-	Not rated	December 31, 2019 Total
FINANCIAL ASSETS:						
Cash equivalents	231 474 092	79 226 177	113 629 895	24 693 874	76 445 492	**525 469 530**
Financial assets at fair value though profit or loss	15 100	22 286	13 430 762	39	313	**13 468 500**
Due from financial institutions	-	-	-	38 399 774	10 045 681	**48 445 455**
Central counterparty financial assets	-	-	467 000 875	1 363 523 536	1 432 146 211	**3 262 670 622**
Financial assets at FVTOCI	-	1 468 972	117 901 837	22 881 145	2 798 804	**145 050 758**
Other financial assets	-	2	65 182	46 323	82 000	**193 507**

	AA	A	BBB	less BBB-	Not rated	December 31, 2018 Total
FINANCIAL ASSETS:						
Cash equivalents	98 942 740	146 219 930	14 240 316	111 573 990	48 985 361	**419 962 337**
Financial assets at fair value though profit or loss	1 018 466	-	3 188 504	-	200	**4 207 170**
Due from financial institutions	-	-	9 053 099	73 638 705	-	**82 691 804**
Central counterparty financial assets	-	5 317 884	32 709 722	2 721 694 337	552 298 146	**3 312 020 089**
Financial assets at FVTOCI	-	465 588	14 961 932	172 765 283	9 667 624	**197 860 427**
Other financial assets	-	85	10 952	61 234	105 705	**177 976**

NCC makes a decision to create an impairment allowance based on the analysis of financial position of its counterparties and maturities of financial assets.

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

Geographical concentration. Geographical concentration of assets and liabilities is as follows:

	Russian Federation	OECD countries	Other	December 31, 2019 Total
Financial assets				
Cash and cash equivalents	135 469 724	389 807 824	194 323	525 471 871
Financial assets at FVTPL	12 592	13 460 019	-	13 472 611
Due from financial institutions	48 445 455	-	-	48 445 455
Central counterparty financial assets	3 262 656 317	-	14 305	3 262 670 622
Financial assets at FVTOCI	104 997 678	37 465 848	2 587 232	145 050 758
Other financial assets	189 826	3 329	352	193 507
Total financial assets	**3 551 771 592**	**440 737 020**	**2 796 212**	**3 995 304 824**
Financial liabilities				
Customer accounts	600 306 185	9 839 213	1 785 927	611 931 325
Overnight bank loans	49 229 140	-	-	49 229 140
Derivatives recognized at fair value though profit and loss	32 831	-	-	32 831
Central counterparty financial liabilities	3 262 670 078	-	544	3 262 670 622
Other financial liabilities	513 847	138 514	9	652 370
Total financial liabilities	**3 912 752 081**	**9 977 727**	**1 786 480**	**3 924 516 288**

	Russian Federation	OECD countries	Other	December 31, 2018 Total
Financial assets				
Cash and cash equivalents	110 060 492	309 523 038	382 325	419 965 855
Financial assets at FVTPL	-	4 211 680	-	4 211 680
Due from financial institutions	82 691 804	-	-	82 691 804
Central counterparty financial assets	3 312 012 658	-	7 431	3 312 020 089
Financial assets at FVTOCI	172 760 841	21 506 788	3 592 798	197 860 427
Other financial assets	177 838	6	132	177 976
Total financial assets	**3 677 703 633**	**335 241 512**	**3 982 686**	**4 016 927 831**
Financial liabilities				
Customer accounts	629 617 397	1 721 156	1 449 608	632 788 161
Overnight bank loans	5 003 111	-	-	5 003 111
Derivatives recognized at fair value though profit and loss	82 225	38 551	-	120 776
Central counterparty financial liabilities	3 312 012 658	-	7 431	3 312 020 089
Other financial liabilities	223 831	72 462	8	296 301
Total financial liabilities	**3 946 939 222**	**1 832 168**	**1 457 047**	**3 950 228 438**

As at December 31, 2019 the balances with OECD counterparties include the following balances with OECD subsidiaries of Russian companies:

- Cash and cash equivalents in the amount of RUB 58 010 338 thousand (December 31, 2018: RUB 64 596 051 thousand);
- Financial assets at fair value through profit or loss in the amount of RUB 13 418 522 thousand (December 31, 2018: RUB 3 188 474 thousand);
- Financial assets at fair value through other comprehensive income in the amount of RUB 37 465 848 thousand (December 31, 2018: RUB 21 506 788 thousand);
- Balances of market participants in the amount of RUB 969 thousand (December 31, 2018: RUB 672 thousand).

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

Market risk. Market risk is the risk of losses due to changes in market variables such as interest rates, foreign exchange rates, and prices of financial instruments, and also due to low market liquidity as a result of liquidation costs/ positions restructuring.

With regard to the activities of a central counterparty NCC becomes exposed to market risk only when credit risk event is realized. Price volatility of market instruments may cause losses due to unfavorable market movements when it is necessary to close positions (substitute contracts) at market prices. Market risk can stem from a potential need to close large market positions (to sell the collateral) of defaulting clearing member which at a low market liquidity may adversely affect the price at which position can be closed (collateral can be sold).

The key components of market risk are interest and currency risks.

Interest rate risk. Interest rate risk is the risk of changes in interest income or the financial instruments price due to the interest rate changes.

NCC's result is exposed to the effects of fluctuations in the prevailing levels of market interest rates on its financial positions and cash flows. Interest margin may increase, decrease or lead to losses as a result of unexpected movements.

In order to measure the impact of interest rate risk on the fair value of financial instruments NCC conducts periodic assessments of potential losses, which may be triggered by negative changes in market environment. The Risk Management Department conducts periodic monitoring of the current financial results of NCC, assesses the sensitivity of the impact of interest rate risk on portfolio fair value and income.
As the majority of NCC's financial instruments are fixed rate contracts, their contractual maturity dates are also their repricing dates.

The sensitivity analysis presented below has been performed based on the risk of interest rate fluctuations as at the reporting date. The estimation is based on the assumption that the interest rate will change by 150 bp (December 31, 2018: 150 bp) which is in line with the Management's expectations with regard to a reasonably possible change in interest rates.

	December 31, 2019		December 31, 2018	
	Net profit	**Equity**	**Net profit**	**Equity**
150 bp parallel rise	(252 142)	(5 524 971)	(82 393)	(6 586 289)
150 bp parallel decrease	259 901	5 722 944	85 260	6 518 751

Currency risk. Currency risk is the risk of changes in financial instruments value due to the exchange rates fluctuations. The financial position and cash flows of NCC are subject to the influence of such fluctuations. The main source of currency risk is open foreign currency positions.

NCC is a CCP on the of FX market of the Moscow Exchange. NCC limits currency risk on FX market through the application of the following instruments: mechanism of currency rates restrictions within trading session, trading limits system, margining system, mechanism of open currency positions assurance, DVP principle, special swap facilities with Bank of Russia.

In the course of clearing activities NCC determines currency risk arising from the volatility of currency pairs. In this regard for market risk management purposes NCC monitors the conditions of internal and external FX markets and sets limits on intraday fluctuations within trading sessions in accordance with current market environment.

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

NCC's exposure to currency risk is as follows:

	RUB	USD	EUR	Other currencies	December 31, 2019 Total
Financial assets					
Cash and cash equivalents	77 207 586	101 569 628	342 512 013	4 182 644	525 471 871
Financial assets at fair value though profit or loss	-	13 418 522	4 111	-	13 422 633
Due from financial institutions	-	48 445 455	-	-	48 445 455
Central counterparty financial assets	2 606 997 173	600 329 803	55 343 646	-	3 262 670 622
Financial assets at FVTOCI	82 087 112	37 444 971	25 518 675	-	145 050 758
Other financial assets	193 507	-	-	-	193 507
Total financial assets	**2 766 485 378**	**801 208 379**	**423 378 445**	**4 182 644**	**3 995 254 846**
Financial liabilities					
Customer accounts	83 564 125	170 052 048	354 033 745	4 281 407	611 931 325
Overnight bank loans	23 704 101	25 525 039	-	-	49 229 140
Central counterparty financial liabilities	2 606 997 173	600 329 803	55 343 646	-	3 262 670 622
Other financial liabilities	513 477	1 452	137 033	408	652 370
Total financial liabilities	**2 714 778 876**	**795 908 342**	**409 514 424**	**4 281 815**	**3 924 483 457**
Derivatives	18 592 559	(4 988 562)	(13 695 492)	108 642	17 147
Open position	**70 299 061**	**311 475**	**168 529**	**9 471**	

	RUB	USD	EUR	Other currencies	December 31, 2018 Total
Financial assets					
Cash and cash equivalents	55 046 127	123 636 137	230 959 387	10 324 204	419 965 855
Financial assets at fair value though profit or loss	-	3 188 474	4 510	-	3 192 984
Due from financial institutions	34 356 917	48 334 887	-	-	82 691 804
Central counterparty financial assets	2 620 844 689	601 664 874	89 510 526	-	3 312 020 089
Financial assets at FVTOCI	99 745 279	64 427 943	33 687 205	-	197 860 427
Other financial assets	177 974	-	-	2	177 976
Total financial assets	**2 810 170 986**	**841 252 315**	**354 161 628**	**10 324 206**	**4 015 909 135**
Financial liabilities					
Customer accounts	110 741 987	205 175 429	306 580 618	10 290 127	632 788 161
Overnight bank loans	5 003 111	-	-	-	5 003 111
Central counterparty financial liabilities	2 620 844 689	601 664 874	89 510 526	-	3 312 020 089
Other financial liabilities	223 859	892	71 550	-	296 301
Total financial liabilities	**2 736 813 646**	**806 841 195**	**396 162 694**	**10 290 127**	**3 950 107 662**
Derivatives	(5 831 364)	(35 392 004)	42 121 201	87	897 920
Open position	**67 525 976**	**(980 884)**	**120 135**	**34 166**	

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

The table below shows the analysis of derivatives of NCC as at December 31, 2019:

	Fair value of principal amount or agreed amount		Assets - positive fair value	Liabilities - negative fair value
	Receivables	Payables		
Currency swaps	60 621 161	(60 604 014)	49 978	(32 831)

The table below shows the analysis of derivatives of NCC as at December 31, 2018:

	Fair value of principal amount or agreed amount		Assets - positive fair value	Liabilities - negative fair value
	Receivables	Payables		
Currency swaps	55 946 021	(55 048 101)	1 018 696	(120 776)

Currency risk sensitivity. The following table details NCC's sensitivity to a 25% for USD and 25% for EURO (December 31, 2018: 15% for USD and 20% for EURO) increase and decrease in the Russian ruble exchange rate against relevant foreign currencies. The sensitivity rate represents NCC's assessment of the reasonably possible change in foreign exchange rates.

	December 31, 2019		December 31, 2018	
	USD	EUR	USD	EUR
	25%	25%	15%	20%
Ruble appreciation	(62 295)	(33 706)	117 706	(19 222)
Ruble depreciation	62 295	33 706	(117 694)	19 869

In March 2020 there were significant fluctuations in financial markets, accompanied by ruble depreciation against major foreign currencies. The management of NCC do not anticipate that these events will have an impact on NCC's financial results.

Limitations of sensitivity analysis. The above tables demonstrate the effect of a change in a key assumption while other assumptions remain unchanged. In fact, there is a correlation between the assumptions and other factors. It should also be noted that these sensitivities are non-linear, thus the results should not be interpolated or extrapolated.

Sensitivity analyses do not take into consideration that NCC's assets and liabilities are actively managed. Additionally, NCC's financial position may vary depending on changes in the market. For example, NCC's financial risk management strategy aims to manage the exposure to market fluctuations. In the event of sharp negative fluctuations in the securities market, Management actions could include selling investments, changing investment portfolio structure, and taking other protective measures. Consequently, the actual impact of a change in the assumptions may not have any impact on the liabilities, whereas significantly impact assets measured at fair value in the statement of financial position. In these circumstances, the different measurement bases for liabilities and assets may lead to significant fluctuations in equity.

Other limitations of the above sensitivity analyses include the use of hypothetical market movements to demonstrate potential risk that only represent NCC's view of future market changes that cannot be predicted with any certainty. Another assumption is that all interest rates move in an identical manner.

Liquidity risk. Liquidity risk is the risk of facing the situation where available funds are insufficient to meet current financial liabilities and arises from the time gap between assets and liabilities of NCC.

The main purpose of liquidity management is to ensure NCC's ability to perform its obligations not only under normal market conditions but also in cases of unforeseen emergencies without suffering unacceptable losses or risk of damaging its business reputation.

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

NCC's liquidity management procedures cover various forms of liquidity risk:

- operating liquidity risk arising from the inability to timely meet its current obligations due to the existing structure of current cash inflows and outflows (operating analysis and control of liquidity);
- risk of mismatch between the amounts and dates of repayment of claims and obligations – analysis and assessment of prospective liquidity (GAP analysis);
- risk of unforeseen liquidity needs, i.e. the consequences of the risk that unforeseen future events may require more resources than allocated for this purpose (stress testing).

Liquidity risk management plays an important role in the whole risk management system and includes such procedures as:

- cashflow forecast by key currencies and assessment of liquidity requirements;
- forecasting/monitoring payment flow and liquidity ratios;
- maintaining of acid, current and longterm liquidity ratios compliant with statutory ratios;
- planning measures to recover the required liquidity level considering unfavourable and crisis situations;
- setting of limits and restrictions on cash transmission into other groups of assets: securities trading limits and limits on open currency position;
- ensuring an optimal structure of assets in accordance with the resource base;
- accounting for the maturities of fund sources and their volumes when allocating assets to financial instruments;
- analysis of negative cases with liquidity shortage, assessment of chain reaction to that type of risk, development of liquidity management methods and mechanisms.

NCC analyses its liquidity state based on maturity gaps between assets and liabilities, assessment of liquidity shortage and liquidity shortage (excess) coefficient on an accrual basis by maturity buckets and with account for refinancing possibilities. The detailed analysis of liquidity using internal models includes clarifying adjustments of accounting data on the structure, amounts and maturity of assets and liabilities.

Tables below do not include amounts relating to accounts in precious metals.

An analysis of liquidity risk is presented in the following table. The presentation below is based on information provided to NCC's key management. As at December 31, 2019 and December 31, 2018 financial assets at FVTOCI, which are included into the Bank of Russia's Lombard list are presented within the category "Up to 1 month".

	Up to 1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years	More 5 years	Maturity undefined	December 31, 2019 Total
Financial assets							
Cash and cash equivalents	525 471 871	-	-	-	-	-	525 471 871
Financial assets at FVTPL	49 978	-	7 268 210	6 150 312	-	4 111	13 472 611
Due from financial institutions	10 045 681	-	38 399 774	-	-	-	48 445 455
Central counterparty financial assets	2 835 616 878	381 839 265	45 214 479	-	-	-	3 262 670 622
Financial assets at FVTOCI	101 470 760	545 477	7 012 492	17 239 147	18 782 882	-	145 050 758
Other financial assets	193 507	-	-	-	-	-	193 507
Total financial assets	**3 472 848 675**	**382 384 742**	**97 894 955**	**23 389 459**	**18 782 882**	**4 111**	**3 995 304 824**
Financial liabilities							
Customer accounts	611 931 325	-	-	-	-	-	611 931 325
Overnight bank loans	49 229 140	-	-	-	-	-	49 229 140
Derivatives recognized at fair value though profit and loss	32 831	-	-	-	-	-	32 831
Central counterparty financial liabilities	2 835 616 878	381 839 265	45 214 479	-	-	-	3 262 670 622
Other financial liabilities	28 362	270 948	106 178	117 091	129 791	-	652 370
Total financial liabilities	**3 496 838 536**	**382 110 213**	**45 320 657**	**117 091**	**129 791**	**-**	**3 924 516 288**
Liquidity gap	**(23 989 861)**	**274 529**	**52 574 298**	**23 272 368**	**18 653 091**	**4 111**	
Cumulative liquidity gap	**(23 989 861)**	**(23 715 332)**	**28 858 966**	**52 131 334**	**70 784 425**	**70 788 536**	

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

	Up to 1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years	More 5 years	Maturity undefined	December 31, 2018 Total
Financial assets							
Cash and cash equivalents	419 965 855	-	-	-	-	-	419 965 855
Financial assets at FVTPL	534 062	484 634	-	-	3 188 474	4 510	4 211 680
Due from financial institutions	16 454 485	28 287 235	37 950 084	-	-	-	82 691 804
Central counterparty financial assets	3 215 967 696	96 052 393	-	-	-	-	3 312 020 089
Financial assets at FVTOCI	185 741 732	-	1 084 571	8 876 413	2 157 711	-	197 860 427
Other financial assets	177 976	-	-	-	-	-	177 976
Total financial assets	**3 838 841 806**	**124 824 262**	**39 034 655**	**8 876 413**	**5 346 185**	**4 510**	**4 016 927 831**
Financial liabilities							
Customer accounts	632 788 161	-	-	-	-	-	632 788 161
Overnight bank loans	-	5 003 111	-	-	-	-	5 003 111
Fair value of foreign currency derivatives	120 776	-	-	-	-	-	120 776
Central counterparty financial liabilities	3 215 967 696	96 052 393	-	-	-	-	3 312 020 089
Other financial liabilities	-	296 301	-	-	-	-	296 301
Total financial liabilities	**3 848 876 633**	**101 351 805**	**-**	**-**	**-**	**-**	**3 950 228 438**
Liquidity gap	**(10 034 827)**	**23 472 457**	**39 034 655**	**8 876 413**	**5 346 185**	**4 510**	
Cumulative liquidity gap	**(10 034 827)**	**13 437 630**	**52 472 285**	**61 348 698**	**66 694 883**	**66 699 393**	

In case of any liquidity shortages the following liquidity management tools are used by NCC: overdrafl borrowing from the CBR, Lombard and interbank borrowings, repo deals, currency SWAPs.

Undiscounted cash flows on financial liabilities are approximately equal to cash flows presented in the analysis of liquidity risk above.

Operational risk. Operational risk is the risk of direct or indirect losses arising from a wide variety of risk events associated with the internal processes, personnel, technology and infrastructure, and from external factors (other than credit, market and liquidity risks) such as those arising from legal and regulatory requirements and generally accepted standards of corporate behavior or IT failure.

With respect to NCC activities as a central counterparty operational risk is triggered off by failures in regular work of functional areas of NCC, technical and IT facilities, rules and requirements to NCC's operations besides all due to mistakes, unintentional and deliberate misperformance, technical failures and also external circumstances.

The Board of Directors has overall responsibility for the oversight of operational risk management, reviewing risk management policies and procedures. The risk assessment, reporting and control procedures vary by exposure type, but share a common methodology developed and updated periodically by the risk management personnel. Both external and internal risk factors are identified and managed throughout the business units within their functional areas. The primary responsibility for the implementation of operational risk controls is assigned to management within each business unit of NCC.

Operational risk management includes reputational, compliance and legal risks governance as well. Moreover, strategic risk (risk of non achievement of strategic goals within certain deadline or resources) is also monitored and managed under the operational risk management framework.

Legal risk. Legal risk is associated with losses due to breaches of contractual obligations, trial, criminal and administrative liability of NCC and/or its management in the performance of their official duties. Losses attributed to legal risk are recorded in risk events database along with operational risk losses.

Legal risk management procedures include:

- monitoring of legislation and internal procedures for compliance with the up-to-date requirements on a regular basis;
- setting quantitative and volume limits for legal claims and control over limits set;
- analysis of legal basis for all new products and services;
- update of internal regulations in order to prevent fines.

(in thousands of Russian rubles, unless otherwise indicated)

30. Risk management policies (continued)

Compliance risk. Compliance risk is the risk of losses resulting from NCC activities being inconsistent with the law, the Charter and internal regulations.

Compliance risk is managed by Internal Control department that takes the following actions in order to prevent losses due to compliance risk realization:

- legislation monitoring;
- interaction with the CBR regarding the specifics of upcoming regulation;
- compliance risk identification in existing and planned internal procedures;
- best-practice analysis of internal control measures.

Reputational risk. Reputational risk is the risk of losses due to the negative public view on the operational (technical) stability of NCC, its service quality and business in general. In order to avoid such losses NCC constantly monitor its appearance in media along with internal processes using the methodology of assessment the impact of each event. The major source of reputational risk is realization of operational risk, specifically when it becomes public. Thus, all actions taken to prevent NCC from operational risk at the same time help to decrease the level of reputational risk.

31. Offsetting of financial instruments

Gross claims and liabilities with individual counterparties under CCP currency transactions are offset in accordance with IAS 32.

Direct and reverse repo transactions of CCP with individual counterparties are subject to clearing rules that create a contingent right of set-off that does not qualify for offsetting. Clearing participants are required to deposit collateral in the form of cash or securities for current deals and make contribution to guarantee funds, as described in Note 30. Clearing rules give NCC right to use these amounts under certain conditions (e.g. in case of default). However, offsetting criteria is not met as there is no intention either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Reverse repo transactions with financial institutions are subject to master agreements entered into with these insitutions. Master agreements give NCC right to settle amounts relating to these transactions on a net basis under certain conditions (e.g. in case of default). However, offsetting criteria is not met as there is no enforceable right to set off in the normal course of business. Similar rules apply to the corresponding income and expenses.

The table below shows financial assets and liabilities offset in the statement of financial position, as well as the effect of clearing agreements that do not result in an offset in the statement of financial position:

	Year ended December 31, 2019			Related amounts not set off in the statement of the financial position		
	Gross claims	**Gross liabilities**	**Net amount presented in financial statements**	**Financial instruments**	**Cash collateral received**	**Net amount**
Financial assets						
Due from financial institutions (Reverse repo receivables from financial institutions)	48 445 455	-	48 445 455	(48 445 455)	-	-
Central counterparty financial assets (repo transactions)	3 259 579 211	-	3 259 579 211	(3 259 579 211)	-	-
Central counterparty financial assets (currency transactions)	3 091 411	-	3 091 411	(1 026 708)	(2 064 703)	-
Total financial assets	**3 311 116 077**	**-**	**3 311 116 077**	**(3 309 051 374)**	**(2 064 703)**	**-**
Financial liabilities						
Central counterparty financial liabilities (repo transactions)	-	(3 259 579 211)	(3 259 579 211)	3 259 579 211	-	-
Central counterparty financial liabilities (currency transactions)	-	(3 091 411)	(3 091 411)	1 026 708	2 064 703	-
Margin account	-	(579)	(579)	-	-	(579)
Total financial liabilities	**-**	**(3 262 671 201)**	**(3 262 671 201)**	**3 260 605 919**	**2 064 703**	**(579)**

(in thousands of Russian rubles, unless otherwise indicated)

31. Offsetting of financial instruments (continued)

	Year ended December 31, 2018			Related amounts not set off in the statement of the financial position		
	Gross claims	**Gross liabilities**	**Net amount presented in financial statements**	**Financial instruments**	**Cash collateral received**	**Net amount**
Financial assets						
Due from financial institutions (Reverse repo receivables from financial institutions)	48 382 748	-	48 382 748	(48 382 748)	-	-
Central counterparty financial assets (repo transactions)	3 310 008 235	-	3 310 008 235	(3 310 008 235)	-	-
Central counterparty financial assets (currency transactions)	2 806 138	(794 284)	2 011 854	-	(2 011 854)	-
Total financial assets	**3 361 197 121**	**(794 284)**	**3 360 402 837**	**(3 358 390 983)**	**(2 011 854)**	**-**
Financial liabilities						
Central counterparty financial liabilities (repo transactions)	-	(3 310 008 235)	(3 310 008 235)	3 310 008 235	-	-
Central counterparty financial liabilities (currency transactions)	794 284	(2 806 138)	(2 011 854)	-	-	(2 011 854)
Margin account	-	(979 567)	(979 567)	-	-	(979 567)
Tota lfinancial liabilities	**794 284**	**(3 313 793 940)**	**(3 312 999 656)**	**3 310 008 235**	**-**	**(2 991 421)**

32. Subsequent events

There are no other subsequent events other than disclosed in Note 26.