



Банк России

MODEL BASICS OF INSURERS'  
FINANCIAL STABILITY AND  
SOLVENCY  
(REGULATION NO. 781-P)

2023





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# 1

STRUCTURAL REQUIREMENTS FOR  
INSURERS. RESTRICTIONS ON  
BORROWINGS  
(CHAPTER 2)



### Restrictions on borrowings (2.4):

Total value of the following assets (liabilities) shall not exceed **40%** (30% as of the effective date) of the value of assets of the insurer:

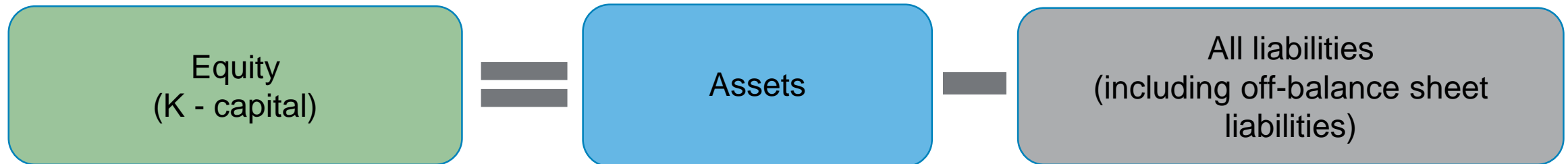
- **Securities (funds) received from the first leg of a repo**, except for those where the insurer is the buyer in the First leg of a repo and which prevent the disposal of purchased securities, except for their return under the Second leg of a repo (the value to be determined according to IFRS 13);
- **Raised loans and borrowings** (including those by issuance promissory notes, bonds, except for subordinated loans as related to the net book value of the subordinated loan included in the required ratio calculation), calculated with interest taken into account, (book value);
- **Lots of derivatives, underlying assets of all financial derivatives** (except for options where the insurer is entitled to demand the counterparty to buy or sell the underlying asset), and commitments to deliver assets under transactions with an execution date over 3 days (except for real estate transactions) (thereinafter “fixed-term transactions”), (the value according to IFRS 13);
- **Sureties and independent guarantees issued by the insurer**, analytical accounting of which is kept on off-balance sheet sub-ledger accounts in accordance with the Chart of Accounts for Bookkeeping in non-financial institutions (NFI) (in the amount of liability (limit of liabilities) of the insurer).



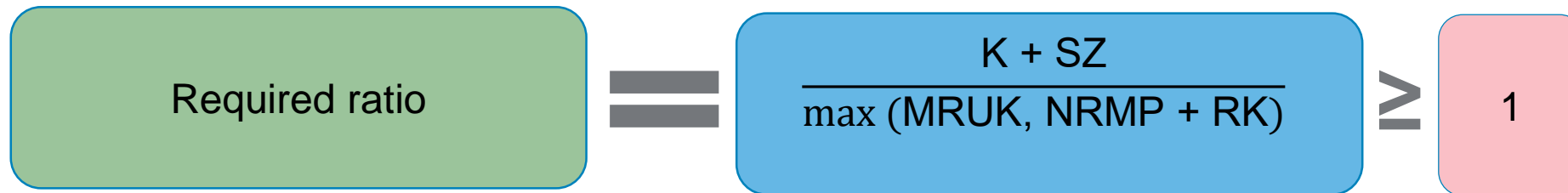
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# 2

CALCULATION OF EQUITY AND  
REQUIRED RATIO FOR INSURANCE  
COMPANIES



- The structure of assets and liabilities is determined in accordance with Chapter 1 of Regulation 781-P
- Assets are revalued in accordance with Chapter 3 of Regulation 781-P (with some valued at zero), liabilities are reassessed under Chapter 4 of Regulation 781-P, and insurance reserves are evaluated under Chapter 5 of Regulation 781-P



- **NRMP** – required solvency margin (Slide 29)
- **RK** – estimation of non-insurance risks' impact on equity, calculated in accordance with Chapter 6 of Regulation No. 781-P (Slides 30 and 31)
- **SZ** – net book value of subordinated loans received by the insurer
- **MRUK** – the minimum required authorised capital (as stipulated in Article 25 of Law No. 4015-1, Slide 6)



Stipulated by Article 25 of Law No. 4015-1. From 1 January 2024, MRUK is set at the amount of:

120 mln  
rubles

for insurance companies providing compulsory health insurance

300 mln  
rubles

for property insurance companies

450 mln  
rubles

for life insurance companies

600 mln  
rubles

for reinsurance activities, as well as combined insurance and reinsurance

Establishing the structure of assets and liabilities

Revaluation of assets and liabilities (the value of some assets is equal to 0)

Calculation of capital as the difference between asset value and total liabilities - the full balance principle (Cl. 1.1)

Calculation of the aggregate impact of market and credit risks on equity, and the required solvency margin

Calculation of the required equity (capital) ratio



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# 2.1

IDENTIFYING THE STRUCTURE OF  
ASSETS AND LIABILITIES FOR  
CAPITAL CALCULATION

(CHAPTER 1)



**Life insurers**

If the policy holder fully bears the market and credit risks of assets, these assets and liabilities are not included in the calculation

(Clauses 1.2.2, 1.3.2 of Regulation 781-P)

**Compulsory health insurance**

The following assets and liabilities, not exceeding the asset size, are excluded from the calculation:

- Compulsory health insurance funds for healthcare payments, received by a health insurance company and held in a separate account as defined by the insurance company's internal document, that allows to consider such funds targeted financing, except for the funds (rights to claim such funds) recognised as the own funds of the health insurance company
- Rights to claim against the regional fund and healthcare organisations as related to funds of the compulsory health insurance being those of a targeted financing, and recourses of the insurance company to those who inflicted damage to health of the insured persons, except for the health insurance company's own funds.

(1.2.1, 1.2.4, 1.3.1)

**Insurers**

Homogeneous claim rights<sup>1</sup> and liabilities arising from the debtor's fulfilment of these claims to the insurance company, amounting to the lesser of them, are excluded from the calculation, provided that:

- No bankruptcy proceedings are initiated against the debtor;
- The claim rights are not burdened by third-party rights;
- The claims are not yet mature;
- The claim rights of the insurance company are homogeneous with liabilities of the insurance company

(1.2.3, 1.3.4)

<sup>1</sup> except for the claim rights from outward reinsurance contracts, the cash flows of which are considered when calculating the reinsurers' share in insurance reserves

Balance sheet structure	Structure of assets and liabilities according to Regulation 781-P
<b>Assets</b>	
Depository receipts (Clause 1.4.1 of Regulation 781-P)	Securities that are certified by these receipts
Claims related to financial lease (lease, 1.4.3)	Real estate
Stocks and units of investment funds, which are not considered zero value according to Chap. 3 (1.4.2)	<i>Option 1:</i> Stocks and units of investment funds
	<i>Option 2:</i> List of fund assets in proportion to the share of units/stocks owned by the insurer
Compulsory health insurance (OMS) funds (1.2.1, 1.2.4)	*
Assets with risks transferred to the policyholder (1.2.2)	*
Claim rights homogeneous with liabilities (1.2.3)	*
Assets arising from the execution, amendment, termination, including premature termination, of insurance and outward reinsurance contracts (1.1)	Claim rights arising from insurance contracts and those accepted for reinsurance, if their cash flows are specified in Paragraphs 2, 4, 6, 7, 9 and 12 of Clause 5.3.7 (Slide 12)
	Claim rights arising from outward reinsurance contracts, if their cash flows are specified in Paragraphs 2, 4, 5 and 8 of Clause 5.6.5 (Slide 13)
	Reinsurers' share in insurance reserves
Other assets	Other assets (structure unchanged)

\* The structure includes the surplus:

- of assets (liabilities) under OMS over liabilities (assets) under OMS
- of assets (liabilities), with risks transferred to the policyholder, over corresponding liabilities (assets)
- of claim rights (liabilities) under homogeneous claims (Slide 9) over liabilities (claim rights)

Balance sheet structure	Structure of assets and liabilities according to Regulation 781-P
	<b>Liabilities</b>
Liabilities associated with assets that have risks transferred to the policyholder (1.3.2)	*
Liabilities under compulsory health insurance (OMS) (1.3.1)	*
Liabilities homogenous with claim rights (1.3.4)	*
Other liabilities	Other liabilities (structure unchanged)
Stocks and units of investment funds, which are not considered zero value according to Chap. 3 (1.4.2)	<i>Option 2:</i> List of fund liabilities in proportion to the share of units/stocks owned by the insurer
	Sureties and guarantees issued (1.3.3)
Value of the insurance company's liabilities under insurance and outward reinsurance contracts (4.3) <sup>1</sup>	Value of cash flows specified in Paragraphs 2, 4 – 7 of Clause 5.3.7 (Slide 12) and in Paragraphs 2, 5 – 9 of Clause 5.6.5 (Slide 13) (evaluated according to IFRS 13)
	Insurance reserves

\* The structure includes the surplus:

- of assets (liabilities) under OMS over liabilities (assets) under OMS
- of assets (liabilities), with risks transferred to the policyholder, over corresponding liabilities (assets)
- of claim rights (liabilities) under homogeneous claims (Slide 9) over liabilities (claim rights)

Paragraph content	Asset example	Liability example
Unrealised (unpaid and/or uncollected) cash flows, the payment term of which, according to the insurance contract terms, occurred before the calculation date, except for insurance payouts in connection with the survival of citizens to a certain age or term and their corresponding cash flows on fulfilment of obligations under insured events, as well as the corresponding cash flows for business expense payments; <i>(Paragraph 2)</i>	Outstanding premium debt	Case management expenses for uncollected premium (commission)
Cash flows from insurance premiums (insurance fees) paid for providing insurance coverage up to the insurance contract's upper bound, assuming that the upper bound of the insurance contract is no later than the calculation date, and the corresponding cash flows for expenses on concluding (acquiring) insurance contracts; <i>(Paragraph 4)</i>	Payment upon insurance contract completion – premium debt	Expenses for concluding postpaid insurance contracts
Cash flows from insurance premiums (insurance fees) paid for the period of insurance coverage validity after the insurance contract's upper bound, and the corresponding cash flows for expenses on concluding (acquiring) insurance contracts; <i>(Paragraph 5)</i>	No asset is created (as the flow beyond the contract's upper bound is considered in reserve calculations)	Accounts payable for expenses on insurance contract conclusion
Cash flows from excessively received funds from the policyholder, insurance premiums (insurance fees) received earlier than the term stipulated by the insurance contract, and the corresponding cash flows for expenses on concluding (acquiring) insurance contracts; <i>(Paragraph 6)</i>	Accounts receivable for expenses on insurance contract conclusion, if excessive funds have been paid by the policyholder and a commission has been automatically deducted from them	Accounts payable for excessively received funds from the policyholder; for expenses on concluding insurance contracts
Unrealised cash flows at the calculation date related to fulfilling obligations under contracts that arose due to insurance compensation payments for an insured event before the calculation date (including cash flows from subrogations and recourses); <i>(Paragraph 7)</i>	Subrogation and recourse	Costs associated with fulfilling obligations related to insurance payouts (e.g. appraiser fees)
Cash flows from the repayment of a loan by an insured individual, provided by the insurer according to Clause 7 of Article 26 of the Law of the Russian Federation 'On the Organisation of Insurance Business in the Russian Federation'; <i>(Paragraph 9)</i>	Asset from loan repayment	No liability is created
Cash flows from claim rights against insurance companies, professional insurer associations, assuming that settlements for such claim rights are conducted within a direct loss compensation agreement and such claim rights have arisen due to direct claim settlement prior to the calculation date. <i>(Paragraph 12)</i>	Asset in the form of a claim right under direct claim settlement. For instance, the injured party has been paid, but the refund has not yet been reconciled through the clearing	No liability is created

Paragraph content	Asset example	Liability example
Unrealised (unpaid and/or uncollected) cash flows, the payment term for which, according to the terms of the outward reinsurance contract, occurred before the calculation date; ( <i>Paragraph 2</i> )	Rights to claims under an outward reinsurance contract. For instance, the reinsurer's share in the payout	Accounts payable under the outward reinsurance contract (reinsurer's share in subrogations and recourses)
Cash flows from outward reinsurance contracts, if such flows are conditioned by cash flows from master contracts that have already been received or paid by the insurer; ( <i>Paragraph 5</i> )	Claim rights on the reinsurer's share of claims paid	The premium for the outward contract is paid after the master contract, forming accounts payable (which will later be listed in the bordereau); share in subrogations and recourses
Cash flows relating to the reinsurer's obligations to pay a portion of the insurance premium under the outward reinsurance contract, which the ceding insurer has the right to defer according to the terms of the outward reinsurance contract, as a guarantee of fulfilment of the reinsurer's obligations under the contract (deposit premiums), and also in the aforementioned part, the size of which is determined by the reinsurer's share in the loss reserves (deposit loss) of the ceding insurer; ( <i>Paragraph 6</i> )	No asset is created	Obligation to pay the premium
Cash flows for fulfilling the obligations of the ceding insurer to make additional payments to the reinsurer, dependent on the difference between the reinsurer's income and expenses under the reinsurance contract or group of such contracts for a period specified in the outward reinsurance contract, as of the calculation date, which cannot be recognised as an insurer's expense according to Regulation No. 491-P; ( <i>Paragraph 7</i> )	No asset is created	Obligaion to make additional payments. Example – bonuses for an incomplete calculation period (interim bonus (tantieme) calculation)
Cash flows on the return of the insurance premium (its part) upon early termination of the outward reinsurance contract, if the early termination date was before the calculation date; ( <i>Paragraph 8</i> )	Asset under the insurance premium refund	Commission liability
Unrealised cash flows on the reinsurers' share in the funds received by the insurer on subrogations, recourses, and sale of salvage. ( <i>Paragraph 9</i> )	No asset is created	Liability for a share in subrogations, recourses, and salvage



In terms of setting requirements for insurers' asset structure and assessing risk impact on equity (capital), liabilities to the insurer from a legal or natural person, the Russian Federation, a constituent entity of the Russian Federation, a municipal formation, a foreign state, or an administrative-territorial formation of a foreign state are considered:

1. A party liable for securities owned by the insurer or for securities involved in fixed-term transactions in which the insurer is a participant;
  2. A party whose obligation performance determines the cash flows from securities owned by the insurer, fixed-term transactions, or other contracts where the insurer is a party (including a participant in a co-insurance contract, reinsurance pool, or association, if such contract or participation conditions imply joint or subsidiary liability);
  3. A party to whom the insurer has other claims (including for insurance premium payment); for the purpose of identifying the obligated party, a credit institution with a special account is considered the obligated party instead of a broker who is not a credit institution, if the claims are based on a brokerage service contract with the following provisions:
    - the broker is not permitted to use the insurance company's funds for their own benefit;
    - the funds received from the insurance company are accounted for in a special account, separate from the account holding other clients' funds of the broker, opened in a credit institution with a credit rating not lower than the level set by the Bank of Russia Board of Directors.
  4. The surety (guarantor) for the above persons
- Lloyd's syndicates are considered as a single legal entity.



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# 2.2

ASSET VALUATION

(CHAPTER 3)

## General terms:

- If an asset is burdened (3.1.22), its value is deemed to be 0
- If the counterparty is bankrupt or the license is revoked (3.1.14), its value is deemed to be 0
- If the claim right is overdue (with certain exceptions), its value is deemed to be 0 (3.1.13)
- The insurer is entitled to specify in an internal document a list of assets, except for claim rights on fixed-term transactions, which are valued at 0 (3.1.25)

Asset type	Conditions for the value not to be 0	Valuation
Cash	Rating* (3.1.12.1) + Information has been submitted to a specialised custodian (3.1.15)	Fair value in accordance with IFRS 13 (3.9)
Deposits	Rating* (3.1.12.1) + Information has been submitted to a specialised custodian (3.1.15) + The term has not yet expired (3.1.13) + Non-subordinated (3.1.9)	If the deposit is unbreakable = IFRS 13 (3.9) If breakable within 5 days without loss of par value = par value + interest on breakage (3.2)
Stocks	Traded** (3.1.2) + Acquired volume <10% of company's capital (3.1.3) + Issuer is not the major company (3.1.4) + The stock is recognised as a security within the Russian Federation (3.1.23)	Fair value in accordance with IFRS 13 (3.9)

\*Rating refers to the rating of debtor or surety (guarantor), whose guarantee is considered 'good' (satisfies Cl. 3.1.8), not below the level set by the Bank of Russia Board of Directors.

\*\* With the exception of non-traded stocks of large Russian companies that correspond with additional requirements (valuation, size, reporting etc.)



Asset type	Conditions for the value not to be 0	Valuation
Capital investment (stake in LLC)	Value = 0 (3.1.5)	0
Mortgage participation certificates	Value = 0 (3.1.10)	0
Promissory notes	Value = 0 (3.1.11)	0
Borrowing	Rating* (3.1.12.1) + Not overdue (3.1.13) + Non-subordinated (3.1.9)	Fair value in accordance with IFRS 13 (3.9)
Bonds	<p>Rating* or issue rating (3.1.8) or Federal Loan Bond (OFZ) + The bond is recognised as a security within the Russian Federation (3.1.23) + <b>1. OR 2. + 3</b></p> <p><b>1.</b> Non-subordinated (3.1.9)</p> <p><b>2.</b> Subordinated + Issued by a credit institution + Convertible into tradable shares (3.1.9) + Included in the asset calculation for the required ratio of equity (capital) to assumed liabilities of the insurance company as of 1 July 2021 (3.1.9)</p> <p><b>3. For perpetual bonds:</b> the decision on their issue does not allow the issuer to unilaterally refuse interest payments on such bonds (3.1.26)</p>	<p>Fair value in accordance with IFRS 13 (3.9)</p> <p>OR in case of a structured bond with a 'bad' underlying asset (Cl. 3.7), then the minimum possible payable amount</p>

\*Rating refers to the rating of debtor or surety (guarantor), whose guarantee is considered 'good' (satisfies Cl. 3.1.8), not below the level set by the Bank of Russia Board of Directors.

Asset type	Conditions for the value not to be 0	Valuation
Refined gold in standard and measured bars	Accounted for in precious metal custody accounts in a credit institution within the Russian Federation (3.1.2)	Fair value in accordance with IFRS 13 (3.9)
Commodities	Marketable (3.1.2)	Fair value in accordance with IFRS 13 (3.9)
Real estate	Commissioned premises, buildings, structures, land (lease rights) under buildings + The insurer's property rights are registered in the Russian Federation (3.6)	Based on the appraisal report from a reputable appraiser (3.10, 3.11) <sup>1</sup> In the event of a financial lease, value = MIN (outstanding lease debt, property value) (3.5)
Items other than commodities and real estate	Value = 0 (3.1.19)	0
Deferred tax assets	Value = 0 (3.1.18)	0
Right of use under a lease agreement	Value = 0 (3.1.20)	0
Intangible assets	Value = 0 (3.1.21)	0
Digital financial assets, digital currencies	Value = 0 (3.1.24)	0

<sup>1</sup> the date of appraisal of real estate no earlier than 14 months prior to the date at which the asset value is determined (used to be one year)

\*Rating refers to the rating of debtor or surety (guarantor), whose guarantee is considered 'good' (satisfies Cl. 3.1.8), not below the level set by the Bank of Russia Board of Directors.



## General condition:

- If a debt is overdue (with certain exceptions), its value is deemed to be 0 (3.1.13)
- If the contract does not specify the obligation's performance term, claim rights that arose 90 calendar days prior to the calculation date are considered overdue, excluding claim rights for monetary obligations under a bank account contract and claim rights against reinsurers, insurance companies, professional insurer associations, and also claim rights for the return of excessively paid (collected) compulsory social insurance contributions (as specified in Subclauses 3.1.12.9 - 3.1.12.11, 3.1.12.13, 3.1.12.14)

Type of debt	Conditions for the value not to be 0	Valuation
Claims rights, in part secured by a state guarantee issued in line with Russian Federation budget legislation	Always above zero (3.1.13, 3.1.14)	Fair value according to IFRS 13 (3.9)
Claim rights for payment of outstanding debt on securities payments, due to default on liabilities by Euroclear Bank and Clearstream Banking	Securities acquired before 14 April 2022 (3.1.13 + 7.9 <sup>2</sup> -7.9 <sup>3</sup> )	The product of the book value less impairment provisions multiplied by a ratio set by the Board of Directors' decision (3.4)
Claim rights against the reinsurer for the payment of overdue debt on its share of the loss covered by the insurer	Redemption date after 1 February 2022 + Reinsurance contract signed prior to 14 April 2022 (3.1.13 + 7.9 <sup>2</sup> -7.9 <sup>3</sup> )	The product of the book value less impairment provisions multiplied by a ratio set by the Board of Directors' decision (3.4)
Any outstanding debt, except for claim rights against the reinsurer, inclusive of the below	Rating* (3.1.12.1) + Cash repayment (3.1.12.1)	Fair value according to IFRS 13 (3.9)

\*Rating refers to the rating of debtor or surety (guarantor), whose guarantee is considered 'good' (satisfies Cl. 3.1.8), not below the level set by the Bank of Russia Board of Directors.

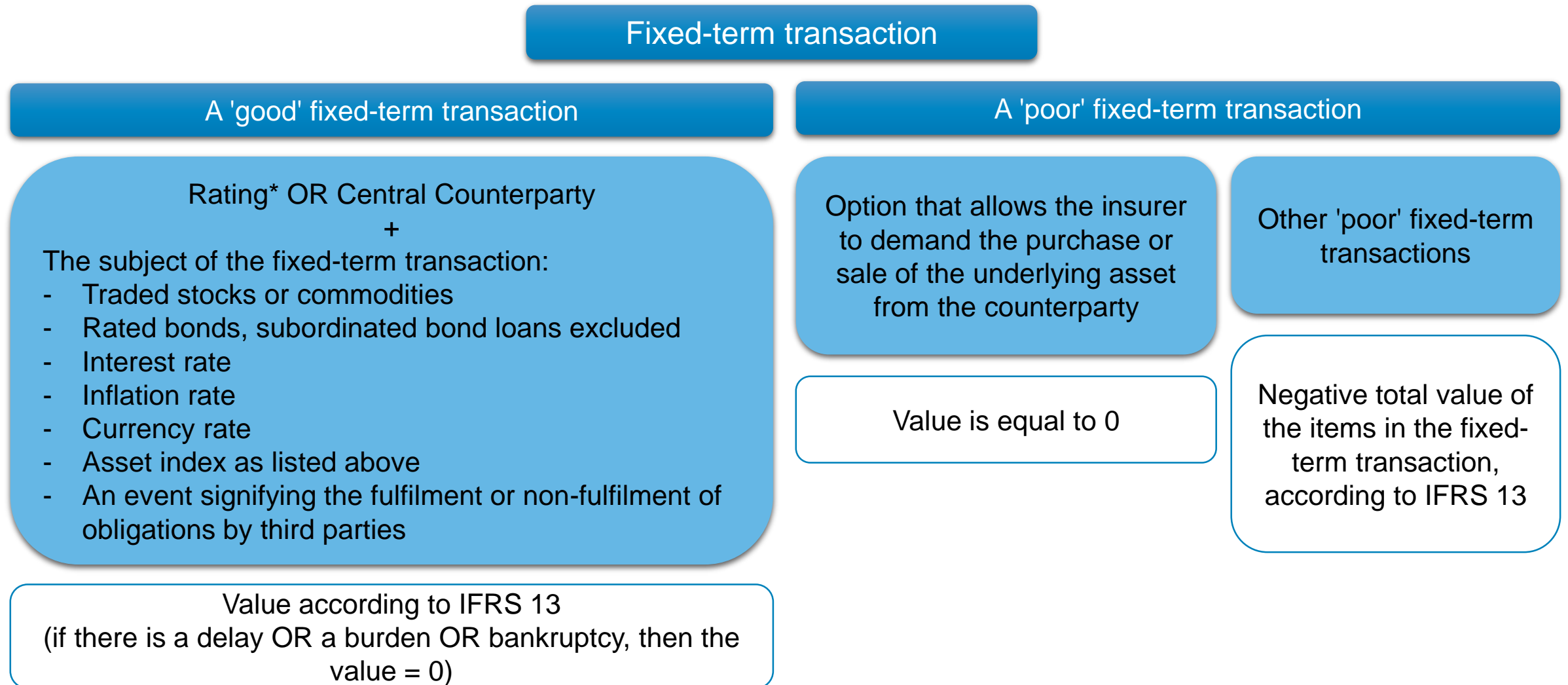
Type of debt	Conditions for the value not to be 0	Valuation
Outstanding payments of insurance premiums by agents and brokers	If the contract sets the payment deadline at 10 working days and the due date for payment of insurance premium (insurance fees) under the insurance contract terms has occurred before the calculation date or the upper bound of such contract precedes the calculation date (3.1.12.7)	Fair value in accordance with IFRS 13 (3.9)
Outstanding payments for direct claim settlement Outstanding payments under reinsurance pool agreements for Compulsory insurance of hazardous facilities, Compulsory carriers' liability insurance, MTPL (Compulsory motor third parties liability insurance) Outstanding payments for Motor hull insurance (Comprehensive motor insurance, other than liability) and MTPL	The insurer is the debtor (3.1.12.10)	Fair value in accordance with IFRS 13 (3.9)
Outstanding payments for subrogations and recourses	The insurer is the debtor, the court has approved the payment decision and no more than 10 working days have passed since it came into effect (3.1.12.10)	Fair value in accordance with IFRS 13 (3.9)
Outstanding payments to professional insurer associations for MTPL, Compulsory insurance of hazardous facilities, Compulsory carriers' liability insurance	Not equal to zero (3.1.12.14)	Fair value in accordance with IFRS 13 (3.9)
Prepayments to healthcare organisations and health resort institutions	Licensed healthcare organisations, Sanatoriums are included in orders No. 301n, No. 449n (3.1.16)	Accounting except for reserves for depreciation (3.4)
Prepayments on taxes, tax and fee liabilities of budgets	If refundable in cash (3.1.17)	Accounting excluding reserves (3.4)

\*Rating refers to the rating of debtor or surety (guarantor), whose guarantee is considered 'good' (satisfies Cl. 3.1.8), not below the level set by the Bank of Russia Board of Directors.

Type of debt	Conditions for the value not to be 0	Valuation
Reinsurer's debt	Reinsurer's rating OR Russian Federation resident OR 100% participation of the Republic of Belarus in the reinsurer's capital OR Nuclear pool insurance (3.1.12.9)	Fair value according to IFRS 13, but not exceeding the amount confirmed by the reinsurer (3.9)
Share of the reinsurer	Reinsurer's rating OR Russian Federation resident OR 100% share of participation of the Republic of Belarus in the capital OR Nuclear pool insurance (3.1.12.13)	In line with Clause 5.6 of Regulation 781-P (3.8)
Prepayments to the reinsurer, if the contract has not yet come into effect	Reinsurer's rating OR Russian Federation resident OR 100% share of participation of the Republic of Belarus in the capital OR Nuclear pool insurance (3.1.12.9) + The contract has not been recognised up to and including the calculation date according to Clause 5.1.11 of Regulation 781-P (3.9)	MIN (Fair value according to IFRS 13, insurer's liability amount under the master contract) (3.9)
Individual's debt for loan repayment in personal insurance	The loan does not surpass the non-negative best estimate of premium reserves + The contract term is no less than 5 years + The contract includes a clause to decrease the payout by the loan amount, should it not be fully repaid by the time of payment + Cash flows from disposal of claim rights are not included into the insurance reserves calculation (3.1.12.8)	Fair value in accordance with IFRS 13 (3.9)

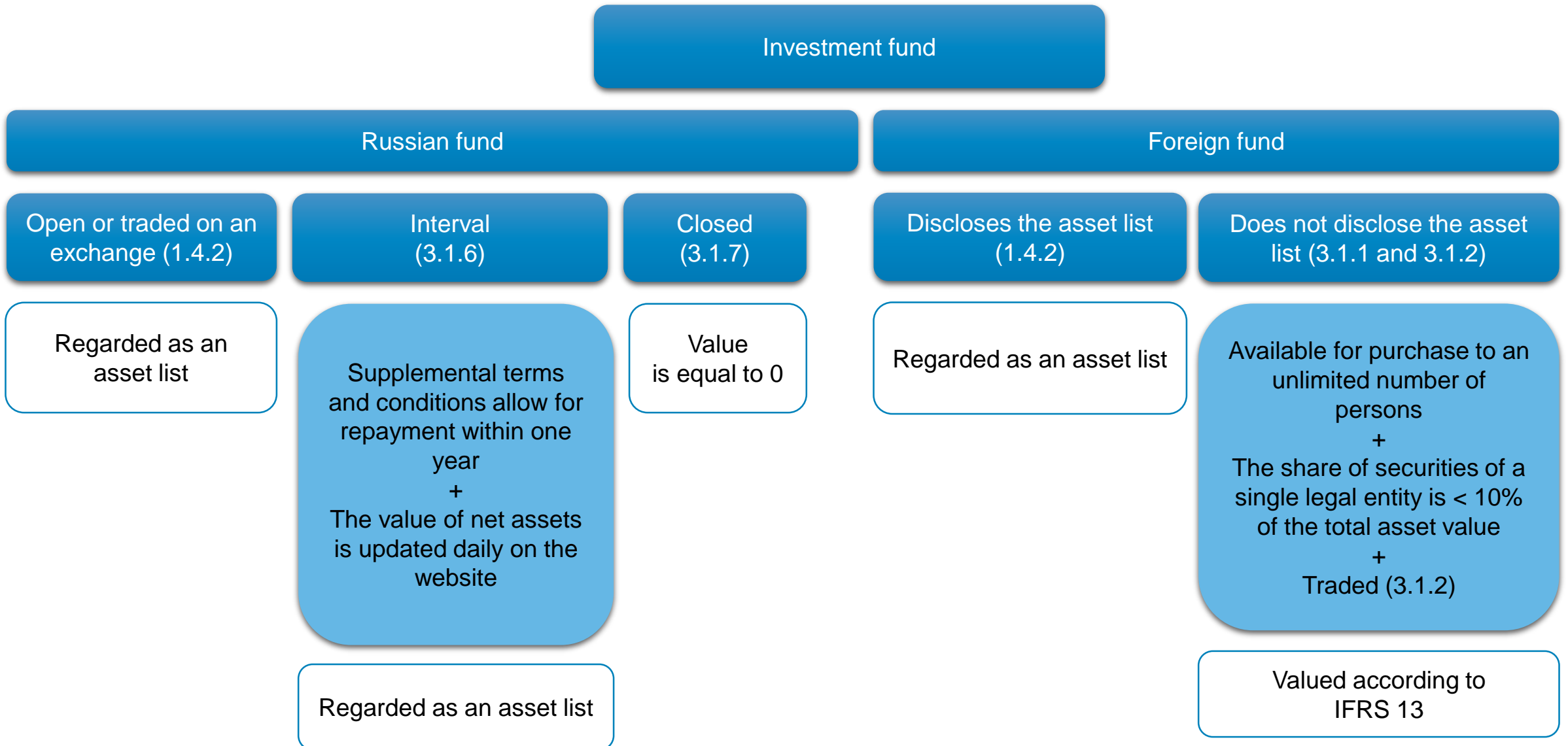
Type of debt	Conditions for the value not to be 0	Valuation
Debt related to the reimbursement of excessively paid insurance premiums for compulsory social insurance	If refundable in cash form (3.1.12.11)	Fair value in accordance with IFRS 13 (3.9)
NCC (National Clearing Centre), NSD (National Settlement Depository) debt	Not equal to zero (3.1.12.3)	Fair value in accordance with IFRS 13 (3.9)
Other systemically important infrastructure institutions	In the context of securities redemption or conducting transactions with them (3.1.12.2)	Fair value in accordance with IFRS 13 (3.9)
Specialised custodian	In relation to payments on securities with a term of no more than 7 working days (3.1.12.5)	Fair value in accordance with IFRS 13 (3.9)
Broker's (non-banking institution) debt under a monetary obligation	The contract does not allow the broker to utilise the insurer's funds for personal gain + Funds are accounted for in a distinct special account in a credit institution with a rating, or acting as a central depository or central counterparty (3.1.12.4)	Fair value in accordance with IFRS 13 (3.9)
REPO liability	Rating* (3.1.8) OR the REPO subject is traded stocks (3.1.2) or rated bonds (3.1.8) (3.1.12.6)	Fair value in accordance with IFRS 13 (3.9)

\*Rating refers to the rating of debtor or surety (guarantor), whose guarantee is considered 'good' (satisfies Cl. 3.1.8), not below the level set by the Bank of Russia Board of Directors.



\*Rating refers to the rating of debtor or surety (guarantor), whose guarantee is considered 'good' (satisfies Cl. 3.1.8), not below the level set by the Bank of Russia Board of Directors.

\*\*A fixed-term transaction includes derivative financial instruments and deals with a calculation date exceeding 3 days, except for real estate transactions.







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# 2.3

VALUATION OF LIABILITY COSTS

(CHAPTER 4)

Type of debt	Valuation
Lease liabilities	The value that exceeds the liability amount over the cost of the right-of-use asset under the lease contract (4.2)
Value of the insurance company's liabilities under insurance and outward reinsurance contracts <sup>1</sup>	The value of cash flows specified in Paragraphs 2, 4 to 7, Subclause 5.3.7 of Clause 5.3 and Paragraphs 2, 5 to 9 of Subclause 5.6.5 of Clause 5.6, according to IFRS 13 (4.3)
Insurance reserves	Calculated according to Chap. 5
Deferred tax liability (DTL)	<ol style="list-style-type: none"> <li>1. For non-life insurers: DTL in accounting is reduced by the amount resulting from the difference in reserves calculations</li> <li>2. For life insurers: DTL in accounting is reduced by DTA in temporary differences (if tax offset is permitted) and by the amount resulting from the difference in reserves calculations (4.4)</li> </ol>
Liabilities from term transactions	<p>Similar to assets, in case of a 'good' fixed-term transaction the fair value according to IFRS 13 is used</p> <p>In case of a 'bad' fixed-term transaction the total fair value of the fixed-term transaction items according to IFRS 13 (4.6) is used</p>
Non-credit liabilities (including issued sureties and guarantees)	Limit of liability of the insurer (4.5)
Other liabilities	Based on the cost in accounting records (4.1)

<sup>1</sup>Deferred tax asset (DTA) – The amount of deferred tax liabilities and assets for deductible temporary differences is determined according to the General Accounting Standards based on data in accounting registers, except for data on assets valued at zero according to Cl. 3.1 (except Subclause 3.1.22 of Clause 3.1), and assets and liabilities not considered when determining the insurer's own funds based on Clauses 1.2 and 1.3



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# 2.4

CALCULATION OF THE REQUIRED  
RATIO AND ASSESSMENT OF  
CONCENTRATION RISK IMPACT

(CHAPTER 6)

$$RR = \frac{K + SZ}{\max(MRUK, NRMP + RK)}$$

- **K** – capital
- **SZ** – net book value of subordinated loans
- **MRUK** – the minimum required authorised capital
- **NRMP** – required solvency margin
- **RK** – assessed value of risk impact on equity

(6.1)

$$SZ = \sum_{i=1}^{ChT} \frac{\min(N_i, 60)}{60} \times D_i$$

- **ChT** - number of outstanding tranches under SZ that the insurer has received
- **D<sub>i</sub>** - outstanding nominal value of the i-th tranche of SZ
- **N<sub>i</sub>** - number of full months to the date of repayment of the i-th tranche of SZ (0 - within the first three months from the date of borrowing)

(6.2)

$$N = \max \left( \sum_i N_{1i} \times K_i; \sum_i N_{2i} \times K_i \right) + (1 - n) \times N_3 \quad (\text{Cl. 6.3.2})$$

✓  $N_{1i} = 16\% \times \sum_j \left( \max\{P_j; 0\} \times \frac{1}{T_j} \right) + C_3$ , (Cl. 6.3.2.1) where:

$j$  - insurance contract (except for those with obligations transferred within the transferred insurance portfolio) recognised within the 12 months preceding the calculation date inclusively, or recognised earlier but still in effect on the calculation date, for the reference group (RG)  $i$

$P_j$  - insurance premium after refunds, less the total deductions from insurance premiums

$T_j$  - the total duration of insurance coverage under insurance contract  $j$  (in years), rounded down if it exceeds one year, and rounded up if it is below a year

$C_3$  – additional requirement for RG 3

✓  $N_{2i}$  - a measure calculated as 23% of 1/3 of the losses incurred under contract  $j$  for RG  $i$  (Cl. 6.3.2.2)

✓  $N_3$  - the total of auxiliary SR values calculated as per Appendix 6, for RG 5 and 11 (Cl. 6.3.2.3)

✓  $n$  - the profit tax rate

$$N^* = 5\% \times \sum_i ((DPP_i + DPU_i) \times Kzh_i) \quad Kzh_i = \begin{cases} \max \left\{ 1 - \frac{DDPP_i + DDDPU_i}{DPP_i + DPU_i}; 0 \right\} \\ \text{for other RG 1, and for RG 18-20} \end{cases} \quad (\text{Cl. 6.3.1}) \text{ where}$$

$DPU_i, DPP_i$  - cash flow for loss reserve, cash flow for premium reserve, for RG  $i$ ;

$DDPU_i, (DDPP_i)$  - the share of reinsurers in the premium reserve (loss reserve) taken in account for calculation of NRMP for RG  $i$   
Only outward reinsurance contracts that transfer insurance risk are used for calculation of the adjustment ratio

### The assets and liabilities included in the RK calculation

All assets and liabilities considered for capital valuation, except for:

- assets valued at 0 according to Cl. 3.1.
- 'Bad' fixed-term transactions (qualified as an asset or liability with a value calculated by the total fair value of lots)

Additionally, the rights to claim insurance premium payments are considered in the cash flow forecast, according to Cl. 5.3.1.

### Specifics of groups and related parties accounting

- Lloyd's syndicates are considered as a single counterparty
- Legal entities related to the insurer (major and subsidiary, except for the OECD reinsurer\*) are treated as a single legal entity – the major company of a group (with the rating of the major company)

\*The reinsurer is established in a member state of Organisation for Economic Co-operation and Development (OECD) with a credit quality group of 1-6, the risks has been ceded to it for reinsurance

$$RK = \sqrt{\sum_{i,j} corr1_{i,j} \times R_i \times R_j}, i,j=1, 2$$

### $R_1$ - market risk

- Concentration risk
- Spread risk
- Interest rate risk
- Risk of change of the stock value
- Foreign exchange risk
- Risk of change of real estate prices
- Risk of price changes for other assets not exposed to other risks

$$R_1 = \sqrt{\sum_{i,j} corr2_{i,j} \times R_{1i} \times R_{1j}}$$

### $R_2$ - credit risk

- Identify the assets are deemed to be at risk
- Counterparties are categorised into five groups
- To the first category the Monte Carlo calculation method is applied
- Calculations on the 2 - 5 categories are based on the credit risk approach + (Poisson distribution)

$$R_2 = \sqrt{\sum_{i,j} corr3_{i,j} \times R_{2credit\_i} \times R_{2credit\_j}} + R_{2credit}^*$$



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# 2.5

MARKET RISK CALCULATION

(APPENDIX 1)





$$R_{1conc} = \sqrt{\sum_{i,j} Conc_i \times Conc_j + Conc_{Re} + Conc^*}$$

$$Conc_i = \max(0, E_i - CT_i \times Assets)$$

- **CT<sub>i</sub>** - 10%, for a reinsurer from OECD with credit quality groups 1-6 and reinsurance liabilities for insurance payment **CT<sub>i</sub>** - 50%, for properties - 25%
- **E<sub>i</sub>** - concentration on an obligated party, total value of such party's assets (including assets for which it is liable), as well as premium claim rights accounted for in reserves
- **Assets** - the insurer's asset value and premium claim rights accounted for in reserves

$$Conc_{Re} = \max(0, \sum_{i=1}^R E_i - k_{Re} \times Assets)$$

- **R** - the number of reinsurers to whom the liabilities for insurance payouts have been ceded for reinsurance
- **k<sub>Re</sub>** - a ratio, set at 20% for life insurance providers and 60% for all other insurers

$$Conc^* = \max(0, E_i^* - 0.15 * Assets)$$

- **E<sup>\*</sup>** - sum of all non-traded stocks

The following assets are not subject to concentration risk assessment:

- Shares in the reserve of declared losses, indebtedness for payment of loss share
- Shares of RNRC (Russian National Reinsurance Company) in reserves
- Assets for which the Russian Federation is the obligor
- Infrastructure institution's debt under securities redemption or transactions involving them
- Debt under direct claim settlement, reinsurance pools for compulsory types of insurance
- Share in the nuclear risk pool (in case of a joint liability), Compulsory insurance of hazardous facilities, Compulsory carriers' liability insurance
- Claim rights for premiums related to survival risk (insurance coverage period exceeding 1 year, if the contract is automatically terminated upon non-payment of the next instalment)



$$R_{1spread} = \max\left(\sum_{m=1}^M (MD_m \times P_m \times S_m) + \Delta Derivatives_{cs} - \Delta reserve_{spread}^{og}; 0\right)$$

$M$  - the quantity of bonds (unbreakable deposits, loans), except for OFZs, state bonds of OECD member countries with a rating no less "A" by the international rating scale

$S_m$  - the ratio of change in the credit spread based on the credit quality group, determined by the rating of the asset, surety or issuer (as specified in Appendix 2 to Regulation 781-P)

$P_m$  - the cost of instrument, inclusive of the accrued coupon income

$MD_m$  - the modified duration calculated by the formula (instrument flow to the closest date - either offer date or maturity date)

$$MD_m = \sum_{j=1}^J \frac{\frac{(d_j - d)}{365} \times CF_j}{(1 + YTM)^{\frac{d_j - d}{365}}} \times \frac{1}{P_m \times (1 + YTM)}$$

$$MD_m = \frac{1}{YTM}, \text{ for perpetual bonds}$$

$$P_m = \sum_{j=1}^N \frac{CF_j}{(1 + YTM)^{\frac{d_j - d}{365}}}$$

$$YTM = \frac{C}{P_m}, \text{ for perpetual bonds}$$

$\Delta Derivatives_{cs}$  - the difference in cost between fixed-term transactions and 'at risk' fixed-term transactions, calculated given the change in the value of the fixed-term transaction subject due to the alteration in credit spread  $S_m$

$\Delta reserve_{og\ Spread}$  - the difference in value between the reserve for investment obligations and the 'at risk' reserve for investment obligations, calculated from changes in the credit spread  $S_m$



$$R_{1interest\ rate} = \max(R_{1interest\ rate}^{up}, R_{1interest\ rate}^{down})$$

$$R_{1interest\ rate}^{up,down} = \max\left(\sum_{m=1}^M (MD_m \times P_m \times RFrates_m \times R_m^{up,down}) + \Delta Derivative_{interest\ rate}^{up,down} - \Delta reserve_{interest\ rate}(R_m^{up,down}); 0\right)$$

**M** - the quantity of bonds (unbreakable deposits, loans)

**P<sub>m</sub>** - the cost of instrument, inclusive of the accrued coupon income

**MD<sub>m</sub>** - the modified duration of instrument m

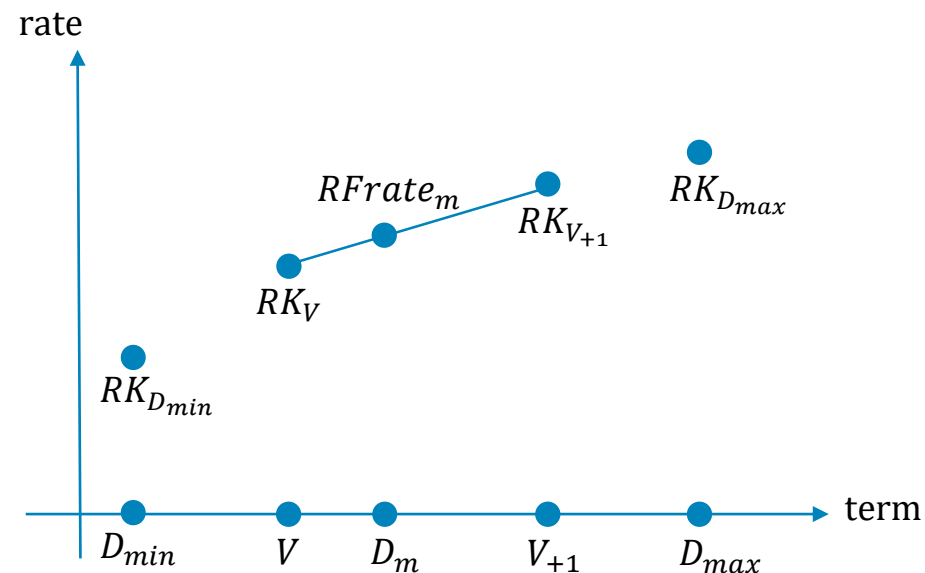
**RFrates<sub>m</sub>** - the interest rate on the zero-coupon yield curve (OFZ for ruble interest rates, China Government Bond Yield Curve for yuan, US Treasury for other currencies). f = 2 pps is added to the rate on the curve for all currencies except for rubles

$$RFrates_m = \begin{cases} RK_{D_{min}}, & \text{if } L_m \leq D_{min} \\ RK_V + \frac{L_m - V}{V_{+1} - V} \times (RK_{V_{+1}} - RK_V), & \text{if } D_{min} < L_m < D_{max} \\ RK_{D_{max}}, & \text{if } L_m \geq D_{max} \end{cases}$$

**L<sub>m</sub>** - the period until maturity / offer of instrument m

**D<sub>min</sub>, D<sub>max</sub>** - the minimum (maximum) terms for which zero-coupon yield interest rates are set

**V, V<sub>+1</sub>** - the maximum (minimum) term for which the value of the zero-coupon yield curve is known, not exceeding (exceeding) **D<sub>m</sub>**, in years





$R_m^{up,down}$  – a point on the curve of interest rate changes

$$R_m^{up,down} = \begin{cases} RK_{0.25}^{up,down}, & \text{if } L_m \leq 0,25 \\ RK_F^{up,down} + \frac{L_m - F}{F_{+1} - F} \times (RK_{F_{+1}}^{up,down} - RK_F^{up,down}), & \text{if } 0,25 < L_m < 30, \\ RK_{30}^{up,down}, & \text{if } L_m \geq 30 \end{cases}$$

$RK_{F_{+1}}^{up,down}$  relative rise (up) or fall (down) in interest rates (ratios are specified in Appendix 2 to Regulation 781-P)

$\Delta reserve_{interest\ rate}(R_m^{up,down})$  – the difference between the amounts of insurance reserves minus the share of reinsurers in insurance reserves, calculated in case of a change in the interest rate by indicator  $R_m^{up,down}$  and (if necessary) a corresponding change in the value of an asset, which according to the insurance contract leads to a change in the reserve of investment obligations

$\Delta Derivative_{interest\ rate}^{up,down}$  - the difference between the price of fixed-term transactions and the price of 'at risk' fixed-term transactions, calculated considering the change in the value of the subject of the fixed-term transaction based on the increase/decrease of the interest rate  $R_m^{up,down}$



$$R_{1equity} = \max(R_{Eq_{up}}; R_{Eq_{down}})$$
$$R_{Eq_{up,down}} = \max\left(-\sum_{m=1}^M P_m \times I_m^{up,down} + \Delta Derivatives_{Eq_{up,down}} - \Delta reserve_{Eq_{up,down}}^{og}; 0\right)$$

$M$  – number of stocks

$I_m^{up,down}$  – the ratio of increase (decrease) in the value of the m-th stock (as specified in Appendix 2 to Regulation 781-P)

$P_m$  – the cost of the m-th stock

$\Delta Derivatives_{Eq_{up,down}}$  – the difference between the price of fixed-term transactions and the price of 'at risk' fixed-term transactions, calculated considering the change in the value of the subject of the fixed-term transaction based on the change in stock value  $I_m$

$\Delta reserve_{Eq_{up,down}}^{og}$  – the difference between the cost of the reserve for investment obligations and the cost of 'at risk' reserve for investment obligations, calculated considering the change in stock value  $I_m$



$$R_{1property} = \max(\Delta \mathbf{Derivatives}_{property} - \Delta \mathbf{reserve}_{property}^{og} + \sqrt{(pr_1 \times P_1^*)^2 + 1,5 \times (pr_1 \times P_1^*) \times (pr_2 \times P_2^*) + (pr_2 \times P_2^*)^2}; 0)$$

The assessment of risk associated with changes in real estate property prices ( $R_{1property}$ ) is determined in relation to real estate property, fixed-term transactions, and investment obligation reserves.

$pr_{1(2)}$  – the ratio of decrease in residential (non-residential) real estate value (as specified in Appendix 2 to Regulation 781-P)

$P_{1(2)}^*$  – the total cost of residential (non-residential) real estate properties, including the cost of land on which said properties are located

$\Delta \mathbf{Derivatives}_{property}$  – the difference between the price of fixed-term transactions and the price of 'at risk' fixed-term transactions, calculated given the change in the value of the subject of the fixed-term transaction due to changes in real estate values

$\Delta \mathbf{reserve}_{property}^{og}$  - the difference between the value of the reserve for investment obligations and the value of the 'at risk' reserve for investment obligations, calculated given changes in real estate prices.



$$R_{1commodity} = \max(R_{com_{up}}; R_{com_{down}})$$
$$R_{com_{up,down}} = \max\left(-\sum_{m=1}^M P_m \times c_{up,down} + \Delta Derivatives_{com_{up,down}} - \Delta reserve_{com_{up,down}}^{og}; 0\right)$$

$M$  – the number of assets that are not subject to interest rate, spread, risk of stock price changes, or risk of real estate price changes

$P_m$  – the value of the m-th asset

$C_{up,down}$  ratio that indicates the decrease (or increase) in asset value (as specified in Appendix 2 to Regulation 781-P).

$\Delta Derivatives_{com_{up,down}}$  – the difference between the cost of fixed-term transactions and the cost of 'at risk' fixed-term transactions, calculated given the change in the value of the subject of the fixed-term transaction due to changes in other asset values.

$\Delta reserve_{com_{up,down}}^{og}$  – the difference between the value of the reserve for investment obligations and the value of the 'at risk' reserve for investment obligations, calculated given changes in other asset values.

**For gold, there are distinct ratio for value change.**



$$R_{1currency} = \max(R_{1currency}^{up}; R_{1currency}^{down})$$

$$R_{1currency}^{up,down} = \max(R_{1currency\ assets}^{up,down} - R_{1currency\ liabilities}^{up,down} + \Delta Derivative_{currency}^{up,down}; 0)$$

$$R_{1currency\ assets}^{up,down} = P_a - P_a^{up,down}$$
$$R_{1currency\ liabilities}^{up,down} = P_l - P_l^{up,down}$$

$P_a$  ( $P_l$ ) – the total value of an insurer's assets (liabilities) denominated in foreign currency or dependent on foreign currency exchange rates according to contract, except for fixed-term transactions.

$P_a^{up,down}$  ( $P_l^{up,down}$ ) – the total value of an insurer's assets (liabilities) denominated in foreign currency or dependent on foreign currency exchange rates according to contract, except for fixed-term transactions, in case of an increase (up) or decrease (down) in foreign currency exchange rates (ratios are specified in Appendix 2 to Regulation 781-P).

$\Delta Derivative_{currency}^{up,down}$  – the difference between the cost of fixed-term transactions and the cost of 'at risk' fixed-term transactions, calculated given the change in the value of the subject of the fixed-term transaction due to an increase (up) or decrease (down) in foreign currency exchange rates.





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# 2.6

CREDIT RISK

(APPENDIX 1)



## The following assets are not subject to credit risk assessment (6.5.10.1):

- assets for which the Russian Federation or an OECD member state is the obligor, with a long-term credit rating of at least 'A' ('A2') on the international rating scale
- prepayments to healthcare organisations and health resort institutions,
- real estate and commodities;
- advance tax payments, tax and fee arrears of budgets;
- debt of systemically important infrastructure institutions in cases of securities redemption or transactions involving them;
- debt under direct claim settlement, reinsurance pools for compulsory types of insurance, Compulsory insurance of hazardous facilities, Compulsory carriers' liability insurance, MTPL- Motor hull insurance calculations via RSA (the Russian Association of Motor Insurers)
- reinsurer's shares in nuclear pools, assuming joint and several liability, Compulsory carriers' liability insurance, Compulsory insurance of hazardous facilities
- claim rights for premiums related to survival risk (insurance coverage period exceeding 1 year, if the contract is automatically terminated upon non-payment of the next instalment)

Credit quality group is determined per each counterparty based on its rating or the rating of its securities (6.5.2.2). Total number of credit quality groups is 23.



The probability of default of the asset and the claim right under the insurance contract in terms of premium payment, for which risk 2 assessment is determined, is calculated as the product of the probability of default (based on the asset's credit quality group), the period until maturity (closure) and z ratio, divided by 365. (6.5.10.2)

- The period until maturity (closure):
  - for cash and breakable deposits is 5 days;
  - for claim rights (including claim rights under the insurance contract in terms of premium payment), which according to the contract must be fulfilled within 365 days following the calculation date is equal to the number of days until the date of claim fulfilment;
  - in other cases, 365 days.
- The probability of default by the obligated party is determined based on the credit quality group of the obligated party.
- For the purpose of risk 2 calculation, cash flows under an insurance contract with a payment term of more than 365 days are considered as a single cash flow in the amount of such cash flows with a payment term of 365 days.
- The ratio z assumes the following values:
  - Ratio 1 (value = 2) - for claim rights under an insurance contract in terms of premium payment for non-life insurance contracts, as well as for life insurance contracts, if such contracts do not include the risk of survival to a certain age, except for contracts that only include the risk of death and/or the risk of primary diagnosis of a critical illness, with an insurance sum for such risk less than 1 million rubles or with an insurance coverage period not exceeding 1 year;
  - Ratio 2 (value = 1) - in other cases.



All counterparties are categorised into 5 groups, with credit risk assessment results for each group contributing to the overall calculation  $R_2 = \sqrt{\sum_{i,j} corr3_{i,j} \times R_{2credit\_i} \times R_{2credit\_j} + R_{2credit}^*}$ ,  $i,j=1, 2, 3, 4, 5$

### Category 1

- Obligated parties with credit quality groups 1 – 21 (except for individuals)
- Obligated parties for securities – subjects of a fixed-term transaction or based on the fulfilment of obligations which determine flows under securities / fixed-term transactions / other contracts
- Obligated parties that are legal entities / individuals, if the concentration on the obligated party exceeds the threshold value K1 / K2 (cut-off limit)
- Obligated parties that are insurers participating in a reinsurance pool or association where the participants have joint or subsidiary liability

### Category 2

All obligated parties that are legal entities, if at least one asset has the indicator  $z = 2$ ,

### Category 3

All obligated parties that are legal entities, except for categories 1 and 2

### Category 4

All obligated parties who are individuals, if at least one asset has the indicator  $z = 2$ ,

### Category 5

All obligated parties who are individuals, except for categories 1 and 4

The insurer sets the cut-off limit for category 1, but it must not exceed 0.5% of the value of its assets.

$R_{2credit}^*$  - the total value of claims under insurance contracts considered in calculating insurance premium payments, if there is a delay in payment of insurance premiums under mortgage contracts for more than 30 business days, or for other insurance contracts for more than 5 business days from the insurance premium payment date specified in the insurance contract



The impact of credit risk on category 1 is gauged as a specified quantile (which will rise from 60% to 90% by 2025, pursuant to Appendix 2 to Regulation 781-P) of the  $X_s$  loss distribution. The anticipated loss value in iteration  $s$  is calculated using the following formula:

$$X_s = \max\left(\sum_{m=1}^M (P_m - P_m(s)) + \sum_{m=1}^{M'(s)} (P_{m'}(s)), 0\right)$$

$$P_{m'}(s) = (CO_{\text{per}}^s + O_{\text{IFRS13}}^s) - (CO_{\text{per}} + CO_{\text{IFRS13}})$$

(Cl. 9 of Appendix 1 to 781-P)

**M** – the total number of assets and claim rights related to insurance premium payments, except for those claim rights factored into the indicator  $R_{2\text{credit}}^*$  calculation, where the obligated parties belong to category 1 of counterparties;

**P<sub>m</sub>** – the price of the  $m$ -th asset;

**P<sub>m</sub>(s)** – the value of the  $m$ -th asset, derived from default assumptions made during iteration  $s$ ;

**M'(s)** – the number of instances where additional obligations arise due to law or contract, including joint or subsidiary liability terms, or conditions of a reinsurance pool or association that the insurance company is a member of, based on default assumptions made during iteration  $s$ ;

**CO<sub>per</sub><sup>s</sup>** – insurance reserves computed based on default assumptions made during iteration  $s$ , in accordance with legal provisions or terms of contract or association charter that establish additional obligations;

**O<sub>IFRS13</sub><sup>s</sup>** – the fair value of extra liabilities, calculated pursuant to IFRS 13, based on default assumptions made during iteration  $s$ , considering legal provisions or terms of contract or association charter that establish additional obligations;

**CO<sub>per</sub>** – insurance reserves;

**CO<sub>IFRS13</sub>** – the fair value of additional liabilities, calculated pursuant to IFRS 13, given the legal provisions, terms of contract or association charter that establish extra obligations for the insurance company.



Asset type	Value at default
<ul style="list-style-type: none"> <li>Assets when the obligated party has no rating (except for bonds)</li> <li>Stocks</li> <li>Convertible subordinated bonds</li> </ul>	0
<ul style="list-style-type: none"> <li>Bonds (without collateral)</li> <li>Deposits</li> <li>Other assets (without collateral)</li> </ul>	35% of the par value, but not exceeding their value on the date of calculation
The asset has no default, but default is anticipated for persons, which based on the obligations' performance determine the asset's cash flows	Cash flow total
Asset with pledge of securities or other property, with no default from the pledgors' side	Value of securities or other property <sup>1</sup>
Asset secured by mortgage	Real estate value according to Chap. 3 multiplied by the ratio of change in real estate value <sup>1</sup>
Asset with collateral other than listed	50% of the value of the collateral for asset <sup>1</sup>
Other assets (if there is a default on the asset or on the obligated party)	0
Other assets (if there is no default for either the asset or the obligated party)	Asset value

<sup>1</sup> but not exceeding the value of the liability secured by the collateral



$$R_{2credit\_2} = \sum_{i=1}^g \min(E_i^{all}, E_i^{max} \times (1 - 35\% \times (1 - r_i)) \times p_i),$$

**g** – the number of groups into which obligated parties are divided, based on individual obligation concentration

$E_i^{max}$  – the highest concentration in group i per obligated party

$E_i^{all}$  – the total concentration in group i per obligated party

$r_i$  – the cumulative proportion of stock value in the total asset value, where the obligated parties are assigned to the i-th group of the subordinated bond loan, provided that the issue terms allow for conversion into ordinary shares;

$p_i$  – the number of defaults in the i-th group, calculated by the formula:

$$p_i = \min\left(\min_k(k | \sum_{j=0}^k \frac{\lambda^j e^{-\lambda}}{j!} \geq Q), M_i\right),$$

where:

$Q$  – risk ratio 2 (as specified in Appendix 2 to Regulation 781-P),

$\lambda = z \times PD \times M_i$

$M_i$  – the number of obligated parties in the i-th group

$PD$  – probability of default based on the counterparty category



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THANK YOU  
FOR YOUR ATTENTION