

Baltikums Bank AS Capital Adequacy Assessment Process Report

www.baltikums.eu

Contents

1.	Capital adequacy assessment process.	. 3
2.	Overview of the results of the capital adequacy assessment process	. 7

1. Capital adequacy assessment process

- 1.1. The purpose of the capital adequacy assessment procedure is to evaluate all risks borne by the Bank and maintain adequate coverage of these risks with available capital.
- 1.2. The procedure of internal evaluation of the Bank's capital adequacy is specified in the Bank's Capital Adequacy Management Policy.
- 1.3. Internal evaluation of capital adequacy is performed on a quarterly basis, within one month following the end of a calendar quarter.
- 1.4. The Bank's capital is evaluated as either "adequate" or "inadequate" by the Bank's Investment Committee (IC). All calculations are performed by the Financial Analysis and Financial Risk Management Department, in accordance with the procedure specified in the Bank's Capital Adequacy Management Policy and annexes thereto, using assumptions specified by the IC where applicable.
- 1.5. On the basis of FCMC Regulations on the Internal Capital Adequacy Assessment Process, the Bank defines:
 - 1.5.1. the amount of capital necessary to cover risks (capital requirements);
 - 1.5.2. the capital reserve;
 - 1.5.3. total capital necessary (the total of capital to cover risks and the capital reserve);
 - 1.5.4. amount of capital at the Bank's disposal.
- 1.6. The Bank employs the simplified methods specified in the FCMC Regulations on the Internal Capital Adequacy Assessment Process for evaluating credit risk, concentration risk, debt securities price risk, currency risk and operational risk capital requirements. The Bank employs in-house approaches and methodologies to determine capital requirements for liquidity risk, interest rate risk in the non-trading portfolio, money laundering/terrorist financing risk, reputational risk, strategy and business risk, and "other" risks:
 - 1.6.1. Capital requirements for credit risk (applies to the Bank's claims on credit institutions and other counterparties, loans to clients, investments in debt securities, and investments in other assets) include all capital requirements which, in accordance with EU Regulation 575/2013, apply to credit risk, as well as concentration risk (additional credit risk related to loans to clients and investments in bonds) calculated using the FCMC Regulations on the Internal Capital Adequacy Assessment Process. In addition to capital requirements determined using the aforementioned simplified methods, the Bank also conducts stress testing of credit risk related to client loans (including loans taken over), stress testing of credit risk related to investments in debt securities, and assessment of credit risk related to claims on other credit institutions and counterparties, and if potential losses determined using stress testing or assessment exceed capital requirements determined using simplified methods, the difference between potential losses determined using stress testing or assessment and capital requirements determined using simplified methods is included in the capital reserve amount:
 - 1.6.1.1. Stress testing of credit risk related to loans issued to clients (excluding securities-backed loans) is performed in accordance with the Methodology for Stress Testing Loan Credit Risk. For each loan, the probability of default in a "bad" year is assumed based on an evaluation of the loan's credit capacity, or rating (according to the negative scenario) and the Bank's assumed losses in the event of the borrower's default. Potential losses for the Bank are then determined using the Monte Carlo method. The total of potential losses is combined with the potential of losses due to loan portfolio concentration by issuers, and residual risk, in order to come up with total potential losses for the Bank.
 - 1.6.1.2. Stress testing of credit risk related to the Bank's investments in debt securities and loans against debt securities is performed using the Securities Credit Risk Stress Testing Methodology;
 - 1.6.1.3. The calculation of potential losses is based on the assumption that the probability of default in the obligations of issuers is characterised by, and may be predicted based on, historical data about default (non-performance) by issuers maintained by the Moody's ratings agency, available as a list of defaulting issuers grouped by credit capacity rating. Potential (1 year) losses are calculated with the assumption that the amount of investments in securities and loans against securities, as well as the distribution of this volume among issuers with specific credit capacity ratings will remain unchanged during the subsequent 12-month period (i.e. other securities with the same rating as redeemed securities will be purchased). Thus, potential losses are calculated regardless of the remaining maturity terms of such securities, factoring in only the credit capacity of the issuers;
 - 1.6.1.4. during calculation of potential losses, the likelihood of (partial) recovery of investments in the event of default by an issuer (also known as the Recovery Rate) is considered;

- 1.6.1.5. to calculate potential losses, 1000 tests/simulations are performed, and in each of the tests each issuer may potentially default or not default based on the relevant default probability. Losses from investments in the securities of each issuer in the event of default are calculated by multiplying the total of the Bank's investments and loans by (1 minus recovery rate); the total of losses from all defaults by all issuers thus constitutes the Bank's total potential losses for the relevant test/simulation. Potential losses of the Bank are calculated as total losses in the 40th worst (by total losses) test/simulation out of the 1000;
- 1.6.1.6. default probabilities for the subsequent 12-month period in the negative stress testing scenario use the ratio of total defaulting issuers (by rating) to the total number of issuers (by rating) observed in 2009, the year following a financial crisis when the ratio of issuers in default was one of the highest observed in 31 years (from 1983 to 2013);
- 1.6.1.7. assessment of credit risk related to claims on other credit institutions and counterparties is performed by the Bank's IC, considering concentration of the Bank's claims among various counterparties and countries;
- 1.6.2. The capital requirements for debt securities price risk and currency risk are consistent with capital requirements specified in EU Regulation 575/2013. In addition to the capital requirements specified using the aforementioned simplified methods, the Bank also performs stress testing of these risks; if potential losses determined using stress testing or assessment exceed capital requirements determined using simplified methods, the difference between potential losses determined using stress testing or assessment and capital requirements determined using simplified methods is included in the capital reserve amount:
 - 1.6.2.1. stress testing of market risk for bonds is performed in accordance with the Debt Securities Market Risk Stress Testing Methodology. Stress testing determines potential losses that the Bank might sustain in the event of a major market crisis and ensuing decrease in the value of securities in its trading portfolio (1 month scenario), as well as if the Bank should be forced to liquidate the entirety of its securities portfolios (including the investment portfolio) 1 year following the date of the stress testing with the assumption that the prices of such securities would be at historically low levels at that point (1 year scenario);
 - 1.6.2.2. to calculate potential losses for the Bank due to potential decrease in debt securities prices, maximum expected bond revenue levels are specified (depending on credit capacity ratings)given a stress situation. It is assumed that the likely level of bond income under market stress would be characterised by the highest income on 63 Russian and CIS country issuers' bonds observed during the period of time from October 2014 till February 2015:

Rating	Number of issuers	Max median yield Oct 14-Feb 15, %	Stress scenario yield, %
BBB	8	7.4%	7.4%
BB	36	11.6%	11.6%
B+ to B	14	16.1%	16.1%
B- to C	5	13.9%	20.0%

for highly rated debt securities ranging from AAA to A-, custom stress scenario yield of between 0.5% and 3% is assumed on a case by case basis;

- 1.6.2.3. the results of internal capital adequacy assessment include "1 year" scenario results. For bonds with a term to maturity that exceeds 1 year as at the date of stress testing, the stress scenario price is calculated using the Excel PRICE formula at the date 1 year following the stress testing date, given stress scenario income for the relevant credit rating, and for bonds with a term to maturity of no more than 1 year following the stress testing date, the Bank's potential losses are calculated as the difference between the value of a bond at market price and at price = 100; Potential losses are calculated as the difference between the current balance sheet value of a security and its stress testing value (divided by 100) and multiplied by the balance sheet value of the relevant security. The "1 year" scenario includes the Bank's expected income from securities coupons;
- 1.6.2.4. currency risk stress testing calculates potential losses to the Bank from potential changes in exchange rates (within 1 day). The period of holding a position for 1 day has been selected because the periodicity of holding positions is actually short (the Bank does not maintain a position in any currency long-term), and the Bank is capable of closing any position within a short span of time. To calculate potential losses, the (absolute) value on the position stress testing date (for positions worth > EUR 70 thous.) is multiplied by the largest change in the value of the relevant currency (against EUR) within 1 day during the period since the beginning of 2008;

- 1.6.3. interest rate risk in the Bank's non-trading portfolio is evaluated in accordance with the procedure specified in the Interest Rate Risk Management Policy. If the IC has identified/assessed interest rate risk as significant, the Financial Analysis and Financial Risk Management Department conducts stress testing of interest rate risk quarterly within the framework of its internal assessment of capital adequacy, calculating the potential impact of changes in base interest rates (in the currencies significant for the Bank) on the Bank's net interest income (non-trading portfolio) and, if stress testing calculations show that the Bank's net interest income as a result of changes in interest rates might be negative, the potential losses are considered the capital requirement for this risk;
- 1.6.4. The liquidity risk capital requirement is determined based on liquidity risk stress testing results. If stress testing indicates that liquidity risk stress scenarios could produce a deficit of liquid assets for the Bank, potentially requiring attraction of additional (external) financing for the Bank to maintain its operations and meet regulatory liquidity criteria, then expenses that might be related to attracting such emergency assets are evaluated, and these expenses are considered the liquidity risk capital requirement. The procedure of stress testing liquidity risk is described in the Liquidity Risk Management policy;
- 1.6.5. The operational risk capital requirement is defined as the larger of two values: the operational risk capital requirement determined using the basic indicator approach specified in EU Regulation 575/2013 575/2013, and the value of potential operational risk losses determined/estimated by the Bank's Operational Risk Management Department (over a 1-year period);
- 1.6.6. Strategy, business, ML, reputational risks:
 - 1.6.6.1. the Bank assumes the risks of strategy, business, ML and reputational risks, and believes that the worst-case scenario that might occur if the aforementioned risks manifest themselves, is (1) major decrease in client deposits and (2) major decrease in income from fees. The potential decrease in client deposits is included in liquidity risk stress testing, while the risk of decreased income from fees is calculated in the manner outlined below;
 - 1.6.6.2. the fee income risk is calculated as the difference between the total of the Bank's administrative expenses (annualised based on the preceding quarter) and 50% of the Bank's net fee income and currency trading income during the preceding 12 months: if the amount of administrative expenses of the Bank exceeds 50% of its net fee and foreign exchange income total, then the relevant positive difference is considered the Bank's fee income risk in accordance with section 1.6.6.3 below; otherwise, fee income risk is assumed to be zero;
 - 1.6.6.3. In accordance with FCMC policy, because the Bank's activity involves servicing of non-resident clients, the Bank must maintain a significantly higher minimum capital adequacy indicator, which in the context of internal capital adequacy assessment is treated as equivalent to assuming a substantially increased risk of strategy, ML, and reputational risk (hereinafter referred to as the "non-resident business capital requirement"). Therefore, the degree of risk of reduced fee income as calculated in accordance with 1.6.6.2 above (provided that it exceeds 0) is compared to the non-resident business capital requirement calculated as follows:

• (Individual capital adequacy indicator specified for the Bank, i.e. 10.5%) x the Bank's risk-weighted assets,

• and, if the non-resident business capital requirement exceeds the risk of reduced fee income, the risk of reduced fee income is assumed sufficiently covered by defining the individual capital adequacy indicator of the Bank; consequently, there is no need for additional capital to cover this risk.

1.6.7. The capital requirement for covering other risks is calculated as 5% of the total of minimal regulatory capital requirements.

1.7. Capital reserve:

- 1.7.1. The Bank defines the capital reserve as the total of (1) additional capital necessary for covering risks (to ensure that the Bank's capital is sufficient for the occurrence of unfavourable scenarios significant for the Bank, as well as to ensure the Bank's capital adequacy throughout the economic cycle) and (2) minimum capital necessary for the Bank in the aforementioned negative scenarios to maintain operations, i.e. observe the capital adequacy requirement;
- 1.7.2. To determine the additional capital necessary to cover risks (for which the capital requirement is determined using simplified methods), stress testing or evaluation is performed, and the amounts of potential losses obtained using stress testing/evaluation are compared to capital requirements specified using simplified methods. If the amount of potential losses obtained using stress testing/evaluation exceeds capital requirements specified using simplified methods, the positive difference is assumed to represent additional capital necessary for risk coverage; otherwise, no additional capital is assumed necessary for covering the relevant risk;
- 1.7.3. The minimum capital that might be necessary for the Bank to continue operation, i.e. maintain the capital adequacy indicator in significant negative scenarios, is calculated by multiplying the expected total value of risk-weighted assets following all significant losses from all significant risks and the increased individual minimum capital adequacy indicator specified for the Bank.

- 1.8. Capital at the Bank's disposal:
 - 1.8.1. For the purpose of evaluating capital at the Bank's disposal, the Bank defines such capital as its net worth, calculated on the basis of EU Regulation 575/2013 by adding 50% of the unaudited, undistributed profit for the reporting year (and prior years), considering the dividend payment policy/plans and the fact that undistributed profits are fully available for coverage of sudden losses should such losses arise;
 - 1.8.2. The decision to include unaudited undistributed profit in capital at the Bank's disposal is made by the IC (each time that internal assessment of capital adequacy is performed), evaluating whether the undistributed profit would be available for coverage of potential losses.
- 1.9. Following assessment of total necessary capital (capital necessary for coverage of risks plus capital reserve) and of capital at the Bank's disposal, the capital excess/deficit is calculated in the interpretation of FCMC Regulations on the Internal Capital Adequacy Assessment Process as the difference between capital at the Bank's disposal and the total capital requirement.
- 1.10. Considering that the overall capital requirement includes potential losses (capital requirements) for all major risks in stress scenarios as well as the minimum capital for maintaining operations based on the increased minimum capital adequacy requirement applied to the Bank, the Bank assumes that its overall requirement may exceed the amount of capital available to the Bank the Bank may face a shortage of capital in the interpretation of the FCMC "Normative regulations on establishing a capital adequacy assessment process"; however, in evaluating its capital as "adequate" or "inadequate", the Bank also considers available measures to mitigate risk/increase capital, which the Bank could relatively easily and without significant additional expenses implement in order to increase its capital adequacy indicator. Such measures include:
 - 1.10.1. liquidating the Bank's securities portfolio;
 - 1.10.2. investing in 0%-risk assets;
 - 1.10.3. limiting lending operations, including refusal to extend reverse-repo loans;
 - 1.10.4. attracting additional subordinated capital (to a limited extent).
- 1.11. If calculations show that, following potential losses in all significant risks, available measures specified in clause 1.10 would produce a higher than minimal individual capital adequacy indicator for the Bank, then the Bank's capital may be assessed as "adequate". If calculations show that, following potential losses on analysis significant risks and available measures specified in clause 1.10 would produce a lower than minimal individual capital adequacy indicator for the Bank, the Bank's Capital Adequacy Management Policy specifies appropriate measures to inform the Board and Council of the Bank and the FCMC, as well as actions to ensure that the calculated potential capital adequacy is no less than the specified individual minimum value.
- 1.12. In order to evaluate the adequacy of additional capital, the Bank's Capital Adequacy Management Policy also specifies capital/capital adequacy planning measures performed within the framework of planning the Bank's budget.

2. Overview of the results of the capital adequacy assessment process

2.1. Results of Bank's internal capital adequacy assessment are largely dependent on the capital adequacy as of 31.12.2015 (prior to available measures to improve the capital adequacy ratio) are as follows:

EUR thous.	Internal assessment of capital adequacy	Minimal capital requirement calculation
Credit risk	21,948	
Standardised approach (SA)	21,287	21,287
Credit portfolio (commercial companies, excluding in- vestment portfolio and repo securities)	6,564	6,564
Commercial companies (investment portfolio)	2,687	2,687
Repo loans against securities	422	422
Loans (formerly banks)	1,834	1,834
Institutions: correspondent accounts and interbank loans	5,815	5,815
Debt securities	1,182	1,182
Other items	2,227	2,227
Loans taken over	564	564
Debt securities position risk capital requirement, specific risk; risk capital requirement, specific risk	660	660
Concentration risk	2,506	
Loans	1,320	
Individual concentration risk	788	
Institutional concentration risk	525	
Collateral concentration risk	0	
Currency imbalance concentration risk for domes- tic (Republic of Latvia) households	7	
Debt securities (including banks)	1,186	
Individual concentration risk	593	
Industry concentration risk	593	
Market risks	245	
Debt and capital securities position capital requirement, general risk	159	159
Currency risk capital requirement	85	85
Interest rate risk in the non-trading portfolio	0	
Operational risk	4,297	4,297
Strategy/business, ML and reputational risks	0	
Liquidity risk	0	
Other risks	1,324	
Capital reserve	56,513	
Capital reserve (related to additional risk)	11,587	
Capital reserve/capital (to ensure capital adequacy despite all risks)	44,925	
Total capital necessary for covering risks	86,833	26,489
Tier 1 and Tier 2 capital	64,499	
Additional capital elements: undistributed profit for current year	3,682	
Total capital at the Bank's disposal	68,181	
Capital surplus or deficit according to the Bank's assessment (prior to measures to improve capital adequacy)	-18,652	

2.2. Kapitāla rezerve (saistībā ar papildu risku) 31.12.2015.:

	Risl	Risks determined upon assessment/stress testing			Capital reserves for
EUR thous., Risk	1st year	2nd year	total	(simplified method)	additional risk
Credit risk of the Bank's demands on other credit institutions and counterparties	7,500	-	7,500	7,650	0
Credit risk and concentration risk of Ban loans to clients, excluding securities- backed loans (minus interest on loans that do not default)	k 15,190	289	15,479	7,884	7,595
Credit risk of loans and investments in company capital taken over by the Bank	4,773	-	4,773	781	3,992
Credit risk of the Bank's investment in securities and securities-backed loans	3,800	-	3,800	6,129	0
Market risk of investment in debt securities (minus coupon on securities that do not default)	-2,121	-	-2,121	159	0



2.3. Results of internal capital adequacy assessment as of 31.12.2014 (with available capital adequacy improvement measures):

EUR mio.	Actual, 31.12.2014	Prior to improvement measures: considering total capital necessary for covering risks*	With securities sale/ discharge and repo termination measure: P1**	With placement of funds on Bank of Latvia correspond- dent account, in sovereign bonds: P2 in addition to P1	With credit portfolio amortisation: P3 in addition to P1 and P2	With attraction of EUR 5 mio. in subordinated capital: P4 in addition to P1, P2 and P3	
Correspondent accounts and interbank (20%)	57,9	55,3	84,9	45,8	52,0	53,0	
Interbank (50-100%)	41,3	41,3	41,3	-	-	-	
Bonds (50-150%)	50,9	44,6	4,2	4,2	4,2	4,2	
Repo and bsb (100%)	5,3	5,3	0,8	0,8	0,8	0,8	
Loans etc. (100%)	67,9	53,1	53,1	53,1	23,7	23,7	
Fixed assets etc. long-term and other (100%)	38,4	31,6	31,6	31,6	31,6	31,6	
Off balance sheet: non- drawn credit lines etc.	13,5	13,5	13,5	13,5	4,0	4,0	
Risk-weighted assets	275,2	244,7	229,4	149,0	116,3	117,3	
Capital requirement for general risk of debt and capital securities	0,2	0,2	0,0	0,0	0,0	0,0	
Capital requirement for currency risk	0,1	0,1	0,1	0,1	0,1	0,1	
Capital requirement for operational risk	4,3	4,3	4,3	4,3	4,3	4,3	
TOTAL, expressed as risk-weighted assets	332,1	301,5	284,2	203,9	171,1	172,1	
Stock capital	68,2	26,3	26,3	26,3	26,3	31,3	
Simplified CA indicator	20,53%	8,72%	9,25%	12,90%	15,36%	18,17%	
EXCESS CAPITAL GIVEN AVAILABLE MEASURES							

* - considering reduction in the value of risky assets at the expense of potential losses

** - except bonds which may become illiquid if a major market crisis arises



- 2.4. On 31.12.2015, capital at the Bank's disposal was assessed at EUR 68.2 mio., capital necessary for risk coverage (including capital for maintaining business if stress scenarios occur) EUR 86.8 mio., capital deficit in the interpretation of FCMC Regulations on the Internal Capital Adequacy Assessment Process EUR 18.65 mio.
- 2.5. Considering that, if negative scenarios occur, the Bank would be able to quickly and without significant additional losses implement the following measures to improve its capital adequacy situation
 - 2.5.1. Reducing/liquidating investments in bonds, including at the expense of discharging obligations at (maturity) except investments in longer-term bonds that may become illiquid as well as to reduce/liquidate the portfolio of loans backed by securities (repo);
 - 2.5.2. Investing up to EUR 250 mio. in 0%-risk assets on a correspondent account with the Bank of Latvia and in 0%-risk sovereign bonds;
 - 2.5.3. Attracting EUR 5 mio. in subordinated capital, allowing to secure excess capital of EUR 1.2 mio. an a capital adequacy ratio of 18.17%; the Bank's Investment Committee assessed the Bank's capital as of 31.12.2015 as adequate and decided that no additional measures were necessary for improving the Bank's capital adequacy situation.