AS LHV Group Pillar 3 Report 2017

This document contains certain forward-looking statements with respect to certain of the Group's plans and its current goals and expectations relating to its future financial condition and performance. LHV Group cautions readers that no forward-looking statement is a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking statements. These forward-looking statements can be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements sometimes use words such as 'may', 'will', 'seek', 'continue', 'aim', 'anticipate', 'target', 'projected', 'expect', 'estimate', 'intend', 'plan', 'goal', 'believe', 'achieve' or other words of similar meaning. Examples of forward-looking statements include, among others, statements regarding the Group's future financial position, income growth, assets, impairment charges and provisions, business strategy, capital, leverage and other regulatory ratios, payment of dividends (including dividend pay-out ratios), projected levels of growth in the banking and financial markets, projected costs or savings, estimates of capital expenditures and plans and objectives for future operations, projected employee numbers and other statements that are not historical fact. By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances. These may be affected by changes in legislation, the development of standards and interpretations under International Financial Reporting Standards (IFRS), evolving practices with regard to the interpretation and application of accounting and regulatory standards, the outcome of current and future legal proceedings and regulatory investigations, future levels of conduct provisions, the policies and actions of governmental and regulatory authorities, geopolitical risks and the impact of competition. In addition, factors including (but not limited to) the following may have an effect: capital, leverage and other regulatory rules (including with regard to the future structure of the Group) applicable to past, current and future periods; macroeconomic and business conditions; the effects of continued volatility in credit markets; market related risks such as changes in interest rates and foreign exchange rates; effects of changes in valuation of credit market exposures; changes in valuation of issued securities; volatility in capital markets; changes in credit ratings of the Group. A number of these influences and factors are beyond the Group's control. As a result, the Group's actual future results, dividend payments, and capital and leverage ratios may differ materially from the plans, goals, and expectations set forth in the Group's forward-looking statements.

Any forward-looking statements made herein speak only as of the date they are made and it should not be assumed that they have been revised or updated in the light of new information or future events. Except as required by the Prudential Regulation Authority, the Financial Conduct Authority, or applicable law, LHV Group expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in LHV Group's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based. The reader should, however, consult any additional disclosures that LHV Group has made or may make in documents it has published or may publish via the Nasdaq Tallinn Stock Exchange



Main Pillar 3 disclosures

Pillar 3 disclosures topic with	Primary location in our Annual report	Primary location in our Pillar 3
reference to CRR-Article		report
Scope of disclosure requirements (Article 431)	N/M	Introduction and disclosures
Risk management objectives and policies (Article 435)	Note 3 Risk Management	Risk strategy, risk appetite and risk
Scope of application (Article 436)	Introduction, Management report	Summary of LHV Group and financials
Own Funds (Article. 437)	Financial results, Consolidated Financial Statements	Capital structure and requirements
Capital requirements (Article 438)	Financial results	Summary of LHV Group and financials
Exposure to counterparty credit risk (Article 439)	Note 3 Point 3.2 Credit risk	Credit risk
Capital buffers (Article 440)	Note 3 Point 3.1 Capital management	Capital structure and requirements
Indicators of global systemic importance (Article 441)	N/M	Summary of LHV Group Financials
Credit risk adjustments (Article 442)	Note 3 Point 3.2 Credit risk	Credit risk
Unencumbered assets (Article 443)	Note 3 Point 3.4 Liquidity risk	Liquidity risk
Use of ECAIs (Article 444)	N/M	Credit risk
Exposure to market risk (Article 445)	Note 3 Point 3.3 Market risk	Market risk
Operational risk (Article 446)	Note 3 Point 3.7 Operational risk	Operational risk
Exposures in equities not included in the trading book (Article 447)	N/M	Additional disclosures
Exposure to interest rate risk on positions not included in the trading book (Article 448)	Note 3 Point 3.3 Market risk	Market risk including interest risk in banking book
Exposure to securitization positions (Article 449)	N/M	Additional disclosures
Remuneration policy (Article 450)	Note 25 Transactions with related parties, Governance of the Group	N/M
Leverage (Article. 451)	Financial Results	Capital structure and requirements
Use of the IRB Approach to credit risk (Article 452)	Financial Results	Credit risk
Use of credit risk mitigation techniques (Article 453)	Note 3 Point 3.2 Credit risk	Credit risk
Use of the Advanced Measurement Approaches to operational risk (Article 454)	N/M	Operational risk
Use of Internal Market Risk Models (Article 455)	N/M	N/M

Disclosure

LHV Group's annual disclosures contain extensive information on risk as well as capital management. Per regulation it is not required to have Pillar 3 disclosures audited. As such the information provided in this Pillar 3 Report is unaudited. Although all used numbers are reconcillated with audited AS LHV Group Consolidated Annual Report for 2017. This and other relevant information can be faound in LHV investor relation webpage https://investor.lhv.ee/en/.

The report is part of the capital adequacy framework that builds on three pillars:

- Pillar 1 provides rules for how to calculate minimum capital requirements for credit risk, market risk and operational risks.
- Pillar 2 requires institutions to prepare and document their own internal capital adequacy assessment process (ICAAP). All relevant sources of risk must be taken into account, that is, not only those already included when calculating the minimum capital requirement for credit, market and operational risks. The Estonian FSA will, make an assessment of the banks' ICAAP and may impose additional capital requirements for Pillar 2 risks, meaning risks not covered by the Pillar 1 calculation.
- Pillar 3 requires institutions to disclose comprehensive information about their risks, risk management and associated capital. This report constitutes the required disclosure for LHV.

This report should be read together with 2017 Financial Statements.

This Pillar 3 report has been prepared based on Financial Statements, which have been prepared in accordance with International Financial Reporting Standards as adopted by European Union for the years ended 31 December 2017 and 31 December 2016, for AS LHV Group and its subsidiaries AS Bank, AS LHV Finance (subsidiary of AS Bank), AS LHV Varahaldus, OÜ Cuber Technology and UAB Mokilizingas (hereinafter referred together as "the Group"). AS LHV Group holds 50% + 1 share interest in UAB Mokilizingas and 65% interest in LHV Finance through AS Bank. All these companies have been consolidated fully to Group report.

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Summary of LHV Group

LHV Group is the largest domestic financial group and capital provider in Estonia. AS LHV Group's key subsidiaries are AS LHV Pank and AS LHV Varahaldus.

LHV was established in 1999, with reliance on the long-term investment and business experience of

its founders. LHV has a representative office for client servicing in Tallinn and Tartu and starting from 2018 also in London. LHV employs over 350 people. LHV's banking services have over 165 000 customers, and LHV's pension funds have over 201 000 customers.





AS LHV Group is a public limited company, incorporated in the Republic of Estonia with a permanent seat in Estonia. The legal address of the company is Tartu mnt 2, Tallinn. LHV is public company, which is listed on the Tallinn Stock Exchange since May 2016, so all clients and partners of LHV may be owners of LHV. AS LHV Group is a holding company, the subsidiary of which, AS LHV Pank, provides banking services and securities brokerage services for customers in Estonia. To service the clients, offices have been opened in Tallinn and Tartu. AS LHV Finance (subsidiary of AS LHV Pank) offers hire-purchase and consumer loans to consumers. AS LHV Varahaldus provides pension fund and other fund management services. UAB Mokilizingas grants consumer loans and hire-purchase in Lithuania and to some extent also in Latvia.

The mission of LHV is to help create local capital and to support the development of local entrepreneurship. LHV concentrates on active and independent customers with an entrepreneurial mind-set. For private consumers LHV offers high quality universal banking services. For corporate clients LHV offers flexible and suitable financing and managing of everyday financial operations.



The products and services provided by LHV are simple, transparent and appropriate. Client interaction is mainly conducted using modern electronic communication channels. Costs avoided will reach the clients of LHV through affordable cost of everyday service.

LHV was created as a partnership and partnership is the central way of growing LHV's business. New initiatives will be implemented faster and more successfully when partners have same interests and long-term support of each other.

LHV divides its business activities into six basic business segments: retail banking, private banking, corporate banking, asset management, Estonian small loans and Lithuanian small loans. Business segments form a part of the Group with separate access to financial data, which also serve as a basis for regular monitoring of business results by the decision-makers of the Group. Entire planning and performance indicators are set on the level of segments. Each segment prepares a full balance sheet and income statement. Besides the aforementioned segment level, the Group also plans and measures on a department level. Division is made based on the client/product base and similar departments have been grouped into one segment.

Private banking includes clients with high net worth, for whom the most important banking product is the investment service.

Retail banking involves all private persons and legal persons with credit exposure below 250 000 euros. This is an ordinary universal banking segment, offering payment services, bankcards, credit, and more.

Corporate banking segment involves all large corporate and other legal persons with credit exposure above 250 000 euros. Main products are loans and payments.

Asset management is a pension funds management segment, including pillar II and III pensions funds.

The hire-purchase and consumer financing segment is a separate company in Estonia as well as in Lithuania, involving the business of small loans and hire-purchase offered to private persons.

AS LHV Group's Management Board has been appointed as the decision-maker, who is responsible for financial allocations and assessment of profitability of business. The results presented by the segment include the direct income and expense related to the segment.

According to LHV's vision, the market value of LHV will reach EUR 1 billion by 2023. For that the existing activities should contribute EUR 500 million, new activities EUR 200 million and mergers or acquisitions EUR 300 million. The completion of such a plan would require new capital in the amount of EUR 100 million. Emphasis is given to the word vision, and therefore the financial plans announced on the stock exchange will continue to express the most likely outcomes and do not include the directions planned with the vision until they become probable.

As practical targets, LHV has identified goals for the years to come as follows:

- To be the best provider of financial services for private individuals who collect and invest in financial assets, and small and medium-sized enterprises, who need financing;
- To be an attractive and recognised employer who offers development, self-realisation and growth;
- To do business in a way that the return on equity would reach 20%;

• To become Estonia's most valuable stock company.

Shareholders

At the end of 2017, LHV Group had 5 281 shareholders, of whom 83.5% were also customers of LHV LHV Bank. They were followed by Swedbank customers (11.5%) and SEB customers (3.7%). 76% of the shares belonged to enterprises and 24% to private individuals. Among the shareholders, the

Estonian residents or their related companies, who own 99.9% of the shares, are clearly dominant

AS LHV Group has 25 767 342 common shares with par value of 1 euro. As at 31.12.2017, the distribution of shares was as follows:

- 13 371 474 shares (51.9%). belonged to the members of the supervisory board and management board and to their related parties.
- 12 395 868 shares (48.1%) belonged to Estonian entrepreneurs and investors and to their related parties.

LHV has had two subordinated debt issues on Nasdaq Tallinn Stock Exchange. The maturity of the first bond is in 2024 and the second in 2025. In 2017 no new bonds were issued, nor redeemed.

At the end of the year 2017 LHV Group had almost 1000 bondholders, 70.3% of them were also customers of Bank. Of the investor base, 68% were companies and 32% were private individuals.

Corporate governance

LHV is convinced that effective internal governance arrangements are fundamental for any financial institution to operate well. As internal governance issues will continue to receive increased attention, institutions will need to assure that effective checks are in place and excessive risk taking is avoided. Therefore it is vital that management bodies fully understand the complexity of the business and the risks involved.

Well-designed internal governance arrangements are vital for the sound management of risk, ensure the effective oversight by management bodies and promote a sound risk culture at all levels of the institution.

LHV has a clear organisational structure with welldefined, transparent and consistent lines of responsibility. Management board devotes sufficient time on the consideration of risk issues and is involved in and ensuring that adequate resources are allocated to the management of all material risks.

Internal control framework includes a wellfunctioning independent internal risk management, compliance and audit functions that have sufficient authority, stature and resources to perform their functions.

Relevant committees of management bodies provide adequate recommendations and conclusions. Policies aimed at fostering ethical behaviour and responsible risk-taking, incl. remuneration policy and conflicts of interest policy, are implemented.

LHV Group financials and risk profile

The Group's pre-tax profit for 2017 amounted to EUR 23.4 million and net profit totalled EUR 22.2 million. Pre-tax profit is 16% more than a year before. Net interest income grew 18% and net fee income increased 16%. Financial income decreased by 25%. The Group's net income was EUR 58.7 million and increased by 16% compared to the previous year. Operating expenses amounted to 31.9 million euros and increased by 10% over the year. The Group met the financial forecast published at the beginning of 2017.

By the end of December, the total volume of the Group's loan portfolio less impairments amounted to EUR 732 million. The volume of portfolio increased 36% in a year. In the loan portfolio, the majority is corporate loans that increased 34% in a year to EUR 510 million. The portfolio of retail loans increased 41% in a year, amounting to EUR 230 million.

The volume of Group's deposits increased 98% in a year and totalled EUR 1 537 million by the year-end. The share of demand deposits of all deposits increased and reached 92%.

Liquidity and capitalization

The liquidity coverage ratio (LCR) of the Group, calculated according to the definitions of the Basel Committee, was 121.3% at the end of December. The liquidity situation of the Group has not changed, as the depletion of the LCR is caused by deposits made by financial intermediaries, which are 100% covered by liquid funds. As at 31.12.2017, the Group's LCR is 216.8%, if the deposits from financial intermediaries are not taken into account. The Group considers cash in the central bank and in other credit institutions and bond portfolios to be included in its liquidity buffer, that accounted for 57% of the balance sheet total. The Group's loan-to-deposit ratio at the end of 2017 was 48%.

The Group's level of own funds as at 31.12.2017 was EUR 141.6 million. Compared to the internal capital adequacy target of 15.06%, the Group is well capitalised as at the end of the reporting period. The level of capital adequacy was 19.6% and Tier 1 capital ratio was 15.3%.

The Group uses the standard method for the calculation of credit risk and market risk capital requirements and the basic indicator approach for the calculation of operational risk capital requirements. The Group has complied with all capital requirements during the financial year and in previous year.

Each year, an internal capital adequacy assessment process (ICAAP) is performed, the goal of which is to identify potential capital needs in addition to regulatory capital requirements.

Leverage ratio, calculated according to Basel Committee on Banking Supervision requirements, as at 31.12.2017 was 5.83%. Leverage ratio is calculated as Group's total Tier 1 own funds divided by Group's total risk exposure measure (incl. risk position on assets and off the balance sheet liabilities). As at the end of the reporting period, the leverage ratio is the arithmetic mean of the monthly leverage ratios over the last quarter.

On December 2017, the Financial Supervision Authority introduced a new prudential regulation for Bank, a minimum requirement for own funds and eligible liabilities (MREL). The ratio is a part of the crisis resolution plan and obliges LHV to have sufficient own funds and unsecured long-term liabilities that can be used to cover losses under the crisis resolution plan. The minimum requirement for MREL ratio is set at 5.79% and it is reviewed annually by the Financial Supervision Authority. At the end of the year, Bank had the ratio at the level of 6.67% and it contains an adequate buffer for the growth plans of 2018. On the other hand, it forces LHV to change its existing policy of financing by deposits and the Group will also include liabilities in the form of bonds or loans, which qualify for MREL, in order to manage the ratio.

Key figures, EUR million	2017	2016	change	2015	change	2014
net profit	22.2	19.9	11%	14.8	34%	9.7
net profit attributable to owners of the	19.6	17.8	10%	13.7	30%	9.2
average equity	111.2	86.2	29%	62.9	37%	43.1
return on equity (ROE) % *	17.6	20.7	-3.1	21.8	-1.1	21.4
average assets	1 354	846	60%	656	29%	485
return on assets (ROA) %	1.6	2.4	0.8	2.3	0.1	2.0
price to earnings	13.56	13.29	0.27	-	-	-
dividend to net profit ratio %	21.0	26.7	-5.7	-	-	-
dividend per share	0,16	0,15	7%	-	-	-
net interest income	35.5	30.0	18%	23.2	29%	16.5
average interest earning assets	1 333	832	60%	641	30%	471
net interest margin (NIM) %	2.66	3.60	-0.94	3.62	-0.02	3.50
spread %	2.62	3.52	-0.9	3.55	-0.03	3.44
cost to income ratio %	54.4	57.2	-2.8	62.8	-5.6	67.5

Business activities in 2018

Taking into account the simplicity and modernity of the products offered, LHV believes that the growth will continue in all key business lines in 2018:

• Deposits continue to grow at a pace comparable to today. Most of the deposits are from retail customers, somewhat less from private customers and companies. Deposits from financial technology companies are worth mentioning separately, but given the early phase of this new business trend, the plan may differ somewhat from reality. In 2018, LHV is expanding the range of financing sources.

• Loans to customers are growing at a record pace. The biggest source of growth is corporate lending, which is expected to have a slight decline in margins. Based on the cost structure, LHV is able to offer loans at better prices than before. Microloans from Mokilizingas and home loans issued in Estonia will follow in growth. All other loan products will also continue to grow. In addition, LHV will enter the market with factoring and most likely also with student loan. • For servicing financial technology companies, the focus is on establishing a branch in the UK and joining a real-time pound payment system. As for sectors, LHV will focus on so-called neo-banks, currency service providers and financial intermediates.

• In 2018, LHV will introduce a II pillar fund investing only in Estonia. At the same time, LHV does not exclude almost any region or economic sector when selecting investments. The goal is to achieve the best long-term yield. In 2018 February number of pillar III funds managed by LHV decreased by one due to merger of funds.

In 2018, the group will have enough capital for growth. Within the group, in order to support growth, a substantial amount of capital is needed for Bank and in a smaller amount for Mokilizingas. LHV Varahaldus and LHV Finance will continue to pay dividends to the group. In the middle of the year, LHV will begin with preparations to explore new opportunities for possible refinancing of bonds in 2019 and attracting new capital needed for growth.

Business environment

The global economic picture continued to improve in 2017, and this year it is expected to accelerate the cyclical growth of the global economy for the second year in a row. The recovery is supported by a significant recovery in trade and the growth of investment and industrial production, with improved business and consumer confidence. Although the lack of pressure on inflation so far has promised to continue with supportive monetary policy, the developed country's central banks are quietly moving directions under the US leadership. The volatile asset values reflect the historically low volatility environment that emerged from the expansive monetary policy of the past, in which investors are increasingly reluctant to accept the expected long-term return on their risk. Geopolitical tensions have decreased since the summer of last year.

Anti-EU movements did not achieve any significant success in the elections held in major Member States of the European Union last year and therefore Brussels and Paris are expected to lead in taking a direction on even closer integration between the Member States. Separatist movements have been sent a robust message both in the form of the difficult Brexit process as well as leaving the Catalonian campaign for independence to be settled domestically. The next important milestone is the general elections in Europe's fourth largest economy, Italy, on 4 March.

Economic growth in the euro area sped up to 2.6%, which is the fastest pace in the past six years. The economic outlook has improved. general manifesting on a larger scale in more countries and sectors. The good outlook allows the European Central Bank to exit the former expansive monetary policy - the purchase of bonds will continue according to the existing plan in a reduced volume until September, but an increase in interest rates is still not expected until the next year. Consumer prices rose by 1.4% in December and have remained in a narrow range since August. Inflationary pressures continue to be low, expected to remain below the long-term average of 2.0%, established as the objective by the European Central Bank. The consensus forecasts that economic growth in the euro area will slow down to 2.2% in 2018 and to 1.9% in 2019. Consumption is supported by a

continual drop in unemployment and a growth in the labour force participation rate, which should eventually bring about the long-awaited acceleration in the growth of wages. The increased order volumes and use of production capacities should stimulate a growth in investments. After years of tightening the belt, governments are expected to loosen their fiscal policy. The continued strengthening of the euro against other currencies is seen as somewhat of a concern and seems to be exerting pressure on the competitiveness of the export sector.

The economic sentiment indicator of Estonia's key trade partners in Europe is close to the all-time high achieved during the economic boom in 2007 and has risen to the highest level of the past 17 years across the 19 euro zone countries.

In Sweden, economic growth increased to 2.9% in the third quarter, which was significantly below expectations. Continually strong domestic demand and a growth in investments had a positive effect, but a robust increase in import volumes had a negative impact on net export. In September, Sweden's real estate market experienced a price turnaround and the prices of dwellings have by now been dropping for four months in a row. This is a welcomed phenomenon, but it is important to ensure that the price correction remains within reasonable limits. Currently, market participants are not concerned - sentiment indicators and consumer confidence remain high and real estate prices are expected to stabilize this year. Sweden will hold parliamentary elections in September and the expected even results are anticipated to bring about a probability of expansive fiscal policy. The consensus forecasts that Sweden's economic growth will slow down to 2.4% in 2018 and to 2.2% in 2019. Estonia's interests revolve around the continual growth of Swedish import volumes, the outlook for which is good, with Swedish banks being investor friendly.

The Finnish economy continued at a good pace in the third quarter, growing by 3.0%. The economic sentiment is strong, on a broad basis. The main driving engines were a growth in investments and net export, with private consumption also remaining strong. The economic growth of 2017 turned out to be the fastest in the past nine years for Finland. The consensus forecasts that the Finnish economic growth will slow down to 2.6% in 2018, but the economic sentiment will remain strong on a broad basis. The 2019 economic growth is expected to be at 2.2%. Similarly to Sweden, Estonia's interests lie in further growth of Finnish import volumes, the prospects for which are good.

Economic growth in Lithuania – a major destination market for LHV - continued at a good pace, accelerating to 3.4% in the third quarter. The economic sentiment is strong, on a broad basis, but the rapid growth of private consumption in Lithuania is being affected by one of the highest rates of inflation in the euro zone. On a balancing note, the economy was supported by an increase in investments, which should gain a more significant role in the coming years. Strong external demand, a lack of qualified labour and a record use of production capacities – all this is forcing companies to make new investments. The volume of projects financed with the EU support is also increasing. The consensus forecasts that economic growth in Lithuania will slow down to 3.2% in 2018 and to 3.0% in 2019.

Economic growth in Estonia slowed down to 4.2% in the third quarter, which is nevertheless a very high pace. This was supported mainly by domestic demand driven by investments and private consumption. The construction sector's contribution to economic growth was again one of the largest. There was a decrease in the export of low-margin electronic equipment, which had largely been fuelling the decrease in export volumes and the negative effect of net export. The inflation rate, which rocketed last year, significantly slowed the growth in private consumption. Consumer prices increased by 3.4% in December. An important aspect is that despite the continuation of the rapid growth in wages, corporate profits have recovered and productivity has improved. The sentiment indicators reflecting the different sectors remain strong, continuing to indicate a positive sentiment. In its forecast published in December, the Bank of Estonia considerably raised its expectations of economic growth. It is estimated to remain around 4.2% this year and 3.1% in 2019. Private consumption and investments will be the driving engines, while the contribution of net export into economic growth is negative. Private consumption continues to be positively influenced by a rapid

increase in wages and the steep rise of the incometax-free minimum wage accompanied by a marginal decrease in the pace of inflation. Investments are driven by a more active use of the resources of the EU structural funds in the public sector. Despite strong external demand, the investment volumes of enterprises will not grow in 2018 due to the impact of ship purchases in the reference base. The key problems revolve around the shortage of labour and its potential magnification in connection with the increase in general government expenditure. The priority lies in the achievement of sustainable, longterm economic growth, balanced between the different sectors

LHV is expecting the positive trends in the Estonian economy to continue in the next twelve months. The economy will continue to grow quickly and exceed the potential long-term sustainability level. The lack of available resources makes it increasingly important to enhance the adaptability and success in productivity enhancement of companies, which requires additional investments to continue vigorously.

By economic sectors, the risks remain higher-thanaverage in the overheating construction sector, and transport and warehousing sectors. LHV remains conservative with regard to the real estate market, monitoring the dynamics on the local and Scandinavian markets and paying particular attention to developments in Sweden. Rental property projects involve a risk of insufficient demand for absorbing the developed volumes in the near future, with corrections expected in either rental prices or vacancy rates.

On a positive note, the financing environment remains favourable. The balance of loans taken from credit institutions continues to grow, but the pace has somewhat slowed down compared to the beginning of the year. The growth of housing loans has been steadily increasing. The loan to deposit ratio and overdue loans have maintained their postcrisis lows. With the record-low interest rates and tight interbank competition having a positive impact on local entrepreneurship, the opportunities should be further exploited. LHV stands ready to boldly and efficiently contribute to the search of new sources of growth, offering a long-term partnership to enterprises and making an effort to create additional value.

Regulatory environment

The regulatory environment of banks is changing as a consequence of the financial crisis that began in 2008. These efforts are coordinated globally by the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS). In Europe, there is a focus on harmonising regulations and supervisory practices through the development of a single rulebook and the introduction of pan-European supervisory institutions. Starting from 2014, the European Central Bank (ECB) began to supervise directly the largest banks in the euro area; national supervisors continue to monitor the remaining banks. LHV belongs to the second group of banks and is supervised by Estonian Financial Supervision Authority (FSA).

An additional feature that has emerged is that the European capital adequacy legislation includes a framework for macro prudential supervision, aimed at detecting and mitigating systemic risk. As a consequence, the banks' capital requirements may be revised rather frequently by the national authorities, when deemed necessary to contain systemic risk.

Below is an overview of the development of the total capital requirement of LHV Group as at December 2017:

Receivables	CET 1	Tier 1	CAD
Base requirement	4.50%	6.00%	8.00%
Capital conservation buffer	2.50%	2.50%	2.50%
O-SII buffer	0.50%	0.50%	0.50%
Systemic risk buffer	0.92%	0.92%	0.92%
Counter-cyclical buffer	0.00%	0.00%	0.00%
Minimum regulatory requirement	8.42%	9.92%	11.92%

The table shows that there is 0,5% systematically importance buffer valid for LHV at end of 2017. Largest banks in Estonia have the same buffer of 2%. LHV hass et internal capitalization targets around 2% higher than regulatory ones. This gives confidence that LHV is able to handle potential volatility in capital related regulations.

The Basel Committee's review of capital requirements On 7 December 2017, the Basel Committee and Group of Governors and Heads of Supervision presented the finalisation of the Basel III regulatory framework also known as Basel IV. The finalisation of Basel III includes several policy and supervisory measures that aim to enhance the reliability and comparability of risk-weighted capital ratios and to reduce the potential for undue variation in capital requirements for banks across the globe. The measures comprise revisions to the standardised approaches and the introduction of an

aggregate risk weighted asset output floor of 72.5%. The changes also includes a review of the role of internal model based method in the credit risk requirement framework and an introduction of a leverage ratio buffer requirement, only for globally systemic important banks. The new rules will be applied from 2022 with a long transitional period for the output floor up until 2027. The standardised approach for credit risk will be updated with a higher risk sensitivity measure where, for example, loan to value will predetermine the REA factor for credit to residential real estate. This can be compared to the previous standardised approach where all credits of the same credit type were allocated the same risk weight. The update of the standardised approach will therefore increase the risk sensitivity of the credit risk REA. Other adjustments that aim to increase the risk sensitivity in credit risk REA is a new framework for more granular classification of unrated exposures, corporates and specific riskweights for small and medium sized enterprises. Changes to the internal ratings-based models for credit risk will be implemented, for example a removal of the advanced IRB models for some asset classes. Moreover, input floors for factors in the calculations such as probability of default (PD) and loss given default (LGD) will be implemented to ensure a minimum level of conservatism when calculating IRB credit risk REA. The amendments to the CVA risk framework aim to enhance risk sensitivity by increasing the exposure component in the calculation of the risk exposure amount. Furthermore, the purpose of the amendments is to harmonise and strengthen the measure and the use of the internal model based approach will be removed and the measures applicable will be a new standardised approach and a basic approach. Additionally, the framework has been aligned with the revision of the standardised approach for market risk. In the revised Basel III, the operational risk framework has been simplified to a great extent where the previous advanced measurement approaches and the existing three standardised approaches will be replaced with one new risksensitive standardised approach for all banks.

The leverage ratio is a new non-risk-based solvency requirement introduced through Basel III. It is described as a backstop to the risk-based capital requirements. It is intended to constrain excess leverage in the banking system and to provide an extra layer of protection against model risk and measurement error. Since 2014, banks have been required to report the leverage ratio to regulators, and a formal disclosure requirement was introduced as from Q1 2015. The proposed minimum leverage ratio is 3% for all banks which eventually will be implemented in the CRR II. In the finalisation of Basel III, which was communicated in December 2017, the minimum leverage ratio will be expanded with a buffer framework only to be a regulatory requirement for G-SIB's. LHV has set up internal limits for leverage ratio at 3.5% and follows it on monthly bases. At end of 2017 LHV leverage ratio was 5.83%.

In January 2016, the Basel Committee completed the Fundamental Review of the Trading Book, a comprehensive revision of the capital adequacy standard for market risk also included in the European Commission's proposals. The new standard implies substantial revisions to both the standardised approach and the internal models approach. However, this approach was not included in the finalisation of Basel III and both the scope and the time frame for its implementation are still uncertain. The time frame for when the finalisation of the Basel III framework is to be implemented has become clear due to the publication made in December 2017. However, it is still slightly unclear how the framework will, when implemented through EU, affect the regulatory capital ratios.

The Bank Recovery and Resolution Directive, which allows authorities to manage banks in distress, was established in the EU in 2014. The crisis management framework set out in the BRRD is intended to prevent crisis situations and improve the ability to manage crises that may arise. The aim is to reduce the risk that taxpayers will have to bear the cost of a banking crisis. This is to be accomplished through bail-in, which means that shareholders and creditors bear the costs to a greater extent.

The Single Resolution Mechanism regulation establishes a centralised resolution approach with a Single Resolution Board being responsible for the overall framework, while national resolution authorities are in charge of implementing the resolution decisions. The resolution authorities' tasks include drawing up resolution plans, determining when a bank shall enter into resolution, and applying the resolution tools.

To ensure that banks always have sufficient lossabsorbing capacity, the Bank Recovery and Resolution Directive also provides for the resolution authorities to set minimum requirements for own funds and eligible liabilities (MREL) for each bank, based on, amongst other criteria, its size, risk and business model. The MREL requirement for systemically important banks, is the sum of a loss absorption amount and a recapitalisation amount. For less important banks as LHV the MREL requirement is the sum of loss absorption amount. The loss absorption amount can be met with own funds instruments (Common Equity Tier 1, Additional Tier 1 and Tier 2), while the recapitalisation amount can only be met with eligible liabilities. Estonian FSA has set MREL limit to 5.79% and is reviewing the level annually. At the end of the year, Bank had the ratio at the level of 6.67% and it contains an adequate buffer for the growth plans of 2018.

The MREL is currently most restrictive ratio for LHV Group as it's almost not managable in short time frame. This ratio affects heavily banks which are:

- Relatively small;
- Mainly deposit funded;
- Not active in securities or mass funding;
- Having low risk assets and higher liquidity books;
- From countries less developed capital markets

LHV tick all of the boxes and by offering services to payment intermediates LHV actually liimits the amounts these clients can keep in LHV in form of deposits.

The LCR became a binding minimum requirement as of 1 January 2015 at 100%.

The Net Stable Funding Ratio (NSFR) requires banks to maintain a stable funding profile in relation to their on- and off-balance sheet exposures. It is expected that revised NSFR rules based on the final Basel framework will be published in 2016 and that a binding minimum ratio for the NSFR applies from 1st of January 2018. Internally LHV has implemented both LCR and NSFR and set internal limits at 110% and 105% respectable.

From 2018 two new IFRS standards became valid. IFRS 9, Financial instruments. Earlier application is permitted but LHV does not intend to early adopt the standard. LHV does not either intend to restate the comparative figures for 2017 in the annual report 2018 due ta IFRS 9. Key features of the new standard are as follows:

- Financial assets are required to be classified into three measurement categories (AC)
- assets to be measured subsequently at amortised cost
- assets to be measured subsequently at fair value through other comprehensive income (FVOCI)
- assets to be measured subsequently at fair value through profit or loss (FVPL).

There were no significant changes in the measurement of financial instruments compared to IAS 39. No significant impact is thus expected on LHV's financial position, financial performance or equity in the period of initial application.

The impairment requirements in FRS 9 are based on an expected loss model as opposed to the current incurred loss model in IAS 39. The scope of IFRS 9 impairment requirements is also broader than IAS 39, IFRS 9 requires all assets measured at amortized cost and fair value through other comprehensive income, as well off-balance commitments as including guarantees and loan commitments, to be included in the impairment test. The assets to test for impairment will be divided into three groups depending on the stage of credit deterioration. Stage 1 includes assets where there has been no significant increase in credit risk, stage 2 includes assets where there has been a significant increase in credit risk and stage 3 includes defaulted assets. Significant assets in stage 3 are tested for impairment on an individual basis, while for insignificant assets a collective assessment is performed. In stage 1, the provisions should equal the 12 month expected loss. In stage 2 and 3, the provisions should equal the Lifetime expected losses. As a

change in impairment calculation LHV had to increase impairments by 0.7 million EUR. Same time there were more detailed and accurate calculations on LGD's which generated opposite effect of 0.6 million EUR. In total the effect was just 0.1 million. The main concern regarding IFRS 9 is not the implementation moment change in impairments, but the potential volatility of impairment amounts if the exposure moves from stage 1 to stage 2 or vice versa.

IFRS 15. Revenue from contracts with customers . The new standard introduces the core principle that revenue must be recognised when the goods or services are transferred to the customer, at the transaction price. Any bundled goods or services that are distinct must be separately recognised, and any discounts or rebates on the contract price must generally be allocated to the separate elements. When the consideration varies for any reason, minimum amounts must be recognised if they are not at significant risk of reversal. Costs incurred to secure contracts with customers have to be capitalised and amortised over the period when the benefits of the contract are consumed. It will have the largest impact on AS LHV Varahaldus, where we need to capitalize sales costs from previous years and amortize over the expected lifetime of the customer contract, which in the case of pension funds is above 20 years. This effect will significantly increase LHV Varahaldus own funds at the moment of adoption of this IFRS standard. As at 1 January 2018, the Group's retained earnings through LHV Varahaldus will be increased by the sales costs incurred and capitalized until the end of 2017 in the amount of EUR 10.6 million and the assets will be increased in the same amount. Starting from 1 January 2018, the sales expenses will be recognized as intangible assets and in the income statement, the sales expenses will be replaced with depreciation costs from client contracts.

Country based adjustments

LCR requirement for all banks in Estonia is set to 100%.

NSFR for all banks in Estonia will be set to 100%.

In addition to minimal capital requirements for credit institutions several additional buffers in own funds are used in Estonia:

- Capital conservation buffer of 2.5%
- Systemic importance buffer of 2.0% for two largest financial institutions in Estonia and 0.5% for LHV
- Starting from beginning of 2016 countercyclical capital buffer, what has set currently to 0%, but may vary between 0 to 2.5%.
- Systemic risk buffer of 1.0% for positons held in Estonia

These buffers are additive to Tier 1 capital charge and so minimal Tier 1 capital requirement is 9.5% and total capital adequacy requirement is 11.5%. On top of that there also entity based Pillar 2 capital charge set by local financial authority based on SREP process.

Capital structure and requirements

The calculation of our regulatory capital incorporates the capital requirements following the "Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms" (Capital Requirements Regulation or "CRR") and the "Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" (Capital Requirements Directive 4 or "CRD 4") as implemented into Estonian law.

The total regulatory capital pursuant to the effective regulations as of year-end 2015 comprises Tier 1 and Tier 2 (T2) capital.

Common Equity Tier 1 (CET 1) capital consists primarily of common share capital, retained

earnings (including losses for the financial year, if any) and accumulated other comprehensive income, subject to regulatory adjustments (i.e. prudential filters and deductions). CET 1 capital deductions comprise (i) intangible assets, (ii) deferred tax assets that rely on future profitability, (iii) negative amounts resulting from the calculation of expected loss amounts. All items not deducted (i.e. amounts below the threshold) are subject to risk weighting.

Tier 2 (T2) capital comprises eligible capital instruments, the related share premium accounts and subordinated long term debt.

Overview about capital charge for LHV Group is presented in the following table:

Receivables	CET 1	Tier 1	CAD
Base requirement	4.50%	6.00%	8.00%
Capital conservation buffer	2.50%	2.50%	2.50%
O-SII buffer	0.50%	0.50%	0.50%
Systemic risk buffer	0.92%	0.92%	0.92%
Counter-cyclical buffer	0.00%	0.00%	0.00%
Pillar 2 buffer	0.37%	0.49%	1.01%
Minimum regulatory requirement	8.79%	10.41%	12.93%

Capital charge of the Group

Failure to meet minimum capital requirements can result in supervisory measures such as restrictions of profit distributions or limitations on certain businesses such as lending. We complied with the regulatory capital adequacy requirements in 2017.

In addition to these minimum capital requirements, the following capital buffer requirements will be phased-in (other than the systemic risk buffer, if any, which is not subject to any phase-in) and will become fully effective from 2019 onwards. The buffer requirements must be met in addition to the minimum capital requirements, but can be drawn down in times of economic stress.

Development of regulatory capital

The Group's level of own funds as at 31.12.2017 was EUR 141.6 million (31.12.2016: EUR 123.9 million). Compared to the internal capital adequacy target of 15.06%, the Group is well capitalised as at the end of the reporting period. The level of capital adequacy was 19.6% and Tier 1 capital ratio was 15.3%.

Capital base (in EUR thousands)	31.12.2017*	31.12.2017	31.12.2016
Paid-in share capital	25 767	25 767	25 356
Share premium	46 304	46 304	45 892
Statutory reserves transferred from net profit	2 471	2 471	1 580
Other reserves	36	36	-40
Accumulated profit/(deficit)	24 468	24 468	10 517
Intangible assets (subtracted)	-7 940	-7 940	-8 114
Net profit for accounting period	19 603	19 603	17 816
Dividend offer (including income tax)	-5 153	0	0
Total Tier 1 capital	105 555	110 709	93 007
Subordinated debt	30 900	30 900	30 900
Total Tier 2 capital	30 900	30 900	30 900
Net own funds for capital adequacy calculation	136 455	141 609	123 907

* including dividend offer

Linkages between accounting and regulatory capital

Capitalization forecast

Based on the base scenario of the budget, the Group's Pillar 1 minimum Tier 1 capital requirement by the end of 2018 will be EUR 109.4 million. The actual Tier 1 capital of the Group at the end of 2017 was EUR 105.5 million based on audited figures, also considering the planned dividend payment and dividend income tax. Based on our targets Group will earn EUR 21.6 million in 2018. To cover growth only 1/5 of forecasted net profit is planned to be utilized for growth in 2018. The limiter here will still be mobility of capital, which is not absolute, which is why it can be considered to be sufficient capital for Group members when looking forward to cover the growth of risk-weighted assets for 6-9 months. To cover the annual growth, it is enough to carry out an interim audit of two first quarter profits. If profitability is not developing in the desired direction, the Group has two quarters to cover the growth of RWA. The Group has planned to carry out

an interim audit of the profit of all three quarters. Based on current plans there is no need for issuing new Tier 1 capital also in following years.

For Total CAD Group capital adequacy, there is enough capital to cover the full growth for 2018. At same time Group has two issues of subordinated bonds, which includes options to call them in mid 2019 and second half 2020 respectively. Group has plans to issue some new subordinated bonds in amount of 7 million in 2019 to cover new growth. Taking into consideration existing suboridinated transactions and current market situation, Group has made a plan to issue new subordinated bonds in end of 2018, with sole purpose of securing the capital situation for years 2019-2020. This issue is not incorporated into any capital adequacy calculation due to conservativity reasons.

Capital management

The Group and Group companies shall be sufficiently capitalised at any time, ensuring the capital resources that ensure economic preservation and enable financing of new profitable growth opportunities.

The objective of capital management in the Group is to

- ensure continuity of the Group's business and ability to generate return for its shareholders;
- maintain a strong capital base supporting the development of business;
- comply with capital requirements as established by supervision authorities.

The LHV follows the general principles in its capital management:

- The LHV and its subsidiaries must be adequately capitalized at all times, having the necessary capital to ensure economic preservation and enabling financing of new profitable growth opportunities;
- The main focus of the capital management is on Tier 1 own funds, because only Tier 1 own funds can absorb losses. All other capital layers in use are dependent of Tier 1 own funds volume;
- All buffers are kept on LHV Group level to keep movement of capital as easy as possible.

Within the internal process ensuring capital management, the Group treats the capital Tier 1 and Tier 2 as own funds. Due to fast growth, in previous years the Group has involved capital in the form of bonds as well as issued shares.

Capital of the LHV can be divided into: 1) regulated minimum capital and 2) capital buffer held by the Group. In order to reach its long-term economic goals the Group must on the one hand strive towards proportional lowering of the regulated minimum capital (through minimizing risks and high transparency). On the other hand, the Group must strive towards sufficient and conservative capital reserve, which will ensure economic preservation even in the event of severe negative risk scenario; The risk appetite set by the Group is an important input to capital management planning and capital goal setting. Higher risk appetite requires maintaining higher capital buffer.

The long-term capital objective of the Group is based on the risk scenario defined in the internal capital adequacy assessment process (ICAAP) and the assumption that at the most critical point of the scenario, the preservation of regulative minimal capital is ensured. The ICAAP risk scenario is updated every year. A regional reference base and competition is taken into account in capital planning. The capitalisation of the Group and subsidiaries must not be significantly below the capitalisation of relevant competitors. Capital planning is an integrated part of the overall business plan of the Group. The capital need of a business plan must always be covered by capital sources. Capital is planned on a business area, business unit, and the consolidated Group basis. In planning any kind of initiative, their potential business capital requirement and risk profile shall be assessed. The Group's capital plan must contain all circumstances known at the moment of planning that may have an impact on the capital requirement. A long-term capital plan is prepared together with a business plan for five years

LHV has developed also plan how to act during the capital shortage internally and what external items Group could use for lowering risk-weighted assets or increasing capital. The internal measures include reduction of granting new loans, cutting costs, optimizing capital usage among group. External measures include increasing additional Tier1 and Tier 2 capital, and selling of certain business lines.

A short-term capital plan is prepared for one year together with a financial plan. The main principle in capital allocation between business units is that each business unit must be capable of ensuring its economic preservation, and the remaining capital shall be held at the Group level. Capital is allocated to business units based on their capital needs. Inside the business units always the whole capital is distributed between business and product lines, based on the capital adequacy calculation rules. Risk weight component is also included into every credit decision, making sure that the credits given are correctly priced.

LHV shareholders have approved the dividend policy, based on which 25% of pretax profit will be used for dividend payouts unless there are expansion plans. And clear rule that all capital related regulations have to be fulfilled. This 25% covers all costs regarding dividends, both dividend and income tax raising from dividend payment.

The Group has set a goal to keep capital adequacy at least at the level of CET1 own funds (10.61%), Tier 1 own funds (12.29%) and Total CAD (15.06%)

LHV Supervisory Board and shareholders are notified on a continual basis of the need to increase capital, if the need arises from regularly conducted stress tests and differs from that which has been budgeted. If the need to increase capital in the necessary time horizon is not possible, LHV will lower the capital requirements by selling bonds and limiting new loans.

In addition to regular planning of the capital requirements within budgeting the business operations, capital requirement forecasts are also always drawn up before launching a new business line/product/service and the required additional capital need is ascertained.

Main changes in risk management

The following outlines the most important changes in the 2016 LHV's risk management processes.

2017 continued to shift attention on group-wide risk management. The Group has agreed on group-wide risk reporting and monitoring processes. Many documents have been adopted on the Group level, such as risk management policy, credit policy, the definition of default document outsourcing policy control and compliance policies. There are regular discussions held with the Group entities.

Below is a description of the risk management organisation and a few highlights of the events and changes in LHV's risk management processes and organisation during 2017.

Organisation. In 2017, the strengthening of the risk management organisation and implementation of group-wide risk management principles continued. At the end of 2017, the number of employees in the risk management area at Bank was 32, having increased by 6 persons during the year. By the first two months in 2018 3 more employees have joined the risk management division in Bank.



Number of employees in risk management

Risk management division at Bank consist of 5 subunits: credit management, risk control, compliance, anti-money laundering (AML) and information security. The latter one was created in 2017 in order to strengthen information security competence at LHV. Tiit Hallas was appointed as the Head of Information Security Unit.

In 2017 in the credit management unit a separate position was created to evaluate real estate set as collateral for the bank.



Risk Management structure in Bank

IFRS 9 project. Starting from the beginning of 2018 new provisioning rules (IFRS 9) game into force. To make sure that all necessary changes are made, LHV started IFRS 9 project already in 2015. LHV's expected credit loss (ECL) model follows widely accepted sum of marginal losses approach, whereby

ECLs are calculated as the sum of the marginal losses occurring in each time period (month) from the reporting date. The marginal losses are derived from individual risk parameters (PD, LGD, EAD) that estimate exposures and losses in the case of default and the marginal probability of default for each period. Forward looking information (macroeconomic indicators) is taken into account in the ECL measurements and probability-weighted ECL amounts are calculated based on the three provisioning scenarios (base, upside and downside). Compared to IAS 39 approach the total impact of IFRS9 was +0.7 million euros (increase) on provisions as at 31.12.2017.

Credit quality and provisions. In general the credit quality of LHV's loan portfolio has remained strong throughout 2017. During 2017, five insolvent clients (rating 13) were added to LHV's largest loan portfolio – the corporate loan portfolio (ca. 66% of the entire loan portfolio). Compared to the previous year, which was a year of exceptionally good credit quality, the share of non-performing loans increased in 2017. The main reason of the increase was the insolvency of one larger corporate loan client and one leasing client. At the same time, it is important to point out that the recovery process of the leasing client has been very efficient so as a result no credit losses will be recognised. In the rest of the loan portfolios the share of the non-performing loans has decreased.

In 2017, LHV and Mokilizingas continued to sell the overdue claims in the Estonian and Lithuanian retail loan portfolios to a collection company and new agreements with higher prices were concluded for the next periods (Mokilizingas +1 year, Bank +2 years). Based on the validation of provisioning parameters (PD, LGD) of Mokilizingas' credit portfolios 0.4 million euros provisions were released at the end of 2017. Also, the off-balance sheet portfolio of Mokilizingas was sold and extraordinary sales revenue of 0.1 million euros was received.

In the corporate loan portfolio collateral-based provisioning model was taken into use at the end of 2017 which increased the provisioning amount by

150 thousand euros. Also the portfolio PD-models where recalibrated to match the better than expected default rates from 2017. Recalibration decreased the provisioning amount by approximately 0.6 million euros.

Stregthening of AML processes. In line with the increased volumes and transactions LHV has strengthened its AML capabilities during 2017.

New products. In 2017 we saw the launch of many important new products. Most substantial of them are the trade financing products: letter of credit, factoring, commodity loan, documentary collection and foreign guarantees. LHV Finance started to offer home repair and car loans which have lower margins than consumer loan but benefit from smaller default rates. LHV Finance together with Euronics, launched "new & improved " which is self-renewing hirepurchase.

Together with the Tax and Customs Board, LHV launched "salary payment". It is an innovative payment solution, set up in cooperation between LHV and the Tax and Customs Board, mainly for small and medium-sized enterprises, that enables the enterprises to pay out salaries to their employees and declare state taxes in a single channel. For payment service providers we started to offer settlement financing so they could manage their cashflows more effectively.

We moved into to the insurance business by starting to offer home insurance together with Compensa to our clients. In course of improving our electronic channels, we started using Smart-ID and video bridge to identify our customers. Mokilizingas started co-operation with mobile service provider Bite. Together they offer hire-purchase in Lithuania from August 2017 and in Latvia from December 2017.

Group-wide risk management – activities for strengthening the group-wide risk management processes continued. Besides increasing the number of risk management employees and introducing new risk management unit (information security) also many group-wide documents were updated and introduced.

Strengthening of compliance processes. For the more efficient management of compliance risk and to comply with the supervisory findings, LHV supplemented the compliance policy and enhanced activities set out in the policy. According to the improved policy, the extent of compliance is unlimited, covering the entire activity of LHV. Also, the policy does not include activities, which are not immediately related to the tasks of the second line of defence.

By following the policy, the compliance function presents an overview of upcoming changes in legislation to the Management Board and Supervisory Board. The compliance function also advises the Management Board and the responsible persons in fulfilling the requirements set out in legislation, incl. in introducing the changes. In addition, the compliance function participates in the management of changes with a bigger impact and scope through projects carried out throughout LHV. Compliance function also prepares risk-based activity overviews, to assess compliance of the activity to the legal requirements. Together with overviews of legislation and training conducted during the period, the compliance function also presents a summary of conducted activities to the Management Board and Supervisory Board, to enable the managerial bodies to fulfil the tasks established for them.

Preparations for the to IRB Approach. LHV has ambition to start using the internal ratings-based approach (IRB) for calculating the RWA. Preparations for IRB started in 2015. During the last couple of years LHV has enhanced many internal process and systems including underlying credit risk models and documentations. In November 2017, the Basel Committee for Banking Supervision published the final instalments of its reforms for the calculation risk weighted assets (RWA) and capital floors. As the new initiatives limit the possible benefit from IRB approach LHV has postponed its plans to start officially using IRB approach. However, internally the preparatory work will continue.

Risk strategy, risk appetite and risk profile

Risk is defined as the potential negative deviation from the expected economic result. In its everyday operations, LHV encounters a number of different risks. The purpose of risk management in LHV is to recognise risks, and measure and manage them properly. In a wider context, the objective of risk management is to increase the company's value by minimising losses and decreasing the volatility of results.

Risk management is based on a strong risk culture of LHV and is built on the principle of three lines of defence, with the first line, i.e. business areas, being liable for taking the risks and day-to-day management of risks. The second line of defence, i.e. risk management area, is responsible for developing risk management methods and reporting on risks. The third line of defence, i.e. the Internal Audit, exercises independent supervision over the entire organisation. The risk management principles, requirements and areas of responsibility are stated in the risk management policy. The capital management principles and objectives are described in the respective internal documents (capital management policy and capital objectives). More detailed risk management processes are described in the internal rules of the respective area.

Under the leadership of risk management, LHV has developed a group-wide risk appetite framework, approved by the Supervisory Board. The framework contains inter alia quantitative risk tolerance levels by main risks.



Risk appetite framework

Risk appetite reflects the readiness of LHV to accept risks in order to achieve the established goals. LHV has called the risk appetite limit risk tolerance – maximum risk, which LHV is prepared to take to achieve the established goals. LHV has also defined risk capacity as the maximum risk, which LHV is able to tolerate. The below figure illustrates three different risk profile levels against the risk tolerance level and briefly describes the activities in the given situations.



The actual risk profile is inside the risk appetite, but below the risk tolerance level. Risk profile is under control and no specific action needed.

The actual risk profile exceeds the risk tolerance level, but is below the risk capacity. An action plan has been launched to reduce the risk profile.



The actual risk exceeds the LHV risk capacity. Financial recovery plan has been launched.

Risk capacity - the maximum damage that LHV can withstand. Financial recovery plan has been launched to overcome the risk.

Risk tolerance - the maximum risk that LHV is prepared to take to achieve its goals. When exceeding the risk tolerance level the activities at enterprice level will be launched to reduce the risk profile.

Risk appetite is the recommended level of risk that LHV plans to take to implement its plans and goals. Risk appetite reflects the desired risk profile. The maximum risk appetite is defined as a risk tolerance.

Risk profile - combination of the real risks of LHV resulting from the nature, scale and complexity of our activities and the operation environment.

Risk tolerance versus actual risk profile

As it may be seen from figure 2.2, when LHV's actual risk profile remains within the limits of risk appetite, this is considered a foreseeable situation and no further actions are necessary. If LHV's actual risk profile exceeds the risk tolerance level, an action plan is implemented for lowering the risk profile. It is also necessary to inform the Supervisory Board. The responsibility for the management of LHV's risk profile and for ensuring that it remains within the limits of risk appetite lies with the first line of defence; for independent monitoring and reporting however, it lies with the risk management unit.

Within the recovery plan, LHV has developed early warning indicators with thresholds and the respective measures.

According to the approved risk management policy, risk tolerance levels have to at least be defined for capital, credit risk, market risk, operational risk, liquidity risk and money laundering risk. Risk tolerance levels have been described in the respective risk policy, approved on the Supervisory Board level. More specific instructions and guidelines have been described in the internal rules.



Risk appetite documentation framework

According to the approved policies, the following quantitative risk tolerance levels have been established. Based on LHV's risk appetite, the actual figures as at the end of 2017 and main control measures: avoidance of risk, limitation of risk, mitigation of risk, spreading of risk, have been added to the table below.

Category		Measures	Risk capacity, regulatory	Risk to	Risk tolerance	
			requirement	Group	Bank	
		Capital adequacy (CAD)	min 12,43%	min 15,06%	min 15,06%	
Capital		Capital adequacy (Tier 1)	min 9,91%	min 12,29%	min 12,29%	
Capital		Capital adequacy (CET 1)	min 8,29%	min 10,61%	min 10,61%	
		Leverage ration	min 3,0%	min 3,5%	min 3,5%	
		Credit losses (% portfolio)		max 1,5%	max 1,5%	
		Credit losses (% own funds)		max 7,5% NOV	max 7,5% NOV	
	portfolios	Latvian and Lithuanian credit portfolio		max 15%	NA	
		Client group (% own funds)	max 25% NOV	max 25% NOV	max 25% NOV	
Credit risk	All	Connected clients of LHV (% own funds)	max 5% NOV	max 5% NOV	max 5% NOV	
		Shadow banking (% own funds)		max 75% NOV	max 75% NOV	
	Biggest credit portfolio	Share of rating classes 10 - 12		max 15%	max 15%	
		Share of rating classes 9 - 12		max 35%	max 35%	
	t cred	10 largest clients (% of own funds)		max 200% NOV	max 200% NOV	
	siggest	Share of largest sector		max 40%	max 40%	
		Change of economic capital due to 200 bp shift in interest curve (% own funds)	max 20% NOV	max 9% NOV	max 9% NOV	
Market risk		Total loss (% own funds)		max 10% NOV	max 10%	
		Operational losses for the past 12 months (% own funds)		max 0,3%	max 0,3%	
Operational risk		Number of critical incidents for the past 12 months		max 20	max 15	
		LCR (Liquidity Coverage Ratio)	min 100%	min 110%	min 110%	
Liquidity risk		NSFR (Net Stable Funding Ratio)	min 100%	min 105%	min 105%	
		Survival period		NA	min 3 kuud	
AML		Non-resident deposits (% of total deposits)		max 20%	max 20%	

Risk tolerance levels

ICAAP and ILAAP processes and results have been substantial inputs for setting up quantitative risk tolerance levels, for example internal capital adequacy targets, liquidity targets. All internal risk tolerance levels have been agreed by the Supervisory Board. In case the actual risk profile has reached or is approaching the agreed levels actions to lower the risk profile have been proposed to the Supervisory Board. During 2017 actions have been proposed for the following risk tolerance levels: capital, operational risk, AML risk.

In addition to quantitative risk tolerance levels, the following qualitative goals have been described by main types of risk:

For credit risk, the goal is to achieve a diversified portfolio with medium risk, where the main part consists of small and medium-sized enterprises and private persons. In the case of enterprises, the credit risk is mitigated with very good knowledge about the client and strong collateral. The financing of private persons deals with market segments with favourable risk-earnings ratio, which combined with low operating expenses, flexible IT solutions, convenient customer service, and analytical risk models allows for profitable and sustainable action. Each client shall undergo a thorough analysis - assessing their risk of insolvency and the value and liquidity of their collateral - before a credit decision is made. When making credit decisions, the competence of client executives and committees has been determined.

The objectives related to market risk are earning profit from bond portfolio investments and providing services to clients. At the same time, risks are only taken when they are priced correctly and understandable for the employees. Methods have been established for measuring and monitoring the risks. Limits have been established, which are constantly monitored and reported on a regular basis.

The objective in regard to liquidity risk is to maintain a sufficient liquidity buffer to ensure the performance of duties. In order to manage the liquidity risk, principles have been established for assessing both the short-term liquidity risk and the structural financing risk based on Basel III standards. Limits have been established by the Risk and Capital Committee (RCC) for managing the liquidity risk. In order to also ensure Bank's liquidity in stress situations, regular stress testing is carried out, the results of which are introduced to RCC.

The objective in terms of operational risk is to keep it on as low level as possible, trying to find a balance between the potential loss from the realisation of risk and cost of risk mitigating measures. Risk tolerance levels for amounts of loss as well as the number of incidents have been established, which are being monitored and reported on a regular basis. To limit potential bigger operational risk incidents, insurance coverage from AIG is used.

The purpose of managing compliance risk is to avoid compliance risk, i.e. imposing of fines, claims for

damages, interruption of contractual relationships and loss of reputation due to violation of legislation, rules, regulations, agreements, precepts or ethical standards.

The purpose of mitigating money laundering and terrorist financing risk is to maintain efficient Groupwide anti-money laundering and terrorist financing measures in order to avoid usage of LHV's services, procucts and channels for money laundering and terrorist financing. More important measures for mitigating the risk is thorough implementation of the Know-Your-Customer principle, a risk-based approach and constant consideration of the developments of the field and domestic and global trends.

LHV has determined a system of committees and decision-making competencies. The functions of the main committees are outlined in the following figure.



Committee structure

In order to ensure that LHV can prepare and present reports that contain the necessary risk details, the risk details are gathered similarly to other data. The organisational structure of LHV is rather simple and clear, and accordingly, so is the system concerning the risk details. Copies are made of the systems used by Bank and LHV Finance to Bank's data warehouse. LHV Varahaldus is using a special portfolio management program. Employees who work with risk details have been granted access to the data. Mokilizingas has independent software programs. A process has been established for forwarding risk details to LHV Group.

LHV has established a risk management policy, which sets the risk management framework. Separate policies have been established for more important risk categories. Risks are analysed, monitored and reported. The risk report provides information by types of risk. The risk report also contains information about capital adequacy. This allows one to get a complete picture of all major risks on the company level and follow their developments. At the same time, the risk report highlights forward-looking information on how much loans it would be possible to issue based on the capital adequacy indicators and how big the available loan volume is, arising from liquidity.

Risk reporting

As a part of risk policy framework the risk reporting process is developed. Tabel below gives high level overview of the risk management reports, which are presented regularly to different management levels.

Management body	Reports name	Frequency	Covered risks
			Credit risk, market risk, interest raterisk,
			liquidity risk, operational risk, anti-money
	Risk report	Quarterly	laundering, monitoring of new regulations
LHV management council	Compliance overview	Annually	Compliance risks
	ICAAP report, ICAAP macro		
	scenarium, SREP report	Annually	All risks
			Credit risk, market risk, interest raterisk,
			liquidity risk, operational risk, anti-money
	Risk report	Monthly	laundering, monitoring of new regulations
LHV bank management	Overview of risk		
council	management area	Annually	All risks
	ICAAP report, ICAAP macro		
	scenarium, SREP report	Annually	All risks
			Credit risk, market risk, interest raterisk,
Council risk and capital			liquidity risk, operational risk, anti-money
committee	Risk report	Quarterly	laundering, monitoring of new regulations
	Problematic credit clients	Quarterly	Credit risk
			Credit risk, market risk, interest raterisk,
Council audit committee			liquidity risk, operational risk, anti-money
	Risk report	Quarterly	laundering, monitoring of new regulations
			Credit risk, market risk, interest raterisk,
Group CEO			liquidity risk, operational risk, anti-money
	Risk report	Monthly	laundering, monitoring of new regulations
			Credit risk, market risk, interest raterisk,
			liquidity risk, operational risk, anti-money
Bank risk and capital	Risk report	Monthly	laundering, monitoring of new regulations
committee	Contingency plan tests and		
	planning	Based on request	Operational risk
	Risk self-assessment	Based on request	Operational risk
	Compliance overview	Annually	Compliance risks
	AMLoverview	Annually	AML risks
	New regulations		
Banks management board	monitoring	Monthly	Compliance risks
barnes management board	Compliance audits	Based on request	Compliance risks
	ICAAP report, ICAAP macro		
	scenarium, SREP report	Annually	All risks

Regular risk reporting

In order to provide regular risk reporting the risk data is collected similarly to other data through data warehouse. LHV organizational structure is simple and clear, and, consequently aslo risk data system is robust. Both Bank and LHV Finance systems are copied during the night process to data warehouse. LHV Varahaldus is using their own special portfolio management system. Mokilizingas has its own IT systems from which required data is extracted and reported based on risk reporting process.

Credit risk and bond portfolio

Credit risk is the potential loss which would arise from the counterparty's inability or unwillingness to meet its obligations to the Group.

LHV's credit risk arises mainly from the loan portfolio and the debt securities (bond portfolio). The loan portfolio includes corporate loans and overdrafts, consumer loans (in Estonia and in Lithuania), credit cards, mortgage loans, leveraged loans and leasing.

Securities portfolio

For short- and medium-term financial assets with the highest market liquidity and credit quality, the financial market interest rates remained negative in 2017. Considering the prevailing circumstances, it was not reasonable to acquire new bonds and thus the bond portfolio continued to decrease. At the end of 2017, the bond portfolio volume was EUR 49.7 million; out of which the share of those with A- or higher rating comprised 99.9%.





Loan portfolio

Gross volume of LHV's loan portfolio increased by EUR 196 million, i.e. by 36% in 2017. Growth was demonstrated in all loan portfolios. The fastest growth was demonstrated by the home and private loan segment. In a year, the gross portfolio volume increased 2.2 times and reached EUR 43.5 million by the end of 2017. Notable support for the segment's growth came from the good situation in the real estate market as well as from the fact that home loan is a rather new product and amoritization is still low. Major part of the loan portfolio growth still originated from corporate loan portfolio growth (EUR 124 million). In 2016, LHV established a new principle for the segmentation of business clients, according to which, if the balance of credit commitments of the client as well as the group related to the same is below EUR 250 000, these business clients fall within the retail banking area. As a result, part of the business clients was transferred from corporate banking to retail banking in 2016. If the balance of credit commitments exceeds the said threshold, a more thorough and extensive credit analysis is prepared and a rating is assigned. Generally, rated clients are served by corporate banking. As at the end of 2017, the gross loan volume of corporate loans in retail banking made EUR 7.3 million.



LHV's loan portfolio by loan products (million EUR)

In 2017, the credit quality of LHV loan portfolios generally improved, but in corporate loan portfolio worsened. This is mainly related to default of one significant corporate loan client, where LHV has made specific provision and expects that this specific provision covers credit loss. LHV continued the sale

of more than 90 days overdue hire-purchase, consumer loan and credit card claims portfolio.

As it may be seen from the table below, the overdue part of LHV's portfolio increased notably in 2017, to an even higher level than it was at the end of 2015. This is related to the default of a significant corporate loan client, whose exposure is so large that it has major impact on overdue loans share on the whole loan portfolio level. Since LHV expects to recover approximately 80% of the exposure then the provisions do not cover the whole 90 days overdue or cancelled contracts amount.

Th EUR, proportions	31.12.2015	31.12.2016	31.12.2017
Loans to clients,	414 676	543 382	740 169
incl. overdue:	3.3%	2.0%	4.4%
1-30 days	1.4%	0.9%	1.1%
31-60 days	0.7%	0.5%	0.9%
61-90 days	0.3%	0.1%	0.1%
90 days and more or contract	1.0%	0.5%	
cancelled			2.4%
Impairment of loans	(1.1%)	(1.1%)	(1.1%)
Share of impairment in 90 days overdue or			
cancelled loans	117.0%	210.4%	46.7%

Share of overdue portfolio, share of impairments in more than 90 days overdue or cancelled loans

Table below shows the division of loan claims by collateral type and fair value. Under-collateralised part is shown in the row "Unsecured". The type of collateral mostly depends on the loan product. Corporate loans and retail loans of companies are those with the most differing collateral. Compared to the end of 2016, the share of unsecured corporate loans and retail loans of companies has increased by 14.3 pp.

	Corporate	Leveraged	Credit cards,	Leasing	Hire-	Mortgage
	loans and retail	loans	consumer		purchase	loans
	loans of		loans, private			
	companies		overdraft			
	(incl. overdraft)					
Listed securities	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Unlisted securities	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Mortgage	45.9%	0.0%	0.0%	0.0%	0.0%	100.0%
KredEx and RDF	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
guarantees						
Pledge over right	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of claim						
Pledge of deposit	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Leased assets	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Other	17.8%	0.0%	0.2%	0.0%	0.0%	0.0%
Unsecured	24.6%	0.0%	99.8%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Division of loan claims by collateral type

Starting from 2018 provisions are calculated according to methodology corresponding to IFRS 9

requirements. Very important inputs to this are customers' PDs and LGDs as estimated impairment

amount is calculated for each loan agreement separately. LGDs use also collateral information. Therefore, changes in PD or collateral quickly impact impairment loss amount. Each client is assigned an individual provision when provisioning defaulted clients.

For all loan products, except for leveraged loans and repo-loans, LHV uses either rating or scoring systems

to assess the client's credit risk as provided in the table below. All credit products have respective application models, the output of which is used for making the credit decision. Also, portfolio scoring models and models for covering the dimensions of LGD and Credit Conversion Factor (CCF) have been developed.

Client type	Segment	Definition	PD Application	Potfolio	LGD	CCF
Corporate clients	Large companies	Legal entities, exposure > 250 EUR thousand	Rating methology		-	-
Retail clients	SME	Legal entities, exposure < 250 EUR thousand	Internal model	Internal model	Internal model	Internal model
Mortgage loan	Mortgage loans	Mortgage loans to private persons	Internal model	Internal model	Internal model	Internal model
	Retail loans in Estonia	Retail loans to private persons	Internal model	Internal model	Internal model	Internal model
	Retail loans in Lithuania	Retail loans to private persons	Internal model	Internal model	Internal model	Internal model

Risk classification systems

Overview of main credit portfolios.

Corporate loans

Corporate loan portfolio is the biggest loan portfolio in LHV. At the end of 2017, it accounted for 67% of the total loan portfolio. In 2017, the gross corporate portfolio increased from EUR 371 million to EUR 495 million. Since 2009, LHV has used a rating method to assess the credit risk of corporate loans. In 2012, the methodology was improved and a scale of 13 categories was implemented, where 1 stands for the lowest (corresponds to rating Aaa on Moody's scale) and 13 for the highest credit risk (so-called defaulted).

Based on the year-end data, the division of ratings of corporate loans corresponded to the figure below.



Division of corporate loan portfolio based on ratings

Ratings 1-9 are acceptable for LHV (rating 9 corresponds to rating Ba3 on Moody's scale) and ratings 10-13 remain below the investment grade of LHV. If we exclude rating 13 (insolvent), then for ratings 10-12, lending is not impossible, however due to higher risk the collateral has to be especially strong. In other words, higher insolvency risk is mitigated with stronger collateral (mostly with KredEx, Rural Development Foundation guarantees, deposit or liquid real estate). Clients with a rating below the investment grade (10-13) comprised 10.6% of the corporate loan portfolio at the end of 2017, having decreased by 1.2 pp. This does not only include newly issued loans, it is also partly caused by the transfer of previously issued loans to a category with higher risk. Compared to the end of 2016, the share of loans of clients with a rating of 5 or 6 has increased.

Based on the figure most of LHV's corporate loans fall within the ratings of 6-9; the weighted average rating of portfolio at the end of 2017 was 7.6. No loans have been issued for ratings 1-3, as these categories assume either taking an actual country risk or the counterparties are large international companies with long history and strong balance sheet and cash flow.

During 2017, the share of the rating category 5 and 6 increased and that of 7 and 8 decreased. Compared to the end of 2016, the growth of loans of clients rated as 5 and 6 share has been 3.1 pp and 4.5 pp, respectively. The share of clients rated 7 or 8 decreased by 2.2% and 2.5%, respectively, compared to the end of 2016. Improvement of risk profile is above all supported by successful sales work, as a result of which it was possible to obtain clients with a better rating, i.e. with better credit quality.

At the end of 2017, the rate of provision of corporate loans comprised 0.91% of gross claims.

Leasing

Starting from autumn of 2012, Bank issues leasing products (operating and financial lease) to both private as well as legal clients. Insurance of lease objects is also mediated. By the end of 2017, the lease portfolio had grown to EUR 45 million.

The probability of default of retail lease clients is assessed through a scoring model, which is different for private and legal clients. The output of the model is the PD over the next year. Rating methodology is applied for assessing the default risk of large leasing customers.

To cover potential credit losses, provisions are established for the lease portfolio based on the collective provisioning method and for one client also specific provision is assigned. At the end of 2017, the rate of provision in the lease portfolio (including insurance and related claims recorded under receivables from customers) was 1.6%. Total provisions as at the year-end comprised EUR 770 thousand. The share of portfolio overdue for more than 60 days comprised 5.6% of the lease portfolio at the end of 2017.

Micro loan

In 2016, LHV started to offer micro loans. A micro loan is a loan designed for micro enterprises in an amount of up to EUR 25 000 for a term of up to 5 years. The loan is secured with private suretyship and partly with the European Investment Fund guarantee. At the end of 2017, the gross portfolio of micro loans was EUR 5.9 million.

Before issuing a micro loan, the client's solvency is evaluated by using the scoring model, the output of which is the client's probability of default over the coming year. Total provisions as at the year-end comprised EUR 115 thousand. The share of portfolio overdue for more than 60 days comprised 1.1% of the micro loan portfolio at the end of 2017.

Private loan and home loan

In 2013, LHV started issuing mortgage loans to clients. From autumn of 2016, LHV has issued home loans. The preferred collateral is real estate in Tallinn, Tartu or in the vicinity of either city. Total private loan and home loan portfolio at the end of 2017 amounted to EUR 77.5 million. The payment history of clients is good and only 0.01% of the portfolio is in overdue for more than 60 days at the end of 2017. Total provisions as at the year-end comprised EUR 243 thousand.

As with other products, the probability of default over the coming year is assessed with a scoring model for private and home loans before issuing the loan to clients. When determining the maximum loan amount, regulatory requirements are followed.

Credit cards

Bank issues credit cards, and in cooperation with Tallinna Kaubamaja also Partner credit cards. At the end of 2017, the credit card portfolio amounted to EUR 5.9 million, having increased in a year by nearly EUR 1.1 million. Before issuing a credit card, the client's solvency is evaluated by using the scoring model, the output of which is the client's probability of default over the coming year.

Provisions to cover possible loan losses of credit card portfolio are established based on the collective provisioning method. The rate of provision of the credit card portfolio at the end of 2017 was 1.4% of the used credit amount. The share of portfolio overdue for more than 60 days made up 0.7% of the credit card portfolio at the end of 2017.

LHV Finance

In January 2013, AS LHV Finance, a subsidiary of AS Bank (65% holding) was founded, with the main field of activity being offering hire-purchase to clients through retailers. In 2015, LHV launched a new product – a consumer loan. By the end of 2017, the gross portfolio of hire-purchase and consumer loans grew to EUR 43.5 million. This was due to rapid growth of the consumer loan portfolio.

Before issuing the credit, the probability of default of each client is evaluated with the scoring model. The development of the portfolio's credit quality is constantly monitored. The share of portfolio overdue for more than 60 days was 0.89% at the end of 2017. The rate of provision was 2.4% of gross claims.

Lithuanian portfolio

At the end of 2017, the portfolio volume of Mokilizingas was EUR 50.0 million. The company mainly offers two products: consumer loans (portfolio volume at the end of 2017 comprised EUR 9.4 million) and hire-purchase (portfolio volume of EUR 38.4 million at the end of 2017). In 2015, the company also started to offer hire-purchase in Latvia, where the gross portfolio at the end of 2017 was EUR 3.7 million. In autumn of 2016, the company began offering credit cards as a new product. The gross portfolio as at the end of 2017 was EUR 2.2 million. Total rate of provision of Mokilizingas products comprised 2.4% of gross claims at the year-end. The provisioning method is based on the assessment of expected loan losses.

Concentration risk

Concentration risk includs analysis of the concentration of economic sectors and counterparties.

From 2016 onwards, LHV uses, in determining the capital requirement under the Herfindahl-Hirschman index, the supplementary method which, instead of 2 %-steps, increases smoothly against the increase in the value of the index, but retains the level of conservatism on the average.

In addition to that as part of IRB process bank also uses internal simulation model to quantify the concentration risk risk-weighted assets.

The calculation of the internal ratings method, the risk weighting formsla requires is infinitely large volume of the portfolio and the homogeneity of portfolio. In order to find out how big impact to the unexpected damage size comes from LHV portfolio size and composition (i.e concentration) LHV generated 100 000 macroeconomic simulations, based on shich calculated to each risk position simulated probability of the insolvency.

Based on analyses it can be said that with probability of 72% the unexpected credit losses remain smaller that EUR 0.5 million. With probability of 99.99% the unexpected loss is EUR 25.1 million, which means that in case of crises happening once in 1000 years, the unexpected credit loss will not exceed EUR 25.1 million.

Otherwords it can be calculated that due concentration risk, unecpected credit losses are 20.6% higher than the calculation presented by IRB

Even though the number of counterparties has increased significantly, compared to the previous period, this increase does not exceed the growth of the loan portfolio as a whole, and is proportionally significantly lower than the rate of growth in capital.

Market risk including interest risk in banking book

Market risk arises from LHV's trading and investment activity in the financial markets from interest rate product, foreign exchange and stock markets as well as lending activities and collecting financial resources. Market risk is a potential loss, which may arise from unfavourable changes in foreign exchange rates, prices of securities or interest rates. Internal judgement is used to assess potential losses. In order to mitigate market risk, conservative limits have been established for the trading portfolio and open foreign currency exposures. LHV Varahaldus invests most of its available resources into his own managed pension funds. The management of LHV Varahaldus is responsible for monitoring of the market risk.

Foreign currency risk

Foreign currency risk may arise from acquisition of securities mostly denominated in foreign currencies or foreign currency receivables and liabilities. The Treasury of Bank is responsible for daily monitoring of open foreign currency positions. The Group's foreign currency risk management is based on market risk policies, limits and internal procedures. The internal limits for open foreign currency positions are proposed by Risk Control Unit and Treasury and the limits are set internally by the Risk and Capital Committee. The limits set by the Committee are maximum nominal limits in euro equivalent with a respect to the Group's net own funds. Limits imposed on individual currencies are in line with the boundaries proposed by the Bank of Estonia. If the open currency position exceeds the limits set by the Committee, measures are immediately implemented to close or reduce such positions (hedging the risk with relevant instruments, such as foreign currency forwards or futures).

Open currency exposures

The following tables present the risks arising from open currency exposures. Assets and liabilities denominated in foreign currencies have been presented in euro equivalent in respective columns, according to the exchange rate prevailing at the balance sheet date. Derivatives reported at fair value in the statement of financial position have been included at contractual amounts under offbalance sheet assets and liabilities. Open currency exposure and the volume of financial assets and liabilities of the Group at the balance sheet date do not significantly differ from the average exposure during the year. The balances of total assets and total liabilities bearing currency risk do not include currency futures at their fair value, but they are shown here at their full contractual cash flow amounts as off-balance sheet assets and liabilities; also, the table does not include the assets (tangible and intangible assets) and liabilities (provisions) not bearing currency risk and equity.

31.12.2017	EUR (CHF (GBP S	EK L	ISD (Other 1	otal
Assets bearing currency risk							
Due from banks and investment firms	922 431	2 587	28 237	892	1 359	5 706	961 212
Financial assets at fair value	21 998	0	0	4	34 603	29	56 634
Loans and advances to customers	730 165	0	4	14	1 832	28	732 043
Other loans and advances to customers	9 357	7	204	11	145	76	9 800
Other financial assets	288	0	0	0	2 001	0	2 289
Total assets bearing currency risk	1 684 239	2 594	28 445	921	39 940	5 839	1 761 978
Liabilities bearing currency risk							
Deposits from customers and received loans	1 457 593	2 534	33 134	3 558	42 646	3 464	1 542 929
Financial liabilities at fair value	0	0	0	1	1	0	2
Accounts payable and other financial liabilities	63 596	66	259	82	54	2 775	66 832
Subordinated debt	30 900	0	0	0	0	0	30 900
Total liabilities bearing currency risk	1 552 089	2 600	33 393	3 641	42 701	6 239	1 640 663
Open gross position of derivative instrument a contractual value	t 699	0	4 959	2 763	3 615	450	12 486

Open gross position of derivative instrument at	11 787	0	0	0	699	0	12 486	
contractual value								
Open currency position	121 062	(7)	10	43	155	51	121 315	
Open currency position of Group								

Price risk

Financial instruments bearing price risk at LHV are securities held in the trading portfolio and investment portfolio. At the Group, limits are set for the size of the trading portfolio and acceptable credit quality ratings are specified for debt securities in the investment portfolio. The risk management unit monitors the compliance with limits. Pursuant to the Investment Funds Act, the minimum shares of LHV Varahaldus as the management company is 0.5% of the number of units in each of the mandatory pension fund managed by it. LHV Varahaldus invests the remaining available assets in euros, to ensure liquidity and to not bear investment risk. Bank does not hold significant amounts of equity securities in its position, due to which the sensitivity to change in the market value of these positions is marginal. Bank's debt securities portfolio recognised at the market price is short-term and of high quality, therefore, the effect of the changes in market risk premiums on the market value of the debt security portfolio should remain at around 1.0% (2016: 1.0%).

Interest rate risk

Interest rate risk reflects the mismatch in the statement of financial position items and the offbalance sheet items when interest rate repricing periods, volumes or the underlying interest rate of assets, liabilities and derivatives do not correspond exactly. Group's interest rate risk management is based on risk policies, limits and internal procedures resulting in identification of all significant sources of interest rate risk and balanced risk taking. Interest rate risk is measured through various scenario analyses by calculating several net interest income scenarios and comparing the difference between these scenarios. The basic measures of interest rate risk uses two scenarios - an increase and a decrease of interest rates to measure the effect on the Group's net interest income for a 12-month period.

Internal limits for interest rate risk management are set by Bank's Risk and Capital Committee and the operational risk management is the Treasury's responsibility.

The goal of monitoring, measuring and managing interest rate risk is to evaluate the profitability of the Group's interest-bearing products, to forecast interest income and to set limits for risk management in order to prevent significant reduction of income through limitation of risks in three aspects:

• cash flow interest rate risk whereby in case of a 1% change in market interest rates, a change in annual net interest income is limited as compared to the estimated actual;

• sensitivity of interest income based on the duration of positions in the balance sheet;

• fair value interest rate risk whereby in case of a 1% change in market interest rates, a change in the Group's economic value is limited (fair value of assets and liabilities is determined by discounting the future cash flows at the market rate of interest).

The deposits interest rates did not change in 2017 remaining at the level of up to 1.0% (up to 1.0% in 2016).

The table below shows the structure of the interestbearing assets and interest-bearing liabilities of Bank grouped by the recalculation dates of interest rates at the principal amounts of receivables and liabilities. Leveraged loans are treated as a onemonth product maturing at the next interest fixing date. Demand deposits have a duration of 2 years due to their behavioural nature.

For managing the interest rate risk, internal limits have been assigned by Bank's Risk and Capital Committee and operative risk management is the responsibility of the Treasury.

31.12.2017	Up	to	33-12 months 1-5 years	More t	han 5Tota	1
Financial assets		•				
Due from banks and investment firms		961 2	12 0	0	0	961 212

Financial assets at fair value (bonds)	0	29 715	15 834	2 000	47 549
Loans and advances to customers	299 246	382 016	41 528	14 851	737 641
Total	1 260 458	411 731	57 362	16 851	1 746 402
Financial liabilities					
Deposits from customers and received	553 360	96 246	893 085	0	1 542 691
Subordinated debt	0	0	0	30 900	30 900
Total	553 360	96 246	893 085	30 900	1 573 591
Net interest sensitivity gap	707 098	315 485	(835 723)	(14 049)	172 811

Group interest-bearing assets and liabilities

Market risk arises from LHV's trading and investment activities in the financial markets from interest rate products, foreign exchange and stock markets as well as lending activities and collecting financial resources. Market risk is a potential loss which may arise from unfavourable changes in foreign exchange rates, prices of securities or interest rates. Internal judgement is used to assess potential losses.

The risk organisation performs daily limit monitoring, in-depth analysis, frequent stress testing, and reporting of the LHV's market risks. Internal reporting of market risk exposure and follow-up on limit usage is performed on a daily basis and delivered to various stakeholders LHV. By way of exception a limit is breached, the risk organisation has established sound escalation principles in which the market risk-takers, as well as senior management, are informed of the incident as well as how it has been mitigated.

LHV Group has made decision not to take extensive positions including market risks. The majority of LHV's market risks is structural or strategic in nature and emerges within Treasury. Moreover, market risk also arises in the daily market-making and clientfacilitation activities of the trading book. LHV's trading operations primarily are the fulfilling of clients' transaction. Structural interest rate risks are a natural part of any banking business that manages lending and funding. Interest rate risk arises from mismatches in interest-fixing periods between the assets and liabilities. Treasury manages these risks within given mandates matching the assets and liabilities directly, or by, for example, using derivatives such as interestrate swaps. In order to mitigate market risk, conservative limits have been established to all market risk types. Group does not take optionality risks and uses internal market risks models only in limited amount. On a daily basis risk organisation controls and monitors the effectiveness of the business' management of market risks. The follow-up is executed through a solid limit monitoring process being a natural part of the risk management and control.

For capitalization purposes only standard approach is used for calculating capital charges.

Operational risk

Operational risk is a potential loss caused by human, process or information system flaws. When completing transactions, transaction limits and competence systems are used to minimise potential losses and the segregation of duties principle is used in the Group's working procedures, according to which there should be an approval by at least two employees or units in order to carry out a transaction or procedure.

LHV Group uses standard approach in measuring operational risk. At least once a year, a selfevaluation procedure is carried out, the main goal of which is to identify, assess and monitor operational risks, which may prevent achievement of the business goal. In 2017 our RCSA focused on the fraud risk and we identified 32 issues in 12 different departements - action plans have been created to resolve them. In 2017, great attention was also paid to the development of the business continuity process. Critical processes were remapped, to keep up with volume growth. At the beginning of 2017, the mapping of critical business processes was carried out and a list of 10 processes that need a business continuity plan was compiled. 6 existing plans were thoroughly updated and 4 new plans were created. In 2018, all of the plans a re set up for testing, focusing on the data recovery.

Information obtained from monitoring the operational risk gives an input for the calculation of LHV's internal capital adequacy assessment and evaluation of capital standards and for preparing an action plan of each area.

A technological platform has been developed for reporting and processing the operational risk events and a database for analysis and consolidation. The database of operational risk events contains structured information about events that can be classified under operational risk and that have caused LHV potential or actual loss. As a result of analysis of the events gathered into the database, it is possible to review the bottlenecks of internal rules, avoid the occurrence of mistakes in the future and mitigate possible risks or define conditions for accepting them. Operational risk incidents have been divided into classes according to their critical nature.

In 2017, the total amount of loss events increased by EUR 196 thousand. The largest part (59%) of losses was caused by card fraud. In December 2017, LHV started using 3D Secure, which based on the data of 2017 will decrease the financial loss by 40%. In addition, there were two major loss events. The first was related to a misinforming clients about a corporate action, as a result of which a loss of EUR 27.6 thousand was incurred. The second event was a loss of EUR 43.3 thousand, resulting from organized external fraud regarding fictitious information given to receive loan.

Number of major and critical incidents has remained stable for previous three years. Altogether the number of all incidents increased from 262 in 2016 to 461 in 2017. This is partly due to higher volumes and improved efficiency of internal reporting.

In 2017 KPI's were set both on LHV Group and Bank level for measuring and monitoring operational risk. Ratio of operational risk losses of a 12-month period to net own funds is set to 0.3%. Within 2017, LHV has been confortably within this limit. The other indicator is the number of critical incidents. It's numberic limit and has not been breached in 2017.

Compliance control and internal audit department have an important role in evaluating, monitoring and mitigating the operational risk. Pursuant to the Credit Institutions Act and Securities Market Act, the main task of Compliance Officer is to define the risks of non-compliance of the activities of the Group with legislation, recommended guidelines of the Financial Supervision Authority and procedure rules of the Group, considering the nature, range and complexity of business and services rendered, and arrangement of mitigating or avoiding those risks. Internal audit is an independent and objective function, assuring and consulting activity that is targeted at improving the Group's performance and adding value. Internal audit helps achieving the goals of the Group, using a systematic and disciplined approach to assess and increase the efficiency of the risk management, control and organisational management process.

Liquidity risk

Liquidity risk relates to the solvency of the Group to meet its contractual obligations on time and it arises from differences between maturities of assets and liabilities.

Out of the Group companies, the unexpected liquidity risk is borne by Bank, who attracts deposits from the public. The other Group companies do not bear the unexpected liquidity risk, as these are financed by Bank and are prohibited from involving external funding from third parties. This means that the main liquidity risk of LHV lies in the potential outflow of client deposits, should the liquidity crisis realise. The main financing risk of LHV is also derived from client deposits; more specifically from the fact that Bank is unable to involve sufficient deposits from the public to finance the estimated growth of business volumes.

LHV remains pragmatic in managing the unexpected liquidity risk and the most important goal in managing the liquidity risk is to secure a sufficient liquidity buffer in Bank. When determining the size of the liquidity buffer, Bank proceeds from the results of stress testing, business continuity planning and testing, and forecasting of business volumes.

Financing risk in LHV is managed through financial forecasts, which are regularly updated. LHV is mainly funded through Tier 1 and 2 own funds and deposits involved from the public. As LHV takes a conservative approach towards market risks, incl. currency risk, the main focus is on involving deposits denominated in euros.

LHV liquidity management and strategy are based on the risk management and liquidity risk policies, reflected in different liquidity risk measures, limits and internal procedures. According to risk policy, LHV's liquidity management reflects a conservative approach towards liquidity risk.

To manage the liquidity risk, the probable net position of receivables and liabilities by different time periods is monitored on a daily basis, while keeping a sufficient liquidity buffer in the accounts at all times, to cover unforeseen liquidity needs. The responsibility for liquidity management lies with Bank Treasury.

The liquidity buffer of the Group consists of demand and short-term deposits with the central bank and liquid debt securities, which have not been encumbered and which can be readily sold or used as collateral in operations with the central bank that increase liquidity. LHV has a sufficient liquidity buffer to cover the need for liquidity that may also arise from standby credit facilities. LHV also monitors the concentration of assets and liabilities by maturity.

As the liabilities of LHV are mostly in euros, Bank also mainly keeps its liquidity in euros to avoid market risks. Liquid assets denominated in other currencies are in line with the volume of liabilities in the same currency.

The ability of Bank to balance the liquidity risk is measured by the size of the liquidity buffer. In addition, Bank makes a distinction between instruments with extremely high and high credit quality and market liquidity in its liquidity buffer. While normally, the liquidity buffer consists of cash held at ECB and commercial banks and bonds designated at fair value through profit and loss, Bank considers as instruments with extremely high and high quality and market liquidity, the cash balance with ECB and certain government bonds of the Eurozone with AAA rating, which are marginally eligible to be used in operations with ECP that increase liquidity.

As at 31.12.2017, the volume of LHV's instruments with extremely high and high quality and market liquidity is sufficient to survive LHV's internal stress test and ensure the funding necessary for the estimated growth of business volumes for the survival period, i.e. 3 months.

As most of the LHV's liquidity buffer comprises cash with ECB and on Nostro accounts of commercial

banks, the LHV's liquidity risk will not be realised due to the possible inefficiency of financial markets in monetising positions.

LHV bond positions are controlled by Bank Treasury, have no encumbrances or other legal restraints, which is why these can be monetised i.e. turned into usable liquidity pursuant to normal market conditions, being up to 2 days as of the trading date. In addition, Bank can consider that half of the bond portfolio is usable in (incl. intra-day) operations with the ECB that add liquidity, which is why Bank can pledge this part of its portfolio to the ECB and promptly receive usable liquidity for it. This possibility is tested by LHV on a regular basis and normally this takes up to 2 hours.

In addition to daily liquidity risk monitoring, LHV conducts liquidity risk assessments (stress testing). The purpose of stress testing is to ascertain the survival period of Bank – a period, in the course of which Bank is able to continue its normal business activity without involving additional resources, considering the realisation of liquidity risk, which in LHV's context would materialise in extensive losses of liquidity through the outflow of client deposits and implementation of standby credit facilities, the realisation of issued guarantees and valuation haircuts of liquid assets. In carrying out stress testing, Bank considers the net growth of budgeted assets when calculating the survival period in the financial forecast (base scenario), which means that continuing with normal business activity also includes the issuing of new loans. The financial forecast has been approved by Bank Management Board and cleared by the Supervisory Board.

Pursuant to the liquidity risk tolerance levels, established with the liquidity risk policy, the survival period of Bank must be at least 3 months.

Based on its financial forecast Bank has prepared a conservative analysis to establish how much liquidity Bank needs for its business activity and what the estimated survival period is.

Given that the net liquidity position - e.g the net of simulated deposits outflow, outflows of off balance

liabilities and 3 months loan growth requirement and the liquidity value of the bank's liquidity pool – is positive, one can illustrate that the bank is able to cope with a liquidity stress scenario (both bank specific and marketwide) aswell is able to continue to grow its assets well beyond critical 3 months required by the liquidity policy of the bank.

Liquidity risk management also includes business continuity recovery plans related to liquidity management.

Internal liquidity risk management methods are supported by Basel III liquidity ratios: Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR).

Based on its financial forecast, Bank has prepared a conservative forecast to ascertain whether at the estimated business volumes Bank complies with the regulatory liquidity requirements established for the same. The below figure shows the LCR and NSFR forecast of Bank for the period of 2018–2022. The figure shows that Bank will not incur any problems with exceeding the limit of the ratios. The bank is also monitoring and forecasting the effect of financial corporate deposits to the level of LCR, attributable to the arithemtics behind the LCR calculation.



LCR and NSFR ratios of Bank for the base scenario

The following table states the division of LHV financial assets and liabilities, except derivatives, by maturities based on the future undiscounted cash flows. In the maturity analysis, the cash flows have been divided into periods when cash flows are generated (i.e. cash flows from interests).

Bank has established a liquidity continuity plan for the event, when the early warning indicators show unfavourable trends in connection with involving funds when an unexpected liquidity crisis is realised. The continuity plan describes the escalation procedures for involving extraordinary liquidity, estimated volumes, which can be involved extraordinarily, and highlights the extraordinary sources of funding.

Bank tested the liquidity continuity plan recently on 26.01.2018. The purpose of conducting the test was to practice the cooperation with the crisis committee, to ensure a relevant overview for the crisis committee members about their role in resolving the crisis and the expectations established for them. In 2017, the main focus of testing was on communication and IT security

The conclusions made during testing the continuity plan and the test results serve as an input to the follow-up plan, which will be implemented in 2018.

The crisis committee convened quickly at the beginning of the test and immediately assigned areas of responsibility and started to resolve communication and liquidity problems arising from the scenario. To make the situation more realistic, a journalist and cameras were also involved this year. A time gap was used in the scenario and liquidity reports depended on the decisions of those subject to the test. Altogether, the goal established for testing was achieved and the committee was able to practice cooperation in a crisis situation.

Asset encumbrance

Asset encumbrance arises from collateral pledged against secured funding and other collateralised obligations. Group has used TLTRO funding in past and this funind was secured with bond portfolio. In mid 2016 all TLTRO funding transactions were paid back, as it didn't improve liquidity not funding situation. At the end of 2017 thre were no assets encumbered.

Maturity structure

Maturity mismatch in LHV comes from difference in deposits and loans maturities. In the maturity analysis, the cash flows are split into the maturity buckets in which the cash flows occur (including interest cash flows). LHV has set internal strickt process of which maturities will be acceptable. Both maturity and interest rate duration wise. Almost 100% of loan portfolio uses floating interest rate an has amortizing structure. Still the risk can't be completely hedged due to very low interest rates, which generates shift from term deposits to demand deposits. To mitigate the risk, bank has set also long list of early warning indicators, showing negative effects in deposits behaviour. There are clear escalation processes and alternative funding sources defined in contingency plans. In 2017 LHV entered into international money market with single purpose of widen the funding sources by completing first small test transactions.

Money laundering and terrorist financing risk

The money laundering and terrorist financing (hereafter: AML) risk consist from potential usage of Bank's products, services and products to commit money laundering and terrorist financing. In addition, a AML risk can occur in situation where the Bank does not apply proper due diligence and Know Your Customer measures in accordance to the regulations and good banking practice. AML risk can primarily materialize through compliance risk or reputational risk.

In order to mitigate the risk, Bank uses a risk-based approach, risk assessment of services, products, channels and customers and applies risk related monitoring. Awareness and commitment of all employees and management is crucial and it is achieved through regular trainings and information sharing. The structure of measures to mitigate money laundering and terrorist financing is set by the Supervisory Board of LHV Group through AML Policy and Customer Acceptance Principles. Bank has conservative approach towards customer on-boarding and has 4 level customer acceptance decision layers. Different levels are - customer relationship manager, 4-eye principle, High Risk Customer Acceptance Committee and Management. Different risk categories trigger different requirement for acceptance level, for example residency, field of activity and etc.

Activities of existing customers are screened against international financial sanctions lists and are monitored in order to detect suspicious and unusual activities. In 2017, Bank made decision to improve existing technical capabilities and acquired licenses to use external vendor solutions for screening and monitoring. Both external vendors are well-known service providers in AML area for years.

Supervisory Board of LHV Group has set risk tolerance level to 20% for non-resident deposits of legal entities which are not financial institutions

Other risks

Strategic risk and business risk

For reasons of corporate growth, LHV's strategic risk is estimated to exceed the strategic risk of a bank positioned in a stable stage. At the same time, the strategic risk is mitigated via the preparation of carefully deliberated business plans and analyses. Furthermore, the management (both the Management Board and the Supervisory Board) of both AS Bank and AS LHV Group has a long-term track record in banking and/or business ventures. Entries into new markets are always preceded by an in-depth analysis, engaging experts in the particular field, where necessary.

Reputation risk

Reputation risk is defined as a risk related to the deterioration of LHV's image in the eyes of customers, business partners, owners, investors or supervisory authorities. Reputation risk can, above all, be attributed to the materialisation of other risks (e.g. as a result of materialisation of operational risk or strategic risk). In each case, the risk may arise from failure to comply with either stated norms, which are likely to change over time, so and assessment of reputational risk can't be static.

LHV mitigates reputation risk by carrying out regular risk management training as well as by continually improving the LHV-wide risk management framework, thus ensuring a strong risk culture.

Country risk

Similarly to reputation risk, country risk mainly occurs as a result of manifestation of other risks (operational risk, credit risk, strategic risk). In addition to Estonia, LHV also pursues business operations in Lithuania. In 2013, in cooperation with a recognised local company (Razfin), LHV acquired a readily available and operational loan portfolio in Lithuania. As at the end of 2016, the gross Lithuanian portfolio amounted to EUR 38.3 million.

Envirnonmental risk

The Group's approach to environmental credit risk managementaddresses risk under any of two categories:

Direct Risk can arise when the Group takes commercial land as collateral. In many jurisdictions, enforcement of a commercial mortgage by the bank, leading to possession, potentially renders the Group liable for the costs of remediating a site if deemed by the regulator to be contaminated, including for pre-existing conditions. Group's approach requires commercial land, if being pledged as collateral, to be subject to a screening mechanism.

Assessment of the commercial history of a piece of potential for environmental land and its contamination helps ensure anv potentialenvironmental degradation is reflected in the value ascribed to that security. It also identifies potential liabilities which may be incurred by the Group, if realisation of the security were to become a possibility.

Indirect Risk can arise when environmental issues may impact the creditworthiness of the borrower. For instance, incremental costs maybe incurred in upgrading a business' operations to meet emerging environmental regulations or tightening standards. In other circumstances, failure to meet those standards may lead to fines.

Environmental impacts on businesses may also include shifts in the market demand for goods or services generated by our customers, or changing supply chain pressures. Environmental considerations affecting our clients can be varied.

Group follows all environmental regulations and decisions very closesly and analyses their effects on the business.

Additional disclosures

Exposures to equities not included into trading book

Group is not taking equity positions outside trading book. There has been only one excemption – VISA shares. As a part of ordinary business issuing and acquiring cards, Group had to invest small position of VISA shares. The outstanding balance of the shares is 0,1 million EUR.

Securitization

Bank is not active in securitization and does not have neither assets or liabilities related to securitization.