AS LHV Group Pillar 3 Report 2016

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 in our Annual Report and our Pillar 3 Report

Pillar 3 disclosures topic with reference to CRR-Article	Primary location in our Annual report	Primary location in our Pillar 3 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	N/M	N/M
(Article 455)		

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### The mission of LHV is to help create local capital and

Summary of LHV Group and financials

AS LHV Group (the Group or LHV) is the biggest

domestic finance group and capital provider in

Estonia. The main subsidiaries of AS LHV Group are

AS LHV Pank (the Bank) and AS LHV Varahaldus (LHV

Varahaldus). LHV was established in 1999 by people

entrepreneurship. LHV's offices for client servicing

are located in Tallinn and Tartu. LHV employs about

300 people and over 110,000 customers use LHV's

banking services. Pension funds managed by LHV

AS LHV Group is a limited liability company

incorporated in and domiciled in Estonia. The

address of its registered office is Tartu mnt 2, Tallinn.

AS LHV Group is a holding company whose

subsidiary AS LHV Pank (hereinafter: the Bank)

provides banking, financial advisory and securities

brokerage services to customers in Estonia,

Lithuania (will be closed first half of 2017). There are offices for client servicing in Tallinn, Tartu and Vilnius (till end of March 2017). AS LHV Finance (the

subsidiary of AS LHV Pank) offers hire-purchase services to merchants and consumer finance. AS LHV

Varahaldus offers fund management services for

pension funds and other funds to clients in Estonia.

UAB Mokilizingas offers consumer finance, hire-

purchase and finance lease services in Lithuania and

in

investing

and

experience

have about 180,000 customers.

with

Latvia.

**Operating principles** 

long

to support the development of local entrepreneurship.

LHV concentrates on active and independent customers with an entrepreneurial mind-set. For private consumers LHV mainly offers services of depositing and increasing monetary funds. 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 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.

#### Shareholders

AS LHV Group has 25 356 005 common shares with par value of 1 euro.

As at 31.12.2016 AS LHV Group had 5 170 shareholders:

13 108 473 shares (51.7%) belonged to the members of the supervisory board and management board and to their related parties.

12 247 532 shares (48.3%) belonged to Estonian entrepreneurs and investors and to their related parties.

#### 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.

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 2016 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 2016 and 31 December 2015, for AS LHV Group and its subsidiaries AS LHV Pank, AS LHV Finance (subsidiary of AS LHV Pank), 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 LHV Pank. All these companies have been consolidated fully to Group report.

#### Summary financials and risk profile

- Loan portfolio increased by EUR 128 million
- Deposits portfolio increased by EUR 145 million
- Volume of funds under management increased by EUR 404 million
- Risk weighted assets in capital adequacy calculation increased by EUR 137 million
- Own funds increased by EUR 19 million
- Net income increased by EUR 6.8 millio and cost to income ratio improved by 5.6 percentage points
- Liquidity coverage ratio was 222%

### Regulatory environment

The purpose of this Report is to provide Pillar 3 disclosures of the Group as required by the global regulatory framework for capital and liquidity, established by the Basel Committee on Banking Supervision, also known as Basel 3. On European level these are implemented in the disclosure requirements as laid down in Part Eight of 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").

#### Basel 3 and CRR/CRD 4

In the European Union, the Basel 3 capital framework was implemented by the "Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms" (Capital Requirements Regulation, or "CRR") published on June 27, 2013, 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") published on June 27, 2013. The CRR/CRD 4 framework replaced the laws implementing the international capital adequacy standards as recommended by the Basel Committee on Banking Supervision, commonly referred to as Basel 2 and Basel 2.5. As a single "rulebook", the CRR is directly applicable to credit institutions and investment firms in the European Union. Thus, the need for implementation of national regulatory legislation was eliminated in many instances. The determination of regulatory own funds, regulatory capital requirements, leverage and liquidity as well as other relevant regulations are now primarily regulated through the CRR.

The CRR/CRD 4 framework further introduced new liquidity standards. The Liquidity Coverage Ratio (LCR) aims to measure a bank's short-term resilience to a severe liquidity stress scenario during a stress

period of 30 calendar days. Detailed rules for the calculation of the LCR are set out in the delegated act adopted in October 2014.

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

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 will apply from 2018.

There are still some interpretation uncertainties with regard to CRR/CRD 4 rules and some of the related binding Technical Standards are not yet available in their final version. Thus, we will continue to refine our assumptions and models in line with evolution of our knowledge as well as the industry's understanding and interpretation of the rules. Against this background, current CRR/CRD 4 measures may not be comparable to previous expectations.

Also, our CRR/CRD 4 measures may not be comparable with similarly labeled measures used by our competitors as our competitors' assumptions and estimates regarding such implementation may differ from ours.

#### 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%, no transitional period will be used.

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
- 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.

#### ICAAP, ILAAP and SREP

The Internal Capital Adequacy Assessment Process ("ICAAP") as stipulated in Pillar 2 of Basel 3 requires banks to identify and assess risks, maintain sufficient capital to face these risks and apply appropriate risk-management techniques to maintain adequate capitalization.

Our ICAAP is a group-wide process that involves various functions, policies, procedures, and methodologies. We calculate, assess, and monitor the capital adequacy position at the Group and for ICAAP relevant legal entities to ensure adequate capitalization against our defined risk appetite on an ongoing and forward looking basis both for actual and also stressed conditions.

The Internal Liquidity Adequacy Assessment Process ("ILAAP") similar to ICAAP focuses on maintaining sufficient liquidity risk management. We calculate, assess and monitor the liquidity and funding position for both Group and all ILAAP relevant Legal Entities to foster an adequate liquidity and funding management on an ongoing and forward looking basis. The assessment process takes account of the liquidity and funding risks to which the Group is exposed; how these risks are identified, monitored

and measured. Within the Group, liquidity and funding risks are managed within a cohesive liquidity risk management and governance framework and the ILAAP aims to demonstrate how this framework operates to effectively manage risks.

The Supervisory Review and Evaluation Process ("SREP") refers to the common methodology and standards used by the European Central Bank (ECB) and local Financial Supervision Authority (FI). In accordance with Article 97 of the Capital Requirements Directive (CRD IV), supervisors regularly review the arrangement, strategies, process and mechanisms implemented by banks and evaluate: (a) the risks to which the institution might be exposed; (b) the risks the institution might pose to the financial system in general; and (c) the risks revealed by stress testing. The SREP process encompasses three main elements: a supervisory risk system (RAS); a comprehensive review of the bank's ICAAP and ILAAP framework; and finally, the evaluation of the bank's capital and liquidity needs. Under SREP, the ECB/FI may impose minimum capital requirements which are more stringent than the statutory requirements set forth in the CRR or the related regulations.

#### MIFID 2

A significant regulation change affecting the investment firms shall take effect in 2018, when MIFID 2 with amendments will enter into force. Regulation includes the requirements of the qualification of the employees, additional reporting requirements, restrict third-party charges, and harmonization of sanctions for violations. LHV has initiated separate project to cope with all changes in timely manner.

### Business environment

Even though the final figures are yet to be revealed, the world economy is likely to have decelerated in 2016, for the second year in a row. According to IMF's January forecast, there is a good chance that the trend will be reversed, with the global economic growth expected to gain momentum and reach 3.4% this year.

The dynamics of the previous six months suggest that developed and developing markets have taken a different path. The new administration in the United States foresees a growth in budgetary expenditure. Similarly, the forecast for the Chinese economy has been upwardly revised against endless government stimulus. In Latin America, however, economic recovery has remained sluggish, failing all expectations. Mexico is suffering from US-related political uncertainty, and the Indian economy from backlashes of the banknote replacement.

The keyword for 2017 is "elections" – in Europe, the year will see elections in both Germany and France, while the newly inaugurated President of the United States is already revealing the first major changes in course. Growth in protectionist tendencies, review of international trade treaties and prolongation of the long-awaited structural reforms have the potential to re-shape the long-term economic outlook.

Economic growth in the euro area hovered around 1.7% in Q3, with the annual change expected to remain in the same ballpark. The IMF forecasts a marginal slow-down in growth, to 1.6%. The return of inflation, fuelled by the recovery in oil and energy prices, will start exerting pressure on domestic consumption (the main engine for growth so far), with the pressure on wage increase remaining non-existent. Consumption is positively affected by consistent growth in employment. Enhanced corporate profitability is bound to attract investments.

The Economic Sentiment Indicator of Estonia's key trade partners remained at five-year highs, strongly advancing in the second half of the year. A major advance in sentiment was evident in Finland and Lithuania in 2016, suggesting an improvement in the countries' economic outlook.

Despite overall optimism, the economic growth in Sweden is losing pace, dropping to 2.8% in Q3. This can mainly be attributed to stabilisation of domestic consumption, which, up to now, has been stimulated by low interest rates. The growth in investment volumes is also expected to slow down significantly. The forecast for Swedish economic growth this year is around 2%. Estonia's interests revolve around a strong growth in Swedish import volumes and investor-friendly tendencies in Swedish banks.

Finland is continuing its sluggish recovery, with the economy growing 1.7% in Q3. Consumer confidence rose above long-term average in 2016 and is nearing ten-year highs - the highest among EU Member States. The positive trend is reflected in the general economy, where domestic consumption has remained the main engine for growth for quite some time. The key for the upcoming year lies in the ability to boost export volumes. So far, this has remained quite a stumbling block. Similarly to Sweden, Estonia's interests lie in further growth in Finnish import volumes.

The economic growth in Lithuania - a major destination market for LHV - slowed down to 1.7% in Q3. This can mainly be attributed to shrinking volumes of projects financed through EU assistance funds, which also had an adverse effect on the construction sector. Strong domestic consumption remained the main engine for growth, fuelled by a quick increase in wages and decrease in unemployment. The Lithuanian economic growth is expected to improve, compared to the 2% growth last year. Growth in the volume of EU financed projects could provide a further stimulus, with the transition to the new programming period expected to contribute.

The Estonian economy in 2016 can mainly be characterised by failure to meet the overly optimistic forecasts – the estimated growth of 1% is the slowest in the post-crisis period. Difficulties in



the oil shale industry and the energy sector, mainly conditioned by external factors, also had their bearing. The poor investment volumes in recent years have impeded the potential growth of Estonian economy. The economic forecast published by the European Central Bank in December foresees a 2.6% growth for the year. Income increase is expected to continue, but the return of inflation will have a significant impact on growth in real wages. Consequently, export and investments are becoming increasingly important, alongside domestic consumption. Government expenditure is expected to rise, fuelled, among other things, by the EU Presidency and the local government elections in the autumn of 2017. The policy measures implemented by the new coalition have caused a greater-than-usual uncertainty with regard to the outlook for the upcoming year.

										Eesti Pan	k forecast
Key economic indicators of Estonia*	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016E	2017E
Nominal GDP (EUR billion)	16.25	16.52	14.15	14.72	16.67	17.93	18.89	19.76	20.25	20.78	21.73
GDP volume***	7.7%	-5.4%	-14.7%	2.3%	7.6%	4.3%	1.4%	2.8%	1.4%	1.0%	2.6%
Private consumption expenditures****	9.0%	-4.9%	-15.3%	-1.6%	3.7%	3.7% 4.3%	3.8%	3.3%	4.7%	3.4%	2.7%
Government consumption expenditures	6.6%	4.6%	-3.2%	-0.4%	1.3%	3.2%	1.9%	2.7%	3.4%	-0.4%	2.4%
Fixed capital formation	10.3%	-13.1%	-36.7%	-2.7%	34.4%	12.7%	-2.8%	-8.1%	-3.3%	0.2%	4.1%
Exports	12.6%	0.9%	-20.3%	24.0%	24.2%	4.8%	2.3%	3.1%	-0.6%	3.6%	3.4%
Imports	13.0%	-6.2%	-30.6%	21.2%	27.2%	9.7%	3.2%	2.2%	-1.4%	5.0%	3.1%
CPI	6.6%	10.4%	-0.1%	3.0%	5.0%	3.9%	2.8%	-0.1%	-0.5%	0,1%**	2.8%
Unemployment rate (% of the labour force)	4.6%	5.5%	13.5%	16.7%	12.3%	10.0%	8.6%	7.4%	6.2%	6.8%	8.2%
Current account (% of GDP)	-15.0%	-8.7%	2.5%	1.8%	1.3%	-1.9%	-0.4%	0.9%	2.2%	2.2%	1.5%
Budget balance (% of GDP)*****	2.7%	-2.7%	-2.2%	0.2%	1.2%	-0.3%	-0.2%	0.7%	0.1%	0.3%	-0.4%

balance forecast considers only those measures on which sufficient information was available at the date of the forecast. Sources: Eesti Pank, Eurostat, Statistics Estonia

#### Table 1. Key economic macroindicators

LHV is not expecting any abrupt economic changes in Estonia over the 12-month horizon. Economic growth is expected to pick up pace, but is unlikely to achieve its full potential. The policy measures of the new coalition will be a major factor. Rapid growth in wages is exerting pressure on the already dropping corporate profits. Corporate adaptability and successful enhancement of productivity will thus play an increasingly important role. A qualitative leap in investments is required to achieve the objectives.

In terms of economic sectors, higher-than-average risks are evident in the processing industry and energy-related sectors, which are facing wage pressures. Special attention should also be paid to transport and warehousing as well as the risks of the construction sector, where the drop in profit figures has been significant, compared to previous periods. LHV has also taken a more conservative approach to the real estate market, carefully monitoring the dynamics on the local and Scandinavian markets. Rental property projects involve a significant 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. 2016 saw a growth in the balance of loans taken from credit institutions. The loan to deposit ratio and overdue loans have maintained their post-crisis lows. With the record-low interest rates and 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.

### 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:

Capital charge	CET 1	Tier 1	CAD
Minimum capital requirement	4.50%	6.00%	8.00%
Capital conservation buffer	2.50%	2.50%	2.50%
Systemic risk buffer	1.00%	1.00%	1.00%
Countercyclical capital buffer	0.00%	0.00%	0.00%
Pillar 2 buffer (valid)	0.74%	0.99%	1.89%
Minimal regulatory capital charge	8.74%	10.49%	13.39%

#### Table 2. 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 2016.

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 31.12.2016 was EUR 119 million (31.12.2015: EUR 100 million) taking into account proposed dividend pay-out. The Group is well-capitalized as at the end of the reporting period with a capital adequacy level of 21.46% (31.12.2015: 24.03%) and Tier 1 capital ratio of 15.90% (31.12.2015: 16.75%).

Leverage ratio, calculated according to Basel Committee on Banking Supervision requirements, as at 31.12.2016 was 9.53% (31.12.2015: 7.5%). 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).



The Group had an IPO in May 2016 and issued 2 million new shares in amount of 13.9 million EUR. This, together with 2016 profit and proposed dividend payment are the major influencers in Tier 1 capital base. The Group has decided to pay out 25% of pre-tax profit attributable to parents shareholders in form of dividends. This policy includes a clause that dividend pay-out decision is subject to fulfilling all capital related regulations and having reserves for future growth.

During 2015 LHV Group issued EUR 15 million worth of 10-year subordinated bonds. In total the Group has outstanding EUR 30.9 million worth of subordinated bonds. The bonds are traded on Nasdaq Tallinn Stock Exchange under ISIN nr: LHVB065025A and LHVB072524A. There are no other Tier 2 capital instruments outstanding.

### Main changes in risk management

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

2016 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. Also, the group has formed the risk and capital committee composed of Rain Lõhmus, Tiina Mõis and Andres Viisemann.

In 2015 internal ratings (IRB) methodology preparation started and project continued in 2016. LHV has set a goal to implement by 2018 the RWA calculation on the IRB methodology. IRB implementation requires prior authorization by the Financial Supervision Authority and also different asset classes may be phased to different periods. According to the plan, the first asset classes moving to IRB methodology are corporate loans, which represent over 70% of the total loan portfolio of LHV Group. According to the project plan, the Group is planning to submit formal request to the Financial Supervision Authority in the third quarter 2017.

The development of credit quality assessment tools continued. Prior to the issuance of credit all credit applications have to pass credit scoring and rating models, which evaluate the credit quality. In 2016 a new leasing scoring model was developed. In collaboration with PWC, corporate lending rating system was validated.

Model results are the main input to the assessment of provisions. Based on the validation of provisioning models, provisioning rates were adjusted in LHV Finance, and in Mokilizingas. From 2016 also for leasing portfolios.

To emphasize the importance of the larger antimoney laundering activities in the field of risk management, a separate Prevention of Money Laundering unit was established and Aivar Paul started leading it in early 2016.

#### Figure 1. Overview of the Group's risk committees



LHV has set a goal to start using the calculation of the internal rating based approach methodology. In 2016 the preparation continued in systems and data quality areas. Starting from 2016 LHV is able to calculate credit risk RWA based on standardized and based on IRB methodology. Both results are used in credit decisions and analysing/forecasting changes in RWA.

In 2016 continued development of credit risk models. Estonian retail portfolio PD models were completed and LGD and CCF models were started. In additional all portfolio scoring models were updated. In December 2016 comprehensive validation report regarding rating systems were completed.

In 2016 the sale of Lithuanian and Estonian retail portfolio overdue claims to a collection agency was started.

In corporate loan portfolio provisioning model LGD level was changed from 25% to 30% in relation start collateral based provisioning starting from 2017.

**New products.** In 2016 continued work with new products and services and bringing them to market.

One of the most widely covered product "home loan" was implemented and sales started in Q4 2016. The product was well appreciated by the customers and portfolio reached EUR 11.6 million by end of the year.

In addition LHV started offering of micro loans and brought NFC cards to the market.

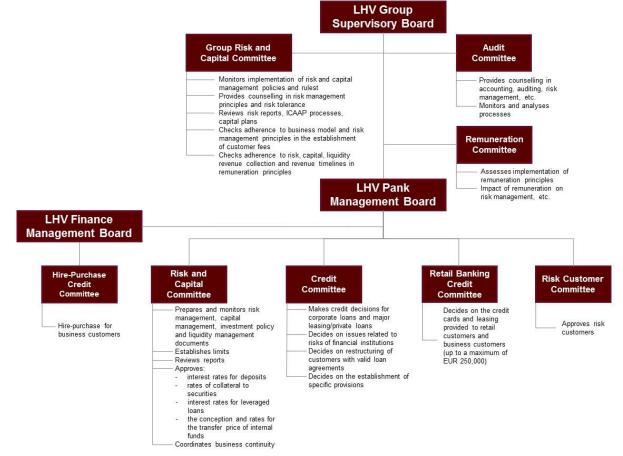
**Purchase of Danske Capital**. On 2d of May LHV asset management unit acquired 100% of AS Danske Capital shares. After that there was one month migration period, during which LHV took over all the services Danske Bank offered to the Danske Capital. On 28.07.2016 these management companies were merged and LHV asset management became successor and manager of both entities funds. Danske euro fund was merged with AS LHV Varahaldus euro fund and similar strategy will be used in planned merger of pension pillar 2 funds in May-June 2017. The entire process is managed in accordance with original plan, and despite the somewhat increased workload, it has not increased the operational risk incidents.

### Risk strategy, risk appetite and risk profile

Risk is defined as a potential negative deviation from expected financial results. The Group encounters several risks in its day-to-day operations. The objective of risk management at the Group is to recognise these risks, to measure them appropriately and to manage them. More broadly, the aim of risk management is to increase the value of the Group by minimising losses and reducing the volatility of results. Risk management at the Group is based on a strong risk culture and is built on the principle of three lines of defence where the first line of defence, the business units, are responsible for taking risk and for day-to-day management. The second line of defence, the risk management division, is responsible for the development of risk

management methodologies and for the reporting of risks. The third line of defence, the internal audit, conducts independent supervision over the entire group. Risk management principles, requirements and areas of responsibility are described in the policies and procedures. In accordance with the capital management principles that the Group has adopted, it must have adequate capital to support risks.

A clear structure has been established for committees that make the risk/related decisions. The main risk committees are presented in the following figure.





LHV's strategic plan foresees an increasing of business volumes, while operating in Estonia and Lithuania. The risk appetite of LHV can be considered average in the current growth phase. At the same time, the capitalisation and risk management objectives and principles of LHV shall be based upon risk-taking. LHV's internal document "Capital objectives of LHV Group" stipulates that the minimum internal target capital adequacy level is 16.19%. The risk appetite of LHV is low in the categories of liquidity risk and operational risk, and average in the categories of credit risk and market risk. The objective of LHV in the next five years is to receive at least an investment grade credit rating from an international rating agency.

LHV has established a risk management policy, which sets the framework for risk management. A separate major risk categories are established policies. The risk are analysed and reported in risk reports based on risk types. Risk report includes also information about capital adequacy. This enables to get comprehensive picture of all significant risks on regular bases on entity level and follow their trends. In doing so, the information in risk report is forwardlooking for analysing the potential business volume growth based on capital adequacy and liquidity trends. In addition ICAAP and ILAAP are interconnected between each other, as ILAAP takes into account the scenario analyses data used in ICAAP.

The description of risk appetite objectives for the main risk categories is provided below.

The objective related to **credit risk** is to achieve a diversified portfolio with a medium risk, in which the main part is formed by small and medium-sized enterprises, and private persons. In case of corporate clients, credit risk is mitigated by a very good knowledge of clients and strong securities. In case of financing of individuals, LHV operates in

market segments, where the relationship between the risk and return is favourable. In combination with low operational expenses, flexible IT systems, convenient and analytical risk models it allows to operate profitably and sustainably. 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. For making the credit decisions, the competence of account managers and committees has been defined in internal regulations.

The objectives related to **market risk** are earning profit from bond portfolio investments and providing services to clients. Risks can be taken only when they are priced correctly and understandable for the employees.

Methods have been established for measuring and monitoring the risks. Additionally, limits have been set and these are constantly monitored and regularly reported.

The objective of **liquidity risk** management is to maintain a sufficient liquidity buffer to ensure the performance of obligations. In order to manage the liquidity risk, principles have been established for assessing both the short-term liquidity risk and the structural financing risk, taking into account the new Basel III regulations. Furthermore, the Risk and Capital Committee has set limits for managing the liquidity risk. Stress-testing is performed on regular basis in order to maintain LHV's liquidity also in stressful conditions. The results of the tests are reported to the Risk and Capital Committee.

The objective regarding **operational risk** management is to limit potential losses. During recent years the operational risk loss has remained below 100 thousand euros. AIG insurance is used for restricting potential large loss events due to operational risk.

Purpose of **compliance risk management** is to avoid situation, where LHV has to pay fines, damages, interruption of contractual relations, and the material losses, which is due to law, rules, regulations, agreements, or the violation of the code of ethics.

Purpose of money laundering and terrorism financing risk management is to keep measures preventing money laundering and terrorism financing effective and up to date throughout the LHV. The most important measure of risk management is the principle of know your customer, risk-based approach and the constantly following the developments in the area.

The table below summarizes LHV's risk appetite and actual estimated risk levels for the main risk categories. Also the main methods for managing the risks are outlined: risk avoidance (A), risk limiting (L), risk mitigation (M), risk diversification (D). There are separate quantitative risk tolerance KPI's set to each risk type, which are followed on daily bases.

			Actual risk level											
		Credit risk		Market risk		Liquidity risk		Operational risk						
			Low	Average	High	Low	Average	High	Low	Average	High	Low	Average	High
risk		Low							L, M				A, L, M	
Desired I Ievel	eve	Average		L, M			D, M							
Des		High												

#### Table 3. The Group's actual and desired risk levels for the main risk categories

The level of operational risk is higher than the desired level of this risk. The main reason is that LHV is currently in the growth phase, where new products and services are introduced to the market.

#### Stress tests

Group-wide stress tests are an integral part of the Risk Management process and annual review of risk appetite. They aim to ensure that the Group's financial position and risk profile provide sufficient resilience to withstand the impact of severe economic stress or specific market/company related risks including IT risks. The largest stress test is ICAAP process, which looks at severe but plausible and business relevant scenario. In addition to ICAAP stress, there are regularly performed stress tests against liquidity, IT security, business contingency etc. risks.

### 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
	0	,	
	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	ittonenty	
	planning	Based on request	Operational risk
	Risk self-assessment	Based on request	Operational risk
	Compliance overview	Annually	Compliance risks
	AML overview	Annually	AML risks
	New regulations	Annuarry	AIVIE 113K3
	monitoring	Monthly	Compliance risks
Banks management board	Compliance audits	Based on request	Compliance risks
		Dased Uniequest	
	ICAAP report, ICAAP macro		
	scenarium, SREP report	Annually	All risks
	scenarium, sker repolit	Annually	

Table 4. 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 LHV 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

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.

LHV uses standardized approach to measure credit risk. In 2015 Group started developing IRB models and starting from 2016 is using IRB in parallel for internal capital allocation. Officially Group plans to start using IRB in nearest years.

#### Securities portfolio

During 2016 the market interest rates of the short and mid-term financial assets with the highest market liquidity and credit quality were still negative. In the 1<sup>st</sup> quarter of 2016 the European Central Bank (ECB) lowered the deposits interest rate again by 10 basis points to the new level of -0.40%. This caused further price increase of the aforementioned financial assets. Considering this, LHV decided that it was unmeaningful to purchase this type of financial assets instead of holding the deposits in the ECB. Due to this, LHV's securities portfolio continued to decrease. At the end of 2016 LHV's securities portfolio amounted only EUR 64.6 million and the share of securities with rating A- or higher was 96.4%. Same time balances with ECB increased to all-time high EUR 264 million.

#### Loan portfolio

The gross volume of LHV's loan portfolio increased by EUR 129 million in 2015, i.e. by 31 %. The quickest growth was evident in mortgage portfolio, which grow 1.5 times and at the end of 2016 portfolio reached EUR 35.4 million. The most significant factor behind the growth was introducing mortgage loan product as standard offering to retail customers in beginning of Q4 2016.

A bulk of the growth in the loan portfolio can be attributed to the growth in corporate loans (EUR 86 million). In 2016 LHV split legal entities portfolio between corporate and retail bank. All clients with exposures below EUR 250 thousand were given over to retail bank. For such clients more automated scoring process is used for calculating risk levels. For all loans exceeding that level detailed credit rating analyses are prepared. At the end of 2016 the amount of legal entities loans in retail bank reached EUR 4.3 million. In 2016 all loan portfolio were growing except Lithuanian portfolio which reduced by EUR 1.3 million. In Lithuania new regulations were introduced, which changed significantly the requirements for analysing the clients scoring process and set very conservative limits to acceptable loan amounts.

2016 saw a continued improvement in the credit quality of LHV's loan portfolios. The improvement was facilitated by specification of the objectives of portfolio management in the company's credit policy. Furthermore, LHV continued to dispose of the portfolio of hire-purchase, small loan and credit card obligations overdue for more than 90 days.

The volume of overdue obligations in the portfolio decreased significantly in 2016. At the same time, LHV maintained its conservative provisioning principles - as at the end of the year, provisions covered nearly 210 % of the volume overdue for more than 90 days.

In 2016, the Group continued to standardise its provisioning rules and maintained a risk-based approach. The ratings-based provisioning method established in 2014 is used for the business loan



portfolio. According to the above method, the highest provisioning rate is applied for the worst ratings. Rating 13 is established based on an indication of default specified in the internal rules of procedure. Where provisions need to be established, a specific provision is assigned for each customer. The provisioning parameters used for all loan categories are validated on a current basis, with the values changed where necessary. In 2016 LHV increased the LGD ratio for corporate loans from 25% to 30%.

All loan products, excluding the gain margin and repoloans (which are collateral based), rating or scoring system is used to measure clients credit risk. All credit products have application models, which outputs are used in credit decision making. Additionally there is developed portfolio scoring models and models covering loss given default (LGD) and credit conversion factor (CCF).

Client type	Segment	Definition	Application PD	Portfolio PD	LGD	CCF
		Legal entities with exposure				
Corporate	Large corporates	exceeding EUR 250 thousand	exceeding EUR 250 thousand Reiting methodolog		-	-
	Small and medium	Legal entities with exposure				
	entities	below EUR 250 thousand	Internal model	Internal model	Internal model	Internal model
		All private individuals				
	Mortgage loans	mortgage loans	Internal model	Internal model	Internal model	Internal model
		All private individuals retail				
	Retail loans in Estonia	loans	Internal model	Internal model	Internal model	Internal model
		All private individuals retail				
Retail client	Retail loans in Lithuania	loans	Internal model	Internal model	Internal model	Internal model

Table 5. Use of PD and LGD models

Corporate loan portfolio is the largest portfolio in LHV. At the end of 2016 this portfolio accounted for 69% of the total loan portfolio. Duing the year loans to corporates increased from EUR 214 million to EUR 287 million.

For the assessment of the credit risk on the loans to companies, LHV uses rating methodology since 2009. In 2012. Methodology was refined and was introduced the scale consisting from 13 ratings, where 1 represented the lowest credit risk rating (equivalent to Moody's rating on scale from Aaa), and the highest credit risk represets the 13 rating (called default).

Since autumn 2012 LHV started offering leasing products both to private and legal person. In addition the intermediation of insurance was started. Lesing portfolio by the end of 2016 reached EUR 41.3 million.

The leasing clients likelihood of insolvency is assessed through scoring models, different for private and legal entities. Outcome of the model is the probability of default during the following year.

LHV Pank began in May 2006 offering microloan. This loan is targeted to small entities in amount up to EUR 25 thousand for term up to 5 years. The loan is secured by personal guarantee and partially guarantee from European Investment Fund. At the end of 2016 portfolio reached EUR 2.8 million.

Prior to the issuance of the microloan, the creditworthiness of the person will be assessed by using the scoring model, the output is the probability of default of customer within the following year.



LHV started offering mortgage loans to its customers in 2013. In 2016 the regular home loan was introduced. At the end of 2016 portfolio reached EUR 35.4 million.

Similarly to other products also home loans and retail loans are assessed based the scoring model and client PD is calculated. Regulatory requirements are determining the maximum loan size and tenors.

LHV Pank issues credit cards in cooperation with Tallinna Kaubamaja. By the end of 2016 credit card portfolio reached EUR 4.9 million being increased by approximately EUR 1.3 million.

Prior to the issuance of the credit card, the creditworthiness of the person will be assessed by using the scoring model, the output is the probability of default of customer within the following year.

For credit cards, the impairments are made against potential losses based on general impairments methodology.

In January 2013 LHV Pank established subsidiary AS LHV Finance (ownership 65%), which main activity has been offering the hire purchase loans through the retail stores. In 2015, LHV started offering new product – small loan. By the end of 2016 the portfolio reached EUR 35.6 million.

Prior to the issuance of the loan, the creditworthiness of the person will be assessed by

using the scoring model. The portfolio quality and dynamics are monitored constantly.

In year 2013 LHV acquired in cooperation with Lithuanian investment company RAZFin 50% plus one share in Lithuanian finance company UAB "SNORO lizingas". After the purchase process, all loans were refinanced by LHV, new management was appointed and company was rebranded. The UAB "Mokilizingas" was confirmed as new company name.

At the end of 2016 Mokilizingas portfolio reached EUR 38.3 million. Company offers mostly two products: small loans and hire purchase.

Approximately 92 % of the total capital requirement for credit risk is associated with the loan portfolio (without considering the concentration risk). The remaining 8 % is divided between assets held with commercial banks, bonds, shares of LHV Varahaldus pension funds and other assets included in the balance sheet.

Majority of RWA is coming from corporate loan portfolio, which is clearly the largest portfolio. From that significant part would after implementing IRB changed to internal models. Therefore, the internal capital requirements with regard to these portfolios are lower than those calculated under standardized rules. On the whole, the internal capital requirement of the loan portfolio is 28 % lower than the standardized capital requirement.

### 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 70% the unexpected credit losses remain smaller that EUR 0.5 million. With probability of 99.99% the unexpected loss is EUR 20.9 million, which means that in case of crises happening once in 1000 years, the unexpected credit loss will not exceed EUR 20.9 million.

Otherwords it can be calculated that due concentration risk, unecpected credit losses are 12.7% 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 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 the organisation controls and monitors 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.

#### Foreign currency risk

Foreign currency risk may arise from acquisition of securities denominated in foreign currencies or foreign currency receivables and liabilities. The Risk Control Unit of LHV Pank is responsible for daily monitoring of open foreign currency positions. If the open currency position exceeds the internal or external limits set by the law, then measures are immediately implemented to close or reduce such positions (hedging the risk with relevant instruments, such as spot transaction, foreign currency forwards or futures).

#### Price risk

Financial instruments bearing price risk at the Group are mainly debt securities held in the trading portfolio and investment portfolio and available for sale portfolio. At the Group, limits are set for the size of the portfolios and acceptable credit quality ratings are specified for debt securities in the investment portfolio and trading portfolio. The Risk Control Unit monitors the compliance with limits. In addition, LHV Varahaldus mandatory shares in pension funds bear the price risk. Namely, pursuant to the Investment Funds Act, LHV Varahaldus as the management company has to own at least 1% of the number of units in each of the mandatory pension fund managed by it.

LHV Pank 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. LHV Pank's debt securities portfolio recognised at the market price is shortterm and of high quality, therefore, the effect of the changes in market risk premiums on the market value of the debt security portfolio as at 31.12.2016 should remain at around 1.0% according ot the performed stress-testing (2015: 1.0%.)

#### Intrest 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. 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 two 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 income based on the term structure of instruments currently in the statement of financial position;

 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 2016 remaining at the level of up to 1.0%. The interest rates of deposits maintained their level in 2016, at a maximum of 1%.

The operational interest rate risk management is the Group's Treasury's responsibility.

### 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 with regard to risks and controls, aimed at identifying, evaluating and monitoring operational risks liable to affect the attainment of the business objectives. In 2016, the Group continued paying special attention to further development of business continuity processes. Critical business processes have now been mapped, along with the preparation of business continuity plans, so as to swiftly respond to potential business interruptions and continue providing the services under normal conditions. In beginning of 2017 also exact list of business continuity plans were mapped.

The information received from monitoring operating risk helps to gather initial information to secure capital adequacy of the Group and to evaluate capital requirements. The analysis of cases collected into the database enables the Group to identify the flaws in rules of procedure, avoid making mistakes in the future and mitigate possible risks or define the terms of their acceptance. The risk control manager of the Group is responsible for collecting information. The operational risk database contains structured information on incidents that have been classified as operational risk and have caused LHV potential or actual damage. An analysis of the cases included in the database allows to identify potential weaknesses in the rules of procedure, prevent errors in the future, and mitigate potential risks or specify the conditions of acceptability of such risks. Operational risk incidents have been classified according to their criticality. The following two figures provide an overview of the number an volume of incidents (critical and major) and loss events in LHV's largest business unit AS LHV Pank and its subsidiary AS LHV Finance, broken down by years. In 2016, the losses were iinvreased by EUR 60 thousand. Largest part (59%) of operational losses were realted to credit card fauds. In 2017 3D Secure will be implemented, which should based on 2016 data reduce card frauds by 44%.

Even though the annual number of critical and major operational risk incidents decreased, the total number of incidents increased in 2016, where we had in total 60 incidents.

In 2016 KPI's were set both on LHV Group and Bank level for measuring and monitoring operational risk. Ratio of operational risk losses to own funds is used as one KPI.

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.

The Group's liquidity management and strategy is based on risk policies, resulting in various liquidity risk measures, limits and internal procedures. As per policy statements, the Group's liquidity management reflects a conservative approach towards liquidity risk.

LHV Bank is the only entity carrying liquidity risk inside LHV Group, as this is the only entity allowed to take deposits. Other entities are not allowed to take liquidity risk and if needed they are funded with match funding from Bank. These entities are not allowed to take funding from external counterparties. As LHV Bank is funding itself almost 100% from deposits, then the main liquidity risk rises from potential outflow of clients deposits.. The main refinancing risk raises also from client deposits, more specifically Bank might not be able to raise enough deposits to cover forecasted growth in assets.

LHV remains prgamatic in liquidity risk management and most important ist o ensure sufficent liquidity buffers in LHV Bank. The size of liquidity buffer depends on liquidity stress tests, contingency plans and business volumes forecasts.

In order to hedge liquidity risk, the probable net position of receivables and liabilities by maturities is regularly monitored and adequate amounts of liquid assets are kept in each time period. The Group's Treasury is responsible for the management of liquidity risk.

The liquidity buffer consists of cash and deposits with the central bank and liquid securities held by

the Group's Treasury, which can be readily sold or used as a collateral in funding operations with the central bank. The Group has a sufficient supply of liquid resources to enable issuing standby loans. Also the concentration of the Group's liabilities by maturities is monitored.

Alongside daily monitoring of liquidity risk, LHV also carries out the assessment of liquidity risk as stipulated in the internal rules for the management of liquidity risk (stress testing), by taking account of the change in assets and liabilities within the framework of the ICAAP simulation. The risk assessment serves to determine the bank's resilience (survival period) in the case of a crossmarket and idiosyncratic stress scenario. In order to measure the liquidity risk and identify the exposure to liquidity shortages, both contractual and behavioural positive and negative cash flows are examined without encumbering the value of liquid assets and their estimated changes. This allows to ascertain the bank's liquidity buffer for various time horizons. The accumulation of the figures allows to estimate the time period during which LHV Pank is able to maintain a positive liquidity buffer. At end of 2016 LHV keeps significant very liquid and low credit risk portfolio, which is able to cover internal stress tests and cover among other items minimal sustainability period of 3 months (including increasing loan portfolio and stress type scenario of deposit outflow).

In the event of a deep crisis, the liquidity position of LHV Pank is not expected to turn negative over a 12-month horizon as at 31 December 2016 (2015: no changes).

Internal metrics are complemented by the Basel III and banking regulation metrics - the Liquidity Coverage Ratio (LCR) and the Net Stable Funding



Ratio (NSFR). For both ratios minimum is set to 100%, although according to the currently available information NSFR will be imposed as minimum requirement from the year 2018. Group is fulfilling both of these ratios with significant margin.

#### Asset encumbrance

Asset encumbrance arises from collateral pledged against secured funding and other collateralised obligations. Group has used TLTRO funding and it's 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 2016 thre were no assets encumbered. No other encumbered positions were held by Group as end of 2015.

#### 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 plans to enter into international money market with single purpose of widen the funding sources.

### 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 LHV Pank 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 land and its potential for environmental contamination helps ensure any 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.

### Capital management

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 Group follows the general principles in its capital management:

- The Group 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;
- Capital of the Group 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.

LHV tries to keep excess capital on Group level to have possibility to support subsidiaries in case there is need for that. LHV has developed also plan how to act during the capital shortage internally and what external items Group could use for lowering riskweighted 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.

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.

### 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.