Diagnostic report on the Estonian capital market

SRSS Local Currency and Capital Markets Initiative TC Framework
Estonia - Capital Markets Diagnostic
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BIF</td>
<td>Baltic Innovation Fund</td>
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<tr>
<td>CEE</td>
<td>Central and Eastern Europe</td>
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<td>CSDR</td>
<td>Central Securities Depositories Regulation</td>
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<td>EAS</td>
<td>Enterprise Estonia (Ettevõtluse Arendamise SA)</td>
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<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
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<td>EC</td>
<td>European Commission</td>
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<td>ECB</td>
<td>European Central Bank</td>
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<td>ESIOP</td>
<td>Economy Development and Innovation Operative Program</td>
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<td>EFSA</td>
<td>Estonian Financial Supervision Authority</td>
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<td>EIB</td>
<td>European Investment Bank</td>
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<td>EIF</td>
<td>European Investment Fund</td>
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<td>ESMA</td>
<td>European Securities and Markets Authority</td>
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<td>EstBAN</td>
<td>Estonian Business Angels Network</td>
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<td>EstVCA</td>
<td>Estonian Private Equity and Venture Capital Association</td>
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<td>ETF</td>
<td>Exchange-traded fund</td>
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<td>EU</td>
<td>European Union</td>
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<td>EUR</td>
<td>Euro</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>GDR</td>
<td>Global depository receipt</td>
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<td>HNWI</td>
<td>High-net-worth individual</td>
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<td>ICO</td>
<td>Initial coin offering</td>
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<td>IBRD</td>
<td>International Bank for Reconstruction and Development</td>
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<td>ICSID</td>
<td>International Centre for Settlement of Investment Disputes</td>
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<td>IDA</td>
<td>International Development Association</td>
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<td>IESE</td>
<td>IESE Business School Universidad de Navarra</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>IPO</td>
<td>Initial public offering</td>
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<td>ITO</td>
<td>Initial token offering</td>
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<td>JEREMIE</td>
<td>Joint European Resources for Micro to Medium Enterprises</td>
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<td>MiFID</td>
<td>Markets in Financial Instruments Directive</td>
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<td>MIGA</td>
<td>Multilateral Investment Guarantee Agency</td>
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<td>MSCI</td>
<td>MSCI Inc. (Morgan Stanley Capital International)</td>
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<td>MTF</td>
<td>Multilateral trading facility</td>
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<td>OECD</td>
<td>Organisation of Economic Co-operation and Development</td>
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<td>PE</td>
<td>Private equity</td>
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<td>PwC</td>
<td>PricewaterhouseCoopers</td>
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<td>SAFE</td>
<td>Survey on the Access to Finance of Enterprises</td>
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<td>SME</td>
<td>Small and medium-sized enterprises</td>
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<td>SRSS</td>
<td>Structural Reform Support Service</td>
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<td>STP</td>
<td>Straight-through processing</td>
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<td>T2S</td>
<td>TARGET2-Securities platform</td>
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<td>VC</td>
<td>Venture capital</td>
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Executive Summary

This capital markets diagnostic was funded by the EU via the Structural Reform Support Programme and implemented by the EBRD, in cooperation with the European Commission’s SRSS. The aim of the diagnostic was to identify market gaps, find alternative solutions via international benchmarking and generate recommendations on how to fix them. The diagnostic can be used as a basis for creating a long-term development plan for the Estonian capital market.

The diagnostic provides an overview and the main characteristics of the infrastructure, investors, available products and legal environment of the Estonian capital market. The diagnostic is based on analysis of previous research, statistical data and current laws. The primary data analysis was complemented with about 40 interviews and 2 workshops with Estonian capital market participants. Additionally, interviews were conducted with foreign institutional investors and supporting bodies to gain an international perspective of the Estonian equity market, stock exchange and legislative framework.

The backbone of the Estonian capital market comprises the local Nasdaq Tallinn and the Nasdaq CSD SE, which acts as the regional central securities depository in the Baltics, with a business presence in Estonia, Latvia and Lithuania. Nasdaq Tallinn is the only regulated securities market in Estonia that manages four market categories for different financial instruments (main and secondary lists for equities, bond list and fund list). The Estonian stock exchange saw dramatically decreased trading activity following the 2008-2009 recession. Although the trading volumes have not returned to the pre-recession peaks, the volumes have started to increase once more in the last 3-4 years. One of the issues for the Estonian capital markets is the classification as a frontier market by large index providers such as MSCI, instead of being classified as an emerging market, which would increase investment flows to stocks listed in the country. MSCI classifications are by far the most influential when it comes to investments.

The regionally active Nasdaq CSD SE is the only provider of securities settlement services in Estonia. Nasdaq CSD SE uses the EU-wide T2S settlement platform, but direct two-way links with CSDs are currently not in place. There are, however, plans underway to open the first two-way link in the near future in order to improve the situation.

There are 14 companies listed on the main list of Nasdaq Tallinn and a further 3 listed on the secondary list. The market capitalisation of Nasdaq Tallinn is about EUR 2.6 billion (as of May 2018), which is only 13 % of GDP – one of the lowest ratios in the EU. The share of the market capitalization of companies listed on an emerging stock exchange is usually dominated by large banks and telco companies, but this is not the case in Estonia. Currently, there is only one publicly traded bank on Nasdaq Tallinn. The largest companies on Nasdaq Tallinn are Tallink (capitalisation EUR 703 million), Tallinna Sadam (EUR 505 million) and Tallinna Kaubamaja (EUR 371 million) as of June 2018. In addition to listed companies, Nasdaq Tallinn also operates a small bond market, although it has a limited number of listed bonds with very low trading activities. One reason for this is the absence of Estonian government bonds, as Estonia has managed to fund its rather small government debt by other means.

In addition to a steadily improving regulated market, the Estonian capital market can boast impressive and advanced alternative financing platforms. The alternative platforms (crowdfunding, P2P lending, etc.) have gained a significant amount of momentum since the 2008-2009 recession, as the total volume of alternative platforms per capita in Estonia was second only to the UK (2016). While their volumes are not comparable to traditional financing instruments, alternative platforms have become an important part of the Estonian financial ecosystem.

When companies look for additional funding, the preferred instrument in Estonia is a regular bank loan. Banks are the main source of financing for most Estonian companies and, as bank loans can also be considered one of the cheapest sources of financing, the current situation is at least
satisfactory in that respect. This is particularly true as the interest rates of loans to Estonian companies are about a half of those in countries like Ireland, Poland and Croatia, as outlined later in this report. The problem is also due to a lack of awareness, as Estonian companies are often ignorant of other possible financing options.

The PE and VC funds have shown remarkable growth in the last 3 to 4 years. Much of it comes down to initiatives such as BIF and EstFund, which have encouraged the growth of local PE and VC funds. This has already led to tangible results, as the volume of private equity investments in the Estonian economy has increased from 0.147 % of GDP in 2013 to 0.361 % of GDP in 2016, which is, in fact, higher than the EU average (0.329 % of GDP). In addition, Estonian business angels have become active. EstBAN, the umbrella organisation for business angels, reported that they had 5 times as many members in 2016 than they did in 2013, and both the total amount and number of investments have steadily grown. According to the market statistics of the European Business Angel Network 2017, Estonia is one of the leading nations when it comes to angel investments as a percentage of GDP.

Retail investment activity has, however, remained at rather low levels. Against this backdrop, the volume of deposits continues to rise and reached EUR 6.8 billion in 2017, of which 76 % were demand deposits. The most preferred investment instrument is real estate, followed by bank deposits, with only about one household in five considering investing in shares as a suitable investment vehicle. The government created an investment account system in 2011 and it has been a moderate success, as there are now almost 5 000 declared investment accounts, although some popular investment vehicles (e.g. equity crowdfunding) have been denied access to the benefits of an investment account (ability to delay income tax).

Pension funds have just recently seen more opportunities to invest in Estonia. The mandatory Estonian II pillar pension system has generated pension funds with impressive amounts of capital (EUR 3.8 billion as of the end of 2017). The Investment Funds Act of 2016 gave pension funds more opportunities and, although the pension fund system is cautious, pension fund investment in Estonia more than doubled in 2017. However, with only about 11 % of pension fund assets held in Estonia, Estonian pension funds invest noticeably less in the domestic market compared to many other countries.

Estonian insurance companies hold slightly fewer assets than the norm for developed countries. The total assets of insurance companies were 8.7 % of GDP in 2017, while the EU average is about two-thirds of GDP. Insurance funds favour secure and liquid investment instruments, which explains why they hold about 65 % of their assets in government bonds. Another 20 % is held in investment funds, which are also very liquid. While exact data are not available, interviews revealed that insurance funds are almost exclusively investing abroad.

Overall, the regulatory framework in Estonia is well developed, although market participants noted some shortcomings, such as the strict definition of an investment account and ambiguity around subordination agreements in bankruptcy proceedings. Another issue is opening securities accounts, for which one needs a bank account, and banks have taken a very conservative line towards non-residents due to anti-money laundering laws. There is no regulation in place covering alternative financing platforms, although the Ministry of Finance is currently considering if and when regulation will become necessary to protect both the investor and platforms.

To improve the current situation, market gaps were identified with input from market participants. Market gaps cover areas such as the perceived too high overall IPO costs especially for SMEs, difficulties in opening securities accounts, rigid rules on bank loans, the preference of pension funds towards foreign markets, low financial literacy and others.

Improvement levers were identified for each market gap that were verified by market participants. For example, too high IPO costs could be mitigated by the development of a support mechanism for companies interested in IPO, while non-existent regulation on crowdfunding could be solved by waiting for EU-wide regulation, creating a new law from scratch or adopting current best practices into regulations. At the same time, exiting investments could be made easier for PE and VC funds by further development of the First North alternative stock market and pension funds would benefit from being...
included more in future policy discussion to increase their investments in Estonia.

The capital markets diagnostic gives an overview of the Estonian capital market, lists existing market gaps and proposes improvement levers to overcome the identified barriers. Further analysis of the effect on the implementation of the proposed recommendations was not part of the current diagnostic, which means that further analysis is needed before acting on current recommendations.
Key recommendations

This section summarises the key recommendations for development of the Estonian capital market. The key recommendations are determined based on the findings of the capital market assessment and in collaboration with the main local stakeholders from each capital market segment.

Amongst the recommendations are some proposals that have already been under discussion or put into action; these were positively noted by stakeholders and should therefore be continually on the table.

It is important to emphasise that the proposed improvement levers are not complete solutions; rather they should give direction and input for further discussion.

The recommendations are addressed to the government and to market players, as both could influence and consolidate the development process in many aspects through their activities. It is also indicated as to whether the impact is expected in the short term or long term.

The key recommendations presented in the table below are the main outcomes of the analysis, as agreed with the stakeholders during the workshops.

Further content, additional improvement levers, references to specific problems and possible impacts are analysed in Chapter 6.

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Timeline</th>
<th>Responsible institution</th>
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<tbody>
<tr>
<td>Develop a <strong>long-term strategy</strong> for development of the Estonian capital market that is measurable and public. The strategy should cover all capital market segments and Instruments (issuing <strong>government bonds</strong> could be one such high impact measure to include in the action plan).</td>
<td>Short-term</td>
<td>Government</td>
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<tr>
<td>Create state-supported pre-listing <strong>instruments for SMEs</strong> to assist them in the resource intensive and costly IPO preparatory process, in order to increase the access of SMEs to capital market financing.</td>
<td>Short-term</td>
<td>Government, Nasdaq Tallinn</td>
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<td>Develop <strong>clear guidelines with respect to AML regulations</strong> to support market participants when on-boarding new customers, especially non-residents. The availability of detailed guidelines would facilitate a common understanding of how to interpret and apply the strict obligations deriving from AML legislation.</td>
<td>Short-term</td>
<td>Government, Market participants</td>
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<tr>
<td>Create a <strong>new deposit account system</strong> to ensure a smoother and easier process when opening a securities account.</td>
<td>Immediate</td>
<td>Government</td>
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<td>Recommendations</td>
<td>Timeline</td>
<td>Responsible institution</td>
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<td>Attract international post-trade institutions (e.g. Clearstream) to Estonia to</td>
<td>Short-term</td>
<td>Market participants, Government</td>
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<td>increase the access of international investors to the Estonian capital market.</td>
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<td>The creation of links between central securities depositories and working with</td>
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<td>different counterparties would ease investing in Estonia.</td>
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<td>Improve the financial education system and continue on-going educational</td>
<td>Long-term</td>
<td>Market participants, Government</td>
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<td>activities (e.g. seminars, workshops and investor events) in order to increase</td>
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<td>the number of Estonian retail investors and to raise their awareness about</td>
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<td>different investment opportunities (e.g. alternative platforms, stocks and bonds)</td>
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<td>and associated risks.</td>
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<td>Analyse in more detail whether there is a possibility to strengthen minority</td>
<td>Short-term</td>
<td>Government, Nasdaq Tallinn</td>
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<td>shareholder protection. Respective legislation should be reviewed and it should</td>
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<td>be considered whether to introduce additional internationally recognised</td>
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<td>principles and requirements for publicly traded companies.</td>
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<td>Reflect more on positive examples where the interests of minority shareholders</td>
<td>Short-term</td>
<td>Government, Market participants</td>
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<td>have prevailed and successful investment cases have been completed. The</td>
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<td>presentation of success stories would encourage both retail investors and SMEs</td>
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<td>to be more active.</td>
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<td>Draft regulation for crowdfunding platforms that first and foremost set rules</td>
<td>Short-term</td>
<td>Government</td>
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<td>on the disclosure obligations to provide greater protection of investor rights.</td>
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<td>At the same time, the rules should not be overly burdensome to prevent the</td>
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<td>swift development of the platforms.</td>
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<tr>
<td>Develop a set of measures in collaboration with pension funds that would</td>
<td>Short-term</td>
<td>Government, Pension funds</td>
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<td>increase the attractiveness of the Estonian capital market for pension fund</td>
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<td>investments.</td>
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Introduction

The Estonian macro-economic environment has developed fast and successfully for more than 20 years. Both the private and public sectors both support innovative approaches, utilise solutions offered by new technologies and improve the overall user experience in most sectors. In general, the business climate and policies are favourable. Globally, Estonia has the image of an e-country, which is reflected in the everyday usage of high value technological solutions.

Despite favourable conditions, the Estonian capital markets have remained inactive and illiquid, mainly due to issues related to limited demand and supply. As a well-developed local capital market is an important driver of economic growth, it is important to investigate all the key areas that could affect the capital market’s development process.

As a result, the Estonian Ministry of Finance engaged the EBRD and the SRSS of the EC to launch the capital markets diagnostic study that was funded by the EU. The study was carried out by Civitta Eesti AS and Advokaadibüroo SORAINEN AS and was conducted during the period of 22 February to 30 September 2018.

Objective and scope

The overall objective of the project was to support the development of the Estonian capital market. The specific tasks of the project were to conduct a diagnostic study on the current state of affairs of the capital markets in Estonia, to identify development barriers and to recommend improvement levers to enhance further development. The project also covers legal aspects and includes a peer-to-peer review for seeking best practices and successful policy examples for reference.

The study focuses on a variety of capital market aspects, including debt, equity, the banking sector and capital market infrastructure, and it includes an overview of the macro-economic situation and the legal and regulatory framework. Recently developed instruments and solutions (e.g. ICO transactions, the cryptocurrency market, etc.) are only covered to a limited extent, as these instruments are not yet widely known and quite disputed.

The main aim of the project was to assess the capital market and to identify improvement levers. The findings of this project provide a solid base for the preparation of a capital market development strategy and implementation plan by policy makers.

Methodology

Throughout the project, the main Estonian capital market stakeholders and market players, in terms of supply and demand, as well as representatives from infrastructure platforms, support services, organisations and policy makers were involved in ensuring that the results reflect the real market conditions and expectations.

The project implementation consisted of three stages:

1. The project began with the analysis of secondary data, market statistics, and relevant laws and regulations. Furthermore, face-to-face interviews with market players were conducted to obtain information for the qualitative assessment of the market. Based on the findings, the overall capital market ecosystem status quo was assessed.

2. The second stage focused on the identification of market gaps and barriers. The preliminary set of identified market gaps and barriers was prepared and presented to the market players at the first workshop. The feedback and additional input received at the workshop led to an adjustment of the barriers and gaps and their prioritisation.

The purpose of the benchmarking exercise was to compare the Estonian capital market with international best practices. In cooperation with EBRD and the Ministry of Finance, Croatia, Finland, Ireland, Luxemburg and Poland were chosen as the main reference jurisdictions throughout the study, as their capital markets are similar to the Estonian capital market in terms of history, volume or location.
Some other foreign countries were also analysed as part of the international benchmarking exercise with the aim of exploring best practices in specific areas (e.g. common practice in Singapore, UK, Finland and Lithuania regarding crowdfunding platforms, Sweden’s approach to financial literacy, etc.).

The main reference countries were also used throughout the report to illustrate or compare the Estonian capital market status.

Additionally, interviews with foreign investors were conducted to validate whether and to which extent the determined gaps and barriers would influence their decision to invest in the Estonian capital market.

3. Based on the market consultations and benchmarking results, recommendations and improvement levers for the development of the Estonian capital markets were drafted and discussed with the key stakeholders at the second workshop. The recommendations presented in this report were developed by taking the opinions of the market players into consideration.

A more detailed description of the methodology is presented in Annex 1. The interviewed market players and workshop participants are presented in Annex 2.

**Structure of the Report**

Due to the project stages and objectives, the diagnostic report is structured into eight chapters.

The first chapter examines the macro-economic and regulatory environment, and it analyses the recent developments and preconditions of further growth of the Estonian capital market. It also categorises all the market players and stakeholders by their roles and gives an overview of their volumes. The approach in the subsequent chapters continues with the same categorisation.

Chapters 2, 3 and 4 concentrate on the infrastructure and demand side (investor base). All the chapters have subchapters that analyse the current market situation and volumes, recent developments and the main problems faced by the different stakeholder groups.

Chapter 5 examines the legal and regulatory framework.

Chapter 6 analyses the identified market gaps and barriers. Only the problems that were identified as the most crucial ones were analysed in greater detail. The full list of all revealed gaps and barriers is presented in Annex 3. Chapter 7 continues with the international benchmarking.

Chapter 8 presents a set of sequenced recommendations to facilitate development of the Estonian capital market. These are prioritised based on an assessment of how critical the respective measure are for the development of the local capital market, while the sequencing also tries to consider the ease of implementation of the measure and the timeline required to implement it.

The report ends with general conclusions and Annexes.

**Disclaimers**

While interpreting the content and results of the report, the following disclaimers should be considered.

It must be noted that the statements and views expressed in the report are based on interviews with stakeholders and therefore may be subjective. The interview results are not triangulated with the wider sample of stakeholders to preserve the integrity of the views expressed.

The analysis only included capital market instruments and stakeholders that are an integral part of the local market and could be influenced by local policy decisions. For these reasons, foreign financial products were not considered in the assessment.

The report focuses on the assessment of the current market situation and presents a variety of recommendations for supporting further capital market development. It does not provide complete solutions.
1. Environment and Recent Trends

1.1. Macroeconomic Environment

After joining the European Union in 2004, Estonia experienced extremely fast economic growth but this, largely debt-fuelled, growth ended in a bubble and a 2008-2009 recession saw a 20 % reduction in Estonian GDP. Estonia managed to overcome the difficulties and returned to growth in 2010, which was further boosted in 2011 with the adoption of the Euro. This has also reduced unemployment, which stood at 16.6 % during the recession. While there is a shortage of skilled workers, about 6 % of the active workforce is still unemployed.

From 2013 onwards, economic growth has been rather timid, at around 2 %, and only reached as high as 4.9 % in 2017. The Ministry of Finance’s prognosis shows that the next five years should also bring steady growth of 3 % per year. The main contributors to growth have been information and communication technology, construction and professional, scientific and technical activities. Looking ahead, lower levels of foreign direct investment could undermine future growth prospects.

Estonia was struggling with inflation up until 2008, but inflation has largely been in check since then, with some deflationary pressures observed in 2014 and 2015. As can be seen in Table 1, Estonian government debt is very low, the lowest in the EU. While private sector debt and external debt rose quickly before the recession, the situation has now stabilised. This is illustrated by the long-term local and foreign currency sovereign credit rating assigned to Estonia by Standard & Poor’s (AA-, stable outlook), Moody’s (A1, stable outlook) and Fitch (A+, positive outlook). Business and consumer confidence levels have also recovered since the crisis.

Estonian tax laws favour investments, as there is no income tax for retained and reinvested profits for corporations. Retail investors have the opportunity to delay income tax on profits that they intend to reinvest (but only when they use an investment account). However, Estonian labour taxes can be considered higher than average, as the tax wedge for a single worker was 39 % in 2016, which is a slightly higher than OECD average of 35.9 %. In recent years there have been changes to income tax regulation and increases in excises.

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<tbody>
<tr>
<td>GDP growth</td>
<td>2.3</td>
<td>7.6</td>
<td>4.3</td>
<td>1.9</td>
<td>2.9</td>
<td>1.7</td>
<td>2.1</td>
</tr>
<tr>
<td>Inflation (average)</td>
<td>3.0</td>
<td>5.0</td>
<td>3.9</td>
<td>2.8</td>
<td>-0.1</td>
<td>-0.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Current account balance, m EUR</td>
<td>265.2</td>
<td>222.5</td>
<td>-349.6</td>
<td>98.5</td>
<td>51.4</td>
<td>397.5</td>
<td>400.3</td>
</tr>
<tr>
<td>Current account balance/GDP</td>
<td>1.8</td>
<td>1.3</td>
<td>-1.9</td>
<td>0.5</td>
<td>0.3</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Net FDI/GDP (neg. sign = outflows)</td>
<td>13.3</td>
<td>4.8</td>
<td>7.8</td>
<td>4.4</td>
<td>6.7</td>
<td>-3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Public debt/GDP</td>
<td>6.6</td>
<td>6.1</td>
<td>9.7</td>
<td>10.2</td>
<td>10.7</td>
<td>10.0</td>
<td>9.4</td>
</tr>
<tr>
<td>External debt/GDP</td>
<td>112.1</td>
<td>100.3</td>
<td>100.1</td>
<td>93.1</td>
<td>96.4</td>
<td>94.3</td>
<td>90.4</td>
</tr>
<tr>
<td>Domestic credit to private sector/GDP</td>
<td>93.0</td>
<td>78.1</td>
<td>72.8</td>
<td>69.4</td>
<td>68.2</td>
<td>69.9</td>
<td>71.9</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>16.7</td>
<td>12.3</td>
<td>10.0</td>
<td>8.6</td>
<td>7.4</td>
<td>6.2</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Table 1. Key macroeconomic indicators.
Source: Statistics Estonia

2 Rahandusministeeriumi kevadine majandusprognoos 2018
While growth has been steady, Estonia is still among the least developed countries in the EU. The current level of development is illustrated in Figure 1, which shows that Estonian real GDP per capita is slightly higher than Polish or Croatian GDP, though marginally so. At the same time, the GDP per capita of Finland and Sweden is much higher. The GDP per capita figures for Ireland and Luxembourg are not representative, as the size of their economies is distorted due to large international corporations and a significant number of foreign workers/consumers. The current situation is largely the outcome of historical experiences, as Estonia regained its independence from the USSR in 1991, Poland was under communist rule from 1945 to 1989 and Croatia declared independence from Yugoslavia in 1991. Finland, Ireland, Luxembourg and Sweden have enjoyed a free market and relatively stable political system for a much longer period. This also influences capital market and financial institutions, as Estonia (along with Poland and Croatia) has only been able to develop its capital market in the last 25 years, while Finland, Sweden, Luxembourg and Ireland have had much more time to reach their current level.

While economic growth was extremely fast prior to the 2008-2009 economic crisis, Estonia has experienced steady and reliable growth since then, and at present there are no signs that this growth might end. This is illustrated by the fact that the Estonian GDP per capita in the PPS (Purchasing Power Standard) EU28 Index rose from 69 in 2008 to 77 in 2017, which shows that the Estonian economy is growing faster than the EU average.5

1.1.1. Entrepreneurs in Estonia

Estonians have been active in founding new companies in the last ten years. In 2006, there were only 48,000 registered companies in Estonia, whereas the number was 82,000 in 2016. As in the rest of the EU, the large majority of Estonian enterprises are SMEs, 91% of which have fewer than 10 employees (Table 2). There are only 176 large companies with more than 250 employees in Estonia. The structure of enterprises is very similar to the EU as a whole, where 99.8% of all active enterprises are SMEs.

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<tr>
<td>1-9 employees</td>
<td>89.87%</td>
<td>90.44%</td>
<td>90.61%</td>
<td>90.66%</td>
<td>90.98%</td>
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<td>10-49 employees</td>
<td>8.25%</td>
<td>7.79%</td>
<td>7.62%</td>
<td>7.64%</td>
<td>7.24%</td>
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<td>50-249 employees</td>
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<td>&gt;250 employees</td>
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Table 2. Ratio of differently sized enterprises as a percentage of all enterprises. Source: Statistics Estonia.

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5 GDP per capita in PPS. Eurostat.
Figure 2 illustrates the overall development of Estonian enterprises:

- While the number of loss-making companies has stayed relatively stable since the financial crisis (around 20 000 enterprises), the number of profitable companies has increased by more than 50% (to 61 000 enterprises).
- Most of the profitable companies do not make substantial profits. In 2016, 54% of them had a profit below EUR 9 999 and 36% made a profit between EUR 10 000 and EUR 99 999.
- The number of highly profitable companies has risen 76% from 2010 to 2016, reaching 6 200 companies that earn a profit higher than EUR 100 000 a year.

The Estonian economy as a whole is considered an advanced, services-dominated economy. This is also illustrated by Figure 3, which shows that...
In regard to export and import, the goods and services trade balance is and has been positive since the economic crisis. The trade balance of goods has been negative since the 2008-2009 recession, while the trade balance of services has been positive. According to Eesti Pank (Bank of Estonia), the trade balance of goods and services was EUR 1 billion in 2017.6 Estonia’s main trading partner is the European Union, with about 73% of all exports going to the EU and 82% of all imports coming from the EU. The largest export articles are electrical equipment, wood and articles of wood, and mineral products. The largest import articles are electrical equipment, vehicles, and machinery and mechanical appliances.7

7 Exports and imports of goods by commodity (CN) and country 2017-2018. Statistics Estonia.

The Estonian government has demonstrated its ability to adapt quickly to new situations. While the country is relatively young and the economy is still developing towards high-tech industries, the government has tried to make the Estonian business environment one of the best in the world.

This is expressed by the dedication to openness, ease of doing business, easy interaction with state authorities, favourable tax code and other factors. Estonia’s competitiveness can also be illustrated by its ranking in various indices:8

- 1st – OECD Tax Competitiveness Index 2017
- 1st – Entrepreneurial Activity, World Economic Forum 2017
- 1st – Internet Freedom, Freedom House 2016 (sharing 1st place with Iceland)
- 7th – Index of Economic Freedom 2018, The Heritage Foundation
- 9th – Digital Economy and Society Index 2017, European Commission

1.1.2. E-Residency in Estonia

Estonia has become the first country to offer a government-issued digital ID that is available for anyone in the world. The e-Residency programme has seen more than 39 000 people from all over the world receive their digital ID, which allows users to easily start and run businesses in a trusted EU environment.

The E-Residency programme is most popular among Finns, as almost 10% of all approved applications originate from there. Russians, Ukrainians, Americans and Germans are also active participants in this new opportunity. Since the introduction of the e-Residency programme, Estonian e-Residents

have established almost 4,000 new companies in Estonia, while the total number of companies owned by e-Residents is 6,300 as of May 2018. According to Deloitte’s economic analysis of the e-Residency programme, it has brought Estonia an estimated EUR 1.4 million in net income and EUR 13 million in net indirect socio-economic benefits. The e-Residency programme should attract foreign businesses (also investors) to Estonia, granting them relatively easy access to the Estonian (and EU) market. This should also bolster capital markets, as both supply and demand for capital should increase. According to the foreign investors that were included in the conducted interviews, the e-Residency programme makes it significantly easier to conduct business in Estonia and to invest in local companies. The amount of paperwork needed for foreign investors participating in the Estonian capital market is reduced.

1.2. Evolution of the Capital Market

When Estonia gained its independence in 1991, the whole market economy needed to be created from scratch. Since then, some areas have developed at a faster pace than others (e.g. IT), and the same can be said when looking more closely at the capital markets (e.g. traditional bank sector, mainly due to the presence of mature Scandinavian banks). The whole Estonian financial sector is being concentrated in the capital, Tallinn. The 1990s saw many new banks emerge all over Estonia, but many of them went bankrupt while others consolidated. Today, almost all the headquarters of Estonian financial institutions are located in Tallinn.

Credit institutions, especially the banking sector, can be considered the best developed area of the financial sector in Estonia. When international Swedish banks acquired two of the largest Estonian banks in the 2000s, they also brought with them a significant amount of experience, which has led to the growth of a modern and trustworthy banking sector. While the banks have enjoyed successful stability, other areas of the capital markets have not been so lucky. Tallinn Stock Exchange has not seen a return to pre-recession trading volumes, when there were more listed companies and turnover was much higher. The same applies to investment funds, which sustained considerable losses during the recession and are still in the process of recovery.

In general, however, the situation is slowly improving. Many market participants mentioned during the study that capital markets need more time to evolve and develop as they deal in long-term financing.

Appropriate policies that favour growth are important for continued sustainable development. In this instance, many market participants have praised the work done by the EIF and the BIF, as these have kick-started equity investments in all three Baltic countries. The BIF represents a EUR 52 million investment by the EIF with each Baltic nation committing a further EUR 26 million through their respective national agencies (in the Estonian case, Kredex). The investment process for the BIF began in 2013 when EIF started to process transactions with selected fund managers. The projected operation period of BIF is 10 years. The EIF is a manager of the BIF and looks towards VC, PE and mezzanine funds with a proven track record and understanding of the Baltic market. The BIF can also co-invest alongside others in early to growth phase SMEs. Market participants have acknowledged that the requirement of prior experience has been crucial in the current success, as the BIF has so far invested in funds that have proven they can manage and grow their resources. The BIF investments have helped four Estonian PE and VC funds raise new funds that are investing in local companies. Creating new PE and VC funds aimed at SMEs would be almost impossible without the BIF; according to market participants, there is simply

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not enough available capital in local markets, and foreign investors are reluctant as they have had limited prior experience with Baltic countries.

Pension funds have also added some momentum in the development of the Estonian capital markets. To date, the relatively stable pension system has accumulated a respectable amount of capital in the last 10 years, and pension funds have been able to invest in Estonia more easily thanks to the new Investment Funds Act. Pension funds have invested EUR 348 million in the Estonian economy as of 2017, which is almost twice as much as in 2016. The upwards trend should continue, as some experts project that the investment of pension funds into the Estonian economy could reach EUR 2 billion by 2023.\(^\text{12}\)

While funds have benefited from growth-oriented policies, the stock market has lagged behind. New IPOs have been rare, but buyouts still happen and overall stock market activity has fallen. This becomes evident when comparing the turnover and number of transactions in the stock exchanges in 2007 and 2017. As can be seen in Figure 5,\(^\text{13}\) the turnover has decreased about ten-fold since 2007, while the number of transactions has more than halved during the same period. The extraordinary difference can be explained by the very optimistic bull market leading up to the 2008-2009 economic downturn. Many Estonians saw equity investments as an easy way to increase their wealth, but the recession brought with it a drastic bear market, which meant that people lost a large portion of their savings. It could be said that Estonians and Estonian investors learned their lessons the hard way and are now much more conservative, although the stock market is again gaining some momentum. For example, in June 2018, the government decided to offer 33% of Tallinna Sadam (Port of Tallinn) to investors through an IPO, and one of the goals of the IPO was to promote the local capital market.

A weak stock market may turn people’s interest to other ways of investing, such as crowdfunding platforms. These new platforms do not command very large amounts of investments (compared to other sectors), but they are quite popular among retail investors. As their popularity rises, so does the need for regulation. In attempting to prevent, or at least control, the situation, FinanceEstonia and Deloitte Legal created the Best Practice for Crowdfunding in 2016,\(^\text{14}\) with which crowdfunding firms aim to self-regulate themselves.

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**Figure 5. Nasdaq Tallinn Stock Exchange number of trades and turnover.**
Source: Nasdaq Tallinn

The Estonian economy as of 2017, which is almost twice as much as in 2016. The upwards trend should continue, as some experts project that the

\(^{12}\) Pension funds could invest €1-2 billion in Estonia in coming years.

\(^{13}\) Market statistics.

\(^{14}\) Crowdfunding Best practice.
With a growing number of investors, the ecosystem for investors is also developing. In recent years, Estonian authors have published books about investing and there are many blogs with people sharing their investing experiences. In addition, investment clubs and seminars have also become quite popular and there is also an investment club for women. LHV bank has created a platform for retail investors to share their experiences, which is also quite popular. In general, a newcomer to investing can quite easily find the necessary information to start their activities. More professional investors can look towards organisations such as EstBAN and EstVCA. EstBAN was established in 2012 and acts as an umbrella organisation for business angels and business angel groups who seek investment opportunities in Estonia. The Estonian Private Equity and Venture Capital Association targets even more professional market participants such as investment funds, banks, legal advisers and others. Their objective is to foster professional growth in professionals, manage the whole investment industry’s public relations, enhance cooperation, etc. FinanceEstonia is another important financial sector cluster organisation that aims to develop financial services and increase investment opportunities.

1.3. Regulatory Environment

A significant part of the regulatory framework in Estonia with respect to capital markets derives from EU legislation. In recent years, Estonia has amended local legislation in order to transpose and ensure compliance with all the relevant EU regulations and directives impacting the capital market, including the Market Abuse Regulation (MAR, (EU) 596/2014) and the Market Abuse Directive (2014/57/EU), the Markets in Financial Instruments Directive (MiFID II, 2014/65/EU) and the Markets in Financial Instruments Regulation (MiFIR, (EU) 600/2014), the Central Securities Depositories Regulation (CSDR, (EU) 909/2014) and the Fourth AML Directive (2015/849/EU).

A draft law to amend the Estonian Securities Market Act has been prepared by the Ministry of Finance to ensure that the Estonian legislation complies with the new Prospectus Regulation (EU 2017/1129), Regulation on Benchmarks (EU 2016/1011), Securitisation Regulation (EU 2017/2402), Regulation on Money Market Funds (EU 2017/1131) and to transpose the Directive as regards the encouragement of long-term shareholder engagement (EU 2017/828).

The Ministry of Finance has prepared a draft law on covered bonds in order to create an opportunity for banks to issue covered bonds and for investors to invest in them, thereby broadening the Estonian capital market. The Ministers of Finance of the Baltic states signed the memorandum of understanding to restart the capital markets in November 2017. It was also agreed to establish a pan-Baltic covered bond market. The current draft law does not address the pan-Baltic dimension. Adding further provisions to the draft law that is necessary for the functioning of a pan-Baltic covered bond market is currently being conducted with the support of the EBRD and the European Commission. The law should enter into force on 1 January 2019, if everything proceeds as planned.

A more comprehensive overview of the current legal framework is provided in Chapter 5 of the report.

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17 Veel üks investeerimisblogi. https://rahajutud.ee/category/blogid/veel-yks-investeerimisblogi/
18 Investeerimisklubi. https://investeerimisklubi.ee/
19 Naisinvestorite klubi. https://naisinvestoriteklubi.ee/
20 EstBAN. http://www.estban.ee/
21 EstVCA. http://www.estvca.ee/
1.4. Overview of Market Players and Stakeholders

The Estonian capital market and its participants can be divided into five separate groups based on their roles in the marketplace. These groups contain separate subcategories. The following page features the scheme that illustrates the current situation, contains capital market groups and gives examples of the participants.

These groups contain separate subcategories:

1) The demand side includes investment funds, private and venture capital funds, banks and credit institutions, pension funds, retail investors, insurance companies and HNWI, which also includes business angels, HNW families and family offices. The institutions and individuals that represent the demand side of the market are keen to make investments in the supply side of the capital market. Banks and credit institutions are the most substantial part of the demand side and the Estonian capital market overall – at the end of 2016, bank assets amounted to EUR 24.4 billion, or 117% of GDP. Pension funds are the second biggest, with a total volume of EUR 3.7 billion, or 16% of GDP.

2) The supply side contains companies listed on Nasdaq Tallinn or Nasdaq First North, large private companies (250+ employees), SMEs (10+ employees), start-ups, custodians, mutual funds, hedge funds and foreign products. Companies in this category are interested in the growth of their companies and financing their future activities, for which they need capital from the demand side. Companies listed on Nasdaq Tallinn can be considered the most important part of the supply side in terms of the investment opportunity they offer; at the end of 2018, the capitalisation of the exchange amounted to EUR 2.3 billion, or 11% of GDP. The local bond market also offers investment opportunities for local capital market participants, mostly in the form of privately issued OTC bonds and shares by Estonian companies, which make up a considerable percentage of the investments made by local investors. Foreign products can also be seen as a category that attracts more interest than other categories in terms of volume. For example, local retail investors, banks and pension funds have allocated most of their capital to foreign products like mutual funds, exchange-traded funds (ETF), government securities and stocks. However, in this study, the main focus on the supply side will be the local securities.

3) The capital market infrastructure includes Nasdaq Tallinn, Nasdaq CSD SE, and alternative capital raising platforms. Nasdaq Tallinn is the only regulated securities market in Estonia. Post-trade operations are conducted by the regional Baltic central securities depository (Nasdaq CSD SE), which provides post-trade infrastructure and a wide range of securities services for the Baltic market. Nasdaq CSD SE acts as the Estonian Register of Securities via its Estonian branch and operates the Estonian securities settlement system, which is governed by Estonian law and approved by EFSA and the European Securities and Markets Authority (ESMA).

4) Financial intermediaries include investment banks, investment companies and asset managers, who mediate transactions between the supply and demand side with the help of the infrastructure created by Nasdaq Tallinn, alternative capital raising platforms and the OTC market.

5) Supporting organisations include accelerators, mentorship programmes, national financing programmes or other similar platforms created with the goal of supporting growing companies and start-ups to access financing in Estonia. Supporting service providers include financial advisers, legal advisers and different government institutions or services that help to mediate transactions between the supply and demand side, ensure the capital market is functioning properly and make certain the necessary regulations are implemented.

The supervision over capital markets in Estonia is conducted by the EFSA, which regulates and supervises the banks, creditors, investment firms, investment and pension funds, fund managers, insurance undertakings, insurance intermediaries, payment service providers, e-money institutions and market operators. EFSA has also established an in-house FinTech working group consisting of various specialists from the EFSA and Eesti Pank in order to enhance financial innovation.
The diagram illustrates the capital market infrastructure and the flow of capital between demand and supply. Key elements include:

**Demand**
- **Private and venture capital funds**: 2% of GDP
- **Retail investors**
- **Business angels**: 0.05% of GDP & HNWI
- **Pension funds**: 15% of GDP
- **Banks and credit institutions**: 117% of GDP
- **Insurance**: 8.7% of GDP

**Supply**
- **Securities**
  - 11% of GDP
  - Funds
  - Stocks
  - Bonds
  - ETFs
  - Real estate investment trusts
  - Mutual funds
  - Other products

**Financial Intermediaries**
- **Banks**
- **Brokers**
- **Fund managers**
- **Financial advisors**
- **Legal advisors**
- **Supporting Services and Organizations**

**Capital Market Infrastructure**
- **Nasdaq Tallinn TSE**
- **First North**
- **Alternative market**
- **Regulated market**
- **Crowdfunding platforms**
- **Other platforms**

*The capital market overview scheme is not aimed to represent all market participants, but present examples.*
2. Capital Market Infrastructure

Nasdaq Tallinn and the Nasdaq CSD SE branch in Estonia are the leading securities market infrastructure operators in Estonia. These two enterprises provide market participants with a platform for trading, clearing and settling transactions with securities, for the listing of securities and for operation of the central securities register in Estonia.

2.1. Nasdaq Tallinn

Nasdaq Tallinn is the only regulated securities market in Estonia. The exchange brings together investors, listed companies seeking access to capital market financing and the exchange's members who mediate investors' securities transactions through the common electronic trading system. The main revenue sources for Nasdaq Tallinn consist of transaction fees (0.035 %*transaction value), which are charged when a trade is made (buying or selling a security), listing fees (can be found in Table 17), which are applied after a company is listed on an exchange, and trading membership fees, which are collected annually. The transaction fees made up 7.7 % of total revenues of Nasdaq Tallinn for 2016.

Nasdaq Tallinn, with a market capitalisation of EUR 2.6 billion, is a self-regulated organisation that issues and enforces its own rules and regulations consistent with standard exchange operating procedures. It is licenced and supervised by the Financial Supervisory Authority of Estonia. Nasdaq Tallinn has been a member of the Nordic-Baltic stock exchange alliance NOREX since April 2004 and uses the Nasdaq trading platforms INET and SAXESS, which are also used by exchanges in Sweden, Finland, Denmark, Iceland, Latvia and Lithuania. Nasdaq Tallinn consists of the regulated securities market and the alternative market, also called the First North (Baltic MTF).

The following gives an overview of the structure of these markets; volumes and data regarding the stocks and bonds listed on Nasdaq Tallinn can be found in Chapter 4.

Regulated market

According to Nasdaq Baltic, a regulated market is defined as a set of organisational, legal and technical arrangements that enables trading in financial instruments in an open manner and on a regular basis. When listing on a regulated market, the organisation and method of trading along with market surveillance is implemented in compliance with the relevant European Union standards and directives. The Nasdaq Tallinn regulated market consists of the main and secondary lists, which are subject to oversight by both the stock exchange and the respective financial market regulator. There are currently 15 companies listed on the main list and 3 on the secondary list. The total turnover of Nasdaq Tallinn was EUR 0.15 billion in 2017.

On the Baltic regulated market, financial instruments may be listed on one of the following lists:
- Baltic Main List (equities)
- Baltic Secondary List (equities)
- Baltic Bond List (debt securities)
- Baltic Fund List (investment fund units)

Alternative market

First North is the Nordic-Baltic alternative marketplace for trading in shares. For a company, First North combines the benefits of being public with

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24 A common name used for the companies and exchanges/regulated markets operated by Nasdaq in the Baltic States

simplicity. When compared to the regulated market, it is much easier for companies to list themselves on the alternative market, due to the easier listing conditions and lower reporting standards. It is a marketplace tailored for companies that are interested in taking advantage of the financial markets but are currently not fulfilling the higher requirements and obligations, which would enable them to list on the Baltic main market. According to Nasdaq Baltic, First North is suitable for:

- Growth companies with ambition to develop
- Established companies that require capital to move into new markets increase their competitiveness in existing enterprises or make acquisitions
- Family-owned companies as part of succession planning
- Companies considering acquisitions
- Companies aiming for a listing on the regulated market in the future

Nasdaq First North is an alternative market; it is a multilateral trading facility (MTF) and does not have the legal status of an EU-regulated market. Issuers on First North are subject to the rules of First North but not the legal requirements for admission to trading on a regulated market. Local capital market participants also mentioned that the First North market would be especially suitable for growth companies and for companies aiming to be listed on the regulated market in the future, when they meet the necessary requirements. Companies on the alternative marketplace face less extensive reporting and listing requirements compared to those on the regulated market, and listing on this market is also less expensive.

First North provides the infrastructure for trading and distribution of share data. The monitoring of trading and companies is conducted by First North along with certified advisers who have to ensure that each company continuously meets the requirements associated with having shares admitted to trading on Nasdaq First North. Furthermore, the Certified Adviser is compelled to constantly monitor the company’s compliance with the rules of Nasdaq First North and report any transgression to the Exchange.

For investors, First North provides the opportunity to invest in a company early in its lifecycle, at a stage of growth and development. First North is also a suitable market for smaller companies that do not meet the requirements for listing on the regulated market. The risk and earnings potential in such an investment may be higher than on the main market. Companies on First North are also subject to less stringent requirements than on the main market, which also implies a higher risk. For example, the listing requirement for the regulated market includes a minimum market capitalisation of EUR 4 million and at least 25 % of shares, or shares worth EUR 10 million, must be in public hands. There are no minimum requirements for listing on the alternative market.

Recent developments

The OMX Tallinn index has been steadily performing over the last 3 years, making it one of the best performing exchange indices in the world in terms of returns.

Since the beginning of 2015, OMX Tallinn has shown a return of 66 % in three years. In comparison, during the same time, the OMX Stockholm has fallen 7.7 %, OMX Helsinki has risen 16.8 % and the Croatian stock market index has fallen 1.6 %. The comparatively high 3-year returns of Tallinn Stock Exchange can partly be explained by the fact that Nasdaq Tallinn recovered more slowly after the 2008 financial crisis, showing lower returns than other exchanges during the period of 2008-2015. In the last 3 years, Nasdaq Tallinn index has caught up in terms of returns.

Higher returns can also be explained by the good performance of Tallink and Tallinna Kaubamaja on Nasdaq Tallinn in the last 3 years. Both of these companies have a significant influence on the Nasdaq Tallinn index, due to their large market capitalisations when compared to other listed companies.

Many interviewed market participants are pleased with the increased number of new listings of companies and other instruments on Nasdaq Tallinn in recent years. Four companies were newly listed on Nasdaq Tallinn in 2016-2018, which is a significant increase, especially when compared to 2010-2015, when only one company was newly listed on Nasdaq Tallinn. This has brought more attention to the local stock exchange and given investors more choices for investments. The trading activity has also increased slightly, as shown in Figure 41 of this report. According to the market participants, the increased listing activity can mostly be attributed to the fast growth of the Estonian economy in recent years, which has also incentivised the growth activities of local companies.

Recently listed instruments on Nasdaq Tallinn with emission size (in EUR):

- LHV bonds, October 2015 (15.9 million)
- LHV stocks, May 2016 (13.9 million)
- Baltic Horizon Fund, July 2016 (30 million)
- Inbank bond, October 2016 (6.5 million)
- Eften Real Estate Fund III, December 2017 (3.5 million)
- Admiral Markets bonds, January 2018 (1.8 million)
- Tallinna Sadam, June 2018 (165 million)

The increase in listing activities is especially important when considering the near decade of inactivity in Nasdaq Tallinn, when there were very few new companies listed. Additional listings and actions are required to create a lasting positive effect on Nasdaq Tallinn. The first government owned company, Tallinna Sadam, was listed on Nasdaq Tallinn in June 2018. In addition, there are several other companies that are now considering raising capital through an IPO according to the financial newspaper Äripäev, which has given hope for a rise in Nasdaq Tallinn liquidity in the future. These companies include Enefit Green (sustainable energy), Inbank (bank), Luminor (bank), Mainor Ülemiste (real estate) and Cleveron (delivery technology), among others. The trend of more companies coming to the exchange seems to be sustainable in the near future, which may result in increased liquidity, transaction volumes and capitalisation for Nasdaq Tallinn.

International reputation of Nasdaq Tallinn

Nasdaq Tallinn is classified as a frontier market in most of the widely used indexes in the world. For example, the MSCI has indexes for a variety of geographic sub-areas, of which the most popular track emerging markets, frontier markets and developed markets. An MSCI Index is a measurement of stock market performance in a particular area.

The countries that are categorised under “frontier markets” are characterised in the index by the following traits:


28 MSCI. www.msci.com
Higher degree of political instability
Less developed capital markets
Lack of compliance with IFRS
Limited financial market regulation

It is clear that the categorisation of Estonia as a frontier market has a strong influence on foreign investors and large institutions that are mostly investing in the first two categories (developed and/or emerging markets) and very little if at all in the third category (frontier markets). The market participants also agreed that foreign institutions and large investors are negatively influenced by the categorisation of Estonia as a frontier market.

Estonia is listed in the same category as countries that have less developed capital markets, are politically unstable or are less regulated than Nasdaq Tallinn (Ukraine, Tunisia, Lebanon). Nasdaq Tallinn has only been labelled a frontier market owing to its small size. However, this might not be clear to foreign investors that are not familiar with the local conditions. This might also be considered one of the main reasons as to why the liquidity in Nasdaq Tallinn is significantly lower than liquidity in exchanges that are classified as emerging or developed markets, such as the Irish Stock Exchange or the Helsinki Stock Exchange. The index classification of Estonia by other index providers such as S&P Global and FTSE Russell is also as a frontier market.

The foreign interviewees also pointed out the lack of knowledge about Estonia and its economy among the majority of foreign investors. This became clear during the IPO of Tallinna Sadam, which was one of the largest and most important IPOs in the recent history of Nasdaq Tallinn. Many of the potential Tallinna Sadam foreign investors did not know much about Estonia and were not sure if investing in an Estonian company would be a good idea. This experience shows that the Estonian capital market is not well known among investors, which makes it important for Estonia to create more awareness and to work towards classification as an emerging market.

Information providers and intermediary services offered on Nasdaq Tallinn

When it comes to information vendors, the most commonly used service providers in Estonia are Bloomberg, Reuters and Morningstar. These platforms offer their clients real-time financial data on both international and local capital markets. The services of these companies are mainly used by banks and other financial institutions and not by retail traders, due to the high costs.

In Estonia, most of the transactions made with Nasdaq Tallinn securities go through banks, which offer brokerage services for their clients located in Estonia or through custody services that allow foreigners to buy securities listed on Nasdaq Tallinn. As can be seen in Table 3 below, the leading brokerage service providers are the largest banks in Estonia: LHV Pank, SEB Pank and Swedbank AS. These three banks make up more than 85% of the Nasdaq Tallinn trading volume.

In addition to the brokerage services offered by banks, there are also several independent international brokerage platforms, which are used by Estonian investors and traders. Among these, the most widely used are Interactive brokers, Admiral Markets, Plus500, Lynx and LHV Trader. When it comes to costs, the independent brokerage platforms offer considerably cheaper transaction fees compared to the local banks, especially when Estonian investors are trading foreign securities. A comparison between these services can be found in the next section.

### Transaction and IPO costs on Nasdaq Tallinn

When taking into account the Estonian average monthly income of EUR 1 250\(^\text{30}\) (as of 1.1.18), the investment costs related to stocks and other financial instruments in Estonia are on a comparable level with other markets. When estimating the investment costs for investors, transaction fees (buying and selling the security) and account management fees are the most important.

For member companies (brokerage service provider) of Nasdaq Tallinn, the transaction fee charged by Nasdaq Tallinn for a stock transaction (buying or selling) is 0.035 % of the total transaction amount (min. EUR 0.30).

For investors, brokerage fees are charged by the mediating financial service provider (i.e. bank, broker).

The average total transaction cost including a brokerage fee for local investors who are investing in companies listed on Nasdaq Tallinn is a minimum of EUR 3 flat fee plus 0.2 % of the transaction amount, resulting in an average transaction cost of around EUR 15 per transaction assuming an average transaction amount of EUR 5 000.

The account management fees (charged from customer’s account per month by mediating financial service provider) for Nasdaq Tallinn stocks are usually EUR 0.64–4 a month.\(^\text{31}\) These fees are comparable to the average fees charged in other EU countries, which can be around EUR 5-15 per transaction (or even lower at around EUR 1-5 when using independent platforms) and EUR 1-5 for maintenance.\(^\text{32}\)

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\(^{30}\) Tradeeconomics.ee. [https://tradingeconomics.com/estonia/wages](https://tradingeconomics.com/estonia/wages) (As of 1st half of 2018)

\(^{31}\) Minuraha.ee. [http://minuraha.ee/kasulikud-abivahendid/?popup=aktsiatehingute_vordlustabel&parent=15861](http://minuraha.ee/kasulikud-abivahendid/?popup=aktsiatehingute_vordlustabel&parent=15861)

\(^{32}\) ValuePenguin. [https://www.valuepenguin.com/types-fees-online-brokerages](https://www.valuepenguin.com/types-fees-online-brokerages)
Trading through local banks (average) | Independent discount brokers | Transaction through banks from other EU countries
--- | --- | ---
**Brokerage fees** (buying or selling an equity) | EUR 3 + 0.2 % of transaction amount | EUR 1-5 per transaction | EUR 5-15
**Account management fees** | EUR 0.64-4 per month | EUR 3-15 per month | EUR 1-5 per month

| Table 4. Comparison of transaction and holding costs of equities |
| Source: Composed by authors based on data collected |

In addition, Estonians seem to prefer investing smaller sums of money (potentially due to having a lower and less disposable income), making the operating costs high in relation to the total transaction sum. The preference for making smaller investments can also explain the popularity of alternative investment platforms in Estonia, where investors can invest as low as EUR 10. As the gross average salary in Estonia is EUR 1 250 and with an average savings rate of 10 %, most people have less than EUR 125 per month to invest. In comparison, people in Ireland have EUR 250, people in Sweden EUR 430 and people in Luxembourg EUR 1 000, based on the same calculations. Transaction costs as a percentage from smaller sums may seem high, which might prevent people from buying stocks, according to the market participants. However, when comparing the transaction costs with other EU countries and most popular brokerage platforms (Interactive brokers, Saxo Bank, Robinhood), the costs are on a comparable level and can be seen as not high.

It is hard to make an exact comparison when comparing listing admission fees between stock exchanges because the costs vary significantly depending on multiple factors (size of IPO, market segment, advisory fees etc.). However, similarly to transaction costs, total IPO costs on Nasdaq Tallinn cannot be considered high when compared directly to other countries. The total IPO costs consist of advisory fees (i.e. lawyers, auditors, investment bank/broker fees) and the listing fees charged by Nasdaq Tallinn and other fees. Nasdaq Tallinn listing fees are rather small compared to the advisory fees.

The listing admission fees for the main list of Nasdaq Tallinn are relatively high (EUR 6 390 + 0.02 % of share market value, max EUR 31 955 for the main list) compared to fees in other countries. For example, when listing on the main list of the Warsaw Stock Exchange, the listing admission fees are EUR 1 400 + 0.03 % of share market value, max EUR 22 200. In Croatia, a listing in the main market of the Zagreb Stock Exchange is 0.08 % of share market value, with a min of EUR 10 800 and max of EUR 21 600. A more detailed comparison of listing costs between countries can be found in Chapter 8 of this report.

The total average IPO cost at Nasdaq Tallinn (listing admission fees plus advisory and other fees) is estimated to be around 5-10 % of the raised capital, while costs on other exchanges in Europe range from around 3-5 % of raised capital for bigger listings and 5-10 % for smaller companies. IPO costs are usually disproportionately high for smaller companies in terms of percentage from the capital raised. In the more recent history of Nasdaq

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33 Tradeeconomics.ee. [https://tradingeconomics.com/estonia/wages](https://tradingeconomics.com/estonia/wages) (As of 1st half of 2018)
35 Wardyński & Partners (2017) “IPO and conditions of listing on the Warsaw stock exchange”
37 Ernst and Young. (2009) IPO insights: Comparing global stock exchanges
Tallinn, the lowest cost IPO in terms of total amount is known to have been around EUR 60 000 for a small size listing (1.27 % of raised capital), according to the market participants. The IPO cost for a bigger company is estimated to have been in the region of 1.1 % of raised capital. The average cost of an IPO in the US for smaller companies (revenue of <EUR 100 million) is estimated to be approximately 5.5-7 % of raised capital\(^{38}\) and 3.5-6 % of raised capital in the UK.\(^ {39}\) These however are average estimates for the category; the cost for companies on the low end of the category (when raising less than EUR 10 million of capital from the market) can be around 10 % of raised capital, which is similar to costs in other European countries.

Dependent on the size of the company, there are other costs in maintaining the status of a listed company after the initial offering is completed. These costs include a small annual listing fees collected by Nasdaq Tallinn (about EUR 3 000 per year),\(^ {40}\) along with the compliance costs for the listed company to follow the regulations and reporting rules of the exchange. For example, these costs may include additional working hours needed for regularly financial reporting of the company. These costs usually become higher for bigger companies, as the regular reporting of activities and results takes more time and is more complex.

Although the total costs for companies to be listed on Nasdaq Tallinn are similar to other exchanges or even lower, the fees charged by Nasdaq Tallinn are rather high for listing on the main list and at average levels when listing on the secondary list. New and smaller Estonian companies are more likely to list on the secondary or First North market of the Nasdaq Tallinn. Even though listing admission fees of these market segment are at similar levels to other exchanges, other costs such as advisory fees still remain heavy burden to list on the stock exchange especially for smaller sized companies.

Investors, custodians and foreign remote trading members and their impact on the market

Investment in Estonian equities is mainly confined to investors from two regions: North America and Europe. Figure 8 shows that investment inflow from Europe and North America in 2012-2017 remained at high levels when compared to other regions. Investments from other regions remained low, though the investors from the Asia region showed some interest in the Estonian capital market. Between Q2 2012 and Q2 2017, institutional investment rose by 110 %. North American investors increased their exposure to the market by 249.5 % over the period (a superior increase compared with European investors, which increased their exposure by 40.9 %).\(^ {41}\)

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\(^{38}\) Ernst and Young.(2012) Considering an IPO? The costs of going and being public may surprise you
\(^{39}\) Aim Adviser webpage. [http://www.aimadvisers.com/overview-IPO-costs.html](http://www.aimadvisers.com/overview-IPO-costs.html)

\(^{41}\) EBRD (2018) The investor base of securities markets in EBRD region

Figure 8. Flow by investor regions 2012-2017
Source: EBRD
In terms of countries of origin, the share of Estonian investors on Nasdaq Tallinn increased from 61% to 64% at the end of 2016. The other 35% is mainly comprised of investors from Europe and North America, which means that these regions also have a significant effect on the Estonian capital markets.

When viewing the overall ownership structure, the strategic holdings accounted for 46.5% of the ownership (Figure 9) and, with insiders at 20.7% and retail investors at 14.8% of the market, institutional ownership was limited to 18.0%. North American investors held the highest percentage of identified institutional ownership, comprising 56.2% of the total institutional investments.

2.2. Nasdaq CSD SE

Nasdaq CSD SE (Societas Europaea), the current central securities depository in Estonia, was established in 2017 as a result of a cross-border merger of three Baltic CSDs. The resulting entity (Nasdaq CSD SE) is legally based in Latvia but operates in Estonia through its Estonian branch. Nasdaq CSD SE is licenced under the European Central Securities Depositories Regulation (CSDR) and uses modern straight-through processing (STP) technology, which is connected to the pan-European TARGET2-Securities (T2S) platform. To increase efficiency, the three Baltic securities settlement systems run on a single CSD instance and one interface to T2S.

Through its Estonian branch, Nasdaq CSD SE provides CSD services in Estonia, acts as the Estonian Central Register of Securities and is the operator of the Estonian securities settlement system, which is governed by Estonian law.

In Estonia, Nasdaq CSD SE provides services to both issuers and participants. Nasdaq CSD SE offers admission of securities for issuers and provides some related ancillary services (e.g. e-Notification, which gives up-to-date information about changes in the list of shareholders). Nasdaq CSD SE participants can only be legal entities and must be authorised to provide custody or credit institution services in the Baltic countries. Participants can have the following status (or statuses, as one participant can hold multiple roles at the same time):

- **Account Operator** – responsible for setting up and maintaining securities in the CSD system. There are 17 account operators in Estonia.
- **Cash Agent** – responsible for guaranteeing and providing liquidity for the settlement in the CSD during the cash leg of CSD participants’ securities settlement transactions and corporate action proceeds if the securities are not T2S eligible or are issued in a currency that is not T2S eligible. There are 8 cash agents in Estonia.

Figure 9. Ownership structure Q2 2017
Source: EBRD IPREO investor base study

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43 EBRD (2018) The investor base of securities markets in EBRD region
• **Issuer Agent** – responsible for representing the issuer in CSD. There are 8 issuer agents in Estonia.

• **Fund Administrator** – responsible for communication with the CSD on behalf of the fund manager. There are 5 fund administrators in Estonia.

When investors want to acquire securities in Estonia, there are (will be) four main ways to do so:

• **Securities account** – opening a local securities account via Account Operator and using it to purchase and sell securities. Opening a securities account is the main way for buying, holding and selling securities.

• **Custody** – International banks (i.e. BNP Paribas\(^\text{44}\) and Citibank\(^\text{45}\)) offer custody services to corporations in which the bank becomes a custodian of the desired securities while giving the owner full voting rights, income, etc. This does not require a foreign investor to open a securities account in Estonia. Currently, Swedbank and SEB act as the main custody service providers in the Baltic region for major international global custodians, although there are also a few international brokerages such as Interactive Brokers and Instinet that also operate in Estonia. The usage data of custody services is not available.

• **T2S** – pan-European platform for delivery-versus-payment settlement of securities trades in central bank money. The platform is still rather young and Nasdaq CSD SE along with 20 other CSDs in 20 European markets has migrated to it.

• **Deposit account** – when the new shareholder doesn’t have a securities account, the issuer can apply for opening a deposit account in the name of the shareholder. Transfers between deposit accounts and securities accounts can only happen when the measures required in the Money Laundering and Terrorist Financing Prevention Act are fulfilled. This is a new alternative that will become available on 1 January 2019.

\(^\text{44}\) BNP Paribas Securities Services. [https://www.carmignac.fr/uploads/pdf/0001/05/1bc155d3a5508218dca180ef83177b0b7cca1b41.pdf](https://www.carmignac.fr/uploads/pdf/0001/05/1bc155d3a5508218dca180ef83177b0b7cca1b41.pdf)

2.3. Alternative Platforms

2.1.1. Market Size and Development

The volume of alternative platforms and P2P lending are growing in Estonia and becoming more prevalent in the market. According to the study conducted by the Cambridge Centre for Alternative Finance, the European alternative finance market grew by 41% in 2016.

![Figure 10. Online Alternative Finance Volume by country in total and per capita, 2016. Source: Cambridge Centre for Alternative Finance](image)

Measured in total volumes, Estonian alternative finance market reached EUR 82.5 million in 2016. However, **Estonia has the highest alternative finance market volume per capita after UK**, even though it is only 11th place in terms of total volume (Figure 10). It can be concluded that other capital market instruments are not as easily accessible for local retail investors, which gives rise to the fast development and popularity of alternative financing in the Estonian capital market.

![Figure 11. Baltics Online Alternative Finance Market Volumes, 2015-2016, EUR million. Source: Cambridge Centre for Alternative Finance](image)

Estonia, together with the other Baltic states, has shown one of the fastest regional growth rates. As presented in Figure 11, **Estonia is currently dominating the Baltic region, with a total volume exceeding Latvia and Lithuania by more than three times** and covering 61% of the market in the region. One of the reasons behind this may be Estonia’s reputation as a FinTech hub together with the government-led e-Residency programme (for

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46 In the context of the report alternative platforms include equity-based funding, donation/reward-based funding, P2P business lending and P2P consumer lending, if not stated otherwise.

more information on the e-Residency programme, see Chapter 1.1.2), with the latter making it possible for foreign investors to sign documents digitally and participate in crowdfunding platforms. The largest shares of the Estonian market include P2P Consumer Lending (EUR 37.95 million) and P2P Property Lending (EUR 31.24 million).

Growth in the Estonian alternative financing segment (covers alternative financing for SMEs and freelancers, equity-based crowdfunding, reward-based crowdfunding. Lending based crowdfunding is excluded) can also be seen when looking at the total transaction value, which has been constantly growing since 2016, according to Statista. The total transaction value is expected to more than triple to EUR 55 million by 2022 (Table 5). Compared to reference countries, Estonia has a good position with compound annual growth rate (CAGR) of 40.9% up to 2022. The highest predicted CAGR is in Ireland, while Sweden is also expected to have a higher growth rate, while Finland, Croatia and Poland are positioned behind Estonia.

The average funding amount per campaign and the number of total funding campaigns on the alternative financing platforms are expected to grow at an accelerated pace in the forthcoming 5-year period. The number of funding campaigns is projected to increase from 1100 in 2017 to 2500, and the average funding per campaign should reach EUR 2444 in 2022. According to these projections, the alternative finance segment in Estonia is expected to grow at a rate similar to the several past years.

The CAGR of crowdlending in Estonia is predicted to be lower than in most of the reference countries. While Ireland is the frontrunner with 55.1%, Estonia exceeds only Croatia with 27.3% (see Table 6). The largest segment of crowdlending is personal marketplace lending with a total transaction value of EUR 106.9 million in 2018. The number of successfully financed loans is expected to grow from around EUR 1.8 thousand in 2017 to EUR 4 thousand in 2022.

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Table 5. Total transaction value in the “Alternative Financing” segment 2018-2022, in EUR million.
Source: Statista, December 2017

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>CAGR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>14</td>
<td>20</td>
<td>28</td>
<td>39</td>
<td>55</td>
<td>40.9</td>
</tr>
<tr>
<td>Finland</td>
<td>31</td>
<td>40</td>
<td>50</td>
<td>64</td>
<td>81</td>
<td>27.5</td>
</tr>
<tr>
<td>Croatia</td>
<td>5</td>
<td>7</td>
<td>10</td>
<td>13</td>
<td>19</td>
<td>39</td>
</tr>
<tr>
<td>Ireland</td>
<td>18</td>
<td>29</td>
<td>45</td>
<td>72</td>
<td>116</td>
<td>58.8</td>
</tr>
<tr>
<td>Poland</td>
<td>10</td>
<td>14</td>
<td>19</td>
<td>26</td>
<td>37</td>
<td>37.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>78</td>
<td>116</td>
<td>173</td>
<td>258</td>
<td>382</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 6. Total transaction value in the crowdlending segment 2018-2022, in EUR million.
Source: Statista, December 2017

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>CAGR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>120</td>
<td>153</td>
<td>194</td>
<td>248</td>
<td>314</td>
<td>27.3</td>
</tr>
<tr>
<td>Finland</td>
<td>149</td>
<td>212</td>
<td>303</td>
<td>432</td>
<td>619</td>
<td>42.6</td>
</tr>
<tr>
<td>Croatia</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>11</td>
<td>19.7</td>
</tr>
<tr>
<td>Ireland</td>
<td>91</td>
<td>141</td>
<td>219</td>
<td>340</td>
<td>525</td>
<td>55.1</td>
</tr>
<tr>
<td>Poland</td>
<td>73</td>
<td>108</td>
<td>160</td>
<td>238</td>
<td>353</td>
<td>48.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>131</td>
<td>219</td>
<td>365</td>
<td>610</td>
<td>1019</td>
<td>67</td>
</tr>
</tbody>
</table>


50 Ibid.
2.1.2. Market Players

The main players in the Estonian alternative financing market are presented in Figure 12. The players are mainly divided between four segments, including equity-based crowdfunding, reward/donation-based crowdfunding, P2P business lending and P2P consumer lending.

The volume of investments together, number of investors and investments of the main market players are provided in Table 7.

<table>
<thead>
<tr>
<th>Market Player</th>
<th>No of investors</th>
<th>Investment volume</th>
<th>No of investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundwise</td>
<td>19356&lt;sup&gt;52&lt;/sup&gt;</td>
<td>1 040 792</td>
<td>22</td>
</tr>
<tr>
<td>Funderbeam</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Investly</td>
<td>-</td>
<td>32 601 381</td>
<td>-</td>
</tr>
<tr>
<td>Crowdestate</td>
<td>21 361</td>
<td>42 651 360</td>
<td>98</td>
</tr>
<tr>
<td>Inwise</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Estateguru</td>
<td>14 253</td>
<td>70 975 253</td>
<td>441</td>
</tr>
<tr>
<td>Argeld</td>
<td>-</td>
<td>24 740 000</td>
<td>9</td>
</tr>
<tr>
<td>Hooandja</td>
<td>88 798</td>
<td>2 828 402</td>
<td>898</td>
</tr>
<tr>
<td>Armastan aidata</td>
<td>-</td>
<td>1 136 261</td>
<td>-</td>
</tr>
<tr>
<td>Stardipaik</td>
<td>3 462</td>
<td>182 522</td>
<td>81</td>
</tr>
<tr>
<td>Bondora</td>
<td>-</td>
<td>144 200 000</td>
<td>-</td>
</tr>
<tr>
<td>Omaraha</td>
<td>-</td>
<td>47 833 967</td>
<td>-</td>
</tr>
<tr>
<td>Moneyzen</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mintos.lv</td>
<td>77 069</td>
<td>1 015 327 155</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 7. Statistics of Estonian alternative financing market by market players<sup>53</sup>

During the conducted interviews, the growth of alternative financing platforms was mostly seen as a positive trend providing better investment markets when applicable. For a more thorough analysis of Estonian alternative financing market, it is recommended to conduct an additional study on the activities and volumes of the market players.

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<sup>52</sup> Number of users

<sup>53</sup> Table is compiled based on public data available on the web pages of the market players. All data include the activities on Estonian market as well as on foreign
opportunities for retail investors, in particular. In addition, alternative platforms are generally less regulated, thus making it easier for companies to involve additional resources compared to PE/VC funds, bank loans, etc. On the other hand, the relatively low level of regulation in the field is also seen as one of the risk areas, resulting in quite a high risk for investors with a low level of investor protection.

**There is no regulation specific to crowdfunding activities** in Estonia, unlike many other EU countries. In 2016, FinanceEstonia and Deloitte Legal law firm developed the Best Practice for Crowdfunding, which is a self-regulation document for crowdfunding platforms, but it does not provide mandatory regulation. The aim of the code of conduct is to provide a framework based on the principle of “comply and explain” to all the internet-based crowdfunding platforms in Estonia. Joining the Best Practice is voluntary; however, the platforms that have joined see it as a measure for increasing their credibility. As a result, the functioning of the joined platforms will be more transparent in the best interests of the investor. In March 2018, the European Commission adopted a proposal for the regulation of crowdfunding, which will enable crowdfunding platforms to provide their services across the EU.54

Additional information on the regulatory issues of crowdfunding has been provided in Chapter 5, Legal and Regulatory Framework.

Since the establishment of the first crowdfunding platforms in Estonia, there have been several examples of successful and unsuccessful fundraising campaigns. The most recent fundraising campaigns of non-traditional companies are presented as follows.

54 See also the “Commission proposal for a regulation on European crowdfunding Services providers”, [https://ec.europa.eu/info/publications/180308-proposal-crowdfunding_en](https://ec.europa.eu/info/publications/180308-proposal-crowdfunding_en)
Unsuccessful crowdfunding campaigns

Skillific

Field: skills-based talent search engine with artificial intelligence features  
Platform: Fundwise  
Campaign date: 2016  
Aim: accelerate development of technology

Initial investment request: EUR 35 000  
Final investment raised: EUR 88 467 (249 % over aim)  
No of investors: 64

In the autumn of the same year, it was clear that the start-up was in financial difficulties and in December 2016 the company went bankrupt.

Estateguru

Field: real estate funding  
Campaign date: 2016  
Aim: reconstruction of a villa in Tallinn

Initial investment request: EUR 224 000  
Final investment raised: EUR 224 000  
No of investors: 294

Estateguru is an alternative financing platform that is focused on real estate investments. Estateguru was established in 2013 and the first loans were issued in 2015. The volumes of the investments of the platform have grown constantly; however, in autumn 2017, the first unsuccessful loan case emerged. OÜ Omale raised EUR 224 000 from 294 Estateguru investors in order to reconstruct a villa in Tallinn. Once the investment was raised, the real estate set as a guarantee for the investors, changed owners and left the investors in uncertainty. Even though Estateguru subsequently refunded all investments, the case shows how many investors are affected by realisation of risks.

Crowdfunding success stories

Arro Keraamika

Field: ceramics  
Platform: Fundwise  
Campaign date: 2016  
Aim: raise funding to launch the production of a new ceramic collection

Initial investment request: EUR 35 000  
Final investment raised: EUR 90 902 (246 % over aim)  
No of investors: 117

The fundraising campaign also resulted in a cooperation agreement with a reputable factory in Portugal. Today, the SME has had the possibility to introduce its products to several domestic shops, launch international trade through its webstore and move towards concluding additional agreements for entering foreign markets.

Siidrikoda

Field: craft cyder production  
Platform: Fundwise  
Campaign date: 2015  
Aim: accelerate development

Initial investment request: EUR 60 000  
Final investment raised: EUR 93 200 (155 % over aim)  
No of investors: 42

Since the fundraising campaign, the company has grown constantly through product development and an increase of turnover. The products of the company are sold in more than 100 stores, restaurants and hotels in Estonia. The current aim of the company is to expand further and build export capabilities. To this end, a new fundraising campaign was launched in FunderBeam in May 2018.
### 3. The Investor Base

An overview of financial sector assets (Figure 13)\(^{55}\) gives a rough estimate of how one major part of the Estonian investor base – the financial sector – has developed over the years. While retail investors, business angels and foreign investors are not included in this particular graph, it shows how Estonian financial sector’s assets have grown in the last 14 years. The assets of monetary financial institutions remained mostly stable during the recession, and only experienced a small contraction from 2009 to 2011, while some market participants saw their assets fade away. However, after the 2008-2009 recession, MFI assets have grown at a rather modest tempo (about 6-9 % a year) and because of that, their relative importance in the financial sector has somewhat diminished. Pension funds have shown the most resilient growth as their assets have increased about 20 % a year (Figure 13). If there are no major changes to the current pension system, this trend is expected to continue in the near future, as Estonians continue to build up their pension system.

Insurance corporations have seen stable growth and they haven’t experienced major setbacks (Figure 14). They even managed to hold on to their assets during the financial crisis of 2008-2009 and have continued to grow since then. Investment funds are in a somewhat of a contrasting situation. Their best days were just before the crisis, when they had assets totalling EUR 1.5 billion. The crisis hit them hard and they lost two-thirds of their assets. The last few years have been better as Estonian investment funds have managed to raise new funds and, while their total assets were still at EUR 948 million at the end of 2017, the trend is certainly positive (Figure 14).

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\(^{55}\) Financial assets of financial sector in market value.  
The number of active securities accounts is another descriptive statistic that shows how the Estonian investor base has developed over the years. As of 14 June 2018, there were 113 093 securities accounts in Estonia. In recent years, about 88% of securities accounts have been owned by private individuals, with the remaining owned by legal entities.

Only about 68% of all accounts are “active”, as in they have actual securities on them, while the remaining third are empty accounts and can be considered inactive. The number of security accounts that actually have securities on them increased rapidly until 2008-2009, when it peaked at 97 700 accounts. The number of opened securities accounts subsequently decreased to about 75 000, although more new accounts are being opened since 2016, as the number of active accounts has again started to increase, reaching 78 000 in 2017 (Figure 15).

Retail investments have seen some growth in recent years but the illiquid local stock exchange has been a detriment to many retail investors. The total number of active securities accounts has been rising in recent years, reaching 31 558 after the IPO of Tallinna Sadam. In the last two years, there have been two distinct events that have increased the number of securities accounts that own publicly traded securities: the IPOs of LHV and Tallinna Sadam. In June 2015, there were 20 000 securities accounts with publicly tradable securities. A year later, following the IPO of LHV, there were 24 000 such accounts. An even larger increase was observed following the IPO of Tallinna Sadam, which increased the amount of securities accounts with publicly tradable securities by 6 000 (Figure 15). While the number of investors is increasing, the total number of shareholders in Estonia is still rather low, at only 2.4% of the total population. For example, in Finland, there are about...
700 000 private investors who own publicly traded stock, which means that 12.8% of Finns own stock directly.\textsuperscript{56}

As the traditional capital market doesn’t offer sufficient versatility, some people have turned to alternative investment opportunities, such as crowdfunding. As was detailed in the previous chapter, the online alternative finance market volumes more than doubled in 2016, reaching EUR 82 million (Figure 10).

In general, the Estonian investor base has experienced steady growth since the recession and, while the number of participants is still lower than in developed countries (e.g. Finland), the accumulation of financial knowledge and investment wealth takes time.

3.1. Credit Institutions and Creditors

3.1.1. Credit institutions

There are eight licenced credit institutions and eight affiliated branches of foreign credit institutions in Estonia as of June 2018. Half of the eight licenced credit institutions in Estonia are majority domestic-held, while Swedbank, SEB and Luminor belong to Swedish and Norwegian parent companies.

As is common in many CEE countries, the Estonian banking sector is dominated by large foreign banks. Swedbank and SEB acquired two of the biggest local banks in the 2000s and have held a tight grip on the Estonian banking sector ever since. According to Eesti Pank, there are four structurally important banks in Estonia – Swedbank AS, AS SEB Pank, Luminor Bank AS and AS LHV Pank – and they hold between them about 84% of the total assets in the Estonian banking sector (Figure 17). LHV, one of the four structurally important banks, is an Estonian bank (which received its banking licence in 2009). In addition, LHV is currently the only publicly listed bank on Tallinn stock exchange, while both LHV and Inbank have publicly issued bonds.

Estonian credit institutions have slowly and steadily increased the amount of issued loans, although if we look at the stock of loans issued to non-financial corporations, its ratio to GDP decreased from 45% in 2010 to just 30% in 2017.\(^{57}\) The overall loan amount growth has been responsible, as the volume of deposits has grown in conjunction with the volume of outstanding loans, keeping the overall loan-to-deposit ratio at between 100-110% since 2013. According to EFSA, the current growth in loans is supported by a good economic environment, low unemployment, increasing salaries and low interest rates. While low interest rates and a negative Euribor could have put some negative pressures on banks’ profitability, they have managed to maintain interest income and general profitability. The return on equity decreased from 11.9% in 2016 to 10.3% in 2017, mainly due to increased equity. EFSA considers the liquidity and capitalisation of Estonian banks strong, as the liquidity buffer is larger than required and the banks have adequate funds for covering risks.

Credit institutions operating in Estonia have issued loans worth EUR 23.8 billion as of Q1 2018. The largest beneficiaries have been households (Figure 18), who have received about 35% of that or EUR 8.2 billion (of which EUR 7.1 billion can be attributed to house loans). Non-financial corporations have received EUR 7.2 billion from banks, while loans to credit institutions and central banks amounted to EUR 5.2 billion at the end of Q1 2018. There are significant differences between banks and their lending policy, as some concentrate more on business loans, while others consider households as their primary clients. In general, however, Estonian credit institutions tend to offer more loans to households than to enterprises.

This is also illustrated by the separate analysis of banks. As shown in Figure 18, the ratio of loans to enterprises is generally in favour of household loans. The one big exception is LHV, but they began offering household loans just one and a half years ago, which means their current portfolio doesn’t show the full picture.

Being dependent on foreign banks has its positive and negative aspects. The positive side is undoubtedly the economies of scale. As can be seen in Figure 19, the Estonian business loan interest rates have been almost as low as in Sweden, Finland and Luxembourg, while Croatian, Irish and Polish businesses have to deal with much higher interest rates. The negative side is that the financial sector is somewhat tied to the Swedish economy. If the Swedish economy and its banks come under pressure, it could disproportionately affect the Estonian economy and especially the financial sector. This risk has been acknowledged by EFSA and can be mitigated by adequate capital and liquidity buffers.59

58 Credit institution’s balance of granted loans and involved resources. [https://www.fi.ee/koond/eng/laen_kred.php](https://www.fi.ee/koond/eng/laen_kred.php)

The analysis of interviews shows that some market participants do not want to include banks and other credit institutions under the term capital markets. However, in terms of supply, it seems that companies, and especially SMEs, prefer bank loans as a financing instrument. According to the SAFE survey (conducted by the EC and ECB in 2017), when SMEs look for additional financing, 64% of SMEs in the EU (and also in Estonia) will first look towards bank loans (Figure 20). This means that about two-thirds of SMEs consider bank loans to be their primary financing instrument, and they would only turn to other means of raising finance after a loan application has failed. According to statistics from Eesti Pank, the main purposes for taking a loan are acquisition of real estate for one’s own use, expanding the commercial activity of a company and acquisition of other fixed assets. Of the total stock of loans granted to non-financial corporations at the end of 2017, these made up 36% of all loans.

When comparing long term loans issued to non-financial corporations, it becomes clear that bank lending does indeed play a bigger role in the Estonian economy and the financing of enterprises than in many other countries. In the aftermath of the 2008-2009 financial crisis, the share of outstanding long-term loans to non-financial corporations decreased from 43% to about 30% of GDP in 2017. All the countries (except Luxembourg) have seen the share of long term loans issued to enterprises decline in recent years.

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60 Survey on the access to finance of enterprises.

61 Stock of loans granted to non-financial corporations by purpose.
http://statistika.eestipank.ee/#/en/p/650/r/907/778
years and the same has happened with Estonia (Figure 21). However, Estonia’s banks still lend visibly more to non-financial corporations than other countries’ banks.

Sometimes, entrepreneurs also put forward their own private real estate as collateral but the larger situation remains the same – banks offer less risky financing options.

3.1.2. Creditors

An alternative capital source beside credit institutions is creditors, which operate under a licence issued by EFSA. With the adoption of the Creditors and Credit Intermediaries Act in 2015, creditors are obliged to apply to EFSA for authorisation and bring their activities into compliance with the statutory requirements.

According to the information on the EFSA website and the websites of creditors, there are around 15 licenced organisations offering capital to SMEs. Most of the creditors offer rather small loans ranging between EUR 5 000 and EUR 10 000 and only a few reach up to EUR 300 000 (e.g. AS Finora Capital). Even though the operation of creditors is supervised by EFSA, there is no public or aggregated data currently available to characterise the market in Estonia in depth. Thus, in order to describe the current situation, the case study of AS Finora Capital is provided.

AS Finora Capital was established in 2012. The aim of the company is to offer flexible and beneficial financing solutions to its clients. In 2017, AS Finora Capital processed close to 4 400 loan applications (including private as well as legal persons) and issued EUR 5.2 million in loans. The company’s loan portfolio reached EUR 6 million by the end of 2017, of which 56% were loans issued to businesses.

Compared to banking groups, creditors are more flexible when offering credit solutions to SMEs. In order to ensure fair competition among creditors and a sound reputation, Best Practice for Creditors and Credit Intermediaries was introduced in 2017. To date, 12 creditors have been granted the certificate.

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3.2. Private Equity and Venture Capital

The PE/VC landscape has developed remarkably in Estonia within recent years. Today, the government is a major investor in PE/VC funds. In order to support the growth of Estonian enterprises, VC is offered by the state-established Kredex Foundation and its fund of funds. Kredex helps both Estonian start-up companies and well-established, fast-growing companies through the provision of venture capital. In order to do so, Kredex’s affiliated company, fund manager SmartCap, supports the development of the Estonian economy by investing in early stage venture capital funds. The investments are targeted to knowledge and technology intensive companies in the start-up phase. In addition, as mentioned in Chapter 1.2, Kredex participated in the creation of BIF and EstFund.

In collaboration with EIF, the three Baltic States established BIF in 2013 to support private capital investments in the region. As a result, new funds began emerging and the Estonian PE/VC landscape began to enliven. Through Kredex, the Estonian government invested EUR 26 million in BIF. The BIF investments were made during 2013-2017 through a “fund of funds” process in order to attract additional private capital. The investment opportunities considered investments into venture capital and private equity funds (including mezzanine funds) with proven experience and an insight into the Baltic market. The sub-funds of BIF invest in enterprises according to the investment policy of each particular fund; however, the main focus should include Baltic companies with sound international development potential. As of today, EUR 20 million of BIF capital is still not invested in funds; however, it is planned to make the investments into 1-2 funds by the end of 2018.

In 2016, EstFund was also established by the Estonian government and EIF, whereby EUR 48 million of ERDF resources were channelled to EstFund to support risk capital funds that target smaller and often earlier stage investments. Thus, EstFund is meant to complement BIF, which targets larger and later stage companies. EstFund operates through the “fund of funds” principal, investing into several risk capital funds selected by an open call for expression of interest. In 2017, EUR 15 million was invested in United Angels Co-Investment Fund in order to fund companies through business angels. As of June 2018, investments in Tera Ventures Fund II (EUR 30 million) and Equity United PE I (EUR 15 million) have been made. Since November 2017, United Angels has already invested in four companies. Tera Ventures has already raised enough capital from private investors in order to start investing. Equity United PE I is currently fundraising and aims to start investing during the autumn of 2018. One of the targets to attract capital is local pension funds, which would also provide an opportunity to increase the investments of the pension fund to the local market. Currently, no thorough statistics are publicly available on the investments of funds in the Estonian market. The funds consider the data as confidential; thus, for more thorough analysis it is advisable to involve EstVCA or FinanceEstonia in collecting the relevant data.

As a result of the state contribution, the volume of PE/VC investments in Estonian companies grew more than ten times from 2013 to 2016. In 2016, the volume of PE/VC investments to Estonian companies reached EUR 49 million. In total, investments were made in 21 companies in Estonia (8 new companies and 13 existing companies). For the future development of the capital market, it is crucial for the state to act as a cornerstone investor in order to ensure the reliability of Estonian funds and attract new private
investors, as the main challenge of Estonian PE/VC funds is the lack of a reliable track record when fundraising.

As of May 2017, EUR 325 million of funds were raised to BIF, with more than one third coming from local pension funds.\(^6\) In 2016, the amount of pension fund investments reached EUR 132 million from domestic pension funds.\(^6\) The positive trend of increasing investments of domestic pension funds to local PE/VC capital was also pointed out during the interviews, with one of the supportive reasons also being the relevant amendments in legislation. Most of the investors of the funds are domestic, with foreign investors constituting only a minor share.

Thus, mainly due to the state support, the volume of private equity investments as a share of GDP has grown sharply. In 2013, the private investments in Estonia aggregated 0.147 % of GDP, whereas the European average was 0.249 %.\(^6\) In 2016, the private investments reached 0.361 % of GDP, as a result of which Estonia exceeded the European average of 0.329 % (Figure 23).


The positive impact of the establishment of BIF and EstFund and the importance of the role of the state in developing the PE/VC market were also pointed out repeatedly by the consulted market players. Even though the participation of the state as an investor in the funds should gradually

\(^{69}\) EstVCA 2016 Report

\(^{70}\) Invest Europe. Central and Eastern Europe Private Equity Statistics. August 2017
decrease, it is clear that the market needs additional state support for at least 10-20 years before it begins to function completely on its own. The short history of the Estonian capital market and PE/VC funds still requires additional support before it will function with the same efficiency as in countries with a more developed capital market.

The main problem in the PE/VC market arises when the funds want to exit their investments. As can be seen from Figure 24, the strategy of most funds is focused on early stage companies and there are fewer funds with an investment size of EUR 3-5 million. In addition, the investment cycle of the funds is similar; thus, the exits tend to occur in the same time period. The problem is also supported by the low awareness of the SMEs, resulting in low interest towards raising capital from PE/VC funds.

Even though foreign investors have acknowledged the problem, they did indicate the option to withdraw from their investments to Estonian companies outside of the local capital market. Their outlook is quite positive, and they do not perceive the low number of exiting possibilities to be a major obstacle. The foreign investors predict more strong growth in investment opportunities and they have commended the favourable infrastructure for entrepreneurs in Estonia.

At the same time, Estonian companies are too small to attract additional foreign investors and Nasdaq Tallinn is perceived to be too illiquid for IPOs. Hence, the possibilities for exit are rather limited.
3.3. Business Angels and HNWI

EstBAN, established in late 2012, is an umbrella organisation for business angels and business angel groups seeking investment opportunities in Estonia and its neighbouring regions with an aim to grow the quantity and quality of local seed stage investments. EstBAN is a full member of the European Trade Association for Business Angels, Seed Funds and other Early Stage Market Players (EBAN) and EstVCA. EstBAN works closely with the Finnish Business Angels Network (FiBAN), Latvian Business Angels Network (LatBAN), St-Petersburg Business Angels Network (SOBA) and newly formed Nordic Business Angels Network (NordicBAN). EstBAN is a group of entrepreneurs, CEOs, venture capitalists and business leaders who have founded, funded and built a number of companies. The deals range from EUR 20 000-500 000 and individual investments start from EUR 5 000 per company.

HNWI are also included in the EstBAN Network, though not all of them. According to the capital market participants, HNWI are an important part of the local financing market, by funding and investing in private companies in significant volumes. There are no official statistics available about the private investments of HNWI; however, there are detailed statistics about EstBAN members’ activities, which also include HNWI.

As seen on Figure 25, the popularity of EstBAN has grown significantly over the last 5 years – the amount of total investments made by the members of the group has also grown every year, reaching a record high of over EUR 11 million in 2017. The yearly growth rate of total investments from 2016 to 2017 was the fastest in the 5-year period, reaching 28%. The number of members has also seen fast and stable growth, showing five times increase from the beginning of 2014 to the end of 2017 (Figure 26). In addition, the number of different companies invested in and the number of investments per year has grown steadily during the 5-year period, as more companies receive necessary funding for their future activities and growth. It is interesting to note that the number of investments has recently grown quicker than the number of members, which means that local business angels have become more active in recent years.

According to EstBAN, the main benefit gained from membership is the access to deal flow. EstBAN members have access to a larger pool of pre-screened

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Figure 25. EstBAN investment and members statistics 2013-2017
Source: EstBAN

Figure 26. Total investments of EstBAN members 2013-2017 (EUR million)
Source: EstBAN

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71 EstBAN [http://www.estban.ee/about](http://www.estban.ee/about)

72 EstBAN [http://www.estban.ee/about](http://www.estban.ee/about)
investment opportunities. Due to leveraged knowhow, an angel group usually has a better judgment capability than an individual investor. Syndication also makes conducting due diligence faster and less expensive. In addition, investing as a syndicate allows individuals to make smaller bets, thereby lowering their personal investment risk and diversifying their portfolio. We can also see from the statistics on Figure 27 that the majority (87%) of the investments made by EstBAN members are made as a syndicate rather than a solo investment. Only 13% of the organisation members prefer to make solo investments, down 1% from 2016.

In 2017, 59% of the investments made by EstBAN members were made in Estonian companies, 26% in companies elsewhere in Europe and 15% in companies outside of Europe. These numbers have changed slightly when compared to the previous years: the percentage of investments made in Estonian companies averaged at around 70% from 2014 to 2016, while in 2017 this figure fell to 60%. This change is mainly the result of the increased investments of EstBAN members outside of Europe, which rose from around 5% to 15% in 2017. This development may be explained by the fact that, as mentioned earlier, EstBAN members have also been more active in recent years, most likely investing more in companies outside of Europe.

EstBAN plays an important role in the Estonian capital markets. They help start-ups by providing capital, knowledge and network. According to the market participants, the fast growth of EstBAN in recent years has significantly improved both the investing opportunities for investors and capital raising opportunities for start-ups in the Estonian capital market. These positive developments can also be seen in the growing number of Estonian start-ups emerging in recent years. The Nordic Angel Program (NAP) has also been created by EstBAN. This is a business angel training and investment programme led by experienced start-up investors. The programme links with the leading start-up events in the New Nordics, culminating in an investment selected by the group. NAP is a micro-fund type of co-investment syndicate, where angel investors participate with minimum tickets of EUR 5,000 and invest in 1-2 startups.

According to the recently released European Business Angels Network 2017 market statistics, Estonia is one of the leading nations when it comes to angel investing. The European angel community grew to 337,500 angels and 39,990 deals were closed during 2017, with the main sectors being FinTech and ICT, followed by healthcare and media. Estonia takes the lead in the highest Angel investment/GDP ratio, which was close to 1% in 2017. The next highest ratio was 0.25% and the average for European countries was under 0.1%.

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73 EstBAN http://www.estban.ee/for-investor/why
74 Annual reviews, EstBAN http://www.estban.ee/about/annual-reviews/2017
75 Annual reviews, EstBAN http://www.estban.ee/nap

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3.4. Retail Investors

The participation of retail investors in the capital market remains still low, which may be attributed to the overall Estonian investment culture. According to a survey conducted by Swedbank at the beginning of 2018, Estonian households still prefer investments in real estate, with their main investment being their own home. Only 10% have invested in additional real estate assets. The second most preferred saving investment remains bank deposits, while the amount of investments in financial instruments is very limited. The reason behind it may be psychological, as Estonians tend to perceive investments in real estate and bank deposits as being more secure and with lower risks.

Based on statistics from Eesti Pank, the stock of deposits of households in Estonia has shown constant growth and reached EUR 6.8 billion in 2017. 76% of the assets are on demand deposits and only 0.5% on other deposits.

![Figure 29. Stock of deposits of Estonian households, 2010-2017. Source: Financial Supervision Authority](image)

The average interest rate of deposits, annual rates of return of Estonian pension funds (in 2017) and alternative platforms are presented in Table 8. Compared to other investment possibilities in the Estonian capital market, deposits are clearly placed last when it comes to annual rate of return for

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investors. The average interest rates for time deposits with a period up to 3 months is 0.11 %, 3-6 months 0.3 % and 6-12 months 0.41 %. The rates of return on pension funds depend highly on the strategy of the chosen fund. The average rate of return of pension funds with higher risk is 5.4 %, whereas the rate of returns of lowest risk is 2.4 %. However, it should be kept in mind that pension funds are focused on a longer perspective and are not aimed to deliver investment returns within a short period of time. The annual rates of return of alternative platforms range from 10 to 25 % depending on the platform; however, the investments into alternative platforms are also of highest risk.

<table>
<thead>
<tr>
<th></th>
<th>Time deposits (period &gt; 1 year)</th>
<th>Pension funds</th>
<th>Alternative platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average interest rate/ rate of return</td>
<td>1.09 %</td>
<td>3.7 %</td>
<td>15.4 %</td>
</tr>
</tbody>
</table>

Table 8. Average interest rates and expected rates of return of investments of retail investors.
Sources: Eesti Pank statistics, Ministry of Finance statistics, alternative platforms’ statistics

The amount of security accounts owned by private persons has fluctuated in the past ten years, as can be seen from Figure 30. In 2008 and 2009, private persons held around 116 000 accounts; by 2014 and 2015, the number of accounts had fallen to 94 000. It reached 100 000 again in 2016 and it has stayed at approximately the same level since then.

The change in the number of security accounts is historically connected with the listing or delisting of companies at Nasdaq Tallinn. The decrease in security accounts in 2012 and 2013 could be an aftermath of the delisting of three large companies in 2009 and 2010 (Saku Ölletehas AS, AS Norma and AS Eesti Telekom were delisted as a result of strategic decisions of the parent companies) in combination with the lowest turnover of all time and the 26.3 % fall of total market value of the companies listed in 2011. At the same time, the growth in the number of security accounts might be associated with the listing of LHV Group, Baltic Horizon Fund and Inbank in 2016.

In relation to the IPO of Port of Tallinn at Nasdaq Tallinn in June 2018, the number of valid security accounts of retail investors has not increased significantly. While there were 99 693 accounts in 2017, the number of accounts reached 100 085 as of 1 June 2018 (immediately before the IPO) and 100 157 as of 14 June 2018 (immediately after the IPO). During 2017, only 7 877 (7.9 % of all retail investor accounts) accounts were involved in transactions, whereas 1-5 transactions were made in 5 637 accounts.

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79 Nasdaq OMX Tallinn AS Annual Report 2011  
80 Nasdaq Tallinn AS Annual Report 2016  
81 Nasdaq CSD SE statistics
In 2010, the system for using investment accounts was created, in order to enable private persons to defer income tax liability. However, there is no clear relation between the decline in the number of securities accounts and establishment of the investment account system. Since the creation of the investment account system, the number of declared investment accounts has grown constantly. From the beginning in 2011, the number of accounts has more than tripled.

![Figure 31. Number of declared investment accounts. Source: Estonian Tax and Customs Board](image)

During the consultations with market players, two main reasons for the continuing moderate level of household investments were brought up, one of them being the rather low level of disposable income and ability to save in combination with a weak culture of investing.

The low activity of households on the capital market is also backed up by data from the OECD. The proportion of securities other than shares as a percentage of total financial assets of households amounted only to 0.3% in Estonia in 2016, which is the second lowest value in the European Union. The biggest share of securities in household assets was in Hungary at 10.5%, with Latvia at 1%, Sweden 1.2%, Finland 1.4% and Lithuania 1.6%. Thus, it can be concluded that the investments of Estonian retail investors still remain relatively low compared to the reference countries.

Nevertheless, there are quite a few investment possibilities on the market. As a result of the state policies, the pension funds can be considered one of the best investment opportunities for private persons. The capacity of compulsory and voluntary pillars of the pension funds has constantly grown and continues to do so. One of the most accessible investment opportunities today is the area of alternative financing platforms, where minimum investments can be very small. However, such investments can have a rather high level of risk for the retail investors, due to the low level of regulation and supervision.

The listing of Eften Real Estate Fund III at Nasdaq Tallinn in the November 2017 was regarded as one of the possibilities for retail investors to participate in the capital market, especially in investments in commercial real estate. In the IPO of Port of Tallinn, 13,723 retail investors (more than 1% of all inhabitants) participated, 78% of all retail investors noted up to 3,000 securities, showing clearly the growing interest among Estonian retail investors in different investment possibilities.

In order to provide retail investors with the information on various investment possibilities, there are several websites as well as thematic social media groups. The EFSA operates www.minuraha.ee, which provides structured information about the financial market for private persons, households and entrepreneurs. The website contains useful overviews about banking, saving, investments, managing a pension plan, etc. Several retail investors keep blogs providing information about investment decisions and possibilities. One of the major daily financial newspapers Äripäev has a column called Investor Toomas, where investments are illustrated. There are also active supporting organisations like StartupEstonia, EstVCA, EstBAN, FinanceEstonia and Estonian Fund Managers Association, which successfully...

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offer capital market training, seminars and forums. Thus, a variety of information on investment activities is made available for retail investors.

However, one of the main challenges in developing the capital market would be to change people’s perceptions towards investing. At the same time, it is important to raise the awareness and financial literacy of local retail investors in order to involve the EUR 6.8 billion of deposits in the capital market.

3.5. Pension Funds

Estonia has a three-pillar pension system, where Pillar 2 is mandatory and Pillar 3 voluntary. The management of most of the funds is dominated by the banks, with Tuleva as a private fund being the main newcomer to the market.

The capacity of pension funds in the Estonian market has constantly grown, reaching EUR 3.8 billion in total in 2017 (EUR 3.6 billion mandatory pillar and EUR 155 million voluntary pillar). The change in the assets of the pension funds during 2004-2017 is presented in Figure 32.

During the recession in 2009-2011, the state contribution to mandatory pension funds was paused and private persons had the possibility to reduce their contribution. Once the down payments were restored, the state made additional contributions to the pension funds of those people (in total 286 000 people) who decided to preserve their 2 % contribution during the recession or increase their contribution to 3 % in 2014-2017. Thus, the growth of capacity of pension funds in recent years can also be partly explained by the increase of the state contribution. Another factor is also the growth in average disposable income over the same time period.

The value of assets of the main pension fund managers is presented in Table 9.

<table>
<thead>
<tr>
<th>Fund Manager</th>
<th>Value of assets (EUR million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedbank</td>
<td>1 601.6</td>
</tr>
<tr>
<td>LHV</td>
<td>1 147.4</td>
</tr>
<tr>
<td>SEB</td>
<td>719.2</td>
</tr>
<tr>
<td>Luminor</td>
<td>307.7</td>
</tr>
<tr>
<td>Tuleva</td>
<td>61.3</td>
</tr>
</tbody>
</table>

Table 9. Value of assets of pension fund managers in Estonian market as of 30.6.2018.
Source: Statistics of Pensionikeskus.ee

Swedbank is currently the largest fund manager in the Estonian market, followed by LHV. The smallest is the newcomer Tuleva, which only entered the market in 2017. Based on data provided by the Estonian Financial Supervision Authority, the total investments of pension funds in the Estonian market have been around 20-25% in 2012 to 2016; however, the investments also include deposits. The direct investments to shares and bonds remained less than 5% up to 2016.

In 2017, the share of total investments of Estonian pension funds to the Estonian market decreased to 14%; however, this was caused by the rapid drop of deposits mainly due to changes in the regulations of management fees and pricing of custodian banks. All other investments approximately doubled.

The total investments in the Estonian market reached EUR 514 million by the end of 2017. During the same year, the direct investments into Estonian shares, bonds and funds, which also invest in the Estonian market, rose to 11% out of all pension fund assets. The direct investments to bonds and shares reached 6.9% of all assets. 85

22% of all domestic investments are made to real estate and forestry funds, the largest of them being Eften Real Estate Fund, followed by East Capital Baltic Property Fund, Lumi Retail Property Fund and Birdeye Timber Fund. Equity funds aggregate a share of 4% of domestic investments, with Baltcap Private Equity Fund in the leading position.

Figure 33. Investments of compulsory pension funds to Estonian market.
Source: Ministry of Finance statistics

Figure 34. Average allocation of pension fund assets to domestic equity and bonds.
Source: European Asset Allocation Survey 2017. Mercer

Compared to other countries, Estonian pension fund investments in the domestic market have historically been low (data on investments to Estonia

in 2012-2017 is presented in Figure 33) and they still remain lower than the average (Figure 34). Depending on the country, domestic investments constitute 30-50% of all assets. However, as pointed out in the study of PwC, the traditional approach of investing to domestic market changes, as more and more pension funds are investing abroad.

As can be seen on Figure 35, the percentage of pensions assets as a percentage of GDP for Estonia is also lower than the EU average of 36% by more than half, being only 13%. Estonia falls behind Finland, Ireland and Croatia, when it comes to the size of pensions assets in relation to the country GDP. The lower levels of pensions assets can be at least partly explained by the fact that Estonia has not had as much time as Finland and Ireland to develop its economy due to gaining independence relatively recently. Estonia should aim to increase its pension assets faster in the near future, in order to come closer to the EU average levels.

The position of pension funds on the Estonian market has improved since the amendment of the Investment Funds Act, which entered into force in the beginning of 2017. With the amendments, it is possible for pension funds to invest in unlisted securities up to 30% of fund’s assets instead of the previous 10%. The amendment in the act is also expected to solve the problem of the too high-ticket sizes of pension funds, which was seen as one of the major barriers for increasing the investments to Estonian markets. According to the Estonian Financial Supervision Authority, the changes in the regulation are expected to increase the activity of pension funds in the Estonian capital market even further.

The largest investor in the domestic market is LHV Pension Funds, which invests 24% of its assets into domestic bonds and shares. LHV Pension Funds is followed by Swedbank, with a share of 7% of all assets invested in domestic markets. All other fund managers invest remarkably less locally.

The share of domestic investments of the funds has grown in recent years – in 2015, LHV invested 13-16% of all assets in the Estonian market, while Swedbank invested approximately 5-6% of all assets.

During the interviews, the low level of investments of pension funds on the Estonian market was brought up numerous times. Although it was acknowledged that the situation has improved and domestic investments have increased, it is also clear that reaching the average level of developed countries is still far. Thus, one of the challenges of developing the Estonian capital market would be to motivate the pension funds to invest even more locally by creating the right capital market eco-system. It was also pointed out that all sudden reforms of the current pension system would endanger the improvements already achieved and may have a negative impact on the market.

When discussing the pension funds asset allocations with foreign investors, an idea emerged for creating an Estonian national government fund that

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86 Due to the low availability of comparable data of pension fund statistics, the comparison of domestic and non-domestic investments is not done with reference countries of the current study.


would invest in the Estonian capital market. The fund should be financed actively by the government and the collected funds should be invested in the Estonian capital market. This fund would mainly be targeted to supporting medium-sized companies in entering the capital market through capital investments. It would also be a part of a comprehensive stock exchange development programme intended to increase the share of capital fundraising in the life of Estonian companies, thus supplementing bank financing, which is currently over-represented. A similar fund has been established in Hungary, which has already shown promising results.
3.6. Insurances

The importance of the Estonian insurance sector is rather small compared with the whole financial sector. In 2017, the total assets of Estonian insurance companies were 8.7 % of GDP, while in EU countries the indicator was two thirds of GDP on average. The compiled insurance premiums reached nearly 1.9 % of GDP, which was more than four times less than the EU average figure.\(^{89}\)

There are three insurance companies that provide life insurance services and eight insurance companies that provide non-life insurance services. Additionally, there are two affiliated branches of foreign life insurance institutions (data as of 10 July 2018). Most Estonian insurance companies are owned by the Nordic parent companies and are also active in other Baltic markets. The market concentration is quite high – in 2017, the three biggest companies held 87 % of the life insurance market and 55 % of the non-life insurance market.\(^{90}\) The market share of non-life insurance services is major because there are several obligatory insurance products stated by law or regulation (e.g. vehicles, traffic and property insurance).

The volumes of the insurance premiums have increased moderately in recent years. During the period of 2012-2016, the insurance premiums increased 6-8 % per year, with the total sum of collected premiums being about EUR 384 million in 2016 (Figure 36).\(^{91}\)

As the collected insurance premiums represent a potential source of funding for local capital markets, it is important to analysis the investment volumes and strategy of the sector.


\(^{90}\) The list of licenced insurance companies. FSAEFSA homepage. https://www.fi.ee/index.php?id=772.

\(^{91}\) Statistics Estonia.

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**Figure 36. The volumes of collected insurance premiums 2012 – 2016**

*Source: Statistics Estonia*

The total amount of investments of the insurance companies was EUR 1 564 million in 2017. In recent years, the amount of investments has remained at the same level (2015 – EUR 1 522 million; 2016 – EUR 1 490 million) as has the breakdown between different instruments (Figure 37).\(^{92}\)

The most preferred investment instruments among insurance companies are fixed income securities, mostly the bonds of foreign governments and financial institutions, which comprised 65% of all investments in 2017. Approximately 20% of all investments were allocated to the equities and fund units, primarily to equity funds. Investments in equity and equity funds are made by the four largest insurance companies. There is no exact data available, but based on annual reports and interview results it can be concluded that almost 100% of the insurance sector’s investments are made abroad. Only one insurance company has declared to hold local shares, but these investments are more of a symbolic size.

Based on the interviews, the insurance companies seek very low-risk and long-time investment options. It was highlighted that although the headquarters of bigger insurance companies are generally in foreign countries, there is usually a local team responsible for investment decisions and risk assessment. The representatives expressed that there are no direct obstacles for investing in Estonia; they have done so or would consider it, but usually there are no suitable options. They that they would be interested in local government bonds, for example, or the listed shares of local companies (preferably state-owned companies).

During the interviews, they pointed to two more specific issues while considering potential investments in the Estonian capital market under the current conditions.

First, in principle it would also be possible to invest in smaller transactions and change the investment strategy more often (generally the investment strategy is planned for 5 to 10 years). But considering that most Estonian companies and funds do not have internationally assessed and approved risk levels, the insurance companies must first assess all the risks. Such a process would become economically unfeasible and would require remarkably more human resources.

Second, while potentially investing in the locally listed shares at Nasdaq Tallinn, the main problems would arise with exits. The insurance company would prefer to buy a large part of the listed shares. But in case of an exit the large size would have a price effect on the market and they current liquidity levels are potentially also problematic. It must be taken into consideration that the Estonian capital market is relatively small and a sizable sell could have an overall negative impact on the stock price of the respective company. Relying on these aspects, it can be concluded that insurance sector investments could be considered a possible extra accelerator for supporting the capital market growth if suitable conditions including an increased number of investable listed products with a sizeable base liquidity would exist.

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Figure 37. The breakdown of the insurance sector companies’ investments 2015-2017
Source: Civitta Eesti AS

The most preferred investment instruments among insurance companies are fixed income securities, mostly the bonds of foreign governments and financial institutions, which comprised 65% of all investments in 2017. Approximately 20% of all investments were allocated to the equities and fund units, primarily to equity funds. Investments in equity and equity funds are made by the four largest insurance companies.

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Based on the interviews, the insurance companies seek very low-risk and long-time investment options. It was highlighted that although the headquarters of bigger insurance companies are generally in foreign

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93 Based on the annual reports of the insurance companies.
3.7. International Financial Institutions

Currently, there are four major international financial institutions active in Estonia: the European Investment Bank, World Bank, Nordic Investment Bank and European Bank for Reconstruction and Development. The institutions fulfil different roles on worldwide or regional levels.

The European Investment Bank is the world’s largest multilateral borrower and lender owned by and representing the interests of EU Member States. The bank provides finance and expertise for sustainable investment projects that contribute to EU policy objectives. In Estonia, EIB financing in 2017 came to a total of EUR 111 million. The total investment of European Investment Bank Group (EIB together with EIF) was EUR 185 million in Estonia in 2017. The lending structure of EIB in Estonia is presented in Figure 38.

The World Bank is an international financial institution that provides loans to countries for capital projects. Estonia has been a member of the World Bank Group organisations of IBRD, IFC, MIGA, ICSID since 1992, IFC since 1993 and IDA since 2008. The last loan it issued to Estonia was in 2000, and it has not needed the financial help of the World Bank since then. In 2006, the status of Estonia as a borrower country was changed to contributor country, thus contributing to helping other countries. The current main task of the World Bank in Estonia is collecting economic and financial data.

The Nordic Investment Bank is an international financial institution of the Nordic and Baltic Countries. Estonia (together with Latvia and Lithuania) became a full-fledged owner of the bank in 2005, after close cooperation between the bank and the countries since the early 1990s. The main task of the Nordic Investment Bank is to offer loans and financing for Estonian companies. For example, in 2018, NIB and Estonia’s AS LHV Pank signed an agreement on launching a EUR 20 million loan programme for on-lending to small and medium-sized enterprises (SMEs) in Estonia.

The European Bank for Reconstruction and Development is a multilateral developmental bank using investments as a tool to build market economies. In Estonia, the institution focuses on supporting investments in energy efficiency and renewable energy, improving the competitiveness of the export sector and supporting cross-border investments by Estonian companies. An additional focus of EBRD is on developing local currency and capital markets through policy dialogue, technical co-operation and investments. In 2018, EBRD supported the IPO of AS Tallinna Sadam (Port of Tallinn) and acquired a stake of 3.6%. This investment was also in line with the Bank’s strategy to increase equity investments in its countries of operation.

Figure 38. Structure of EIB Group lendings in Estonia in 2017, EUR million
Source: Country overview of EIB

NIB press release (2018) NIB and LHV Bank to finance SME investments in Estonia

https://www.nib.int/who_we_are/news_and_media/news_press_releases/3014/nib_and_lhv_pank_to_finance_sme_investments_in_estonia
4. Products

4.1. Shares listed on Nasdaq Tallinn

The overall economic conditions in European countries have improved significantly over the last few years. The economy of European countries has started to grow faster, providing assurance and confidence for investors who are investing in European stocks. The bond purchase programme initiated by the European Central Bank has provided investors with more means to invest by increasing the money supply, which has had a positive impact on the majority of European stock markets, including Nasdaq Tallinn. Nasdaq Tallinn is closely connected to the other Baltic exchanges, as Nasdaq Tallinn, Nasdaq Vilnius and Nasdaq Riga are combined as the Baltic market.

The size and liquidity of Nasdaq Tallinn

Estonia’s ratio of market capitalisation to GDP for the first half of 2018 (13 %) is one of the lowest in the European Union. The size of the Estonian stock market puts it among the smallest in the European Union. There are currently 15 companies listed on the main list of Nasdaq Tallinn and 3 companies on the secondary list. There is currently one Estonian company listed on the First North market.

The total market capitalisation of Nasdaq Tallinn is about EUR 2.6 billion or about 13% of GDP in the end of the first half of 2018. In comparison, the capitalisation of the Stockholm Stock Exchange, one of the most developed exchanges in Northern Europe, is around EUR 1.05 trillion or 254% of GDP and the capitalisation of Helsinki exchange is EUR 210 billion or 89% of GDP. When compared to other countries that are more similar to Estonia in terms of size and economy, Nasdaq Tallinn is still one of the smallest and with very small trading volumes. A comparison of Nasdaq Tallinn capitalisation (as a percentage of GDP) with other European countries can be found in Figure 39.

![Figure 39. Number of companies listed on Nasdaq Tallinn](source)

Source: Nasdaq OMX Baltic

95 StockMarketClock. Available at: [https://www.stockmarketclock.com/exchanges](https://www.stockmarketclock.com/exchanges)

Figure 40. Countries by Stock market capitalisation to GDP (%) (Dec 2016)
Source: Eesti Pank

Figure 41 shows that the number of transactions made with shares on Nasdaq Tallinn has stayed mostly constant and at relatively low levels in the...
past five years. However, the transaction volume picked up slightly in 2017, reaching a record level of EUR 60,000 transactions per year in 2017.

The comparisons of Nasdaq Tallinn with other exchanges of countries with similar economic conditions to Estonia are demonstrated in Table 7.

Table 10 shows that market capitalisation of Nasdaq Tallinn is almost 6 times smaller than that of the Zagreb Stock Exchange in Croatia and significantly smaller than other comparable exchanges. Nasdaq Tallinn also has the lowest stock market capitalisation to GDP ratio among the selected countries. The other figures are also lower when compared to other exchanges; for example, the turnover of Nasdaq Tallinn for 2017 was more than two times lower than the turnover of the Zagreb Stock Exchange and ten times lower than the Irish Stock Exchange turnover. All figures for the Helsinki Stock Exchange are substantially higher when compared to other stock exchanges. On a positive note, the market capitalisation/turnover ratio is rather good for Nasdaq Tallinn, being lower than the ratio for the Helsinki Stock Exchange, but higher than the ratios for the Irish and Zagreb stock exchanges.

\\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
 & Nasdaq Tallinn & Zagreb Stock Exchange (Croatia) & Irish Stock Exchange (Ireland) & Helsinki Stock Exchange (Finland) \\
\hline
Market Capitalisation (billions) & 2.6 (11 \% of GDP) & 18.7 (38 \% of GDP) & 126.8 (202 \% of GDP) & 210 (94 \% of GDP) \\
\hline
Number of companies & 19 & 27 & 51 & 130 \\
\hline
Turnover (billions) & 0.15 & 0.35 & 1.6 & 134 \\
\hline
Avg. daily turnover (m) & 0.41 & 0.96 & 4.4 & 367 \\
\hline
Market Capitalisation/turnover ratio & 17.3 & 53.4 & 79.25 & 1.56 \\
\hline
Avg. daily number of trades & 240 & 495 & 358 & 65,200 \\
\hline
\end{tabular}
\\caption{Comparison of size between exchanges\\label{table:comparison}}\\end{table}

As a result of Nasdaq Tallinn being small, rather illiquid and having only some larger companies listed, there are only a few big institutions and foreign investors that are willing or able to invest in or interested in the companies

---

96 StockMarketClock. Available at: \url{https://www.stockmarketclock.com/exchanges}
97 Irish Stock Exchange. Available at: \url{http://www.ise.ie}
98 Zagreb Stock Exchange. Available at: \url{http://zse.hr}
listed on Nasdaq Tallinn. The biggest company on Nasdaq Tallinn is Tallink, with market capitalisation of EUR 700 million. This is not big enough for foreign investors who are interested in larger investments. The market participants estimate that market capitalisation of around EUR 1 billion would be suitable for bigger investors. Due to the small size, low liquidity and lack of companies on Nasdaq Tallinn, it is very difficult for larger foreign investors and institutions to invest here.

As can be seen in the Figure 42, Nasdaq Tallinn is also rather concentrated, when taking into consideration of the number of companies listed. The market capitalisation of five of the biggest companies listed on Nasdaq Tallinn make up more than 75% of the total market capitalisation of Nasdaq Tallinn. These companies are also the most actively traded and liquid companies on Nasdaq Tallinn.

On the secondary list, there are three companies listed and their total market capitalisation is EUR 100 million:
- Pro Kapital Grupp (capitalisation of EUR 96 million)
- Skano Group (capitalisation of EUR 2.2 million)
- Trigon Property Development (capitalisation of EUR 2.2 million)

State participation in the development of the local capital market

According to the opinion of the interview participants, the government of Estonia has not given the development of the Estonian capital market high priority in the past. The government has privatised only two state-owned companies (Tallinna Sadam and Eesti Telekom) since the creation of the local exchange. Eesti Telekom was listed in 1999 and Tallinna Sadam was listed on Nasdaq Tallinn at the beginning of June 2018.

The listing of Tallinna Sadam on Nasdaq Tallinn is definitely a positive development, but the understanding of market participants is that an overall capital market development strategy set by the government is required. This development plan needs to set measurable goals that ensure the completion of the strategy even when a new government takes over, after parliamentary elections. Currently, there is no such strategy in place.

According to most of the interviewed participants, listing new state-owned companies and government bonds on Nasdaq Tallinn would improve the liquidity of Nasdaq Tallinn and make it more attractive for foreign and institutional investors. Government bonds and larger state-owned companies on Nasdaq Tallinn would be suitable investments for institutional and large foreign investors. This is also reflected by the verbatim comments by a European mutual fund (AUM > USD 10 bn) which stated “There are some other markets that I am positive on, such as Estonia, but they are too small for me to have direct exposure to. At the moment, Estonia is growing better than a number of other countries that I am covering. It has been recovering

Figure 42. The capitalisations of the stocks listed on Nasdaq Tallinn main list (EUR million, as of May 2018)
Source: Nasdaq OMX Baltic
for some years already from the 2008 downturn. The government there is market-friendly. It has been doing the right things for a while now.\textsuperscript{99}

Getting more attention from these investors could make the local stock exchange more visible and also more liquid, due to increased outside interest. These opinions are also supported by empirical evidence – the privatisation of IPOs increases both the overall liquidity of the stock market and the liquidity of the shares of non-privatised companies by improving on investors’ diversification opportunities.\textsuperscript{100}

The supporting role of the government is crucial for a market to develop. The experience of stock markets in developed countries shows that the development of a stock market cannot be isolated from solid institutional structures. The infrastructure of Nasdaq Tallinn is well developed and supervision by the state is adequate; however, there are several ways the government can add value. Poland is a clear example of a country where the government has been one of the main developers of the local capital market. The government of Poland has initially set clear goals for the future of the Warsaw Stock Exchange and is also participating actively in shaping its future development. A more thorough analysis of the best practices by different countries can be found in Chapter 8.

Poland has been active in introducing both bonds and state-owned companies on the exchange and has strongly advocated pension fund investments in companies listed on the Warsaw Stock Exchange, which has contributed significantly to the development of the local capital market.\textsuperscript{101}

\textbf{Performance of the companies listed on Nasdaq Tallinn}

High growth enterprises (annual growth in employment by 10\% or more) play an important role in contributing to the economic growth and creation of jobs. Figure 43 illustrates how Estonian companies lag behind most other EU countries and the EU average in terms of the number of high growth local enterprises.\textsuperscript{102}

The slow growth of Estonian companies is also seen on Nasdaq Tallinn, where the growth of listed companies has not been fast enough to make foreign investors and institutions more interested in Nasdaq Tallinn.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure43}
\caption{High-growth enterprise shares (columns) in EU Member States, 2015 (\%)\textsuperscript{99}}\textsuperscript{102}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure43}
\caption{Figure 43. High-growth enterprise shares (columns) in EU Member States, 2015 (\%)\textsuperscript{99}}\textsuperscript{102}
\end{figure}

Source: Eurostat

Performance of the companies listed on Nasdaq Tallinn

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\end{figure}

Source: Eurostat

EU countries and the EU average in terms of the number of high growth local enterprises.\textsuperscript{102}

For example, when taking a closer look at six of the highest market capitalisation and most actively traded stocks on Nasdaq Tallinn (Tallink, Olympic Entertainment Group (OEG), Tallinna Kaubamaja, Tallinna Vesi,

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure43}
\caption{Figure 43. High-growth enterprise shares (columns) in EU Member States, 2015 (\%)\textsuperscript{99}}\textsuperscript{102}
\end{figure}

Source: Eurostat

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\end{figure}

Source: Eurostat

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\includegraphics[width=\textwidth]{figure43}
\caption{Figure 43. High-growth enterprise shares (columns) in EU Member States, 2015 (\%)\textsuperscript{99}}\textsuperscript{102}
\end{figure}

Source: Eurostat

100 Bernardo Bortolotti (2007) “Privatization and stock market liquidity”
101 Reuters Staff (2014) Polish pension funds must hold at least 75\% in stocks through 2014. Available at: \url{www.reuters.com}
102 Eurostat (2017) Business demography statistics. Available at: \url{http://ec.europa.eu/eurostat}
Merko Ehitus and Silvano Fashion Group), their market capitalisations and the share prices have not changed much over the last decade.

Table 11 shows that the revenue growth of most of the companies has also been rather modest over the five-year period, averaging at around 0.6% per year for the six companies listed in the table on the right. The lack of revenue growth is also reflected in the prices of these stocks, which have not been able to exceed their pre-2008 crisis prices in most cases.

These companies are among the most influential on Nasdaq Tallinn, illustrating the stagnation and underwhelming price performance offered by the Estonian largest companies listed on Nasdaq Tallinn. This price underperformance is caused by the inability of the listed companies to grow, which has also kept the share prices of these companies at low levels.

<table>
<thead>
<tr>
<th></th>
<th>OEG</th>
<th>Tallink</th>
<th>Tallinna Kaubamaja</th>
<th>Tallinna Vesi</th>
<th>Merko Ehitus</th>
<th>Silvano Fashion Group</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock price before 2008 crisis (EUR, as of May 2018)</td>
<td>6</td>
<td>11</td>
<td>9</td>
<td>14</td>
<td>7</td>
<td>5</td>
<td>n/a</td>
</tr>
<tr>
<td>Stock price during 2008 crisis (EUR, as of May 2018)</td>
<td>0.5</td>
<td>0.4</td>
<td>2</td>
<td>8.5</td>
<td>2</td>
<td>0.5</td>
<td>n/a</td>
</tr>
<tr>
<td>Current stock price (EUR, as of May 2018)</td>
<td>1.9</td>
<td>1.1</td>
<td>9.3</td>
<td>11</td>
<td>11</td>
<td>2.8</td>
<td>n/a</td>
</tr>
<tr>
<td>Revenue growth (5y. average) (%)</td>
<td>5.06</td>
<td>-4.57</td>
<td>6.84</td>
<td>2.48</td>
<td>4.98</td>
<td>-10.98</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Although dividends have been paid, the return on investment for investors has not been adequate for a 10-year period, especially when compared with other larger companies that are listed on more developed stock exchanges. Although recent years have shown great returns for investors, as demonstrated by the 66% rise in OMX Tallinn index, the cumulative return of Nasdaq Tallinn during a 10-year period has been underwhelming (less than 20%), especially when compared to the stock market growth of large developed countries. For example, the most widely followed stock index in the world, the S&P 500, has risen more than 180% since the 2008 financial crisis and the German stock index DAX 30 has risen more than 110% in the same time period. However, the returns of Nasdaq Tallinn during the last 5 years have been significantly better than the average saving account rates that the local banks pay to people who keep their money in savings accounts. This rate has been less than 2% in most banks for the 5-year period and is currently under 1%. There are also very few companies that are interested in expanding their activities outside of their current home markets, which can also be considered one of the reasons for stagnation in the companies listed on Nasdaq Tallinn. There have been several expansion attempts, such as by


Tallinna Kaubamaja, OEG and Baltika, but these have resulted in a loss of capital for the companies and investors. Over the last 10 years, there also haven’t been any secondary public offerings of companies currently listed on the exchange.
4.2. Bond market

The Estonian bond market can in general be divided into two main markets: the Nasdaq Tallinn bond market and the private bond market.

The Nasdaq Tallinn bond list is divided into the regulated market and the First North market. The regulated bonds market consists of government and Central/European Bank bonds and Corporate bonds, and the First North market consists of the First North Baltic Bonds.

Currently, the Nasdaq Tallinn bond market cannot be considered active, as there are only a few bonds listed on the different bond markets. The trading activity with the bonds is also extremely low, as can be seen in Figure 44 below. The number of bonds transactions per year clearly shows an upward trajectory over a three-year period. However, the numbers are still very low when compared to other more developed bond markets (Irish and Croatian bond market where government bonds are also listed), due to the small number of bonds being listed on the exchange.

![Figure 44. Number of bond transactions on Nasdaq Tallinn 2015-2017](Source: Nasdaq OMX Baltic)

The corporate bonds market is most actively used, and there are four different bonds listed by three Estonian companies. There is only one bond listed on the First North market by an Estonian company and there are no bonds listed on the government and Central/European Banks bonds list. The following table gives an overview of the listed bonds, their interest rate, listing time and the amount raised.

<table>
<thead>
<tr>
<th>Market segment</th>
<th>LHV Group 7.25 % subord. bond</th>
<th>LHV Group 6.5% subord. bond</th>
<th>Inbank 7.00 % subord. bond</th>
<th>Admiral Markets 8 % subord. bond</th>
<th>Mainor Ulemiste 5.5% 5Y bond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate (%)</td>
<td>7.25</td>
<td>6.5</td>
<td>7</td>
<td>8</td>
<td>5.5</td>
</tr>
<tr>
<td>Time of listing</td>
<td>5.10.15</td>
<td>2.11.15</td>
<td>3.10.16</td>
<td>11.1.18</td>
<td>1.2.18</td>
</tr>
<tr>
<td>Amount raised (EUR million)</td>
<td>15.9</td>
<td>15</td>
<td>6.5</td>
<td>1.8</td>
<td>10</td>
</tr>
<tr>
<td>Maturity</td>
<td>20.6.24</td>
<td>29.10.25</td>
<td>28.9.26</td>
<td>28.12.27</td>
<td>5.4.23</td>
</tr>
</tbody>
</table>

Table 12. Overview of bonds listed on Nasdaq Tallinn, as of May 2018
Source: Nasdaq OMX Baltic

The First North Bond Market is a multilateral trading facility, or, in more common terms, an alternative marketplace. It does not have the legal status of an EU regulated market. Companies on First North are subject to the rules of First North and not the legal requirements for listing or admission to trading on a regulated market. It is operated by Nasdaq with a separate
rulebook and price list. Thus, it can offer companies more flexible admission and other requirements compared to the regulated market.\textsuperscript{105}

First North complements the regulated market. Some issuers can get bigger benefits from the leaner admission process and requirements on the First North Bond Market, whereas other issuers find that their investors require admission to a regulated market. In short, First North gives both issuers and investors a wider range of possibilities.\textsuperscript{106}

In addition to bonds, there is also a Baltic fund list on Nasdaq Tallinn; however, there is currently only one Estonian funds listed (Baltic Horizon Fund). The trading activity in the fund list is also very low when compared to more active stocks on Nasdaq Tallinn, reaching just over 2 000 transactions in 2017.

According to the capital market participants, most traditional SMEs face difficulties in finding external equity investments. Considering also the issues regarding low knowledge and awareness among SMEs, these circumstances together increase the SMEs' dependence on bank loans. The reason companies most often issue bonds is to raise needed capital. Bonds are an alternative to more traditional bank financing through loans. Statistics show that Baltic companies are increasingly using corporate bonds to fund themselves.

Therefore, in addition to the bonds listed on the Nasdaq Tallinn bond lists, considerable amounts of money have been raised by private bond issuers that have been arranged by private Estonian companies on the OTC market through private placements. The buyers of these OTC bonds have usually been large local investment companies, HNWIs, family offices or pension funds. For example, Alexela Group issued EUR 25 million worth of bonds at the beginning of 2018, in order to raise capital for purchasing the Euro Oil filling station network. The interest rate for these bonds was 5.5 % and the bonds were issued for 10 years. These bonds were bought by the pension funds of LHV and Swedbank.\textsuperscript{107} Another example of private capital raising is the bonds issued by Tartu City Government at the end of 2017. These bonds were bought by LHV (for EUR 5.5 million) and Nordic Investment Bank (for EUR 8 million) for the period of 15 years.\textsuperscript{108} Bigbank, an Estonian bank focused on time deposits and consumer loans, also issued EUR 5 million worth of bonds at the end of 2017. The fixed interest rate for these loans was 6.5 % and they were issued for 10 years. The buyer of these bonds was once again the LHV pension fund.\textsuperscript{109} A list of a selection of the private bond issues by Estonian companies in the last three years can be found in Table 13 below. There have been many more additional bonds issued over this period; however, due to restrictions by the Supervision Authority and other regulations, many of the smaller creditors cannot offer their bonds publicly or list them on the Nasdaq Tallinn bond market.

\textsuperscript{105} Nasdaq OMX Baltic \url{http://www.nasdaqbaltic.com/en/products-services/listing-2/first-north-bond-market/}
\textsuperscript{107} Rebane, Liisa “Alexela haub börsiplaani” \url{https://www.aripaev.ee/uudised/2018/03/02/alexela-haub-borsiplaani}
\textsuperscript{108} BNS “Tartu emiteerib 13,5 miljoni euro eest võlakirju” \url{https://www.err.ee/639185/tartu-emiteerib-13-5-miljoni-euro-eest-volakirju}
\textsuperscript{109} Salusoo, Ervin “Bigbank emiteeris 5 miljoni euro eest võlakirju” \url{https://www.bigbank.ee/281217volakirjad/}
### Table 13. List of privately issued bonds by Estonian companies, as of June 2018
Source: Äripäev, FinanceEstonia

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Interest rate (%)</th>
<th>Time of issue</th>
<th>Amount raised (EUR million)</th>
<th>Maturity</th>
<th>Buyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arco Vara</td>
<td>12 %</td>
<td>2016</td>
<td>1.12</td>
<td>2 years</td>
<td>n/a</td>
</tr>
<tr>
<td>Luminor</td>
<td>n/a</td>
<td>2017</td>
<td>65</td>
<td>n/a</td>
<td>LHV, Swedbank</td>
</tr>
<tr>
<td>Tartu City Government</td>
<td>n/a</td>
<td>2017</td>
<td>13.5</td>
<td>15 years</td>
<td>LHV, Nordic Investment Bank</td>
</tr>
<tr>
<td>Bigbank</td>
<td>6.5 %</td>
<td>2017</td>
<td>5</td>
<td>10 years</td>
<td>LHV</td>
</tr>
<tr>
<td>Alexela Group</td>
<td>5.5 %</td>
<td>2018</td>
<td>25</td>
<td>10 years</td>
<td>LHV, Swedbank</td>
</tr>
<tr>
<td>Endover</td>
<td>11 %</td>
<td>2018</td>
<td>10</td>
<td>2 years</td>
<td>HNWI, family office, investment companies</td>
</tr>
<tr>
<td>Coop Bank</td>
<td>n/a</td>
<td>2018</td>
<td>5</td>
<td>3 years</td>
<td>LHV</td>
</tr>
<tr>
<td>Endover</td>
<td>11 %</td>
<td>2018</td>
<td>10</td>
<td>2 years</td>
<td>Institutional and private investors from the Baltic countries</td>
</tr>
<tr>
<td>Creditstar</td>
<td>8-12 %</td>
<td>2018</td>
<td>35</td>
<td>1-3 years</td>
<td>Institutional and private investors from the Baltic countries</td>
</tr>
<tr>
<td>PlusPlus Capital</td>
<td>10 %</td>
<td>2018</td>
<td>5</td>
<td>3 years</td>
<td>Institutional and private investors</td>
</tr>
</tbody>
</table>

There are a variety of corporate bonds available in the Estonian capital market; however, there is no complete database of these bonds available, due to the fact that these bonds are often not publicly advertised or made available to retail investors due to regulations or other reasons. These kinds of private bond issues are a frequent occurrence in the Estonian capital market, due to the majority of Estonian companies financing their activities with loans. However, the majority of the bonds are not issued through Nasdaq Tallinn. One of the reasons why most companies place bonds privately is that they usually do not respond to the regulations set by the Supervision Authority. Another reason might be that the buyers of these bonds are already known before the issuing and there is no need to attract additional financing from investors. Therefore, it might be more cost effective to sell the bonds privately.

When it comes to the range and depth of corporate bond activity among the countries chosen for benchmarking, Figure 45 shows that the most active
issuers for corporate bonds relative to GDP is Luxembourg, where the corporate bond issuance amount makes up 7.4% of GDP. When compared to other benchmarked countries, the issuance amount in Estonia makes up only 1% of GDP, which is slightly higher than the amount in Croatia and Poland, but lower than the amount in Western European countries (Finland, Ireland and Luxembourg). The EU average is also more than two times higher. It is expected however, that Western European countries outperform Eastern European countries when it comes to corporate bond activity, mainly due to having more developed capital markets and economies. As mentioned above, the corporate bond market in Estonia can be considered active, which is also proven by Figure 45, as Estonia has a higher depth of corporate bond issuance relative to GDP than both, Croatia and Poland, whose economies and capital markets are more comparable to Estonia.

As can be seen from Figure 46, the range in depth of high-yield bond markets in the EU differs significantly between the benchmarked countries. It is clear that the most active issuers of high-yield bonds are Luxembourg and Ireland, whereas Estonia and Poland come in last place out of the benchmarked countries. Based on these figures, it is clear that issuing high-yield bonds is not common in Estonia. These results are to be expected, as Estonian companies seem to prefer issuing lower-yield corporate bonds as their primary financing option.

**Figure 46. The depth of high-yield bond issuance relative to GDP in the three years to 2016**
Source: Dealogic, IMF, New Financial

**Government securities and the national debt level of Estonia**

Estonia currently has the lowest national debt level among the EU countries. Estonia’s “national debt” is measured as its “general government debt,” which means the debts of every layer of government. Gross debt measures all of the debts of a government as represented by bank loans and outstanding debt instruments. The IMF and the OECD are international bodies that monitor the economies of the world. At the end of 2017, the gross national debt of Estonia when expressed as a proportion of GDP was reported as 8.8% of GDP by IMF. As a member of the EU, Estonia is also reported on by Eurostat. The Eurostat methods are very close to those of the IMF and they are the same methods used by the government of Estonia itself.
when calculating national debt. The national debt of Estonia is estimated at 9% of GDP by Eurostat.\footnote{National debt clocks \url{https://www.nationaldebtclocks.org/debtclock/estonia}}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{national_debt_chart}
\caption{National debt in the 1st quarter 2018 in relation to gross domestic product (GDP)}
\label{fig:national_debt}
\end{figure}

As can be seen on Figure 47, the national debt of Estonia is significantly lower than that of other benchmarked countries. An especially large difference can be seen when comparing the national debt level of Estonia and the EU average national debt level, which is almost 10 times higher. Estonia can be seen as an exemplary country when it comes to keeping its national budget in check, while still showing great numbers of economic growth.

Estonia’s extremely low national debt when expressed as a percentage of GDP is higher now than it was at the beginning of the century. Therefore, the debt of the country has been on an upward trend. However, the increase in the ratio peaked in 2014 and has been falling since. The State Treasury does not like to raise debt through the sale of traditional debt instruments to the commercial market. However, the Estonian government became used to getting loans from other governments and international development banks during the early years of its independence and became used to this form of borrowing.\footnote{National debt clocks \url{https://www.nationaldebtclocks.org/debtclock/estonia}}

There have only been two points in its recent history that the government of Estonia has issued bonds, in 1993 and 2004. These were before the country moved over from its own currency to the Euro. Since the above bonds were paid off, the Estonian government has not issued any more.\footnote{National debt clocks \url{https://www.nationaldebtclocks.org/debtclock/estonia}} Currently, the main investment holders of the Estonian government loans are other governments and international development banks, as Estonia has not issued traditional government bonds when taking loans.

Although extremely low levels of national debt are definitely a positive sign for Estonia and show the strength of the local economy, the \textit{lack of government bonds was seen as a difficulty in finding low-risk local financial instruments by many of the local capital market participants}. As already stated before, listing government bonds on Nasdaq Tallinn would offer better investment opportunities to both local and foreign investors. Government bonds would also bring much needed attention to Nasdaq Tallinn, which could in turn increase the liquidity and attractiveness of the local capital market. \textit{Government bonds and their interest rates are also important indicators of the capital market conditions of a country}, and are often closely followed by foreign investors and institutions. The lack of government bonds seems to be a negative aspect in the eyes of foreign investors and institutions, which cannot easily assess the Estonian economic strength and investment potential.

Foreign investors that were interviewed during the writing of this report also noted that issuing government bonds could make Estonia and its capital markets more visible for foreign investors. However, the bonds should not be issued for this purpose alone. Bonds should only be used when the capital
gathered from issuing these bonds will be required for a specific and useful purpose.

**Funding opportunities offered by the Estonian stock and bond market**

As seen on the figure below, the funding opportunities offered by the Estonian stock and bond markets are mainly aimed at more mature companies starting from the growth phase. Bonds seem to be more universally used, while the main and secondary lists of the stock exchange are suitable for more mature companies and First North for growth companies.

![Figure 48. Funding opportunities for companies in different stages of development](image)

Source: Based on market data and the feedback of market participants
4.3. Mutual Funds, hedge funds and other financial instruments

The financial instruments covered in this chapter are not as available and widely used as they are in most countries with highly developed capital markets, such as the United States, Germany, France, etc. Due to the small size of Estonia, there are not many mutual funds or hedge funds of local origin present here. As none of the main problems or shortcomings identified in the report is related to these topics, the analysis of these topics is also less detailed.

The performance of Estonian mutual funds and hedge funds

Traditionally, a mutual fund is a collection of stocks, bonds or other securities. When someone is buying a mutual fund, that person owns the share of the mutual fund. The price of each mutual fund unit is called its NAV, or net asset value. That’s the total value of all the securities it owns divided by the number of the mutual fund’s units. Mutual fund units are traded continuously between brokers and customers, but their transaction price is decided based on its NAV calculated at the end of each business day.

There are mainly two types of mutual fund types: stock funds and bond funds. Funds with similar concept for a mutual fund and traded at a stock exchange are called Exchange Traded Funds (ETFs). There are only a few mutual funds in Estonia, of which the largest are managed by Trigon capital and Avaron. As can be seen in Table 14 below, the average returns of these mutual funds have been relatively good, averaging at a minimum of 5 % per year. Most of the funds are targeted at buying listed securities and each of the funds offers at least 1 type of unit that has no minimum investment requirement. That makes these funds accessible to both large investors and retail investors. There are currently no ETFs available in Estonia.

Similarly to mutual funds, there are currently very few investment companies that could be categorised as a hedge fund in Estonia. A hedge fund is an alternative investment that is designed to protect investment portfolios from market uncertainty, while generating positive returns in both up and down markets. The most well known and most likely the first hedge fund in Estonia is KRR Funds, which was established in 2013. The return of KRR Funds has been impressive in the past 2 years, offering an

Table 14. Overview of Estonian mutual funds, as of June 2018
Source: Avaron homepage, Trigon Capital homepage

<table>
<thead>
<tr>
<th>Fund name</th>
<th>Average 5 year return per fund</th>
<th>Minimum investment per unit</th>
<th>Fund AUM</th>
<th>Investment target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avaron Emerging Europe Fund</td>
<td>25 %</td>
<td>Unit D: No min.</td>
<td>EUR 450+ M</td>
<td>Listed equities of European Union new member states and accession countries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit C: EUR 125 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit E: EUR 1 M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trigon New Europe Fund</td>
<td>55 %</td>
<td>Unit B: EUR 5 M</td>
<td>EUR 124.3 M</td>
<td>Listed equity securities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit D: EUR 3 M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit E: No min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trigon Russia Top Picks Fund</td>
<td>35 %</td>
<td>Unit A: EUR 1 M</td>
<td>EUR 13.4 M</td>
<td>Securities traded on the global regulated markets with a Russian market focus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit D: No min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trigon Baltic Fund</td>
<td>54 %</td>
<td>Unit A: No min.</td>
<td>EUR 2.4 M</td>
<td>Companies operating or listed in the Baltic States</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit C: No min.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

113 Amadeo, Kimerly, How mutual funds work. [https://www.thebalance.com/what-are-mutual-funds-3306241](https://www.thebalance.com/what-are-mutual-funds-3306241)

114 Kennon, Joshua “What is a hedge fund” [http://www.hedgefundmarketing.org/hedge-fund-definition/]
average return of about 25% per year. The fees for this fund are also relatively high, with the management fee being 2% and performance fee 30%. The minimum investment is also quite high at EUR 10,000, making it difficult to invest in for retail investors.

**Etalon Varahaldus** is another example of a hedge fund in Estonia, which was established in 2015 as a non-public investment fund. However, since losing about two thirds of its capital under management, the performance and other details about this fund are no longer public.

**Other financial instruments are not easily accessible for investors**

Over-the-counter derivatives are private contracts between counterparties. Unlike over-the-counter derivatives, listed derivatives are more structured and standardised contracts in which the underlying assets, the quantity of the underlying assets and settlement are specified by the exchange. Over-the-counter derivatives are private contracts that are traded between two parties without going through an exchange or other intermediaries. Therefore, over-the-counter derivatives could be negotiated and customised to suit the exact risk and return needed by each party. Although this type of derivative offers flexibility, it poses a credit risk because there is no clearing corporation.  

In Estonia, transactions take place with OTC derivatives, like SWAPs and other instruments; however, as these are traded privately, there is no public data available for more detailed analysis. According to the market players, OTC transactions with bonds and different financial instruments make up a considerable volume in the local capital market.

In Estonia, purchasing or selling listed derivatives is difficult, and even the regional banks do not offer the possibility for retail investors to trade products like options, futures, swaps, etc. In order to trade with these kinds of products, it is necessary to open an account with one of the international brokerage platforms, which would allow derivatives trading. Even purchasing ETFs or certain foreign stocks has been made more difficult recently, due to new regulations introduced in 2018 (MiFID II). These regulations allow the banks to either deny access to third-country equities completely, or to not comply with its provisions and continue providing access to these stocks for investors.

**High-Frequency trading is not used in Estonia**

HTF or High frequency trading is a computer-driven investment trading strategy that emphasises high transaction volume, extremely short-duration positions and rapid rule-based automated buying and selling. High frequency trading is performed by computer algorithms, operated by investment companies or boutique market-making companies that react to pre-specified market conditions to generate short-term profit. Although Estonia is a technologically advanced and well-connected country, which would offer High Frequency Traders a suitable operating environment, there are currently no publicly known companies in Estonia that are implementing high frequency trading strategies.

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117 High Frequency Trading definition [http://www.businessdictionary.com/definition/high-frequency-trading.html](http://www.businessdictionary.com/definition/high-frequency-trading.html)
5. Legal and Regulatory Framework

5.1. Key regulations in force

Securities markets

In Estonia, the main legislative act regulating capital markets is the **Securities Market Act** (entry into force 2002, as amended). The Securities Market Act defines the securities and regulates the public offering of securities, including requirements on prospectuses and securities’ admission to trading on regulated securities markets. The act also provides for regulation of the activities of investment firms and the provision of investment services, the functioning of a regulated securities market and a securities settlement system, as well as the requirements for takeovers.

There are **no capital inflow or outflow restrictions** in place in Estonia and **no restrictions for the participation of foreigners** in the capital markets.

The disclosure **requirements on the information contained in prospectuses** in order to facilitate investor protection in case of public offering of securities or admission to trading on regulated market and the format of prospectuses derives from the old EU Prospectus Regulation (EU 809/2004) and the Securities Market Act refers to this EU Prospectus Regulation in respective parts. The threshold for preparing and registering a prospectus is EUR 2.5 million and specific requirements on the prospectuses established by the Minister of Finance apply for public offerings with a consideration less than EUR 5 million, i.e. a lighter version of disclosure is required.

As the Securities Market Act was passed nearly 20 years ago and has been amended repeatedly since, the law includes many ambiguous clauses and leaves room for multiple interpretation. Many amendments derive from relevant EU legislation, with the most recent amendments being in connection with the enforcement of Market Abuse Regulation and the transposing of MiFID II. Currently, further amendments are envisaged due to recently adopted EU legislation (please see Section 1.3 for more details).

The requirements for issuers to become a listed entity, requirements for the securities to become listed and related disclosure requirements are regulated in the **Nasdaq Tallinn Rules and Regulations** (the Rulebook). The Rulebook among other topics also provides rules for the clearing and settlement of stock exchange transactions.

Shareholder rights and the general principles of corporate governance derive from the Commercial Code (entry into force 1995, as amended), which is the primary legislative act regulating companies. While, according to a general principle, all shareholders must be treated equally under equal circumstances, under the thresholds at which decisions can be passed the minority shareholders holding less than one third of the votes have quite limited protection. The situations that have gained most public attention are the majority shareholder refusing to decide on dividend payment and the price paid to minority shareholders in case of a squeeze-out.

Post-trade services

The registration of securities and other operations performed with the securities are regulated by the **Securities Register Maintenance Act** (entry into force 2001, as amended). The Estonian Register of Securities is currently kept by Nasdaq CSD SE, a regional central securities depository in the Baltics with its headquarters in Latvia and a branch in Estonia.

In order to hold and **trade with securities, one must own a securities account that is linked to a bank account**. As the account operators with the Estonian Register of Securities are credit institutions, a potential investor would need to open a bank account and securities account with the Estonian credit institution. Opening a securities account includes establishing a client relationship (i.e. opening a bank account) with an Estonian bank, which is a prerequisite by all credit institutions in Estonia. Establishing client relationships with Estonian banks for foreign investors is complicated and time consuming and often results in a negative outcome, i.e. client relationship will not be established. Although the Securities Register Maintenance Act indicates that the registrar may open securities account without the mediation of an account operator, this option is not used in practice. The main reason behind the difficulties in opening the bank
accounts is the interpretation of the anti-money laundering regulation by the credit institutions. Banks take a very conservative approach when establishing a client relationship and applying due diligence measures. This is based on their risk appetite, which seems to be rather low when it comes to foreign clients. According to several interviewees, foreign investors wanting to invest in Estonian stocks are not willing to contribute too much of their time on complying with these regulations, as the Estonian capital market is relatively small and illiquid. When too much paperwork is involved in being able to trade with Estonian securities, foreign investors will often find other alternative markets.

The Ministry of Finance has indicated that the problem for foreign investors might ease by legislative amendments in enabling the securities depository to open a limited-use securities account for investors without the necessity of having a bank account. However, as the limited account would not enable investors to perform any transactions until due diligence measures are completed, the amendment is not likely to solve the problem.

There have been different proposals by banking experts in Estonia to solve this problem. According to one proposal, the Estonian Financial Intelligence Unit (FIU) should provide Estonian banks with more specific instructions on sufficient fulfilment of the AML requirements set by law. That would enable banks to more properly manage their risks and perhaps simplify establishing a client relationship with foreign investors.

It has also been proposed that in addition to instructions by FIU, the EFSA should also issue their respective guidelines. Based on such detailed guidelines the banks could reduce their administrative burden and eventually create a unified market practice in applying due diligence measures.

**Investment funds**

The activity of the investment funds is regulated by the Investment Funds Act (entry into force 2017, as amended), which provides requirements for the establishment and management of investment funds (including UCITS, pension funds, alternative fund), offers of their units and shares, and requirements for obtaining an activity licence as a fund manager. The Investment Funds Act also provides requirements for investing the assets of the investment funds.

**Insurance**

Insurance activities are regulated by the Insurance Activities Act (entry into force 2016, as amended), which also provides regulations for the supervision of insurance undertakings. The Insurance Activities Act implements EU Directive 2009/138/EC (Solvency II) and provides principles for investing the assets of insurance undertakings.

**Taxation**

The taxation of income from investments is regulated by the Estonian Income Tax Act (ITA, entry into force 2000, as amended). Corporate entities can benefit from the deferred corporate income tax system, which enables them to postpone the corporate income tax liability up to the moment of distributing profits. Natural persons are generally not able to postpone the income tax liability on capital gains, interest income or other type of income from investments as being subject to personal income tax on an annual basis.

As an exception, Estonia provides a regime of investment accounts, which enables natural persons to postpone the income tax liability similarly to corporate entities. The income tax liability arising from gains or income received on financial assets specified in section 171 sub-section 2 (mostly publicly traded securities and shares) of the ITA can be postponed up to the moment of making payments from the investment account that exceed the payments to the investment account made by the account holder. The prerequisite for this is that the financial assets shall be acquired exclusively for the funds on a cash account opened for such a purpose with a credit institution or in the permanent establishment of a credit institution.

The applicability of such a regime is, however, very limited and does not cover most of the investment schemes it should normally cover. When using intermediaries (such as Interactive Brokers U.K or Investly), the money for investment is usually transferred to this intermediary, which is then used for buying securities and shares. In most cases, the intermediaries involved are
not credit institutions, meaning the investment account regime is not applicable to the money transferred to the broker’s account. This excludes a major part of investment activities from the investment account system.

As noted by market participants, this is a problem when using crowdfunding platforms. Income to investors’ accounts on crowdfunding platforms is subject to income tax deductions while income to investment accounts with credit institutions is not subject to income tax deduction. This may hinder the rise of activity on crowdfunding platforms, as it affects the return on investment for investors.

A solution to the problem could be to allow acquiring the financial assets for funds that are also transferred to intermediaries and similar operators. It is possible to track the balance of payments made to and by the intermediaries, enabling a sufficient level of comfort for the tax authority to check whether the tax return is correct.

In the case of trading with a large number of financial assets, it is unreasonably burdensome to insert every transaction separately to the natural person’s income tax return form on which the investment account balance before and after every transaction should be declared. If the goal of such a detailed overview on the changes in the balance is to monitor changes on the account, it should be possible to present such information in an automated way.

**Anti-Money Laundering**

The principles to prevent money laundering and terrorist financing applicable to most participants of the capital markets are regulated by the Money Laundering and Terrorist Financing Prevention Act (AML Act, entry into force 2017, as amended). The AML Act transposes the Fourth AML Directive into Estonian legislation and provides the principles of assessment, management and mitigation of risks related to money laundering and terrorist financing, obligations related to disclosing the beneficial owners of legal persons and supervision over and liability of obliged entities.

**Insolvency**

Insolvency proceedings are regulated by the Bankruptcy Act (entry into force 2004, as amended), which defines bankruptcy as the insolvency of a debtor declared by a court ruling. The Bankruptcy Act is applicable to most companies and private persons, unless otherwise stated in law. The state or a local government cannot be bankrupt.

There are also specific insolvency regulations for certain types of debtors in addition to or instead of the Bankruptcy Act – for example, credit institutions (as regulated by the Credit Institutions Act), common funds (as regulated by the Investment Funds Act) and insurance undertakings (as regulated by the Insurance Activities Act).

Bankruptcy proceedings are administered by a bankruptcy trustees who during the proceeding will prepare a distribution proposal according to claims presented at the general meeting of creditors. The distribution proposal will ultimately form a distribution waterfall, which ranks claims subject to the law.

Market participants in Estonia note that there are issues with acknowledgement of subordination agreements in Estonian bankruptcy proceedings. It is noted that subordination agreements are used in bankruptcy proceedings, but it is still uncertain as to whether the bankruptcy trustee could treat all creditors (senior and subordinated) in the same way and in the same rank in the distribution waterfall. As the enforceability of the subordination agreements that are widely used in different capital market transactions plays an important role in making lending and investment choices, it was also analysed as to how other countries regulate the same situation. An overview of the reference countries is provided in Chapter 7.
5.2. Regulatory institutions

The supervision over capital markets in Estonia is conducted by EFSA, which supervises the banks, creditors, investment firms, investment and pension funds, fund managers, insurance undertakings and insurance intermediaries, as well as payment service providers, e-money institutions and market operators.

**EFSA’s strategic role regarding financial innovation** is to analyse potential supervisory areas and address the opportunities and risks involved with financial innovation. In order to enhance the financial innovation and cooperate and assist the FinTech start-ups, EFSA has also established an in-house FinTech working group consisting of various specialists from the EFSA and Eesti Pank.

The FinTech working group has consulted a variety of different FinTech companies that aim to provide innovative services or use new technologies. EFSA acts as a partner for this type of company by helping to qualify the service and guide the market participants to a relevant legal framework or directing them to the authorisation proceedings if necessary. Lately, the majority of the questions have been around cryptocurrencies and token offerings. The FinTech working group has also piloted a consultation channel where the interested parties can join in conversations on different innovation-related topics such as crowdfunding, virtual currencies and blockchain technology and Estonian FinTech.

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5.3. Areas of capital markets currently not regulated

There are areas in capital markets widely used in recent years that have no specific regulation in Estonia. The two mostly under discussion lately are crowdfunding and token offerings.

**Crowdfunding**

There is no specific regulation on crowdfunding activities in Estonia, unlike many other EU countries. Different regulations apply depending on the purpose of financing and the business model of the crowdfunding platform, e.g. the Creditors and Credit Intermediaries Act in case of intermediating consumer credit or the Securities Market Act in case of dealing with securities. However, most of current market players offer fundraising options to companies and do not provide financing themselves; instead they bring together different parties, so therefore the majority of them do not fall under the aforementioned laws.

In 2016, FinanceEstonia and Deloitte Legal developed the Best Practice for Crowdfunding, which is a self-regulation document for crowdfunding platforms but does not provide binding regulation.

As crowdfunding is a rapidly increasing way of capital raising and seen as a useful tool to improve an SME’s access to financing, the EFSA suggested in the autumn of 2016\(^\text{118}\) that the activities of crowdfunding platforms should be regulated in Estonia in order to provide more legal certainty and enable better protection for investments made through the platforms. The proposal is currently under consideration by the Ministry of Finance.

In March 2018, the European Commission published a FinTech action plan, which includes a proposal for a regulation on European crowdfunding service providers. According to the published proposal, the regulation, if

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\(^{118}\) Initiative available (in Estonian) on EFSA website.  
enforced, would enable the crowdfunding platforms to provide their services across the EU on a cross-border basis under an authorisation applied from the ESMA. Such service providers would also be supervised by ESMA. The scope of the new regulation would be limited to crowdfunding offers with a consideration of up to EUR 1,000,000. There is currently no clarity over the timing of the regulation. While the estimated financial impact analysis sets an assumption for the regulation to enter into application at the start of 2019, at which point ESMA would start drafting Regulatory Technical Standards (RTS) and procedures and first entities would be supervised by 2020, this seems quite an ambitious timeline given the usual EU legislative processes. Considering the preliminary feedback of the member states on the initiative, which is quite conservative, especially so from countries that already have their own crowdfunding laws, it is highly likely that even if the regulation is adopted it will be in a format quite different from the current draft proposal.

Market participants see that the regulation would be welcomed in order to have legal certainty and enhance investor protection. A more thorough overview of the results of interviews with some market participants has been provided in Chapter 6. The regulations of reference countries have been analysed in Chapter 7.

**Token offerings**

Another area of capital raising that has received a lot of attention but remains currently unregulated is initial coin offerings (ICOs) or initial token offerings (ITOs). As Estonia has acquired a reputation as an ICO-friendly environment, the authorities and advisers receive multiple information requests on ICO regulations on a daily basis. Currently, as there is no specific regulation in force for ICOs, the general principles of securities markets regulations are applicable. Whereby the coins or tokens offered are to be considered as securities under the Securities Market Act, the offering might qualify as a public offering and trigger a prospectus requirement. Arranging or intermediating token offerings may also qualify as an investment service requiring authorisation as an investment firm. Arranging a secondary market for such tokens could be considered as operating a multilateral trading facility or organised trading facility and would also raise topics related to CSDR.

In cases where the tokens offered do not qualify as securities and could be considered so-called “utility” tokens, the aforementioned regulations do not apply and the ICO is not a regulated activity. In such cases, general private law principles and consumer protection requirements apply.

There are currently multiple working groups initiated, among others by the Ministry of Finance and Finance Estonia, in order to develop suggestions on a regulatory framework with respect to ICOs. As the legal framework concerning instruments that fall under the definition of a security is already established by EU legislation (including MiFID, Prospectus Regulation, CSDR, etc.) the discussion is mostly concentrated on possible regulations regarding the ICOs not falling under the scope of securities offerings. Finance Estonia intends to start developing an ICO Best Practice self-regulation similar to the document developed for crowdfunding. The same document could, in the next phase, act as the basis for a parliamentary regulation.
6. Overview of market gaps and barriers and proposed improvement levers

The objective of the current chapter is to describe the identified market gaps and barriers and propose possible improvement levers for each problem.

First, the following table gives the general overview of final gaps and barriers. The table is followed by the detailed description of each topic and the proposed recommendations.

The final list of identified gaps and barriers is based on the interviews with market players and on the first stakeholders’ workshop results, which were further analysed. The analysis covered the identified market gaps and barriers, which were ranked by the market participants by their importance from high to medium. Based on the findings from the analysis and additional consultations with a range of market players, selected problem areas were re-categorised and further elaborated.

As a result of the study, nine different problems were detected, which relates to almost every capital market stakeholder category. The problems which were assessed to be of low importance level or were excluded from further analysis based on directions given by key stakeholders can be found in Annex 3.

<table>
<thead>
<tr>
<th>Category</th>
<th>Problem</th>
<th>Short Problem Description</th>
<th>Importance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy</td>
<td>Problem 1. There is a need for a long-term government strategy for development of the local capital market.</td>
<td>There is currently no public long-term government strategy developed for Estonian capital markets. The government involvement in the local capital market has been low, especially regarding the development of the equity and debt markets.</td>
<td>HIGH</td>
</tr>
<tr>
<td>PE/VC funds</td>
<td>Problem 2. Estonian PE and VC funds are not focused enough on traditional SMEs and there are not enough exit possibilities for these funds.</td>
<td>Even though PE/VC investments have increased rapidly in recent years, the PE/VC funds’ investment strategies are not focusing on traditional SMEs, leaving those with a relatively low level of options. PE/VC funds also have relatively few exit possibilities available.</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

The proposed recommendations are based on the problems identified during the diagnostic stage and at the workshops. The recommendations were determined through close collaboration with the authorities and market players.

Among the recommendations, there are some that either have already been identified previously or are currently actioned, but those were still considered as being of high importance for the development of the local capital markets and with a wide impact.

The proposed improvement levers are based on the capital markets diagnostic but cannot be seen as a substitute for a capital market development strategy. The findings of the diagnostic provide a direction for development and should encourage further discussion. The recommendations are addressed both to the government and market players, as they could influence and support the development process in many aspects through their activity.

The recommendations have to be seen in their entirety and not as single measures, as many of them are interdependent. The key to long-term success is to assemble a sufficiently robust set of different levers that engage all capital market sectors.
<table>
<thead>
<tr>
<th>Category</th>
<th>Problem</th>
<th>Short Problem Description</th>
<th>Importance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attracting IPOs</td>
<td>Problem 3. Overall IPO costs are perceived as being too high.</td>
<td>As most of the companies in Estonia are SMEs, their financing possibilities are often directly reliant on the costs of these opportunities. High overall IPO fees may deter companies from listing their stocks on Nasdaq Tallinn.</td>
<td>HIGH</td>
</tr>
<tr>
<td>Attracting foreign</td>
<td>Problem 4. Obstacles in opening securities accounts in Estonia can</td>
<td>Opening a securities account requires an Estonian bank account, which can be difficult due to no clear guidelines of anti-money laundering and terrorism funding prevention regulations.</td>
<td>HIGH</td>
</tr>
<tr>
<td>investors</td>
<td>make investments difficult for foreigners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit institutions</td>
<td>Problem 5. Loans are only issued based on very strict and standardised regulations without much flexibility.</td>
<td>The first financing instrument that companies choose is usually bank loans, as this is one of the cheapest ways for accessing additional capital. Loans are issued based on very strict rules, which may mean that some companies are unable to access this kind of capital.</td>
<td>HIGH</td>
</tr>
<tr>
<td>Retail investors</td>
<td>Problem 6. Lower financial literacy compared to more advanced countries is one of the reasons why local retail investors don’t participate in Estonian capital markets.</td>
<td>The participation rate of Estonian retail investors in the local capital market is relatively low, especially when compared to countries with more advanced economies. This is largely due to the low financial literacy rates of people, which prevents retail investors from investing in more traditional capital market instruments like stocks and bonds.</td>
<td>HIGH</td>
</tr>
<tr>
<td></td>
<td>Problem 7. Weak minority shareholder protection may prevent active retail investor involvement on Nasdaq Tallinn.</td>
<td>The protection of minority shareholders should be a priority for the regulatory authorities and self-regulatory organisations. Public disputes and problems that have taken place in the past due to inadequate minority shareholder protection scares potential new investors and existing ones could leave.</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>Alternative platforms</td>
<td>Problem 8. Alternative platforms are unregulated.</td>
<td>The low level of regulation of alternative platforms is seen as an unfair competitive advantage in comparison with other market players. A lack of regulation may also cause high risk, especially to (small) investors.</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>Pension funds</td>
<td>Problem 9. Investment of pension funds in the domestic market is low</td>
<td>Estonian pension funds are quickly growing and their assets are increasing. Pension funds invest most of their accumulated assets in foreign markets. Additional domestic investments should be good for the development of Estonian capital markets.</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

Table 15. Overview of the identified gaps and barriers.
Problem 1. There is a need for a long-term government strategy for development of the local capital market.

<table>
<thead>
<tr>
<th>Background data:</th>
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</thead>
<tbody>
<tr>
<td>• Chapter 4.1</td>
</tr>
<tr>
<td>• Chapter 7, problem number 8, examples of Luxembourg and Poland</td>
</tr>
</tbody>
</table>

As explained more thoroughly in Chapter 4.1, there is no clear and visible development plan or goals set by the government for the capital market. The supporting role of the government is crucial for a market to develop. Currently, no one at state level is responsible for the development of the capital market.

There are currently no government bonds listed on Nasdaq Tallinn and there is only one government owned company listed, which is also a very recent development (Tallinna Sadam was listed at the beginning of June 2018). It is considered that issuing government bonds could be one measure to include to the action plan to improve the liquidity of the capital market and make it more attractive for foreign and institutional investors.

According to the capital market participants, there should be clear goals and a strategy in place for the development of the local capital market. The Estonian government should be more involved in the development of the local capital market in order to make it more attractive for both foreign and local investors. Workshop participants also stated that the listing of government-owned companies and bonds on the capital market would have a positive effect on the local exchange by attracting more foreign investors to Nasdaq Tallinn and increase its liquidity. There should also be a well-defined public development plan in place for the capital market, where certain goals are set and results can be measured. According to foreign investors, creating a government fund or an investment vehicle for investing in Nasdaq Tallinn stocks would also be beneficial for the Estonian capital market, as explained in more detail at the end of Chapter 3.5.

Recommendation: Prepare a development strategy for the Estonian capital market that is measurable and public

SHORT-TERM

The need for a clear vision from government and active participation in the development of capital markets was acknowledged by the key stakeholders. It is also necessary to deepen the cooperation between the state and market players in developing this strategy. This strategy needs to be measurable and public. Issuing government bonds and listing the larger state-owned companies on Nasdaq Tallinn could be considered as some of the measures to be included into the strategy.
Problem 2. Estonian PE and VC funds are not focused enough on traditional SMEs and there are not enough exit possibilities for these funds

Estonian PE and VC funds are not focused enough on traditional SMEs and there are not enough exit possibilities for these funds

Background data:
- Chapter 3.2
- Chapter 7, Table 16: Country rankings by index values

PE/VC funds’ investment strategy is not focused enough on traditional SMEs

There are currently too few PE/VC funds in Estonia that are focused primarily on funding the activities of local traditional SMEs. Of the 12 main PE/VC funds active in Estonia, only three funds (United Partners, Baltcap, Livonia) are willing to invest in traditional SMEs, as other funds are mainly focused on growth companies. This prevents the growth of Estonian companies and also the Estonian economy overall, due to the fact that most Estonian companies are SMEs. More PE/VC funds dedicated to funding the activities of traditional SMEs would provide the companies with an opportunity to grow faster based on the availability of risk capital.

Even though there are new PE and VC funds in Estonia, over 60% of them invest only in tech companies, while there is no know-how in Estonia for investing in, for example, biotech or pharmaceutical companies. The existing funds also don’t cover all the growth stages and activity fields: the majority of funds are concentrated on investing in start-ups and fast-growing companies in the technology sector, which might leave some businesses without funding opportunities. There are also no funds specialising in bonds.

Recommendation:
Increase potential investor base for traditional SMEs

In order to increase the possibilities to attract capital, measures to increase the potential investor base for traditional SMEs should be developed. One of the measures could be incentivising local pension funds to more actively invest in Estonian SMEs or to support the creation of specific listed SME Investment Vehicles. The appropriate support measures should be developed with involvement of the key stakeholders and should be a coordinated approach as it is also highly correlated with Problem 8. The investor base of traditional SMEs can also be increased by introducing Estonian market opportunities to the international investment community together with providing relevant guidance.

Recommendation:
Create a support ecosystem for SMEs and investors

Supporting the research coverage for locally listed stocks especially dedicated to covering SMEs listed on Nasdaq Tallinn would provide more information and guidance on the SMEs and also make them more visible for investors. Another important measure in the upgrade of the support ecosystem is increasing the awareness of SMEs on different financial instruments. This can be achieved through developing a SME pre-listing support programme, a dedicated website or organising thematic trainings and seminars for SMEs (e.g. at the Estonian Chamber of Commerce and Industry).

There are not enough exit possibilities for PE/VC funds

The main problem in the Estonian PE/VC market arises when the funds want to exit their investments. As explained in Chapter 3.2, the strategy of most funds is to invest in start-ups and early stage companies, and there is a market gap in regard to funds with an investment size of EUR 3-5 million. There are too few local players who would be ready to invest in companies worth 3-5 million. At the same time, Estonian companies are too small for attracting foreign investors and Nasdaq Tallinn’s secondary market is still too illiquid. Hence, the possibilities for exits via IPOs are rather limited.

The capital market participants pointed out that there are not many exit possibilities in Estonia. In Sweden, for example, exits happen when funds collaborate and buy from each other. It is difficult to find buyers for companies in Estonia and when a buyer is found, the valuation may not be satisfying. At present, Estonian funds are mostly in the same stage of their investment cycle, which also constrains their exit possibilities. Getting more foreign investors into Estonia would increase the attractiveness and liquidity of the market. Despite being “positive” on Estonia, some investors said that firms there were too small for them. Therefore, special investment vehicles
may be needed which focus on investments in listed SMEs preferably on a Baltic level to critical mass required to attract institutional investors (i.e. such as TEKES from Finland) which would broaden the funding opportunities for local companies.

Recommendation: Develop a strategy how to achieve an emerging market status in the MSCI index

LONG-TERM

In order to improve the exit opportunities for Estonian PE/VC funds, it is advisable for Estonia to be upgraded to emerging market status. Advancing to the emerging markets category of the MSCI index would make Estonia more attractive for investors.

Recommendation: Further develop the market liquidity and First North market on Nasdaq Tallinn

LONG-TERM

The development of the market liquidity (e.g. First North and secondary list) and increasing the awareness for the existing markets and the opportunities they offer.
Problem 3. Overall IPO costs are perceived as being too high.

IPO costs on Nasdaq Tallinn are too high.  

Background data:
- Chapter 2.1
- Chapter 7, Table 17. Company listing and annual maintenance fees charged by the exchange for the main and alternative lists by countries

Although smaller companies in Estonia mostly choose bank loans when they require new financial resources, a number of businesses, typically focusing on services and growing rapidly, cannot provide collaterals necessary for a loan. If a small or medium-sized enterprise wants to grow, it needs to gradually increase its capital. As other forms of raising capital (e.g. venture capital) are not always available to cover all types of SMEs, listing on the stock exchange can be one of the most appropriate forms of accessing long-term financing for some SMEs, more likely supplementing, but not replacing, loans and/or private financing sources. However, as already mentioned in Chapter 4.1, SMEs can find the option of listing their shares on an exchange to be too expensive. When taking into consideration the available financial resources of the local companies and the amount of capital to be raised, the upfront overall costs for an IPO is seen by many of the SMEs as too high.

According to the opinions of capital market participants, it is too expensive for SMEs to be listed on the First North market as the costs for advisers (i.e. auditors, lawyers) are high, which hinders smaller companies from listing on Nasdaq Tallinn. Many of the smaller Estonian companies need funds to grow but consider listing on the First North market to be too time and resource intensive (due to advisory fees, annual listing fees and increased reporting requirements that come with listing on an exchange) when considering the capital that would be raised there. Market participants also found that large banks and brokers in Estonia do not provide sufficient research coverage of the smaller companies listed on Nasdaq Tallinn, which is also negatively impacted by the MiFID II stipulations on research unbundling. The market participants also concluded during the workshop that there are quite a few, typically smaller, companies for which a regulated market means too many constraints and too high issuance and compliance costs. For them, a market with less stringent publication rules and upfront costs would likely be more acceptable. On the other hand, listed companies should comply with investor protections requirements and corporate governance standards. One of the considerable ways to support SMEs in accessing capital market financing is to provide a pre-listing support instruments for an IPO on First North. In this respect, an SME pre-listing support project is under way by Estonia, with support from the EBRD and the SRSS. There could also be a fund that invests into companies that go public on First North.

A more thorough explanation and analysis of this issue can be found in Chapter 2.1 and a comparison between the exact costs of listing between countries can be found in Chapter 8.

Recommendation:
Create state-supported pre-listing support instruments for SMEs  

Many of the market participants pointed out during the interviews that the preparatory work for IPOs is too resource intensive and costly for smaller companies. The workshop participants found that creating a pre-listing support instrument for covering IPO preparatory work to partially cover some of the upfront costs would make Nasdaq Tallinn significantly more attractive for smaller Estonian companies that are interested in raising funds through an IPO.

Recommendation:
Develop support mechanisms focussing on capacity building for local companies interested in IPOs

An initiative by Enterprise Estonia on the creation of a similar type of support mechanism has already been approved. According to the workshop participants, continuous explanatory work (regarding the actual costs) for companies that might be interested in an IPO is also needed to make Nasdaq Tallinn more attractive. At present, many of the Estonian local companies have misconceptions when it comes to the pricing of listing their company on Nasdaq Tallinn. Providing trainings for SMEs/entrepreneurs would help to increase the awareness on different financing possibilities and lower the perception of too high IPO costs for them.
Problem 4. Obstacles in opening securities accounts in Estonia can make investments difficult for foreigners.

Opening securities accounts in Estonia can be difficult for foreign investors and alternatives are lacking.

Background data:
- Chapter 5.1
- Chapter 7

More than 80% of market participants have indicated that one of the main issues that negatively affects investments into Estonia is the difficulty in opening a securities account. This issue has also been mentioned repeatedly by Estonian local news sources. As was discussed in Chapter 5.1, opening a securities account also requires an Estonian bank account, which in turn requires a client relationship with a domestic bank. AML regulations make this labour-intensive and banks often refuse to open a bank account for foreign clients. The banks consider the risks too high compared to their potential revenue from this type of transaction and have thus defined their risk appetite with respect to opening accounts for non-residents as low. This difficulty is tied to international AML regulations and the Estonian government doesn’t really have many options to mitigate the issue.

Fortunately, there are other options, i.e. custody services that enable investors to invest in Estonian securities without opening a securities account. EFSA has an overview of all the providers of cross-border investment services, which includes important participants like Interactive Brokers, CitiGroup, Lehmann Brothers, UBS and others. This means that foreign investors do have access to Estonian capital markets and especially regulated markets. According to the foreign investors, e-residency also makes it much easier (less paperwork and easier access to services) for them to actively participate in the local capital market.

In terms of regulated markets, the classification of Estonia as a Frontier Market presents a more tangible problem, as that inhibits investing into Nasdaq Tallinn, because large international funds look for more developed markets (for more information, see Chapter 2.1). This is also one reason why shares of Estonian companies are not included in any international index funds, which would make indirect investments much easier for foreign investors.

Recommendation: Create clear guidelines to market participants that would reduce uncertainty in regards to AML regulations

The government should develop a duty-of-care concept that the market participants would follow when on-boarding new customers in order to decrease their level of risk. Current AML regulations are on the one hand very strict but they likewise rely on a risk-based approach, which does not provide obliged entities with clear guidelines that should be followed in order not to fall under administrative supervision and potential sanctions. As a result, obliged entities take a very conservative approach. Therefore, a more detailed guideline might be useful for the market participants.

Recommendation: Create a deposit account system to complement current securities account system

The Securities Register Maintenance Act has already been amended. In case the shareholder has no securities account opened in their name upon registration of the shares, the securities register can open a deposit account for the shareholder based on an application of and at the expense of the issuer. While the transactions made from the deposit account are limited (only once required AML due diligence measures can be applied by the registrar, e.g. based on the information received from the credit institution), the opportunity to use deposit accounts is available as of 1 January 2019 and will hopefully ease the current situation.

The government should also continue to investigate alternatives to the securities account requirement, e.g. allow for making smaller transactions without the requirement of having a securities account. This would especially be applicable when the investor already has a foreign deposit account.

Recommendation: Attract international partners (e.g. Clearstream) to Estonia to increase international access to Estonian market

Market participants should make efforts to invite more international partners to Estonia. The creation of links between central securities depositories and working with different foreign counterparties would reduce the need for a local securities account and ease investing into Estonia.
Problems 5. Loans are only issued based on very strict and standardised regulations without much flexibility

<table>
<thead>
<tr>
<th>Loans are only issued based on very strict and standardised regulations without much flexibility</th>
<th>HIGH</th>
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Background data:
- Chapter 3.1
- Chapter 7

The most preferred external funding option for Estonian companies is a bank loan. The Basel III international regulatory framework for banks applies strong rules on collateral that may deter banks from issuing loans to certain businesses and business models. For example, it doesn’t accept income guarantees as an available collateral, while at the same time a major portion of the Estonian economy is comprised of service and tech companies who don’t necessarily have real estate to give as collateral. The largest demand for loans comes from SMEs, but, as was discussed in Chapter 3.1, Basel III regulations make it difficult/expensive to provide loan financing for specific companies.

Alternative credit providers should not fall under the comparable strict rules. As also mentioned in Chapter 4.2., the credit providers are unable to list their bonds due to the interpretation of the legislation by the Financial Supervision Authority according to which this would qualify as banking activity. The regulation should be reviewed with that respect as other EU countries have not adopted this view and listing of bonds of the creditors is allowed in many jurisdictions across EU.

Recommendation:

<table>
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<tr>
<th>Recommendation: Analyse and review current regulation on alternative credit institutions</th>
<th>SHORT-TERM</th>
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Alternative credit institutions are an important part of capital markets but, as a result of public outcry, their operation has been hampered by strict regulation, which restricts their ability to raise additional capital and thus also expand their activities. Market participants have indicated that the regulatory framework should differentiate more between them, for example making small loan providers nimbler to fill market gaps.
Problem 6. Lower financial literacy compared to more advanced countries is one of the reasons why local retail investors don’t participate in Estonian capital markets.

The reason for the moderate level of retail investments is a lower financial literacy rate compared to countries with more advanced capital markets.

Background data:
- Chapter 7
- Table 17

According to the market participants, the low rate of investments and participation in the local capital market and traditional investment instruments like stocks and bonds by Estonians is partly caused by the lack of knowledge about different investing opportunities and also the lower overall financial literacy rate, in comparison to countries with advanced economies that were chosen for the benchmarking (Finland, Sweden and Ireland). In having low financial literacy without an understanding of basic financial concepts, people are not well equipped to make decisions related to financial management. People who are financially literate have the ability to make informed financial choices regarding saving, investing, borrowing and more.

Alternative financing platforms have also increased in popularity in recent years, due to their simplicity and the low requirements for making investments. However, alternative financing platforms in Estonia are unregulated and can offer quite risky investments.

The same problem also affects businesses and professional PE and VC funds. Most of the interviewed (75% of all interviewees) market players and stakeholders pointed out that entrepreneurs have low financial literacy and awareness of financing instruments, which limits their use of the capital market. Generally, the entrepreneurs rely only on bank loans and if the loan application is rejected, they don’t know how to find other alternatives.

Recommendation:
Improve the educational system and continue on-going educational activities (e.g. seminars, workshops, investor events) in order to increase the amount of Estonian retail investors (especially young people) and the amount of investments, the market players should continue their educational activities through seminars, conferences and lectures. These activities will help to introduce the next generation of active investors to the Estonian capital markets. In addition, the topic of financial literacy should be introduced in the school curricula.

Recommendation:
Develop measures for motivating people to invest more actively. Making the 3rd pillar of pension funds more customisable could make people in Estonia more interested in the Estonian capital market and make them feel more in charge of their future investments. In addition, certain financial incentives should be offered when investing (e.g. tax incentives), in order to motivate people to invest. This would result in the emergence of a more active retail investor community in Estonia.
Problem 7. Weak minority shareholder protection may prevent active retail investor involvement on Nasdaq Tallinn

Investor protection plays a major role in developing investor confidence and facilitating investment strategies adapted to the needs of customers and should lead to more efficient capital markets that are more reliable and trustworthy in the eyes of investors. Shortcomings in the minority shareholder protection regulations might be one of the reasons for the moderate level of retail investor participation on Nasdaq Tallinn.

The workshop members agreed that the protection of minority shareholders should be one of the priorities when talking about the development of the local capital market. Public disputes and problems scare potential new investors and existing ones could leave. As already pointed out in the previous chapter of the report, there have been a few instances where companies on Nasdaq Tallinn have been bought by foreign investors, but minority shareholders receive very little compensation in the buyout scenario, if at all.

One of the most well-known is the case of Eesti Telekom, where the court case has still not reached its final conclusion after 8 years of legal disputes. These kinds of disputes derived from the unfair treatment of retail investors are not appropriate for a developed stock exchange, where a buyout of a listed company usually results in significant premiums for the current shareholders. In the case of publicly traded companies, the most recent decision by the Nasdaq Tallinn indicates that Nasdaq Tallinn is taking investor protection more seriously. After the voluntary takeover offer to Olympic Entertainment Group shareholders, Nasdaq Tallinn refused to delist the company on the grounds of investor protection.

In conclusion, the statutory requirements concerning minority rights should be reviewed as a whole. Some internationally used principles and practices like trustee-concept, appointment rights or specific voting arrangements could be considered and introduced to enhance decision rights of minority shareholders, especially in public companies. It would be advisable to consider exit opportunities for minority shareholders. Also, the transparency requirements of public companies should be reviewed.

Recommendation:
Review statutory requirements with respect to minority shareholder protection

As the legislation that foresees minority shareholder protection has remained the same for years, it would be beneficial to review the requirements and consider whether it would be reasonable to amend and strengthen minority protection clauses. A topic to consider would be to introduce a trustee-concept, along the lines of Nordic practice. A trustee would act as a representative of all investors, and protect their interests. This is already used in practice for bond issues; however, it could be considered whether it might also be applicable to facilitate shareholder protection.

Recommendation:
Reflect more on positive examples of Nasdaq Tallinn investor successes

Media and market participants should concentrate more on reflecting positive practice where minority shareholders’ interests have prevailed. To date, mostly negative examples have gained wide public attention.

Problem 8. Alternative platforms are unregulated

Alternative platforms are unregulated MEDIUM

Background data:
- Chapter 2.3
- Chapter 5
- Chapter 7

Alternative financing platforms are a good way for local investors to invest their money in small tranches and diversify their investments. As already mentioned in Chapters 2.3 and 5, there is no regulation specific to crowdfunding activities in Estonia, unlike in many other EU countries, which can be dangerous for small investors using these platforms. In 2016, FinanceEstonia and Deloitte Legal law firm developed the Best Practice for Crowdfunding, which is a self-regulation document for crowdfunding platforms, but does not provide mandatory regulation. The aim of the code of conduct is to provide a framework based on the principle of “comply and explain” to all the internet-based crowdfunding platforms in Estonia. Joining the Best Practice is voluntary; however, the platforms that have joined see it as a measure for increasing their credibility. As a result, the functioning of the joined platforms will be more transparent in the best interest of the investor.

During the conducted interviews, the growth in alternative financing platforms was mostly seen as a positive trend that provided better investment opportunities, especially for retail investors. On the other hand, the relatively low level of regulation in the field is also seen as one of the risk areas, resulting in quite a high risk for investors with a low level of investor protection.

The low level of regulation of alternative platforms has several negative consequences:

- High risk especially for (small) investors and is seen as an unfair competitive advantage in comparison with other market players.
- Lack of regulation means that bigger and more influential platforms are likely to leave.
- Lack of regulation causes alternative platforms to have an unfair competitive advantage over other options, due to lower costs.

The local capital market participants pointed out that everything is currently working well, but the alternative platforms could be in financial trouble when the economy slows down and fewer revenues can be generated. For that reason, platforms should be quite supportive to create some kind of regulation; otherwise, they could crash and bring a lot more unnecessary regulation upon themselves. For example, no one at present assesses investors’ risk toleration, profile, etc. In addition, the investor also takes on the risk of mismanagement of platforms themselves. Marketing is also not regulated, which enables them to engage in aggressive marketing. As also noted by some market participants, there are platforms on the market that do not comprehend their obligations and rights towards investors and may be prone to misconduct, including falsely advertising successful projects that they have not intermediated. As a result, the uncertainty and false advertising of alternative platforms could be of potential damage to the reputation of the crowdfunding market in Estonia.

Another aspect noted by the market participants is that some Estonian credit institutions are not willing to grant loans to a borrower if it is linked to an ongoing or previous crowdfunding project. This could be due to a lack of regulation, which makes the banks cautious. Clear regulation might change the situation.

Market participants anticipate that crowdfunding platforms should be regulated entities. They add that regulation would protect investors and also aid crowdfunding platforms to comprehend their exact obligations and rights in relation to investors. It has been suggested by the market participants that the Best Practice for Crowdfunding, which is not a legislative act, would be reasonable as law in Estonia. In general, it is agreed that if crowdfunding platforms would be regulated entities, it would increase
their attractiveness and improve the trust of investors in crowdfunding platforms.

Therefore, in the opinion of the market participants, there should be a minimal acceptable regulation developed for crowdfunding that would leave the door open for new financing instruments. There should be some sensible level of reporting obligations and accountability for issuers.

Additional information on the regulatory issues of crowdfunding has been provided in Chapter 5.3, entitled Legal and Regulatory Framework. Examples of best practices regarding the alternative platform regulations can be found in Chapter 7.

<table>
<thead>
<tr>
<th>Recommendation: Create regulation for crowdfunding platforms</th>
<th>SHORT-TERM</th>
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<tr>
<td>The government should consider adopting a regulation that on the one hand would provide legal certainty to market players and necessary protection for investors, while not being too excessive and motivating platforms to search for another jurisdiction. The basis for regulation could be the current Best Practice for Crowdfunding, and it should focus on investor protection by providing minimum standards on offerings and clear disclosure rules.</td>
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<tr>
<th>Recommendation: EU-wide cooperation in order to develop international regulation</th>
<th>LONG-TERM</th>
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<tr>
<td>The government should continue working at EU level in order to come to a harmonised pan-EU solution. Once the local legislation has been adopted and proven to be efficient, there should be a focus on suggesting similar solutions at EU level in order to ensure legal stability for the industry.</td>
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Problem 9. Investment of pension funds in the domestic market is low.

<table>
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<tr>
<th>Investment of pension funds in the domestic market is low.</th>
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Background data:
- Chapter 3.5
- Chapter 7

The law mandates that Estonians put a total of 6% of their income into pension funds, but this is only mandatory for people born since 1983, while people born before this could decide whether they want to join the II pillar or not. Pension funds started to grow very quickly since the middle of the 2000s. For example, in 2004, pension funds only had about EUR 100 million worth of assets, but by the end of 2017, their AUM had grown to EUR 3.8 billion.

If we exclude loan capital, this has made pension funds easily the largest potential source of capital in Estonia. It is, however, difficult to invest this acquired capital into local assets. If there are suitable domestic investment opportunities, pension funds would be able to consider local investments. Market participants have pointed out three main barriers that prevent pension funds investing into the local economy. The first problem for local investments is the threat of changing regulations that makes long-term local investments too risky for pension funds. Most pension funds seek long-term investments. The second problem is the ticket size of an investment: as pension funds have grown quite large it is difficult to find suitable large investment opportunities in Estonia. The new Investment Funds Act relaxed previously stringent rules on the investment strategy of pension funds, and this has certainly helped. The third problem is the management fees of pension funds: limiting management fees pushes pension funds to search for investments that require less active management, e.g. index funds and very large corporations – both of which are absent from the Estonian market.

Recommendation:
Develop a set of measures in collaboration with pension funds

The government should develop a package of measures in collaboration with pension funds, the implementation of which would motivate pension funds to invest more in the local market. Such measures might include a “success fee”, payable after the pension fund has invested a certain amount of capital into Estonia, including the principal of providing a stable environment for the pension funds without major reforms in the system or releasing the threshold of management fees. As the success fee structure might raise a question of free movement of capital on EU level the viability of the solution should be analysed before going forward. In any case, the set of measures should be developed together with the pension funds.

120 Financial assets of financial sector in market value.
http://statistika.eestipank.ee/#/en/p/FINANTSKONTO/r/2389/2198
7. International benchmarking

The purpose of international benchmarking was to seek for the best practice and successful policies for capital markets in order to improve the capital market in Estonia. The international benchmarking analysis concentrates on the final identified gaps and barriers that are described closely in Chapter 6. Croatia, Finland, Ireland, Luxemburg and Poland were chosen as the main reference countries as their locations, histories or capital market volumes are similar to Estonia. Furthermore, with the aim of exploring the most appropriate examples, some other foreign countries were also analysed during the international benchmarking (e.g. the practices of Singapore, UK, Finland and Lithuania regarding crowdfunding platforms, Sweden regarding financial literacy, Hungary regarding VC funds, etc.).

**Problem 1. There is a need for a long-term government strategy for developing the local capital market.**

**Successful capital market strategy of Luxembourg**

There are several examples of countries where government intervention and active support have significantly improved the conditions of the local capital market. Over the course of the last three decades, Luxembourg has been able to build a financial industry that is uniquely specialised in cross-border activities. Clear goals have been set and strategic plans made by the government for the advancement of the local capital market. Although Luxembourg is a small country similar to Estonia, with a population of just over 600,000 people and a GDP of EUR 60 billion, its capital market is one of the most developed in the world. Luxembourg has grown into one of Europe’s leading destinations for investors, savers and companies alike. With an inherently international financial centre, Luxembourg has played a leading role in the development of Europe’s financial services industry. The country has developed cross-border products and services in a variety of sectors including banking, investment funds, wealth management, insurance and capital markets – offering a high degree of complementarity to other financial centres that predominantly serve domestic markets. Its multijurisdictional expertise, the diversity of its financial services ecosystem and its high degree of stability have helped the Luxembourg financial centre flourish, while delivering benefits to households, companies and governments across Europe and beyond. Today, the LuxSE lists more than 40,000 securities in 55 currencies, from more than 3,000 issuers in more than 100 countries. Market cap over Luxembourg GDP ratio is 110.47%. It holds a 20% global market share of all internationally listed securities. This is partly thanks to the government’s close involvement in the capital markets.121

Luxembourg has created several development plans related to the local capital markets, the latest of which is the LUXFIN2020 development plan called ‘A vision for the development of the Luxembourg financial centre’. In this document, clear goals and strategies are outlined for both the overall capital market as well as for the stock exchange. LUXFIN2020 sets out a vision for the financial centre with a view to building on Luxembourg’s core strengths, seizing opportunities and supporting innovation in other, newer sectors of the financial services arena. The growth of the financial sector so far would not have been possible without an efficient regulatory framework, strong governance and a high level of investor protection.122

**Positive effect of government support on Poland’s capital market**

Poland, with a population of 38 million people, is another example of a fast-developing stock market, where the government has had a crucial role in the success of the exchange in the past decade, as already outlined previously in the report. Poland has healthy equity markets that facilitate the free flow of

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121 “LUXFIN 2020: A vision for the development of the Luxembourg financial centre” 2015

122 “LUXFIN 2020: A vision for the development of the Luxembourg financial centre” 2015
financial resources. Poland’s stock market is the largest and most developed in Central Europe. Its capitalisation amounts to a quarter of Poland’s GDP of EUR 470 billion. The WSE is itself a publicly traded company with shares listed on its own exchange after its privatisation in 2010. The Polish regulatory system is effective in encouraging and facilitating portfolio investment. Both foreign and domestic investors may place funds in demand and time deposits, stocks, bonds, futures, and derivatives. WSE has become a hub for foreign institutional investors targeting equity investments in the region. In addition to the equity market, Poland has a wholesale market dedicated to the trading of treasury bills and bonds (Treasury BondSpot Poland). This treasury market is an integral part of the Primary Dealers System organised by the Finance Ministry and part of the pan-European bond platform.\footnote{State Department’s Office of Investment Affairs 2017 “Poland – Financial sector” \url{https://www.export.gov/article?id=Poland-6-Financial-Sector}}

The capital market is an important source of funding for Polish companies. The Polish government acknowledges the capital market’s role in the economy in its development plan. Foreigners may invest in listed Polish shares, but they are subject to some restrictions in buying large packages of shares. Liquidity remains tight on the exchange.

Thanks to the efforts and actions of the local government, the Polish capital market is one of the most developed in the Eastern and Central Europe region. The country still holds a leading role in Central Europe in terms of capital market indicators such as market capitalisation, number of market participants, trading volumes and the number of listed companies. This success however has not prevented the Polish government from thinking about the possibilities of improving the capital markets even further.

The Polish Ministry of Finance cooperates with the European Commission and EBRD to develop a “Polish Capital Markets Development Strategy”, which would enable the Polish capital market to achieve (in a perspective of 5 years) the following development goals:\footnote{European Bank for Reconstruction and Development “SRSS Local Currency and Capital Markets Initiative - Capital Markets Development Strategy for Poland”}

- becoming a major engine of economic development and an innovation catalyst for the economy;
- (re)gaining the leading status in Central, Eastern and South-Eastern Europe;
- attracting (increasing the activity of) the leading Polish companies;
- expanding WSE’s trade and post-trade services across other regional stock exchanges;
- increasing the role of debt capital markets and corporate debt financing;
- enhancing the role of competitive financial intermediaries in the development of the Polish capital market;
- developing trade services for professional markets in the areas of fixed income, money market, interest rates derivatives and foreign exchange instruments.

In addition to creating development plans and setting clear goals for the local capital market, the government of Poland has also introduced both government owned companies and bonds on the capital market.

\textbf{Problem 2. Estonian PE and VC funds are not focused enough on traditional SMEs and there are not enough exit possibilities existing for these funds}

PE and VC funds are not focused enough on traditional SMEs

VC and PE funds theoretically cover the whole company landscape of Estonia; however, market participants feel that certain areas are underserved. The main problems are SMEs who seek financing in the range
of EUR 2-5 million and small businesses in manufacturing, as most of the smaller funds are orientated towards investing into tech companies.

Estonian performance in this topic area is compared with Sweden and Poland. Sweden has a long and successful history of investment funds, while Poland has been historically in a similar situation with Estonia. According to the ECB, the net worth of the financial assets of Estonian investment funds is EUR 948 million, while Polish and Swedish investment funds had EUR 77 038 and EUR 441 623 million worth of assets at the end of 2017.

While the investment funds in Estonia in theory cover the whole funding escalator, Figure 49 shows that local investment funds have much less assets as a percentage of GDP than those in Poland or in Sweden. Sweden is in an entirely different league, as their investment funds have assets worth almost 82% of their annual GDP. Polish investment funds have assets worth 16.5% of their GDP, while the EUR 948 million of Estonian investment funds only comprises 4.1% of Estonian GDP (Figure 49). This overview shows in itself that investment funds in Estonia don’t have the same opportunities that funds in other countries have, due to not having enough available assets for making more and larger investments.

Hungary has been one of the prime examples of successful state support for SME equity financing activities. State support for SME equity finance in Hungary has focused on support for venture capital finance (private equity) and support carried through the Budapest Stock Exchange (public equity). On the private equity side, government supported venture capital fund schemes have in past years been primarily through the EU JEREMIE programme, and since 2017, either from EDIOP sources or JEREMIE revolving sources. At present, capital funds are provided mainly by means of co-investment. There are a variety of government venture capital fund schemes operating in Hungary at present that are focusing on different SME areas, including pre-seed, seed, start-up, later stage, introduction of new digital technologies, etc., as well as financing specific areas such as manufacturing, industry and cross-border trade.  

While the investment funds in Estonia in theory cover the whole funding escalator, Figure 49 shows that local investment funds have much less assets as a percentage of GDP than those in Poland or in Sweden. Sweden is in an entirely different league, as their investment funds have assets worth almost 82% of their annual GDP. Polish investment funds have assets worth 16.5% of their GDP, while the EUR 948 million of Estonian investment funds only comprises 4.1% of Estonian GDP (Figure 49). This overview shows in itself that investment funds in Estonia don’t have the same opportunities that funds in other countries have, due to not having enough available assets for making more and larger investments.

Hungary

125 EBRD “Hungary-State support for SME equity finance”

126 EBRD “Hungary-State support for SME equity finance”
In addition, there are various other initiatives of the BSE and the Hungarian State to encourage capital market participation by SMEs, including mentoring and training services for SMEs considering listings, under the European Union GINOP programme, as well as targeted support for increasing the liquidity and efficiency of secondary markets for SME shares, including improving company analysis and availability information on listed shares, as well as supporting market making with respect to such shares. Further measures include the launching by the BSE (in close cooperation with the securities market regulator) of the “Xtend” market segment for medium-sized companies and other stakeholders), with listing costs reduced through private issuances of shares by the “SMEs” with simultaneous “silent” listing on Xtend without an IPO. The BSE is also actively screening to identify IPO candidates and carrying out active public awareness and outreach measures. Finally, through the Xtend market platform, the BSE is requiring the use of Nominated Advisers (NOMADs) in order to assist issuers in preparation for the IPO process and to provide continuous support after the IPO to companies in order to comply with the applicable rules.127

There are not enough exit possibilities

As already mentioned earlier in the report, the Estonian capital market is dominated by the banking sector and the local stock exchange is rather illiquid and small. According to “The Venture Capital and Private Equity Country Attractiveness Index 2018” study by the IIESE, well-developed stock markets, which allow general partners to exit via IPOs, are crucial for the establishment of vibrant VC/PE markets. In general, bank-centred capital markets are less able to produce an efficient infrastructure of institutions that support VC/PE deal-making. They affirm that it is not only the strong stock market that is missing in bank-centred capital markets; it is also the secondary institutions in place, including the conservative approach of bankers to lending and investing, and the social and financial incentives that reward entrepreneurs less richly (and penalise failure more severely) that compromise entrepreneurial activity. Jeng and Wells (2000) stress that IPO activity is the main force behind cyclical VC and PE swings because it directly reflects the returns to investors.128

The study also points out that risk capital flourishes in countries with deep and liquid stock markets. Similarly, Schertler (2003) uses the capitalisation of stock markets or the number of listed companies as measures for stock market liquidity and finds that they significantly impact VC and PE investments. The state of a country’s capital market evidently affects its VC and PE activity. The size of the IPO market indicates the potential for the preferred exit channel and IPOs likewise spur entrepreneurial spirit because they reward entrepreneurs. This may be considered as analogous to the size of the M&A market, which also incentivises entrepreneurial managers and presents the second preferred VC/PE divestment channel, as well as deal sourcing opportunities. Therefore, the liquidities of the M&A, banking and public capital markets provide good proxies for the VC and PE segment because they assess the quality of the VC and PE deal-making infrastructure.129

Venture Capital and Private Equity Country Attractiveness Index measures the attractiveness of countries for investors in the venture capital (VC) and private equity (PE) asset classes. It provides the most up-to-date aggregated information on the quality of the investment environment and an assessment of the ease of transaction-making in 125 countries. A more exact measure of Estonian VC/PE funds exit possibilities is the depth of capital market ranking, which is contained in the Venture Capital and Private Equity Country Attractiveness Index as one of the components. This component is the best illustrator of the PE/VC fund exit possibilities in different countries,  

127 EBRD “Hungary-State support for SME equity finance”
as it shows the depth of the local capital market, which is one of the principal components when predicting the PE/VC fund exit possibilities in a county.

<table>
<thead>
<tr>
<th></th>
<th>Estonia</th>
<th>Finland</th>
<th>Ireland</th>
<th>Lithuania</th>
<th>Croatia</th>
<th>Poland</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Venture Capital &amp; Private Equity Country Attractiveness Index (0-124)</td>
<td>44</td>
<td>16</td>
<td>19</td>
<td>45</td>
<td>68</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Depth of Capital Market (0-124)</td>
<td>66</td>
<td>23</td>
<td>40</td>
<td>68</td>
<td>60</td>
<td>22</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 16: Country rankings by index values  
Source: IESE

As can be seen in the table above, Estonia is ranked 44th out of 125 countries in the Venture Capital & Private Equity Country Attractiveness Index. When making a comparison with other relevant countries, Estonia is at almost the same level as Lithuania, which is ranked 45th on the list, but falling far behind countries with more developed capital markets, like Poland, Sweden, Ireland and Finland. However, these results are to be expected and the overall rank of Estonia in the index is rather good, when considering the small size and development stage of the country.

However, Estonia falls even more behind most other countries in this table when it comes to the depth of the capital market. As explained before, the depth of the local capital market is one of the main indicators of VC and PE fund exit possibilities in a country. Of the other countries, Lithuania is ranked two places lower than Estonia; all the other countries have more developed capital markets in terms of their depth. This ranking also illustrates and provides evidence for the problem that was pointed out by the market participants and the workshop – PE and VC funds in Estonia do have limited possibilities of exits in Estonia.

Problem 3. Overall IPO costs are perceived as too high.

SMEs find it quite difficult to meet the stringent requirements of regulated markets and the high cost of the IPO, especially for a company with limited resources. The regulation of main markets requires a wide range and considerable depth of information disclosure from issuers. The disclosure requirement covers business, financial condition and practically all other categories of information that may impact on stock pricing. It is a time-consuming and expensive process to collect and organise such data, which results in significant preparatory and other costs for basically all companies. Although the listing fees and IPO preparation costs vary, the first public transaction generally requires around one year of preparation and a cost burden of 5 to 10% for issuers in proportion to the total capital raised. This figure includes the official listing fees as well as the IPO preparation costs (investment service provider, lawyers, auditors, marketing expenses, etc.). For this reason, SME growth markets typically set less stringent criteria that can be easier met by SMEs. SME markets can serve as an appropriate platform for both traditional and new players investing in SMEs.130

The most successful European SME markets include AIM (operated by the London Stock Exchange), Nasdaq First North (held by the Nordic subsidiary of the US stock exchange) and NewConnect (founded in 2007 by the Warsaw stock exchange). These markets have shown substantial growth and were built on the same pillars and followed the strategy that made capital market financing available option for SMEs. Stock exchanges can be flexible when assessing individual listing applications, and the administrative burden is smaller for companies. Furthermore, the costs of listing and continuous presence in the stock exchange are to a large extent lower compared to the

fees of a regulated market. The listing criteria in the SME markets are tailored to smaller-sized companies. Stock exchanges generally have significantly less stringent requirements for SMEs as compared to the main market.\textsuperscript{131}

Table 17 shows that the initial listing fees (handling fee + admission fee) of an IPO in the main list are relatively expensive in Estonia, when compared to other countries. Most of the companies that have been listed on Nasdaq Tallinn have raised a small amount of capital when compared to international IPOs. Based on the example of a company with capitalisation of EUR 50 million (as presented in Table 17), Estonia ranks as the 3\textsuperscript{rd} most expensive when it comes to listing companies on the main list of the exchange. When listing a company with a market capitalisation of EUR 200 million, the difference between countries is even bigger, as Estonia ranks as the second most expensive country. The higher costs of listing in Estonia for companies with bigger market capitalisation are due to a higher maximum limit defined by Nasdaq Tallinn, when compared to the limits set in other countries. In examining the annual fees charged by the exchanges for being listed on the main list, we can see that Nasdaq Tallinn is the most expensive compared to other countries.

However, when it comes to listing on the alternative market, the listing fees in Estonia seem to be at average levels, being more than the costs at the Lithuanian and Poland exchanges but less than the costs at other exchanges. Annual listing fees on the alternative market are also at average levels (as is shown in the example in Table 17). Company listing and annual maintenance fees charged by the exchange for the main and alternative lists by countries below, with listing a EUR 4 million company), being at same levels as in Lithuania and Latvia, less expensive than Ireland and Croatia but more expensive than Luxembourg and Poland. In conclusion, it can be said that listing costs and annual listing fees are high for listing companies on the main list, when compared to the countries chosen for benchmarking. However, when it comes to the alternative list, both the listing admission and annual listing fees are at average levels when compared to other countries. It is also important to note that in this chapter only the official listing costs of stocks were analysed for comparisons between countries. An important part of listing a stock on an exchange is also the advisory fee, which is usually much higher and can have a bigger impact on an SME’s decision for listing. However, as the data for these fees were not available, it was not possible to assess the different advisory fees of the comparison countries.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
 & Estonia & Lithuania & Latvia & Ireland & Croatia & Luxembourg & Poland \\
\hline
\textbf{Listing fees on the main list} & \textbf{Handling fee of EUR 28 + admission fee of EUR 6 390 + 0.02 \% of the market value of shares (max EUR 31 955)} & EUR 13 900 & EUR 14 230 & < 250 000 000 = EUR 100 000, 250 000 000-500 000 000 = EUR 150 000 & Admission fee of 0.08 \% of the market value of shares (min EUR 10 800, max EUR 21 600) & Approval fee of EUR 2 500 + listing fee of EUR 2 500 & EUR 1 400 + 0.03 \% of the market value of shares (min EUR 1 850, max EUR 22 000) \\
\hline
\textbf{An example of total listing fees and annual maintenance fee for a company} & \textbf{Listing fee: EUR 18 390} & \textbf{Listing fee: EUR 13 900} & \textbf{Listing fee: EUR 14 230} & \textbf{Listing fee: EUR 100 000} & \textbf{Listing fee: EUR 21 600} & \textbf{Listing fee: EUR 5 000} & \textbf{Listing fee: EUR 16 400} \\
\hline
\end{tabular}
\end{table}

\textsuperscript{131} Nagy, Végh “SMEs at the stock exchange” 2017. \url{https://www.bse.hu/About-Us/Press-Room/Professional-Articles/SMEs-at-the-stock-exchange}
<table>
<thead>
<tr>
<th>Annual listing fees on main list</th>
<th>Estonia</th>
<th>Lithuania</th>
<th>Latvia</th>
<th>Ireland</th>
<th>Croatia</th>
<th>Luxembourg</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; EUR 64 000 000 = EUR 3 832 + 0.03 % of the market value of the Issuer’s shares</td>
<td>Fixed annual fee of EUR 7 110 + variable quarterly fee of 0.01125 % of MCAP (Max EUR 9 960 per year)</td>
<td>Fixed annual fee of EUR 7 110 + variable quarterly fee of 0.01125 % of MCAP (Max EUR 9 960 per year)</td>
<td>Fixed annual fee of EUR 7 110 + variable quarterly fee of 0.01125 % of MCAP (Max EUR 9 960 per year)</td>
<td>Up to EUR 250 000 000 = EUR 7 000</td>
<td>0.0375 % of shares market value (min. EUR 4 050, max. EUR 10 800)</td>
<td>Starting from EUR 500 (for an issue amount equal to or lower than EUR 50 000 000)</td>
<td>0.02 % of shares market value (min. EUR 2 100, max. EUR 16 350) + quarterly fee of 10 % of the due annual fee</td>
</tr>
</tbody>
</table>
### Table 17. Company listing and annual maintenance fees charged by the exchange for the main and alternative lists by countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Estonia</th>
<th>Lithuania</th>
<th>Latvia</th>
<th>Ireland</th>
<th>Croatia</th>
<th>Luxembourg</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; EUR 5 000 000 = 3 000</td>
<td>&lt; EUR 5 000 000 = 3 000</td>
<td>&lt; EUR 5 000 000 = 3 000</td>
<td>&lt; EUR 5 000 000 = 3 000</td>
<td>Up to EUR 250 000 000 = EUR 5 000</td>
<td>EUR 2 160</td>
<td>Starting from EUR 500 (for an issue amount equal to or lower than EUR 50 000 000)</td>
<td>0.02 % of shares market value (min. EUR 700 max. EUR 1 870) + quarterly fee of 10 % of the due annual fee</td>
</tr>
<tr>
<td>EUR 5 000 000-20 000 000 = 3 000 + 0.02 % of the average market value exceeding the EUR 5 000 000 limit</td>
<td>EUR 5 000 000-20 000 000 = 3 000 + 0.02 % of the average market capitalisation exceeding EUR 5 000 000 limit</td>
<td>EUR 5 000 000-20 000 000 = 3 000 + 0.02 % of the average market value exceeding the EUR 5 000 000 limit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; EUR 20 000 000 = 6 000 + 0.002 % of the average market value exceeding the EUR 20 000 000 limit</td>
<td>&gt; EUR 20 000 000 = 6 000 + 0.002 % of the average market capitalisation exceeding EUR 20 000 000 limit</td>
<td>&gt; EUR 20 000 000 = 6 000 + 0.002 % of the average market value exceeding the EUR 20 000 000 limit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Problem 4. Difficulties in opening securities accounts in Estonia can make investments difficult for foreigners.

AML regulations are international and, as such, apply in all the countries that implement it. This makes opening securities accounts for non-residents difficult in many countries. In Finland, for example, to create or acquire a company, the entrepreneur needs a local bank account. As a foreigner, opening a (corporate) bank account is much more difficult, because banks need to know who are the beneficial owners (who own more than 25 % of the stock) and this process is more difficult and time-consuming for non-residents.132 The situation is similar in the UK and Ireland, where most banks require a UK or British residency to open a corporate bank account. While some banks also open accounts for foreigners (e.g. Barclays and HSBC), there are additional strings attached, like minimum deposited amounts and restrictions for ATM cash withdrawals.133 The situation is slightly simpler for investors who want to acquire publicly traded securities, as those countries’ stock exchanges are included in many international brokers, who act as nominees in the name of an investor.

Problem 5. Loans are issued only based on very strict and standardised regulations without much flexibility

While the most preferred external funding mechanism is a bank loan, it is a very highly regulated area with strict rules on collateral. Market participants...

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133 Opening a business bank account in the UK for non-residents. [https://1office.co/blog/opening-business-bank-account-uk-non-residents/](https://1office.co/blog/opening-business-bank-account-uk-non-residents/)
hypothesised that Estonian companies could be more severely affected by this as Estonian companies are younger and have not accumulated a comparable amount of assets that qualify as collateral.

To examine this issue, Estonian enterprises were compared with enterprises in Poland and Finland. Poland has a similar history to Estonia, while Finland is more developed and is often considered as a model for future Estonian development.

Figure 50 shows the fixed assets of non-financial corporations as a percentage of their yearly turnover. This gives a comparative overview of how much fixed assets suitable for loan collateral non-financial companies in those three countries have. Fixed assets are shown as a percentage of turnover to make the data comparable, as these countries are vastly different both in terms of size and their level of economic development. Yearly turnover should eliminate these effects.

This issue was also covered in Chapter 3.1, where Figure 19 shows that Estonian banks have actually given more loans as a percentage of GDP to non-financial institutions than banks have in many other European countries. According to these findings, it can be argued that Estonian companies are in a slightly less fortunate situation compared to Finland, at least in respect to available collateral, although the overall situation in Estonia is not too bad, as bank lending to companies is higher than in many other countries.

Problem 6. Lower financial literacy compared to more advanced countries is one of reasons for local retail investors not to participate in Estonian capital markets

Almost all market participants agreed that the overall level of financial literacy in Estonia is low, when compared to other more economically advanced countries that were chosen for the benchmarking (Finland, Sweden and Ireland). While capacity building activities by the government and Nasdaq Tallinn about financial instruments and investments have increased in recent years and the situation has improved, still many people and also business owners are not aware of the opportunities the capital markets offer and risk associated with financial instruments.

Worldwide, just 1-in-3 adults shows an understanding of basic financial concepts. Financial literacy becomes higher among the wealthy, well educated, and those who are familiar with financial services. Credit products, many of which carry high interest rates and complex terms, are becoming more readily available. Governments are pushing to increase financial inclusion by boosting access to bank accounts and other financial services

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but, unless people have the necessary financial skills, these opportunities can easily lead to high debt, mortgage defaults or insolvency.¹³⁵

Lack of financial literacy carries significant costs. Consumers who fail to understand the concept of interest compounding spend more on transaction fees, run up bigger debts, and incur higher interest rates on loans. They also end up borrowing more and saving less money. Low financial literacy also causes people to invest less due to the fear of not having enough knowledge to make informed investment decisions. Meanwhile, the potential benefits of financial literacy are manifold. People with strong financial skills do a better job planning and saving for retirement. Financially savvy investors are more likely to diversify risk by spreading funds across several ventures.¹³⁶

Financial literacy rates vary widely across the European Union. On average, 52 % of adults are financially literate, and the understanding of financial concepts is highest in Northern Europe. Denmark, Germany, the Netherlands and Sweden are the highest financial literacy group in the European Union: at least 65 % of their adults are financially literate. Rates are much lower in Southern Europe. For example, in Greece and Spain, financial literacy rates are 45 % and 49 %, respectively. Italy and Portugal have some of the lowest financial literacy rates in Southern Europe.¹³⁷

When comparing the financial literacy rates of Estonia to other countries chosen for benchmarking in the table below, we can see that Estonia ranks fourth in financial literacy among the eight countries chosen for benchmarking. Countries with higher literacy rate are Sweden, Finland and Ireland. This is to be expected, as Northern Europe countries have higher than average financial literacy rates. The financial literacy rate of Estonia is however higher than the rate in Lithuania, Latvia, Croatia and Poland.

These results indicate that the financial literacy rate of the Estonian is better than the financial literacy rate in countries with a similar development phase (Eastern and Central European countries). Estonia however falls behind Northern and Western European countries that have had more time to develop due to not being a part of the former Soviet Union. In general, overall Estonian financial literacy can be considered adequate, especially when taking into account the current development phase of the Estonian economy. However, more directed action needs to be taken by the state in order to catch up with northern and western European countries.

There are many examples of European countries taking specific action in order to improve the financial literacy of their population. For example, the Ministry of Finance of Croatia led the National committee for financial literacy, composed by ministries, financial regulators, financial industry associations and others. The committee drafted the National Strategic Framework for Financial Literacy 2015-2020 and the Action Plan for the Implementation of Measures in 2015. Both documents were adopted by the government in January 2015. In Ireland, the National Steering Group on Financial Education was established by the then Financial Regulator.

Table 18. Adults financial literacy rate by countries
Source: S&P Global FinLit Survey

<table>
<thead>
<tr>
<th>Country</th>
<th>Adults who are financially literate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>54</td>
</tr>
<tr>
<td>Finland</td>
<td>63</td>
</tr>
<tr>
<td>Ireland</td>
<td>55</td>
</tr>
<tr>
<td>Lithuania</td>
<td>39</td>
</tr>
<tr>
<td>Croatia</td>
<td>44</td>
</tr>
<tr>
<td>Latvia</td>
<td>48</td>
</tr>
<tr>
<td>Poland</td>
<td>42</td>
</tr>
<tr>
<td>Sweden</td>
<td>71</td>
</tr>
</tbody>
</table>

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Other countries, including France, Poland, Romania, and Serbia, are designing their national strategy. Estonia and Sweden have developed their own national strategies for financial education, which are being implemented at the moment. Most (national) strategies focus slightly more on students and young people. The overall Estonian strategy tries to be quite inclusive (aimed at a large target audience) while Sweden concentrates more on educating the unemployed and migrants.

Although Poland doesn’t have a government mandated national strategy for improving financial literacy, the National Bank of Poland has spent about EUR 4-5 million annually since 2002 on financial education, in particular trying to improve the financial literacy of women and people who are in debt or over-indebted. The Microfinance Centre operates across Eastern Europe and Central Asia and is also operating in Poland where they organise classes on long-term financial planning, debt management, remittances, savings, etc. for low-income people.

Sweden has created a continuous improvement system that starts with additional materials for secondary school curriculum and continues up to university level. Afterwards, there are also courses for young adults, professionals and pensioners, thus educating people continuously throughout their lives. The programme is spearheaded by Gilla Din Ekonomi (Like Your Finances), a nationwide network for educational initiatives related to personal finances. The strength of the Swedish system is a nationwide reach that provides a consistent and continuous approach to teaching financial literacy.

Estonia has a national strategy to develop financial literacy among its residents that has a roadmap from 2013 to 2020. The national strategy has led to many initiatives, such as the amendment to the Financial Supervision Authority Act § 6 (1) (the Functions and Rights of Supervision Authority) in June 2013 with paragraph 7 of the act stipulating that one of the functions of EFSA is to promote awareness among citizens of financial services and financial products. Another example is the website rahamaa.ee, which contains a game for kids about money and saving. The EFSA also operates the web-portal www.minuraha.ee, which provides structured information about the financial market for private persons, households and entrepreneurs. The portal contains useful overviews about banking, saving, investments, managing a pension plan and everyday costs, etc. According to the EFSA statistics, there are on average 350 page views every day. During the year, visits are made from approximately 1 700 unique users.

Concerning education, there are about 250 publicly available pages of study material covering 35 topics of financial literacy. All the materials are available in Estonian, while some of them have also been translated into Russian. Creating these study materials was supported by market participants who also helped to put the materials together. Financial literacy has also been actively added to schools’ curriculums through interdisciplinary methodology. This study material was created to improve the financial literacy of Estonian residents, while entrepreneurs have been

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left behind to date. These are good initiatives, although the Swedish approach can be considered much more thorough and Estonia could learn something from there.

There are also active support organisations like StartupEstonia, EstVCA, EstBAN, FinanceEstonia, Estonian Fund Managers Association, which offer capital market trainings, seminars and forums.

**Problem 7. Weak minority shareholder protection**

The level of investor protection can be measured by several indexes, one of the most used and well known of which is the Strength of Investor Protection Index (on a scale of 0 to 10) that is measured annually by the World Bank. This index measures the strength of minority shareholder protections against misuse of corporate assets by directors for their personal gain as well as shareholder rights, governance safeguards and corporate transparency requirements that reduce the risk of abuse.\(^{144}\)

From the index values shown in the table below, the values for Estonia are clearly lower than the values for the comparison countries. The Estonian value of the strength of investor protection index is the lowest among the 7 countries and the extent of ownership and control index value is the second lowest, with only Finland having a lower score of 2. The extent of ownership and control index is the most appropriate indicator for illustrating the level of minority shareholder protection when it comes to takeovers by outsiders. These results validate the findings of the workshop when it comes to minority shareholder protection. Retail investors may not want to invest in companies listed on Tallinn Stock Exchange due to fears of not having their rights protected when a company decides to leave the exchange at some point. As already mentioned in the problem description, the recent delisting of companies from Nasdaq Tallinn has not had a favourable outcome for the minority shareholders.

<table>
<thead>
<tr>
<th></th>
<th>Estonia</th>
<th>Finland</th>
<th>Ireland</th>
<th>Lithuania</th>
<th>Croatia</th>
<th>Poland</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strength of investor protection index (0 to 10)</strong></td>
<td>5.7</td>
<td>5.8</td>
<td>7.5</td>
<td>6.2</td>
<td>6.8</td>
<td>6.2</td>
<td>6.8</td>
</tr>
<tr>
<td><strong>Extent of ownership and control index (0-10)</strong></td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>9</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

**Table 19: Country rankings by the investor protection index values**

Source: The World Bank

**Problem 8. Alternative platforms are unregulated**

The benchmarking analysis regarding regulations of the crowdfunding platforms consider **lending-based (debt-contribution) arrangements**, where investors lend money to companies resulting in a repayment obligation reflected as debt on the balance sheet of the borrowing company, and **equity-based arrangements**, where investors provide capital for a share in the company.

The international benchmarking is based on analysis of the regulations of reference countries as well as on interviews with representatives of some Estonian crowdfunding platforms. Public information sources were used for the comparison.\(^{145}\)

For the analyses, **Singapore, the UK, Finland and Lithuania** were selected as the reference countries. The UK was used as an example because it is one of

\(^{144}\) The World Bank

\(^{145}\) Berkeley Business Law Journal Volume 15 Issue 1 article 6; An Easy Start for Start-ups: Crowdfunding Regulation in Singapore, written by Christian Hofmann and presentation on Reflections and Highlights from the Finnish Crowdfunding Act by Danske Bank’s Managing Compliance Officer Aki Kallio on 8 February 2017 (“Danske Bank Presentation”).
the financial centres in the world and therefore well regulated, which in turn is attractive for entrepreneurs and investors. Singapore was selected as a benchmark country based on its regulatory regime covering FinTech and innovations. Finland was used as an example as it has regulated, not overregulated, crowdfunding in order to develop a crowdfunding market. Lithuania is one of few CEE countries to have introduced special regulations for crowdfunding activities.

Market participants note that in order to protect the interests of investors, crowdfunding platforms should be obliged to carry out due diligence of the borrower and its financing project. They agree that the measures and extent of due diligence should be disclosed to investors so that investors can conduct their own assessment. They also add that the results of due diligence of a specific financing project should be disclosed to investors (publicly). They add that disclosure of the results of due diligence must not be deemed as investment advice. They also clarify that due diligence on crowdfunding projects should not be too formal as it would unreasonably raise the administrative costs for crowdfunding platforms.

Market participants state that crowdfunding platforms should be obliged to disclose the entities’ general information and financial statements to the investors so that the investors could then perform their own assessment. They suggest that investors should be mostly responsible for their own due diligence and they should analyse their own investments to develop their investment awareness.

Market participants note that establishing a system for distinguishing investors by their knowledge and experience (please see Singapore’s risk mitigation test below for reference) will not most likely take too many resources as it should be a simple task for developed crowdfunding platforms.

Market participants anticipate that crowdfunding platforms should have a similar income tax system as investment accounts with credit institutions. They state that investors’ gains should be subject to income tax only when they are transferred from investors’ accounts with crowdfunding platform to investors’ bank accounts with credit institutions, which could exempt investors’ reinvested gains from being subject to tax deductions. That would be beneficial in terms of return on investment for investors.

Market participants additionally note that opening a bank account with Estonian credit institutions for foreign investors should be simpler. They add that an easier process for opening a bank account in Estonia would attract more foreign investors to Estonia, which in turn could develop Estonian capital markets.

In the UK, in addition to equity-based crowdfunding, loan-based crowdfunding is also a regulated activity and requires a specific permission granted by the regulator. However, the regulation for loan-based crowdfunding is not too restrictive while investors have the required protection.  

In the UK, crowdfunding platforms have an extensive obligation to disclose relevant information. For example, communications must be fair, clear and not misleading such that they can easily be understood by the target audience. Crowdfunding platforms have to provide adequate and sufficient information about them, the investment projects and submit relevant periodic financial statements. The information to be provided by crowdfunding platforms has to include conflicts of interest policies, performance reports, the costs and charges for the services, and details about their client money safeguards.

Under Regulation (EU) 2017/112, every offer of securities to the public must be accompanied by a prospectus that informs potential investors about the project in adequate ways. For debt-based securities, a further exemption

146 Berkeley Business Law Journal, pgs 259 and 263.
is available that promises to lessen the burden for issuers. When issuers of debt-based securities are required to provide a prospectus, they may do so by way of a simplified prospectus (a base prospectus). The base prospectus may be limited to more general information that leaves the specific details of the offered securities unaddressed. The details containing the final terms of the specific security may be provided separately at a later stage, but a final summary must ultimately be provided to investors and contain the key information from both the base prospectus and the final terms of the offered securities.¹⁴⁹

The UK’s regulation could be considered a standard for future EU crowdfunding regulations as the UK is Europe’s largest crowdfunding market and it has developed a profound crowdfunding regulation, although it may be too restrictive from some market participants’ view.

In Singapore, loan-based crowdfunding platforms are also unregulated entities if the financing gathered goes to companies and they do not fall under the Capital Markets Services licence (particularly providing investment advice). In that case, the loan-based crowdfunding platforms are not obligated to assess investors’ knowledge or experience or to perform an investment suitability test.¹⁵⁰

The regulator in Singapore has provided a sample Risk Disclosure Statement which investors must sign before they invest in crowdfunding platforms. It emphasises the high risk of total loss, the lack of sale and redemption options, and for equity-based investment the high risk of no dividends being paid and holding being diluted.¹⁵¹

In addition, crowdfunding platforms in Singapore can use two possible risk mitigation tests to establish whether an investor is suitable for crowdfunding investments:

- Knowledge or experience test – this test requires platforms to evaluate whether investors possess sufficient knowledge or experience to understand the risks of crowdfunding investments in general;

- Suitability assessment test – this test requires platforms to evaluate whether crowdfunding investments in general are suitable for a specific investor. (pg 240, Berkeley Business Law Journal).

Singapore has approached crowdfunding regulation in an open manner resulting in loan-based crowdfunding intermediaries being unregulated entities and equity-based crowdfunding intermediaries being regulated entities. Singapore’s example could be considered a standard for future EU crowdfunding regulations, as Singapore has proven to be an innovator of finance regulations that attract market participants.

In Finland, both securities-based and loan-based crowdfunding platforms require a registration in the register of crowdfunding intermediaries. Finland has also set minimum capital requirements for crowdfunding intermediaries to EUR 50,000. Finnish legislation focuses increasingly on investor care, and crowdfunding intermediaries have to handle investors’ funds in limited instances and they also have a duty of disclosure towards investors. The disclosure obligation is compulsory for any platform raising more than EUR 2,000 and it should be made following a format as indicated by the Ministry of Finance of Finland.¹⁵²

In Finland, securities-based and loan-based crowdfunding platforms have an obligation to disclose information in the following manner:

- No untrue or misleading information can be disclosed;
- Information on the crowdfunding recipient must be disclosed accurately and sufficiently.

Certain provisions of respective investment services acts also apply to crowdfunding platforms (provisions regarding conflict of interest, client complaints and information to be obtained from the client, etc.) (pg 20, Danske Bank Presentation)

The disclosure should contain various information, including:

- Basic information, e.g. name of crowdfunding recipient, purpose of the financing;
- Possible risks, e.g. risks of loss and lack of market liquidity for the investment;
- Information on the crowdfunding recipient, e.g. legal form, largest shareholder, board of directors;
- Information on the investment instrument and the offering, e.g. financing amount sought, subscription price and conditions;
- Information on guarantors and collateral.

The Finnish Crowdfunding Act can be regarded as a significant improvement in the Finnish regulation of this sector, gathering the best of the existing legislation and making it more effective. It could very well represent a standard for future EU crowdfunding regulations.\textsuperscript{153}

Lithuania is similar to Estonia in many ways; both countries are small and also rapidly increasing in popularity. Crowdfunding, which has previously been available to Lithuanians only via foreign platforms, is now regulated in Lithuania. National crowdfunding-specific laws have only been passed in 11 EU Member States as of the beginning of 2017. Lithuania has been one of the leading European countries when it comes to the development of the alternative trading platforms and innovations in this area. Lithuania has created a favourable environment for hybrid alternative financing platforms in Lithuania that seek global recognition. Modern, balanced crowdfunding legal regulations have been created that comply with international standards and are not limited to satisfying only the national market.\textsuperscript{154}

Crowdfunding platforms were in operation in Lithuania for a number of years before the national Law on Crowdfunding was passed in 2016. Their activity was in the framework of Law on Consumer Credit, the Central Bank of Lithuania responsible lending provisions, various Civil Code articles and elsewhere. For this new financing method, special regulations were not applied, and general legal norms and principals had to be followed in the meantime. The Law on Crowdfunding allows the establishment of debt-based and equity-based crowdfunding platforms, but it does not apply to crowdfunding based on non-financial consideration/incentives, such as donation and reward crowdfunding. Crowdfunding platforms based on the donations or rewards models may operate in Lithuania without any regulatory burden. The regulations for this process, that is, the 2016 national Law on Crowdfunding, acts of the board of the Lithuania’s Central Bank and the amendments made to different financial institutions’ laws, Lithuania’s Central Bank Law, and the Money Laundering and Terrorist Financing Prevention Law will have a positive effect on the expansion of the crowdfunding sector.\textsuperscript{155}

\textsuperscript{153} ECN Outline.
\textsuperscript{154} Sadzius, 2017 “Crowd funding regulation in the Republic of Lithuania”

\textsuperscript{155} Sadzius, 2017 “Crowd funding regulation in the Republic of Lithuania”
Crowdfunding in Lithuania continues to rise in popularity. The effort and result of creating and perfecting special legal regulations for this process do not go unnoticed. Crowdfunding is appealing to businesses and encourages them to innovate and prosper.

Problem 9. The investment of pension funds in the domestic market is low.

Mandatory pension funds in Estonia have amassed about EUR 3.7 billion (16 % of GDP) of pension savings as of Q1 2018 and their volume is constantly growing. Their investments in the domestic Estonian market are, however, much smaller than in many other countries.

Poland, Croatia and Finland will be more specifically studied in this case. Poland and Croatia were chosen because they keep a larger than usual amount of their assets in the domestic market and Poland has very actively managed its pension system and related regulatory framework. Finland is also a suitable country for comparison, as it has created a well-developed pension system that was highlighted as a positive example during many interviews.

### Table 20. Pension funds’ statistics. Source: OECD, Finnish Centre for Pensions

<table>
<thead>
<tr>
<th></th>
<th>Estonia</th>
<th>Finland</th>
<th>Croatia</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets in funded and private pension arrangements, 2006</td>
<td>4.7 %</td>
<td>50.5 %</td>
<td>5.6 %</td>
<td>11.1 %</td>
</tr>
<tr>
<td>Total assets in funded and private pension arrangements, 2016</td>
<td>16.4 %</td>
<td>59.3 %</td>
<td>26 %</td>
<td>9.3 %</td>
</tr>
<tr>
<td>Operating expenses as a % of total assets</td>
<td>1.0 %</td>
<td>0.5 %</td>
<td>0.4 %</td>
<td>0.6 %</td>
</tr>
<tr>
<td>% of assets abroad in 2016</td>
<td>75.7 %</td>
<td>72 %</td>
<td>9.93 %</td>
<td>7.3 %</td>
</tr>
</tbody>
</table>

As can be seen in Table 20, there are major differences between the national pension systems of Estonia, Finland and Poland. The first major difference is the total assets of pension funds. This boils down to different pension fund structures, but in Finland’s case, in particular, to the total time their pension system has functioned. Finland has had time to accrue a significant amount of capital, while Estonia and Poland are still building up their relatively young pension funds. All in all, Finnish pension funds saw a big drop in their assets during the financial crisis and the following slow recovery has not allowed for very fast growth since then. The crisis also affected Estonian pension funds, as some people’s contributions were temporarily halted, but the previous system has been restored. Polish pension funds reacted painfully to the economic crisis and also ongoing demographic crisis and 2014 reforms stripped private pension funds of about half their assets in favour of a state-sponsored pay-as-you-go system, significantly reducing the funds’ ability to invest.

Poland

Poland pushed through a major reform of their pension systems in 1999 that created a traditional three pillar system with mandatory pay-as-you-go public pension provided by Social Security Institution, mandatory private pension provided through Open Pension Funds (OPF) and voluntary private pension funds that aimed to offer additional pensions for those who opt for it. In 2011, Poland reduced the mandatory contributions to II pillar from 7.3 % to 2.3 %, diverting the excess funds to the state pension system. In 2014, Poland introduced a new regulation that shifted 51 % of the assets...
held by OPFs to a state-run pay-as-you-go pension system and made pillar II voluntary.\textsuperscript{156}

At the moment, the Polish pension system is again in the process of being overhauled, although discussions about how exactly to do it are still ongoing.

The investment strategy of the Polish pension system has been contentious for a long time. In 2011, the European Court of Justice ruled that Poland infringed EU law by limiting the foreign investment of pension funds to just 5\% of all assets.

While this certainly had a positive effect on the development of the Polish capital markets (pension funds were forced to invest into domestic instruments), some Estonian market participants have brought up that this is a somewhat risky strategy, as it puts all the resources into one basket and financial crises could thus disproportionately affect pensions. In 2012, Poland introduced legislation that aims to gradually reduce the restriction on the foreign investment of pension funds to 30\% by 2021.\textsuperscript{157}

Since the 2014 pension system reform, Polish Open Pension Funds are not allowed to invest into government bonds, treasury bills and other debt instruments issued or guaranteed by the Polish state. Instead, they had to hold at least 75\% of assets in shares of companies listed on regular markets, although this requirement has gradually lowered to 15\% in 2017. The restrictions on foreign investment remain, although, as mentioned before, it is decreasing.\textsuperscript{158} At the end of 2016, the Polish Open Pension Funds’ investment portfolio was still mainly comprised of publicly traded shares, as can be seen on Figure 51.\textsuperscript{159}

Although the Polish pension system reforms have reduced the total available assets of Polish pension funds and with that also their influence on the Polish capital market, current trends show that their investment in the local stock exchange remains significant.\textsuperscript{158} However, the current situation makes them vulnerable to changes in the stock market, which may lead to further diversification and removal of large parts of capital currently in shares.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure51.png}
\caption{Polish Open Pension Funds’ investment portfolio, EUR million.}
\label{fig:investmentportfolio}
\end{figure}


\textsuperscript{157} Poland to raise foreign investment cap for pension funds to 30\% of AuM by 2021. http://cbonds.com/news/item/580835

\textsuperscript{158} How the Polish pension fund reform will affect the fund’s investments. http://www.allenovervy.com/SiteCollectionDocuments/Publication_OFE_Investment_after_the_reform.pdf

\textsuperscript{159} Annual bulletin. OFE’s market 2016. https://www.knf.gov.pl/en/REPORTS_AND_ANALYSIS/Pension_system/Annual_data_pension_funds_market
Finland

The Finnish pension scheme combines two pillars in quite a unique way. It is basically based on two complementary pension schemes: The National Pension public plan and a compulsory occupational pension scheme.

The National Pension aims to secure a minimum viable income for retirees whose earning-related pension is small. It provides a flat-rate benefit of up to 20% of average wages in Finland. However, the mandatory earning-related occupational pension insurance is the backbone of the Finnish Pension system. The latter is partially pay-as-you-go financed and partly funded. Due to the strong and well-developed compulsory pension schemes, the voluntary pension funds have not reached very high popularity in Finland.

As can be seen in Table 20, Finnish pension funds hold most of their assets abroad; in 2017, only 28% of all assets were held in Finland. The domestic investment portfolio of Finnish pension funds is tilted towards listed stocks and equity funds, which make up 29.4% of domestic assets. Another 24.7% of domestic assets are placed into real estate and shares, while money market investments are the third largest group, holding 17.8% of all domestic pension funds’ assets (Figure 52). In the last 10 years, Finnish pension funds have started to invest more assets into private equity and other alternatives. At the end of 2016, this group commanded 6% of domestic pension funds’ assets, while in the middle of the 2000s, they only had about 3% of those assets.

Croatia

“The Croatian pension insurance system based on individual capitalised savings, i.e. the establishment and management of mandatory and voluntary pension funds (known as Pension Insurance Pillar 2 and 3) is regulated by the Mandatory Pension Funds Act and Voluntary Pension Funds Act which entered into force in February 2014, repealing the Mandatory and Voluntary Pension Funds Act.”

As can be seen in Table 20, Croatian pension funds have performed very well, both in terms of investment return, and also by their ability to increase assets under management, which has increased from 5.6% of GDP in 2006 to 26% of GDP in 2016. As in other CEE countries, Croatia has instituted investment restrictions, namely at least 50% of their assets have to be invested in Croatian government bonds, but there are also maximum regulations on different asset classes that depend on the pension funds’ risk class.

Croatian pension funds invest a large majority of their assets in the domestic market (Table 20). The majority of this domestic investment is held in Croatian government bonds, which means that Croatians finance at least

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Figure 52. Finnish pension funds’ domestic investment portfolios, EUR billion. Source: TELA

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161 Croatian Financial Services Supervisory Agency Annual Report 2016. [https://www.hanfa.hr/media/2549/annual-report-for-2016.pdf](https://www.hanfa.hr/media/2549/annual-report-for-2016.pdf)
some part of their own government debt through the pension system (Figure 53).

EUR 1.4 billion (12%) worth of assets is also held on the domestic stock market, which helps both domestic companies raise necessary capital and to increase liquidity.

For comparison, the examples from Sweden, Finland and Latvia and Lithuania were observed. Sweden and Finland were used as examples as they have a well-developed bankruptcy law. Latvia and Lithuania were used as examples as they have similar history with Estonia. The analysis is based on interviews with bankruptcy law specialists.

In **Sweden** acknowledging subordination agreements in bankruptcy proceedings is to a certain extent a complicated issue with not enough practice. A bankruptcy trustee is required to comply with the allocation principle set out in the Rights of Priority Act (in Swedish Förmånsrättslagen). A bankruptcy trustee should not comply with any subordination agreement in violation with the aforementioned act.

Hence the bankruptcy trustee is in principle not obliged to comply with any subordination agreement that is in violation with the act. Such an subordination agreement only has a contractual impact and is only as a general principle binding between the creditors.

In **Finland**, there are some possibilities in insolvency proceedings and payment rankings to subordinate claims in the most junior class. However, the distribution waterfall in insolvency proceedings is not specifically regulated. There is a fair assumption between finance and insolvency lawyers that bankruptcy trustees would honour a waterfall agreed between creditors of the same claim and in the same class (for example, under an intercreditor agreement). However, this is not specifically regulated in Finland.

In **Lithuania**, the situation is very similar to Estonia. The bankruptcy laws of non-regulated entities do not explicitly cover subordination agreements. Therefore, it is a high risk that a bankruptcy trustee would not uphold such subordination agreements when distributing funds to creditors of the bankrupt entity.

On the other hand, once the payments are distributed between creditors, such creditors are generally bound by operation of the contractual provisions of the subordination agreement.

Other issues identified during the project

**Regulation of subordinated debt**

As described in Chapter 5.1, one of the problems identified during the project by the market participants is the uncertainty around the acknowledgement of subordination agreements in Estonian bankruptcy proceedings.
In Latvia a bankruptcy trustee is bound by a statutory distribution waterfall. Making payments to unsecured creditors under a subordination agreement is a contractual obligation existing between the debtor and its creditors, and is therefore not allowed for a bankruptcy trustee. Hence, a bankruptcy trustee will not most likely adhere to the subordination agreement.

On the other hand, once payments are distributed between creditors, such creditors are generally bound by the operation of contractual provisions of the subordination agreement.

To solve the issue, subordinated debts should be mentioned in distribution waterfall in bankruptcy proceeding regulation so that bankruptcy trustees would uphold subordination agreements when making payments to creditors of the bankrupt entity.
Conclusions

Despite the fast development of the Estonian economic environment in the past 10 years and the overall favourable conditions, the local capital market has remained rather small.

There are several positive factors that are already in place (e.g. e-Residency, establishing the EIF and BIF, active network for supporting start-ups, information portals and seminars for retail investors and SMEs, etc.) and that should have influenced the faster development of the capital market; however, it seems that these factors separately have not had sufficient power to boost the market to the expected level. One gap that was brought forward as a significant drawback was the complete and long-term strategy that should contain the concrete steps authorities and market participants could implement in close cooperation.

Most of the standard financial instruments and market participants are represented in the Estonian capital market. The demand side includes investment funds, private and venture capital funds, banks and credit institutions, pension funds, retail investors, insurance companies, HNWI and business angels.

As in most EU countries, the majority of the supply side of the Estonian capital market consists of SMEs, who mainly consider a bank loan as their first and only financial instrument. The activities of companies in the local stock market have been very modest. The trigger for new IPOs has sometimes been a concrete one-time strategic decision, after which the company remains in an inactive status.

The crowdfunding platforms, as alternative investment options, have become more and more widely used by retail investors and SMEs. This trend has generally been noted as a positive alteration that could form a stronger base for FinTech and other types of alternative instruments. As innovative instruments and solutions (e.g. ICO transactions, the cryptocurrency market, etc.) were not covered in depth in this diagnosis and there were stakeholders who were cautious about that area, it is advised to study those areas separately. More in depth analysis about the alternative instruments requires complete data and statistics, which are not currently available and accumulated.

As a result of the diagnosis, the financing options were mapped and compared by growth phases of a company. A significant part of the Estonian regulatory framework in respect to capital markets derives from EU legislation. In recent years, Estonia has amended local legislation in order to transpose and ensure compliance with all the relevant EU regulations and directives impacting the capital market.

Despite this, there are still some essential areas (e.g. crowdfunding, taxation, rules and process for opening securities account, protection of minority shareholder) that are less or even unregulated or require changes to ensure...
lower risks, equal conditions or allow smooth transactions. It can be positively noted that crucial issues regarding the gaps in legislation are already under discussion by the authorities and market participants.

As a result of the diagnosis, potential improvement levers were proposed. The levers concern the identified problems on the demand and the supply side, along with issues regarding the legislation and infrastructure.

One of the cross topics that became evident was the low level of financial literacy among the retail investors and SMEs when compared with high-ranked European countries. Based on the analysis, it can be concluded that this issue also influences other stakeholders and causes the following barriers. For example, although the founding of more VC/PE funds has been encouraged, SMEs still do not have the expertise to understand the investment options offered by funds.

The government and market participants themselves have made a number of efforts (e.g. investment portals, seminars, investor clubs, etc.) to raise awareness, which have resulted in somewhat positive results. However, it is clear whether there is still a significant amount of work to do.

A similar issue was raised in analysing retail investors. Local people mostly tend to deposit their savings as they are not aware of the different investment options or the options may seem too complicated. Investing on crowdfunding platforms have become more and more popular in recent years because platforms actively offer their services through different channels, the investment process is easy and they can invest relatively small amounts of money.

One of the challenges is to increase the attractiveness of the local capital market for foreign investors. The local stock exchange is rated poorly or mentioned in a very limited sense on the well-known international websites. This causes the market to remain insignificant and virtually unnoticed abroad. The second barrier is related to the rules and prerequisites for starting trading securities in Estonia. One needs to have a local bank account to open a local securities account, but EU rules for AML regulations are strict enough and banks do not want to take on the high cost for heavy due diligence rules.

There is no clear guidance to support the due diligence process of banks. As a result, there has been much annoyance among capital market stakeholders.

The successful policy should simultaneously combine the levers to increase both demand and supply. Various potential sources have been identified that could be directed to the market – such as pension funds, deposits, insurance companies’ investments – that could be directed to the local market. At the same time, however, it is crucial to support accelerated economic growth and bring a wider choice of investment instruments to the market.

It is evident that a long-term capital market development strategy is required.

While determining the improvement levers and concrete actions, it has to be considered that the Estonian capital market ecosystem has been and remains relatively small. But this feature could benefit from new alternative instruments and should be used as an advantage for faster growth.
Annexes

Annex 1. Methodology

The Estonian capital markets diagnosis focused on all the traditional and common capital market aspects, including infrastructure (e.g. stock exchange, crowdfunding platforms), the banking sector, pension funds and insurances, debt, equity and venture capital funds, investor base and also the activities of the supporting organisations and services. The innovative instruments and solutions (e.g. ICO transactions, the cryptocurrency market, etc.) are only covered to a limited extent, as these instruments are not yet widely used and not integrated densely to other areas of the capital market.

The target groups of this study are the business sector, investor base, stock exchange and other infrastructure platforms, financial intermediaries and supporting organisations, including ministries as policy makers, as well as possible foreign investors and businesses.

Against this backdrop, all throughout the project, the main Estonian capital market stakeholders and market players from all target groups were closely involved in most activities to ensure that the results are in line with the real market conditions and expectations.

The study consisted of three main stages: 1) Estonian capital market status quo assessment; 2) Market gaps and barriers analyses and determination; 3) Recommendations and improvement levers identification. These stages were supported by general project management activities throughout the whole project.

Figure 55 illustrates the project methodology, links between each tasks and outcomes.

The analysis of previous researches and statistical data

The objective of the secondary data analyse was to identify the local macro-economic environment, capital market volumes and map the market players. It was also important to gather information about the recent developments and preconditions for further growth of the Estonian capital market.

There have been several studies and surveys carried out on the topics related to the Estonian capital markets, which were closely examined. Relevant and useful information was also gathered from international studies conducted by the EBRD, OECD and other institutions.

During the analysis, some capital market gaps and barriers were identified, which were already defined in previous studies.

In order to determine the transaction volumes, public databases were mostly used along with a number of different types of market participants. Additional data inquiries were made to Eesti Pank, ESFA, Central Depository, crowdfunding platforms and banks.
The outcomes of the analyses of previous research and statistical data were used to prepare the individual interview questions and describe the current local situation.

Analysis of laws and regulations

The analysis commenced by identifying the relevant laws and regulations applicable to all aspects of capital markets, both at EU and local level. It was determined which areas are currently unregulated in Estonia with respect to capital markets. The regulatory institutions and their main roles were also identified.

Based on the review, the gaps in the relevant regulatory framework were determined and highlighted by comparing the existing framework to international standards and best practices in reference countries.

Throughout the analysis process the focus was set on the areas that are not regulated at EU level and could be influenced by developing or amending the local legislation.

The outcomes of the legal and regulatory framework analyses were used as input for determining the market gaps and barriers.

Interviews and market consultations

The most extensive part of the project was interviews with the stakeholders and market players. The interview outputs were one of the most crucial information sources for the following stages of the project.

The interviewees were chosen from all mapped capital market target groups with different types of background and experience. From each target group, at least two representatives were interviewed. 36 market players were interviewed in total. Their names and institutions are named in Annex 2. The interview structures were semi-structured, which means that they contained some closed questions (e.g. multiple-choice questions), as well as open questions, which allowed the researchers to gather additional information according to the interviewee’s answers. For each interview, an individual interview plan and questionnaire was developed, according to the interviewee’s background and field of activity. The duration of one interview was 1-2 hours, depending on the depth of the topic. All the interviews results were documented and categorised for further analyses. The categorisation process made it easy to present and use the data from all interviews and draw clear summaries.

The interview process was closely related to the analysis on the secondary data and the laws and regulations – based on the interview results and feedback from market players, the focus of these analyses was continuously adjusted.

There were also some additional consultations after the first workshop and in determining the market gaps and barriers with some market players in order to clarify the concrete issues. The names and institutions of these market players are named in Annex 2.

Workshop for determining and prioritising the market gaps and barriers

The aim of the first workshop was to verify and prioritise with the market players and stakeholders the preliminary list of the market gaps and barriers, which was drafted based on the individual interview results and secondary data analysis. All the preliminary gaps and barriers were categorised and described briefly for the workshop.

The invitations to the market players were sent according to the principle that all the main target groups would be represented, but the number of participants would not be too high, in order to ensure everyone’s active participation.

The workshop materials were provided to all participants in advance, including the project background information, list of problems and questions under discussion, and description of the workshop format.

As the workshop introduction, all preliminary problems were presented and described in detail. Then all the participants were divided into three groups for more active discussion. The preliminary list of problems was also divided into three sets and each group thoroughly analysed the concrete set of problems. The participants were asked to evaluate the impact of each problem, agree on the final set of gaps and barriers (supplement the list if...
necessary) and prioritise them. Each problem was assessed with an importance level from 1 to 5 (where 5 was a problem with the most crucial and widest impact). All group discussion results were presented orally to the plenary where everybody could give their comments. Based on plenary discussion, the final, joint agreement on the gaps and barriers and their importance was made.

The outcome of the workshop was the final and full list of identified and prioritised gaps and barriers, which were used for international benchmarking and developing the improvement levers. All the problems discussed in the workshop with their brief descriptions and assessed importance levels are presented in Annex 3.

The workshop took place on 25 May 2018. All the written workshop presentations and materials were prepared in English; however, the oral presentations and group discussions were held in Estonian. There were 22 participants in total, including 20 representatives from different capital market target groups and 2 participants from the EBRD and SRSS. The participated market players’ organisations and their representatives are listed in Annex 2.

Workshop for developing the recommendations and improvement levers

The aim of the second workshop was to develop with the market players and stakeholders the potential improvement levers to the identified gaps and barriers.

First, the overview of the identified market gaps and barriers were presented and the deeper content was explained to all participants. The identified gaps and barriers were presented based on the different market player’s journeys (SME, retail investor, foreign investor, PE/VC fund, etc.) and the bottlenecks that they could face while acting in the market.

Then all the participants were divided into groups for more active discussions with the overall goal of coming up with possible solutions. Participants were asked to discuss and identify the list of potential improvement levers for each identified capital market gap and barrier (problems 1-9 as described in Chapter 6), set the target for each proposed solution and determine whether the impact reveals immediately (during 1 year), in short-term (in 2-5 years) or long-term (over 5 years).

All groups started with brainstorming to propose the different kinds of potential solutions and afterwards identified 1-2 concrete solutions that are applicable in practice and have concrete influence. Each group presented its final proposal, and the final list of potential improvement levers was determined as a result of the plenary discussion.

The workshop took place on 21 August 2018. The working language was English. There were 21 participants in total, including 20 representatives from different capital market target groups and 1 participant from EBRD. The participated market players’ organisations and their representatives are named in Annex 2.

International benchmarking

The purpose of the international benchmarking assessment was to find the appropriate examples of successful and supportive policies for capital markets in order to improve the capital market in Estonia. The international benchmarking concentrated only on those subjects that were assessed in the workshop with the importance level of “high” and “medium” (it means as the most problematic or with the widest impact). Only these reference countries that have implemented the positive and good practice, which could provide input for finding solutions in Estonia, were described under each identified market gap and barrier (problems described in Chapter 6).

In cooperation with EBRD and Ministry of Finance the Croatia, Finland, Ireland, Luxemburg and Poland were chosen as the main reference countries. With the aim of exploring the most appropriate examples, some other foreign countries were also analysed during the international benchmarking (e.g. the practice of Singapore, UK, Finland and Lithuania regarding crowdfunding platforms, Sweden regarding financial literacy, etc.).
The main reference countries were also used all throughout the report to illustrate Estonia’s position compared to the similar markets. The main reference counties were chosen based on the following argumentation:

- **Croatian** and Estonian capital markets are quite similar in terms of developmental stages and the fact that both rely heavily on bank lending. However, Croatia’s capital markets have shown quick growth and have managed to somewhat diversify their financing sources\(^{162}\).
- **Finland**, one of Estonia’s closest neighbours, has managed to create a system where about 13% of the population own stocks.\(^ {163}\) Being closely related culturally, the Finnish achievements in the successful promotion of investing in stocks were closely observed to define the possibilities for implementing similar practice in Estonia.
- **Ireland** and **Luxemburg** have both been brought forward as countries that have vitalised their capital markets through smart regulatory choices, in this case concentrating on niche markets.\(^ {164}\) The development of markets in Ireland and Luxembourg have also been helped by social and policy factors, such as highly educated staff, strong geographic ties, linguistic advantages and low taxation on holding companies.
- **Poland’s** capital markets have a lot more relative depth than the markets of other CEE countries.\(^ {165}\) Although Poland’s market size is different, the capital market in Poland was also heavily reliant on a concentrated banking sector in the past, much like Estonia. Poland’s early growth was driven by broadening access to finance and developing the non-bank financial sector.


Annex 2. The list of the involved market players and stakeholders

The sequent table consists of the list of all market players and stakeholders who were involved in the interviews and consultations or participated in the workshops. The schedule for interviews, consultations and workshops was the following:

- The interviews with local market players and stakeholders were conducted during the period 22 March to 18 May 2018. Additional interviews with foreign market players were conducted during the period 3 September to 22 October.
- The first workshop for identifying the market gaps and barriers took place on 25 May 2018.
- The additional market consultations with Finance Estonia members took place on 19 June 2018. There were additional consultations with some participants during June to August 2018.
- The second workshop for developing the recommendations and improvement levers took place on 21 August 2018.

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</table>
Annex 3. The list of all revealed market gaps and barriers

The first stakeholders’ workshop took place on 25 May 2018 with the purpose of validating and prioritising the draft list of gaps and barriers. The following table reflects the workshop discussion outcomes, which were used for further analysis and determination of the final set of gaps and barriers.

All the discussed problems are listed and briefly described. It is indicated under the workshop results whether the topic was to be kept in the list for further analysis or be left out, as well as the level of its importance.

<table>
<thead>
<tr>
<th>Preliminary list of market gaps and barriers identified based on the interviews</th>
<th>Workshop discussion results</th>
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<tbody>
<tr>
<td>Category</td>
<td>Main Problem</td>
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<td>SMEs as capital seekers</td>
<td>1. SMEs favouring bank loans as the first and main source of external financing hinders the development of capital market.</td>
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<td></td>
<td>2. Even though PE/VC investments have increased rapidly in recent years, the PE/VC funds’ investment strategies are not focusing on traditional SMEs, leaving those with a relatively low level of options.</td>
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<td>3. SMEs have a low level of financial literacy; thus, they are not aware of the possibilities to involve financial instruments other than bank loans.</td>
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<td>PE/VC funds</td>
<td>4. Listing at Nasdaq Tallinn is not an attractive option for raising capital for SMEs.</td>
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<tr>
<td>Alternative platforms as funding possibility</td>
<td>1. There are not enough exit possibilities for PE/VC funds.</td>
</tr>
<tr>
<td>Alternative platforms as funding possibility</td>
<td>1. The low level of regulation of alternative platforms is seen as an unfair competitive advantage in comparison with other market players.</td>
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<tr>
<td>Stock Exchange</td>
<td>1. Nasdaq Tallinn is small and illiquid.</td>
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<tr>
<td>Stock Exchange</td>
<td>2. There is no government long-term strategy for developing the local capital market.</td>
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<tr>
<td>Stock Exchange</td>
<td>3. Transaction and overall IPO costs on Nasdaq Tallinn are too high when considering invested sums and the amount of raised capital.</td>
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<tr>
<td>Stock Exchange</td>
<td>4. The companies listed on Nasdaq Tallinn are not growing fast enough.</td>
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</table>
companies have not managed to exceed the pre-2008 crisis prices.

5. The participation of retail investors on the local exchange remains low. Overall living standards and limited ability to save. Real estate investments are preferred by retail investors. **Keep 1**

6. Shares on Nasdaq Tallinn are not easily accessible by foreign investors. It is difficult for foreign investors to open bank accounts in Estonia, which are needed in order to trade share listed on Nasdaq Tallinn. **Keep 3**

| Attracting foreign investors | 1. Opening the bank accounts needed for the trading of securities can be difficult for foreign investors. | It is safer and easier for banks to deny new bank accounts. A bank account is needed for a securities account. | **Keep 5** |
| Credit institutions | 1. Dependence on Scandinavian banks is risky for Estonian financial sector | The largest banks are subsidiaries of Scandinavian banks. Loan policy is made in headquarters abroad and is not flexible for local SMEs. The Scandinavian economic cycle could affect the Estonian financial market. Only one bank is available on Nasdaq Tallinn. | **Left out 0** |
| | 2. Loans are issued only based on very strict and standardised regulations without much flexibility | Banks need solid collateral for loans. More risky investment plans might not get the required funding. Domination of banks has diminished the need for other, more versatile financing instruments. | **Keep 4** |
| | 3. Difference of regulations across countries (especially the Baltic States) complicate harmonised cross-border activities | There are not very many clients in Estonia, or throughout the Baltics. The lack of clients makes developing new services expensive. Different regulations within Baltic countries take an impractical amount of resources. | **Keep 2** |
| Retail investors | 1. The definition of investment account in the Taxation Act is too narrow. | An investment account does not cover all of the varied investment options. | **Keep 1.5** |
## General topics (added during the workshop)

1. Overall development of the Estonian capital market so it starts to function properly.  

   | n/a | New topic 5 |

2. Subordinate debt is confusing and open to different interpretations.  

   | n/a | New topic 5 |