ATTRACTIONENESS OF LATVIAN, LITHUANIAN AND ESTONIAN VENTURE CAPITAL MARKETS FOR INTERNATIONAL INVESTORS

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Abstract

Business start-ups, small and medium sized companies face financial difficulties to finance their innovative activities, which hinders innovative products from commercialization. This mainly results from the high risks and information asymmetries involved in such projects. Standard debt financiers are reluctant to take these risks, besides the young enterprises lack collateral to receive the credit. However, the risk tolerance for investors differs as well. One of the alternatives for bank loans is venture capitalists, who rather become partners than creditors of young, innovative companies with growth potential. Particularly venture capital or the so-called “smart money” is what financially supports such business ventures, provides funding for technological transfer and commercialization.

The authors of the present paper have chosen to examine and compare the venture capital attraction possibilities in the Baltic States using Venture Capital and Private Equity Country Attractiveness Index (by Groh et al.) data for 2012-2018. Venture capital market development is currently a very topical issue for the Latvian government, taking into consideration the critical importance of venture capital for financing innovation. Becoming the leader in the venture capital sector and No. 1 choice of start-up companies in the Baltics are now the objectives of the government of Latvia. It was therefore relevant and important to compare venture capital attraction possibilities in Latvia, Estonia and Lithuania to see and analyze in which aspects Latvia lags behind its neighbouring countries and in which it succeeds.

The paper compares the six main factors or key drivers which determine the attractiveness of venture capital markets. According to Groh et al. (2016), these factors are: 1) Economic Activity; 2) Depth of Capital Market; 3) Taxation; 4) Investor Protection & Corporate Governance; 5) Human & Social Environment and 6) Entrepreneurial Culture & Deal Opportunities. However, the results of the research reveal that the main problems for international investor attraction in the Baltic States are underdeveloped capital markets and low economic activity. Latvia, unfortunately, is the most unattractive for international venture capital investors. Nevertheless, it has experienced the fastest growth during six years, which means that there is potential for becoming a leader in the venture capital sector. The present paper reveals the aspects to be improved for becoming more attractive for venture capital investments.

Keywords: venture capital, Baltic States, comparison, venture capital market attractiveness; start-up, innovation.

JEL Codes: G24, G28, F21, M14.

Introduction

Innovations can ensure competitiveness under globalisation and a saturated market. The materialisation and sale of novelty in the market takes place in the entrepreneurship sector in particular, yet one of the key problems hindering economic development is the lack of innovative enterprises. According to research studies, innovative small and medium enterprises (among them start-ups) in euro area countries regard the lack of funds, which was caused by the sovereign debt crisis in the euro area in 2011, as one of the key problems on the way towards innovative activity in addition to their limited resources, insufficient assets for getting a loan and insufficient performance (EC, 2011). Since innovations, in essence, represent untested, new and therefore risky ideas in the market, it could be very complicated to borrow funds in the form of a loan. A bank loan is more appropriate for enterprises with stable business performance and large enterprises having tangible and intangible assets to be used as collateral for the loan (Kerr and Nanda, 2014). One of the alternatives to bank loans is venture capital funds. The key sources of finance for a new innovative enterprise with high growth potential are venture capital funds and business angels (Financing Innovative Development..., 2007). Venture capital in particular, representing “smart money”, supports new and innovative enterprises with fast growth potential, finances the transfer and commercialization of technologies (Prohorovs, 2014). According to Florida and Kenney (1988), venture capitalists are in the centre of the innovation process. Venture capital is considered to be an especially appropriate source for financing innovation, as it combines both capital and investor competence (Innovation and the contributions …., 2006).

At present, the development of the venture capital market is topical in Latvia. An increasing attention to it is paid by the government, and the objective of the government is to make Latvia choice No. 1 among the Baltic states for start-ups or fast growing technology enterprises (Aseradens, 2016). Since the stiffest competition in the attraction of venture capital investment and the struggle for the sympathies of new enterprises is faced by Latvia from Estonia and Lithuania, it is of great importance to compare and analyse possibilities for the enterprises in the Baltic States to attract international venture capital and the attractiveness of venture capital markets of the Baltic States for venture capital investment and to identify problems to be tackled in Latvia to become the leader in attracting venture capital among the Baltic States and the most attractive Baltic State for the new enterprises. Since most of the venture capital in all the Baltic States is comprised of national capital, it is important to examine how the Baltic States as a whole (and especially Latvia) are assessed by international investors.

Without knowing the socio-economic environment of a country where to make an investment, venture capital (hereinafter VC) investors cannot make rational decisions on making their investments. VC investors perform in-depth enterprise credibility checks to reduce the influence of information asymmetry and the effects of a potential lack of
information (Rossi, 2013). This process is time-consuming and expensive. The Venture Capital and Private Equity Country Attractiveness Index developed and published for the eight year in a row by Barcelona IESE Business School researchers A. Groh, H. Liechtenstein, K. Lieser and M. Biesinger shows the attractiveness of 125 countries for investment.

The research aim is to compare and analyse the attractiveness of venture capital markets of the Baltic States for international investment. The research employed Venture Capital & Private Equity Country Attractiveness Index report data for the period 2012-2018.

According to the authors of the Venture Capital & Private Equity Country Attractiveness Index, venture capitalists increasingly tend to shift focus and attention from traditional and developed VC markets to those of the least developed regions. The least developed countries attract investors by means of their great opportunities for economic growth (Groh et al., 2016). However, growth opportunities are not the only factor that determines the attractiveness of a country for VC investment. A number of socio-economic and institutional prerequisites are necessary for having the infrastructure and investment environment of a profitable and flourishing VC market.

To identify how profitable it is for international investors to invest in venture capital funds in Latvia, the authors compared the attractiveness of economic activity, capital markets, tax systems, investor protection and corporate management, human and social environments, business cultures and business opportunities in the Baltic States from the perspective of international venture capital investors, which allowed identifying the fields to be improved and the competitiveness of Latvia against its neighbouring countries with regard to the attraction of venture capital investors.

The authors summarised data on the Baltic States and performed their own analysis to identify why the Baltic States were ranked in certain places according to particular criteria based on the data sources used by the index and a parallel analysis of various bibliographical and other sources.

It has to be noted that published index report data are not always comparable because the index structure and composition have been changed many times; therefore, for the purpose of making the data comparable over several years, the data were acquired from the index authors, which were altered and adapted to the last (2018) methodology for calculating the index.

Research results

VC attractiveness index values for the Baltic States

Initially, overall VC attractiveness index values for the Baltic States were analysed to identify the attractiveness of Latvia, Estonia and Lithuania for international venture capital investment among 125 countries. The index values are shown in Table 1.

<table>
<thead>
<tr>
<th>Year</th>
<th>Estonia</th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
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<tbody>
<tr>
<td>2012</td>
<td>51</td>
<td>67</td>
<td>47</td>
</tr>
<tr>
<td>2014</td>
<td>50</td>
<td>64</td>
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<td>2016</td>
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<tr>
<td>2018</td>
<td>44</td>
<td>49</td>
<td>45</td>
</tr>
</tbody>
</table>

(Source: Groh et al. (2012, 2014, 2016, 2018))

Among the 125 countries ranked by the index, Latvia took 49th place, Lithuania 45th, while the most attractive Baltic State for venture capitalists was Estonia ranked in 44th place. It is a positive fact that particularly Latvia progressed the most among the Baltic States, and since 2012 it has improved its ranking by 18 places, which indicates socio-economic development in the country as well as the formation of a favourable environment for the venture capital industry and investment. Overall, all the Baltic States have improved their rankings every year.

Economic activity

Undeniably, the economic situation in a country affects its attractiveness for VC investment. The size of the economy and the employment rate are the basis of wellbeing in the country, and the number and diversity of enterprises depend on both factors as well as indicate overall entrepreneurial activity and, consequently, the expected flow of venture capital deals. Expected economic growth requires investment and provide a justification for entering the markets of the least developed countries. Gompers and Lerner (1999) believe that there are attractive opportunities for venture capital investment for investors if a particular economy experiences fast growth. Romain and van Pottelsberghede la Potterie (2004) have found that activity in the venture capital industry is cyclical and positively correlates with GDP growth. The number of enterprises that have qualified and are ready for venture capital investor support is associated with social wellbeing not only because it provides generally easier access to funds but also because it is associated with higher incomes of potential domestic market customers.
The following three indicators were employed to calculate the key criterion – “Economic activity” – of the Venture Capital Country Attractiveness Index: 1) size of the national economy (GDP); 2) expected real GDP growth, %; 3) unemployment rate, %. In total, the weight of the key criterion “Economic Activity” comprises 15.8% of the index. The performance of the Baltic States in terms of economic activity in the period 2011-2018 is shown in Table 2.

Table 2. Venture Capital and Private Equity Country Attractiveness Index Rankings of the Baltic States according to the Key Criterion “Economic Activity” in the Period 2012-2018

<table>
<thead>
<tr>
<th>Country</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
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<tbody>
<tr>
<td>Estonia</td>
<td>66</td>
<td>88</td>
<td>91</td>
<td>82</td>
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<tr>
<td>Latvia</td>
<td>84</td>
<td>92</td>
<td>90</td>
<td>43</td>
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<tr>
<td>Lithuania</td>
<td>77</td>
<td>86</td>
<td>87</td>
<td>74</td>
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</tbody>
</table>

(Source: Groh et al. (2012, 2014, 2016, 2018))

In 2018 among 125 countries, economic activity in Lithuania was ranked 74th, while Latvia took 43rd place and Estonia – 82nd place. Compared with 2012 Latvia “climbed” the most.

The disadvantage of Latvia with regard to this criterion is unemployment, which was still the highest among the Baltic States. On the one hand, the good GDP growth outlook and lower unemployment indicate that in 2018 economic activity in Latvia is going to be ranked higher in the VC country attractiveness index and there is a reason to believe that the number of new, innovative and fast-growing enterprises could rise, thereby attracting more VC investment (including foreign) and increasing the number of available investment projects and the flow of business deals. However, on the other hand, the Baltic States were ranked the lowest, being among the most economically inactive nations out of 125 countries, according to this criterion in comparison with the other criteria, and if their performance does not improve this year, their rankings will be below the optimum threshold. Overall, low economic activity has to be considered to be a significantly negative factor in attracting international venture capital investors to the Baltic States.

Depth of the capital market

Black and Gilson (1998) discuss differences between bank-centred and stock market-centred capital markets. In their opinion, a well-developed stock market (stock exchange) is very essential for establishing and maintaining a dynamic venture capital market, as it allows venture capital fund managers (complementary partners) “exit” their investments via public offerings as an exit strategy. According to both authors, bank-centred capital markets are less capable to provide an efficient infrastructure of institutions that support venture capital (and private equity as a whole) deal-making. The venture capital industry flourishes in the countries with well-developed and liquid stock markets. For this reason, the authors of the VC country attractiveness index emphasise that the capital market and its state considerably affect VC and PE activity. The size of the market of initial public offerings indicates the potential for the preferred exit strategy for investors. Similarly, the size of the market of mergers and acquisitions (M&A) stimulates and incentivizes entrepreneurial managers, as well as indicates and allows assessing the second preferred divestment channel in the country in which they plan to invest. Accordingly, the liquidities of the M&A market, the banking sector and the market of initial public offerings in a country are good proxies and allow assessing the VC deal-making infrastructure for VC investors (Groh et al., 2016).

The following four indicators were employed to calculate the key criterion “Depth of capital market” in the Venture Capital Country Attractiveness Index: 1) size of the stock market (sub-indicators: market capitalisation of companies quoted on a stock exchange (as a % of GDP) and the number of domestic companies quoted on a stock exchange); 2) liquidity of the stock market (trading volume, as a % of GDP); 3) SM liquidity and the public stock-issuing activity (sub-indicators: market volume and the number of issues); 4) merger and acquisition (M&A) market activity (sub-indicators: market volume and the number of deals). In total, the weight of the criterion makes up 43.8% of the index, and it is the most important criterion in the index.

The performance of the capital markets of the Baltic States in the period 2012-2018 is presented in Table 3.

Table 3. Venture Capital and Private Equity Country Attractiveness Index Rankings of the Baltic States according to the Key Criterion “Depth of Capital Market” in the Period 2012-2018

<table>
<thead>
<tr>
<th>Country</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
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<tbody>
<tr>
<td>Estonia</td>
<td>68</td>
<td>66</td>
<td>61</td>
<td>66</td>
</tr>
<tr>
<td>Latvia</td>
<td>79</td>
<td>75</td>
<td>65</td>
<td>59</td>
</tr>
<tr>
<td>Lithuania</td>
<td>61</td>
<td>55</td>
<td>55</td>
<td>68</td>
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</tbody>
</table>

(Source: Groh et al. (2012, 2014, 2016, 2018))
Among the 125 countries, Latvia – its capital market – was ranked higher (59th in 2018), followed by Estonia (66th in 2018), while Lithuania took the lowest place (68th in 2018); Latvia “climbed” over the six-year period the most.

An assessment of market imperfections by the Ministry of Economics (MoE) explains that VC funds (and PE funds as a whole) in Latvia rarely considered the Riga Stock Exchange NASDAQ as a viable exit strategy for their investments, as there have been few successful cases where companies were quoted on the exchange in Latvia and the liquidity of the capital market has not been low (Access to Finance, 2015). Although the capital markets of Lithuania and Estonia performed better, overall, they were still developed insufficiently. After the 2008 crisis, the market of public offerings in the Baltic States has completely become exhausted, and the trading volume of the stock exchange demonstrated, in general, a strong downward trend (Akciju publiskais..., 2015). This indicates that the most realistic exit strategy for the venture capital funds of the Baltic States is an opportunity to find another venture capital funds that are engaged in financing later development stages of companies or to seek strategic investors. However, the size or development level of a company is often insufficient at the moment when the VC fund implements its exit strategy and offers the company for an international strategic investor or other VC funds, so that they seriously consider the acquisition of the company; therefore, complications arise in the case of exiting the investment by the VC fund (Access to Finance, 2015).

Nasdaq specialists explain that the main problem of the Baltic capital market is the insufficient number of companies listed on the stock exchange. The more companies are in the stock market, the more attractive it is for investors. The factors why being listed on the stock exchange would seem not attractive to potential issuers are a fear of a heavier administrative burden and an increased attention paid by the public (Akciju publiskais..., 2015).

**Taxation**

According to Bruce and Gurley (2005), any increase in the individual income tax rate raises probability that the individual becomes an entrepreneur: considerable differences in rate between the individual income tax and the corporate income tax work as a stimulus for start-up activity. The authors of the index analysed the effects of taxation from the perspective of starting up a business or how the individual and corporate income taxes and their rates affect the establishment of start-ups (as well as the establishment of innovative and fast-growing start-ups being sought by investors) from the perspective of Bruce and Gurley.

Overall, although the effects of taxation on economic activity have been extensively researched and determined, it is complicated to identify its direct connection with VC investment. On the one hand, there are countries with relatively high corporate income tax rates, yet at the same time there is high activity in the VC industry and large investments are made in these countries. On the other hand, there are a lot of countries (especially the least developed ones) with relatively low corporate income tax rates where no considerable VC investments are made (at least publicly reported). In general, developed countries have higher tax rates and also larger amounts of VC investment. This indicates that tax rates as such do not significantly affect VC deal-making; for this reason, the authors of the index assigned the lowest weight to this criterion in the total index at 5.3% (Groh et al., 2016).

The key criterion “Taxation” is composed of only one indicator: “Entrepreneurial tax incentives (tax relief) and administrative burdens”, which, in its turn, consists of three sub-indicators: 1) entrepreneurship incentives (tax relief) (individual and corporate income taxes) (%); 2) number of tax payments; 3) time spent on tax issues.

The performance of the Baltic States in terms of taxation in the period 2012–2018 is shown in Table 4.

| Table 4. Venture Capital and Private Equity Country Attractiveness Index Rankings of the Baltic States according to the Key Criterion “Taxation” in the Period 2012–2018 |
|-----------------|-------|-------|-------|-------|
| Country        | 2012 | 2014 | 2016 | 2018 |
| Estonia        | 36    | 37    | 42    | 40    |
| Latvia         | 25    | 25    | 29    | 30    |
| Lithuania      | 47    | 47    | 52    | 51    |

(Source: Groh et al. (2012, 2014, 2016, 2018))

Overall, the Baltic states performed the best according to this criterion and its sub-indicators. In 2018, among the 125 countries, Latvia was ranked 30th, Estonia 40th and Lithuania 51st. According to the index rankings, it is the easiest to set up a start-up particularly in Latvia.

However, in the opinion of the authors, the performance presented by the index is not completely unbiased, as other information sources report quite contrasting opinions. For example, as regards the enterprise income tax (EIT) regime, according to a tax study done by experts of the Certus think-tank, the tax system of Latvia is not competitive in comparison with those of the neighbouring countries – Estonia and Lithuania. Latvian enterprises are burdened by higher labour tax rates. Latvia competes with its closest neighbours to attract foreign investments and offer tax residence to enterprises. In Lithuania, for example, the corporate income tax (CIT) rate (15%) was the same as in Latvia and the scope of tax relief is similar but more effective than in Latvia (Latvijas konkūrētspējas..., 2016). At first glance it seems that the CIT rate (20%) in Estonia is the highest, yet enterprises are offered a very innovative practice – zero
CIT rate for reinvested profits. Effective CIT rates, which are calculated as real taxes paid as a percentage of taxable income provide a more accurate notion of the advantages of various CIT regimes.

The authors believe that it is important to mention again the new Latvian “Start-up Activity Support Law” that stipulates significant tax relief for start-ups and intends to increase the number of start-ups in Latvia. A similar law specifically aimed at increasing the number of start-ups has not been adopted neither in Estonia nor in Lithuania. By passing this law, the goal of the government is to make Latvia choice No. 1 for start-ups among the Baltic States. Since the requirement for a start-up, in accordance with the law, to qualify for tax relief is to attract a venture capital investment (at least EUR 30 000), it is a serious reason to believe that for the establishment of start-ups in particular – that are the object of interest for venture capital investors – Latvia is currently the most attractive country among the Baltic States.

**Investor protection and corporate governance**

The legal structure and ownership rights protection can considerably influence the attractiveness of the VC market. According to Cumming and Fleming et al. (2006), the quality of the legal system of a country in implementing an exit strategy in relation to VC-financed enterprises is even more essential than the size of the stock market of the country. Cumming et al. (2010) have performed in-depth examinations of these aspects and found that differences in the legal systems of countries, including their legal origins and accounting standards, significantly influenced CV (and PE) investment management. However, Johnson et al. (1999) proved that insufficiently protected ownership rights restricted profit reinvestment by start-ups. The authors of the index emphasise that entrepreneurship becomes expensive without sufficient legal protection and law enforcement. The VC industry, to a great extent, depends on them, as the industry has long-term business relationships with institutional investors where investment origin countries and recipient countries could differ. Investors rely on their intermediaries (fund managers) and they, in their turn, rely on portfolio company management teams. If investors are not convinced that their interests are protected in a particular country, they avoid investing their capital in the country.

The key criterion “Investor protection and corporate governance” is composed of three indicators: 1) quality of corporate governance, which consists of five sub-indicators (disclosure index; director liability index; shareholder suits index; legal rights index; efficacy of corporate boards); 2) security of property rights, which consists of three sub-indicators (legal enforcement of contracts; property rights; intellectual property protection); and 3) quality of legal enforcement, which consists of five sub-indicators (judicial independence; impartial courts; integrity of the legal system; rule of law; regulatory quality). In total, the weight of the criterion in the index is 15.8%. The rankings of the Baltic States among the 125 countries are shown in Table 5.

**Table 5. Venture Capital and Private Equity Country Attractiveness Index Rankings of the Baltic States according to the Key Criterion “Investor Protection and Corporate Governance” in the Period 2012-2018**

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<thead>
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<th>Country</th>
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<td>Estonia</td>
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<td>21</td>
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<tr>
<td>Latvia</td>
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<tr>
<td>Lithuania</td>
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<td>33</td>
<td>32</td>
<td>33</td>
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</table>

(Source: Groh et al. (2012, 2014, 2016, 2018))

In 2018, Estonia took 21st place, which was good performance. Latvia and Lithuania also performed quite well, being ranked 41st and 33rd, respectively.

In the World Bank’s report Doing Business 20171, in the section Protection of Minority Investors, Latvia was ranked higher than Lithuania and Estonia (World Bank database). In Latvia, according to the report, it is easier for minority investors to litigate, company managers take a greater responsibility and legal rights are more favourable for minority investors. A problematic area, from the perspective of investors, is information disclosure issues. In other words, information disclosure is limited for minority investors.

An analysis of the other indicators of this criterion, e.g. security of property rights, which are mainly based on Global Competitiveness Index data, leads to a conclusion that Estonia can ensure the highest security level regarding property rights and intellectual property protection, whereas in Lithuania it is the lowest. Estonia has achieved the highest level regarding the efficacy of corporate boards, whereas in Latvia it is the lowest2. A problematic matter in Latvia is the legal enforcement of contracts, which is the most ineffective among the Baltic States.

**Human and social environment**

According to Megginsson (2004), education (schools, universities and research institutions) plays an essential role in contributing to growth in the venture capital industry. The authors of the Venture Capital and Private Equity Country Attractiveness Index believe that rigid labour market policies negatively influence the evolution of the VC

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market. Besides, Schertler (2003) stresses that labour market legal provisions and rules influence entrepreneurial activity, and an employee is less stimulated to become an employer and, potentially, set up a start-up if the labour market policy is rigid and the rules are inflexible. However, Djankov et al. (2002) have researched the effects of various social burdens on start-up activity and found that the largest barriers and costs were associated with corruption, crime, a larger unofficial economy and bureaucratic delay. It is of particular importance to analyse the above-mentioned in some emerging countries with high perceived levels of corruption.

The key criterion “Human and social environment” consists of three indicators: 1) education and human capital, which is comprised of two sub-indicators (quality of the educational system; quality of scientific research institutions); 2) labour market rigidities, which consists of four sub-indicators (difficulty of hiring index; rigidity of hours index; difficulty of firing index; firing costs) and 3) bribing and corruption, which consists of three sub-indicators (bribing and corruption perception index; control of corruption; extra payments/bribes). In total, the weight of the criterion in the index is 15.8%. The rankings of the Baltic States among the 125 countries are shown in Table 6.

Table 6. Venture Capital and Private Equity Country Attractiveness Index Rankings of the Baltic States according to the Key Criterion “Human and Social Environment” in the Period 2012-2018

<table>
<thead>
<tr>
<th>Country</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
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<tbody>
<tr>
<td>Estonia</td>
<td>33</td>
<td>35</td>
<td>27</td>
<td>33</td>
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<tr>
<td>Latvia</td>
<td>68</td>
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<td>43</td>
<td>46</td>
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<tr>
<td>Lithuania</td>
<td>35</td>
<td>25</td>
<td>23</td>
<td>28</td>
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</table>

(Source: Groh et al. (2012, 2014, 2016, 2018))

Among the Baltic States, Latvia was ranked the lowest according to this criterion (in 2018, Latvia was 46th, Lithuania 28th and Estonia 33rd) and both other Baltic States were far ahead (Lithuania by 18 places and Estonia by 13 places); however, as regards this aspect, Latvia progressed the most.

In terms of education and human capital, Latvia considerably lagged behind its neighbours, as the Global Competitiveness Index (the data of which were used in the index as well) rated the quality of its educational system as well as the quality of its scientific and research institutions lower than that of the neighbouring countries. In the opinion of the authors, a large role in evaluating this criterion is played by the level of corruption and the grey economy, which was the highest in Latvia compared with the other Baltic States for several years in a row. The last corruption perception index report by the international anticorruption organisation ranked Latvia 40th, Estonia 21st and Lithuania 38th among 180 countries, which indicated that the perceived corruption level in Latvia was the highest among the Baltic States1.

In the Baltic context, the largest size of the grey economy and the poorest legal environment were in Latvia. Tax evasion, money laundering and abuses by insolvency administrators were significant problems that resulted not only in less tax revenue but also in lower competitiveness in attracting foreign investments. A study by Putniņš and Sauka (2018) “Grey Economy Index in the Baltic States in 2009-2017” pointed out that in 2017, as a percentage of GDP, the grey economy in Latvia was 22%, in Lithuania and in Estonia – 18.2%.

**Entrepreneurial culture and deal opportunities**

The fact whether there is demand for access to funds, in the opinion of the authors, is the most important factor in making decisions on venture capital investment. The existence of projects to be financed plays a large role in, first, the persistenence of the VC industry and, second, changes in the flow of deals.

According to Schertler (2003), both R&D employees and the number of patents positively and significantly influence VC activity. Besides, Romain and van Pottelsbergh de la Potterie (2004) found that the activity of start-ups was associated with R&D equity capital, technological opportunities and the number of patents.

The key criterion “Entrepreneurial culture and deal opportunities” is comprised of five indicators: 1) innovation, which consists of two sub-indicators (global innovativeness index; capacity for innovation); 2) number of scientific and technical journal articles; 3) ease of starting and running a business, which consists of three sub-indicators (number of procedures to start of business; time needed to start a business (days); costs of business start-up procedures, as a % of income per capita); 4) simplicity of closing a business, which consists of three sub-indicators (time for closing a business (years); costs for closing a business, as a % of estate; recovery rate); and 5) corporate R&D, which consists of two sub-indicators (company spending on R&D; number of utility patents). In total, the weight of the criterion in the index is 26.3%, which is the second most important criterion in the index. The rankings of the Baltic States among the 125 countries are shown in Table 7.

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Table 7. Venture Capital and Private Equity Country Attractiveness Index Rankings of the Baltic States according to the Key Criterion “Entrepreneurial Culture and Deal Opportunities” in the Period 2012-2018

<table>
<thead>
<tr>
<th>Country</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
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<tbody>
<tr>
<td>Estonia</td>
<td>40</td>
<td>40</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>Latvia</td>
<td>45</td>
<td>45</td>
<td>47</td>
<td>49</td>
</tr>
<tr>
<td>Lithuania</td>
<td>43</td>
<td>38</td>
<td>37</td>
<td>40</td>
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</table>

(Source: Groh et al. (2012, 2014, 2016, 2018))

Latvia considerably lagged behind Estonia (by 8 places) and Lithuania (by 9 places).

An analysis of the indicators of the criterion showed that Estonia had the highest capacity for innovation, followed by Lithuania, while Latvia considerably lagged in terms of capacity for innovation. According to the latest World Bank data, the number of scientific and technical journal articles produced in Latvia was the smallest among the Baltic States. As regards corporate R&D, according to the last Global Competitiveness Index report, Latvia also significantly lagged behind the other Baltic States, and enterprises in Latvia invested the least in R&D.

As regards starting and closing a business, according to the World Bank’s report Doing Business data and the assessments made in the last research study by the authors, one can conclude that starting and closing a business in Estonia was the easiest, whereas in Lithuania it was the most complicated.

In general, one can conclude that starting a business in Latvia is not difficult (the World Bank ranked Latvia 19th in terms of ease of starting a business among 189 countries (2017) and viewed it as one of the TOP 30 leaders that made significant reforms aimed at improving entrepreneurship); however, there are problems regarding innovation and R&D issues, which means that there is a lack of innovative projects to be financed, which does not result in the foundation of start-ups.

Conclusions

Overall, although Latvia demonstrated the poorest performance among the Baltic States according to the key criteria for the attractiveness of VC markets, it progressed the most, which indicates that by continuing working on its problems, Latvia has every opportunity to become the most attractive Baltic State for venture capital investors and, therefore, to develop its VC industry and provide opportunities for innovative development.

The hypothesis put forward in the research proved to be true. One of the most essential barriers to the development of the VC industries of Latvia and the Baltics was insufficient opportunities for implementing exit strategies. Both the opinions of Latvian venture capital industry experts and the Venture Capital and Private Equity Country Attractiveness Index indicate that among the Baltic States, the stock market in Latvia is the least developed. Venture capital funds in Latvia do not consider the stock market in Latvia to be a divestment channel that gives fund managers two options – to implement an exit strategy via M&A deals or to sell their shares to funds that are engaged in financing later development stages of companies.

The Baltic States demonstrated the poorest performance according to the key criterion “Economic activity” of the index. Overall, the GDPs, expected growth, employment rates and economic wellbeing of the Baltic States are not attractive for international VC investors. Low economic activity indicates an undynamic flow of deals in the country.

Among the Baltic States, Latvia had the lowest corporate R&D investment level, the lowest capacity for innovation, the smallest number of patents and scientific research articles, the lowest quality of scientific research institutions, the most limited cooperation between R&D institutions and industries and the smallest available number of scientists and engineers. This resulted in the lack of projects to be financed.

Policy makers have to focus on attracting early-development-stage venture capital investors, making them more active and promoting the informal venture capital industry, as business angels are complementary to venture capital funds – they can prepare high-quality projects for venture capital funds dealing with later-development-stage enterprises. In this way, the problem of lack of projects to be financed would be tackled.

The Baltic Associations of Venture Capital and Private Equity have to internationally represent and present the Baltic venture capital market as a single one and to actively work on the dissemination of publicly available information, which allows performing more and better quality research investigations, as well as to popularise the industry as a whole, thereby contributing to the flow of deals.

The popularisation of the venture capital industry in the entrepreneurship sector is of great importance as well. For this reason, venture capital fund managers should find an opportunity to purposefully popularise cooperation areas broken down by particular industry of interest (IT, electronics, technologies, biomedicine etc.), e.g. through activating cooperation with universities.
References


ASERADENS, A. 2016. Latvijai jākļūst par start-up saņēmuma izvēlē Nr.1 Baltijā. Available at <https://www.em.gov.lv/lv/jaunumi/11622-


Innovation and the Contributions from Venture Capital. 2003. SCHERTLER, A.


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