

Working Papers



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*Zukunft in
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Sustainable Foreign Direct Investments of German Companies in Latvia

Abstract

This working paper takes the sustainability drivers in combination with foreign direct investments (FDI) under research. The empirical research was executed among German companies in Latvia. Therefor an internet-based questionnaire was created with Limesurvey. To start with, the definitions, volumes, tendencies and meaning of FDI were explained. After that, the term and content of sustainability were explained with the three pillars (social, economic and environment) and set into the context with the 17 sustainable development goals (SDG) of the United Nations.

The empirical research was conducted to get an overview what is going on in reality, in this case in Latvia with companies having German investment.

The response rate was 22.5% and the analysis was executed with SPSS.

The correlations were calculated with Cramér's-V.

Overall, it can be stated that sustainability has already a high status in companies in Latvia with German investment. A high percentage undertakes various activities in corporate governance as well as in the social and environmental area.

Key Words:

foreign direct investment (FDI), sustainability, corporate governance, social pillar, economic pillar, environmental pillar, corona virus assistance

Sustainable Foreign Direct Investment of German Companies in Latvia

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1. Introduction

Thanks to foreign direct investments the economic growth of the Baltic countries has increased in the past. For Latvia in particular, foreign direct investment is an important source of investment. Direct investments in Latvian companies have been taking place since the 1990s. However, it was not until 2004, after Latvia's accession to the EU, that the number of foreign direct investments increased more sharply. Thus, foreign direct investment has been an important issue in Latvia for more than 30 years. Currently, 128 countries invest in Latvian companies through direct investments. Germany ranks fourth among them, with investments totalling to about 600 million euros (Limanskis 2020, p. 1). However, investment flows have been subject to strong fluctuations since 2016, and investments have been showing declines since then (Limanskis 2020, p. 2). Foreign direct investment from Germany was also just under -\$10 million in 2018 (OECD d. 2020). Despite the declines in recent years, FDI plays an important role in Latvia. However, due to climate change and the increasing importance of environmental protection, the importance of sustainability is also growing. This topic plays an important role not only in private everyday life, but also for companies. The relevance of sustainable and environmentally conscious corporate actions has been increasing for years.

Therefore this paper investigates how sustainable the direct investments of German investors in Latvia actually are. This was researched by the cooperation between the Technische Hochschule Ingolstadt, Germany (Prof. Dr. Hofbauer) and the RISEBA University of Business, Arts and Technology in Riga, Latvia (Prof. Dr. Limanskis) by means of an empirical investigation. The structure of the working paper is as follows. First, the theoretical basics, which are related to the topic and are necessary for the understanding of the paper, are explained in more detail. First of all, the aspect of foreign direct investment is dealt with, as well as foreign

direct investment around the world, in Europe, Germany and Latvia. Then, sustainability is defined and the three pillars of sustainability and sustainable-dedicated investments are discussed in more detail. After that, a connection between foreign direct investments and sustainability is formed. After the two theoretical aspects, the survey is conducted. This part is divided into three parts: the preparation phase, the implementation phase and the evaluation phase. The evaluation phase is discussed in the most detail. At the end of the paper, a conclusion on the topic of sustainable foreign direct investment is then formed based on the results of the empirical investigation and the preceding theoretical research. Furthermore, an outlook is given on how foreign direct investment in Latvia, related to the sustainability aspect, will develop in the coming years and which aspects could be further developed in the future.

Due to the high amount of investments by German companies, the question naturally arises to what extent the direct investments from Germany are sustainable. Therefore, this paper will use a questionnaire to find out if and how investments from Germany in Latvia are ecologically, socially or governmentally motivated and through which measures the companies act ecologically and sustainably. This research question will be answered with the help of the questionnaire and the theoretical research.

2. Theoretical Research

2.1. Foreign Direct Investment

This chapter focuses on the theoretical basis of foreign direct investments. It gives an overview on foreign direct investments as a method to invest in new economies and provides a deeper insight on the FDI flows worldwide, especially in Europe, Germany and Latvia.

2.1.1 Foreign Direct Investment Defined

According to the Organization for Economic Co-operation and Development (OECD) foreign direct investment (FDI) "reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor" (OECD 2008, p. 48). So, foreign direct investment (FDI) is a key element to link the international economic. A foreign direct investor is an entity (for instance an individual or a group, an enterprise, or a governmental body) in one economy and normally controls at least 10% of the voting power of the foreign direct investment enterprise after the investment. It therefore has a significant influence on the foreign direct investment enterprise (OECD a. 2014, pp.7-8) (UNCTAD b. 2007, pp.245-246). Chen (2021) describes foreign direct investment as an investment of a company into an enterprise, which is located in another country. It means that this company either founds a new business in a foreign country or buys assets of a foreign company. These investments are more used in open markets.

Following the Framework for Foreign Direct Investment Relationships (FDIR), different types and extensions of FDI are distinguished. Depending on how much voting power and influence the direct investor has in the enterprise, a distinction is made between a subsidiary, an associate and not relevant in FDI (OECD f. 2008, p. 54). The table below shows the categorization of Foreign Direct Investment Relationships (FDIR) according to the percentage of voting power.

CATEGORY	EXPLANATION
SUBSIDIARY	An enterprise in which an investor holds more than 50% of the voting power. Therefore, it is controlled by the investor.
ASSOCIATE	An enterprise in which an investor directly holds at least 10% and not more than 50% of the voting power.
NOT RELEVANT IN FDI	An enterprise in which an investor holds less than 10% of voting power. According to the OECD this relationship is out of scope of recording of Foreign Direct Investment Relationships.

Table 1: Categories of Foreign Direct Investment Relationships (own table based on OECD f. 2008, pp. 54-56)

Foreign direct investments involves either as greenfield investments, mergers & acquisitions known as M&As or joint ventures. Greenfield investments are investments made to develop a manufacturing or production facility from the ground up to produce goods locally. A greenfield investment comes with a high chance of becoming very profitable, but also carries the risk of very high fixed costs. If it is the case investors should consider M&As or joint ventures. M&As mean that it is invested in local companies and their production capacity. The other option of FDI is setting up a joint venture, which implies entering into a cooperation with the local company. The advantage of M&As and joint ventures is that the investor has the opportunities to realize synergies with his investment. Whereas in a joint venture even both parties benefit from it (Staeher, Ryan and Raff 2007, pp. 2-6).

Synergies are a determinant and motive in foreign direct investment as well as market access, outsourcing of production steps due to lower labor costs, exchange rate fluctuations, transfer of technological know-how, competitive effects, taxes, legal regulations, pricing, trade location and more (Herger, Kotsogiannis and McCorriston 2015, pp. 2-15). An interesting point is, that FDI can also be seen as a kind of aid to developing countries, as the foreign investors bring capital to the host country, which in turn leads to more taxes and capital for the government, job creation and increased economic activity there. In return, the investor also benefits if the tax conditions in the recipient country are more beneficial to him. Through FDI, technological and business know-how can be transferred. Because of foreign direct investment the recipient country could become better connected to world markets, competition increases, and in turn, the investor gains better access to the recipient country's market (Seid 2018, p. 23). Of course, foreign direct investment can also lead to some disadvantages for the receiving country. Foreign direct investment can cause environmental degradation if the investors' goal is to

escape the burden and cost of environmental regulations in their home countries (Seid 2018, p. 24).

The main financial components of foreign direct investment are equity for instance equity capital and reinvested earnings as well as debt instruments like loans (OECD f. 2008, pp.60-61); (Drahokoupil 2020).

2.1.2. Foreign Direct Investments - Worldwide

The foreign direct investments worldwide are expected to fall dramatically because of the Covid-19 pandemic. In 2020 the value of the global FDI flows is expected to be less than USD 1 trillion the first time since 2005, which is a decrease by up to 40% compared to 2019 (USD 1.54 trillion). The fall is projected to continue in 2021 by a further decrease of 5-10%. The outlook beyond 2022 is highly uncertain, a recovery to its trend line before the pandemic is possible. The recovery or stabilization of the global FDI flows is dependent on the economic and geopolitical development (UNCTAD a. 2020, p.2).

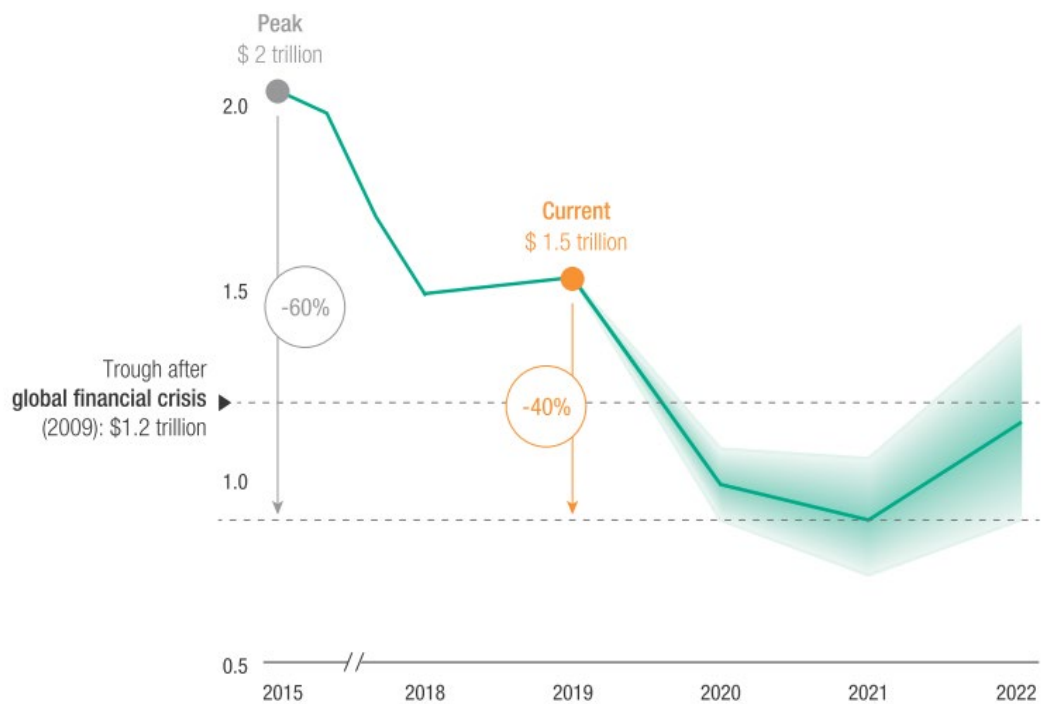


Figure 1: Global FDI inflows, 2015-2019 and 2020-2022 forecast (UNCTAD p.2)

The projected decline of FDI investments will affect all regions and economic groupings.

For analytical purposes, all regions and countries are divided in three general categories: developed economies, developing economies and economies in transition. This grouping depends on the economic situation in each country. Within each category subgroups can be

defined. In this working paper the focus is on developed economies because Germany and Latvia are both defined as developed economies (UN 2014, pp.143-144).

Developed economies are projected to see a decline in FDI inflows between 25 and 40%. Developing and transition economies are expected to see decrease between 30 and 45% (UNCTAD a. 2020, p.8).

In 2019 the worldwide FDI flows increased marginally by 3% in comparison with 2018. The FDI inflows increased in developed economies by 5% compared to 2018 (52% of the global FDI inflows), which was mainly due to the increase in Europe, where the inflows rose by 18%. In 2019, the inflows to North America remained on the same level in comparison with 2018. In developing economies, the inflows decreased marginally by 2% in 2019 (44.5% of the global FDI inflows) and the transition economies increased by 59% in 2019 (UNCTAD a. 2020, p.11); (UNCTAD a. 2020, p.13).

The largest recipient (host country) of FDI in 2019, as in the year before, were the United States with an inflow value of USD 246 billion. The second largest recipient in 2019 was China with an inflow of USD 141 billion (2018: USD 138 billion). Other important host countries in 2019 were Singapore (USD 92 billion), the Netherlands (USD 84 billion) and Ireland (USD 78 billion) (UNCTAD a. 2020, p.12).

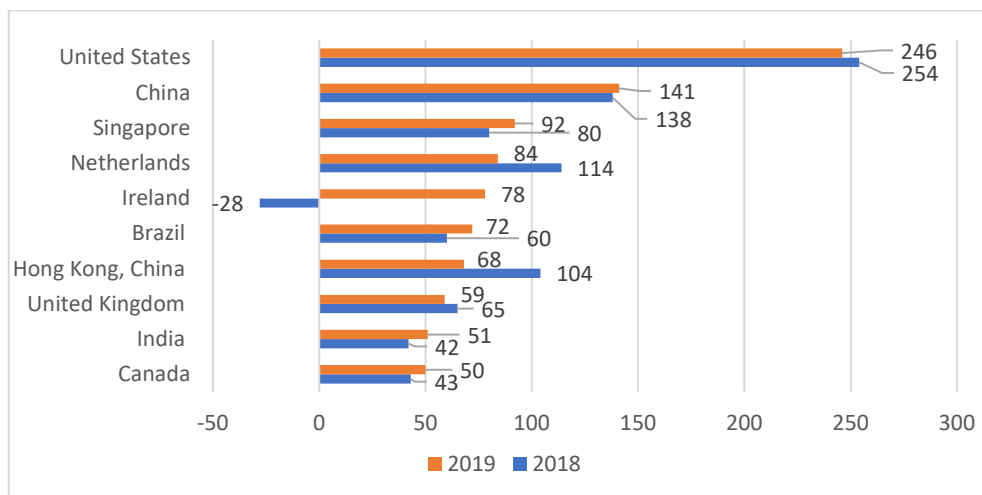


Figure 2: Top 10 host economies (UNCTAD)

The worldwide FDI outflows in developed economies was in 2019 USD 917 billion, which is an increase of 72% from the previous year (USD 534 billion). Outflows made by investors in Europe increased by 13% from the year before. FDI outflows from developing economies

decreased by 10%, reaching USD 373 billion (2018: USD 415 billion) and economies in transition declined by 37%, to USD 24 billion in 2019 (2018: 38 billion) (UNCTAD a. 2020, pp. 13-14).

The most important home economies (country of foreign direct investor) were Japan with an FDI outflow of USD 226,65 billion, the United States investments turned positive with an outflow of USD 124,9 billion after a decrease to USD -92 billion in 2018, the Netherlands (USD 124,65 billion) and China (USD 117,12 billion) (UNCTAD a. 2020, pp.14-15); (UNCATD a. 2020, p.238).

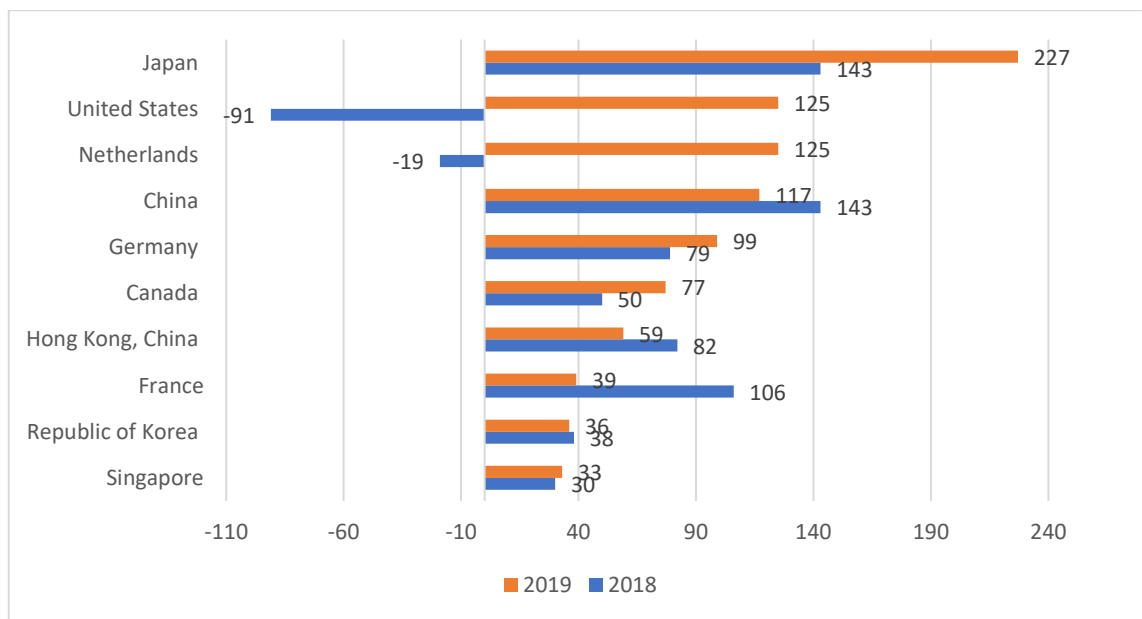


Figure 3: Top 10 home economies (UNCTAD)

2.1.3. Foreign Direct Investments – Europe

The FDI flows to developed economies will decline between 25 and 40% because of the Covid-19 pandemic. Europe is expected to fall between 30 and 45% in 2020 (UNCTAD a. 2020, p.63). In 2019 FDI flows to Europe increased by 18% to USD 429 billion, which is approximately 28% of worldwide FDI value, regaining some value lost since 2015 (USD 720 billion) despite the weakening macroeconomic environment (UNCTAD a. 2020, p.238).

The inflows to the European Union rose by 8% and had in 2019 a value of USD 447 billion. The most important host economies within the EU in 2019 were the Netherlands with a fall of 26% since 2019 and value of USD 84 billion, Ireland with a FDI value USD 78 billion (2018: USD -28 billion) and Germany where the inflows halved to USD 36 billion (UNCTAD a. 2020, p.12) (UNCTAD a. 2020, p.238).

In the of 2017 the United States were the largest investor for FDI with approximately 35% of the direct investments to the EU. They mainly invested in the finical services, followed by manufacturing. The second and third largest investors were the offshore financial centres (excl. Singapore and Hongkong) with 29% and the third largest partner was Switzerland with 12.5%. The main economic areas in which the most investments have been made were financial and insurance activities and manufacturing (Eurostat 2019).

Outflows from the European Union increased by 13% to USD 475 billion in 2019 mainly due to the increase by investors from the Netherlands (from USD -19 billion to USD 125 billion). EU outflows rose by 32% in 2019. The most important home economies within the EU were the Netherlands as the 3rd largest home economies worldwide, the second largest home economy was Germany with an outflow of USD 99 billion (2019), which is 25% increase since 2018. The third largest home economy in 2019 was France USD 39 billion (UNCTAD a. 2020, p.15) (UNCTAD a. 2020, p.238).

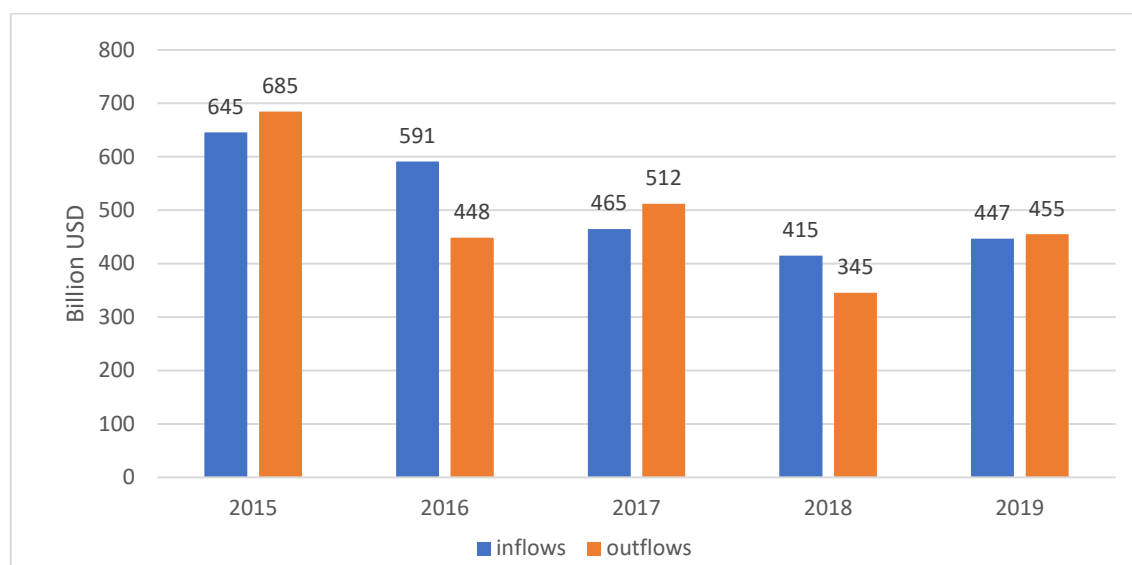


Figure 4: FDI flows EU (UNCTAD)

At the end of 2017, the most important partner was the United States with 34.4% of all FDI outflows from the European Union. The second largest partner was Switzerland with 13.4% and offshore financial centres (12.3%). (Eurostat 2019)

2.1.4. Foreign Direct Investments - Germany

In 2019 the FDI inflows to Germany had a worth of USD 36 billion, which is a decline of 51% since 2018 and a decline of 55% since 2007 when the FDI inflows had their peak value of USD 80 billion in 2007. (OECD b. 2020).

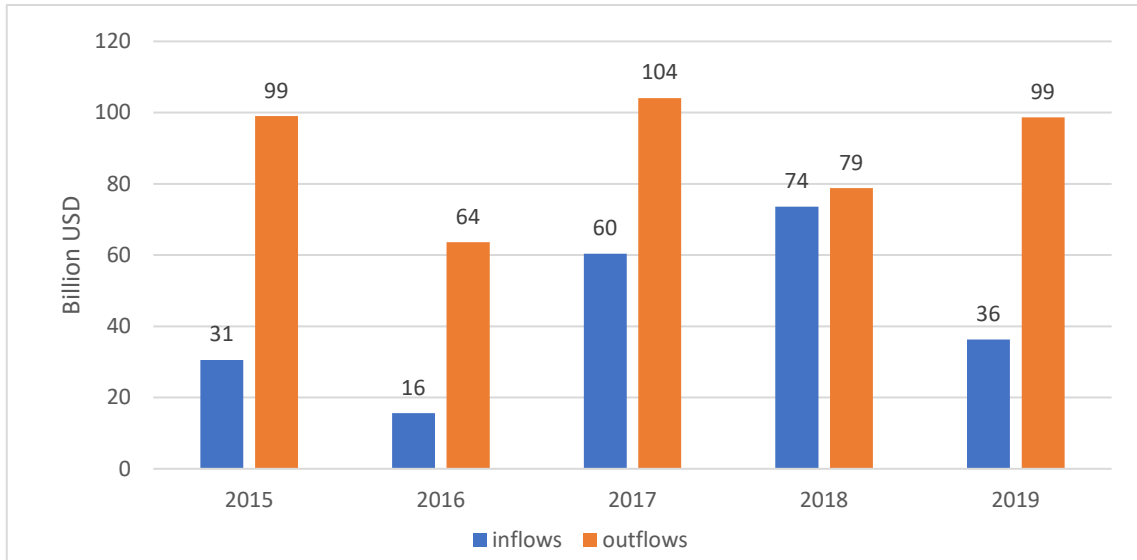


Figure 5: FDI flows Germany (UNCTAD)

The largest partner countries for FDI inflows to Germany are the United States with an investment of USD 27 billion in 2018. The second and third largest investor in were Spain (USD 7.649 billion) and Austria (USD 5.745 billion). In 2018 Latvia was the home country for investments in amount of USD 32 million, which is an increase of 92% since 2016 (OECD c. 2020).

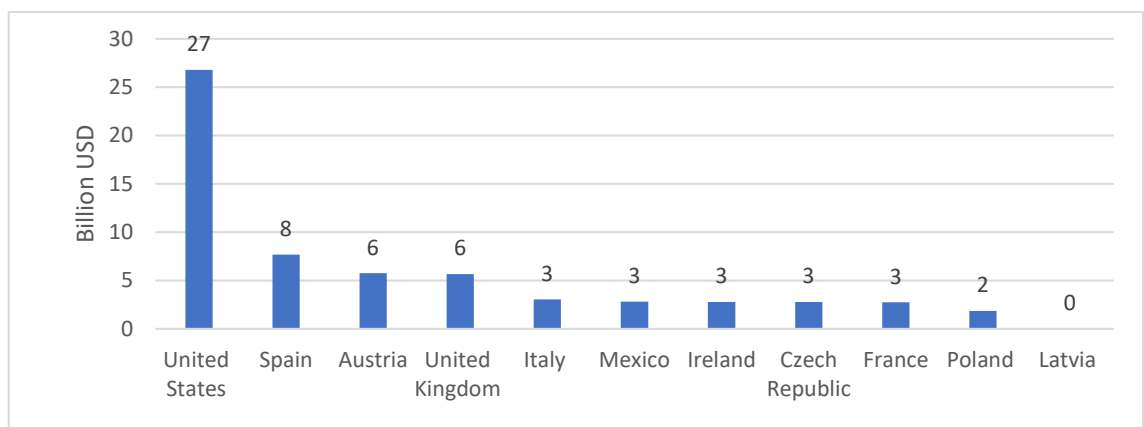


Figure 6: Inflows by partner country 2018 (OECD)

The most important host countries for German investments were in 2018 Switzerland with an investment value of USD 11 billion, the United Kingdom (USD 7 billion) and the United States (USD 2.6 billion). The German FDIs in Latvia had in 2018 an amount of USD -10.6 million. The last positive investment was made in 2015 (USD 2.2 million) (OECD d. 2020).

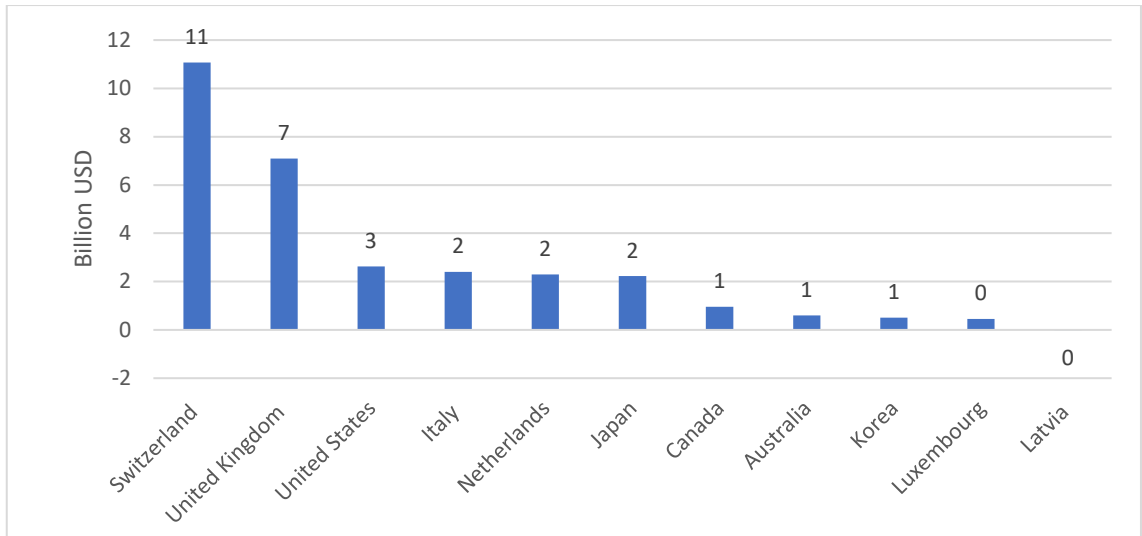


Figure 7: Outflows by partner country 2018 (OECD)

German foreign direct investors invested in Finance and insurance activities (2017: USD 17.6 billion), services (USD 47 billion), manufacturing (USD 4.7 billion), mining and quarrying (USD 1.9 billion), electricity and gas (USD 273 million) and water supply and waste management (USD 29 million) (OECD e. 2020).

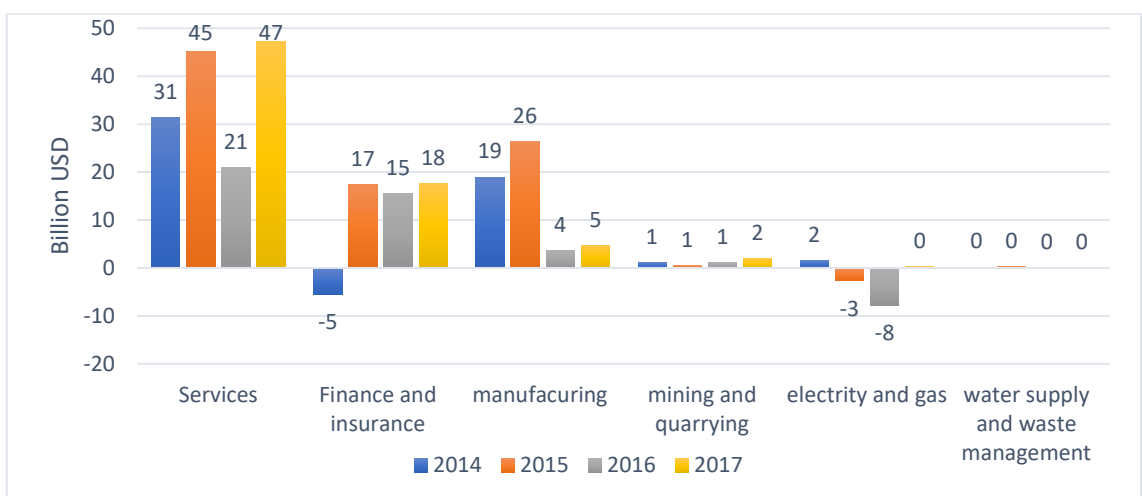


Figure 8: Outflows by Industry 2017 (OECD)

2.1.5 Foreign Direct Investments – Latvia

The FDI inflows to Latvia increased rapidly since the accession to the EU in 2004. In 2019, the inflows reached its highest point (EUR 16 billion / USD 19.5 billion). (LIAA 2020)

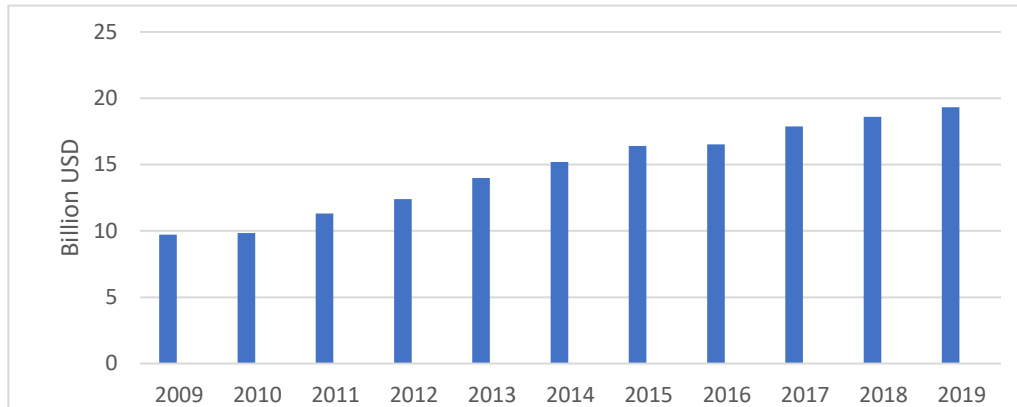


Figure 9: FDI inflows Latvia (cumulativ) (Bank of Latvia)

The reason for foreign investors to invest in Latvia were new market opportunities, stable monetary policy, Latvia's geographic location between the EU and CIS countries and its well-developed infrastructure (LIAA 2020).

At the end of 2019, 77% of all foreign direct investments were made by investors within the EU. The largest investment was made by Swedish investors (15.3%). The second largest investor is Estonia (13.6%) and Russia (10.1%) (LIAA 2020).

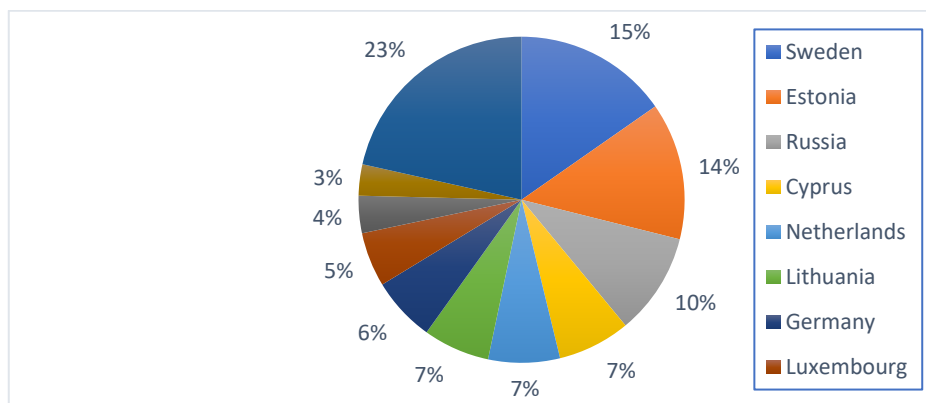


Figure 10: FDI in Latvia by partner country 2019 (Bank of Latvia)

In 2020, the volume of foreign direct investments increased, despite the Covid-19 pandemic by USD 190.2 million, amounting USD 9.2 billion. (Limanskis a., 2020)

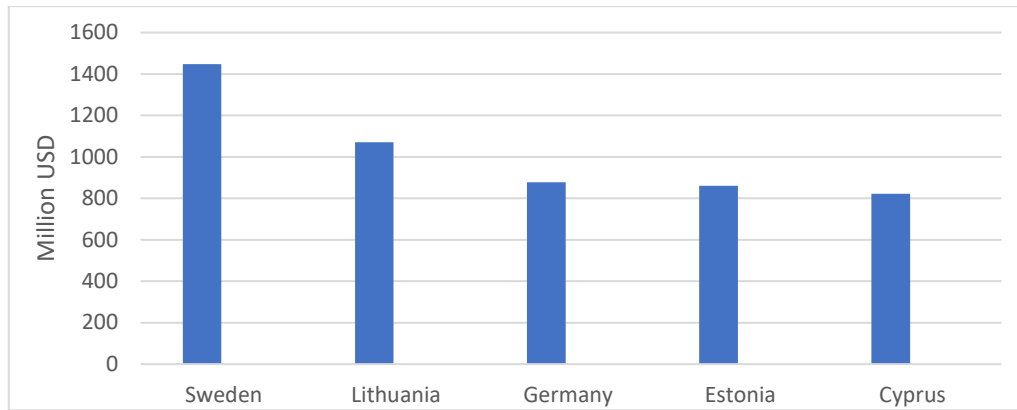


Figure 11: accumulated FDI volume at the end of 2020 (Limanskis, 2020)

The largest amount of investments (USD 176 million) was made by German “CE – Beteiligungs-GmbH”, which is the sole shareholder of SIA “Lidl Latvija”. The second largest investment (USD 106 million) was made by “Emteko Limited”, registered in Cyprus. (Limanskis a., 2020)

2.2. Sustainability

This chapter deals with the definition of sustainability, the key characteristics and the three pillars of sustainability, the importance and characteristics of sustainable-dedicated investments as well as the criteria of sustainable foreign direct investment.

2.2.1. Definition of Sustainability

There are many different definitions of sustainability or sustainable development. Therefore, it is complex to find a precise and unambiguous definition of sustainability in general. The most cited definition of sustainable development comes from the UN World Commission on Environment and Development in 1987, also known as the Brundtland Commission:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

(Borowy, 2014, p.3)

In comparison, the United States Environmental Protection Agency defines sustainability as follows:

"Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability

is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations."

(United States Environmental Protection Agency, 2020)

The following key characteristics for sustainability can be derived from both definitions:

- **Natural resources and environment:** Focus on natural resources and natural environment to meet our needs.
- **Create and maintain conditions:** Conditions must be created and maintained so that people do not destroy nature but preserve nature and live with nature in perfect harmony.
- **Long-term perspective:** It is not about the present. It is about the long-term perspective and support for our future generations.

In conclusion, the general definitions of sustainability or sustainable development focus more on the environmental dimension of sustainability and how humans deal with natural resources. But sustainability has more facets, which are explained in the section below.

2.2.2. The Three Pillars of Sustainability

Because sustainability is even more than just about accessing natural resources, sustainability can be divided into three overarching pillars (United Nations 2016). To clearly depict these three pillars, the United Nations Sustainable Development Goals are introduced. After all, the United Nations Sustainable Development Goals are an important part of global sustainable development. These goals were adopted at the United Nations Sustainable Development Summit on 25 September 2015 and set a new sustainable development roadmap for the next 15 years. This plan of action consists of 17 Sustainable Development Goals and 169 related targets with 232 indicators (United Nations 2016). The three pillars of sustainability are: **economic** pillar, **environmental** pillar and **social** pillar, which are visualized as interlocking circles in figure 12. The intersection of the three pillars represents sustainability.

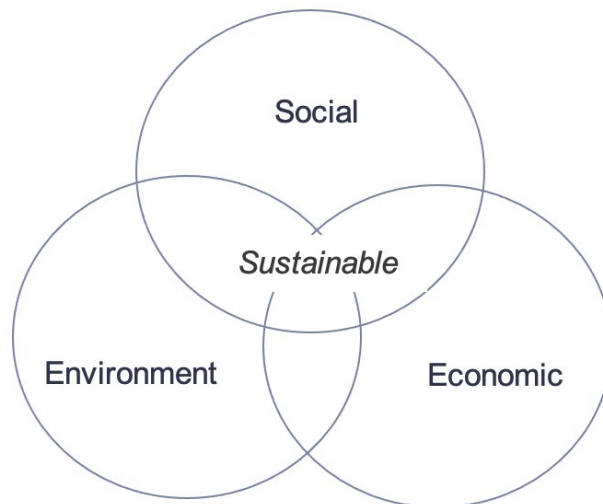


Figure 12: Three pillars of sustainability (own representation)

Each of the 17 Sustainable Development Goals can be assigned to one of the three pillars and create balance between the three dimensions of sustainability. (Kostoska and Kocarev 2019, p. 2).



Figure 13: Sustainable Development Goals assigned to the three pillars of sustainability (Kostoska and Kocarev 2019, p. 2)

The **economic** pillar represents economic growth with the goal of ending poverty and hunger, good health as well as technology and innovation. The **environmental** pillar represents the green dimensions of sustainability and stands for renewable resources, clean water and energy, responsible use of natural resources, and life on land and in water. The **social** pillar represents good education, women's empowerment, peace justice, and strong institutions (United Nations 2016).

So, we can see that there is a broader understanding and meaning of sustainable development than just in the "green" environmental dimension of it. And we can apply this knowledge to sustainable-dedicated investment in the next section. In the following, reference is made to the Sustainable Development Goals, abbreviated SDGs, as they thus have an important influence of the classification of sustainable investments.

2.2.3.Sustainable-dedicated Investments

Sustainable-dedicated investments are defined as investments, which "consider environmental, social and corporate governance (ESG) criteria to generate long-term competitive financial returns and positive societal impact" (US SIF 2020). According to the 3 pillars of sustainability (economic, environmental and social), sustainable investments can be assigned into this similar categorization: the ESG criteria (environmental - social - governance). However, the economic pillar is now transferred to the governance pillar. Because the way the company is managed, the guidelines, compliance and corporate policies and political and social contributions made are decisive for the success of an investment. Figure 13 shows a selection of the ESG criteria that socially conscious investors use to screen for potential investments (US SIF 2020).



Figure 14: Examples of ESG criteria used by sustainable investors (US SIF 2020)

The social pillar aims in the context of sustainable-dedicated investment at workplace safety and benefits, labor relations, diversity and many more as can be seen above. The environmental pillar now targets how environmentally friendly the companies' buildings are designed, whether they also use clean technologies and processes, and whether they carry out environmental clean-up activities and work to prevent soil pollution.

So, sustainability-dedicated investments in general relate to investment funds that address ESG criteria or SDGs related issues or sectors, for instance clean energy. (UNCTAD 2020, p. 187). "UNCTAD estimates that sustainability-dedicated investment today could be in the range of \$1.2-1.3 trillion" (UNCTAD 2020, p. 187).

2.2.4. Sustainable Foreign Direct Investment

Another specialization of sustainable-dedicated investments is sustainable-motivated foreign direct investments. Which means, that the decision to make a FDI is based on the ESG-criteria seen above. The aim of our research was, to evaluate how the foreign direct investments from

Germany in Latvia have been sustainable-motivated based on the ESG-criteria. In general, it can be seen that investments that can be classified under the environmental pillar of sustainability, have increased enormously, especially globally in the power and water, sanitation and hygiene sector. Figure 14 shows that investments in the power sector have changed from a five-year average of 2010-2014 by +51% to 2015-2018, and investments in the water, sanitation and hygiene sector have even increased by +113% by 2018. (UNCTAD 2020, P. 185)

FDI in SDG sectors, five-year average, 2010–2018 (Billion of dollars and per cent)								
	Developing economies				Of which: LDCs			
	Number of economies	Average (\$ billions)		Change (%)	Number of economies	Average (\$ billions)		Change (%)
		2010–2014	2015–2018			2010–2014	2015–2018	
Power	39	14.1	21.3	51	6	0.8	0.8	4
Transport services	36	17.8	17.8	0.04	7	0.4	1.3	217
Telecommunication	16	9.1	12.0	32	1	0.3	0.4	20
Water, sanitation and hygiene	10	0.3	0.7	113	-	-	-	-
Food and agriculture	38	22.7	16.3	-28	7	0.5	0.8	42
Climate change mitigation	..	..	..	..	..	..	..	..
Climate change adaptation	..	..	..	..	..	..	..	..
Ecosystem and biodiversity	..	..	..	..	..	..	..	..
Health	21	2.5	2.0	-20	3	0.002	0.006	140
Education	14	0.8	0.7	-13	2	0.002	0.005	191

Source: UNCTAD.

Note: The latest year available is 2018. The number of economies represent those making full or partial data available for both periods.

Figure 15: FDI in SDG sectors (UNCTAD 2020, p. 185)

3. Empirical Research

In order to uncover the extent to which foreign direct investment by German companies and investors in Latvia is sustainable, an empirical study was conducted. This requires an intensive preparation, implementation and evaluation phase. In order to be able to conduct an empirical study, German investors as well as companies that make direct investments in Latvia were needed. From a corresponding database 180 German investors were selected. Of the 180 selected, 20 had to be subtracted due to undeliverable e-mails or incorrect contact data. Thus, the number of 180 was reduced to 160 German investors. Both companies with negative investments and companies with positive investments in Latvia were considered. Insolvent investors were excluded. In addition, only companies that invested in the years from 2017 to 2020 were considered in the research. Simultaneously with the research of the corresponding contact data of the German investors, the questionnaire was prepared. The questionnaire was divided into three entry categories as well as the three pillars of sustainability. It is thus divided into six categories: general questions, questions about investments, questions about sustainability, corporate governance, positive environmental impact and positive social impact. The general section includes questions regarding the company, such as industry and number of employees. The two questions on the topic of investments refer to the time of the first investment in Latvia as well as the positive or negative experiences of the investors with investments in Latvia. The third item on sustainability is aimed at sustainability in the company. To what extent has experience with sustainable investments already been gained and what importance does the topic of sustainability have for the investors? This is followed by the three pillars. The first pillar covers corporate governance. Here, questions are asked about sustainability reporting in the company, the mission/vision of the company as well as investor transparency. The second pillar on the topic of positive environmental impact is intended to find out what the companies are currently doing to protect the environment and what environmental remediation activities the companies are carrying out. The last pillar and the last three questions refer to the positive social influences. This is to find out to what extent the companies promote the skills/health of their employees, whether the companies are members of social employer initiatives and whether the government program "CoronaVirus support for companies" is an important support measure for the companies. In total, the six categories and the questionnaire include 22 questions. It was possible to complete the questionnaire in both English and German.

After the preparation phase, the implementation phase took place. This phase included the mailing of the questionnaire. The questionnaire was announced in advance to the 160 German investors by means of an announcement e-mail. Subsequently, three e-mails with the questionnaire and the request for participation were sent to the investors within three weeks. The e-mails were initially sent out in English and German only. Latvian was then added at the end.

3.1. General Analysis

The survey was responded 18 times completely and 18 times nearly completely. For the analysis of the individual questions all the responses are considered whereas for the relation between the questions only the completed surveys are used. At first the single questions are analysed.

3.1.1. General questions

The general questions reveal following responses:

1. Which position do you have in your company?

68,8% of the answers were given by employees and 31,3% by investors or shareholders. The population for this question is 32.

2. How many employees does your company engage?

In this case the question was responded by 30 participants. The following chart shows the percentage distribution of the number of employees:

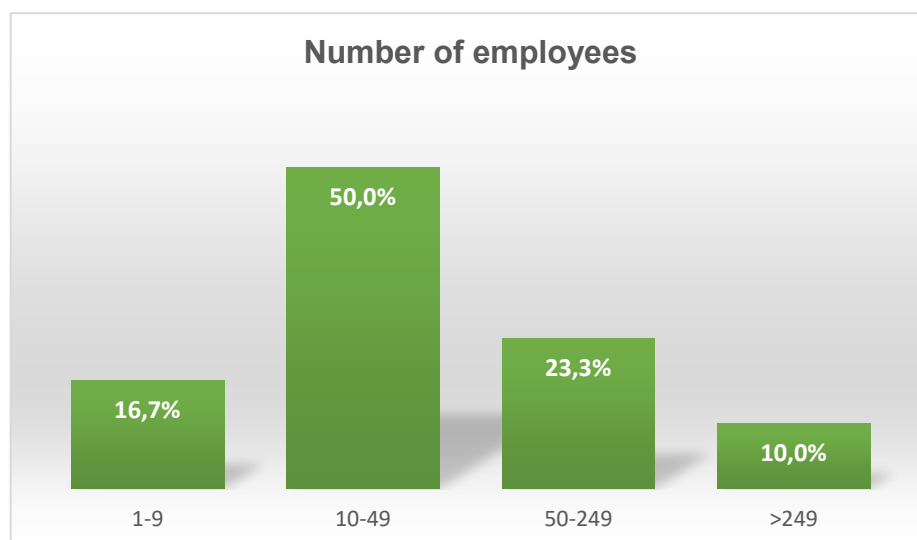


Figure 16: Number of employees (own illustration)

It's obvious that more than half of the companies are smaller ones with less than 50 employees. 10 percent of the enterprises have more than 249 employees. So, in the following answers the perspective of small enterprises have to be considered.

3. In which sector does your company operate?

The sectors in which the companies operate, are shown in following diagram. Not all of the sectors indicated as answer options were chosen by the 26 participants, so not all the sectors are presented.

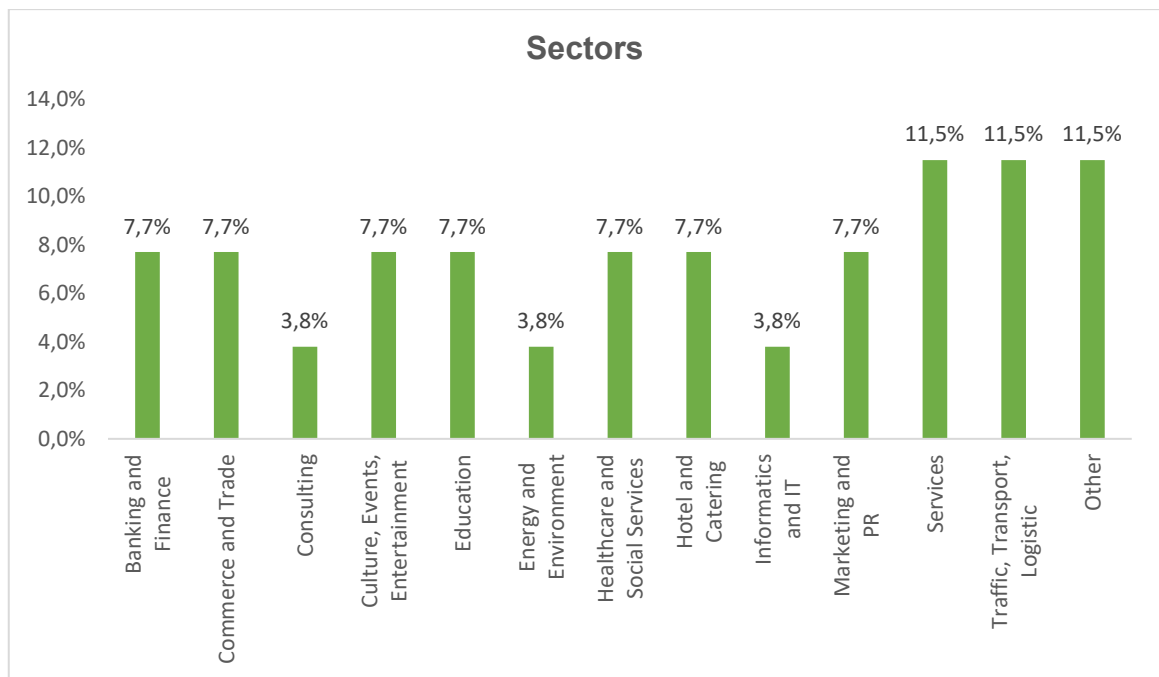


Figure 17: Sectors (own illustration)

The most companies operate in the sectors services, traffic, transport and logistics and others. The areas consulting, energy & environment and informatics & IT are far behind with 3,8%. All in all the analysis of the general questions shows clearly that the most answers of the now following specific questions relate to companies with 10 to 49 employees, but to different sectors.

3.1.2. Investments

The next two questions concern the investments of German companies in Latvia.

4. Since when does your company operate in Latvia?

26 participants answered the question since when the investments have been part of the enterprise. 57,7% of the investments started earlier than 2015. In the years 2015 until 2017 in each case 7,7% and from 2018 until 2020 in each case 3,8% of the investments began.

5. How was your experience with investing in Latvia so far?

The second question in that part was responded by 25 participants. 72% of them had positive and 28% had negative experiences with the investments. 15 answering persons chose positive aspects and 7 of them negative ones. This results in following percentage distribution:

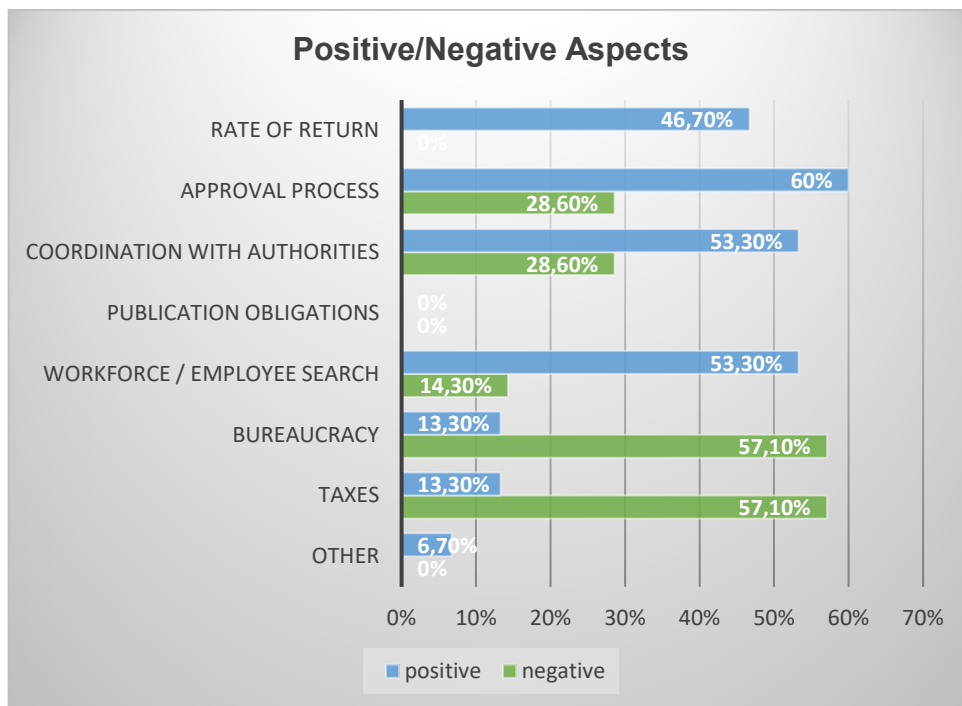


Figure 18: Positive/Negative aspects (own illustration)

The most aspects of investments are seen more positive than negative. Only the bureaucracy and the taxes are with each 57,1% more negative.

Finally it can be noted that the most investments of German companies in Latvia last since more than six years and are valued positive.

3.1.3 Sustainability

To analyse how sustainable the investments are, the next questions follow up with sustainability.

6. How important is sustainability for you?

For 27,3% of the companies the subject is very important and for 59,1% it's important. Only 13,6% of the participants said that sustainability is less important. The question was answered by 22 participants.

7. Which of the following statements meets the definition of sustainable investments in your opinion best?

The definition of sustainable investments was selected by 20 participants. The definition is as follows: Sustainable investments are characterized by...

1... environmental friendly company.

2... long-term profit.

3... social responsible company.

The first statement was selected by 10%, the second one by 25% and the third definition by 5%. The most of the participants (60%) said that all of the statements define sustainable investments.

8. Do you already have experience with sustainable investment? In which field have you already gained experience?

This question was answered by 20 persons. 45% of them had already experiences with sustainable investments. In following areas they gained the experiences:

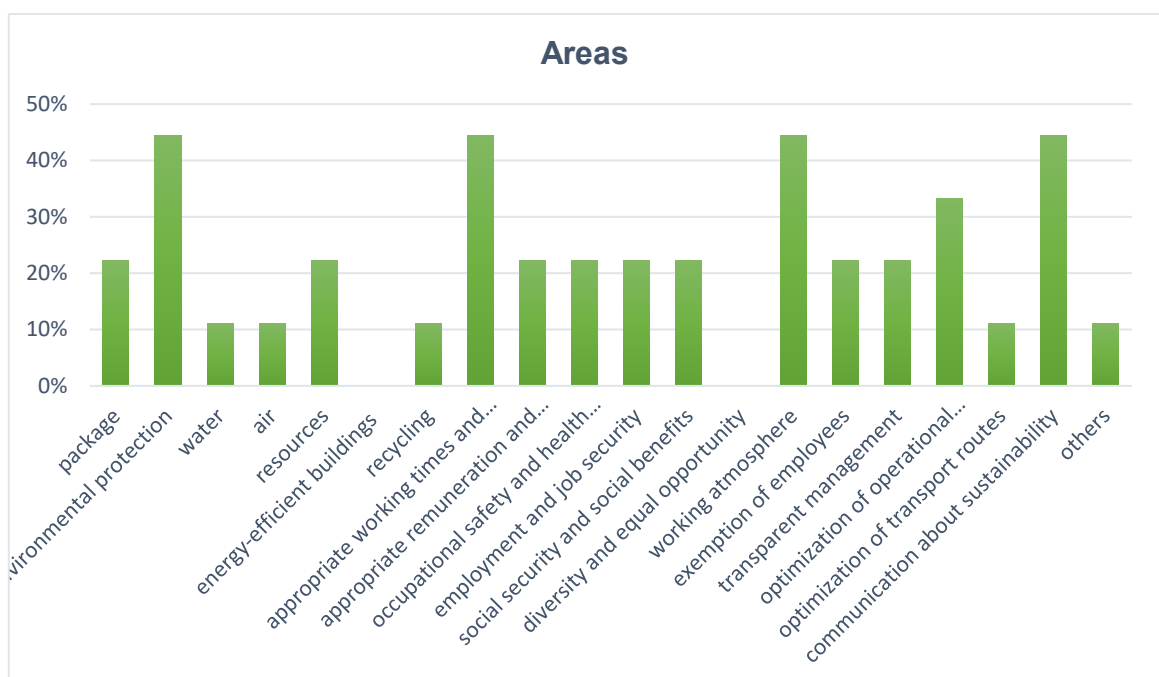


Figure 19: Areas (own illustration)

With more than 40% the most experiences with sustainability are gained in “environmental protection”, “appropriate working times and flexible working models”, “working atmosphere” and “communication about sustainability”. At the other side there are no experiences with energy-efficient buildings, diversity and equal opportunity.

To sum up it can be said that sustainability is often part of the companies, but there are bigger differences in the understanding of the subject sustainability. Furthermore it’s very different in which areas the companies operate sustainable. The environmental part is often not very pronounced, for example activities to protect the air or the water or to improve the recycling are often missing. The social pillar of sustainability is the strongest one. The companies invest in good working times and working atmosphere and in the health of their employees, however subjects like diversity are missing, too. The third pillar is the economic one which is moderate strong. For example the optimization of operational processes is with more than 30% one of the most used areas.

3.1.4 First pillar: corporate governance

The first pillar focusses on questions about corporate leadership.

9. Is the term "sustainability" used in the mission, vision and/or values of your corporate?

		Frequency	Valid Percent	Cumulative Percent
Valid	no	7	36.8	36.8
	prefer not to say	1	5.3	42.1
	yes	11	57.9	100.0
	Total	19	100.0	
Missing		17		
Total		36		

Table 2: Term “sustainability” used in mission, vision and/or values (SPSS)

As one can see in table two 57,9% of the companies surveyed, stated that the term “sustainability” is being used in the mission, vision and/or values of the corporate. 36,8% said, that this term is not part of the mission, vision and/or values of the corporate. This shows that the term “sustainability” is important for most of the surveyed companies.

Later, it will be examined whether there is a relationship between the size of the company and the use of the term sustainability in the company's mission, vision and/or values.

10. Does the company issue a sustainability report (like, for example, Swedbank)?

Even though more than half of the companies said that the term sustainability is part of their mission, vision and/or values, only 15,8% of the 19 companies stated that they issue a sustainability report. In contrast to that, 63,2% are not issuing a sustainability report and 21,1% prefer not to answer this question.

11. Is investor transparency secured in your company?

68,4% of the companies said that investor transparency is secured in their company. Only 10,5% stated that investor transparency is not secured in their company and 21,1% prefer not to answer this question.

Those questions show that the term 'sustainability' and investor transparency are important to the surveyed companies. Less important is a publication of a sustainability report.

The next pillar includes questions about a positive environmental impact of the surveyed companies.

3.1.5 Second pillar: positive environmental impact

12. What do you currently undertake for the environmental protection in your company?

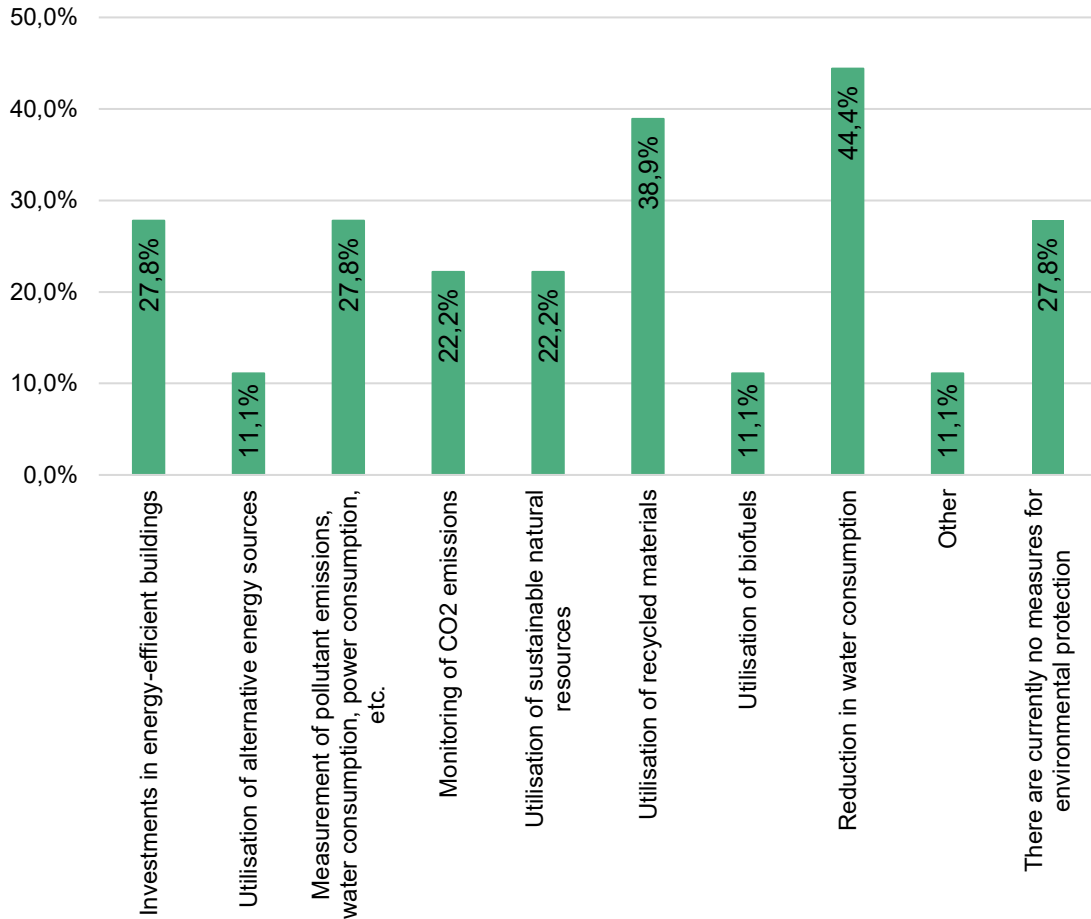


Figure 20: Measures for environmental protection (own illustration)

As one can see in the figure 20 the most popular undertaking with 44,4% is the reduction in water consumption and the utilization of recycled materials with 38,9%. 27,8% of the surveyed companies are currently not undertaking any measures for environmental protection.

Later it will be investigated whether there is a relationship between the use of the term sustainability in the vision, mission and/or values of the company (Question 12) and not undertaking action on environmental sustainability (Question 15).

13. Do you undertake environmental remediation activities?

66,7% of the surveyed companies stated that they do not undertake environmental remediation activities. 33,3% are undertaking environmental remediation activities.

14. Which environmental remediation activities do you undertake?

The companies which answered the previous question with 'yes' were asked which environmental remediation activities they undertake.

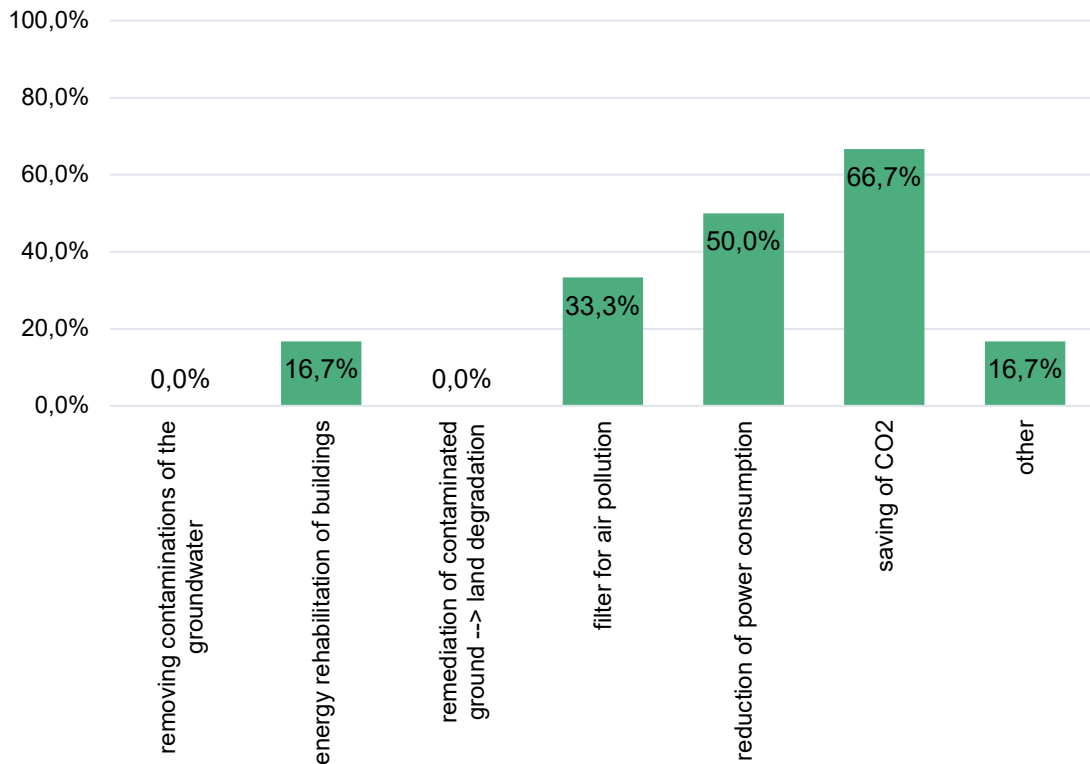


Figure 21 : Environmental remediation activities (own illustration)

As one can see in figure 21, the most popular activity is saving of CO2 with 66,7%, followed by the reduction of power consumption with 50,0%. None of the companies stated that they remove contaminations of the groundwater or remediation of contaminated ground.

This pillar shows that companies are already doing various activities for environmental protection. Remediation activities in contrast are not very popular through the surveyed companies.

The third and last pillar of this survey contains questions about a positive social impact of the surveyed companies.

3.1.6 Third pillar: positive social impact

15. Do you support the skills/health of your employees?

94,4% of the surveyed companies stated, that they support the skills/health of their employees. Only 5,6% said, that the do not support the skills/health of their employees.

16. How does your company support its employees?

All companies which answered 'yes' to the previous question were also asked how their company supports the employees.

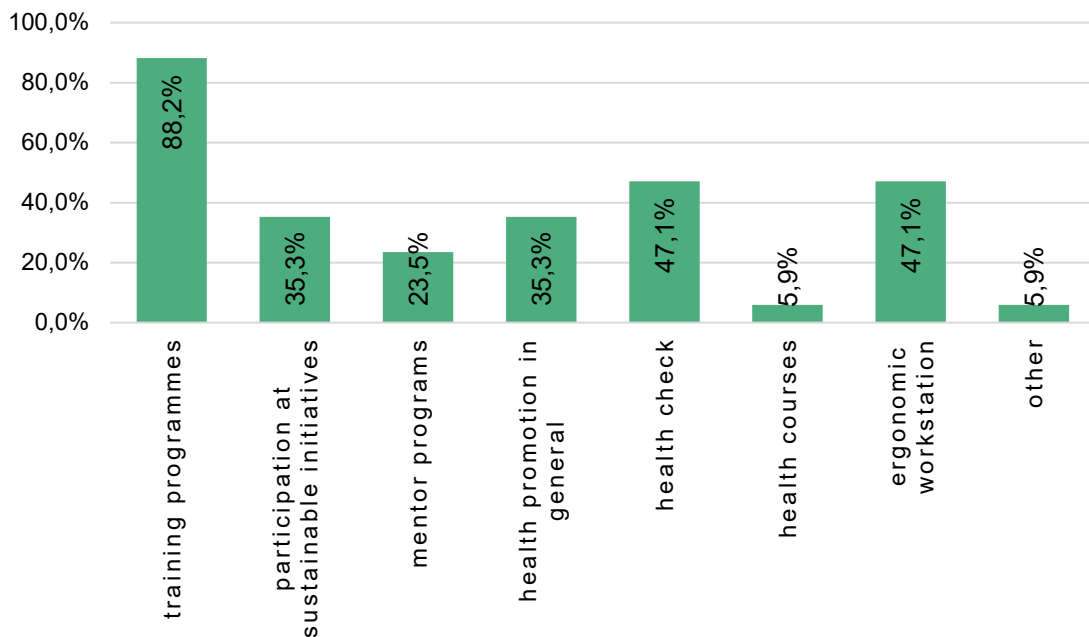


Figure 22: Measures for supporting employees (own illustration)

As one can see in figure 22 88,2% of the 17 companies which answered this question, support their employees through training programs. Health checks and ergonomic workstations are with 47,1% also very popular. Besides that, participation in sustainable initiatives as well as health promotion in general are popular support activities.

17. Is your company a member of social employer initiatives?

22,2% of the surveyed companies stated that they are a member of a social employer initiative. 61,1%, the clear majority said they are not. 16,7% preferred not to answer this question.

18. Which of the following aspects were implemented in your company?

The four companies which answered 'yes' to question 20 stated the below in chart 23. It was possible to choose multiple answers.

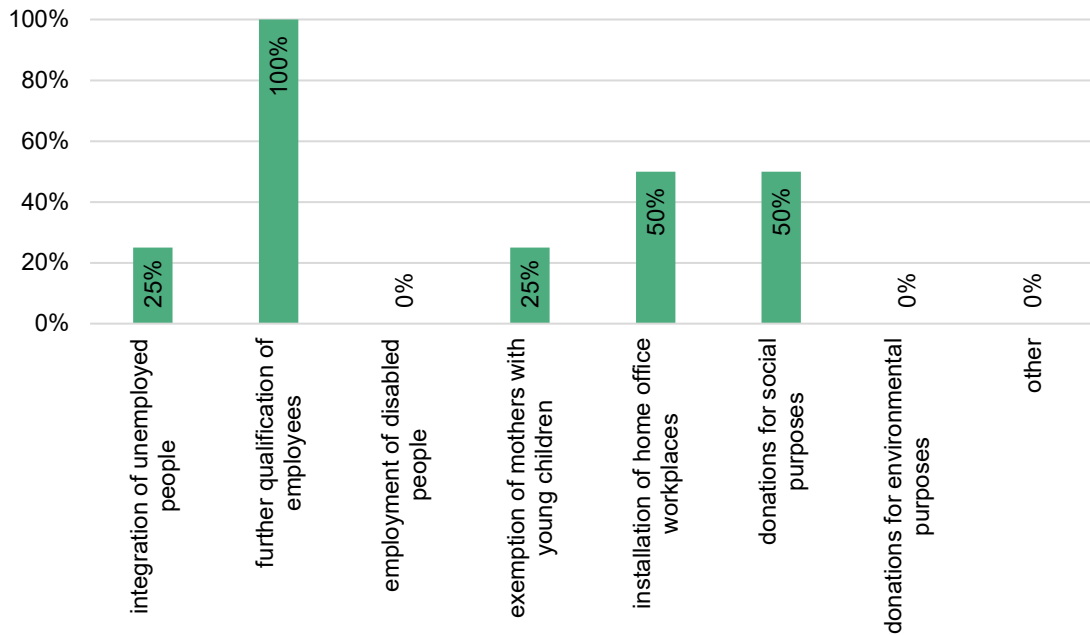


Figure 23: Implemented aspects (own illustration)

100% of the companies which answered this question implemented further qualifications of employees to their company. 50% implemented installation of home office workplaces and donations for social purposes in their company. This shows a huge importance of further qualifications of employees to the companies.

19. Is the governmental program "Coronavirus assistance to entrepreneurs" an important relief effort for your company?

For 72,2% of the companies the governmental program 'Coronavirus assistance to entrepreneurs' is no important relief effort for the company. Only 16,7% answered this question with 'yes' and 11,1% preferred not to answer this question.

This last pillar points out that the health of employees is very important to the companies. A lot of and also multiple activities are implemented in order to ensure the support of the employees. Even though the health of their employees is very important to the companies, only a small minority is member of a social employer initiative. The governmental program 'Coronavirus assistance to entrepreneurs' is not important to the surveyed companies.

3.2. Analysis of Correlation

In the next chapter the relations between the individual questions will be analysed.

Correlation between size of company and experience with investing in Latvia

The size of the company is defined as the number of employees. The two questions have a middle relation because the statistical correlation Cramer-V has a value of 0,431. The analysis reveals following results:

		How was your experience with investing in Latvia so far?	
		More positive	More negative
How many employees does your company engage?	1-9	50%	50%
	10-49	77,8%	22,2%
	50-249	40%	60%
	>249	100%	0%

Table 3: Correlation size and experience (own illustration according to SPSS)

The most companies had more positive experiences with investing in Latvia, only companies with 50 to 249 employees had more negative experiences. In total there is no trend evident.

Correlation between sector and experience with investing in Latvia

The sectors in which the companies operate and the experiences they gained with investing in Latvia reveal a very strong correlation with a Cramer-V value of 0,935. The companies in each sector always only had more positive or more negative experiences. Following sectors had more positive experiences with investing in Latvia:

Banking & Finance

Commerce & Trade

Consulting

Hotel and Catering

Marketing and PR

Services

Traffic, Transport and Logistic

These sectors had more negative experiences:

Healthcare & Social services

Energy & Environment

Education

Culture, Events, Entertainment

So, it can be seen that the experiences are dependent on the sector of a company.

Correlation between size of company and importance of sustainability

The result in this case should clarify if there is a connection between the number of employees and how important sustainability is in a company. The statistical correlation Cramer-V is 0,402 and therefore exists a middle relation between the two subjects. In total almost all sizes of the companies say that sustainability is important or very important, except 40% of the enterprises with 50 – 249 employees and 11% of them with 10 – 49 employees which claim that it's only less important.

Correlation between size of company and using the term "sustainability"

In the next step the relation between the number of employees and the use of the term "sustainability" in the mission, vision and/or the values of the companies is analysed.

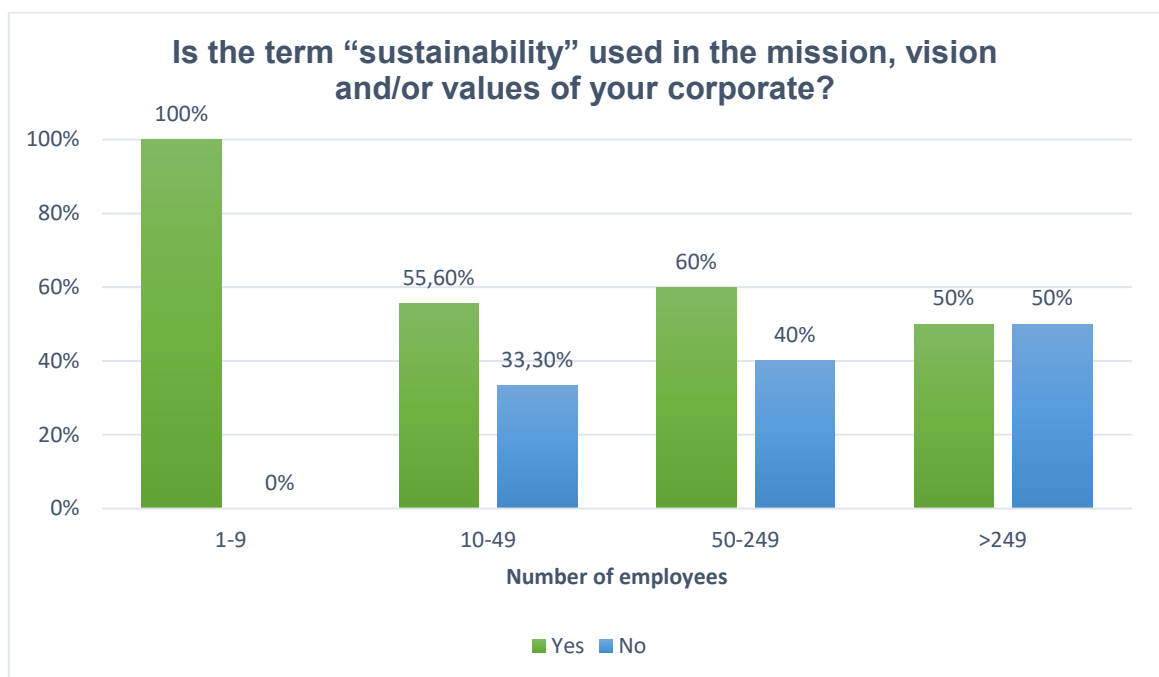


Figure 24: Correlation size and term "sustainability" (own illustration)

The diagram shows obviously that the larger the enterprise, the less often the term "sustainability" is used. As a conclusion it can be noted that smaller companies use the term more often in their mission, vision or values as larger ones.

Correlation between using the term "sustainability" and importance of sustainability

The combination of these two questions shows only a weak correlation. For 81,9% of the companies which use the term in their mission or vision sustainability is important and very important. The ones which don't use the term regard sustainability to 83,4% as important and very important. So it cannot be said that companies which use the term "sustainability", see the subject more important than the ones which don't use it.

Correlation between importance of sustainability and experience regarding sustainable investment

		Value	Approximate Significance
Nominal by Nominal	Phi	.375	.282
	Cramer's V	.375	.282
N of Valid Cases		18	

Table 4: Correlation importance sustainability and experience (SPSS)

It was investigated whether there is a correlation between the importance of sustainability to the surveyed companies and their experience with sustainable investment.

As one can see in table four the calculated Cramer's V has a value of 0,375. This means that there is only a weak correlation between the importance of sustainability and experience with regard to sustainable investment. 53,3% of the companies which stated that sustainable is important or very important to them already have experience in sustainable investment. 46,7% of the companies which also stated that sustainability is important to them have no experience with sustainable investment.

Correlation between the year of beginning operating in Latvia and the importance of sustainability for companies

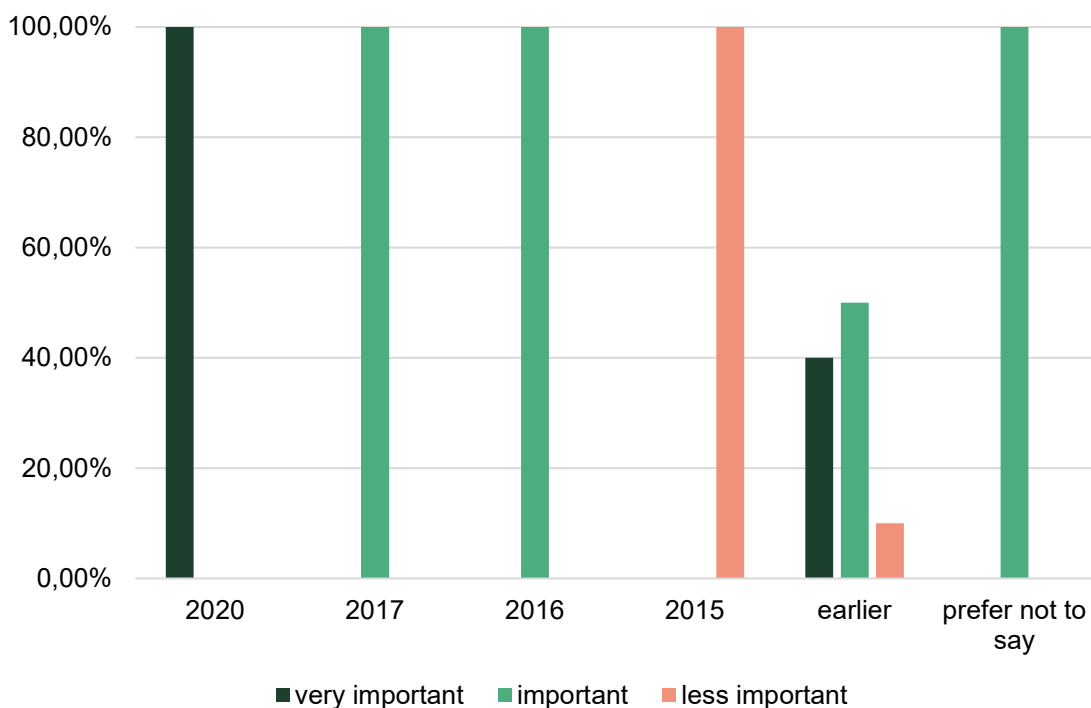


Figure 25: Correlation starting year and importance sustainability (own illustration)

Further it was also investigated whether there is a correlation between the beginning of operating in Latvia and the importance of sustainability to the surveyed companies. As expected, there is a strong correlation between the beginning of operating and the importance of sustainability. The Cramer's V has a value of 0,696. The figure 25 shows how the companies ranked the importance of sustainability in the respective year of the start of operating, broken down by year. As one can see the importance became more important through the years, so that in 2020 100% of the companies stated that the term 'sustainability' is very important to them. However, it must be taken into account that most of the companies started operating in Latvia earlier than 2015 and only one company stated that it started in 2020.

Correlation between beginning of operating in Latvia and a membership of social employer initiatives

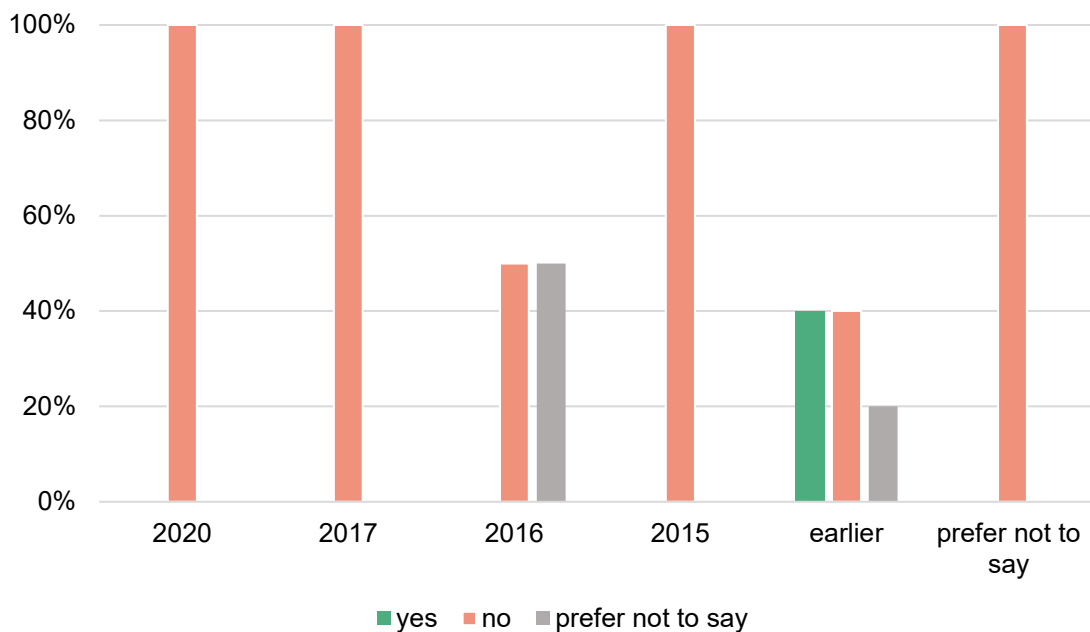


Figure 26: Correlation starting year and membership social employer initiative (own illustration)

It was also investigated if there is a correlation between the year of beginning to operate in Latvia and the company being a member of social employer initiatives. According to the Cramer's V there is a medium correlation between those statements. As one can see in figure 26, the companies which stated being a member of social initiatives started operating in Latvia earlier than 2015.

Correlation between the usage of the term 'sustainability' in the mission, vision and/or values of your corporate and the measures for environmental protection

Further it was examined which actions for environmental protection companies undertake which stated that the term 'sustainability' is used in the mission, vision and/or values of the company.

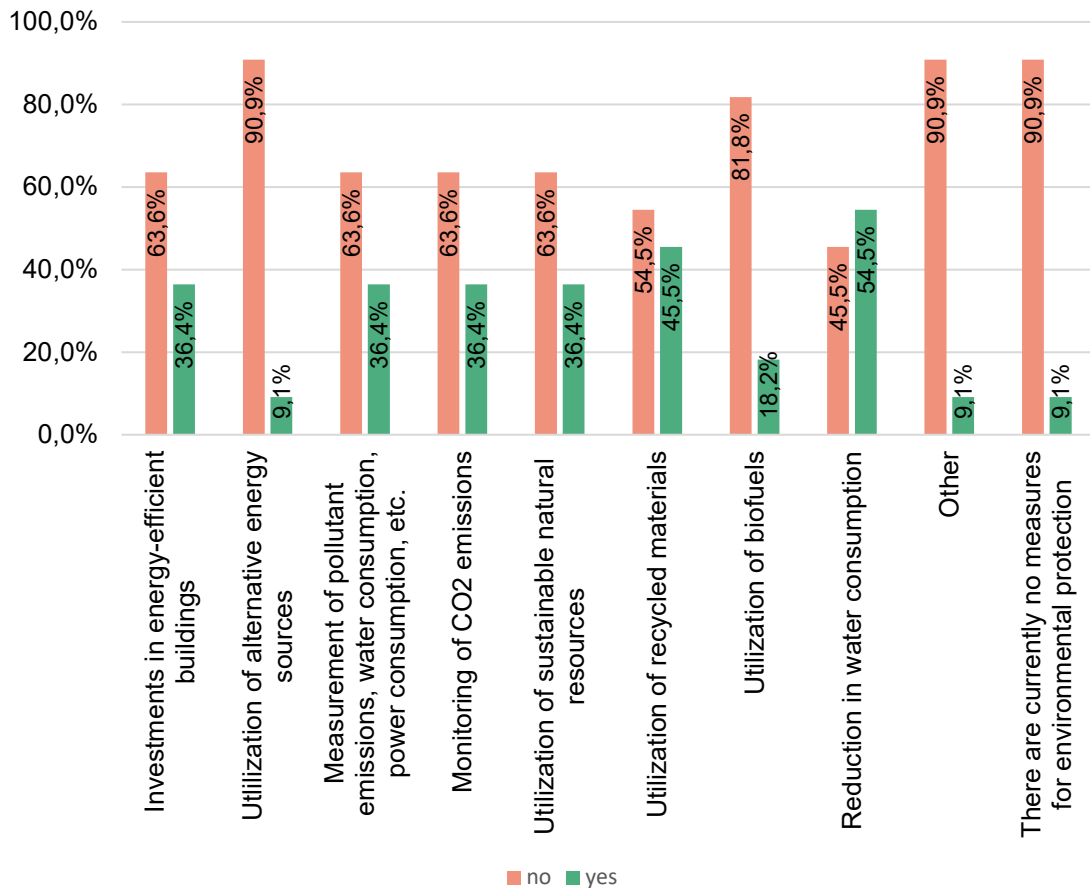


Figure 27: Correlation term "sustainability" and measures for environmental protection (own illustration)

Out of the companies which stated that they use the term 'sustainability' in their mission, vision and/or values of the company only 9,1% stated, that they do not undertake any measures for environmental protection. This shows that almost all companies which use the term 'sustainability' do undertake measures for environmental protection. Most popular are with 54,5% the reduction in water consumption as well as utilization of recycled materials with 45,5%.

Correlation between importance of sustainability and the support of the skills/health of the employees of the surveyed companies

Also, it was investigated the correlation between the importance of sustainability and the support of the skills/health of the employees of the surveyed companies.

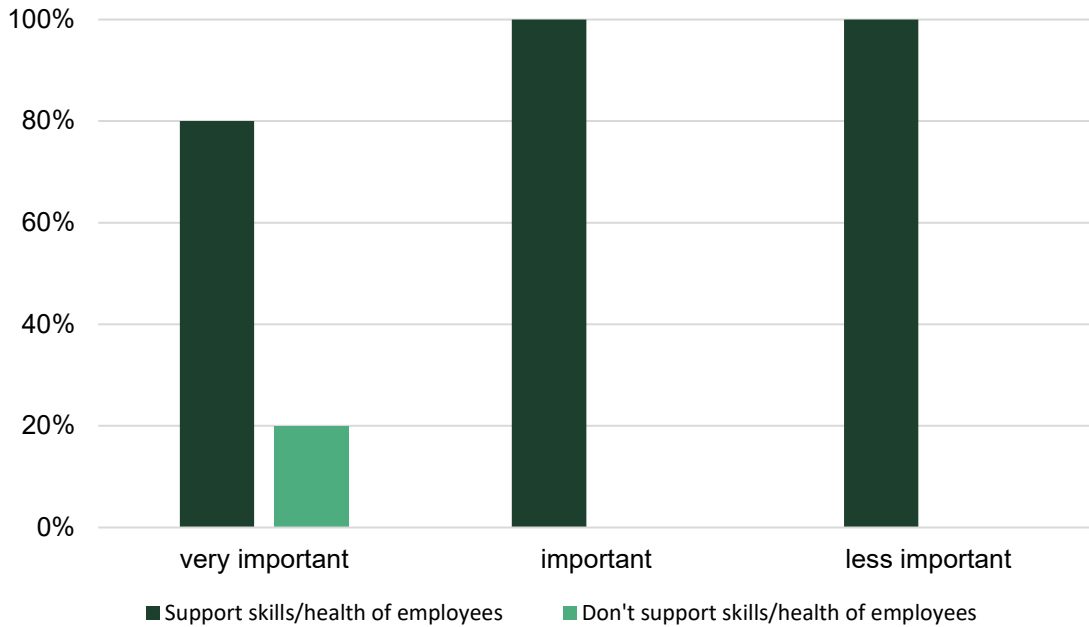


Figure 28: Correlation importance sustainability and support of skills/health of employees (own illustration)

Most companies which stated that sustainability is important (80%) or very important (100%) to them also support the skills/health of their employees. Only 20% stated that sustainability is very important to them, but they don't support the skills/health of its employees. On the other hand, also 100% of the companies which stated that sustainability is less important to them also support skills/health of their employees. This shows that this social aspect is not part of the definition of sustainability for those three companies.

4. Conclusion

This empirical study has provided new insights to what extent the companies surveyed are already acting sustainably and which activities are already being applied in the company. As it can be seen from the results of the survey, the issue of sustainability already plays an important role for the majority of the companies surveyed. Their experiences with foreign direct investment tend to be positive.

Sustainability can be divided into three pillars: economic pillar, environmental pillar and social pillar (Kostoska and Kocarev 2019, p. 2). In order to act sustainably, all pillars must be equally pronounced and equally considered. These three pillars are also reflected in the research question "If and how are investments from Germany in Latvia ecologically, socially or governmentally motivated?", which was to be answered based on the empirical investigation. With the help of the empirical investigation, the corporate actions of the respondents were examined in relation to the three pillars of sustainability. The first pillar, corporate governance, shows that the topic of sustainability is anchored in the mission/vision of just over half of the companies surveyed. In addition, investor transparency was ensured. However, only 15,8% of the companies surveyed publish a sustainability report.

The second pillar was designed to find out what companies have done to date to protect the environment and what measures they are using to achieve this.

The environmental pillar shows that the companies mainly use recycled materials and reduce water consumption to protect the environment. As environmental remediation activities the companies most often save CO² and reduce the power consumption. It can be seen that most companies are already undertaking actions regarding for environmental protection and are adapting their business activities to the sustainability aspect.

The last pillar refers to the social aspect. For almost all the companies surveyed, it is important to strengthen and promote the skills and health of their employees. Most of them offer training programs, health checks or ergonomic workstations. Only a minority of the enterprises is part of social employer initiatives, but all of these companies invest in the further qualification of their employees. Half of them donate for social purchases and offer home office workspaces. The government's coronavirus assistance to entrepreneurs' is not relevant for the majority. As can be seen from the evaluation, the companies are already acting in a very sustainable manner. The three pillars of sustainability are quite balanced, with the social pillar being a little more pronounced. Nevertheless, there is still room for improvement in all three pillars. In the

future, the companies should further expand the following aspects in particular and take them into account in the company. Although for most companies the concept of sustainability is anchored in the company's mission/vision, the majority of respondents do not publish a sustainability report. In addition, the measures for environmental protection could be further expanded. The use of alternative energy sources and the use of biofuels is not yet as pronounced among the companies surveyed. Furthermore, the majority of companies do not carry out any environmental remediation activities. Also in the last pillar, the positive social impact, it becomes apparent that many of the companies are not yet members of social employer initiatives.

Moreover, as mentioned in the theory part, there have been strong fluctuations and negative investment flows since 2016. In this context, the last positive investment was made in 2015 (OECD d. 2020). From the evaluation, it can be seen that for companies that invested in Latvian companies before 2015, the issue of sustainability plays a less important role than for companies that invested after 2015. Moreover, it also shows that before 2015 more companies were members of social employer initiatives. This may be due to the negative investment flows since 2016.

At the end it should be mentioned that through the 18 completed participants as well as the 18 almost fully questionnaires, only the opinion of 22,5% of the 160 surveyed companies can be reflected. Most of the companies that participated in the survey have between 10 and 49 employees, so mainly small companies participated in the survey. Most of the companies were active in the sectors of services, traffic, transport and logistics and others. In summary, it can be said that the issue of sustainability in foreign direct investment is already an important topic for most companies and the companies are already active in this regard. Nevertheless, there is still room for improvement in many areas for more sustainable entrepreneurial action. Due to the increasing importance of sustainability and environmental protection, it can be assumed that this topic will become more and more important for companies.

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