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VENTURE FUNDS AS AN ELEMENT OF THE ECOSYSTEM: CHALLENGES AND DEVELOPMENT DRIVERS IN THE CONTEXT OF UKRAINE

Bachelor thesis

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Tartu 2021

I have written this Research paper independently. Any ideas or data taken from other authors or other sources have been fully referenced.

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Introduction

Venture capital industry is developing and extending promptly during the last years worldwide. According to the Teker and Teraman (2016), size of the venture capital market was around $50 billion in the reported year.

The reason behind growth of the industry is that it has a positive impact on the economy development from many different perspectives. According to Briel, Recker & Davidson (2018), innovation performance is positively influenced by the venture capital investments. The study of Kortum and Lerner (2000) shows that in respect of innovation prospering, venture capital has three to four times more power than research and development in corporations. During the last 40 years, one of the major sources of the economic growth and job creation is big and successful companies that previously had received investments in the form of venture capital at the different stages of their development (DiGiorgio & Harris, 2013). Thus, contribution of venture capital to the national and even world economy is impossible to overestimate.

Under the venture capital ecosystem, the author suggests the relationship between a collection of interconnected elements of venture business to ensure its self-support and self-development at the expense of private capital based on the definition of the ecosystem by Cambridge Dictionary (n.d.): “all the living things in an area and the way they affect each other and the environment”. The interconnected elements, then, include government, venture funds, business angels, business incubators, accelerators, and companies. According to the Lerner, Leamon and Garcia-Robles (n.a.), healthy venture capital ecosystem directly contributes to the economic growth, furthermore, even prerequisites for the ecosystem development stimulate the increase in the economy.

The paper of Bruton, Freid and Manigart (2005) states that venture capital market of the country is shaped by respective institutional characteristics. Hereby, author considers that different countries have different venture capital ecosystems.

According to the Mazur and Zyanko (2013), venture capital ecosystem, as well as number of funds have been constantly increasing in developed countries. In terms of Ukraine the topic is especially relevant because country lacks economic and politic stability and does not have a good legal basis for the venture capital development yet. The author believes that the analysis of empirical studies on the similar to Ukrainian venture capital systems is useful to determine the key factors influencing the development of a single fund.

Many previous studies conducted research taking into account perspectives of both companies and funds for making generalizations and presenting statistical information about the development of the venture capital ecosystem as a whole. However, there are no studies that would focus on funds specifically and that would study their development as a part of the ecosystem. Thus, the research gap of the thesis is revealed. By diving deeper into studying one of the elements of the ecosystem it will be possible to reveal new patterns and to broaden understanding of challenges that funds are facing.

In this way, venture fund is one of the main characters in the venture capital ecosystem. It provides portfolio companies not only with financial support but help with talent acquisition, establishing contacts with professionals and potential customers or suppliers (Park & LiPuma, 2020). Thus, it is crucial to understand how ecosystem is influencing the fund itself and how it can boost the development of the fund.

The bachelor thesis aim is to explore challenges and development drivers of the venture fund as an element of Ukrainian ecosystem. For the research aim achieving, the following tasks were set up:

- To discuss a concept of venture capital, venture capital ecosystem and its elements,
- To analyze country-specific challenges and development drivers of venture funds based on previous studies,
- To present analytical overview of the context in which Ukrainian venture fund is developing,
- To conduct interviews with representatives of Ukrainian venture funds,
- To present and discuss the results.

The paper consists of two parts, theoretical and empirical. The first part of this work will focus on discussion of the venture capital concept, elements of the venture capital ecosystem and operating principles of the fund itself. Previously done studies will be analyzed to get insights about country specific challenges and drivers of the venture fund in the similar ecosystems to the Ukrainian one. The empirical part will cover analytical overview of the ecosystem in Ukraine, methodology of the research, and interviews with representatives of venture funds. At last author shall thank all representatives of Ukrainian venture funds which agreed to take part in the research.

Keywords: venture capital, venture fund, fund development, funding, challenges of funds.

1. Theoretical foundation of venture capital funds development

1.1. Defining main concepts of the ecosystem and analyzing fund's development

Venture capital is one of the main concepts when it comes to venture capital ecosystem and its development. It was discussed by many authors and the definition is still evolving. In the following paragraph, the author aims to present how the concept has been changing over the last two decades and how it is relevant to the venture capital ecosystem. Besides, elements of the ecosystem will be analyzed in further details in order to get an understanding of how they impact the development of the fund.

One of the most well-known definition of venture capital was introduced by Kortum and Lerner in 2000. They refer to the concept of venture capital as “equity or equity-linked investments in young, privately held companies, where the investor is a financial intermediary” (p. 676). Megginson in 2001 provided broader definition of the concept, including the fact that for the firm, in order to become a portfolio company of the venture fund, some characteristics should be followed. Besides, the perspective of venture fund itself in respect of return and risks involved should also be discussed.

Gompers and Lerner in the same year of 2001 also pointed out that venture capital investments involve high risks and that they are usually made in private firms, usually high technology, giving examples of Microsoft and Apple. Moreover, they explained that it is usually hard for young companies to provide themselves with debt financing or bank loans.

Christofidis and Debande (2001) provided pretty similar definition to those described above already. However, they also state that it is possible to see venture capital as a combination of demand and supply cycle. The former aspect represents companies that seek external financing while the latter considers the lifecycle of the fund. Thus, here the interconnection of the ecosystem’s elements can be observed already. On one side, companies have to follow the requirements provided by the fund like showing good traction, product development experience and strong board members team to get financing. On the other side, funds have to raise enough money from investors and investigate market in order to find companies to invest in and to promote the fund.

Mishkin and Eakins (2012) viewed the definition from the same perspective. However, they also stressed out that venture capital is an alternative source of financing for newly baked companies, as other sources are unavailable to firms that are only establishing.

During last two decades the concept of venture capital did not change the core value. Definitions from different authors provided above complement each other and they are overlapping without any discrepancies. Recent studies on the topic related to venture capital are also based on these definitions, thus, information from years of 2000 and 2001 is considered to be relevant. The following Table 1 gives a brief overview of how definition was evolving.

Table 1

Definitions of venture capital

Author(s) and year	Definition
Kortum and Lerner, 2000	Core definition - “equity or equity linked investments in young, privately held companies”.
Megginson, 2001	Added importance of internal characteristics of the company and mentioned return and risk aspect for the fund.
Gompers and Lerner, 2001	Pointed out that venture capital investments are usually made in high technology companies.
Christofidis and Debande, 2001	Provided deeper understanding of the concept by introducing correlation between demand and supply cycle.
Mishkin and Eakins, 2012	Viewed concept only as an alternative source of financing for newly baked companies.

Source: compiled by author based on the sources from the research paper

So, venture capital fund is the one that invests in companies on early stages of their development by buying their shares. The average investment horizon is usually equaling up to 5 years. Thus, such investments are associated with high risks. However, it assumes high returns as well. Even though majority of portfolio companies fail (Cochrane, 2005), the returns from ones that became successful are so high that they cover the losses associated with failures. (Elango, Fried, Hisrich & Polonchek, 1995)

Hence, fund is earning money only after selling shares of the portfolio company that has increased in value over time. Usually when fund invests in a new company, the agreement includes the description of preferable exit. There are several options for a fund to make an exit. First one may be executed when portfolio company is going public and starts trading its shares on the stock market, thus, provides initial public offering (IPO). In this case venture fund sells its shares to public. The most common way of funds’ exit happens via mergers and acquisitions (M&As). When another entity buys portfolio company partially or fully, fund also has a possibility to sell its option to the entity. The last option of stock buybacks is not common. It is when management of portfolio company is repurchasing shares from the venture capitalist. In this type of exit, fund gets back money directly from the company. (Ibrahim, 2012)

Before analyzing what are the different aspects of the venture capital ecosystem and how they interconnect, it is also important to understand where the process of investing itself starts and how it is going on. This helps in comprehension of what are the components of venture capital fund development. Gompers and Lerner (2001) defined the concept of venture cycle. Authors stated that everything starts when venture fund is established. When the fund raised enough money, it is ready to invest it into other companies and, thus, to provide them with additional support needed afterwards. When the portfolio company's value increased, it is a favorable situation for the fund to make an exit. After the successful deal, capital is returned to the investors and fund itself is raising money to reinvest it again. So, fund is developing when it raises money, invest in companies and gains capital by exiting. The more elements of the ecosystem will support each of the stages, the greater positive impact it will have on the development of the fund. The following Figure 1 below illustrates the venture cycle for better understanding.

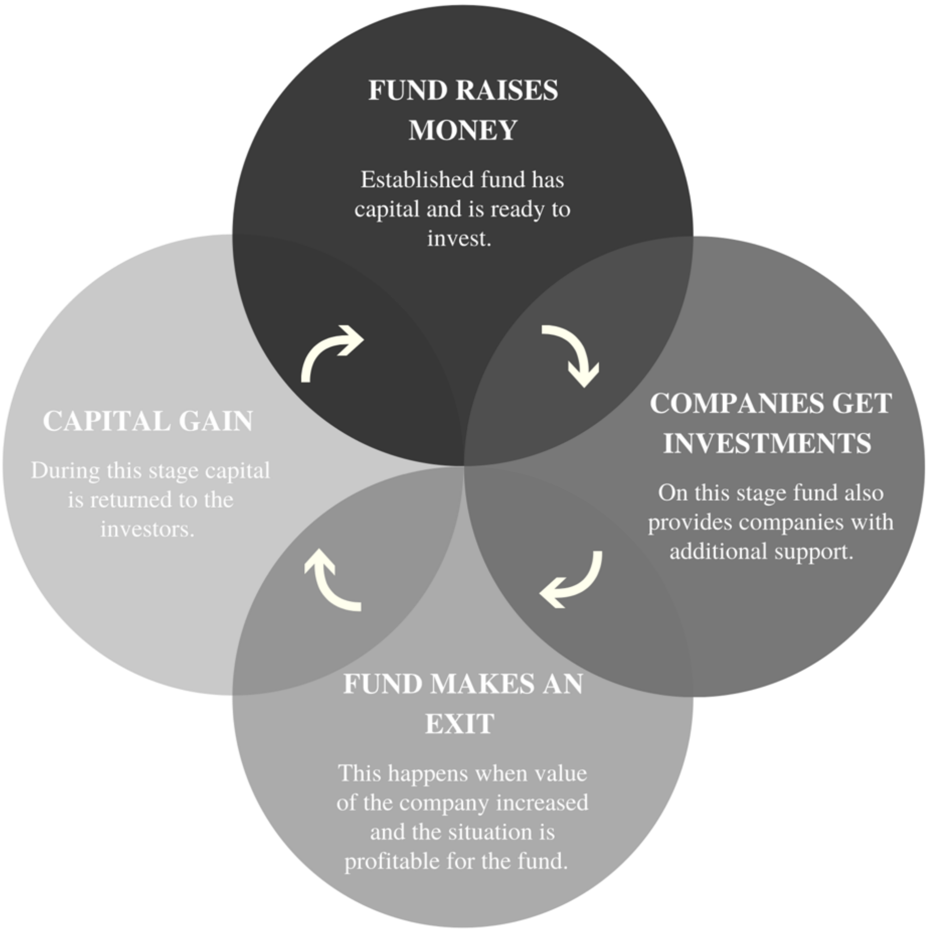

Figure 1. Venture cycle

Source: compiled by author based on the paper of Gompers and Lerner (2001)

From this figure it is possible to observe that the first step in the cycle is when fund is raising money. During this stage some challenges may appear already. After the fund itself was established already, it has to get financing. According to Burton and Scherschmidt (2004), it is often difficult for the fund to find limited partners (LPs) that will be willing to put in their money. However, after this stage is complete, LPs do not have a great impact on investment decision, and they usually do not set strict rules on investments. Thus, fund is able to adjust investment focus according to the agreement with LPs, but they cannot dictate how much money and in which company to invest. They usually do not set restrictions on number of deals or volume of investments per year. It means that general partners of the venture fund can make own decisions. Thus, the final goal of the fund is to make a profitable exit and to be able to return money to LPs. (Kuckertz, Kollmann, Röhm & Middelberg, 2015)

Now, understanding what venture cycle is and how it works, it is easier to view the correlation between venture capital ecosystem's elements and how they drive the fund's development. As it was mentioned earlier already, the ecosystem consists of such interconnected elements:

- government;
- venture funds;
- business angels;
- business incubators and accelerators;
- companies.

Ueda and Hirukawa (2008) stated that expansion of the venture capital industry is a significant aspect for stimulating economic growth. Hence, it is of government's importance to provide a favorable environment for the development of all aspects contributing to the ecosystem including funds. According to Snieska and Venckuviene (2011), it is even more important than just financial help from the government.

Author assumes that business angels, as an element of the ecosystem, do not have a drastic impact on the fund's development. According to Teker (2016), they have less investments for companies and they apply different approach, comparing to that one used by venture funds. It is due to the fact that business angels are willing to put their own money as a source of funding for the company. Thus, they mostly invest on early stage, before venture capitalists do according to the venture cycle, what does not create a competitive environment for funds.

Business incubators and accelerators provide a wide range of activities to help companies on the early stages of development (Bone, Gonzalez-Uribe, Haley & Lahr, 2019). Therefore, the more strong companies arise, the more good investment possibilities for funds there are. It leads to more exits and creates capital gain in accordance with venture cycle. In simple words, it means that business incubators and accelerators lead to the increase in venture demand and that they are drivers to the fund's development.

Moreover, according to the Plage (2006), venture demand is the most important factor for the success of venture capital ecosystem. Author also states that situation when venture capital supply is higher than demand leads to consistent public policy incapability.

Small and medium enterprises have a great positive impact on the growth of the economy mainly caused by job creation and innovations boost. According to the Keunschnigg and Nielsen (2003), government has a big influence on companies by setting taxation rules and facilitating a favorable climate for entrepreneurs by establishing policy regulations. Here applies the same logic as with business incubators and accelerators. As number of companies increase, venture demand goes up. It brings us to the conclusion that the more government support SMEs, the better it is for the development of the fund.

Based on the analysis of the ecosystem's elements provided above, author assumes that the greatest impact on the development of the venture fund has government itself and its ability to establish open market and favorable environment for the entrepreneurs. This is why it is important to examine venture capital ecosystems in different countries (governments) which is to be done in the next sub-chapter.

1.2. Analysis of country-specific challenges and development drivers of funds

In order to find papers that provide an analysis of venture capital ecosystem as a whole and are funds concentrated in the different countries, author used scientific databases including JSTOR and ScienceDirect. The following keywords were applied: “venture capital”, “venture capital ecosystem”, “venture fund development”. In order to narrow the search, the recent years of publications were taken into account and the focus of the whole research was a criterion. The main goal was to study distinct aspects of the works rather than the factors that caused them. In this way the novelty is introduced. Author acquires information on how funds are developing differently under similar venture capital ecosystems.

Author chose similar ecosystems to the Ukrainian one for the analysis. Thus, they are still not mature as a whole and depend on public support to large extend.

The first chosen for the analysis venture capital ecosystem was Belarussian one. The study that was conducted based on surveys of the “AIDVENTURE” project (2017) outlines current issues in the ecosystem and provides recommendations for the development of the ecosystem and interconnected elements. Authors found that the most preferable factors that are drivers for funds development are skilled labor force, low competition in the national economy among young entrepreneurs and the direct connection with EAEU and CIS markets. However, issues that significantly slow down the performance of the fund include weak judicial system, lack of investor's protection, ineffective innovation structure and absence of reforms that aim to improve the whole business environment. With this pack of strengths and weaknesses, venture capital funds from Belarus invest in around 50 startups every year, comparing to 66 in Ukraine and 56 in Lithuania and it still remains on the same level.

The second ecosystem that is definitely relevant is Russian one. Paper by Trofimova (2017) points out that venture capital ecosystem in the country is currently worsening because of the crisis, sanctions and lack of instruments for attracting foreign capital. However, the role of funds that were creating the demand for innovations on the state level had grew up. Thus, only the latter mentioned funds get support for the development.

The next paper author chose for the analysis provided comparison of different venture capital ecosystems with the focus on Serbia. Authors concluded that most countries from Central and Eastern Europe (specifically, Poland, Hungary, Slovakia, Romania, Czech Republic) do not have such a mature ecosystem but they show positive movements. Mentioned above countries have advantages which include auspicious taxation, cheap and at the same time skilled labor and rapidly increasing GDP, comparing to developed countries. Thus, it has a positive impact on the development of funds, however, the speed of such development is pretty low due to the weak ecosystem as a whole. Turning to Serbia specifically, there are no venture funds yet because of inferior socio-economic situation and insufficiently developed market despite the fact that country has good geographical position, agreements on free trade and inexpensive labor. (Ljumovic, Lecovski & Obradovic, 2020)

Paper by Gemzik-Salwach and Perz (2019) provides analysis on Polish sources of financing for startups. From 2015 to 2016 value of investments from funds decreased by almost 20% to €15.1 million and it is still fluctuating in this range. Thus, the funds in general are not developing further. In this case, again, venture capital ecosystem lacks relevant legal regulations and environment that would support newly baked companies.

Qualitative and quantitative research of Saric (2017) provides analysis of venture capital ecosystem in the countries of former Yugoslavia. As a result, it turned out that the ecosystem literally does not exist in Bosnia and Herzegovina, Macedonia, Montenegro and Serbia. Such elements of the venture capital ecosystem like government and companies do not contribute to funds creation. However, there are currently 4 funds in Croatia. During almost two decades and till now the speed of venture fund developing there is really low mainly because of the shallow market. Local entrepreneurs just do not know the investment process, its features and they are not ready to split the ownership of the company. The same reasons of weak ecosystem apply to Slovenia as well, the market is immature. Thus, development of funds is low as well.

Study of Matisone and Lace (2020) analyzes the relationship between structural funds in the EU and development of the venture capital ecosystem from the perspective of fund in Latvia. It points out that it is a huge problem to attract private investors to the venture fund. Another issue is that track records is low in Latvia. The similar issues that have a negative effect on the development of the fund of the previous papers analyzed include weak legislation and need to strengthen business environment.

Last paper analyzed contained information on the Lithuanian ecosystem. Venture capital ecosystem of Lithuania is still developing on early phase but has an increasing potential. Here the same problem as in Croatia and Slovenia may be observed. Most of the companies do not have any experience with venture capital. Entrepreneurs lack knowledge about different investment possibilities, including venture capital. This, in turns, has a direct negative impact on the development of funds. (Lauzikas, Miliute, Bilota & Bielousovaite, 2017)

To conclude, in all ecosystems analyzed the main challange for the development of funds is considered to be government. Weak ecosystem means low level of fund performance and such system definitely does not support funds development. Government is responsible for many factors that have a positive impact on the development including improving economic policy, promoting innovations, setting favorable tax rates etc.

Another important issue that was observed – lack of familiarity with venture capital investments. However, this also can be considered as the government being the element of ecosystem. Government can strengthen judicial and legislation system taking into account venture cycle features and it can promote venture investments on the state level to increase awareness. Russian ecosystem may be served as an example in this case, boosting the development of funds that were creating the demand for innovations on the state level (Trofimova, 2017). Table 2 below concludes the results from the literature review.

Table 2

Studies on the ecosystem relationship with funds

Author(s)	Country & Year	Challenges	Drives
n.a.	Belarus; 2017	Poor judicial system, lack of investor's protection and ineffective innovation structure.	Skilled labor force, low competition among entrepreneurs and direct connection with EAEU and CIS markets.

Trofimova	Russia, 2017	Crisis, sanctions.	Support from government for funds that were creating the demand for innovations on the state level. Partnership and sharing of good deals.
Ljumovic, Lecovski & Obradovic	Hungary, Slovakia, Romania & Czech Republic; 2020	Lack of legislation system.	Auspicious taxation, cheap and skilled labor and rapidly increasing GDP.
Ljumovic, Lecovski & Obradovic	Serbia; 2020	Inferior socio-economic situation and insufficiently developed market.	Geographical position, agreements on free trade and inexpensive labor.
Gemzik-Salwach & Perz; Ljumovic, Lecovski & Obradovic, accordingly	Poland; 2019 & 2020	Lack of relevant legal regulations and environment that would support newly baked companies.	Favorable taxation, cheap and skilled labor.
Saric	Bosnia and Herzegovina, Macedonia, Montenegro & Serbia; 2017	Venture capital ecosystem does not exist in these countries. Such elements of the venture capital ecosystem like government and companies do not contribute to funds creation.	-
Saric	Croatia & Slovenia; 2017	Shallow market, lack of knowledge on the investment process, founders of startups are afraid of losing ownership.	-
Matisone & Lace	Latvia; 2020	Lack of private investors due to the weak legislation system and low track records.	-
Lauzikas, Miliute, Bilota & Bielousovaite	Lithuania; 2017	Lack of knowledge on the investment process.	Partnership and sharing of good deals. Accelerators create new investment possibilities for funds in the long run. Availability of variety of smart money.

Source: compiled by author based on the sources from the research paper

Previous studies do not take into account implication of COVID. Gompers, Gornall, Kaplan & Strebulaev (2020) found that the vast majority of venture capitalists continue activities at their normal investment pace. Thus, author of this thesis is not going to study the development of the fund in the context of COVID specifically.

All in all, there are many challenges and development drivers of venture capital funds. As it was observed, this is especially the case with immature ecosystems. In the next chapter this study will try to find out new patterns that were not revealed yet by analyzing Ukrainian ecosystem and conducting an empirical study.

2. Empirical study of the Ukrainian venture funds' challenges and development drivers

2.1. An analytical overview of the Ukrainian venture capital ecosystem

When considering the development of funds, it is crucial to understand that the external environment, thus, the country where operations of the fund are taking place, has a great impact. The context in which funds have been establishing and developing should be taken into account. Hence, the following part will cover an overview of the Ukrainian venture capital ecosystem.

Real development of the Ukrainian ecosystem as a whole began in the year of 2001 when the parliament of Ukraine (Verkhovna Rada of Ukraine) adopted the Law "About institutes of joint investment (share and corporate investment funds)". The Law introduced the concept of a "venture fund" and defined a legal and organizational basis of it. In the first redaction of this document fund's investors could be legal entities exclusively. (Law of Ukraine from 2001, 2013)

This Law became a basis for the current legislation as well. The latest redaction was held in July of 2020 and it states that now it is possible for the individual to invest own money in the venture fund. However, this investment should be made in the form of purchase of securities of the fund with the nominal value being equal to at least 1500 of minimum monthly wages established by Law on January 1, 2014. This change made it easier for the fund to get financing. (Law of Ukraine from 2013, 2020)

From that time on the ecosystem in Ukraine have been developing. In the year of 2013, only 2% of companies have received investments in the form of venture capital. In the same year first business angels were occurring as well. It is also worth mentioning that the trend of the venture capital ecosystem is positive overall. In 2014 Ukrainian Venture Capital and Private Equity Association (UVCA) was founded with the aim of promoting investments in Ukraine. It represents private equity investors' interests to policymakers. By establishing a relationship between the Ukrainian and global venture capital ecosystems, UVCA promotes the development of the domestic market by increasing the inflow of capital and information. (About, n.d.)

Among other initiatives it is also important to mention Ukrainian Startup Fund (USF). It is the first government fund that was established by the initiative of the Cabinet Ministry of Ukraine in 2018. The fund aims at boosting technology startups in the country by pre-seed and seed investments. USF want to make Ukrainian companies more competitive by improving business development skills of workers. It also positively contributes to the whole ecosystem by increasing awareness about the venture capital investment process. The Foundation also provides opportunities for startups to receive grants for training programs of accelerators in Ukraine and abroad. All startups are chosen by the board of independent investment experts. (USF, n.d)

In order to have a broader understanding of the context in which funds have been establishing and developing, other factors should be taken into account as well. UVCA's reports on the venture capital ecosystem in Ukraine usually include Global Innovation Index and The Ease of Doing Business (Ukrainian Venture Capital and Private Equity Overview, 2020). Thus, in this paper author also included them into the analysis.

Weakest pillars of the Global Innovation Index in Ukraine include institutions, infrastructure, and market sophistication. It is clear from the report that political and business environment as well as investments are not strong enough. It means that market size does not match market dynamism and that political, legal, operational, and security risks have a great impact on business operations. Besides, quality of policy formulation is low, and it is hard to resolve insolvency. These factors have a negative impact on the development of both companies and funds. Figure 2 provides an overview of Ukraine ranking in all pillars of the Global Innovation Index. Thus, the lower number corresponds to the higher position in the ranking. (Barbary et al., 2020)

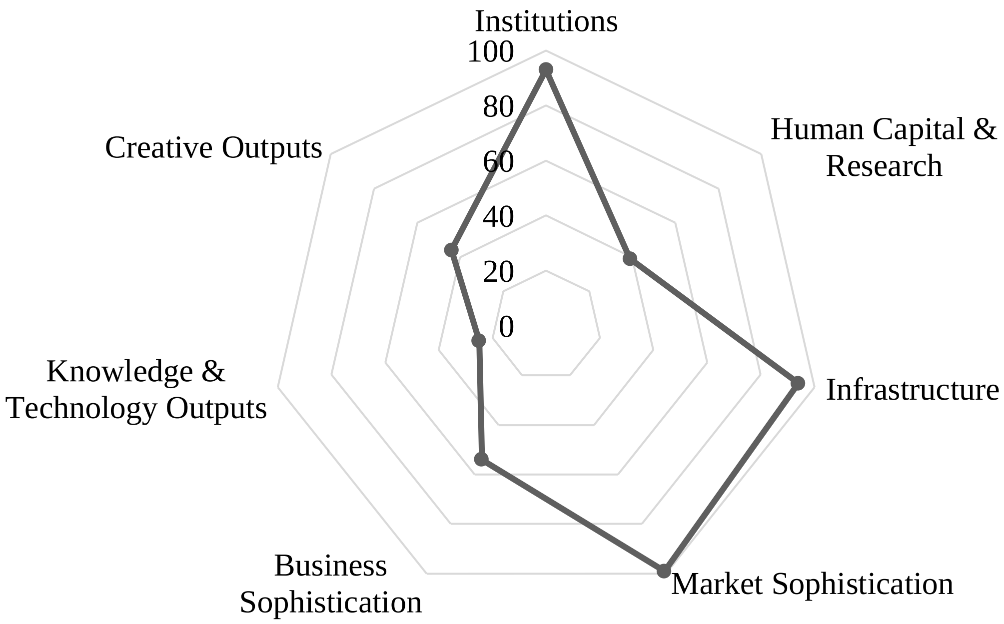

Figure 2. The Global Innovation Index of Ukraine, by pillars

Source: compiled by author based on paper of Barbary et al. (2020)

At the same time Ukraine holds a relatively high rank in other pillars with the top position in knowledge and technology outputs. The report states that there is a high mobile app creation and that there is a high utility models creation. The latter means that many technical inventions were granted rights that restrict the usage of the invention without the previous permission of those, who hold the rights (Richards, 2010). This in turns means that the number of inventions was recently increasing, providing more investment opportunities for funds. (Barbary et al., 2020)

According to the Doing Business (2020), Ukraine has slightly better than average results in most of the aspects such as: starting a business, getting credit, and enforcing contracts. However, it falls behind significantly in resolving insolvency factor. This means that there are many weak points in the implemented bankruptcy law and that there are restrictions in the process of bankruptcy. Therefore, companies that are being in a financial distress will face negative legal actions, such as liquidation of assets. In comparison, similarly low rankings by this factor also have least developed countries such as Burundi and Ethiopia. The full visual representation of ranking in all aspects of the Ease of Doing Business is shown on the Figure 3. The lower number by category is – the higher rank country holds.

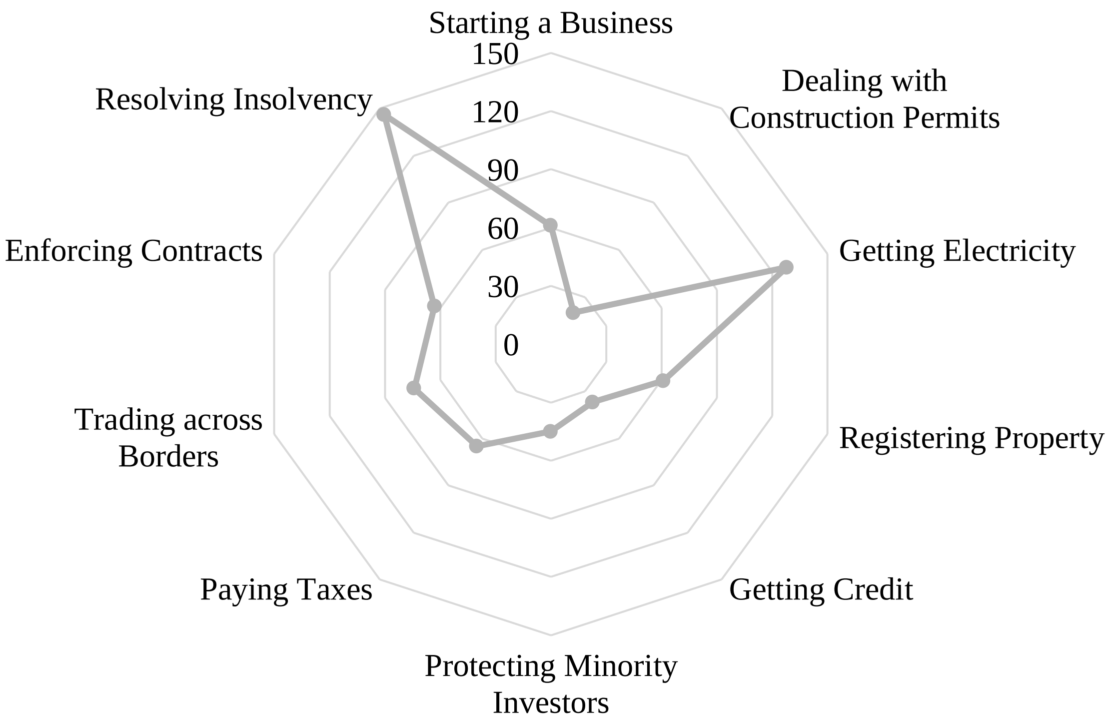

Figure 3. The Ease of Doing Business Index of Ukraine, by categories

Source: compiled by author based on Doing Business (2020)

It also can be seen from the Figure 3 that Ukraine holds a very low position in a getting electricity aspect. It measures how tough it is for a business to get for the constructed warehouse a permanent electricity connection (Getting Electricity, n.d.). However, author does not study the aspect in further details as venture capital funds mostly invest in software companies rather than in hardware ones (Rajan, 2010). Hence, target companies do not require to construct a warehouse and the getting electricity aspect is not considered to be relevant in the context of the thesis.

The biggest issues that have negative impact on the investment climate are as follows (EBA guide to reforms 2030. Doing business in the next decade, 2021):

- high corruption and lack of anti-corruption measures;
- weak judiciary and legislation system;
- bad influence of the shadow economy;
- outflow of labor.

The mentioned above factors definitely affect companies in a negative way. However, it is important to understand that newly baked innovative startups that are seeking for investments in the form of venture capital do not represent all Ukrainian companies.

Moreover, in the context of the thesis, Ukrainian companies are considered to be those that are founded and built by Ukrainians. The same approach is usually applied in other researcher, one of the examples is UVCA's report on Ukrainian Venture Capital and Private Equity Overview (2020). Thus, such companies may follow a different legislation depending on the registration. Consequently, some new and not studied yet patterns could appear with further research.

2.2. Data and methodology

In the following subchapter, author is going to present the method of data collection that was used in order to reach the initial research aim, the way the plan for the interviews was created, the framework to be applied for the acquired data analysis, and the incipient overview of data.

First of all, deductive approach for the research was applied. From the literature review sub-chapter author stated a hypothesis that venture capital funds face challenges that are country specific. Thus, new patterns that have not been explored yet may emerge even though there were observed some common issues in all countries that were studied as well. Elements of the venture capital ecosystem comprise the external environment for the development of the fund.

Secondly, the internal factors should be also taken into account. Hence, the Ukrainian funds that have different investment focus, that are of different size and that are running by different authorities should be studied.

Thirdly, as author is conducting qualitative research that aims to bring an understanding of challenges that funds are facing as well as factor that contribute to their development, non-probability sampling is applied. To be more precise, the purposive sampling form is used meaning that the representatives of funds to be interviewed were chosen strategically. All interviewees have broad enough knowledge and experience in order to be able to provide sufficient inferences. Nevertheless, with such method of data collection it is not possible to make generalizations of a whole population (Bryman, A. & Bell, E., 2011). People that hold positions of managing partners, founders, directors or any other that assumes high level of involvement into the internal processes of the venture fund are most often representatives of the sample (Krasovskaya, 2013). This thesis follows the same logic for choosing interviewees.

Finally, data was gathered via interviews with the representatives of funds. These face-to-face conversations were taking place online due to the quarantine restrictions. Some of the previous research (Krasovskaya, 2013; Saric, 2017; Venture Funding in Belarus, 2017) also applied the same method which proves its validity. The interviewees were given an option to provide answers to questions in a written form as well. However, web-based interviews were chosen by all representatives of funds as it was a more convenient option. Besides, it gave an opportunity to the author to specify unclear answers right away and to ask additional clarifying questions. According to Wilson (2014), such method of data collection allows to research the topic in-depth and to provide more detailed analysis.

In order to create most representative sample, it is important to understand main differences of funds. According to the Christifidis and Debande (2001), there are several main distinctions by which venture funds can be characterized. The first one is about involving funds' activity on different stages of investing. By this factor, funds can be specialized in pre-seed, seed, series A, series B, etc. Funds also may differ by their sectoral and geographical focus. Another important factor takes into account type of venture capital fund and considers who is running the firm. These include:

- private funds established by individuals;
- financial institution's branch;
- company's subsidiary, thus, corporate fund;
- public authority funds.

Additionally to the mentioned above types, Block, Fisch, Vismara & Andres (2019) also identify family offices (funds) as organizations that are investing money of business families. These funds may have various investment focus. However, as some of them share the same investment strategy as venture capitalists, they also should be included in the sample.

There is no official information on the total number of venture funds operating in Ukraine. However, unofficial source (How to attract a venture investor to a startup, 2020) states that in 2019 there were 11 funds that were active during prior 5 years. Thus, author contacted 6 of them that would differ by size. In the period from 2019 till today some new funds were established. In order to get as versatile sample as possible, 4 of newly created funds were contacted as well. Finally, author made sure that list of funds to contact includes those of different types. By this moment there were already corporate and private funds. As in Ukraine there are no national venture capital funds, the only missing type was family funds. Hence, author also contacted two family funds but only one agreed on cooperation due to the high privacy requirements. After forming the list of funds to contact, author checked their official website in order to create a least of workers to be interviewed. As it is described above, people were chosen based on their position in the fund.

During all stages author paid attention to the investment focus of each fund. It turned out that all funds are focusing on IT sector, including digital health, educational technologies, digital banking, and mobile apps with minor differences. Similar pattern was observed with geographical focus. Ukrainian funds are focusing on investments into the Ukrainian startups and those from Russia, Poland, Belarus, Estonia, and Lithuania. There are some exceptional investments in startups from other countries as well, but they are too rare to be taken into account. Thus, the focus of the fund (both sectoral and geographical) was not in priority while contacting representatives. Moreover, all funds are mostly investing on seed stages and rarer on pre-seed and series A. By following these steps author end up with 7 replies from funds and 6 of them agreed on cooperation. Table 3 provides an overview of these proving that funds are of different type, size and that they have different investment experience in terms of successful and failed deals.

Table 3

Overview of funds' specifics

Number	Fund	Type of the fund	When was established	Number of deals	Number of exits	Number of failed startups	Number of employees
1	Genesis Investments	Corporate	2019	15	0	1	15
2	TA Ventures	Private	2010	138	53	4	30
3	A Ventures	Private	2012	13	1	2	3
4	Family fund	Private (family fund)	2019	4	0	0	4
5	QPDigital	Corporate	2020	8	0	0	7
6	Anonymous	Corporate	2017	9	0	2	7

Source: compiled by author

It is worth mentioning that A Ventures fund was established in 2012 with the focus on pre-seed and seed investments. However, in the year of 2018 it narrowed its focus only to service companies because of pool of LPs that were interested in this sector. Currently A Ventures is also focusing on invest banking, however, investments in this case are mostly provided to companies by business angels rather than by fund. Thus, fund is technically only providing consulting services to business angles on where to invest. That is why representative of the fund mostly shared experience connected with previous activities of the fund rather than present ones.

Thus, there were conducted six online interviews with representatives of funds. The following Table 4 provides an overview of the sample.

Table 4

Overview of interviews and interviewees

Number	Fund	Interviewee	Position	Experience (years)	Length (mins)
1	Genesis Investments	Elena Mazhuha	Investment Manager	3.5	71
2	TA Ventures	Elya Checheneva	Investment Manager	2.2	45
3	A Ventures	Bogdan Svyrydov	Director	6	75
4	Family fund	Anonymous	Director	18	64
5	QPDigital	Yurii Sereshchenko	Managing Partner	15	39
6	Anonymous	Anonymous	Founder	9	70

Source: compiled by author

In order to hold interviews, the plan of questions was crafted. It has two core topics: external and internal factors. As it was discussed already, external factors include all elements of the venture capital ecosystem and cooperation with them. Internal factors cover only features that are under control of each fund such as investment focus, amount of financial help and types of non-financial help to be provided. The full list of questions if available in Appendix. Findings from the literature review served the basis for questions creation.

Initial plan of interview questions contained also one asking about the country of registration of the fund. However, because of the confidentiality issues, this information was not disclosed. Thus, the question was eliminated from the interview plan and fund is considered to be Ukrainian if its founders and majority of other workers are Ukrainians.

Each interview started with a short introduction covering questions about the venture capital experience of the representative of the fund. The main part of the interview about the actual development of the fund as a part of the ecosystem is further analyzed in the next subchapter of the thesis. The concluding part was summarizing the whole interview and checking whether there are any missing points.

2.3. Results and discussion

After conducting all interviews, it is possible to analyze findings, see what are common features that create challenges for the development of funds and what are the factors that, vice versa, contribute to the fund as an element of the Ukrainian ecosystem. The Table 5 below provides an overview of challenges that different funds faced in the context of the thesis.

Table 5

Challenges in the development of funds under the study

Number	Fund	Companies	Other funds	Government	Other
1	Genesis Investments	Lack of knowledge on the investment process.	Fight for the bigger share in the deal.	Lack of legislation. Weak judiciary.	Ecosystem is still immature. Lack of integration on the global market.
2	TA Ventures	Increasing number of companies that are competitors to portfolio ones.	Fight for the bigger share in the deal.	Lack of legislation.	Lack of integration on the global market.
3	A Ventures	-	-	Lack of legislation. Absence of financial support.	Lack of financial support from LPs. Restrictions on investments set by LPs. Lack of integration on the global market.
4	Family fund	Companies are afraid of getting investments from family funds. Increasing number of companies that are competitors to portfolio ones.	Companies prefer to get financing from big funds rather than from family funds.	Lack of legislation. Weak judiciary. High level of corruption.	Lack of the access to good deals because of the lack of network within the ecosystem. Lack of smart money.
5	QPDigital	-	-	Lack of legislation. Weak judiciary. Absence of	Ecosystem is still immature. Lack of integration on the global

				financial support.	market. Crowdfunding is not common.
6	Anonymous	Increasing number of companies that are competitors to portfolio ones. Lack of knowledge on the investment process.	Fight for the bigger share in the deal.	Lack of legislation. Absence of financial support. High level of corruption.	Ecosystem is still immature. Lack of integration on the global market. Inability to attract foreign capital to the fund.

Source: compiled by author

It can be seen that all types of funds regardless of their investment focus and size identify challenge of weak legislative system. Half of them also mentioned weak judiciary as an issue that government should work on. It appeared that in Ukraine government also does not provide any financial support to funds. Thus, fund is able to develop only with money of private investors.

All of the respondents also mentioned the need to enter the global market of venture capital. Yurii Sereshchenko points out: “The growth zone of the Ukrainian venture capital ecosystem lies in the international integration”. In this way companies and funds will be able to attract foreign capital and expertise. Thus, funds have to strengthen networks not only within the country but outside the ecosystem as well.

Some of the fund’s representatives mentioned that deals are usually structured abroad. Moreover, few interviewees admitted that all deals were not structured in Ukraine. Because of the confidentiality concerns, it is not possible to specify all jurisdictions, however, several respondents mentioned Cyprus, Israel and Dubai as already applied ones. Besides, Gibraltar and Lichtenstein were referenced as possible countries for structuring deals in the future. If Ukraine provided various investment instruments and Ukrainian Law was precise in terms of structuring deals and well understood by everyone, then the deals would be structured in this country. For example, current Ukrainian Law does not have definition of convertible notes, which is the most common instrument for venture capital financing (Hellmann, 2006).

Half of the interviewees said that in recent years number of startups is rapidly growing and that there are more and more similar ones occurring. Companies are definitely adding new features to their products or services compared to those of competitors. However, as fund already has done some investments, it may happen that one of the competitors is a portfolio company. In this case fund will not invest in new project even if it seems like a good deal in order to avoid competitiveness between portfolio companies.

Two out of six respondents admitted that lack of knowledge on the investment process is a challenge for a fund, meaning that companies do not understand how to behave properly and that their expectations do not meet reality. For example, many founders get confused by investor asking about detailed reports on the activity of the company. Many of them also get upset or angry when getting rejection. Elena Mazhuha specifies: “There are some founders that truly believe that their startup did not get money because investor is bad”. To tackle this issue, it is advised to learn more about the investment process and about the relationship between funds and companies that are looking for venture capital investments beforehand.

Two other representatives of funds interviewed think that there is definitely a phase in the very beginning of a project at which founders lack knowledge on the investment process. However, interviewees do not consider it as a big issue as there is not much to learn and it is easy to overcome this phase. Thus, this factor was not included in the Table 5 for the corresponding funds.

There are no venture capital funds in Ukraine that would operate with national money. All of the funds have been financed by private money from individuals (usually serial entrepreneurs) or by corporate money from companies. All representatives except for the Bogdan Svyrydov from A Ventures did not see any issues with the fund’s financing. Corporate funds and family funds will be established in the first place only if there is enough capital for that already. Logically, they will not experience lack of funding at least during the first investment horizon. As for private funds, it is more difficult for them to get financing indeed. However, TA Ventures did not experience the actual problem of lack of fund’s financing. Besides, Bogdan said that the fund is not actively looking for investments. Hence, author believes that financing issues of A Ventures should be considered as an outlier and that venture capital funds do not have difficulties of financing themselves.

Another distinguish thing about A Ventures is that during its active venture financing stage from 2012 till 2018 fund invested in 13 companies but only 1 exit is made at the current moment. This is because investment horizon was made up to 10 years instead of average of 5. Values of most portfolio companies are increasing, meaning that fund still has good chances of making a profitable exit in the future.

Two funds that were interviewed anonymously admitted that high level of corruption in Ukraine is a significant challenge that funds are facing. Bribery is very common when it comes to any financial activity in the country. Thus, Ukraine definitely has to strengthen existing anticorruption methods and implement new ones.

It was also observed that family fund along with most common challenges like lack of strong legislative system faced other uncommon problems. Such fund has very strict privacy rules and it does not develop a brand. Thus, even if fund already made several of investments, this information would not be publicly available. That is why companies are afraid to get investments from family funds. They usually do not quite understand the origin of such money and they have trust issues. In such a case it is crucial for the family fund to have a good network, so other reliable people could introduce fund to the company and in this way prove its reliability. Otherwise, family funds will have lack of good available deals and will not be able to develop properly.

Additionally, other funds are also creating a highly competitive environment for the family fund. As it was mentioned above, companies are more likely to trust funds that have built their brand already. Besides, venture capital funds usually provide a good expertise in a field and can satisfy a demand for smart money of companies. As it was discussed during the interview, family funds also often cannot provide enough of non-financial help. Hence, this is one of the most important issues that makes company choose regular venture capital fund instead of the family fund as well.

All in all, major challenges faced by family funds may be minimized by building a good network with other funds, companies, and incubators. This will increase the flow of deals and make startups enlarge the trust. Moreover, by expanding the network and partnership with other elements of the ecosystem it is also possible to broaden smart money that is to be available for portfolio companies of the family fund.

One of the respondents stated that if crowdfunding was common, it would boost the venture capital ecosystem. It would mean that people are more opened to invest their money into actual companies rather than into real estate or just putting savings on the bank account. This would probably make it easier for a new fund to get established but as current funds have enough of financing already, it will not have a great impact on them. However, this would increase the number of business angels that invest in startups before venture capitalists do, which is a development driver of funds.

Accelerators and incubators do not create any challenges for funds. Moreover, all respondents agreed that they boost the development of startups from the first stage of idea creation and, thus, provide new investment possibilities for funds in the long run. The same also applies to business angels along with the help for portfolio companies majorly with networking issues. This is why these two aspects of the ecosystem were not included in both Table 5 and Table 6. The latter one presents identified factors that contribute to the development of funds.

Table 6

What are the development drivers of funds under the study?

Number	Fund	Companies	Other funds	Government	Other
1	Genesis Investments	Increased number of investment possibilities via network.	Help for portfolio companies by providing expertise. Sharing of good deals.	Positive movements towards improving legislation.	Good investment possibilities in terms of money. Availability of variety of smart money. Skilled and cheap labor.
2	TA Ventures	Increased number of investment possibilities via network. Help for portfolio companies.	Help for portfolio companies by providing expertise. Sharing of good deals.	Auspicious taxation.	Good investment possibilities in terms of money. Availability of variety of smart money.
3	A Ventures	Increased number of investment possibilities via network.	Sharing of good deals.	-	Availability of variety of smart money.
4	Family fund	Increased number of investment possibilities via network.	Help for portfolio companies by providing expertise. Sharing of good deals.	Positive movements towards improving legislation. Auspicious taxation.	-
5	QPDigital	Increased number of investment possibilities via network. Help for portfolio companies.	Help for portfolio companies by providing expertise. Sharing of good deals.	Positive movements towards improving legislation.	Good investment possibilities in terms of money. Availability of variety of smart money.
6	Anonymous	Increased number of investment	Sharing of good deals.	Positive movements towards	Skilled and cheap labor. Availability

	possibilities via network.	improving legislation. Auspicious taxation.	of variety of smart money.

Source: compiled by author

All respondents agreed that network is one the most importance when it comes to the fund’s development. This factor can be observed within different categories. Thus, it was not indicated in the Table 6 separately. As it turned out, it is necessary for the fund to keep network and to create partnerships with all elements of the ecosystem.

Talking about companies, good network with external entities provides new investment possibilities for the fund. In some cases, it also helps portfolio companies by sharing expertise. The same also applies to other ventures capitalists. If fund was able to set a good relationship with them, they will share good deals. Moreover, it is also important for funds to stay connected because in one round several investors usually take part. Thus, fund will be able to close the deal sooner if it would not waste time on establishing communication or finding potential investors.

As Ukrainian funds are usually established by successful entrepreneurs or companies, they majorly do not experience funding difficulties. In this way they have a lot of investments possibilities in terms of money. After conducting interviews, venture supply higher than demand is observed. Funds have money that they are willing to invest but there are not enough of good deals available. This issue is not considered as lack of startups overall or low level of innovativeness. This challenge should be addressed as lack of network. There are many potentially good investment possibilities but they are usually taken by the biggest funds that have established a brand already.

Representatives also agreed that venture capital fund should provide not only financial but non-financial help as well. Thus, the better expertise in the field fund has, the better it is for its development. As it was mentioned already, as funds in Ukraine are founded by successful entrepreneurs, they usually have solid network and expertise which they are willing to provide to portfolio companies. The exception here is made by family funds that are financed by entrepreneurs but that are not actually running by them.

All interviewees also agreed that COVID did not cause any real challenges for the development of the fund. During 2020 funds did not fire any workers and continued to perform investment activity. Moreover, the number of potential investment deals in the second half of 2020 only increased.

After the analysis of interviews, it is also important to synthesis actual findings with the literature review. As a result, it is possible to observe that theoretical part provided a core understanding of challenges that funds in ecosystems similar to Ukrainian one are facing. However, after the empirical study new key points appeared and some factors revealed in other ecosystems were not observed in Ukraine. For example, one of the biggest challenges in Latvia is lack of private investors which is not the case in Ukraine. Table 7 below provides a corresponding overview.

Table 7

Synthesized results of literature review and author's findings

Categories	Challenges	Drivers
Companies	Lack of knowledge on the investment process. **Increasing number of companies that are competitors to portfolio ones.**	Increased number of investment possibilities via network. **Help for portfolio companies.**
Business angels	-	**Increased number of investment possibilities. Help for portfolio companies.**
Accelerators and incubators	-	Create new investment possibilities for funds in the long run.
Other funds	**Fight for the bigger share in the deal.**	Partnership and sharing of good deals. **Help for portfolio companies by providing expertise.**
Government	Poor judicial and legislation systems. **Hight level of corruption. Absence of financial support.**	Auspicious taxation. **Positive movements towards improving legislation.**
Other	Ecosystem is still immature. **Lack of network within the ecosystem. Lack of integration on the global market.**	Skilled and cheap labor. Availability of variety of smart money. **Good investment possibilities in terms of money.**

Notes. All observed patterns from literature review were also found while conducting empirical study. Newly revealed patterns are marked in bold.

Source: compiled by author

As it turned out, government plays an important role in the development of the fund indeed. Current legislation and judicial systems in Ukraine are still weak. The venture capital ecosystem is considered to be immature. However, most of the fund's representatives admitted that there are already positive movements towards improving legislation which will make investment process in Ukraine easier. What is more, half of the respondents mentioned that auspicious taxation set in Ukraine has a positive contribution to the development of fund.

To summarize, Ukrainian funds are deliberately developing from the year of 2001. They are still facing a lot of challenges because of immature ecosystem. However, there are also many development drivers of venture funds. Author of the paper believes that revealed patterns are country-specific and that these can vary depending on the ecosystem. Moreover, the findings give an overview of the Ukrainian venture capital ecosystem only from the perspective of funds, while analyzing its other components separately would provide a broader look.

Conclusion

For almost half a century, one of the major sources of the economic growth and job creation is big and successful companies that previously had received investments in the form of venture capital. Thus, it is crucial to support developing of the venture capital ecosystem to boost economy development. Ultimately, fund as the supplier of investments has a great importance for the whole ecosystem.

As for the Ukrainian venture capital ecosystem, it began its development in the year of 2001, when the term “venture fund” was introduced be Law for the first time. Since then, the Law had several redactions which made it easier for the fund to develop. This bachelor thesis endeavors to study main challenges and development drivers of Ukrainian funds as an element of the ecosystem.

While the conclusions of existing literature about venture capital ecosystems consider the perspective of fund, none of the studies conducted solid detailed face-to-face interviews, thus relying solemnly on quantitative statistical data. Development drivers of funds and challenges that they are facing as an element of ecosystem had never been investigated. Thus, in an attempt to fill the research gap, the detailed interview plan covering questions about all elements of the ecosystem, as well as the specifics of a single fund was created.

Findings of the theoretical part show that there are challenges and development drivers of funds largely caused by government. Hence, under different ecosystems (governments) venture capital funds will be developing differently. Theoretical insights also served a basis for a questionnaire development as they showed major weaknesses and strengths of ecosystems that are similar to Ukrainian one.

In the empirical part of the paper author has introduced the sample of six interviews. It included representatives of funds that had been holding positions of managing partners, director, founder, and investment managers that are responsible for major operational activities. Prior to sample, author also has presented an analytical overview of the Ukrainian venture capital ecosystem that gave an understanding of the context in which funds are operating. From the conducted interviews author has presented thematic analysis through coding.

From following empirical analysis of challenges and development drivers of the venture capital fund as an element of the venture capital ecosystem on the example of Ukraine author was able to obtain significant insights that are unique in this exact context.

Research revealed that government plays crucial role in the development of the fund. Main challenges for funds in Ukraine include weak legislation and judicial systems.

Additionally, it is also very important for the fund to have a good network and to establish partnerships with other elements of the ecosystem and abroad.

As one of proposals for future research for the topic, author suggests conduction of in-depth analysis of the development of the fund from the perspective of government, taking into account the specifics of legislative and juridical systems. The geographical region of the research can be expanded as well as the number of respondents. Besides, it is recommended to study the development of the venture capital fund under the influence of COVID in details.

At last, author found that next research focusing on the venture capital ecosystem as a whole can be improved. Author believes that they shall analyze all elements of the ecosystem separately, including one of the most importance – government.

List of references

1. About (n.d.). Retrieved from: http://uvca.eu/en/about

2. Barbary, V., Bayona, P., Bergquist, K., Hendi, T. B., Andrade, R. B., Chattopadhyay, D., & Cornelius, P. (2020). The Global Innovation Index 2020: Who Will Finance Innovation? Cornell University, INSEAD, and WIPO. Retrieved from: https://www.globalinnovationindex.org/gii-2020-report#

3. Block, J., Fisch, C., Vismara, S. & Andres, R. (2019) Private equity investment criteria: An experimental conjoint analysis of venture capital, business angels, and family offices. *Journal of Corporate Finance 58*, 329-352.

4. Bone, J., Gonzalez-Uribe, J. Haley, C., & Lahr, H. (2019). The Impact of Business Accelerators and Incubators in the UK. *Department for Business, Energy & Industrial Strategy. BEIS Research Paper Number 2019/009.*

5. Briel, F., Recker, J., & Davidsson, P. (2018). Not all digital venture ideas are created equal: Implications for venture creation processes. *Journal of Strategic Information Systems. 27*(4), 278-295.

6. Bruton, G. D., Fried, V. H., & Manigart, S. (2005). Institutional influences on the worldwide expansion of venture capital. *Entrepreneurship Theory and Practice 29*(6), 737–760.

7. Bryman, A. & Bell, E. (2011). Business Research Methods (3rd ed.). *Oxford University Press.*

8. Burton, J. & Scherschmidt, R. (2004). First-Time Venture Fund Raising. *The Journal of Private Equity Winter, 8*(1), 9-21.

9. Christofidis, C., & Debande, O. (2001). Financing Innovative Firms Through Venture Capital. *European Investment Bank. EIB Sector Papers.*

10. Cochrane, J., H. (2005). The risk and return of venture capital. *Journal of Financial Economics, 75*(1), 3-52.

11. DiGiorgio, C., & Harris, J. G. (2013). If Venture Capital Falters, Will Job Creation Fade? *Accenture Institute for High Performance.*

12. Doing Business. Ukraine (2020). Retrieved from: https://www.doingbusiness.org/en/data/exploreeconomies/ukraine - DB_sb

13. EBA guide to reforms 2030. Doing business in the next decade (2021). Retrieved from: https://eba.com.ua/wp-content/uploads/2021/02/EBA-Strategy2030.pdf

14. Elango, B., Fried, V. H., Hisrich, R. D. & Polonchek, A. (1995). How venture capital firms differ. *Journal of Business Venturing, 10*(2), 157-179.

15. Gemzik-Salwach, A. & Perz, P. (2019). Startups Financing in Poland. *Humanities and Social Sciences. Research Journal 26*, 29-38.

16. Getting Electricity (n.d.) Retrieved from: https://www.doingbusiness.org/en/data/exploretopics/getting-electricity/what-measured

17. Gompers, P., Gornall, W., Kaplan, S. N. & Strebulaev, I. A. (2020). Venture capitalists and COVID-19. *National Bureau of Economic Research.*

18. Gompers, P. A., & Lerner, J. (2001). The Venture Capital Revolution. *Journal of Economic Perspectives, 15*(2), 145-68.

19. Hellmann, T. (2006). IPOs, acquisitions, and the use of convertible securities in venture capital. *Journal of Financial Economics. 81*(3), 649-697.

20. How to attract a venture investor to a startup (2020). *InVenture.* Retrieved from: https://inventure.com.ua/analytics/articles/raundy-investicij-v-venchurnom-biznes:-kto-i-kak-ih-privlekaet

21. Ibrahim, D., M. (2012). The New Exit in Venture Capital. *Vanderbilt Law Review. 65*(1).

22. Keunschnigg, C., & Nielsen, S. B. (2003). Tax policy, venture capital, and entrepreneurship. *Journal of Public Economics, 87*(1), 175-203.

23. Kortum, S., & Lerner, J. (2000). Assessing the Impact of Venture Capital to Innovation. *RAND Journal of Economics, 31*(4), 674–692.

24. Krasovskaya, O. V. (2013). Венчурное финансирование: мировые тенденции и ситуация в Украине [Venture financing: global trends and the situation in Ukraine]. *National Academy of Sciences of Ukraine.*

25. Kuckertz, A., Kollmann, T., Röhm, P. & Middelberg, N. (2015) The interplay of track record and trustworthiness in venture capital fundraising. *Journal of Business Venturing Insights, 4*, 6-13.

26. Matisone, A., & Lace, N. (2020). The Impact of Public Interventions on Self-Sustainable Venture Capital Market Development in Latvia from the Perspective of VC Fund Managers. *Journal of Open Innovation: Technology, Market, and Complexity. 6*(3), 53.

27. Mazur I., & Zyanko V. (2013). Venture Capital and its Features in Ukraine. *Journal of Financial Management and Accounting, 1*(2), 5-14.

28. Megginson, W. L. (2001). Towards a global model of venture capital. *Journal of Applied Corporate Finance, 16*(1).

29. Mishkin, F. S., & Eakins, S. G. (2012). Investment Banks, Security Brokers and Dealers, and Venture Capital Firms. *Financial Markets & Institutions. Seventh edition, 22,* 558-559.
30. Law of Ukraine from 2001, (2013). Retrieved from: https://zakon.rada.gov.ua/laws/show/2299-14#Text
31. Law of Ukraine from 2013, (2020). Retrieved from: https://zakon.rada.gov.ua/laws/show/5080-17#Text
32. Lerner, J., Leamon, A., & Garcia-Robles, S. (n.d.). Best Practices in Creating a Venture Capital Ecosystem. *Multilateral Investment Fund. Member of the IDB Group.*
33. Lauzikas, M., Miliute, A., Bilota, A., & Bielousovaite, D. (2017). Main Development Drivers of Start-up Companies within Start-up Ecosystems: The Case of Lithuania. *Sumy State University. Marketing and Innovation Management,* 316-328.
34. Ljumovic, I., Lecovski, I. & Obradovic, V. (2020). What Drives Private Equity and Venture Capital in Central and Eastern Europe Countries: Focus on Serbia. *Economic Analysis, 53*(1), 133-148.
35. Park, S., & LiPuma, J. A. (2020). New venture internationalization: The role of venture capital types and reputation. *Journal of World Business, 55*(1).
36. Plage, A. (2006). Public Policy for Venture Capital: A Comparison of the United States and Germany. *Deutscher Universitats-Verlag.*
37. Rajan, A. T. (2010). Venture capital and efficiency of portfolio companies. *IIMB Management Review, 22*(4), 186-197.
38. Richards, J. (2010). Utility model protection throughout the world. *Ladas & Parry LLP*
39. Saric, M. S., (2017). Does a Venture Capital Market Exist in the Countries of Former Yugoslavia? *EBEEC. Conference Proceedings, The Economies of Balkan and Eastern Europe Countries in the Changed World, KnE Social Sciences,* 197–210.
40. Snieska, V., & Venckuviene, V. (2011). The Role of Government in Venture Capital Market: Lithuanian Case. *Kaunas University of Technology. Ekonomika ir vadyba,* 345-351.
41. Teker, S., & Teker, D. (2016). Venture Capital and Business Angels: Turkish Case. *Procedia – Social and Behavioral Sciences,* 630-637.
42. Teker, D., & Teraman, O. (2016). Venture Capital Markets: A Cross Country Analysis. *Procedia Economics and Finance,* 213-218.
43. Ueda, M., & Hirukawa, M. (2008). Venture Capital and Industrial "Innovation". *CEPR Discussion Papers, 7089.*

44. Ukrainian Venture Capital and Private Equity Overview (2020). *UVCA.* Retrieved from: http://uvca.eu/uploads/uvca-market-research.pdf

45. USF (n.d.). Retrieved from: https://usf.com.ua/#usf-sc-1

46. Venture Funding in Belarus (2017). Retrieved from: https://bel.biz/wp-content/uploads/2018/04/AidVentureEN_2.pdf

47. Wilson, C. (2014). Interview Techniques for UX Practitioners. USA, Waltham: Morgan Kaufmann

Appendix

Interview questions

Thematic block	Interview question	Theoretical ground
1. Introduction	1.1. What position do you hold in the fund? For how long?	Compiled by author
	1.2. Did you have previous experience in VC before working in the fund? If yes, then which exactly?	Compiled by author
	1.3. What are your main responsibilities at the fund? Do you think that you are responsible only for a small part of all fund's activities?	Compiled by author
2. Internal factors	2.1. When was the fund established? What are the sectors and countries fund is investing in? In which rounds do the fund participate? What kind of support apart from the financial one fund provide?	Compiled by author
	2.2. What is the type of the fund (private, corporate etc.)? How does the fund get financing? What impact does the source of financing have on the fund?	Krasovskaya (2013)
	2.3. How would you describe the effectiveness of the fund? Do you think that your fund is developing good?	Compiled by author
	2.4. What do you consider as a bigger issue for the fund: lack of good deals or lack of internal resources? How do you think it is possible to tackle this issue?	Plage (2006)
	2.5. How many deals did the fund close? How many deals do you usually make a year? How much money are you willing to invest in a year?	Compiled by author
	2.6. What instruments do you use for investing?	Compiled by author
	2.7. Did any of the portfolio startups fail? If yes, what is the share of them in the portfolio?	Saric (2017)
	2.8. Did fund make any exits? If yes, how many? For how long fund is able to survive without exits?	Saric (2017)
	2.9. Do you invest in Ukrainian startups? If yes, what is the share of Ukrainian startups in the portfolio? Did you invest in startups that graduated from Ukrainian accelerators or incubators?	Compiled by author
3. External factors	3.1. Describe the relationship between fund and accelerators/incubators.	Compiled by author
	3.2. Do you cooperate with business angels or other funds? Why?	Compiled by author
	3.3. Do you use foreign law when structuring venture deals? Specify jurisdiction, if possible.	Krasovskaya (2013); Venture Funding in Belarus (2017)

	3.4. If there had been an opportunity to follow deals through relying on Ukrainian law (from the investment protection standpoint), would you have been doing them under Ukrainian legislation?	Krasovskaya (2013); Venture Funding in Belarus (2017)
	3.5. How would you describe investment climate in Ukraine? Do you think there are positive movements in the development of VC ecosystem?	Saric (2017); Venture Funding in Belarus (2017)
	3.6. How can you describe the attitude you have towards development of the fund in Ukraine and towards investing in Ukrainian startups?	Saric (2017); Krasovskaya (2013)
	3.7. What do you consider as a major source of the good development of the Ukrainian fund?	Compiled by author
	3.8. What do you consider as the biggest obstacle for the development of the Ukrainian fund?	Compiled by author
	3.9. How government is able to boost support of the fund's development in Ukraine (both financial and non-financial help)?	Saric (2017); Venture Funding in Belarus (2017)
	3.10. Do you consider it a problem for the development of the fund that startups do not want to get venture capital investments because they don't want to lose control over own company?	Saric (2017)
	3.11. Do you consider it a problem that startups do not get venture capital investments because they lack knowledge on the investment process? Is it common?	Venture Funding in Belarus (2017)
	3.12. Did COVID bring up any challenges for the development of the fund?	Compiled by author
4. Conclusion	4.1. Do you believe that it is important to study challenges and development drivers of the fund as a part of venture capital ecosystem?	Compiled by author
	4.2. Do you think there are any distinct aspects between ecosystems that create different difficulties for the development of the fund?	Compiled by author

Source: compiled by author based on the paper Venture Funding in Belarus (2017), paper of Plage (2006), research of Saric (2017) and research of Krasovskaya (2013)

Kokkuvõte

RISKIFOND KUI ELEMENT ÖKOSÜSTEEMIS: VÄLJAKUTSED JA ARENGU AJENDID UKRAINAS

Pea poole sajandi vältel, majanduskasvu peamiseks allikaks on olnud suured ja edukad ettevõtted. Suur osa nendest ettevõttetest on saanud rahastuse läbi riskikapitali. Tagamaks majanduskasv, on oluline arendada riskikapitali ökosüsteemi. Investeeringu allikaks on riskifond, mis täidab olulist osa kogu ökosüsteemis. Uurimistöö eesmärgiks on uurida riskifondide väljakutseid ja arengu ajendeid Ukrainas.

Töös on avatud riskikapitali mõiste, riskikapitali elemendid ning seletatud selle põhimõtted. Riskikapitali ökosüsteemi elementideks on ettevõtted, äriinglid, fondid, riik, kiirendid ja inkubaatorid. On teostatud eelnevate empiiriliste uurismistööde analüüs. On välja toodud peamised väljakutsed ja arengu ajendid sarnastes ökosüsteemides. Nõrk kohtusüsteem, seadusraamistik ning nõrgad teadmised investeerimise valdkonnas on olnud peamised väljakutsed fondide arengus. Samal ajal, kiirendid, inkubaatorid, kvalifitseeritud tööjõud, soosiv maksusüsteem ja riiklikud toetused on peamised arengu ajendid. Töös antakse analüütiline ülevaade Ukraina riskikapitali ökosüsteemist, et tekiks arusaam millises kontekstis fondid tegutsevad. Töös analüüsitakse „The Global Innovation“ Index ja „The Ease of Doing Business Index“ riskikapitali fondide arengu vaatevinklist.

Saavutamaks, uurimuse eesmärki, kasutab autor kvalitatiivset metoodikat. Autor teostas 6 näost-näkku intervjuud Ukraina riskikapitali fondijuhtidega. Intervjueeritavad on ajajooksul töötanud partnerite, juhtide, asutajate ja investeerimisjuhtidena, olles vastutavad põhitegevuste eest. Intervjuu küsimused olid koostatud põhinedes eelnevatele empiirilistele uurimistöödele. Intervjuu vastustest koostas autor temaatilise anlüüsi kasutades kodeerimist. Tulemused ei ole vastuolus läbitöötatud kirjandusest saadud infoga. Riigi toetus ja integreerimine globaalsesse turgu on äärmiselt oluline.

Kokkuvõttes, töö panustas juba olemasolevasse riskikapitaliteemalisse kirjandusse ja riskikapitali fondide arengusse. Uurimistöö kontekstis on saadud olulised teadmised valdkonna kohta. Üks ettepanek tulevaseks uurimistööks oleks süvaanalüüs riskikapitali fondi arengu kohta riigi vaatevinklist, võttes arvesse spetsiifilist kohtusüsteemi ja seadusraamistikku. Uurida võiks ka teisi riike ja suurendada intervjuueritavate arvu.

Märksõnad: riskikapital, riskikapitali fond, fondi arendamine, rahastamine, fondide väljakutsed

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VENTURE FUNDS AS AN ELEMENT OF THE ECOSYSTEM: CHALLENGES AND DEVELOPMENT DRIVERS IN THE CONTEXT OF UKRAINE,

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13/05/2021