Emerging VC Markets

Exploring Determinants of Venture Capital Internationalisation in the Polish Funding Ecosystem for Start-ups and Technology Ventures

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EXPLORING DETERMINANTS OF VENTURE CAPITAL INTERNATIONALISATION IN THE POLISH FUNDING ECOSYSTEM FOR START-UPS AND TECHNOLOGY VENTURES

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Executive Summary

Technological ventures often struggle to survive in fast-growing innovation ecosystems, as developing market-ready innovations can be challenging. Despite this, such innovations are crucial for addressing societal issues and boosting the economy by creating jobs. External funding, particularly from venture capitalists, plays a vital role in alleviating these struggles by providing smart capital, which includes financing and managerial support. However, in emerging economies like Poland, the innovation ecosystem faces additional challenges. A preliminary study of Poland's ecosystem highlights key issues including a lack of growth capital, diminishing VC activity, an overcrowding of the market with public funds following their depletion, and a low presence of foreign capital.

This research investigates the topic of VC internationalisation in the Polish context, particularly that of foreign VC activity in the Polish innovation ecosystem. A case study of the Polish ecosystem was performed using the insights from 11 industry participants, who administered the Polish context to the determinants found in the literature and reassessed their relative significance in attracting foreign VC firms. We find the presence of a talented workforce in the domestic market to be most often considered by foreign VC investors and are much closer to the individual deal perception, along with normative institutions. Industry norms, on the other hand, needed to be distinguished between start-up norms and VC norms, due to their distinct and varying significant effects on the determinants. Regulatory institutions were found to consistently negatively impact different areas of the ecosystem's functioning. Cultural norms, macroeconomic indicators and physical distance, although of lesser significance still have been found to affect the investors, either more indirectly or at different stages of internationalisation whatsoever. Lastly, economic integration which was found to aid start-ups in achieving economies of scale, pointed to the missing links in our understanding of the phenomenon.

Through further qualitative interview analysis, we extract patterns and themes related to all of the determinants and structure them into a causal map, allowing for a comprehensive overview of the Polish innovation ecosystem. The mapping of the determinants within different depths of the innovation ecosystem allows for the identification of weaknesses, their causes and consequences on the start-up performance and professionalism, deemed to be the direct determinants of the inflow of VC. The missing links included an entrepreneurial mindset, which ultimately hampers the functioning of individual start-ups, and VC ecosystem maturity, which is often observed by foreign investors and is a successful deterrent of foreign interest.

To further strengthen the theoretical understanding of emergent VC markets we outline testable propositions, which highlight the key findings of the case study. We point to the significance of specific entrepreneurial skills essential to attracting foreign investments, how the ecosystem's maturity is perceived, the role of the VC firms in such ecosystems and the importance of strategic governance over the ecosystem. We make them actionable by outlining the agents that govern them and the necessary steps to practically improve the ecosystem.

The implemented research methodology is not without its limitations, however, as the academic studies of emergent VC markets, uniquely that of Central Eastern Europe, are still scarce, calling for the use of a qualitative framework to strengthen the theoretical understanding. In such instances, the report acts as a faithful and transparent prescription of the steps taken in the case, allowing the readers to apply their own standards to the approach, the data and the interpretations and conclusions made by the researcher.

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Introduction

1.1. Theoretical background

Start-ups serve as a backbone for technological progress, driving innovation in the direction that not only improves our daily lives but also solves the problems of dimensions greater than ourselves. They revolutionise industries, create employment opportunities and contribute to economic growth, however, since they attempt to introduce radical innovations to the market, they are often burdened with obstacles. Unlike other small and medium-sized enterprises (SMEs), their innovations can face difficulties penetrating the market, and without the necessary capital to run the business and develop technology, start-ups are facing a major problem. This unsustainable condition can often lead them to fail before reaching the necessary scale.

Venture capital (VC) funding, which is the domain of this thesis, is one of the sources of external funding for technological ventures. Initially, VC firms raise funds from different sources like government, banks, family offices, high net-worth individuals (HNWI), university endowments, pension funds or insurance companies. Such entities are called limited partners (LP), as they raise funds which are bestowed upon VC firm managers to be distributed in a portfolio of start-ups, which in this scale are commonly called portfolio companies (PCs). On a deal scale, however, venture capitalists provide the necessary financial backing to start-ups in different stages of their growth. In the case of seed and early-stage ventures, the capital is of great significance as it can help achieve market diffusion and adaptation. Growth stage ventures on the other hand can utilise the capital to establish economies of scale by penetrating new markets. In return for the financing, venture capitalists hold an equity stake in the start-up, making their returns grow over the investment horizon, and which will be realised once the VC firm exits the company.

VC is different from the other investment, due to risk-return trade-off being much more pronounced. On the one hand, technological start-ups are not guaranteed to survive in the competitive innovation ecosystems, requiring the investors to have greater risk tolerance. On the other hand, the most successful start-ups can display abnormal growth (unicorns), as seen in cases of high-profile companies listed on public markets, ensuring above-average returns for their investors.

Venture capital is not the only type of financing, however. The demand for high-risk capital can be met by other investors, institutional (government programmes, public grants, university grants) and private (business angels, private equity (PE)), as well as close friends and family (bootstrapping) or even community (crowdfunding). What makes VC firms a distinct form of financing is the variety of start-ups they can financially back and the added value they provide in the process. Experienced VC managers can leverage their invaluable knowledge and experience in terms of managing technology ventures, the know-how of penetrating the markets, hands-on supervision on the board of directors, or access to the considerable network they have established, all to help their portfolios excel in the competitive landscape. When it comes to VC firm's investment scope, depending on their strategy and size, VC firms can be more generalist, focusing on good business models, teams and ideas, or more specialist, investing in particular industry sectors and technologies, products or services. Typically, VC firms also invest in particular geographical scopes, due to their familiarity with the region, where network effects can be leveraged. However, the literature observed the tendency of VC firms to occasionally cross regional boundaries, effectively widening said investment scope. This decision to internationalise (Devigne et al., 2018) bears additional risks, as barriers to entering other favourable regions can pose difficulties to VC managers. VC internationalisation is the overarching topic in this thesis.

VC fund managers that internationalise have to consider different risks associated with heterogeneity of other VC markets. Information asymmetries which are already significant in cases of private investing, can be even more pronounced in markets that are not familiar with VC practices or have underdeveloped regulatory institutions. Costs required to properly investigate the new market, build a network and operate within it, can be substantial and have to be weighed against the potential returns the region might bring to the portfolio. The complexity of this decision is dictated by the determinants of VC internationalisation.

This thesis synthesises knowledge on two particular streams of venture capital literature, namely cross-border VC investments and emerging VC markets. An in-depth study of the Polish VC ecosystem case has been performed using European policy analysis, regional CEE analysis and interviews with Polish VC industry practitioners. This provided help in outlining the full context of the ecosystem and developing a theoretical understanding of the determinants of foreign VC inflow into emerging VC markets. The resulting operational framework allows for the analysis of the dynamic nature of emergent VC markets and what moderates inward VC flow, which can serve a purpose for policymakers.

1.2. PRACTICAL PROBLEM

To fully define the practical problem, the issue has been divided into two segments. The industry problems describe the current state of the Polish VC market revealed upon examination of current industry reports. Through analysis of data and trends, fundamental problems have been identified. The academic problem refers to the current methods and challenges in VC research.

1.2.1. INDUSTRY PROBLEM

The case study's unit of observation is the Polish VC ecosystem which encapsulates two sides, the start-up side (the demand) and the VC side (the supply) of the ecosystem. The Polish VC ecosystem, understood as the one within the bounds of the Polish institutional framework and geographical bounds, is considered an emergent one for several reasons. Firstly, its lifespan is significantly shorter than that of the most developed VC markets. This could be traced back to the relatively recent creation of the capital market in Poland (1989), followed by the instability in the political atmosphere ever since, which largely affected the direction of innovation in the country. Secondly, not until 2019 did the Polish VC ecosystem observe a significant rise in the number of transactions and value of transactions (Kuchar, 2024). For the first time, market activity was induced in the ecosystem, outgrowing all the previous years combined. Thirdly, Polish VC funds are still highly dependent on the public fund of funds - the Polish Development Fund (PFR - Polski Fundusz Rozwoju), as the primary LP. Venture capital fundraising in Poland is a difficult task, which, unlike other markets, gathers fewer potential investors who are tolerant of this sort of risk. Without public financing, however, the aforementioned rise in activity would not have been possible, as PFR supported 73 VC firms, holding in its portfolio over 650 PCs (Polski Fundusz Rozwoju, 2024).

The practical problem that the Polish VC market experiences can be broken down into the following fundamental problems:

A **The lack of growth capital in Poland**. The venture capital ecosystem in Poland comprises mostly nano- and micro-VC funds (Dziewit et al., 2021), that only focus on pre-seed, seed and early-stage companies. Larger fundraising is generally harder to execute in Poland, primarily due to the lack of private capital on the market. Technology is not a common form of investment, bearing additional uncertainties as the market is still in its infancy. The most successful start-ups are more likely to acquire financing, leaving a vacuum for growth-stage start-ups with reduced performance, leading to a situation where the portfolios have to rely on their VC firm managers to secure follow-on rounds.

B **Diminishing growth in activity on the market**. After the initial spike in the activity on the market, the year-on-year growth has been diminishing (Kuchar, 2024) which prompts the question of the sustainable path for the VC ecosystem. This is alarming as the stagnancy can be caused by many factors, such as the diminishing entrepreneurial spirit, resulting in fewer founders pursuing their ideas to form start-ups, or the lack of a competitive market, which denies the ability of the start-ups to transform markets. Ultimately, the stagnant VC ecosystem will fail to drive economic growth or create job opportunities.

C **Overcrowding of public funds followed by their exhaustion**. The dependency on public institutional investors has proven to be a complex issue. On the one hand, PFR issues public programmes which induce fundraising and even VC firm creation. Private investors are incentivised to become LPs as the fund is granted more legitimacy. This effectively allows for large amounts of public funds to be distributed strategically through intermediaries, which are industry professionals with greater knowledge and skin in the game. On the other hand, public funding imposes restrictive investment mandates, meaning guidelines on VC firm managers that limit the investment scope and size of the ticket (also having potential significance in Problem A). Moreover, as PFR is also dependent on EU funding, a transition between European budgetary periods can cause a major disruption on the ecosystem level, as the cessation of the availability of funds for longer periods can prevent the development of ideas and businesses.

D **Low presence of foreign capital**. The interest of foreign investors in Poland has been limited (Kuchar, 2024), resulting in single cases of investment in the most prominent start-ups. The low presence of foreign capital can be an indicator of limited access to global markets or disconnection from the best practices. Additionally, the lack of foreign capital can equate to a heightened dependency on domestic fundraising options, hence vulnerability to ecosystem disruptions. Conversely, the sustained presence of foreign VC flow is suspected to be necessary to overcome the industry problems A, B and C.

1.2.2. ACADEMIC PROBLEM

Countries of the Central and Eastern European (CEE) region have not been given sufficient attention in academic literature, despite their interesting characteristics. VC ecosystems in CEE display features of emergent ecosystems, characterised by institutional heterogeneity and various governing bodies. On top of that, the influence of the EU as the higher institutional body cannot be neglected, as it sets direction for the innovation through numerous policies, initiatives and programmes. On top of that, there is evidence of recent developments in those regions, with new start-ups gaining worldwide recognition and drawing attention to their ecosystems. This creates a series of unique cases, each worth investigating as the local relevance in the rapidly expanding markets.

The academic problem refers to insufficient study methods available in the literature. Common in academic studies are quantitative analyses that test for correlation of certain determinants suggested by theory, which has several weaknesses when the scope revolves around emergent markets. First and foremost, the available databases only give insight into successful deals, meaning the ones where negotiations resulted in the financing of a PC. In emerging regions, where deal activity is low, the data might be too scattered to provide conclusive results. Additionally, in the face of relevant problems, the data on unsuccessful deals might be arguably more interesting, as it can reveal the weaknesses in the ecosystem. By relying solely on data without context, certain critical decision-making processes might be omitted. As opposed to asking *What determines deals being signed?*, the approach proposed in this thesis investigates *What prevents the deals from being signed?*, and encapsulates it in the unique context of Poland as an emergent VC market. Lastly, the gap between the ecosystem and academia remains wide, often analysing historical data without focusing on the voices of the industry practitioners. As industry problems are relevant today, the historical data, dating a very short period, is merely a suggestion of what the solution could be.

1.3. RESEARCH QUESTIONS

The objective of the research is to *combine two research streams of VC internationalisation and emergent VC markets to investigate the determinants that moderate the inflow of VC into Poland.* A clear set of research questions has been delineated to support the exploratory nature of this process.

> ***RQ1: What are the determinants that moderate VC inflow into the Polish VC market?***

In our inquiry, we aim to build on the existing knowledge of general determinants of the phenomenon and unravel emergent market-specific ones. Our research sub-questions are intermediate steps that help us answer the central research question, and they specifically inquire about the perception of the Polish VC managers who have been interviewed.

> *RQ1.1: Which of the existing determinants in the literature are perceived as most significant?* We aim to improve our understanding of an emerging VC market, by revisiting the existing determinants in the literature to see if they apply to this context. This serves as a theoretical foundation of the inquiry, seeking the relative impact of the phenomenon and critically reflecting on the literature.

RQ1.2: What other determinants are perceived as significant but are not sufficiently mentioned in the literature? To contribute to the literature we investigate other proposed determinants which are more context-specific. This acknowledges the attention one must pay to the heterogeneity of emergent markets when analysing the VC inflow.

RQ1.3: Which of the determinants are perceived as barriers and which ones as motivators? This question sheds light on the limitations and strengths of the ecosystem that affect the inflow of foreign VC firms. The most interesting results are likely to arise in cases where the investigation will reveal contradictory perceptions of the determinants.

To properly ground the research context we pose a sole domain question. It is not initially certain that internationalisation can solve the industry problems at all, thus we need to reflect that in our research design. We ought to find the ecosystem benefits and losses associated with the presence of foreign investors, without biasing the Respondents. The domain questions states:

DQ1: Can the increase in activity of foreign VC firms help mitigate the Polish industry problems?

To increase the internal validity of the case, a set of operational questions is also added. These questions are meant to find the weaknesses or threats to this research method ahead of time. Moreover, operational questions lay the necessary groundwork for the case study protocol. The researcher uses these to assess how certain information should be collected and why.

(OQ1) How valid is the research approach?

(OQ2) What is the effect of the instrument (the researcher, the interview) on the respondent's answer?

(OQ3) Is the respondent sufficiently equipped to answer the question?

(OQ4) How well do the responses answer the research questions?

The thesis report follows the steps taken by the researcher in answering the research questions. The following Chapter 1 presents the selected key findings from the VC studies, which serve as a fundamental framework for the case study preparation. The pivotal discoveries in this chapter explain the reasoning behind the use of a broader geographical analysis of the Polish context in the case study, supplemented by different considerations regarding emergent VC markets. The main object of the review is the in-depth discussion of the determinants, risks and outcomes of VC internationalisation. Chapter 3 describes the methodological choices made by the researcher, substantiated by the qualitative research literature. Here, the initially posed research questions are incorporated into the design of the research. Chapter 4 begins with the case study protocol, which ensures transparency and internal validity, as well as prescribes the steps necessary for theoretical and literal replication of the study. Following that are the findings regarding the Polish VC ecosystem, which include the European Union's historical sphere of influence, the regional VC market of the Central Eastern European community and the state of the Polish VC market, derived from the interviews conducted with the Polish VC managers. The researcher's interpretations of results take the form of the causal map of determinants in Chapter 5, simultaneously answering the research questions and illustrating a multitude of testable propositions, outlining possible alleys for future quantitative research. Additionally, the chapter also addresses the possible practical managerial implications through narratives, which identify the weaknesses in the Polish ecosystem. Chapter 6 provides a general discussion of the results, which revisits current knowledge in the literature, followed by the acknowledgement of the research limitations. Lastly, Chapter 7 briefly concludes the thesis and outlines the actionable recommendations for parties in the ecosystem.

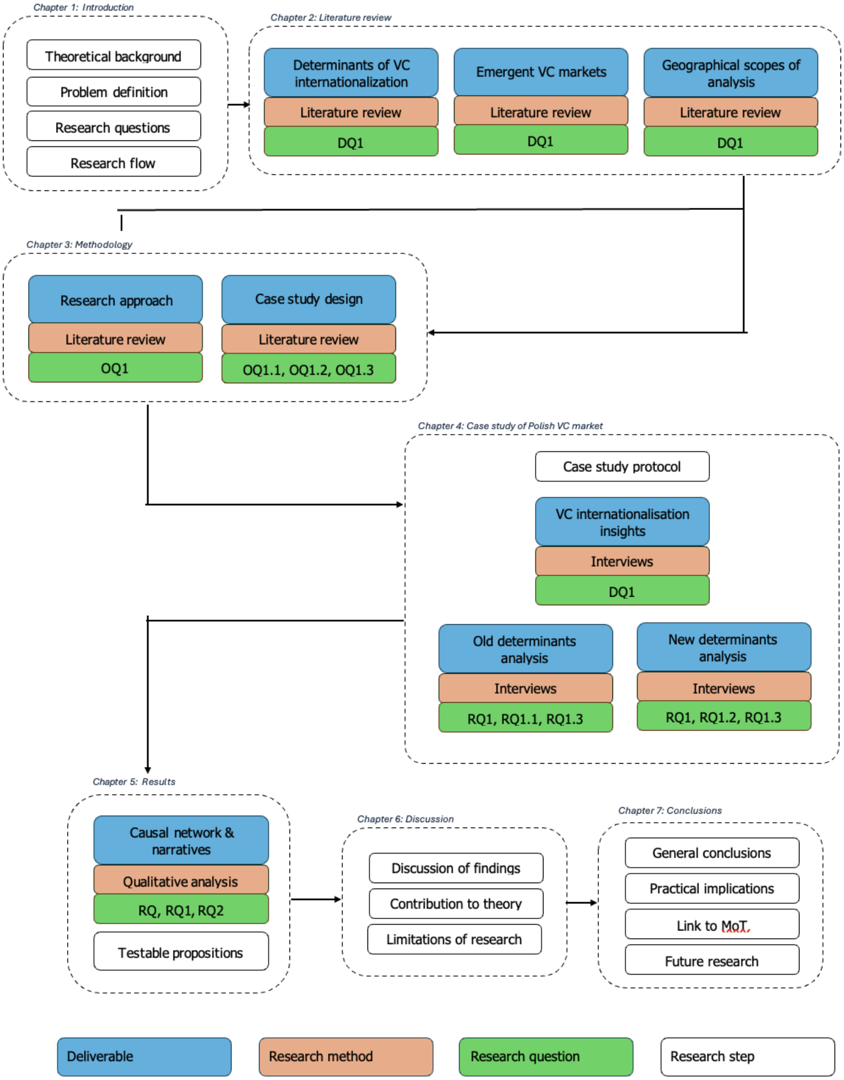

Figure 1.1: Research steps

1.4. RESEARCH FLOW

This research flow ensures a systematic and comprehensive exploration of VC internationalisation, particularly within the emerging market of Poland, providing valuable insights for both theory and practice. We begin by identifying the industry problems and formulating the research questions, the domain question and operational questions, which serve as guidelines throughout the course of research. We perform the preliminary literature study of two streams of VC research: the VC internationalisation and emergent VC markets to exhaust the theoretical understanding of the case of Poland. We devise a sound theoretical framework for the case analysis, which incorporates a qualitative approach at its core.

Our core research steps include desk research and field investigation, often interchanging for the duration of the Polish case study. The desk research served a supporting role, enhancing the findings with the available knowledge. The field investigation was the novel part of the research as it incorporated unique and contemporary interviews with incumbents in the Polish VC market. The answers to the research questions were found in the course of interview analysis, which were then synthesised and presented in the form of a causal map. The process of arriving at the key findings was concluded with the delineation of narratives, accompanied by testable propositions.

The findings are summarised below and later in the general discussion, where they are contrasted with the available knowledge in the literature. In the spirit of strengthening the theoretical understanding, the main contribution is discussed, which involves the novel framework and methodological choices deployed in this study. We reflect on the scientific contributions and limitations of this approach.

Last but not least, we provide practical recommendations, returning to the core of this research which is addressing the industry problems. We make them actionable by identifying the industry practitioners, who are most suitable for introducing change to the ecosystem.

1.5. SUMMARY OF RESULTS

The key results of the study of the Polish case are the weaknesses in the Polish innovation ecosystem that cascade down to individual start-up performance and professionalism Figure 5.1. In this way, we examine the larger scope to arrive at the root cause of the international inflow of VC firms to Poland. We find support for the statement that the supply of foreign private capital can in fact help resolve particular industry problems. An emergent VC ecosystem such as Poland can benefit greatly from being connected to the global circuit of innovation. This novel framework embraces the opportunistic behaviours of investors at its core to understand the way the ecosystem can improve different areas of its functioning, resulting in increased foreign VC activity.

We adjust to the low deal generation capabilities of emergent markets and thus limited information, and choose to incorporate literature and the voices from industry practitioners to identify the new determinants and forces that govern them. The use of qualitative research methods is particularly useful in this instance. The VC firms will remain the key to the VC ecosystem as they are the best equipped to embrace the foreign VC investors as well as learn from the more developed markets, through the adaptation of practices. Additionally, we observe that entrepreneurship revolving around a global-scaling mindset, strategic internal management and management of stakeholder expectations in the deal process are of the essence to boost the creation of attractive start-ups. Additionally, political governance in the ecosystem was found to affect many determinants, but most importantly the regulatory institutions and the way they are enforced on different levels. Lastly, the maturity of the ecosystem was deemed non-negligible in the current understanding of what attracts foreign investors as many indicators consistently deter the foreign participants at lower degrees of internationalisation commitment.

We also contribute by critically assessing the previously known determinants from the literature, in accordance with the Respondents' answers from the interviews. We find the limited effect of macroeconomic indicators and physical distance in the decision to invest, but necessary when deciding whether to enter the emergent market at all. Similarly, the cultural norms and regulatory framework were found to have a more indirect effect on the network of determinants but were kept nonetheless, as they moderate essential, more direct areas of the ecosystem's functioning. The most significant were the talented workforce levels and normative institutions, which were reflected in the causal map, by placing them closer to the effective internationalisation determinants, namely start-up performance and professionalism. Lastly, the unique findings include the addition of an entrepreneurial mindset and VC ecosystem maturity as they are core to fostering foreign activity.

2

Literature Review

In this chapter, an essential summary of knowledge connected to the research is presented. The review is broken down into three sections, each corresponding to one of the major VC literature streams and the domain questions. The first section of the literature review defines and justifies the use of the term "VC internationalisation" and addresses the existing geographic scopes in the literature. The second section is dedicated to a comprehensive discussion of VC internationalisation in terms of the determinants that moderate it, the ways VC managers mitigate the risk of investing abroad and the outcomes of internationalisation from different stakeholders' perspectives. Lastly, the defining features of emergent VC markets from selected case studies are presented, with an aim to incorporate VC internationalisation into the picture.

2.1. Geographic scopes

The analysis of VC internationalization, as opposed to cross-border VC flows, considers the broader process or strategy of venture capital firms expanding their operations or activities beyond their domestic market, and into international markets. Internationalisation can thus occur in various modes, each with a different level of commitment. VC firms can gradually expand their network to the foreign VC market seeking reliable sources of information, and also raising awareness of their presence in the network in the process. Participating in events and conferences, tying relations with local professionals. If the market research proves to be fruitful, VC firms can decide to syndicate with local VC firms and invest in the most prominent PCs as a lead investor or follower to another lead. It is also possible for an even higher degree of commitment, where VC firms establish branches or international joint ventures with local VC firms. On the other hand, cross-border VC investments specifically refer to the act of venture capital firms signing deals with start-ups located in foreign countries. It focuses more narrowly on the actual financial transactions and investments made across national borders, without necessarily considering the broader aspects of internationalization, such as establishing a physical presence in foreign markets or adapting strategies. In the context of emerging VC markets, the term VC internationalisation is more practical as we analyse the whole process of foreign VC inflow not just the signed transactions, which are scarce in the first place.

Geographic scopes of analyses are important to understand when analysing VC internationalisation since countries display significant heterogeneity making direct comparisons impractical. For instance, large economies such as the US or China will encapsulate many VC ecosystems each with their own defining characteristics, and which possibly match in size other emerging nations VC ecosystems. Conversely, certain national VC markets like those in Singapore or Estonia rival entire regions in terms of VC activity. Therefore, it's crucial to delineate the potential geographic scopes of analysis to make cross-comparisons reliable. The most common lines drawn in the studies of internationalisation are country borders, as VC ecosystems operate within the institutional framework and jurisdictions of countries. From here, the current knowledge expands the scope to larger regions, represented by bordering nations. Schertler and Tykvova (2011) for instance, analyse flows between entire continents, with a sample of over 50 thousand financing deals over the period 2002-2008. The results of the regional analysis reveal the Northern American continent to be the most active internationally, being the largest supplier and the largest recipient of inter-continental deals. Groh et al. (2021) offer a nuanced regional breakdown in their annual attractiveness index, categorizing 125 countries into eight regions, notably distinguishing between Western and Eastern Europe, as well as nominating the Middle East as a new region. However, both papers still rely on the country analysis, which then only is sorted into regions.

A more comprehensive regional analysis might be possible if economic integration were to be the underlying notion. Countries may form together larger economic ecosystems, such as the European Union, Mercosur or NAFTA (Alhorr et al., 2008), and might face external isomorphic pressures that shape their internal VC markets. For example, the European Commission (EC) can influence the direction of innovation by advocating for clean technologies, investing in technology infrastructure, or streamlining administrative burdens through single-market policies. In the paper, the authors emphasise the significance of economic integration mechanisms such as tariff removal, currency unification, and market integration, all fostering entrepreneurship and growth of SMEs across the countries. The European Union dimension has proven to be very insightful in our research and is included as part of the case context, as it affects the structure of the Polish VC market in interesting ways.

A possible regional scope can revolve around technological hubs, meaning that the initial country distinction along the border lines is narrowed to the effective ecosystems, while still maintaining the focus around the internationalisation of foreign VCs (Harrison et al., 2020). This approach although not necessarily in line with the "internationalisation" notion, might be relevant to VC firms which have to overcome similar risks such as information asymmetry. The research on internationalisation into technological hubs suggests that there exists heterogeneity even within the national bounds, which can hamper the integration of minor innovation hubs with the global circuit of international VC. The major innovation hubs on the other hand can benefit at the expense of less internationalised regions in the same country.

Innovation literature commonly references the triple helix model, categorizing actors within the innovation network into three streams: industry, academia, or government (Ranga & Etzkowitz, 2013). These actors operate within institutional frameworks and share the common goal of regional innovation development. However, our focus lies on VC ecosystems, which revolve around VC financing, emphasizing the supply and demand of this capital. While the innovation ecosystems analysis will have its scope around entrepreneurs, VC ecosystem analysis shifts the focus to VC funds and deals, predominantly situated within the industry stream of the helix. Furthermore, as venture capital is a form of private equity financing, actors such as academia and government may have individual effects. Moving forward, the VC ecosystems will be analysed, however, all stakeholders will be incorporated into the discussion.

2.2. VC INTERNATIONALISATION

This section will investigate VC internationalisation in three main aspects, as synthesised and suggested by Devigne et al. (2018). Considered will be the country-level determinants that moderate this phenomenon, then the inherent risks and the ways VC firms overcome them and lastly the benefits for portfolio companies and VC funds. Following this framework, more recent and relevant papers will be integrated.

2.2.1. THE DETERMINANTS

Scholars have been trying to understand what are the determinants (independent variables) behind the non-random flow of high-risk capital (dependent variable) (Aizenman & Kendall, 2008). The causal relationships are relevant to the case as they point to the possible areas of improvement in the ecosystem. Although Devigne et al. (2013) describe two kinds of determinants, VC firm-level determinants and country-level determinants, we choose to focus on the latter. *VC firm-level determinants* describe the internal organisational capabilities of funds to uptake the cross-border investments, whereas *country-level determinants* comprise particular characteristics of destination economy that are perceived as favourable (or not). In our context, which is the inflow of foreign VC into an emergent market, the VC firm's capabilities to internationalise are less relevant as we consider only the foreign VC firms that already take interest in this region. This frames the discussion around the internationalisation of VC into the region instead of importing all possible foreign capital. Nevertheless, the V firm-level determinants will still be relevant in the last part of the report, as the implications for policymakers will be discussed, in an attempt to induce the flow of VC funds that are uncertain and not yet willing to invest in the Polish market.

Researchers in VC studies, most commonly attempt to tie the **macroeconomic indicators** to the phenomenon of VC internationalisation. Macroeconomic indicators are a reliable and accessible source of data for all investors, providing insight into the performance of countries. For instance, Schertler and Tykvova (2011) find evidence for expected GDP growth and market capitalisation to be significant determinants. To be more precise, when comparing sets of two countries, we observe that the larger the difference between their corresponding expected growths of GDP, the more inclined they are to invest in one another. Countries with high expected GDP growth and high market capitalisation tend to solicit more deals domestically as well as encourage foreign investors to participate. One year later using a more selective sampling of 15 European countries, the US and Canada, Schertler and Tykvova (2012) have refined the approach to arrive at more practical implications, framed for policy-makers. As most determinants are likely to influence both the import and export of venture capital, the authors observe their difference (net import) in correlation to the macroeconomic indicators. They find that higher stock market capitalisation increases both the import and export of VC, however, the net import decreases. In practical terms that means that with higher stock market capitalisation there is a risk of losing the capital as an ecosystem, due to the outflow.

Bruton et al. (2005) borrow from institutional theory, explaining that countries are distinguished by their varying levels of **regulatory**, **normative** and **cultural-cognitive institutions**, which arbitrate the environment of the deal. Regulatory institutions refer to the existing legal framework which bounds the financing ecosystem and is structured around four pillars - legal philosophy, legal enforcement, legal investor protection and the fundamental nature of the capital market. Interestingly, Devigne et al. (2018) do not find a place for taxation among the determinants. Groh et al. (2008) argue the inclusion of taxation in the assessment of the attractiveness of the market for the VC and PE investors. The authors investigate taxes on personal income and capital gains for the investor, as well as the corporate taxes for the PCs. It is the researcher's conscious decision to include taxation in the research design under regulatory institutions as in Poland, the tax law is embedded in the Polish constitution, which is imbued with the legal philosophy of Poland, and the tax law is also enforced by The Polish Financial Supervision Authority (KNF). Normative institutions refer to values and norms widely accepted by the professionals in the industry (Bruton et al., 2005). Similarities in normative institutions can indicate levels of professionalism, consistency and reliability among other industry participants, especially during syndication. In emergent markets, distance to the standards of foreign VC can become a source of unfamiliarity and miscommunication(Tykvová & Schertler, 2014). Cultural-cognitive differences are another important dimension as the behaviours, practices and contributions to a social network that again might influence the propensity to invest. Bruton et al. (2005) understand cultural-cognitive institutions as societal pressures on entrepreneurs and the strength of social networks. Entrepreneurs are not perceived the same way across countries, their status varies in the eyes of the society, resulting in a different perception of failure and success. Adults from Europe, for instance, are less likely to start their businesses out of fear of failure, and those who do, are viewed as opportunists. Considering high-tech ventures are at an even greater risk of failure due to the disruptive innovation diffusion processes, emergent markets will most likely observe fewer entrepreneurs and thus produce fewer technological start-ups. Tykvova and Schertler (2014) find that despite the possibility of syndicating with a VC fund available on-site , the institutional distances are not likely to be overcome. Moore et al.(2015) suggest that attracting external VC funding requires reducing cognitive-cultural and normative differences, which will produce a greater effect than regulatory. Lastly, Nahata et al. (2014) find that for both developed and emerging economies, the greater the institutional quality the greater the VC firms perform. On the other hand, however, the performance of the deal was found to be increasing the more culturally distant the target country was. The authors draw upon the argument that more deliberate screening processes are needed in carrying out investments in culturally foreign countries. In emerging countries, investors tend to rely on their informal networks to compensate for the lack of formal institutions (Ahlstrom & Bruton, 2006).

Another country-level determinant that is suspected to increase the inflow of VC is **economic integration** (Alhorr et al., 2008), which is interpreted as the adoption of the common market and common currency. Based on observations of European Union countries, the authors name the largest beneficiary of integration to be entrepreneurs, who have access to global markets through integration policies. The European Commission, the governing body of the EU, imposes the reduction of tariff and non-tariff barriers to reduce friction in the flow of goods, people, services and money, clearly benefiting SMEs. These commonalities, however, result in an increase of VC activity within the Union, possibly at the expense of links established with other regions of the world such as the US and China. Sondermann and Vanteenkiste (2019) find that monetarily unified countries have an increased supply-chain interconnectedness, institution quality and better infrastructure all of which work in favour of incentivising investment flows. A comprehensive analysis of European policies related to VC markets is presented in Chapter 4, as part of the case context.

Geographical distance is widely considered to be a country-specific determinant in VC internationalisation literature. The need to travel to the PC destination might arise in the information collection period preceding the investment, as well as during managerial, monitoring and advisory activities that come after (Aizenman & Kendall, 2012). These can be perceived as resource-intensive in emergent VC markets, where the normative distances are too large, requiring more intensive, hands-on supervision. This however can be mitigated with the presence of a reliable local VC, who takes the leading position (Tykvová & Schertler, 2014). Cumming and Dai (2010) find that more reputable and well-networked VCs will exhibit less local bias. Contrastingly, VCs who have a preferred staging or technology specialisation will focus on their geography. A study of American clusters showed the effects of geographical proximity on structures of VC contracts (Bengtsson & Ravid, 2009), whereby cash-flow incentives are created for travelling investors. Although after the COVID-19 pandemic, a lot of activities have shifted online, a certain presence of foreign investors locally is still needed, especially in early-stage ventures. A unique perspective was added by Chemmanur et al.(2013) who introduced "effective" distance, a measurement of flight time between VC firms and their target location. The natural experiment was conducted on American PE investors and resulted in a conclusion that pairs of countries with open sky agreements are likely to reduce the geographical distance bottleneck. The effect is predicted to be stronger for the European Union as inclusion within EU borders allows for easier movement and simultaneously increases the administrative burdens for external investors.

Madhavan and Iriyama (2009) studied the influence of transnational technical communities. In the current age of globalisation, highly educated individuals with entrepreneurial talent will gravitate towards developed economies, which facilitate business and education opportunities. The ones that return to their home countries will have the necessary experience, for instance after working in foreign start-ups, to create technological ventures of their own. The network effects also apply, as they can re-establish contact with previous peers and VC investors. These patterns of **talent migration** will be the guide for technological potential from the perspective of VC investors. Based on an early study of the American market, Sorenson and Stuart (2001) hint that talent and venture capital will even follow spatial distribution within countries, around technological clusters. In Central Eastern Europe the distribution will be more finely grained and clusters more underdeveloped. In the Global Innovation Index of World Intellectual Property Organisation (2023), the innovation hubs of CEE went unnoticed in terms of patents and publications, with Warsaw being the leading hub of the CEE, positioned only at 90th place of the 100 S&T hub.

2.2.2. MITIGATING RISKS

Venture capitalists inherently operate within a distinct risk-return framework compared to conventional investors. Investing in early-stage technology ventures, characterised by limited transparency and information asymmetries, exposes VCs to heightened risks. However, long-term above-average expected return compensates for these burdens. When it comes to cross-border venture capital investments, the risks become even more pronounced than in purely domestic scenarios. Foreign markets present unfamiliar terrain to investors, marked by geographical and institutional distances (Tykvová & Schertler, 2014), calling for persistent and resource-intensive efforts to bridge these gaps. Due to inadequate networks in the target country, foreign VC firms can also be exposed to fewer sources of deal flow, (Lu & Hwang, 2010). Furthermore, VC firms are likely to invest through local partners, which introduces additional agency risks (de Prijcker et al., 2012). Such syndicates may trigger conflicts of interest between the local VC firm acting as the agent and the foreign VC firm as the principal. These misaligned goals can be seen in issues related to mismanagement, resource allocation, strategic decision-making, and opportunistic behaviour, potentially impacting investment outcomes. In emergent VC markets, these risks are also likely to be heightened. Lower institutional quality, less experience among the VC managers and heterogeneity will impact the perception of risk among foreign VC investors.

The literature provides various strategies for mitigating these risks among foreign investors, each displaying a different level of commitment. Wright et al. (2002), in their examination of the Indian VC market, discover that foreign investors often opt to adapt to local market conditions rather than imposing their own standards and norms. Foreign VC inflow is often accompanied by syndication with a local VC firm. Despite the associated agency risks, syndication enables the outsourcing of monitoring and value-adding activities to the local co-investor (Nahata et al., 2014). Local partners are typically more familiar with the local market conditions and possess extensive networks within the entrepreneurial ecosystem. Galloway et al. (2017) shed light on exploratory alliances that maintain relatively conservative strategies until information asymmetry is sufficiently reduced. On top of that, the exploratory possibilities remain even after the IPO, further adding to the benefits. VC firms might consider opening a cross-border office (Pruthi et al., 2009) to maintain local proximity with the portfolio companies, accelerators, incubators or universities. Employing a local workforce might help in establishing the branch office, and help in mitigating institutional liabilities. Lu and Hwang (2010) even propose leveraging homegrown networks to generate deal flow, potentially as an alternative to syndication. Certain aspects of homegrown networks are even transferable to new destinations, like social status (Guler & Guillén, 2010a), which could in turn attract entrepreneurs and VC firms. Another risk-mitigating measure would be the structuring of the financing deal. Since a VC firm risks more by engaging in a foreign country, taking a larger stake of equity in the portfolio company will ensure larger control rights and more solidified grounds in judiciary processes. Balcarcel et al. (2010) point out that weaker legal systems invite more equity stakes in favour of foreign investors.

To sum up, VC firms can deploy different strategies to mitigate the liabilities of foreignness. By embracing these adaptive strategies and capitalizing on existing networks and local incumbents, foreign investors can navigate the complexities of cross-border investments more effectively while capitalizing on emerging opportunities. To manage agency risks foreign VCs might consider stronger commitment by opening a local branch or even structuring the deal with a higher equity stake.

2.2.3. OUTCOMES OF INTERNATIONAL VC INVESTMENTS

Devigne et al. (2018) present the outcomes of VC internationalisation from two perspectives - start-ups and VC firms, as these are clear sides of the VC deal. However, success is a complex metric on inter- and intra-organisational levels, and the analysis of success on the econometric level, i.e. through statistical data can also fail to capture the individual ambitions of the parties involved. In the interview phase of the research, we broaden the inquiry also to the outcomes for a VC ecosystem, which is relevant for emerging markets.

First and foremost, the literature finds that the presence of a foreign investor is related to the exit performance of the start-up. For instance, portfolio companies that are located in emerging markets, and are backed by a syndicate of foreign and domestic VC firms outperform both purely domestic and purely foreign syndicates and tend to have a greater chance for successful exits and higher post-IPO operating performance (Chemmanur et al., 2016). Additionally, strong evidence has been found for a higher probability of IPO exit and IPO proceeds raised in internationalised syndicates (Cumming et al., 2016). In North American start-ups, the presence of a foreign investor sped up the exit process (Espenlaub et al., 2015), but macroeconomic factors, such as legal system and market activity were of equal importance. Again in the US, Chahine et al. (2019) propose that the presence of a foreign investor signals quality to the potential share owners, resulting in higher IPO premiums. In emergent markets, exit effects can vary, as the efficiency of capital markets is not on par with developed ones and public trading is not as voluminous.

The growth of startups can also benefit from the involvement of cross-border VC. In the long term, foreign-backed companies demonstrate accelerated growth rates in sales and an increase in total assets under management and employment. (Devigne et al., 2013). Additionally, businesses supported by a syndicate of domestic and cross-border VC investors exhibit robust growth, both in the short and long term, surpassing the growth of other VC-backed companies. Authors also indicate that the time of entry of a cross-border VC investor into the portfolio company plays a lesser role, as long as the domestic investor was present in earlier financing rounds. In emergent VC markets, domestic VC firms, which are the first choice of financing for local entrepreneurs, will have a more important role to play in bridging the gaps with foreign investors. Conversely, the internationally experienced founders might gain advantage of value, by seeking foreign investors through their cross-border networks. Establishing permanent ties with a foreign VC through financing deals can be perceived as beneficial for portfolio companies, due to access to their home markets (Mäkelä & Maula, 2005). Cross-border VCs can legitimise new entrants, but also drive them away from intended markets.

When it comes to negative outcomes, Mäkela and Maula (2006) discover that the diverging expectations between the foreign investor and start-ups can cause a decrease in commitment to the venture. This can be amplified by the embeddedness in the network, geographical distance and the financial importance of the investment. The effects of the last might pose an interesting angle to the discussion about emerging markets. Lack of monetary commonality and early stage of development of the market can lead to higher capital efficiency, where investors for their standard ticket size are able to leverage higher subscription shares in the PC. If the emergent market PCs represent a minor share of the fund's portfolio, then it can result in diminishing commitment of the investors, should the expectations diverge. Bertoni and Groh (2014) confirm this in their study and show that cross-border VCs tend to exit underperforming start-ups earlier. This means that unsatisfactory results in terms of start-ups can lead cross-border investors to not participate in the follow-on round. In the case of early-stage ventures, which comprise most start-ups in emergent markets, can lead to the loss of core expertise offered only by internationalised VC firms.

2.3. EMERGENT VC MARKETS

Although the literature does not focus particularly on Central and Eastern Europe in the analysis of emergent markets, we rely on studies of other relevant regions.

Klonowski et al. (2006)(2007) elaborate closely in their works , on the CEE region. They point out that the CEE region cannot be treated as a homogenous block, each experiencing a different rate of development, institutional foundations and market forces. They also focus on the investment process from the perspective of the particular VC managers, which does not necessarily fit our scope. However, this points to the relevance of academic research in the analysis of emergent markets as the availability of knowledge can be supported with more recent data, as the significant spike in activity occurred in the ecosystem in the past five years, giving rise to another set of obstacles.

Early studies of VC markets analysed VC markets in emerging economies (Ahlstrom & Bruton, 2006), and not necessarily emerging VC markets. What differentiates an emerging economy is its institutional environment which is undergoing fundamental change to facilitate transactions governed by market forces. Extending this to emergent VC markets, the quality of the institutions, which moderate the VC activity, would be lagging behind more developed emergent VC markets. The primary concern for the governance of emergent VC markets would be ensuring sustainable growth of VC activity. Due to the ongoing institutional transformations, cross-border VC flow will be affected as the costs of reducing information asymmetries could become a barrier to entry.

Nonetheless, the case of Chile (Bustamante et al., 2021) has shown that a strong formal institutional framework is a necessary, but not sufficient condition for a robust VC market activity. By analysing the evolution of regulatory and legal framework over the last quarter century, the researchers noticed that despite the quality improvement, the VC market did not elevate until innovation and entrepreneurship were framed into the discussion. As it turns out, informal values such as culture, norms and values are more important to sustain the growth of entrepreneurship, which only then will translate to a healthy VC market.

When it comes to internationalisation in emerging markets, Wang et al. (Wang et al., 2022) conclude that the foreign VCs, to gain competitive advantage, will display more aggressive, long-term and proactive strategies by becoming major contributors to the portfolio company. Additionally, from the perspective of the policy-makers, foreign VCs that contribute to the growth of multiple ventures in the ecosystem should be acknowledged. In this way, institutional changes should keep fostering cross-border VC as an objective.

In the case of India and the US foreign VC investors (Wright et al., 2002), foreign practitioners tend to adapt to the local conditions. At the same time, they do not value any imbalances in the domestic VC firm commitments but rather focus on the actual performance of their portfolios. Again this falls short of the survivor bias, and might not be applicable in the modern age of investment, where we attempt to attract the foreign investor who is not obliged to get involved, thus our scope is different.

3

METHODOLOGY

3.1. RESEARCH APPROACH

The studies so far have been insufficient in drawing conclusions of the determinants that moderate the VC inflow into emergent VC markets. A lot of inferences have been made based on quantitative data, which inherently cannot fully capture the strategic intent of firms. On the other hand, the qualitative data that has been brought forth is very scarce in terms of emerging VC markets, since not many deals originate from there in the first place. However, there is an even more fundamental drawback to the existing studies. Namely, analysed are only signed investment deals between VCs and start-ups. What is lacking is the analysis of the strategic decision-making path that led VC firms to invest in a PC cross-border, and perhaps most important would be what ultimately led them to not sign the deal.

As Yin (1984) suggest an **exploratory single case study** is a suitable method for our research because the existing presumed causal links are too complex to be sufficiently drawn only from experiments and surveys. Since two VC research streams are combined - VC internationalisation and emergent VC markets, it is our task to explore this domain, formulate theoretical grounds for the determinants and create a comprehensive determinants methodology for emergent VC markets. We use the dual approach in analysing the case. On the one side, we try to conceptualise the phenomenon, discern patterns and gain a deeper understanding of the root causes of certain associated factors. On the other side, we gain perspective by observing the participants in the ecosystem and their behaviours as individuals and collective society. This justifies calling this type of research both phenomenography and ethnography (Miles & Huberman, 1994).

The Polish VC market has been selected for this case study, as it represents a unique case of a host country for internationalised VC firms. The underlying proposition is that VC inflow can solve practical problems the Polish VC market is facing. The phenomenon is thus contemporary and set in a real-life context. The researcher inserts themselves as a participant observer into the Polish VC industry and leverages the proximity to Poland and the Polish language to gain more comprehensive data. In this study, we explore the determinants of VC inflow in the Polish VC market. We use two approaches in formulating a framework of analysis of the determinants, namely deductive and inductive (Miles & Huberman, 1994). Using the available literature, industry reports and policies, we deductively design an interview which gathers opinions of the Polish VC managers [1]. We ask respondents to rank the *a priori* defined set of determinants, to examine their relative strength, as well as their causality. Additionally, new determinants are inquired as new insights emerge in the particular context of Poland. We then analyse the findings and inductively try to validate the constructs by reaching to theory and formulating testable propositions. The causal network and narrative we propose, help visualise the conceptual framework and are meant to be used as a tool for policy-makers.

The contribution of this thesis is the case analysis of Poland, and its strength lies in its replication properties. A case of Poland can be replicated again by interviewing the foreign investors to obtain contrasting results (theoretical replication) or another emergent VC market can be observed using the same case protocol to support the framework (literal replication) further (Yin, 1984). The thesis transparently displays evidence and procedures, so that the readers can apply their standards (Eisenhardt, 1989). The conceptual framework that emerges from this study is useful for future research as it allows for an understanding of the phenomenon of VC internationalisation, without restricting any modifications (Jabareen, 2009).

3.2. CASE STUDY DESIGN

The designs of case studies can vary dramatically depending on the research questions and the depth of inquiry. This design however followed the works of Bustamante et al. (2021), as it initially identifies the policy evolution history.

3.2.1. INTERVIEWS

The interviews were designed to be **semi-structured** with a clear interview protocol, but also leaving sufficient room to follow-up on the topics of interest and most salient points noticed by the researcher during the proceedings (follow-on tactic). Keeping in mind the limited resources of the researcher and no prior presence in the Polish VC market, the interview was designed to obtain the most abundant data with the fewest interviews. The duration of the interview was planned not to exceed 30 minutes, which was disclosed

[1] Although one of the respondents was technically an analyst, we have reasons to believe that their input contributes to the knowledge, and hereof the respondents collectively shall be called VC managers

to all the potential participants, as a longer duration could potentially lead to an unsuccessful recruitment. The interviews were planned online using the MS Teams platform due to its transcription capabilities. The outcomes of the interviews were: the transcription, the video recording and the ranking of the determinants, all of which were stored on the TU Delft OneDrive, as per TU Delft requirement.

The interview protocol used in data collection procedures is shown in the Appendix A.3. The interview followed four main segments, in order: the general data regarding currently occupied positions and years of experience, knowledge of the VC internationalisation phenomenon, experience with foreign entities and the determinants. For the most part, the interview was qualitative, however, one quantitative part regarding the existing determinants in the literature was included, as the idea was to challenge the existing approaches used in VC studies. The first section aimed to acquaint the respondent with interview conditions with a series of simple questions regarding general information. The second section was dedicated to reducing the misinformation and bias, and to assessing the knowledge of the participants in the process. If the participant asked for an explanation of the phenomenon, a modest but standardised description was provided. All participants then were asked to share the perceived benefits and drawbacks of exercising their knowledge. In the first version of the interviews, the participants were asked only about the perceived benefits and drawbacks from the VC firm's perspective, however later a choice was made to add perceived benefits and drawbacks from the point of view of the hosting country. In the third section, the desired information was respondents' personal experience with foreign VC firms, and also foreign VC-related institutions, for instance, business angels, government VCs, corporate VCs, financial instruments and banks. In the final part, the respondents were presented with an interactive board and a task to rank the composed set of seven determinants of VC internationalisation, extracted from the previous studies. The context was set to the Polish VC market and its particular effect on the inflow of foreign venture capital. Additionally, the participants were asked to provide a commentary on their choices, seeking an explanation of the relative strength of the determinants. The final and most crucial part is related to the Respondent's own reflection on the determinants of VC internationalisation. As such, the propositions emerged in two categories, either by elaborating on completely new topics or expanding on the academic knowledge by differentiating the existing determinants. After the completion of the interview protocol, the transcription was ended and the interview reached its end.

3.2.2. PARTICIPANT SELECTION

Participant selection was the major task in the design of the research. The research question revolves around finding the determinants that moderate the inflow of foreign VC, thus seeking their perception of the Polish market. However, the choice of Polish VC managers as case participants rather than foreign VC managers carries two strengths. Firstly, the Polish VC managers are strongly embedded in the network, having built their relations with the entrepreneurs over the years, as well as the government and other VC firms. Since they operate within the network they are likely to be more up-to-date and receive first-hand information, as well as be able to observe closely the ongoing changes and disruptions in institutional frameworks and market activity. On the other hand, foreign VC investors, due to a varying degree of commitment and information asymmetries, will be on average less informed, in which case the second strength applies. Domestic VCs are most likely to become local partners, even at the lowest degree of commitment, they will be the first to be contacted and networked with. By extension, the domestic VCs will be aware of perceptions of foreign VCs, as it is safe to assume that not all the attempts to internationalise end up in signing a deal with a start-up. Therefore the domestic VCs are sufficient and reliable second-hand sources of foreign VCs' perception, granted that they have been in contact with foreign VCs.

3.2.3. DETERMINANT SELECTION

The second part of case design was selectively picking determinants that are neither redundant nor over-differentiated. Imperative to the case was the Polish context, and the questions in the last segment were framed around the research questions. The following list of determinants was nominated:

- Macroeconomic indicators
- Regulatory distance
- Cognitive-cultural distance
- Normative distance
- Economic integration
- Geographical distance
- Presence/immigration of talented workforce

There are several differences between this list and the determinants mentioned in the literature review. First is the phrasing of the determinants. To begin with, the **geographical distance** was selected because the term "geographical location" would be ambiguous and imprecise. Using the latter could confound the participant, leading to the association of the term "location" with a geographical position on the map (surrounded by neighbouring countries, belonging to a continent). The literature hardly discusses geographical position as such and rather focuses on the importance of proximity in carrying out monitoring and management activities. The use of "distance" in the phrasing was intentional and implemented in other determinants as well.

A crucial addition to the list of determinants is the distinction of the formal and informal institutions into three categories. Formal institutions took the form of **regulatory distance**, describing taxation, legislation, and investor protection. On the other hand, the informal institutions were presented to the respondents as **normative distance** and **cultural distance**, exemplified by industry norms and society. Again the use of "distance" pointed to the differences between the foreign investor's domestic market and the Polish market. This practice reduced the potential confusion, and it hinted to the participants that institutional frameworks in the markets are not on par and should be considered.

Economic integration was a sufficiently distinct determinant and encapsulated the market as well as currency commonalities as proposed by Alhorr et al. (2008). This was relevant due to the introduced market unifying policies of the EU as well as the unilateral foreign policies of the Polish government, and the respondents were suspected to have a good level of understanding of this topic. Economic integration relates to the entirety of the market, and the risk of ambiguity was relatively lower than that of other determinants.

Macroeconomic indicators are a necessary addition to the list as the aim of this research is to challenge the well-known and anchored methods in VC studies, as described in the academic problem. Macroeconomic indicators were a determinant of the broadest scope, encompassing a variety of economic features of Poland. In fact, the use of "distance" in the phrasing of macroeconomic indicators would result in an overload of data to process, and the researcher refrained from such a cosmetic procedure.

Lastly, the **presence/immigration of talented workforce** was deemed particularly important in the case of Poland according to prior research. This determinant was presented as a feature of Poland and was supposed to induce an idea of aggregate talent levels in the VC market. Notably, the talent levels were in principle referring to the possible talented employees working in the start-ups, but were further extended to the talented founders as well as VC managers.

3.2.4. THREATS TO VALIDITY AND PROPOSED SOLUTIONS

The adequate design process of the interview should identify the shortcomings and threats to validity and reliability beforehand. Anticipating the issues and addressing them in time can enhance the research conduct, and also the audience to apply their own standards (Miles & Huberman, 1994). For the scholars aiming to replicate this study, these threats are likely to be relevant too, thus certain lessons are outlined in this section. To bring forth the awareness of these issues, a set of operational questions was posed beforehand and factored in throughout the research design and data collection, as presented in Section 1.3.

First and foremost, the bias control should primarily tackle the researcher's influence on the responses and data collection procedures (interviewer bias and confirmation bias) and the Respondent's affinity to answer according to social norms (social desirability bias). To address these, the interview protocol was created to standardise this process and avoid unnecessary diverging lines of questioning. As seen from the interview protocol, we also restrain ourselves from seeking solutions to industry or academic problems. Instead, we highlight the general perks of VC internationalisation from different stakeholders' perspectives (second segment) or determinants of VC inflow to Poland (fourth segment). As the Respondents are industry practitioners, we acknowledge their tendency to answer the questions from their point of view, as members of the Polish VC community. This meant that the key, locally relevant, insights emerged naturally in the course of the interviews. Additionally, the industry problems were reconfirmed. The final results were taken from all segments of the interviews. The risk of social desirability bias was most likely present in the VC norms analysis and is taken into consideration in the key results of Chapter 5

Secondly, as the interviewer is responsible for guiding respondents according to the interview protocol, the risks could be associated with the interviewer's ability to obtain quality information. Although the validity of the answers is hard to ascertain during the interviews, necessary steps are still taken to ensure that the Respondents are not confused by the questions, and any doubts are clarified before extracting the answers. The interview protocol held a semi-structured format with enough room for explanations and clarifications. Additionally, during the interviews, a rapport was established to build legitimacy, ensure participant confidentiality and anonymity, and reduce uncertainties. The interviews relied on a large dose of open-ended questions, bearing the most abundant descriptive data.

Lastly, the weaknesses of this form of presentation were possible inaccuracies in the interpretation of the determinants and the task itself (fourth segment). Because composing the list of determinants is a selective process (Miles & Huberman, 1994), it most likely will always suffer from the researcher's bias and be intertwined with the preceding literature study. The individual discrepancies in the understanding cannot be fully mitigated as the researcher has not been in contact with the participants beforehand. The problem of ambiguity was reduced by providing examples in the brackets, all of which were substantiated in the literature beforehand. Additionally, the task was clarified in a way that would assess the causal relationship, its strength and the direction of effect. The ranking inquired about the strength of the causality in absolute terms, meaning that the first position reflected the most significant determinant, which could be held by a motivator as well as a barrier. In hindsight, this approach could be more refined by inquiring about the barriers and motivators separately, however, the current state of the VC ecosystem was too dynamic to capture without introducing biases in the task.

3.2.5. DATA COLLECTION METHODS

Table Section 3.2.5 outlines a comprehensive framework for data collection methods employed in a research study focusing on venture capital (VC) internationalization, particularly within the context of the Polish and Central and Eastern European (CEE) markets. The research is divided into multiple phases, starting with a literature study, which uses narrative reviews to explore VC internationalization and emergent VC markets. This qualitative approach helps to establish a foundational understanding of the phenomenon. The case design phase involves a selection of suitable methods to proceed with the research phase, however certain methodological choices were also incorporated due to the limits of the inherent limitations. The case study phase focuses on EU policy, the CEE market, and Polish VC managers, utilizing a combination of qualitative and quantitative methods, including historical analysis, market analysis, and semi-structured interviews. Lastly, the data collection methods are carefully aligned with the research questions to contribute significantly to the internal and external validity of the study's findings, employing grounded approaches and ensuring methodological rigour throughout the research process.

Table 3.1: Data collection methods

Phase of research		Data collection method	Qualitative or Quantitative	Research Question	Contribution to research
Literature study	Geographical scopes	Narrative review	Qualitative	DQ1	Approach validity
	VC internationalisation	Narrative review	Qualitative	DQ1	Grounded theory Construct validity
	Emergent VC markets	Case reviews	Qualitative	DQ1	External validity
Case design	Polish VC market	Scope review and methodology	Qualitative	RQ1; OQ1-4	Internal validity
Case study	EU policy (desk)	Historical analysis Market analysis	Qual. and Quant.	DQ1	Internal validity
	CEE market (desk)	Market analysis	Quant.	DQ1	Internal validity
	Polish VC managers (field)	Semi-structured interviews	Qual.	RQ1.1-3	Internal validity Construct validity
Interview analysis	Causality network and narrative	Interview data	Qualitative	RQ1; RQ1.1-3;	Internal validity Construct validity

4

CASE STUDY OF THE POLISH VC MARKET

4.1. CASE STUDY PROTOCOL

4.1.1. PURPOSE OF THE PROTOCOL

The case study protocol is a faithful prescription of the steps taken during the course of the case, aimed at high replicability, should any multiple-case studies be carried out in the future. A case study protocol should consist of the four core segments as stated by Yin (1984), and therefore this section will follow those guidelines. The case study protocol is not to be mistaken for the interview protocol, a tool used in conducting the semi-structured interviews with the Respondents.

4.1.2. INTRODUCTION OF THE CASE

For this case, we analyse in-depth the phenomenon of VC internationalisation, particularly in the context of foreign VC activity in an emergent market. The case of Poland was selected, and 11 interviews were conducted with VC managers active in the Polish industry. The research aims to discover what determines foreign activity, and more specifically what are the barriers and attractors for external industry practitioners to cross the border. We rely on the knowledge of determinants obtained through the preliminary literature review and aim to verify their relevance in the Polish context. Additionally, we discover the context-specific determinants provided by the Respondents, which could have been previously omitted or insufficiently elaborated on.

The goal of this research is to capture the complex processes taking place in the ecosystem and challenge the status quo by identifying the weaknesses in the network that prevent foreign VC activity. Based on these insights managerial recommendations are outlined to direct the focus on mitigating the industry problems. Moreover, the academic contribution of this case is the novel framework deployed, one which is suitable for emergent VC markets such as Poland, where the deal volume is low and data is scarce. The rapid and disruptive changes in these markets, as well as their recent increase in activity, call for a closer investigation, one that bridges the gaps in the industry.

In our inquiry, we distinguish different levels of commitment when internationalising. To be active in the Polish market VC firms do not necessarily have to invest, but it is possible for them to reduce information asymmetries to a sufficient level by establishing network ties with the local VC firms. This will result in increased access to the deal flow, with a lower resource intensity. In our case, we also open the discussion to the determinants of higher degrees of commitment, where the foreign VC firm actually finances a Polish venture. The distinction between the two levels of commitment is necessary since they are characterised by different risks to which the investor is exposed. With the findings we enhance the theoretical understanding of the strategic decision-making of a foreign investor, firstly whether they select Poland as the internationalisation destination, and secondly whether they choose to commit to the investment in a Polish portfolio company. It is important to reflect on the determinants of the phenomenon from the literature in the light of these two processes, with the added context of an emergent market.

The determinants are driven by different theories, including social capital network, information asymmetry, and institutional theory, all of which are common to the VC internationalisation determinants literature. The determinants have been defined *a priori* and in this collection were presented to the Respondents for validation. They serve as a theoretical base to which the Respondents administer the Polish context.

- Macroeconomic indicators
- Regulatory distance
- Cognitive-cultural distance
- Normative distance
- Economic integration
- Geographical distance
- Presence/immigration of talented workforce

4.1.3. DATA COLLECTION PROCEDURES

The data was obtained through the field investigation with industry participants, who were recruited through a personal network of contacts (LinkedIn). The interviews were conducted in the Polish language, with the exception of two interviews, which were carried out in English. As per TU Delft's requirement, ahead of time, a Data Management Plan (DMP) was prepared according to the Human Resources and Ethics Committee guidelines. Data protection was essential in this case, as the Polish VC market is not populous and the risk of identifying the individual participants was extremely high. The data was stored at TU Delft OneDrive, and only the research team was granted access. The raw data collected from the participants consisted of video recordings, auto-generated transcriptions and rankings of the determinants. Additionally, prior to the start of each recording, signed Informed Consent forms were sent out to ensure the rights to data. In the final report, none of the personal information, or information allowing for re-identification of the respondents are disclosed. Noted were only the general professions and years of experience as they were used to assess the demographic data. The data in fieldwork was collected in the period between the 13th of September and until 6th of December of 2023. All the interviews were conducted online and after the last interview the provided data was assessed to be sufficient and the research proceeded further to analysis.

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The field investigation was supplemented by the additional desk research, taking place throughout the course of the case. Additional areas of interest included the European Union's influence over the domestic VC market and the recent Central and Eastern European VC industry developments. The EU's historical policy analysis is included in Appendix A.1, whereas the CEE market analysis is included in Appendix A.2, both of which helped refine the Polish VC landscape by broadening the ecosystem view to external market forces and, in combination with Respondent's insights, were particularly useful in outlining the managerial recommendations.

4.1.4. CASE STUDY QUESTIONS

Case study questions correlate to the questions already described in Chapter 1, namely the presented research questions, the domain question and the operational questions. These questions remind the Researcher of the research objective throughout the case, as the data gets gradually more abundant and it needs to be structured. The domain question attempts to validate the foreign VC activity as the potential way to mitigate industry problems in the Polish market. This question intentionally shifts the scope of the study to the local and subjective ecosystem view of the phenomenon, with the use of Respondent's insights. The research questions regarding the determinants of the phenomenon aim to tie the study to the current knowledge in the literature and propose other theoretical findings relevant to the case context. Lastly, operational questions assess the validity of the procedure itself, attempting to address the limits of the research and potential threats to the validity ahead of time.

4.1.5. TENTATIVE OUTLINE

The audience for this report includes the Graduation Committee and interested industry professionals, fellow VC researchers, students and the public. The case is a comprehensive analysis of the ongoing state of the market with the use of insights, ideas and perceptions gathered through the interviews. As such it is imperative that the case study protocol and the case report are in place to ensure the transparency of the analytical process. Additionally, an inventory is appended for the audience, who can apply their own standards to the collected data. The inventory entices:

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1. Case report
2. Interview protocol (Appendix A.3)
3. Contact summary forms (Appendix A.7)
4. Ranking of the known determinants (Table 4.3)
5. Effects matrix (Table 4.4, Table 4.5, Table 4.6)
6. Extracted patterns and themes (Appendix A.5)
7. Causal map (Figure 5.1)
8. Aggregated list of determinants and their in-case effects (Appendix A.4)
9. Consent form (Appendix A.6)
10. EU policy analysis (Appendix A.1)
11. Regional CEE market analysis (Appendix A.2)

The case report which follows presents the essential findings regarding the Polish VC market, first by briefly discussing the institutional structure of the VC ecosystem and moving to the core of the research which was the field investigation.

4.2. POLISH VC MARKET STATE

In 2004, Poland joined the EU, guaranteeing single-market privileges for its citizens. As the European Union's VC policy analysis shows Appendix A.1, the initial focus of the Commission was on inducing entrepreneurial drive, by facilitating SME financing and developing research capabilities of individual VC markets. The intention was to lay the foundation for the development of innovation, often fueled by academic research. This however was not the case for the high-tech market in Poland which remained dormant until 2018. The same stands for the other CEE VC ecosystems in this position, such as Estonia, Czechia, and Hungary Appendix A.2, who similarly exhibited growth spurs only recently, and sometimes were able to sustain them. Despite the benefits of the initial EU market programmes dating back to 2007 (JEREMIE, CIP, FP7), which incentivised the creation of individual businesses, emergent countries failed to translate that into developed innovation ecosystems early on. This was then met with the oversupply of VC financing, which could not be efficiently distributed across the ecosystem due to a lack of a promising start-up ecosystem.

Important to note is that the EU does not participate in the investments by themselves, but rather uses intermediaries to establish their vehicles locally. This means that the distribution of funds lies entirely on the side of the local partners, and with that, agency problems can arise. The effect of managerial execution on the effectiveness of such programmes should be closely investigated. Among these intermediaries, the Polish institutional players have been found to be the largest distributors of such funds, and we focus our managerial recommendations around them[1].

In conclusion, the Polish ecosystem currently stands out within the Central Eastern European region, displaying a huge contribution to VC activity and continuous growth. However, because of its flattened growth curve as well as reduced success in developing high-quality start-ups, the sustainability of the current state is in question. The whole region, on the other hand, formed by several rapidly growing micro-ecosystems with a high degree of interconnectedness, puts itself on the map, one step closer to the other world's regions.

In the following section, we map out the participants in the Polish VC ecosystem and investigate the industry problems more comprehensively, using the industry reports, available historical data and relevant interview data. The industry reports are publicly available online, through the Polish institutional fund of funds investor *PFR* (the Polish Development Fund), *NCBR* (the National Centre for Research and Development) and *Start-up Poland* - a not-for-profit organisation conducting annual surveys with the start-up industry. The analysis of the institutional structure of the ecosystem follows the triple-helix model of innovation (Ranga & Etzkowitz, 2013) and in turn, elaborates on the roles of government, industry and academia.

4.2.1. INSTITUTIONAL PLAYERS

The Polish government bridges the gap between the EU and the Polish VC firms in the ecosystem. It moderates the legal climate within the ecosystem, aids in the dialogue between the agents by opening channels of communication and establishes funding ve-

[1] Although the Polish government is not the only type of intermediary, the focus diverges from private intermediaries as their effect on the VC market is weakly documented

hicles for the VC firms and start-ups. Adding to the EU context, they serve as strategic fund distributors, leveraging their strong embeddedness in the local network. A funding ecosystem benefits from this agreement, especially if it is an emerging one. VC firms have a chance to be backed by the EU as an investor, legitimised by its government. The final portfolio of the ecosystem is larger, as funding is more accessible and efficient. Yet, the capacity of emerging ecosystems is significantly lower, with particularly low interest from private investors, causing public funding to be the main contributor in many VC firms. This can risk overcrowding the market, rendering it more susceptible to disruptions, e.g. during transition periods between the EU seven-year budgets. In that sense, the exhaustion of funds can leave a vacuum that cannot be filled solely by private investors, as the first VC participants have not yet exited from their prior investments.

To mitigate the problem, PFR applies a strategy when distributing the funds. In principle, PFR functions as an institutional fund of funds, resembling the EIF on the European scale. However, the approach of the PFR Starter initiative differs on the programme and the deal level. On the programme level, PFR offers to co-invest with VC firms, CVCs and business angels, but not necessarily in the particular technology sectors. As mentioned earlier, the European Union's technology-driven direction might be problematic in emerging economies due to insufficient research infrastructure and resources. On the deal level (PFR Ventures, 2021), PFR imposes certain financial commitments from the VC funds management and requires the ability to raise funds from other private investors. Additionally, PFR guarantees individual private investors higher returns on a contractual basis. This tactic favours the creation of a strong capital market, in essence creating a larger pool of HNWIs that are willing to participate with legitimate VC firms and be guaranteed higher relative profits. However, a spotted weakness is that the VC firms supported by public programmes have to diversify the raised amount over a portfolio comprising mostly (not less than 85%) Polish ventures. While this ensures that the funding stays in the Polish ecosystem, this is perhaps also hampering VC firms. Such restrictive investment mandates prevent domestic VC firms from internationalising and exploring opportunities in more developed markets.

NCBR is the second institutional agency, responsible for bridging the gap between the scientific research and commercial landscape (NCBR, 2024b). They do so by distributing European and national funds through financing grants, to which both start-ups and VCs can apply. In this sense, NCBR differs from PFR Ventures, as the former does not co-invest with the industry participants. Until 2020, their largest programme BRIdge Alpha supported the creation of 57 VC firms who were beneficiaries of the European Funds. Now the programme continues with an additional focus on CVCs, offering adequately larger tickets. On the start-up side, the strategy of NCBR revolves around increasing access to financing and inducing activity in particular technology sectors. Moreover, NCBR also promotes bilateral research programmes between selected partner countries such as Türkiye, Switzerland or Taiwan. Outside of the VC scope, NCBR is also responsible for assisting research units, universities and NGOs (NCBR, 2024a). Similarly to PFR Ventures, they impose certain requirements for VC applicants regarding the technological and commercial suitability of their business models. Moreover, the investment tickets are limited to €0.2 million, meaning the focus is on the seed-phase ventures.

The overall assessment of the PFR and NCBR is that they serve as the driver of VC supply. The modes in which European funds are distributed are very flexible, as can be seen by the modularity and differentiation of the programmes. They aid both sides of the industry (start-up side and VC side) as well as academia. Although access to finance is getting increasingly enabled, the dependency on the budgetary periods of the EU can be the cause for disruption. A possible consideration could be a more time-controlled supply of the programmes, distributing funds over time with regard to the actual demand for capital in the market. Again, as Darin (Da Rin, Nicodano, & Sembenelli, 2005) point out, simply channelling the funds is rather ineffective, and promoting entrepreneurial culture should take precedence.

4.2.2. VC FIRMS

In 2019, the analysis of the structure of the VC market showed a gap in financing (Krzysztofiak-Szopa et al., 2019). The majority of firms are nano- (with less than €10 million AUM) and micro-VCs (with less than €100 million AUM). This renders the VC market incapable of sustaining the growth stages of start-ups just domestically. Additionally, PFR funding programmes impose a ticket size maximum of roughly €200 thousand, imposing a certain investment mandate on the VC managers, according to which they have to select PCs. Although this strategy favours markets largely consisting of seed and early-stage ventures, one of the issues apparent in the interviews was the lack of follow-on round investors for portfolios, causing VC managers and entrepreneurs to have to rely on the networks. This can be a problematic task for emerging VC markets such as Poland, where the VC managers are likely to be less experienced and possess weaker network ties, or operate in young VC firms without necessary traction. Moreover, their track records are yet to be proven due to long investment horizons and unrealised returns.

The money distributed by the institutional governments has been allocated in full by 2020 (Dziewit et al., 2021), however, Polish VC firms have been reported to not be able to reallocate money to start-ups. On the other hand, start-ups that have to sustain their growth face difficulties as there is not enough growth financing on the market. The financing gap therefore refers to the more mature ventures that in the near future will increase in numbers as their start-up phases end. The seeming lack of private equity on the market can make foreign VC firms the only viable option for Polish portfolio companies.

Longitudinal data shows a series of interesting patterns Table A.2. First and fore-

Table 4.1: Polish market composition over the years (Kuchar, 2024)

Year	Transactions		Inflow transactions		Outflow transactions	
	Total no.	Total value [2]	No.	Value (% of total)	No.	Value
2019	269	291	15	183 (63%)	11	19
2020	310	489	40	234 (48%)	29	23
2021	424	792	58	459 (58%)	63	84
2022	459	775	52	480 (62%)	37	53
2023	437	484	50	193 (40%)	58	70

most, in terms of cross-border VC flows, the Polish market was always dependent on foreign capital, which comprised around half of activity on the market. The number of inflowing capital decreased by more than half in 2023, signalling the decreasing opportunities for foreign investors. This trend can be additionally reasoned by the fact that foreign VC firms are likely to invest in more verified and transparent business models. This allows them to also contribute larger capital, as the option is safer. This in turn signals that there might be a deficiency of growth-stage opportunities attractive to foreign investors, something to reflect on considering the industry problems (Chapter 1). This seeming loss of interest in the Polish ventures can be contrasted with the outflow of the transactions to obtain import, export and net import data (Schertler & Tykvová, 2012), which bears different implications for the ecosystem. Even though effectively VC financing outflows more than it inflows, the internationalised VC firms benefit from their foreign network effects. In the long term, they can import back the returns to the original ecosystem and reinvest locally, while still maintaining their valuable network.

As for the overall number and value of transactions, there is the aforementioned stagnancy in the market, despite the availability of the funds. Possibly, the most prominent companies have already received financing and developed their businesses in anticipation of the follow-on financing rounds. In this sense, the Polish VC firms have not yet exited from their initial investments, again indicating the infancy of the market.

4.2.3. POLISH HIGH-TECH SECTOR

Start-up Poland offers a yearly aggregation of start-up data, which includes characteristics of the venture itself, as well as comprehensive data on the founders and teams. Without access to VC databases, we can rely on these reports to paint the high-tech landscape in the light of VC internationalisation. This data is also not limited to the successful financing deals and in fact, reflects the voices of the high-tech industry participants.

In the past decade, the health technology industry sector was the leading one in the ecosystem (Kuchar, 2023), contributing around 15 per cent to the market activity each

[2] All values are in € million

year. It also exceeds other sectors in the number of deals and value of transactions. In that sector one of the first Polish unicorns emerged - DocPlanner, scoring two rounds of a total of €200 million. In terms of employment, the number of employees hired in start-ups did not see an increase from 2022, which is alarming considering that job creation is considered one of the most important benefits of a growing innovation system. Other sectors included Data & Analytics, Energy, Gaming and Transportation / Delivery. In Poland, it is suspected that health technologies and technologies being societally relevant will remain the leaders of the ecosystem. The predominant business model among start-ups seems to be subscription-based/SaaS (over 40 per cent). The second spot belongs to the manufacturing/hardware technologies (over 20 per cent) and the third to commission/marketplace (over 10 per cent). This indicates a lenience of the market towards software, IoT, generally requiring different technical skills, but often combined with the health sector. This is corroborated by the report of Start-up Poland (Dziewit, 2023), who claim that around one-third of the start-ups consider AI, deep tech and IoT to be keywords reflecting their business models.

When it comes to widely interpreted internationalisation, only 9 per cent of start-ups report international operations. This is a critical point in the understanding of market penetration of domestic start-ups, as their economies of scale are bound to the Polish market. Additionally, only one-fifth of the surveyed start-ups (n = 4800) are seeking investors with international experience. The Polish start-ups seem to have difficulties in acquiring financing, as 70 per cent reported needing help with locating sources of financing in the market in the first place. Nearly half of the start-ups consider acquiring growth capital to be one of the hardest barriers to overcome. This reveals a larger pattern regarding the accessibility of VC financing, namely that there is an unmet demand for VC financing, amplified in the later stages. This combined with the gap in the distribution of funds gives support to the industry problems. Little is revealed about foreign financing and further investigation is needed, however, some inferences can be made.

Taking the aforementioned data into consideration, foreign VC firms are less likely to participate than domestic VC firms due to limited familiarity with the market, whereas start-ups can suffer from a lack of visibility and insufficient networks. While the supply of financing is ensured for the early-stage ventures and this share of the market can be sustained by public funding, the growth and late-stage companies have to rely on foreign VC financing, as there is limited private equity in the market. The decreasing investment activity of foreign investors in the Polish ecosystem adds to the gravity of industry problems.

4.3. INTERVIEW FINDINGS

4.3.1. GENERAL OVERVIEW

This segment serves as a display of processed interview data, conducted with 11 field professionals incumbent to the Polish VC ecosystem (further referred to as Respondents). The objective of the interviews was to obtain necessary data regarding the determinants of foreign VC activity in the Polish market. This data will help us answer research and domain questions. The display of data will follow the structure of the interview protocol Appendix A.3, focusing first on the brief demographic data, continuing to the knowledge and experience of the Respondents regarding the phenomenon of VC internationalisation. The major overview of the existing and new determinants will be the closing part of the case report.

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Table 4.2: Demographic data of the Respondents

Respondent	Position*	Years of exp.	Investment lead
R1	Investment Director	7	Yes
R2	Analyst	1.5	Yes
R3	General Partner**	30	Yes
R4	General Partner	5	Yes
R5	Investment Director	8	Yes
R6	General Partner	13	Yes
R7	General Partner	9	Yes
R8	General Partner	8	Yes
R9	Principal	2	No
R10	General Partner**	7	Yes
R11	General Partner	10	Yes

* Here, the term *General Partner* is synonymous with *Managing Director* (Feld & Mendelson, 2016)
** Is also a founder of the VC firm

As mentioned in the case context, emerging markets are less likely to have experienced VC managers. However, this should not pose a high risk for the research, as the Respondents were all assessed positively based on the quality and substance of their answers. Despite varying years of experience in the VC industry, we acknowledge that from the theory-building perspective, all of the Respondents were insightful. Moreover, the data on the average years of experience of the General Partner or Investment Director is hard to obtain in the literature, rendering meaningful comparisons difficult. It is kept in the notes, however, that some Respondents might have insight into what happened before 2019, which was the first bloom of the Polish ecosystem. The average years of experience in the VC industry of the GPs [3], which was the majority of the respondents, was

[3] Excluding an R3, which was a significant outlier

8.6 years. All respondents have led an investment with the exception of R9, however, R2 reported leading an investment in an informal way, on behalf of one of their partners. Some Respondents have also mentioned prior relevant experience in other fields, such as investment banking, financing and consulting. Additionally, two GPs (R3 and R9) were also founders in their own respective firms.

4.3.2. INSIGHTS ON VC INTERNATIONALISATION

Although not all Respondents had encountered the term "VC internationalisation" beforehand, the interview protocol ensured alignment with the research goal. In the second segment of the interview, the Respondents were provided with a description of the phenomenon, which focused on the different levels of commitment of internationalising VC firms. In the knowledge part, Respondents were asked to generally elaborate (without mentioning the case of Poland) on possible rationales, benefits, risks and drawbacks behind operating internationally and remaining purely domestic. Additionally, their knowledge was exercised to provide the possible risks and returns for the ecosystem. The purpose of this section was to shift the Respondent's perspective to the determinant view of the VC internationalisation phenomenon. The insights from this section were used to validate the domain question that the inflow of VC can resolve or at least mitigate the industry problems.

As the driving forces behind VC firms leaving their regional boundaries, the respondents placed most often strategic reasons, such as access to a greater deal flow (R2, R4, R5, R6, R8 and R12), diversification of risk (R5, R8 and R10) and strengthening network ties (R7, R8 and R9). This hints at the opportunistic behaviour of the investors, something that we leverage in our understanding of internationalisation later on. In a highly competitive internal market, VC firms are often forced to adapt their strategies and search for deals in "non-obvious places" to function at all (R2). However, a commitment to cross-border investment, especially in an emergent market, requires a fundamentally different approach. To commit to an investment, thus transcending the "information-seeking" internationalisation, VC firms need to be prepared to bear greater risks and overcome larger barriers to entry. However, because they are willing to bear those risks, the risk-return trade-off suggests that the return must be sufficiently high. This broadens our scope as well, namely that the Polish high-tech start-ups not only need to be more visible and perform better, but also these deals have to yield higher against the other deals from other regions. Respondent 9 supports that by saying that these nuances in the deals cause the intent to internationalise to be "case-to-case".

Similarly, when it comes to the reasons for VC firms to stay within the domestic market, the Respondents point to internal organisational barriers such as weak presence in foreign networks (R2, R6, R7, R8, R10 and R11), which can be caused by insufficient knowledge of other regions (R2, R4 and R6). To internationalise the VC firms might also be required to shift their strategy (R3, R6 and R10), as it is more cost-intensive (R3 and R8). Although our focus is primarily on the VC firms capable of investing in Poland, this does not discredit these findings just yet. As we later shift the view to the ecosystem-based approach, we notice how certain determinants such as information transparency and openness to foreignness are affecting lower degrees of commitments of VC internationalisation. For foreign investors exhibiting readiness to invest, the possible negative effects can include obtaining second and third-tier startups (R3) or lower than anticipated subscription of shares (R3 and R8). The dynamic of the mixed-financed deals is likely to be different in Poland, due to the infancy of the innovation ecosystem. Respondents 6 and 7 raise concerns about the lack of added value when financing ventures cross-border, the latter articulating the limited value provided by "party-round" investors.

Shifting the perspective to the ecosystem view, the access to capital (R2, R9 and R10) and knowledge spillover (R5, R6, R9, R10 and R11) are considered to be positive outcomes for the ecosystem. While access to financing being the solution to industry problems seems trivial, we also acknowledge the herd effect that prominent investments can cause (R3), increasing the visibility and exposure of the region to foreign investors. Respondent 2 mentions that access to capital increases competitiveness in the innovation market, and allows for higher valuations, with the conclusion that in the long term, entrepreneurial drive will also follow. However, as later determinants analysis reveals, it is possible that access to capital is necessary but should not be the primary concern of the industry. While knowledge spillovers are the most commonly mentioned, they are one of many network effects the Respondents highlight. Apart from the necessary VC know-how for the local syndicate partners (R10), foreign VC firms will also bring new perspectives and experiences and introduce higher standards to the ecosystem. Additionally, the benefits of internationalised VCs are also transferable to their portfolio companies. Respondent 9 mentions easier access to foreign markets through strategic partnerships, which reduce the dependency on the Polish market to achieve economies of scale. Lastly, the delayed effect of foreign VC entering the ecosystem can be in fact, the reduction of barriers to internationalise outwards for domestic VC funds (R7 and R9).

When it comes to the negative ecosystem effects of internationalisation, domestic VC funds uninvolved with foreign investors can experience a rise in competition (R6 and R10), which is a concern for emergent markets if the entrant cannot be matched in size. This risk can be coupled with another aspect of foreign presence, highlighted by Respondents 7, 8 and 11, namely that the Intellectual Property (IP) of the start-ups tends to migrate to the country of origin of the foreign VC firm as part of the financing agreement. With the most promising start-ups being noticed by foreign investors and simultaneously offered the chance to expand to foreign markets, it is likely that the ecosystem will perceive it as a loss. In Poland where the capital market is underdeveloped a rise in exits in the local market can maximise the returns on the investments taken by the institutional funds. There are ways to offset it, however, through IP transfer tax (R5) or not completely ceasing operations in the domestic market. This is also a signal of a potential direction for the policy-makers concerning the protection of IP through facilitating better conditions in the local market.

This section of the interview corroborates the findings in the literature regarding risk management and return-maximising strategies of investors. We append to that the ecosystem perspective which is more relevant from the governance perspective. As the theory suggests, these risk-return trade-offs will be even more pronounced in the case of technology ventures in foreign countries. This dissemination between risk perception and return perception will be particularly useful in building the effects matrix and causal network later on. In the broader understanding of internationalisation, VC firms can enter the ecosystem without closing a financing deal with a start-up. This strategy can lead to a reduction of information asymmetry (R3) and can also send a signal to the ecosystem about the presence of foreign capital (R10). In the modern age of digitisation and globalisation, the costs of reducing those barriers are lower as duties can be carried out online, without the physical presence of the investor, at least in the early stages of the investment process. This also signals that the lower-commitment VC activity, which seeks deal flow and information will become less cost-intensive over time. This brings us to the determinants of cross-border VC investment, which is a higher degree of commitment and bears distinct ecosystem benefits.

4.3.3. EXISTING DETERMINANTS

The fourth segment of the interview revolved around exploring the determinants of internationalisation, but in particular that of foreign investors to the domestic VC ecosystem of Poland. First, the determinants of VC internationalisation, which were borrowed from the literature, were placed in order of significance by the Respondents. In other words, they were tasked with identifying the relative significance of these factors, regardless of whether they were barriers or attractors. The compiled results of the ranking task are presented in the Table 4.3, which includes the averages, standard deviation, and top position counts. Due to the sample size, the quantitative statistical analysis would be inconclusive. However, the research design revolves around exploratory grounded theory building, which prefers qualitative causal analysis, so the ordinal values will be supplemented with explanations given by the Respondents. The determinants thus have also been placed in the effects matrices Table 4.4, where we interpret their effects on the risk and return perceptions of the foreign investor. We also highlight whether no effects or limited effects have been found, or whether the relationship with other determinants was identified.

The major attracting factor for foreign VC investors seems to be the presence of a talented/specialised workforce and founders (Avg.= 2.455; Std. Dev. = 1.916). Poland is known for its exceptional IT developer talent (R2, R3, R4, R5, and R10), which results in greater quality of start-ups and more efficient resource combinations. R2 reports that the Polish regulatory framework fosters good working conditions for IT developers, as it offers more convenient tax exemptions, leading to growth in IT entrepreneurship. However, some Respondents also reported a lack of marketing talent in Poland (R2, R4 and R6), which heavily undermines the start-up's ability to scale and develop their innovation, especially in harder, more competitive global markets such as Western Europe and the US (R6). R4 and R7 agreed that the reason for the abundance of IT developers in Poland was partially caused by a global event, namely the invasion of Ukraine. The induced migration of talent resulted in a doubling of the number of IT developers in Poland (R5), as well as having more engineers than France and Germany combined (R7). This data however is anecdotal and research was not able to verify it. R5 supposes that the reason why Poland was selected as a destination was its function as a travelling and logistical hub.

Normative distances (Avg.= 3.364; Std. Dev. = 2.248) were the second most significant determinant, associated with the industry practices, among the start-ups as well as local VC funds. The high standard deviation can indicate the difference in understanding of the normative distance. For instance, when it comes to the VC industry norms, they were perceived to be homogeneous with the other markets (R1, R2, R5 and R6), claiming that the industry practitioners are learning the standards from Silicon Valley and the knowledge is constantly being spilt over. R3, R9 and R11 on the other hand, all agree that the norms in Poland are not as uniform as perceived, especially those in start-ups, causing them to seem unprofessional, hampering the communication (R3) and affecting the execution of common goals. As we later see in the reflection that implements the duality of the answers in the causal map in Figure 5.1, by distinguishing start-up norms and VC norms, as they are relevant in emergent markets where different segments of the ecosystem are heterogeneously developed. R2 and R11 both point to the effect of regulatory institutions on the VC industry practices. Due to the weak regulatory quality such as the length of the judiciary process (R2), and low investor protection (R11), regardless of whether they are foreign or domestic, VC investors tend to overprotect their interests which affects the way start-up operates.

The economic integration of Poland with other foreign markets (Avg.= 3.818; Std. Dev. = 2.442) has not been found to affect the risk and return perceptions of investors. R1 and R8, who have placed this determinant at the top of the significance ranking, rationalise this by stating that start-ups perform better when they have increased opportunities to target more markets due to said integration. R8 however, disputes the importance of the Euro currency and prefers to focus on the single market policies, making it easier for the goods and human capital to flow. Importantly, economic integration had the least

Table 4.3: Ranking of the existing determinants in the context of attracting foreign investors to Poland

Respondent	Macroeconomic indicators	Workforce and talent levels	Economic integration	Physical distance	Normative distance	Regulatory distance	Cultural distance
R1	5	3^+	1^+	4^-	7	6	2^-
R2	5	1^+	3	7	3	3	6
R3	6	2^+	6	4^-	1	6	3
R4	2	1^+	3	5	7	4	6
R5	4	1^+	7	3	2	5	6
R6	5	6	7	4	1^+	3	2
R7	2	1^+	3	5	4	7	6
R8	7	2	1^+	4	5	6	3
R9	3	6^+	2	5	1^-	4	7
R10	7	1^+	2^+	5^+	4	3^-	6
R11	4	3	7	6	2^-	1^-	5
Average	4.545	2.455	3.818	4.727	3.364	4.364	4.727
Std. dev.	1.753	1.916	2.442	1.104	2.248	1.804	1.849
Top 3 score	3	9	7	1	6	4	4
Top 1 score	0	5	2	0	3	1	0

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confident position in the ranking, scoring the 7th position three times, due to different arguments. R3 states that because start-ups are expected to globalise, the economic integration between the countries loses its relevance. The economies of scale are meant to be reached through all the markets, for the start-ups to be perceived as attractive by foreign investors. R5 supports the low significance of economic integration, by saying that the majority of start-ups in Poland are software companies, which do not benefit from economic integration. Lastly, the anecdotal evidence provided by R11 points to the fact that there are more funds from Asia, the US and Scandinavian countries in Poland, which indicates economic integration has a limited effect on the investors. Of course, this evidence should be investigated for survivor bias, as we also try to outline the reasons why foreign VCs do not invest in the market.

Regulatory distance (Avg.= 4.364; Std. Dev. = 1.804) was perceived ambiguously, scoring both the lowest and the highest positions twice. We find different rationales behind these perceptions. Respondent 7 for instance, points out that to offset the risks completely the start-up will most likely migrate to a foreign investor's jurisdiction. This exemplifies the mitigation risk strategies that are currently being deployed in Poland by foreign investors. R3 again finds no support for the regulations to be relevant to the investors, as they tend to expect the VC firms to internationalise, and thus be able to operate within other jurisdictions. Respondent 10, who puts regulatory distance in third place, notices that Polish legislation is still distant and contains "exotic entries". This lack of familiarity, however, is expected to be reduced in the earlier stages of commitment to internationalisation. Respondent 11 (1^{st}) highlights the possible indirect effects of regulatory frameworks that target different areas of the domestic ecosystem. For example, the legislative conditions are not perceived as safe by foreign VC firms, causing them to overprotect their interests in term sheets. R11 additionally points out that start-up norms are likely to be affected by changes in the legislation as well as how efficient the judiciary process is. While unfamiliarity with the local regulations can be reduced at a lower cost, the lack of investor protection laws (R11) can pose a barrier for smaller VC funds. The lack of the rule of law (R2 and R11) has also been raised as a common concern for entrepreneurs.

A few Respondents pointed out that macroeconomic indicators (Avg.= 4.545; Std. Dev. = 1.753) are less relevant in general, due to the seeming disconnection of the performance of the economy to the performance of the internal VC market (R2). Additionally, the investment horizon ranges from 5 to 7 years, meaning that the current economic situation might not reflect the actual returns (R8). Even the effect on post-IPO performance is not quite clear based on the current and historical economic indicators. Respondents 1 and 4 present somewhat contradictory opinions, saying that they are macroeconomic indicators are important and basic factors to be considered by many foreign investors, during the earlier decisions to enter the market. There is a reason to believe that the macroeconomic indicators affect different areas of decision-making, distinct from the actual investment which is the ultimate consideration when internationalising (R10). In our ecosystem view, macroeconomic indicators are not governed by any ecosystem participants and have to be reflected as more global determinants, similar to physical distance.

Physical distance (Avg.= 4.727; Std. Dev. = 1.104) scored significantly lower than other determinants, being placed in the top 3 only once. The proponents of the physical distance being significant, claim that there is still a need to carry out duties in person (R9), especially if a VC firm has a portfolio diversified over many countries (R11). R3 and R5 associate physical distance with the easiness of travel, in terms of administrative burdens such as obtaining a visa or time of flight. Moreover, Respondent 2, who puts geographical proximity in the last position, finds it irrelevant because most start-ups are SaaS and software ventures, and everything can be carried out through calls. Respondents also place physical distance in accordance with the risk-return trade-off of the foreign investors, claiming the more attractive the start-up in a distant market is, by observing their growth and market penetrability, the more these burdens lose in significance (R1 and R3). Lastly, observations of bias on the active internationalised VC firms in the domestic market have been shared. For instance, R1 mentions that surprisingly there are more US and Asian funds present in the market, in comparison to European funds. R5 claims that most of the funds are from Germany, Austria, Switzerland, and other neighbouring countries. R6 points out that CEE VC firms will display geographical bias and focus regionally when establishing networks abroad.

In our task, cultural distance (Avg.= 4.727; Std. Dev. = 1.849) was understood and presented as societal norms. While literature defines cultural norms as media attention to entrepreneurship as well as perception of entrepreneurship opportunities, the Researcher here decides to explore what other relevant cultural norms are considered by the Polish VC managers. Respondent 1 for instance highlights the openness to foreignness as a cultural norm, saying that Poles live their lives without ever internationalising, which most likely causes them to go unnoticed by foreign investors. Additionally, the difference in cultural norms makes Asian VCs less likely to appear on the domestic market (R6). R11 summarises that both geographical and cultural distances are a matter of personal preference of foreign investors, however as proven by the ranking, rather slightly affecting the decision to internationalise. Respondent 2 points at the greater value added in terms of team building when investments occur between culturally proximal investors and founders.

This segment of the interviews inquired into the individual explanations of the ranking. The effects matrix (Miles & Huberman, 1994) was a tool used by the researcher in the process of gathering data as a part of the deductive approach, and is suitable for explaining the causal relation between variables. The grounded approach begins with the

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findings of the previous section regarding the strategy of internationalisation. At the core of any investment, there is a combination of risk and return, and as such, the known determinants have some direct and indirect effects on the perception of risk and return in strategic decision-making. Some indirect effects of the determinants were also pointed out by the Respondents, where the direct effect was intervened by the local agents in the VC ecosystem. In other words, some of the determinants influenced the start-ups and VC firms, which in turn shaped the foreign investor's perception of risk and return. Other than those effects, the Respondents happened to point out that certain determinants had no or limited effect on the inflow of VC, which opened new lines of inquiry. Causal effects between the determinants, and previously unanticipated directions of effect were all subjects of the analysis. Table 4.4 shows the effects matrix.

4.3.4. NEW DETERMINANTS

When generating a list of new determinants based on the answers provided by the Respondents, caution has to be exercised. As Miles and Huberman (1994) advise, the new variables have to be refined in the context of redundancy and over-differentiation. New determinants had to fulfil certain criteria: they had to occur during the interview either in the knowledge or determinants segments and be presented with a sufficient causal link to be able to draw a connection to either risk or return, another variable, with an intercepting causal effect, or affecting the VC ecosystem itself. First presented are the coherent propositions, and direct claims made by the Respondents. These key results are further described and elaborated in detail in Chapter 5. Also presented are the propositions that were inferred from the answers, but still credited with sufficient reasoning to find their reflection in the causal map.

The first new determinant that emerged from the interviews was the political atmosphere, which was a result of combining a few concepts. Respondent 2 reports that in Poland, the growth of entrepreneurship was hampered severely by the lack of rule of law, making prospective entrepreneurs averse to opening new businesses, especially technological start-ups. Rule of law refers to judiciary processes and how well they are conducted and in the case of Poland, whether they are independent of the ruling government, which was a concern raised at the European level in 2019 (European Commission, 2019). The political atmosphere became a new variable because more linkages have been identified to validate its position in the causal network. For instance, the economic integration of Poland depends on the current foreign policy and their attitude towards the EU integrating goals. The political atmosphere also affects cultural and societal norms like openness to foreignness, which is particularly important in the study of VC internationalisation. Notably, the political atmosphere should be distinguished from the regulatory framework, as it also encapsulates other areas of governance of the ecosystem. For instance, R5 finds that due to the historical instability in the economy,

Table 4.4: Existing determinants effect matrix

Determinant	Direct		Indirect		No or limited effect	Different effect
	Risk	Return	via Start-up	via VC firm		
Macroeconomic indicators		• Good macro indicators are a sign of a prosperous market/ potential (R5, R11)			• Investment horizon is too long for them to matter (R2) • Uncertain if the economic cycle is a definitive determinant (R8) • Local conditions are irrelevant because the PCs need to globalise (R3, R10)	
Workforce and talent			• Talented founders increase the quality of start-ups (R2, R3, R4, R9) • Talented workforce increases the quality of start-ups (R3, R4, R5, R7, R9, R10)			• Global events increase talent pools (invasion on Ukraine) (R4, R7) • Favourable regulations foster creation of talent pools (R2)

_______ = claim made strongly by one or more Respondents
bolded = inference made by the researcher

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Table 4.5: Existing determinants effect matrix pt.2

Determinant	Direct		Indirect		No or limited effect	Different effect
	Risk	Return	via Start-up	via VC firm		
Economic integration			• Economic integration helps start-ups develop and gain global markets (R1, R8) • PCs that operate on foreign markets increase the likelihood of VC flow from those countries (R1)		• Local conditions are irrelevant because the PCs need to globalise (R3) • Integration has a limited effect when it comes to software start-ups (R4) • Economic integration has no effect (more Asian and American VCs than European (R11)	
Physical distance	• **Proximity decreases the difficulty of carrying out duties** (R1, R3, R4, R9, R11)				• Proximity is irrelevant because all the activities are carried out online (R2) • Proximity might be completely disregarded depending on the investment mandate (R2)	

_______ = claim made strongly by one or more Respondents
bolded = inference made by the researcher

Table 4.6: Existing determinants effect matrix pt.3

Determinant	Direct: Risk	Direct: Return	Indirect: via Start-up	Indirect: via VC firm	No or limited effect	Different effect
Normative institutions			• **Lack of norms in start-ups (business models, pitching, value-adding expectations towards investors) makes them less professional** (R4, R6)	• **Lack of norms among VC funds (ways of conducting business, term sheet structures, cap table formation) leads to lower professionalism** (R3, R9, R11)		• Normative institutions are a consequence of regulatory institutions (R2, R11)
Regulatory institutions	• Low-quality regulatory institutions (long judiciary procedures) discourages investors (R11) • Low investor protection laws can result in (R11)				• Regulatory institutions are less impactful because the PC will migrate (R3, R7)	
Cultural-cognitive institutions					• Cultural norms are not the most important to foreign VC investors (R9) • Cultural norms are seldom a part of the strategy to the investor, rather a matter of preference (R11)	• Culturally hermetic countries will (R3, R7)

_______ = claim made strongly by one or more Respondents
bolded = inference made by the researcher

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fewer high net-worth individuals were generated, as turmoil caused by the political atmosphere did not set a fundamental ground for the rise of the capital market.

Entrepreneurial mindset was a consistent answer among the Respondents (R2, R6, R9, R11), referring to the ability of start-up founders to properly market their products and achieve economies of scale. R2 ties the regulatory framework, as a result of the political atmosphere, to be the main deterrent to growing entrepreneurship in Poland. Although some tax exemptions for SMEs that operate within the business-to-business model are in place, there is a lack of safety which causes distrust among the aspiring entrepreneurs. R5 and R6 claim that the local market conditions such as the population and country size effectively discourage the entrepreneurs from conquering foreign markets. R11 hints that the entrepreneurial mindset is too broad, and a global-scaling mindset is a more appropriate description, however, that falls under the risk of over-differentiation.

Respondents 6 and 10 describe the maturity of the ecosystem to be the significant determinant of internationalisation. Even so, different explanations were proposed. For instance, maturity can be defined as the amount of well-performing late-stage ventures in terms of Annual Recurring Revenue (R6). Respondent 10 associates the maturity of the ecosystem with the number of local VCs. Both respondents also stress that the start-ups need to internationalise and their global success contributes to the maturity of the ecosystem. R10 says that global success stories generate angels, which return their capital to the original market, looking for more opportunities. The maturity of the whole ecosystem, however, suggests that there are certain thresholds to be crossed, like industry norms that match the American standards, where the VC can achieve greater performance. Additionally, concepts like entrepreneurial mindset are necessary but not sufficient for the ecosystem to be considered mature. The maturity of the ecosystem could be described as the high state of all the components of the ecosystem, and as it cannot be attributed to just one of the variables, it becomes a latent variable.

Associated with the ecosystem maturity perception can be the determinant brought forth by R5, the presence of graduates, which occurs in areas of high concentration of talent. To be precise, the graduates are senior-level managers of successful start-ups who decide to sell their share of the company and start their venture. R5 also points out the tendency for graduates to open their ventures under familiar local conditions, bringing the gained experience and know-how back to the original ecosystem. This global experience is perhaps the missing link that hampers the ecosystem in the process of internationalisation. R10 mentions the case of UIPath which generated wealth back into the ecosystem through successful business angel investments. The founders that have succeeded in the global markets can exhibit the "PayPal mafia effect" where the top management splits and starts a new generation of start-ups. As such global success of the Polish ventures can also be considered ecosystem indicators.

STEM education was another determinant mentioned by R2, who explains that it can lead to an increase in talent levels domestically. An example of Chinese STEM education was brought forth, saying that it is positively associated with producing engineering talent. R2 adds that STEM education should also be subsidised by the government, which is not the case in Poland. After many considerations, STEM education was kept, as otherwise another explanation for the presence of talent in Poland needed to be inquired, as it solely cannot depend on global events.

Although weakly present in the interviews, capital efficiency also can contribute to the perception of the investor indirectly. R9 exercises caution when stating that the costs of hiring talent for start-ups are lower. More confidently, R9 claims that this can be a source of competitive advantage for start-ups as the cost of hiring engineers in Poland is lower. R9 also point to one of the benefits of hosting foreign VC firms, namely that they can induce the flow of cheaper labour, due to the network effects.

This chapter focuses on the faithful representation of the insights obtained through the interviews. It is the Researcher's objective to translate these insights into an operational framework for understanding foreign VC activity in Poland. The interview design was structured to answer initially posed research questions, and with the abundant data, we proceeded to a finer formulation of the phenomenon within the case context.

5

Results

This chapter synthesises the findings from the case and places them on the causal map which reflects the nuanced perspectives offered by the Respondents. The causal map not only reflects the causal relations between the plethora of determinants taken from the last segment of the interview, but it also incorporates different methodological choices for how the map should be formulated, taking into consideration the distinction between different degrees of internationalisation commitments, varying depths of the ecosystem, risk-return trade-off and the opportunistic behaviour of the investor.

5.1. Causal map and narratives

To try and understand the complexity of the strategic decision-making behind the internationalisation of VC into emergent markets, we follow Miles and Huberman (1994), as they outline aspects that validate the strength of the causal relationship. The decision to internationalise is a complex one, involving many anteceding variables that affect the strategy of the foreign investor. We achieve that by taking a step backwards to observe the *causal complexity* of the ecosystem, variables and processes, as often a single cause for foreign activity cannot be appointed. We ground the phenomenon of internationalisation in the evidence provided by the Respondents because it allows for *retrospective* view of the events in the ecosystem. The causality is strengthened as the Respondents share evidence of the cause-effect relationships. The exploratory nature of the study takes the initial existing determinants and identifies them within the case, preceded by and or intervening with each other and new variables. This sheds light on the *temporality* aspect of the causality, in other words, the causal map includes the order in which the determinants are occurring. Lastly, the network utilises the strong conceptual formulation of the variables and presents them as parts of larger processes taking place in relation to time and on different depths within the ecosystem (*processes and variables*).

The development of theory takes the form of the causal network of variables Figure 5.1. Even though causal relationships between the variables are predominantly the object of experimental control design studies, these bear a few shortcomings, which can be otherwise satisfied by qualitative causal analysis Chapter 1. By systematic reduction of interview data, extracting patterns, conceptualising variables, and refining and formulating the causal links, we gradually expand the predecessors of the risk and return perceptions. As the interviews were conducted with industry participants, the determinants that were revealed had high internal validity and displayed high local relevance.

5.1.1. METHODOLOGICAL CHOICES

The first and foremost methodological choice used in the causal map was the distinction between the degrees of commitment when internationalising into Poland. It is imperative to understand that being active in the local VC market, does not necessarily correspond to actual investment. This can be leveraged by foreign investors, who decide to engage with the Polish industry participants but remain on a network basis since it has become gradually more cost-effective. Once access to the deal flow has been granted, foreign VC firms can proceed to evaluation and decide to commit to an actual investment. As such, from the perspective of an emergent VC ecosystem, this distinction is valuable as different levels of commitment to foreign activity result in different outcomes for the ecosystem. For instance, purely networking relations signal the availability of the capital to the ecosystem, and can result in higher valuations. Then, if the foreign VC advances to an actual investment, knowledge spillovers can occur and global experience can be shared. Post-investment the benefits of foreign networks and strategic partnerships can be utilised. Similarly, we find that different degrees of commitment are determined by different determinants, namely that initial screening of the internationalisation destinations usually takes into consideration factors such as macroeconomic indicators and physical distance, while actual investment considers more deal-centred determinants as the investors evaluate start-ups case by case (R9). The causal map intentionally narrows the focus to the determinants of cross-border investments, as they are the most relevant in addressing the industry problems, per the domain question.

The second choice was the inclusion of different depths in the mapping of the ecosystem. This allows us to move away from the causal network and formulate a causal map of determinants instead, which incorporates different levels of the ecosystem with different determinants assigned respectively. Outlined are the global determinants which are not governed by any participants and exist as constant states (macroeconomic indicators, physical distance, global events). In the innovation ecosystem depth, we place determinants which are broadly governed by policy-makers who moderate different areas of the VC ecosystem's functioning, such as domestic start-ups and VC firms through legislation, attitude towards entrepreneurs or even foreign policy. Next, in the VC ecosystem depth, we place both start-ups, represented by their founders and talented employees, and VC firms, represented by VC managers. We outline the cascading effects of the prior determinants on the actual industry participants as their involvement is essential to foreign investors. Lastly, we bridge the gap between the risk and return of the investment decision to the actual deal, which is illustrated in the map by individual start-up performance and professionalism, as well as local VC professionalism. The interviews have shown that the determinants do not always have a direct effect on internationalisation, but rather have an indirect effect through either start-up or VC firm Table 4.4.

The main criteria for the inclusion of determinants in the map was a sufficient relationship to the risk-return trade-off. We disseminate the antecedent variables of the risk and return perception within the case by streamlining them through the participants in the deal. Determinants encapsulated in the innovation ecosystem were validated against their effect on the core determinants of investment: start-up performance (13) and start-up professionalism (14). Additionally, we observe the relevant effect of local VC professionalism (15) in reducing the risk perception of foreign VC firms and tie the determinants to it as well. While the initial approach was exploratory, here the determinants explain the various states in the ecosystem. This framework reveals the particular chains of events that occur on broader ecosystem levels and shows their ultimate effect on the individual investment deals of foreign investors. The causal map ties even more closely to the current status quo in the industry, which is achieved by specifying the polarity of the relationship (either having a positive or negative correlation) with other determinants. In this way

The causal map was populated with the existing determinants as well as new ones, according to their ecosystem mapping. Naturally, the determinants were brought up by the Respondents in different contexts, focusing at times on single relationships or whole patterns affecting risk and return. First, the effects matrix Table 4.4 of the existing determinants helped position them with respect to start-ups and VC firms. To supplement that data, the findings from the ranking were utilised to assess their strength and polarity. The full overview of the determinants and their in-case effect is presented in Appendix A.4. Notably, from the original seven determinants, normative distances were bisected into VC norms (11) and start-up norms (10), based on the inference made by the Researcher, namely that emergent innovation markets develop unequally and start-ups tend to lag behind the rest of the ecosystem. Cultural distances due to their low significance score in the ranking were redefined as societal norms referring specifically to openness to foreignness (R1). Talented workforce levels (8) were confidently found to be highly significant and were placed in the VC ecosystem level, having a more direct effect on the individual performance of start-ups. Similarly, we apply that logic to

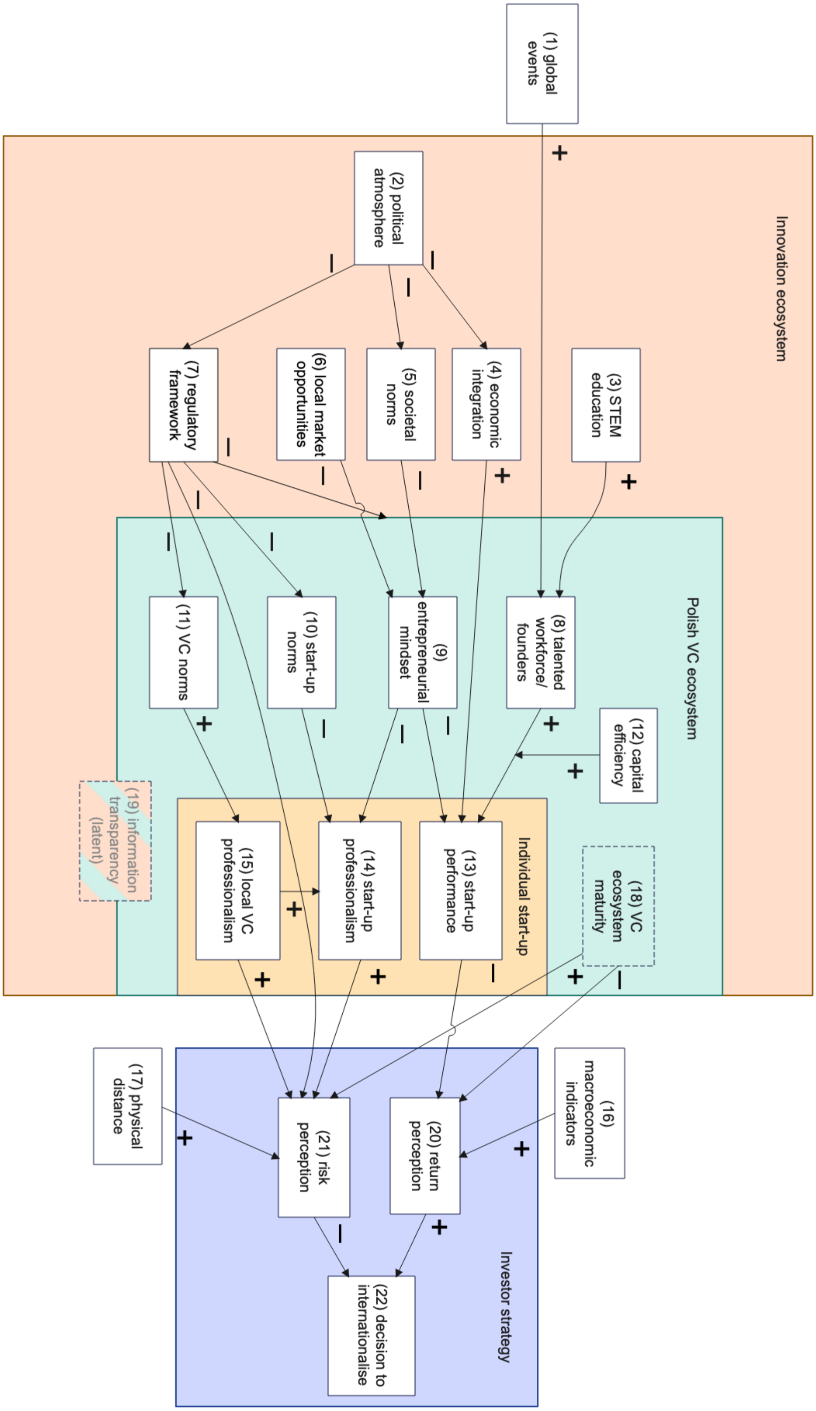

Figure 5.1: Causal network of determinants of foreign internationalisation in Poland

economic integration (4), but we place it at the innovation ecosystem level. Macroeconomic indicators (16) and physical distance (17) were positioned outside at the global level. This was supported by their low relative significance in the ranking task. We do not exclude them, however, as Respondents argue their significance in earlier stages of internationalisation, by claiming that they are basic factors to consider. As we investigated the general activity (research questions) of foreign firms, these were considered relevant. Lastly, the regulatory framework (7), stemming from regulatory distance in the ranking, was claimed to be significant in three ways. The broadest way was fostering the VC ecosystem itself in terms of tax exemptions on particular business models. However, the gaps in legislation affect the industry norms and pose threats to foreign investors due to the lack of sufficient investor protection.

We also find a place for new determinants on the map, namely the aforementioned political atmosphere (2), entrepreneurial mindset (9) and VC ecosystem maturity (18), which we identify as missing links. The political atmosphere encapsulates the broader legal and societal philosophy, which we ground in the innovation ecosystem. As such we consider the way innovation is fostered, through regulatory framework (7) and societal perceptions of entrepreneurship and foreignness (5). The political atmosphere also affects whether the benefits of economic integration (4) are acknowledged and opportunities for globalisation are clear to the ventures. The entrepreneurial mindset of Polish founders is positioned closely to the deal, inside the VC ecosystem level, and has been identified as a significant barrier to start-up performance and professionalism. The necessary entrepreneurial drive is hampered by the local market opportunities (5), which incentivise business owners to stay in the domestic market. VC ecosystem maturity (18) was depicted as a latent variable, and resembling macroeconomic indicators in the way investor is affected. However, VC ecosystem maturity takes this latent form due to it being a broad characteristic of the VC ecosystem, additionally interpreted by individual investors differently. Included in the map was also capital efficiency (12), which has a moderating effect on the ways human resources are combined in the Polish start-up teams, as well as the valuations these teams receive. STEM education (3) and global events (1), were depicted on the map as the drivers of talented workforce and founders, each positioned in their respective ecosystem depth. Lastly, information transparency (19) was included as a latent variable, as it affects the ability to retrieve information efficiently between industry participants.

As the study was exploratory in nature, the causal map attempts to paint the full picture of the ongoing variables and processes in the ecosystem. Some determinants (e.g. societal norms from cultural institutions) have evolved from their original definitions to suit the context more closely. The key results, which bridge the gap between the framework and contributions of the study follow the structure of narratives, which are necessary to capture the context of the study. In this way, the later identification of testable propositions is much simpler as the narratives reveal the gaps in the ecosystem, as well as the participants to which the suggestions will be addressed. When more data is available, the experimental control designed tests can verify the validity of these findings. Nevertheless, the industry problems are currently relevant as the ecosystem is vulnerable to the ongoing rapid changes. The propositions also function as a signal to the policy-makers to reconnect the ecosystem with academia to foster a knowledge-based entrepreneurial environment.

5.1.2. START-UP PERFORMANCE AND PROFESSIONALISM

The study of the Polish VC ecosystem resulted in the inclusion of start-up professionalism (13) and start-up performance (14) as key determinants, to again reflect the opportunistic behaviour of the foreign investors. PC performance is a relevant deal-specific indicator of returns, as Respondent 6 describes:

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> Certainly, an important factor is how internationalised startups operating in a given market are. On the one hand, it is about attracting foreign funds to that market, but on the other hand, these funds expect that the companies they invest in will also be internationalised, at least in terms of revenue sources. It is good if you have a team in Poland, the Czech Republic, or Hungary, but the question is where are your revenues coming from? Are they only from the local market? Have you already gone global and shown that your product is competitive? Is it able to be monetised?. ... When we look at particularly the top funds, they expect that at least the company they invest in, and its technology, are exceptional on a global scale. (Respondent 6)

As Polish start-ups rarely expand to attractive international or global scales, investors will perceive the potential returns (20) as diminished. On the other hand, interviews have shown that the professionalism of a Polish start-up management team, which stems from the start-up norms (10) and entrepreneurial mindset (9), is often evident during the negotiation phase of the deal, causing the ventures to be perceived as less transparent and less knowledgeable about the investment process and how to manage investor expectations. Respondent 9 states:

> In Poland, this market is still not well developed. It must be emphasised once again that this observation refers to *deep tech start-ups market* because there is a slight difference when it comes to, SaaS solutions or fin-tech - these are completely different markets in terms of solutions. I am aware this stems from a lack of understanding of the startup ecosystem structure. They [start-ups] function in a very different and distinct way compared to startups abroad. What is still lacking in the Polish market is the knowledge and individuals who can explain to these start-ups how to acquire funds and how

> to develop, especially having in mind these technological startups. I believe that is the main problem. ... Practically speaking, they [start-ups] do not know how to pitch. They do not have ready pitch decks - they are practically unprepared for conversations with foreign investors. (Respondent 9)

Adherently, as exchanges of practices occur most effortlessly in the VC plane, the role of a local VC also includes that of an educator. As the priority shifts to the unification of markets, the start-up side of the ecosystem needs to adapt to the norms, a process that can be facilitated by VC firms through smart investing and knowledge diffusion. The experience segment of the interviews shows that the VCs constantly build rapport with foreign industry participants and the perception of these relations is consistently perceived as that of high value. This quote hints at the first proposition from the findings. In the case context, the role of the local VC is also more pronounced, as they were found to precede both risk perception and start-up professionalism. Firstly, as the local VC firms are most likely to be approached by outside parties, they are often bridges to the ecosystem, established through extensive professional networks. Additionally, the local syndicate partners help mitigate the information gaps in local legal framework and judiciary processes, as the case of institutions in emerging markets is quite dynamic and can give an impression of being too demanding on the investor. Consequently, local VC professionalism affects the risk perception of an investment directly. In response to the question of the

> ...the ability to rely on a local VC to take care of the shop when they are absent. In many, many of the foreign VCs will require that some local VC would be there first. As you are aware, ensuring the locality is well-managed while serving on the board... (Respondent 3)

The proposition from this section of results is that the local VC firms will remain the key to the development of the ecosystem. Their relative position in the network indicates a variety of strong effects they have on start-ups and foreign investors. By promoting and endorsing their successful portfolios through professional networks, they improve the visibility of the ecosystem. By maintaining strong local embeddedness with the highest quality of practices, they improve the accessibility to the ecosystem.

> ***P1. In emergent VC markets, the professionalism of local VC firms decreases the risk perception of the investments in local PCs.***

5.1.3. Entrepreneurship in emergent markets

Although VC professionalism might take away the load from the ecosystem, it is evident that the development has to be driven by the start-ups. One of the refined issues that emerged from the interviews was the lack of entrepreneurial mindset (9), despite the extraordinary IT talent (8) in Poland. The high capital efficiency (12) in the Polish talent market, in principle should allow for a more efficient resource combination increasing the start-up performance. Yet, as suggested in the interviews, Polish entrepreneurs often fail to identify business opportunities in the early forming stages of their ventures, resulting in poor strategic management. For instance, the underdeveloped marketing side of ventures, seemingly unaccounted for in the creation of business models, prevents the development of enterprises, despite their strong intellectual capabilities.

> Therefore, looking at the investment of foreign funds in Polish companies, there are not many of these investments. Why? Because it is mostly a systemic problem of the Polish startup ecosystem. I believe they focus too much on technology and completely neglect the product and scaling of the product. ...other Polish companies that even have great technology do not get the funding because they cannot scale abroad due to the founders having a weak mindset from the start, building a Polish business, to scale it later internationally. It is impossible to build an international business that way, founders need to think from day one about building a business with international DNA. (Respondent 4)

The interviews reveal that the entrepreneurial mindset (9) has to relate to the desire to globalise. Thus, it is not the rate at which the start-ups form that ought to be investigated, but rather how they are managed and how well they translate their organisational capacity into conquering different markets to achieve scale attractive to the investors. This is undermined by the local market opportunities (6), as Poland is often perceived by start-ups as sufficiently large, causing the drive to globalise to decay. A large potential in the domestic market, can facilitate healthy competition but also be detrimental to the creation of outliers on the market, something that attracts foreign activity. As the lack of growth-stage capital is a persistent issue in Poland, the entrepreneurial mindset could be a pivotal point of discussion on the inflow of foreign VC.

> ***P2. In emergent VC markets, an entrepreneurial mindset revolving around globalisation is the key to increasing start-up performance, hence increasing return perception.***

The lack of marketing skills is one of the reasons why contesting other competitive markets can come across as a challenge to domestic ventures. The ability to embrace this multidisciplinary within the start-up is considered one of the essential building blocks of entrepreneurship. Respondent 2 claims:

> Poland is somewhat of a hub with knowledge for all of Europe. We have a lot of talented people, especially tech guys, who may not necessarily know how to sell but are very skilled. So, talent is number one. (Respondent 2)

Marketing is a vital component for the success of start-ups in emergent VC markets. It helps build brand awareness, attract investors, drive sales, and create a competitive edge. By leveraging effective marketing strategies, start-ups can achieve growth, adapt to disruptive changes, and build lasting relationships with their customers. The lack of marketing capabilities which is a sign of decreased entrepreneurial knowledge is proposed to be a significant determinant of overall start-up performance.

> ***P3. In emergent VC markets, an entrepreneurial mindset revolving around strategic internal management is the key to increasing start-up performance, hence increasing return perception.***

Broadening the concept of entrepreneurial mindset to entrepreneurial education, we can find a causal connection to VC professionalism as well. There is a seeming gap in education related to the ways of acquiring investors and broadening the network, also noticed in the industry reports. This is a problem as the entrepreneurial spirit is usually reflected in the adapted norms evident in the deal-making process. The adaptability to the terms and resilience in the face of adversities is key to conducting international business. VC firms can find Polish start-ups struggling in the understanding of deal steps such as negotiating the cap table and composition of the board of directors. This is epitomised by the quote from Respondent 9 in the previous section.

> ***P4. In emergent VC markets, an entrepreneurial mindset revolving around managing stakeholder expectations is the key to increasing start-up professionalism, hence decreasing risk perception.***

5.1.4. POLITICAL ATMOSPHERE AND GOVERNANCE

The political atmosphere although appears not to have a direct effect on the participants of the deal, has been drawn to have relations with other key areas of the internal VC ecosystem's functioning. We delineate its effect on the regulatory framework which is established to execute legal entrepreneurial philosophy.

> It shows that we do not have the rule of law in Poland, which is crucial for entrepreneurs to feel safe and want to start businesses at all. How can a founder be certain that if they have a dispute with another entrepreneur or investor, their case will be resolved in court, considering Poland does not have independent courts and cases take four to five years to resolve? These are much more structural issues related to political power, but we cannot deny they are very, very important. So, can there be an entrepreneurial ecosystem in Poland or not? (Respondent 2)

Additionally, whether the regulatory framework complies with the European Union's standards dictates whether the privileges of economic integration apply to domestic

SMEs. In the face of EC's isomorphic pressures, dictating convergence of regulatory practices, execution of strategies and initiatives and societal responsibility, the Polish start-ups operate in a constantly shifting ecosystem, which is governed by the political atmosphere in the country. Economic integration is crucial in the expansion of the ventures, as it reduces barriers to entry to other Member States, increasing the flow of market opportunities.

While, rapidly growing talent pools of talent are accommodated and are being incentivised to form technological ventures, through means of lenient tax exemptions, this is not sufficient in fostering growth in the key high-tech sector. The interviews have shown that a sub-optimal legal framework combined with inefficient judiciary processes pushes both the supply and demand side of the VC ecosystem to operate with norms (10 and 11) distant to foreign investors. For instance, Polish founders tend to overprotect their interests in the term sheets, caused by the lack of rule of law. For the same reason, regulatory framework seems to be the reason for overprotective measures by foreign investors

> This system strongly promotes or indicates securing against non-business risks. Not that the project will fail because there is no market or it did not achieve success, but that someone will use legal regulations to simply kick the investor out of the business. Foreign investors have a different approach, and my perspective on this, after many conversations, is that there are simply better legal mechanisms that do not easily create large loopholes allowing the investor to be excluded or their value in the company to be nullified. At the same time, they must not impose severe restrictions on the management or founders. (Respondent 11)

The lack of timeliness in resolving civil cases is an effective deterrent for foreign investors, as the usual protective provisions are likely to be resolved in a legally flawed jurisdiction. Even though the tax exemptions are in place to incentivise talented workforce to form businesses, this does not translate into sustained start-up creation. Furthermore, one of the risks of low-quality regulatory institutions is the migration of intellectual property. PCs are driven towards more efficient capital markets by their investors, where the returns from exits can be much more spectacular. Even though the migration of IP rarely culminates in the closing of the initial branch, the capital market of an emerging economy, which has limited activity, few IPOs and low volume, can perceive the migration of start-ups as a poignant loss.

> ***P5. In emergent VC markets, the innovation-oriented political atmosphere is key to increasing the quality of the regulatory framework, hence improving the industry norms.***

An important relation is inferred between the political atmosphere and societal norms, as the focus on innovation globalisation. Entrepreneurs are not recognised as viable career paths in society, which is coupled with the early stage of the VC ecosystem, resulting in a situation where there are few trailblazers to navigate and educate the rest of the ecosystem, to utilise the knowledge-based economy. While entrepreneurship is not underpromoted, the focus of society might be drawn towards other recurring and relevant societal issues, away from the innovation direction.

> These cultural differences, in my opinion, are more of a barrier than an incentive. Especially in Poland, which is a large country where one can spend half or an entire professional life without venturing abroad or doing anything actively internationally, unlike smaller countries such as the Baltic states or the Czech Republic, which are more active. ...Our ecosystem resembles the large Western European countries, such as France, which are quite closed off to what is happening outside, while smaller Western European countries, like the Netherlands, are much more open. I think this aspect is significant here. (Respondent 1)

Little evidence has been found that entrepreneurial culture is being encouraged through the political atmosphere. On the contrary, starting their own business is still risky, and entrepreneurs are not being empowered, neither in the early stages nor after success. These cultural attitudes could be significantly improved, once the political situation stabilises.

> ***P6. In emergent VC markets, the international political atmosphere is key to increasing societal norms, hence increasing entrepreneurial attitudes.***

5.1.5. MATURITY OF THE ECOSYSTEM

The maturity of the VC ecosystem is a complex variable, concerning the maturity of different areas within the ecosystem. With information asymmetries, however, foreign investors have to rely on indicators of maturity when assessing entrance to the market. Emerged from the interviews was the importance of global success stories, which improve the visibility of the ecosystem and indicate potential opportunities in the market. Additionally, the "PayPal mafia effect" takes place, a phrase common in the industry, used to describe the phenomenon of break-off of the talented management of the initial company, driven by the intent to start their technological ventures.

> I believe we can add the maturity of the start-up ecosystem, that is, the number of local funds, and the number of global successes, meaning companies from Poland that have achieved significant success. There is the "PayPal mafia effect" where the founders of such companies return to the market

> and establish more funds and startups. And this starts the snowball effect. ...this company [UIPath] has generated a lot of angels who now have access to capital. (Respondent 10)

Consequently, the exponential growth will be observed by the external parties. The maturity is harder to conceptualise due to there being many indicators of how developed the VC ecosystem is. Those are perceived differently by individual external observers and are most likely present in the preliminary phases of reducing the barriers to entry.

> ... a very important element is the maturity of the ecosystem. For many funds, the Polish ecosystem is still not mature enough, and for example, we still do not have enough companies that are large enough to meet the criteria. For example, investment companies invest in companies that are at Series B or Series C rounds, raising 50, 100 million dollars or euros, with 10, 50 million euros in repeatable revenues, and they consider this ecosystem still immature to invest in or build relationships with. (Respondent 6)

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Once the initial market information barriers are crossed and the deal process has begun, the maturity is reflected more explicitly through the norms implemented by the deal participants. This again moves us to the deal-based view of the investor's strategy, where the individual assessment takes precedence in defining the outcome decision to internationalise.

> ***P7. In emergent VC markets, the VC ecosystem immaturity decreases the return perception of the market, from the ecosystem-based view.***

> ***P8. In emergent VC markets, the VC ecosystem immaturity increases the risk perception, from the deal-based view.***

5.2. SUMMARY OF THE KEY FINDINGS

This chapter synthesizes the findings from the case study on the internationalization of venture capital (VC) into emergent markets, focusing specifically on Poland. It introduces a causal map to illustrate the complex decision-making processes behind internationalization strategies. We provide methodological choices of our framework, including distinctions between degrees of internationalisation commitment and different depths of the ecosystem. The causal map is populated with determinants sourced from respondent interviews, reflecting causal relationships and temporal sequences within the ecosystem. Additionally, we observe their complexity and effect through the retrospective view of the events.

The study delves into the dynamics of the Polish venture capital (VC) ecosystem, highlighting start-up professionalism and performance as crucial determinants. While start-ups often exhibit lower professionalism during negotiations due to a limited understanding of investment processes, their inability to scale globally diminishes potential returns for investors. Key propositions suggest that local VC firms play a pivotal role in reducing risk perception by providing expertise and bridging cultural gaps. Moreover, fostering an entrepreneurial mindset focusing on global scalability and strategic management, along with improving marketing skills and stakeholder management, is vital for enhancing start-up performance and professionalism.

Additionally, the political atmosphere and governance significantly impact regulatory frameworks and societal norms, influencing the quality of the entrepreneurial environment. Challenges such as inefficient judiciary processes and regulatory instability deter foreign investors and hinder start-up growth. Therefore, an innovation-oriented political atmosphere is essential for improving regulatory frameworks, fostering societal attitudes toward entrepreneurship, and shaping the maturity of the VC ecosystem. Overall, VC ecosystem maturity, driven by local and global success stories, plays a crucial role in shaping investor perceptions and risk-return dynamics within emerging markets like Poland.

6

DISCUSSION

The general discussion is raised to integrate the findings of the case with the current literature on the VC internationalisation phenomenon. We first critically discuss findings in light of the initially posed research and domain questions. We revisit the existing literature and contrast the findings taking the context of an emergent market as a benchmark. We append these with original alternative explanations, assessing the contribution to the theoretical in light of the academic problem outlined in the Chapter 1. We provide methodological limitations to enhance procedural transparency and ensure the possibility of replication of the study.

6.1. GENERAL DISCUSSION

The overarching motivation for this Thesis was finding an answer to the Polish industry problems, to which the study of internationalisation was proposed. The domain question inquires about the feasibility of foreign VC activity in mitigating the issues on the market. Therefore, we designed an interview with the incumbent Polish VC managers, who share their insights on the potential outcomes of the phenomenon, as well as barriers and attractors to entry and investment, for foreign VC investors. We structure the interview protocol and the ranking task in a way that answers the research questions. To be precise, we investigate the relevance of the currently examined determinants in the literature, and we explore ones that are more specific to the context, which will now be presented.

The case of Poland has shown that the dynamic landscape of the VC ecosystem is defined by many moving factors, embedded in different levels of governance. It is through the analysis of the variables and processes within the case, that we reconfirm the emergent traits of the ecosystem. To observe the contemporary and unique nature of VC internationalisation in Poland, the local case study was an adequate choice. The current studies tend to gravitate around markets where more data is available, and as such, for a portion of the European countries, belonging to the CEE region for instance, the findings will not apply. Current literature (Devigne et al., 2018) names the benefits of internationalisation, but lacks the inclusion of the contemporary nature of an emergent market, which ultimately does not capture the relevant Polish industry scope. An emergent market, in this case, will find some of the academic studies less relevant. For instance, findings based on post-IPO performances (Chemmanur et al., 2016) or IPO proceeds (Cumming et al., 2016), will not help address the major challenges that the individual participants are facing. The need to explore other research frameworks was apparent.

6.1.1. ANSWERING THE RESEARCH QUESTIONS AND CONTRASTS WITH THE LITERATURE

The initially posed research questions served as the focal entry points to the study, guiding through the exploration of the ecosystem dynamics, despite limited data. This process, which culminates in a grounded and in-depth understanding of variables and processes taking place in the ecosystem, must also ensure that the main research questions and sub-questions have been answered. The causal network and the narratives are the tools that incorporate a useful distinction of the different levels of viewing the determinants. Their position within each of the levels also dictates which institutions govern them. This shows the cascading effect of the more global innovation ecosystem determinants, to which the political atmosphere seems to be a key antecedent, over the more deal-relevant key determinants of return and risk perception. This approach bridges the gap between the current ecosystem view popular in the literature and a more deal to deal based approach, which is more practical in the emergent ecosystems where the deal activity is relatively small. Due to this scarcity, the general understanding of the behaviours in more developed VC markets might not apply to the same extent. Through the streamlined approach, we place the start-ups at the centre of the network and for a good reason. At the heart of the decision to internationalise, are the individual start-ups, which must ascend above the rest of the landscape to attract the foreign investor's capital. Thus, their performance and professionalism are the forefront key determinants of how foreign investors perceive the Polish VC market.

The main research question (RQ1) stated: *What are the determinants of foreign venture capital firms' activity in the Polish VC market?*. We show that despite complex processes that take place in the ecosystem, where many variables and processes are present, causal links can be established. For the foreign investor, the return generated on the investment has to ultimately outweigh the risk they will bear should they invest in cross-border into an emergent market. The key results of the case suggest that the inflow of foreign VC in the ecosystem scope view is determined by the aggregate performance and professionalism of the VC side of the ecosystem - the direct determinants of the VC investment activity. By understanding the single instance of investment, we are able to generalise more broadly to the causes of internationalisation. However, the attractiveness in terms of performance and professionalism levels of start-ups, do not occur in a vacuum, but rather are a consequence of antecedent variables in the broader ecosystem level.

The first research sub-question (**RQ1.1**) inquired about the relative significance of the determinants present in the literature. Although the causal map does not discriminate against any of the previous findings, the relative significance of these determinants helped identify the most crucial findings. From the ranking task, we find that talented workforce levels and founders (8) are a major attracting force for foreign investors. Talented workforce levels are an attribute of the ecosystem recognised among the incumbents as well as foreign investors. In the causal map, we streamline this effect through start-up performance (13). From the social embeddedness perspective (Madhavan & Iriyama, 2009), the talented workforce is initially referred to as talented communities active in both foreign and domestic countries, which utilise the network effects to induce start-up formation. Within this research, another angle of this definition emerged, namely that the talented workforce is a necessary, but not sufficient condition for ecosystem growth and foreign capital attraction. Despite many factors (global migrations of talent (1) and STEM education(3)) leading to the increase of talent, these resources do not combine well enough to display attractive performance. This hinted at the entrepreneurial mindset being the missing link that hinders start-up performance.

Notably, different sides of the ecosystem develop differently, as VC firms have access to professional networks and thus concentrated sources of knowledge and industry practices, whereas start-ups find it difficult to capitalise on the knowledge if they do not acquire value-adding VC financing in the first place. Normative distances were the second-highest-scoring determinant in terms of significance. As Ahlstrom (2006) point out informal institutions have an increased importance in emergent markets, as they have to substitute the dubious formal institutions, exemplified clearly in the case of Poland. The regulatory framework of the Polish innovation ecosystem has been found to pose risks to the local participants and foreign stakeholders. For instance, the different areas of the ecosystem's functioning are impacted by regulatory gaps, such as the deal process, the SME formation, the security of the investments, and the civil dispute resolution process. As a result the informal institutions, such as norms and practices of the industry participants, have a pronounced importance in mitigating the perceived risk. This is also reflected in Proposition 1 regarding the importance of a local trustworthy partner which can offset these obstacles (Bottazzi et al., 2011).

Limited support was found for cultural distances, macroeconomic indicators and physical distance, despite their relevance in the literature. The macroeconomic indicators (Schertler & Tykvová, 2011, 2012) and physical distance (Aizenman & Kendall, 2012) have a greater impact on the strategic decision to internationalise, rather than actual investment which is the main conclusion from the ranking task. The causal map reflects that by placing them as global determinants, which are not governed by any actors in the ecosystem. Geographical bias, despite being comprehensively discussed in literature (Cumming & Dai, 2010), is suspected to have reduced relevance in the coming times, as the digitisation and globalisation of information, cause the costs of reducing information asymmetries to diminish. As it becomes easier to enter the emerging VC market's networks without having to commit significant resources, as well as the fact that the visibility of the ecosystems increases naturally and the deal flow is spread, the geographical bias will eventually lose its relevance, as the opportunistic investor behaviours will surpass it. Lastly, the cultural-cognitive institutions were found to have a limited effect according to their previous definition. Bruton et al. (2005) defined them as societal pressures on entrepreneurs, whereas Bustamante et al. (2021) measured particular indicators related to the perception of entrepreneurs in the society. Although the Respondents did not see the significance of societal norms during the task, we summarise them to be the determinant of the entrepreneurial mindset.

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The most prolific determinants (**RQ1.2**), which were suggested by the Respondents, and which require further theoretical strengthening with statistical experiments, were entrepreneurial mindset and maturity of the ecosystem itself. The entrepreneurial mindset (9) was found to be the antecedent variable of both start-up professionalism and performance. The ecosystem-wide shift to a more global scaling mindset can prove to be a difficult task for Polish entrepreneurs, as it stems from societal cultural norm constraints as well as the Polish market constraints. Entrepreneurship itself is a concept explored in the literature, however, with the applied context of an emerging VC, we propose that only a specific type of entrepreneurship will have the desired effect of improving the performance and professionalism of the VC side of the ecosystem. Namely, entrepreneurship which focuses on global scaling, strategic internal management and stakeholder expectations management is the key antecedent of start-up perception. Ventures that intend to globalise and acquire foreign smart capital therefore will be forced to act towards adjusting their practices to match those of the foreign industry participants. The issue of unrealised potential, coming from the intellectual predisposition of the VC ecosystem and countered by its reduced performance, is suspected to be resolved when entrepreneurship values in Poland become more refined.

The emergence of maturity of the ecosystem (18) as a latent variable should not be a surprise, as the case context revolves around an emergent market. This "hidden" feature of the market describes the efficiency of the agents and processes taking place in the ecosystem, as well as the readiness of the network to host foreign VC firms. The immaturity can be observed with relatively low costs, as there are several risk-return determinants, most likely taking place in the earlier internationalisation decision stages, before the commitment to reduce the information asymmetries. Allocating the latency status to ecosystem maturity is sensible since the indicators of maturity are limited to the individual information obtained by the investors, their interpretations and assigned values. In the deal-based view, to foreign investors, the unpreparedness of the ecosystem might be the source of additional operational and legal risks, hence imposing higher risk tolerance on investors. It is suspected that the initial macroeconomic indicators and physical distance will be substituted for more specific indicators regarding the ecosystem. These might point to the lack of necessary foundations for the scaling of the start-ups in their domestic markets, forcing the investors to accommodate them abroad, where a more favourable environment is fostered.

To observe which determinants are motivators and which ones are barriers (**RQ1.3**), the relationships between the variables are examined. The clear distinction between risk and return perceptions allows us to delineate chains of events that consequently accumulate in particular ecosystem bottlenecks. Our determinants task gives sufficient room for the Respondents to elaborate on these nuances.

The causal map with narratives in Chapter 5 displays the particular effects that the variables have on one another. From the interviews, the most polarised determinant was the normative distance of the ecosystem. On the one hand, the Respondents agreed that the start-up practices are sub-par causing the investors to bear additional risks and burdens after the investment process is finalised. On the other hand, Polish VC firms present themselves as ready candidates to syndicate with, practising the norms inherited from the more developed VC markets. This resulted in the split of start-up norms and VC norms in the causal map and in our view of the ecosystem. In emergent markets, it is likely for the different constituents to develop at unequal rates, creating an imbalance in the risk and return perceptions.

The analysis of the relationships with regard to the direction of the effect and strength resulted in the formulation of narratives and propositions, which describe different dynamics within the ecosystem. In our case, the largest reported force driving foreign investors towards the Polish market is the availability of highly skilled professionals. Yet, the analysis reveals that despite the talented workforce being a clear attractor, this is not converted into the attractive performance of the start-ups, entrepreneurial mindset as a major barrier,

6.1.2. GENERALISABILITY TO THE DOMAIN

The investigation into the phenomenon revealed a much more intricate causal network of determinants, which have the specific context of the emergent markets. Through systematic reduction and refinement cycles in the analysis, the variables are more than just predictive - their causality is grounded. The variables have been placed into the network taking into consideration their relationships with each other, their place in different ecosystem depths and the polarity of the correlation, which is unique to the case, but from which we arrive at particular generalisable conclusions.

To answer the domain question (**DQ1**) and validate internationalisation as the answer to industry problems, we revert back to the second segment of the interview where we inquire about the risks and returns for the ecosystem. Our inquiry distinguishes between different levels of commitment when internationalising, as they bear different ecosystem benefits. VC firms can engage in the market without necessarily investing by establishing network ties with local VC firms, thereby reducing information asymmetries and increasing deal flow access with lower resource intensity. Our main objective, however, is to also explore the determinants of higher commitment levels, where foreign VC firms finance Polish ventures, highlighting the different risks involved. These findings enhance the theoretical understanding of foreign investors' strategic decision-making, considering both the selection of Poland as a destination and the commitment to invest in Polish portfolio companies, within the context of an emergent market. Benefits such as the transfer of knowledge, practices and networks from more developed markets, alongside the notions of smart-connected capital, are associated with the actual investments. As the foreign VC firms are becoming gradually more cost efficient and they remain opportunists the lower degree of internationalisation will become more popular. Thus in the causal map, we narrow the focus to the determinants of the actual investment as the domain of the thesis is solving the industry problems. The PCs located in the emergent markets are suspected to benefit much more from the guidance of foreign investors than the literature currently predicts. The literature reveals the growth patterns for internationally backed portfolio companies (Devigne et al., 2013) but does not engage in the discussion of key knowledge the foreign investor might possess that allows the start-ups in emergent markets to pass the necessary milestones of success.

Additionally, the start-ups that are knowledgeable already are effectively driven outside of the ecosystem by their investors. In that sense, the IP migration risk (Mäkelä & Maula, 2005)(2006), is a poignant ecosystem issue. The stakeholders are forced to rely on successful capital and first-hand experience to return to the market and reintroduce those benefits back to the network, which can take time as the first VC pioneers have yet to exit from the first investments. In the current state of the Polish market, the issue of the scarcity of private equity is dire, as the first wave of publicly-backed ventures enter their growth stage, and are left without the necessary financing to enable their growth.

Lastly, the important point of the discussion is the generalisability of the results. This framework intentionally shifts between the scopes, gradually narrowing to the basic principles of the investment process from the point of view of an external participant. This approach yields many positive results, as it allows for a comprehensive analysis of the determinants in an ecosystem view. Understanding how the ecosystem effects impact individual deal processes is crucial in cases such as ours where the deals are scarce in the first place, thus the ecosystem can be represented easily by fewer deals. By identifying the weaknesses of the ecosystem that prevent foreign firms from participating we avoid the survivor bias, which was identified in the academic problem. The unique sample of domestic VC managers also contributes to the academic understanding. Although this approach is also visible in other academic work, such as that of Wright et al. (Wright et al., 2002), the studied case of India is governed by completely different market forces and times. The relationships in the causal map can be generalised to a certain extent to the other emergent markets of the CEE. A more cautious approach would be to implement similar types of inquiries in emergent markets that lead to the identification of the determinants of different levels and governance.

6.2. CONTRIBUTIONS TO THEORETICAL UNDERSTANDING

The academic approaches found in the literature could not exhaust the understanding of the international flow of VC into emerging markets in similar situations as Poland. This created a need for a novel framework, which prioritises the theoretical understanding of the phenomenon of internationalisation. To do that we implement qualitative causal analysis of the determinants known from previous findings and incorporate the first-hand observations of the industry participants (VC managers), who administer the Polish context. Additionally, in the process of conceptual refinement, we implement different scopes of analysis, such as the distinction between levels (global, innovation ecosystem and VC ecosystem), in which we systematically narrow down the determinants. We replace the broad concept of VC internationalisation with the specific deal-based view, which captures the opportunistic behaviour of the investor. This unveils a causal chain of events and states taking place in the network, which in turn allows for easier identification of the underdeveloped start-up side of the ecosystem.

As such the testable propositions were delineated along the narratives in Chapter 5. The local VC firms are expected to remain the load-bearers of the ecosystem (Proposition 1), at least until the start-up side of the ecosystem closes the gap between the other participants by adapting industry norms. The role of domestic VC firms is potentially doubled, as they are the key to acquiring follow-on financing for their portfolios, and have the ability to quickly adapt the practices from more developed markets, fulfilling the role of an educator in the ecosystem.

The growth of the ecosystem is driven by the growth of start-ups, which given the case context, find difficulties in achieving scale attractive to foreign investors. Further research can focus on particular aspects of entrepreneurship, such as globalisation, strategic resource combination or stakeholder expectation management. (Propositions 2, 3 and 4). This mindset shift, facilitated by effective local VC support, can significantly enhance start-up professionalism, reduce risk perceptions, and increase the overall attractiveness of the ecosystem to foreign investors.

The political atmosphere (Propositions 5 and 6), on the other hand, affecting a series of intermediate variables is indeed important in the case but has been sufficiently discussed in the literature (Guler & Guillén, 2010b). An innovation-oriented political atmosphere is crucial for creating a supportive regulatory environment and fostering positive societal norms towards entrepreneurship. The lack of efficient legal mechanisms and prolonged judiciary processes act as deterrents for foreign investors, while political instability can undermine entrepreneurial activities. Improving the political and regulatory landscape is essential for enhancing industry norms, reducing investment risks, and promoting a more vibrant and globally competitive start-up ecosystem.

Lastly, the maturity of the ecosystem was a concept brought forth by the interviews. The limitation of that variable is the broad definition given to maturity, as it is perceived only using certain internal indicators by foreign investors. In future research however, maturity could be quantified by a more selective set of metrics, similar to the ones proposed by Cukier and Kon (2018), but expanding from the VC ecosystem to the the broader innovation ecosystem. According to the distinction provided, the Polish start-up ecosystem would fall into a nascent or evolving category, falling short on the key metrics such as entrepreneurship in universities, entrepreneurial culture values and regularity of start-up events. If the initial barriers related to maturity perception are reduced, still the deal participants are responsible for demonstrating maturity through established norms and practices during the deal process are essential for reducing risk perceptions and attracting sustained foreign investment.

Although these areas are more pronounced in the Polish context, the findings can be generalised to other emerging markets. Despite the heterogeneity of the CEE region, the case of the Polish VC market acknowledges the possible threats to the growth in the ecosystem view, applicable under similar conditions, such as the economies with inefficient capital markets lacking installed formal institutions. The research approach, as well as the case study protocol, are an invitation to replication of this study. Of equal importance are the literal replications, on which a longitudinal set of data can be built, and theoretical replications, to further deepen the understanding of emergent VC markets.

6.3. METHODOLOGICAL LIMITATIONS

As emergent markets are not yet studied in the literature in this capacity, the proposed framework is novel, giving room for debate over the methodological decisions taken throughout the study, as well as the conditions under which the study was performed.

First and foremost, the main shortcoming of this thesis is the way the final results were achieved. Qualitative analysis is a selective process and therefore bears certain risks, such as the researcher's subjectivity, namely in the inclusion and exclusion of data and interpretation of results. The data had to be transcribed and continuously reduced until the determinants of the VC internationalisation were sufficiently conceptualised and valid causal relationships were established. At every step of this process though, the initial interview sample was at risk of the researcher's selection and confirmation biases. Notwithstanding the operational questions and measures to ensure validity, the findings will most likely be contemporary, and highly imbued in the case.

The pivotal decision in the analysis of the results, for instance, was the inclusion of the individual assessment of the investor, represented by risk and return trade-off. Some of the interviews have signalled that the investor's decision is based on individual cases of start-ups, meaning that the ecosystem trends derived from the previous literature, might not capture the full extent of the decision to invest. As such, in this research, we purposely focus on the deal-to-deal base, before arriving at general tendencies and weaknesses of the ecosystem markets. In retrospect, the Polish case study analysis also chooses one of the possible ways to incorporate the determinants into the discussion, by implementing the ecosystem level distinction, as well as the clear streamline of the investor strategy. By setting the boundaries of the analysis, the study can result in some conclusive outcomes. Nevertheless, due to the lack of a feedback cycle between the participants, experts and the researcher, the results function more as educated but modest propositions, rather than the concrete proof of the ongoing processes in the market. In this sense, the threat in question is the generalisability of the findings, first to the whole ecosystem, and then to the landscape of emergent markets. Without the necessary sample size and industry confirmation, although the theoretical explanations are exhausted for the gathered data, the findings might not be necessarily applicable to the greater picture.

The design of the field investigation was initially improved through the qualitative analysis literature (Yin, 1984) (Miles & Huberman, 1994) and the field proceedings through the case protocol and operational questions. Nevertheless, the interview proceedings have evolved as the case progressed, and certain questions have been added or rephrased to obtain more fruitful data, at the expense of others. This lack of consistency, partially due to the semi-structured interview type, could be avoided, had the questions been more refined beforehand. Additionally, some questions were kept until the last field interview and did not bear conclusive results in the end, a problem that should have been addressed in the earlier stages.

7

CONCLUSION

This is a concluding chapter explaining the scientific and technical implications for society in considerable detail. We refer to the industry problems described in Section 1.3, by proposing VC internationalisation as a general solution, and practical implications in particular areas of the ecosystem identified by this study. Lastly, we outline future research alleys, which could create the momentum necessary to expand the VC knowledge to stay current with the industry needs.

7.1. THE MAIN CONTRIBUTION OF THE THESIS

The foremost contribution of this research is the proposed theoretical framework, which utilises the causal map as a display of elaborate networks and causal narratives to formulate the theoretical propositions for further experimental design tests. This framework is used to answer the main research question regarding the determinants of VC internationalisation to foreign emergent VC markets. This framework is relevant when data is scarce and there is a need to shift the scope to barriers to internationalisation.

This framework leverages extensively the qualitative approach in the field investigation. It begins with identifying the suitable unit of analysis which are the domestic VC fund managers and their first-hand observations of the ongoing foreign investment processes, as they are likely to be the first participants to be approached by the foreign investors. We ask specific questions regarding the determinants existing in the literature to deductively build a theoretical framework which we later inductively augment with new insights. By placing the determinants in the continuous cycles of reduction and refinement we arrive at the causal map which displays the complex network in additional bounds dictated by methodological choices.

The methodological choices are core to this framework and have emerged during the interviews. The case-to-case opportunistic approach of the individual investors mentioned by the Respondents caused us to streamline the determinants effects through particular deal participants. This distinction reflects more faithfully the well-known risk-return trade-off of an investor and allows to outline weaknesses on different levels, and their proximity to the start-up performance and professionalism, on which the investors are more inclined to base their investment decision-making process and level of commitment and activity. An additional understanding of the ecosystem was embraced by the causal map, which included the depiction of different levels of analysis, starting from the global to the innovation ecosystem, VC ecosystem and finally the individual deal-based approach. This is in accordance with the relative significance of determinants, which was the topic of the last segment of the interview. The determinants that scored lower, were also found to have a more indirect relation with the investor (regulatory framework, economic integration, societal norms), but have a strong effect on other areas nonetheless. Some determinants exerted effects in a different moment whatsoever (macroeconomic indicators and physical distance). The more significant determinants (industry norms and talented workforce levels) were brought closer to individual start-ups and VC firms on the map.

The deliverable of the framework is the ability to identify the weaknesses in the ecosystem without burdens. Although the causal map of determinants might change from case to case general relationships are likely to be duplicated as they are grounded in retrospective and temporal causal relations, evident throughout the case. The methodological choices help structure the flow of determinants and narrow down the practical causes for low levels of international VC firms' activity.

7.2. PRACTICAL IMPLICATIONS

The current industry problems, while not investigated in the literature yet, need to be addressed for the innovation ecosystem to grow sustainably and substantially. The framing of the industry problems around the EU policies Appendix A.1 reveals that the sphere of influence can be seen through the enforcement of market-unifying policies and the easing of the barriers to the expansion of businesses. However, if the ecosystem does not react to those, the most successful ventures will simultaneously encounter fewer barriers to migration. While start-ups will achieve economies of scale, this loss will be experienced by the capital market, further setting it back compared to other markets. Thus it is imperative to foster an innovation ecosystem, without restricting foreign start-ups from globalising, and at the same time incentivising them to return the benefits to the original market.

7.2.1. PRONOUNCED ROLE OF THE DOMESTIC VC FIRMS

In emergent VC ecosystems, where innovation has not yet flourished, but knowledge spillovers naturally occurred due to globalisation, the VC managers have yet an important role to fulfil, which is to bridge the gaps between the entrepreneurs and foreign investors. Due to the dual nature of their expertise, ranging from technological and business knowledge and familiarity with domestic opportunities, as well as the knowledge of the financing side of deals such as the investment standards, their role is pronounced in terms of internationalisation. Local VC managers are in a unique position as they are likely to be the first ones to be approached by eager foreign opportunists, reducing the information asymmetries of the region on their behalf, as well as increasing information quality and transparency. Domestic VC firms are also best equipped to remain in the global circuit of venture capital, and as such should fulfil the role of educators, finding ways to diffuse the globally accepted industry practices among start-ups. This stands for more than just their portfolios, as the whole high-tech sector needs to be realigned with globalisation goals. By bridging these gaps, local managers can be the essential catalyst in the process of internationalisation, both outward and inward of the ecosystem. VC firms have to present themselves as trusted advisors in the ecosystem. Their voices should be incorporated into academic research as industry problems can be investigated in the context of existing knowledge. They can also be the representatives of the industry to raise the issues of their portfolios to the policy-makers, defining the future direction of entrepreneurship in Poland. We believe that while their positive is immeasurable until start-ups close the gap between the current standards, Polish VC firms will remain key to short-term growth.

7.2.2. ENTREPRENEURIAL EDUCATION GAP

In Poland, tertiary education comprises mostly public universities, and as such they should be inspected closely in terms of entrepreneurial contexts in education. Despite the high concentration of talented workforce in Poland, entrepreneurial studies could be incorporated into the curricula to utilise the intellectual drive on the market. An opportunity to improve the interdisciplinarity side of entrepreneurship might present itself if we shift our view to the triple-helix model, and realise the gaps between academia and industry. The apparent disconnection of universities and entrepreneurship can be observed through the scarcity of university spin-offs and few university incubators. Research contributors fail to find applications for their findings in the commercial segment of the market. While a strong technical education is facilitated, this is unaccompanied by equally strong entrepreneurial education. However, education does not stop at the management aspect. Financial management education, namely the one related to investor funding, could be incorporated into younger generations of founders in the earlier stages of tertiary education. This could also be accompanied by research aspects of

VC financing, present in the literature. This particular type of entrepreneurship cannot be fostered through systematic entrepreneurship education alone (Iles et al., 2015), but rather requires a fundamental shift in the ways of thinking about high-tech ventures and successful businesses. Interdisciplinary thinking about global business development, especially in an emergent market with a lot of technical skill and expertise, might be the key to fostering the creation of internationally desired start-ups. We turn towards the educational policy-makers who need to incorporate entrepreneurial education within STEM branches to sufficiently induce the entrepreneurial spirit in the high-tech sector.

7.2.3. GOVERNANCE OF THE ECOSYSTEM THROUGH PUBLIC FUNDING

An ecosystem which largely depends on public funding, and at the same time doesn't attract private capital tolerant to this kind of risk, cannot grow sustainably. The shortage of growth capital, an industry problem described previously, where there is an absence of VC firms specialised in scale-up and late-stage financing might be one of the symptoms of an immature VC ecosystem. The lack of growth capital may be associated with the unwillingness of the Polish market to invest in these riskier options, creating a dependency on either public funding or the import of foreign VC. Concerning the European timeline of initiatives, this problem is amplified by the overturns of the European Commission's Financial Frameworks and other disruptive global events.

The public funding ought to be distributed with the consideration of the rate of the growth of the ecosystem so that the demand needs of different industry segments are met at different points in time. A more methodical approach is advised as the entrepreneurial drive in the ecosystem must take precedence, and what hampers the formation of high-tech enterprises must be taken into consideration, Policy-makers ought to reflect on the way entrepreneurship can be facilitated in the light of the EU's market-unifying policies and regulations, and view it as an opportunity for economic growth.

Current regulatory frameworks have been reported as unsafe for all industry participants, foreign and domestic and the limited information transparency causes the start-ups to be relocated to more favourable jurisdictions. The common political discourse has to be shifted and reoriented towards innovation and entrepreneurial sparks in society have to be empowered. The legislative changes, which are admittedly also managed against the EU expectations, need to be communicated more efficiently, with the stakeholder analysis consideration, as even the most distant stakeholders can perceive it as a risk.

7.3. FUTURE RESEARCH

In Chapter 6, the findings from the case study are integrated with existing literature on venture capital (VC) internationalization, emphasizing Poland's emergent market context. Key determinants influencing foreign VC activities, such as talent levels, regulatory frameworks, and entrepreneurial mindsets, are identified. Future research could delve deeper into the entrepreneurial mindset, exploring how societal norms and market constraints affect start-up performance. Additionally, studying the role of local VC firms in facilitating ecosystem growth and their potential to bridge the gap between start-up norms and global standards is crucial. Expanding this research to other Central and Eastern European (CEE) markets could validate the findings and enhance the understanding of emergent VC ecosystems.

The chapter also highlights methodological limitations and suggests areas for further exploration. Future studies should aim to develop more quantitative measures of ecosystem maturity, potentially using a set of metrics applicable to the broader innovation ecosystem. The impact of political and regulatory environments on VC internationalization remains significant and warrants deeper investigation. Furthermore, expanding the qualitative framework to include longitudinal studies and replications in different emergent markets would provide a more robust understanding of the determinants of foreign VC activity. Addressing these areas could lead to more nuanced insights and practical strategies for enhancing the attractiveness of emergent markets to foreign investors.

7.4. Link to Management of Technology

In emergent markets, where disruptions are frequent and entrepreneurship is not anchored in the institutional models of society, there might be a need to reconnect with academia to examine existing knowledge. The Master's Thesis incorporates knowledge from different scientific disciplines to propose a solution to practical problems in Poland. The innovation ecosystem progress, which is central to this thesis, can be addressed with studies which attempt to bridge the gap with industry, as the triple-helix model suggests (Ranga & Etzkowitz, 2013). Programmes such as Management of Technology at TU Delft aim at bridging those gaps, by providing knowledge tools that help address the industry problems.

This research reflects one of the different paths the Management of Technology paves for its students. The curriculum incorporates different areas of technological expertise from scholars while enabling their students to learn the value of the connection to the industry. For instance, classes in Economic Foundations, Technology Dynamics or Financial Management shed light on the importance of the ecosystem view of VC. High-tech Marketing courses, Leadership and Technology Management and Technology Strategy and Entrepreneurship help understand the dynamics of start-ups. Skills such as academic writing and scientific reasoning are embedded at every step of the programme. Lastly, courses such as Financing Technology Ventures inspire research in alleys interesting to curious students.

The Technological University of Delft also acknowledges entrepreneurial values, by supporting innovation among its students and researchers. The outstanding work of the Delft Centre for Entrepreneurship in research and industry is a great lesson to be taught in emergent markets. Their offer of Master courses revolves around the gradual conceptualisation of ideas, starting with THINK, learning the necessary base for entrepreneurial principles and understanding the relevant disciplines such as patenting, financing and governance. ACT continues along that path by fostering the conceptualisation of ideas and verifying them with the use of experts. START courses allow for the execution of ideas with the help of business experts and coaches. This is the prime example of how the educational gap in entrepreneurship can be closed by tertiary education.

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A

Appendices

A.1. The European vision

The ongoing VC goal of the European Union is to create a continent-wide market, which brings together both entrepreneurs and investors, to foster innovation. To facilitate the creation of a single VC market across Europe, the EU exerts isomorphic pressures by introducing policies that target all actors of the VC ecosystems, i.e. VC firms, national governments and entrepreneurs. The Commission enforces on individual Member States regulatory quality and common direction. To paint a broader context to the case of the Polish VC market, historical initiatives have been aggregated with the use of available sources online. Two main data sources were the European Investment Fund (EIF) and the European Commission (EC). Each of them provides different types of relevant documents, the EIF (European Investment Bank, 2022) being an institutional fund-of-funds that monitors and generates evaluation reports of the launched loan and equity instruments. The EC(European Commission, 2013), on the other hand, communicates with the individual MS governments to implement policies and guarantees a uniform course of action regarding VC markets, as well as more broadly the innovation ecosystems. Some working series of research papers issued by the European Central Bank were useful in the broader economic heuristic.

The historical analysis of European VC policies is adapted from the case of Chile (Bustamante et al., 2021), where the authors identify the key turning points in the evolution of formal institutions and regulations in the Chilean VC ecosystem. This case study has identified four relevant periods:*Foundations of European VC: 1998-2007*, *Launch of initiatives: 2008-2013*, *Defining strategies: 2014-2017*, *Regional outcomes: 2021-present*, each representing a different discourse driven by the European Commission. Launched initiatives have been triangulated with differently sourced quantitative data, more relevant to the industry, e.g.: the total value of investments or recipients of the EU financing programmes. The initiatives reflected one of two underlying principles of VC policies, the first being the creation of efficient VC markets within the individual Member States (MS) and maintaining sustainable growth of the ecosystem, which will result in regional job creation and economic growth, and the long-term rise in competitiveness. The second principle proposes the inducing of cross-border VC investments between these markets, allowing for the creation of a knowledge-based EU economy, through spillovers between regional VC ecosystems.

Foundations of European VC: 1998-2007 In 1998, The European Commission announced the Risk Capital Action Plan (RCAP)(European Commission, 2006), which was the first communication calling all Member States at the time to a coordinated action to provide equity financing specifically to the SMEs. The growth of high-risk capital markets was seemingly threatened by several risks. The markets across the MS were too fragmented, economically as well as institutionally. The unsatisfactory regulatory frameworks seemed to penalise high-risk investments with unattractive tax incentives. In terms of the investing culture, the potential investors had already been averse to the high-risk investment options and preferred debt financing, which was only heightened due to the lack of experts in the field of VC, rendering any significant scale of this market unattainable. The regulations also affected the high-tech side of the ecosystem which was also found to be considerably underdeveloped and flawed. While administrative procedures targeted business start-up creation, the unfavourable patent laws targeted innovation growth. The lack of high-tech networks and the seclusion of entrepreneurial culture in education resulted in fewer start-ups.

Through the next five years, the Commission monitored the VC activity across MS more closely and regularly to identify the best market practices. During that period the VC markets encountered several external forces which ultimately shaped their growth. As EC reports, global events such as 11 September 2001 in the USA caused a ripple effect on the stock markets worldwide, whereas the introduction of the Euro currency caused the barriers to cross-border transactions between markets to diminish. In the end, the implementation of RCAP resulted in the achievement of the majority of technical and political goals. Because the regulatory quality and accounting standards continued to grow across the States, towards the end of the period, the gap between the EU and the US has been considerably reduced. Although the responses on country levels varied, the assessment was that the internal risk-capital industries grew in all the MS, by becoming more professional, knowledgeable and sizeable.

An independent paper issued by the European Central Bank (the ECB) in 2005 (Da Rin et al., 2005) investigated the relationship between public policy and activity on the VC market. This was especially important due to the joining of ten countries in the EU in May of 2004. The accession of several smaller economies reintroduced the risk of fragmentation of the EU VC market. The study examines public policies from 1988 to 2001 using a panel of VC policy experts and finds that for the VC industry to grow, the innovation side of the ecosystem had to be the main driver of progress. Different areas of the innovation ecosystems underwent a critical assessment. The paper marks the availability of stock markets and the reduction of capital gains tax as the primary source of increase in the market activity, tackling both the supply and demand side of VC. Similarly, reducing barriers to entrepreneurship will positively affect the availability of high-risk projects to invest in. This is especially important in the context of the ten newly emergent VC markets, as the report states that policies that simply channel more venture capital are neither sensible nor effective.

This historical interval is concluded with the European Commission's communication of 2006 "Financing SME Growth – Adding European Value" (The European Commission, 2006). This was the first decisive step in strengthening the financing vehicles for start-ups across the EU. The report aimed to align the European VC goals with the Lisbon Process, a long-term effective plan for creating a socially cohesive, knowledge-based European economy. As the fragmentation between the markets was still persistent, and additionally the strong evidence of power law among the VC firms was present, a lot still had to be done by the Commission. Thus, the communication addresses ways to remove these obstacles. Firstly, the mezzanine (mix of debt and equity) financing from the banks was legitimised by the EC as a more robust way of dealing with frequent changes of ownership among start-ups and the disruptions that financing rounds have on the rapidly growing businesses. The second decisive step was foreshadowing the three major programmes that tackled the MS innovation ecosystems, each targeting one of the helices of the innovation system. The upcoming changes and their range of effects were a significant tipping point towards market activity.

To sum up, the actions of the European Commission in this period revolved around building foundations for VC markets. The identification of the risks was followed by the installation of relevant institutions in different areas. Despite the disruptions, such as the accession of new Member States and the introduction of the Euro, the common direction of sustainable innovation systems remained. Not only did EC follow the US as the VC role model in terms of informal institutions, but it also correctly addressed the lack of sufficient formal institutions. By regularly keeping stock on the MS VC markets and remaining in close contact with applied researchers it laid the groundwork for substantial financial and research programmes.

Launch of initiatives: 2007-2013 During this period, the European Commission started to explore ways to tackle the high fragmentation of the VC markets (European Commis-

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sion, 2008). Operating on the knowledge base of the institutional domestic settings, the EC attempted to reduce existing barriers to the sustainable growth of entrepreneurship. With a large pool of resources, the EC could consider public funding and co-funding initiatives, resulting in a more horizontal distribution of the capital and a wider range of effects. The role of entrepreneurs as the major driving force of innovation has been solidified, and the EC would focus on fostering the environment around them. Countries saw a rise in the number of technological clusters and research facilities, liquidity of stock markets improved and more structural funds became active. Furthermore, the EC has also inquired into the VC private sector and highlighted the need to establish incentives for VC firms. Examined were administrative procedures in each of the MS, as well as tax obstacles and the possibility of an integrated financial market. The outcome was the later announcement of three simultaneous research and financing initiatives.

The *Competitiveness and Innovation Framework Programme (CIP)* (European Commission, 2015) aimed at inducing entrepreneurship and regional development in all Member States, and was supported by three pillar programmes. The largest, and most relevant was the Entrepreneurship and Innovation Programme (EIP) which bestowed grants for institutions, SMEs and selected regional VC funds, which combined resulted in € 3.621 billion distributed over the course of seven years until 2013. All countries of the current EU-27 benefited from the agreements under CIP, however, the EC also supported foreign countries such as the UK, Turkey, Serbia, North Macedonia, Iceland and Norway. The other pillars were: the ICT Policy Support Programme, which was meant to create a common standard across MS regarding information transfer and access, and the Intelligent Energy Europe Programme which aimed at shifting European countries towards sustainable development and renewable energy. The final evaluation of CIP confirmed its success, noting that both the program as a whole and its individual initiatives performed well, aligning with initial expectations. The CIP has emerged as a significant driver of innovation, extending beyond technological development by advancing services, processes and business models. It also built an extensive knowledge base for policy-makers and individual MS to enable the later creation and implementation of the successors to the CIP.

The second major initiative named *Joint European Resources for Micro to Medium Enterprises* or *JEREMIE* (European Investment Fund, 2016) invested a similar amount into regional funds - € 3.678 billion. This fund-of-funds was a joint initiative from the European Investment Bank group and the European Commission, and it specifically targeted the underdeveloped regions in Member States. Even though the programme was launched in 27 countries simultaneously, only 15 of them were final beneficiaries. In the end, the funds were distributed over 31 regional funds for development, some of which have been delegated to fully manage the funds, reducing agency risks to a minimum and utilising the regional expertise of the funds. For instance, in Poland, the funds were fully managed by the institutional development fund - Bank Gospodarki Krajowej (BGK), which secured almost 20% of the JEREMIE. In the final evaluation (de Laat, Richards, & Yong-Protzel, 2011), the JEREMIE was scrutinised by the participating countries for its lack of timeliness which resulted in substantial delays, cascading and amplifying down to the regional funds. Additionally, the cost-effectiveness of the programme was in question. Notably, the gap analyses, equivalent to MS markets research, did not yield any conclusive outcomes. Most of the time, the intermediary holding funds were not nominated until very late, which left a vacuum within the regional markets. The poor execution of the programme possibly undermined the anticipated outcomes, a lesson learned and improved upon in the descendants of JEREMIE.

Finally, the *Seventh Research Framework Programme*(European Commission, 2016) or *FP7*, which existed as a continuation of the previous Research Framework Programme, revolved purely around advancing research in Europe. The EC outlined four areas which would be heavily financed. If the prospective programme revolved around increasing the population of researchers in Europe, by either attracting foreign ones or encouraging the research career paths, the programme would fall under the "People" category. The "Ideas" category was meant for high-level frontier projects, whereas the "Cooperation" was reserved for transnational in and out of Europe collaborations between research facilities and organisations. Lastly, the "Capacities" were aimed at improving research infrastructures as well as developing technology clusters. The relevance of research programmes such as FP7 lies in its wide range of multidisciplinary and multi-helix effects, focusing primarily on universities, but also supporting technology-oriented companies and SMEs. In total, over 25 thousand projects were nominated, monitored and evaluated (?, ?). The return on the programme was estimated to be eleven-fold the cost, roughly translating to an additional annual GDP of € 20 billion every year for the next quarter century. The SMEs that have participated in the programme have reported gaining new knowledge and having increased innovation competencies, which allowed them to become more competitive in their respective fields.

In 2013, the EU was presented with *The European Venture Capital Directive of 2013*(European Commission, 2013) or *EuVECA*, which for the first time introduced a single set of rules and a label under which the VC firms can operate. This regulation discussed the eligibility criteria for VC firms to operate under the EuVECA label. These included the registration of its management, availability of qualified personnel that can manage those funds, clear composition and investment scopes of the funds and lastly quality thresholds. Should these conditions be fulfilled, only then the VC firms would receive the EuVECA passport, which would allow them to secure a better legal position and operate under EU regulations. The goal was to attract more investors to the EuVECA firms by legitimising their management structures and investment strategies. Ceteris paribus, the more capital the firms can amass, the more diversified their strategy can become, allow-

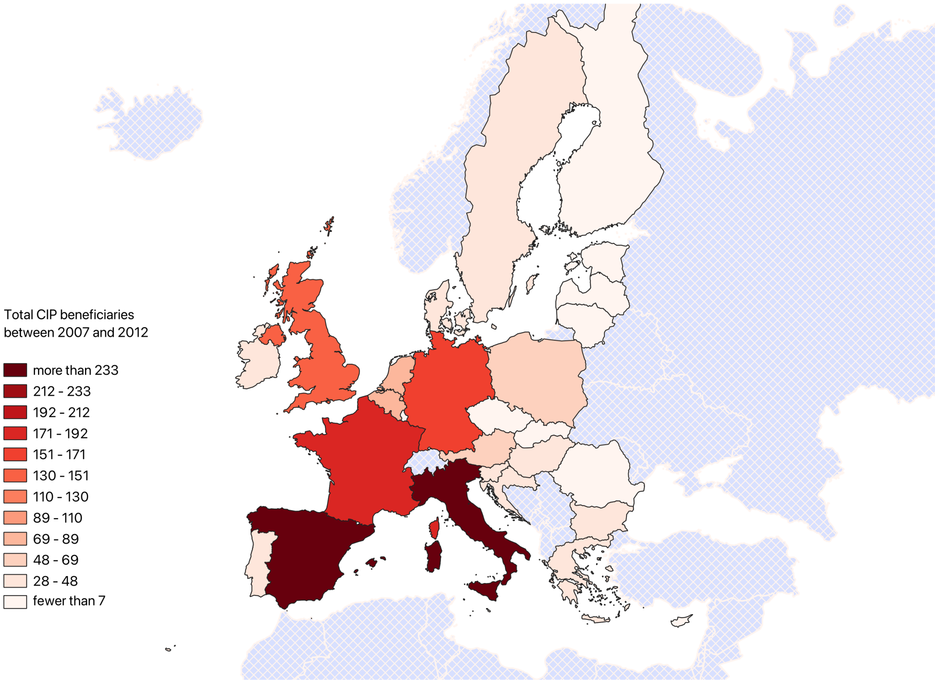

Figure A.1: Map of the EU-28 featuring the range of effects of the CIP initiative in the years 2007-2012

ing them to invest in more emerging regions and technologies.

This period was essential in the development of the VC markets. The European Commission placed its efforts on making continuous transitions between the programmes, utilising the obtained knowledge and familiarity with domestic institutions. The EC also ensured that all of the helices of the innovation ecosystem were addressed by programmes and that they were developed equally. However, by analysing the streamed capital there are geographical biases in terms of capital channelled to different regions of Europe. For instance, one of the observations is that the JEREMIE programme focused on the more underdeveloped regions like Poland, which was the largest beneficiary of the programme. CIP on the other hand, focused on verified innovations and leading entrepreneurs in Western Europe. We can infer that newly joined Member States are more prone to receive large structural funds rather than grants for domestic entrepreneurs. This can be reasoned with the lower institutional quality and the lack of transparency, which causes local institutional investors like BGK to take the leading role in the distribution of funds. However, this poses the question of agency, whether the local actors share the common goal, and that the financing is not a distraction, in achieving the European Union's goals.

Defined strategies: 2014-2020 The budgetary period of 2014-2020 was crucial for the development of the VC. Due to a large number of acts, directives and frameworks being announced by the EC, the EIB and EIF had to align the financing instruments accordingly. While the Multiannual Financial Framework would dictate the seven-year budget for the instruments, the Horizon 2020 would provide direction for the research and innovation in the EU. The Small Business Act of 2008 was intended to align the MS in terms of fostering business-friendly environments for entrepreneurs. As such, the EIB and EIF opened a call for VC firms to participate in two programmes, which were the natural successors of CIP and JEREMIE - COSME and InnovFin.

Competitiveness of Small and Medium-sized Enterprises or COSME introduced a novel approach by running two parallel programmes, equity (Equity Facility for Growth) and loan (Loan Guarantee Facility) financing vehicles. The idea behind the programme was to increase access to finance and individual VC markets, as well as increase competitiveness and encourage entrepreneurship. This was possible by streaming the capital through different channels by signing agreements with different-sized organisations. While the LGF was meant for guarantee societies, banks and leasing companies, the EFG was distributed among the most prominent expansion and growth-stage VC firms in the EU. Worth noting is the fact that even though the budget was designated for the period 2014-2020, some of the recipients still operate within the programme today. Unfortunately, to the best of our knowledge, the evaluation of either programme was not released to the public. However, some analysis is possible regarding the implementation outcomes. The selective process of EFG in nominating intermediaries resulted in the support of only 463 portfolio companies from 18 countries. LGF on the other hand, targeted as many as 1.2 million SMEs across 35 countries through public and private institutions. This comparison opens the discussion to the importance of public and commercial institutions as local financial intermediaries, characterised by the much greater access to SMEs than private equity funds. Additionally, due to their high operational capacity and more access points like local branch offices and being a generally less risk-bearing form of investment, the banks could function more efficiently than investment funds. This motive is associated in the VC literature with cultural informal institutions, where the discrepancy between the sources of funding can stem from cultural societal norms, such as general trustworthiness towards equity financing when compared with loan guarantees. Economies that are bank-based, instead of market-based will report entrepreneurs leaning more towards loan financing, as can be seen in the case of Poland, where equity is not a widely adopted form of financing, nor a common form of investing.

InnovFin - EU Finance for innovators, similarly to COSME was launched in support of Horizon 2020, however, it worked more strategically, subdividing the fund into several products, each targeting a different scope of investment correlating to different stages and industries. For instance, InnovFin Emerging Innovators would support VC funds that targeted seed and early-stage start-ups, whereas InnovFin Large Projects would support access to finance for universities, large companies and public research organisations. EIF would also reserve funds for VC firms in high-tech fields such as space technologies, infectious diseases, energy system transformation and many more. In this way, InnovFin would become a fund with multiple specialities, as opposed to a generalistic one, which was beneficial for two reasons. Firstly, the size of the ticket would correlate to the investment scope, following a more rational, finely-grained distribution of funds. Secondly, the VC firms had a clearer picture of how to obtain the sources, by knowing beforehand which category they should apply. From the available sources, in 2022 and 2023, eight Polish entities have received financial backing from InnovFin, including three VCs (InnovFin Equity), one holding fund (InnovFin Energy Demo Projects), one SME (InnovFin Infectious Disease Finance Facility), two national research centres and the Polish Ministry of finance (InnovFin Science).

Later on in 2015, in response to the economic crisis in the EU, the EC announced the economic revitalisation plan - the Juncker Plan, which was carried out with the European Fund for Strategic Investments otherwise known as EFSI. The fund mobilised € 315 billion to be distributed between SMEs across MS, facilitating job creation and accelerating EU economic growth. Relevant to our context, however, was the EFSI Equity financing instrument - a subprogramme, which focused on addressing recent developments in technology. With a noticeable rise in space, AI, blockchain technologies, impact investing and the blue economy, a fund of € 150 million in size was accumulated for social impact investing. The recipients and intermediaries of EFSI Equity were not found, assumed to be overshadowed by the Juncker Plan itself, however, the direction in which the EC proceeded suggests a more oriented approach towards sustainability goals and investing in particular societally impactful innovations.

In 2017, the EC tested a completely new approach, by investing exclusively in pan-European funds of funds. With the help of private investors, they gathered €2.1 billion, out of which € 415 million originated from Horizon2020, COSME and EFSI. Under the *VentureEU* initiative, six partnerships emerged. The core motivations behind this initiative were to attempt to match the size of the American VC firms for the first time, as well as prevent European entrepreneurs from relocating. A binding condition that was imposed, was arguably short the duration of 12 months, in which the potential VC funds of funds had to raise funds, which resulted in a partnership with six intermediaries in 2018: IsomerCapital, Axon Partners Group, Aberdeen Standard Investments, LGT, Lombard Odier Asset Management and Schroder Adveq (European Commission, 2018), managing a total of € 6.5 billion.

Due to the significant rise in the number of start-ups in the previous years, as well as the maturation of the ecosystem, the EC followed a more targeted approach. In 2020, the EC released ESCALAR, which focused solely on scale-up-oriented VC firms. This was especially important in the COVID-19 period, which spawned a considerable number of ventures related to social distancing and health sanitation, as well as health technologies, which was naturally picked up by the venture capitalists, causing a reallocation effect (Bellucci et al., 2023) in capital markets. ESCALAR in principle aimed at filling the vacuum created by the shifting trends in the VC market as well as countering the investment inactivity due to the economic turmoil of that time. Surprisingly, however, the programme received rather insufficient interest and was put on hold, and its status remained only a pilot.

This policy period was characterised by a more strategic approach of the European Commission. The EC displayed a great ability to combine its resources and leverage its network of private investors to raise funds on a gradually increasing scale. The strategic diffusion of funds between VCs in different designated initiatives, focusing in turn on the specific investment scopes and technological sectors, successfully set the VC ecosystems across the MS on a growth path. The need to adapt to the current global situation, while still operating within the larger EU economic reforms posed a formidable task, expected to be even more pronounced in the emergent VC markets. The aggregated outcome is documented in Figure A.2.

Regional outcomes: 2021-present In their historical launches of equity and loan programmes, the European Commission boasts a high degree of transparency, providing a clear set of guidelines regarding application procedures and selected intermediaries. After all, the goal is to increase accessibility to financing for all SMEs. Additionally, the EIF provides evaluation reports, from which we already have been included within the recommendations of the thesis. Upon a close look, however, the apparent issue of geographical bias towards the CEE region has been very well documented by the EIF. VC activity data brought by OECD, InvestEurope and the EIF point to the steady growth of the CEE region, which is not reflected by the amounts invested by the EU in those regions. To understand this regional geographical bias it is perhaps useful to understand how the largest institutional fund of funds operates currently.

Firstly, the EIF represents its investors, which include the EC, the EIB and national financial institutions[1] (European Investment Fund, 2024). In this context, the EIF can be considered an equity fund by itself, however, its limited partners are also major stakeholders, each applying its own direction for the European VC market as well as its own regions. For instance, the EC is getting closer to achieving its economic and sustainability goals. The historical shift towards more societally impactful technologies, clean technologies and deep technologies was reflected by the gradual change in the financing initiatives over the years. The currently available equity products have also been strategically reduced into avenues of greater impact. The European Investment Bank, on the

[1] Institutions from each of the EU-27, Türkiye and the UK

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other hand, can reinvest the returns back into the market, increasing the availability of European securities. On the VC ecosystem level, however, the intended effect of EIB is to induce activity on the markets through competitiveness initiatives. Through the use of the equity instruments, they mobilise the investment funds locally, by crowding in potential investors(Kraemer-Eis, Signore, & Prencipe, 2018). For the national financial institutions, it is perhaps a chance to diversify the risk by investing according to EIF's strategy, while still ensuring that their local ecosystems do not go unnoticed. In this way, the stakeholder analysis is important to our reasoning. The need to direct the portfolio towards feasible returns for the primary investors could partially explain the regional geographical bias towards the CEE returns.

This idea is also supported by the *modus operandi* of the EIF in selecting their intermediaries. The intensive screening processes, resembling those of the VC firms when assembling a portfolio, are one of the ways to mitigate the asymmetries. By outsourcing regional experts for market research and analysis and by signing agreements with the most trustworthy and network-verified local VC firms, they avoid direct investments with SMEs. However, this also implies that the geographical bias must be a conscious choice of the institutional fund of funds, rather than the emergent pattern of the investment. This brings forth the importance of regional analysis, as the EIF strategically internationalises in certain regions as opposed to others. This logic can be extended to private VC firms that internationalise, if we consider their individual fund characteristics and networks, they can be assumed to also display a geographical bias towards certain underdeveloped regions.

The regional bias is suspected to be amplified by the transition period between the budgetary period occurring between 2020 and 2021, which is entangled with the goals of the European Commission as well. The shift in the framing of the equity instruments around the European goals reflects that very clearly. At the moment, the EIF offers all of its guarantee and equity products through the InvestEU platform, following the digitisation trend. However, the currently available equity products favour technologies such as AI, blockchain, and decarbonisation, meaning the eligible intermediaries can only be the VC firms that have those specific investment scopes. However, for underdeveloped VC markets, this change in European goals and EIF investment strategy will likely amplify the bias towards emerging regions, which might be weaker in developing particular technologies. While the developed VC ecosystems contain more advanced clusters and research capabilities, as well as a higher quality of entrepreneurship, ventures from underdeveloped regions are more likely to face more challenging conditions for development. This policy pull effect is not guaranteed to induce the development of societally impactful technologies if, for instance, the local entrepreneurs are working on more regionally relevant solutions, which can be too distant from the EU goals. Conversely, this can discourage investors with more generalist investment scopes from participating, and favour VC firms with specific expertise.

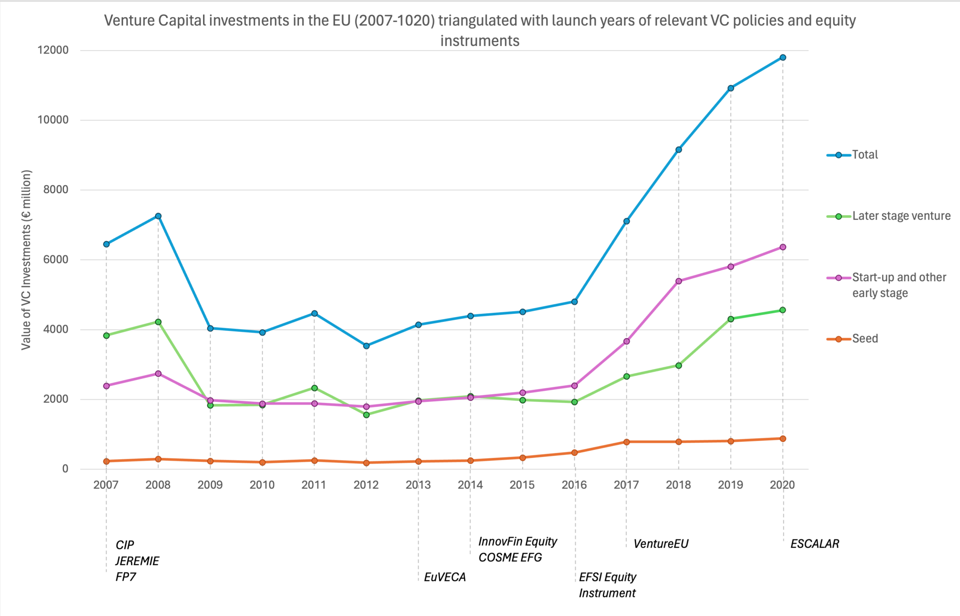

Figure A.2: OECD Data triangulated with the relevant VC policy and equity intruments

A.2. EMERGENCE OF CEE REGION

Historically speaking, VC activity has never contributed to the GDP in a significant way. In the US, where the VC market is most developed, the VC activity amounted only to 0.33% of GDP in 2015 (OECD, 2016). In 2023 in Europe, the VC markets of Estonia and Luxembourg were the highest contributors to their respective economies Figure A.3. When it comes to the emergent CEE region VC markets, they have been given limited attention in the literature, resulting in the scarcity of studies on the region. As early as 2007, Klonowski (2006) abandoned the idea that the countries in the CEE region are a homogenous block. Their fragmentation and emergent status call for a more deliberate study of each of the markets. Although academic literature does not inquire into the regional barriers in Europe, some analysis of the European Commission is framed around the region. In the interviews, the respondents often reported the significance of the regional analysis, due to the higher degree of interconnectedness of the VC firms and close ties with neighbouring countries. Therefore, the available knowledge is most up-to-date due to the industry reports coming from governmental and private agencies, which is true in the case of Poland as well. More recently, the CEE region has expanded in the eyes of industry, from the initial economies which Klonowski examined (Czechia,

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Table A.1: Summary of the European Union initiatives

Initiative	Type of initiative	Year	Additional information
Risk Capital Action Plan	VC market reform	1998	• Identification of the six risks of the VC market in the EU
Lisbon Strategy	EU economic reform	2000	• Creation of knowledge-based competitive economy across Europe
Public policy and the creation of VC market	VC market reform	2005	• Creation of active VC markets
Financing SME growth - Adding European Value	VC market reform	2006	• Introduction of equity instruments
Removing obstacles to cross-border investments by VC funds	Directive	2007	• Addressing the lack of uniformity across MS VC markets
CIP	SME financing instrument	2007	• Access to financing for development funds, VC firms and SMEs
JEREMIE	SME financing instrument	2007	• Access to financing for underdeveloped regions
FP7	Research financing instrument	2007	• Research mobility and excellence
EuVECA	VC firms legitimisation	2013	• Introduction of VC passports for VC firms
InnovFin Equity	SME financing instrument	2014	• Access to financing for diverse VC firms
COSME EFG	SME financing instrument	2014	• Access to financing for all SMEs
EFSI Equity Financing	New technology financing	2016	• Access to financing for space, blue, social impact technologies
VentureEU	Fund of funds	2017	• Investing in funds of funds
Effectiveness of tax incentives for VC and BA to foster investments of SMEs and start-ups	Market analysis report	2017	• Analysis of tax determinants of VC activity
ESCALAR Pilot Programme	Scale-up financing instrument	2020	• Access to financing for scale-ups

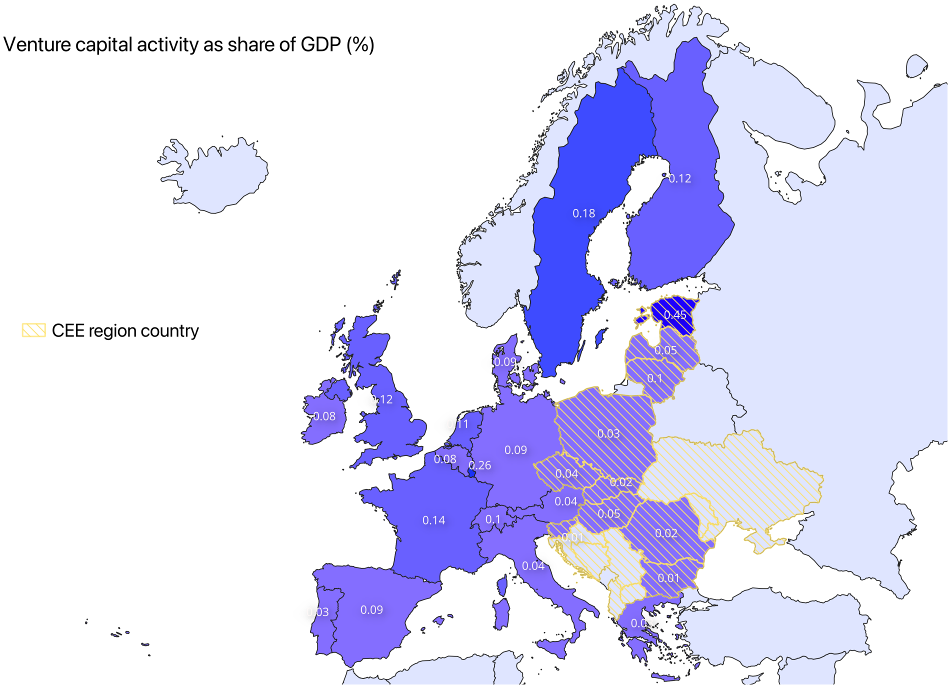

Figure A.3: VC activity as percentage of GDP (MSCI, 2023)

Hungary Poland, Slovakia), industry reports have evolved to consider different countries belonging to the region (Satus Starter, 2023). Vestbee (2023) for instance, appends the list by including non-EU countries such as Ukraine and Serbia bringing the total to 17 countries.

In 2022, the Polish VC ecosystem contributed significantly to the regional arena at 28% (OECD, 2022) of total investments. As Figure A.4 shows, in terms of start-up staging, the seed stage Polish start-ups secured 24% of total investment in the region, whereas start-up/early stage and later stage gathered 40% and 14% respectively. With the current entrepreneurial drive, it is expected that the amount of later-stage financing in Poland will increase over time, showing sustained growth of the Polish VC ecosystem and *vice versa*. As of 2022, the total enterprise value of Polish start-ups was the highest in CEE, reporting €36.8 billion (Dealroom, 2022). With Estonia being a close runner-up (€36.3 billion) and Czechia steadily trailing the other two (€30.2 billion), the regional balance might shift soon, especially considering that the number of start-ups transitioning into unicorns is greater in Estonia and Czechia. This could perhaps be another indicator of future stagnancy in the Polish market. An interesting statistic from the same report shows that 46% of the total enterprise value of the CEE ecosystem tends to migrate outside the region, caused by start-ups scaling their activities to more competitive mar-

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kets and relocating their headquarters. The numbers are driven higher by Belarus and Ukraine due to the geopolitical situation, but the case of Estonia might suggest the limited volume of the internal national economy, leading to the forceful migration of start-ups for survival. In the case of Poland, the retention rate of the enterprise value is as high as 93%, among the highest in CEE.

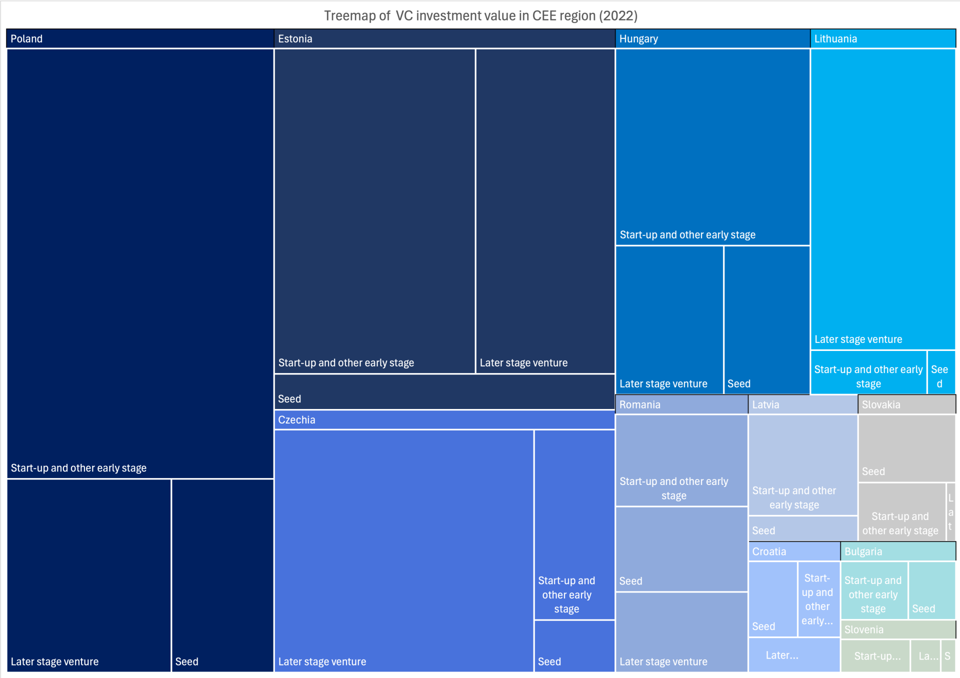

Figure A.4: CEE regional market composition (OECD, 2022)

Although the region is fragmented and clear technological powerhouses drive the market, an internal CEE knowledge-based ecosystem is also in the making. In recent years VC firms have been coming together to share knowledge and networks thanks to industry initiatives, such as the Vestbee CEE Summit (Vestbee, 2023), crossing the national barriers to set an example of bridging the gaps between CEE and more mature ecosystems. In this way the normative distances diminish, ensuring that the best practices are being implemented, while simultaneously signalling to the foreign VC firms the presence of domestic syndicate candidates. Additionally, while start-ups can benefit from accelerators and incubators, the availability of smart capital must follow, as the experience of VC firms is crucial for ventures to reach the relevant scale.

A.3. INTERVIEW PROTOCOL

Interview protocol (domestic VC managers)

(estimated time – 30 mins)

Warm up section (*demographic*)

What is your full name?
Which VC fund do you work in currently?
What position do you hold at this moment?
How many years of experience do you have in VC industry?
    *Do you have any other relevant experience?
Have you ever managed an investment?
    *Have you had successful exits?

VC internationalisation phenomenon section (*clarification*)

Are you familiar with the phenomenon of VC internationalisation?
(explanation)
Could you name some reasons why a VC firm would invest abroad?
Could you name some reasons why a VC firm would not invest abroad?
Could you name some advantages for a country that hosts foreign VC firms?
Could you name some disadvantages for a country that hosts foreign VC firms?

Experience with internationalisation section (*credibility*)

Have you ever been in contact with a foreign VC firm?
What was/is the nature of the relation?
Were any of them from the list? (*multiple instances of co-investing, single time co-investing, strengthening network ties, bridging the gaps, introducing to start-ups, sharing practices and knowledge on conferences, summits, events*)
    *Who approached first?
What benefits do you perceive from these kinds of relations?
Do you perceive any drawbacks from these kinds of relations?

Have you ever been in contact with foreign VC-related institutions? (*business angels, CVCs (corporate VCs), GVCs (government VCs), public financial instruments, banks*)

Determinants section (*research*)

Task to be presented to the respondents.

Please familiarise yourself with the following determinants of VC internationalisation of foreign VC firms towards Poland. Your task is to rank these factors from the most significant (1) to least significant (7). Expected time of this task is 5-10 min.

- Geographical distance (travelling distance)
- Cultural-cognitive distance (societal differences)
- Regulatory distance (taxation, legal framework, investor protection etc.)
- Normative distance (industry practices, start-up market)
- Economic integration (common currency, EU single market)
- Macroeconomic indicators (GDP, y-o-y ΔGDP, export, import, FDI)
- Specialised workforce/talent presence

Do any require an explanation?

Could you briefly explain why you placed them in this order?
Why did you put ___ in the first place?
Why did you put ___ in the last place?

Do you think any determinants are missing from this list?
    *Could you put them and adjust the order?

Figure A.5: Interview protocol

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A.4. DETERMINANTS OF INTERNATIONALISATION

Table A.2: Aggregated list of existing and new determinants with refined definitions and within-case effect

No.	Variable	Definition	Within-case effect
(1)	Global events	Talent migration inducing events	An increase in (1) global events increases levels of (8) talented workforce
(2)	Political atmosphere	Impact of the government on the dynamics of the market and VC ecosystem	The lack of innovation-oriented shift in (2) political atmosphere causes a decrease in (4) economic integration, (5) societal norms and (7) regulatory framework of innovation
(3)	STEM education	Tertiary education in Science, Technology, Engineering and Maths	An increase in the quality of (3) STEM education increases levels of (8) talented workforce
(4)	Economic integration	The degree of integration with other nations in terms of monetary union, and single market	(4) Economic integration with foreign economies increases (13) performance of start-ups
(5)	Societal norms	Openness of the society to the foreignness	Low quality of (5) societal norms decreases (9) entrepreneurial mindset
(6)	Local market opportunities	Opportunities which are the result of sufficiently large internal market	Presence of (6) local market opportunities decreases (9) entrepreneurial mindset
(7)	Regulatory framework	Sum of regulatory institutions binding the innovation ecosystem	Low quality of regulatory framework of innovation reduces both qualities of (10) start-up norms and (11) VC norms
(8)	Talented workforce	Qualified founders and employees who add value to the start-up	Presence of (8) talented workforce and founders increases (13) start-up performance which is moderated by high (12) capital efficiency
(9)	Entrepreneurial mindset	Traits and attitudes that ensure the long-term growth of the start-up	The lack of (9) entrepreneurial mindset decreases both start-up (13) performance and (14) professionalism

Table A.3: Aggregated list of existing and new determinants with refined definitions and within-case effect p.2

No.	Variable	Definition	Within-case effect
(10)	Start-up norms	Start-up practices relating to investor-seeking activities	Low quality of (10) start-up norms reduces (13) start-up professionalism
(11)	VC norms	Practices shown relating to co-investing with foreign VCs	High quality of VC norms increases (15) local VC's professionalism
(12)	Capital efficiency	Increased purchasing power	High (12) capital efficiency moderates how (13) start-ups perform when they are operated by (8) talented workforce and founders
(13)	Start-up performance	Sustainable growth to globalise	Low (13) performance of start-up on the global arena reduces the (20) perception of returns according to foreign investor
(14)	Start-up professionalism	Codes of conduct in the investment process with potential VC firms	Low levels of (15) start-up professionalism increase the (21) perception of risk
(15)	Local VC professionalism	Codes of conduct during syndication with foreign investor	High levels of (15) local VC professionalism reduces (21) perception of risk
(16)	Macroeconomic indicators	Statistical data on Polish economy	High (16) macroeconomic indicators increases (16) perception of return
(17)	Physical distance	Distance between the PC and VC in terms of the time of travel	An increase in (17) physical distance increases (21) risk perception in foreign investor
(18)	VC ecosystem maturity	Stage of development and sophistication of the components of the ecosystem	Latent variable of the Polish VC ecosystem, perceived by foreign investors
(19)	Information transparency	Clarity of local ecosystem specific dynamics and institutions	Latent variable of the Polish market fostering the flow of information to foreign investors

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Table A.4: Aggregated list of existing and new determinants with refined definitions and within-case effect p.3

No.	Variable	Definition	Within-case effect
(20)	Return perception	Strategic interpretation of available data to deduce return on the investment	(20) Perception of high returns increases lead to the (22) decision to internationalise
(21)	Risk perception	Strategic interpretation of available data to deduce the risk of the investment	(21) Perception of high risks leads away from (22) decision to internationalise
(22)	Decision to invest cross-border	VC strategic decision to commit resources in another ecosystem	-

A.5. LIST OF PATTERNS AND THEMES

Table A.5: Patterns and themes extracted from the interviews (Alphabetically)

Code	Insight	Code	Insight
Cap. Eff.	Capital efficiency	Problem A	Reference to industry problem A
Eco. Return	Ecosystem return	Problem B	Reference to industry problem B
Eco. Risk	Ecosystem risk	Problem C	Reference to industry problem C
Econ. int.	Economic integration	Problem D	Reference to industry problem D
Entre. Mind.	Entrepreneurial mindset	Public fund.	Public funding
Exp.	Personal experience	Reg. frame.	Regulatory framework
First	First approach	Return	Returns for the investors
Foreign VC	VC foreign to Poland	Risk	Return perception
Global ev	Return perception	Rule of law	Rule of law
Global succ.	Global success of PCs	STEM	STEM education
Graduates	PC graduates	Supp. Dem.	Supply and demand of VC
Hubs	Technological hubs	Talents	Talented workforce and founders
Int. mode	Mode of internationalisation	Tax	Taxation
Int. VC	Internationalisation of VC	Transp.	Transparency of information
IP migration	Migration of intellectual property	(!)	Other insights
Local opp.	Opportunities of local market		
Macro ind.	Macroeconomic indicators		
Maturity	Maturity of the Polish VC ecosystem		
Norm PC	PC industry practices		
Norm soc.	societal norms		
Norm VC	VC industry practices		
Profess. PC	Professionalism of PC		
Perform. PC	Performance of PC		
Perform. VC	Performance of VC		
Phys. dist.	Physical distance		
Polish eco.	Characteristics of Polish VC ecosystem		
Polish PC	Trends of Polish PC		
Polish VC	Trends of Polish VC		

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A.6. INFORMED CONSENT FORM

Consent Form

You are being invited to participate in a Master Thesis research study titled **"The determinants that moderate VC internationalisation in emerging VC markets: Case Study of the Polish funding ecosystem"**. This study is being carried by Manh Tung Nguyen from the TU Delft under supervision of Associate Professor Victor Scholten.

The purpose of this research study is to explore the determinants that influence the propensity of foreign VC investors to invest in the Polish start-up ecosystem. The interview will take approximately 30 minutes to complete. The interview will be audio-recorded, and later a transcript will be done. An anonymous summary of the interview will be created and sent to the participant for verification. The data will be used in the final Master Thesis and the summary will be included in the thesis. The Master Thesis will be made publicly available once the study is completed.

As with any data collection activity, the risk of a breach is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimize any risks by making interviews anonymous. The answers will be stored in the OneDrive of TU Delft which is only accessible by authorized individuals. The TU Delft project team will be only authorized to access the data of the interview.

Your participation in this study is entirely voluntary and you can withdraw at any time. You are free to omit any questions. After the Master Thesis submission, the detailed version of transcripts, and the audio recordings, will be archived for future research for up to 2 years in TU Delft under the supervision of the research team. The results will be published in the TU Delft repository and only the most important results will be presented in an anonymous form.

Contact details of the Corresponding Researcher:
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Victor Scholten, e-mail: V.E.Scholten@tudelft.nl

To agree to the interview and to this Opening Statement, sign below.

Signatures

Name of participant [printed]	Signature	Date

I, as researcher, have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

MANH TUNG NGUYEN

Researcher name [printed]	Signature	Date

Study contact details for further information: Manh Tung Nguyen, M.T.Nguyen-3@student.tudelft.nl

Figure A.6: Consent form

A.7. CONTACT SUMMARY FORMS

CONTACT SUMMARY

Respondent code	R1
Location of interview	Online
Date of interview	13 Sep 2023
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Investment director
Years of experience	7
Years of other relevant exp.	N/A
Have they lead an investment?	Yes (at the time of interview 4)

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. The “dominant model” among Polish VCs is to invest in their region.	Polish VC
	2. Start-ups internationalise by setting up offices and branches in foreign regions to increase their reach.	Int. PC
	3. Internationalisation is beneficial but requires presence of a local lead investor.	Return Risk
	4. Conquering larger, richer, more attractive markets through internationalisation.	Macro ind. Return
3: Experience	5. R1 has been in contact with the foreign VCs (their own VC as a lead and American VC as a co-investor).	Exp.
	6. In the Polish ecosystem level of cooperation is high (despite the rivalry), due to the necessity of finding the investor for the follow-on round.	Polish eco. Problem A
	7. Role of events in diffusion of information, also as an access point for foreign investors.	Mode int.
	8. R1 perceives the relations with foreign investors as necessary, but rarely do they result in business relations. They take more of a networking purpose.	Exp. Mode int.
	9. Out of the relations with non-VC institutions, banks were perceived as the least understanding.	Exp.
	10. In their experience (R1’s), the first contact can be made by either party. However, sometimes VCs approach others on behalf of the start-up company.	First Mode int.

4: Determinants	11. There are cases where Polish start-ups have "outstanding" founders that have been working in international corporations like Google. Those individuals have been building international networks and have easier time attracting international investors.	Talents Polish PC
	12. There exist also cases of exceptional VC funds that attract the foreign investors due to their reputation. However, R1 says "there is a small percentage of VC funds have shown to be mainstream".	Polish VC
	13. Economic integration is ranked first because "the idea of common business is most attractive". Start-ups that already operate in Germany will have easier time attracting German capital.	Econ. Int. PC perform.
	14. Cultural-cognitive distance is a barrier. "Poland is a large country, where you can spend half or whole of your professional career without actively going abroad". This translates to start-ups as well. Smaller countries (Baltic states, the Czech Rep., the Netherlands) produce start-ups that are more active internationally. Poland is compared to France in terms of being closed off.	Soc. norm. Local cond.
	15. Geographical distance is relevant when looking at the capital coming in from Asia and the US. For them to invest, the start-up must be considerably profitable. The time zones are a problem, due to ability to carry out maintenance activities (calls).	Phys. Dist.
	16. Macroeconomic indicators are important, since they help find an answer to the question: "How big is a "big company"?". Moreover, it helps estimate the size of investment.	Macro ind. Return
	17. Regulatory distances are important because they moderate the understanding of deals. But they are not significant.	Reg. frame.
	18. Normative distances don't exist. We adapted everything from Silicon Valley, with a European framework.	Norm. VC
	19. A new determinant according to the R1 is the local patriotism. It is easier for Polish founders gain Polish funds and for German founders to attain German funds. Strong sense of national identity. "American Funds invest in American boys from good universities".	VC prefer.

CONTACT SUMMARY

Respondent code	R2
Location of interview	Online
Date of interview	13 Sep 2023
Language of interview	Polish
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Analyst
Years of experience	1.5
Years of other relevant exp.	2 (investment banking)
Have they lead an investment?	Yes (informally)

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. “I find funds that don’t invest that way (internationally) weird”. R2 points at the PFR backed funds in Poland, which due to imposed regulations, cannot invest internationally.	Polish VC Problem B
	2. Benefits of internationalisation for the VC firms include increasing the pool of available start-ups. In any given region (except the US, China and India) there is always more VC funds than start-ups, hence VC funds as part of their strategy should internationalise in order to function at all.	Return
	3. A drawback is that it requires understanding that specific foreign market. There might be a language barrier and cultural barrier.	Risk
	4. Like start-ups VC funds also must build a brand recognition through conferences, events, and content marketing.	Int. mode
	5. Competition that is a result of internationalisation is not necessarily a drawback or a benefit. It is a problem for weaker players but simultaneously a motivation for bigger players.	Risk
	6. If a VC firm opens a branch in a certain region, it builds its marketing and branding presence there. It increases the competition there and signals to the start-ups and other funds that this market is attractive in terms of entrepreneurship.	Int. mode
	7. PFR has funded several foreign VC funds which resulted in foreign capital staying in Poland.	Public fund.

	8. Ceteris paribus, the higher the supply of capital, the higher the competition on the market. That usually results in higher valuations and in the long term in boost in entrepreneurship. Entrepreneurs will acknowledge that they can exit at higher IPOs, and they will be starting ventures.	Eco. Return
	9. Joint ventures are more common for larger VC firms, scale-ups from series A, B and higher. Usually it occurs if they know beforehand that their portfolio companies supplement each other. JVs are also a long-term committed partnership, which means they must have a good reason to establish.	Int. mode
3: Experience	10. They are in contact with foreign VCs, on all their transactions.	Exp.
	11. VC ecosystem is much more cooperative, open community than private equity and hedge funds. Who approaches first can vary.	First.
	12. R2 experiences all kinds of relationships, events, networking, exchange of practices, calls.	Exp.
	13. R2 has been in contact with foreign non-VC related institutions: growth funds, banks, accelerators, EIF. R2 believes most of the VCs in the ecosystem also do that.	Exp. Polish VC
4: Determinants	14. Poland is known as a European hub for talented people, especially “tech guys”. Not so much for marketing talent.	Talents
	15. Regulatory distances and economic integration are on par, and should not be differentiated, as they stem from EU legislation.	Reg. frame. EU
	16. Geographical distance is almost irrelevant in VC because the portfolio companies are software and internet based.	Phys. Dist.
	17. As for normative distances they are low, since all markets have been looking at and following the US, and that is unlikely to change. Industry practices are “common across the globe”. They are also a derivative of the regulatory framework.	Norm VC Reg. frame.
	18. Macroeconomic indicators are not insignificant, but VC investment horizon is 5, 7 or 10 years, hence the current GDP is less relevant. R2 tries to have an anticyclical approach.	Macro ind.
	19. Talent is the primary indicator. Talent levels are affected by the regulatory framework. In Poland, there is a very convenient B2B (business-to-business) model for single developers, which is characterised by low taxation.	Talents Reg. frame.

	20. Start-ups come first and that attracts VCs. It cannot be the other way around because VCs will not survive without start-ups. On the other hand, start-ups can always bootstrap. 21. The assessment regarding the level of entrepreneurship in Poland is complicated. It stems from cultural and societal factors but not exclusively. What can the government do to develop that entrepreneurial culture? 22. Is there a rule of law in Poland? There are no solid groundworks to establish companies in Poland. Judiciary processes take 4 or 5 years. Can an entrepreneurial ecosystem even exist in Poland without that? 23. STEM education is very important for the country. Looking at China and the US, the STEM education has been heavily promoted for a long time already. STEM subjects should be strongly subsidised and developed top-down.	(!) (!) Entre. Mind. Rule of law Reg. frame. Political atm. STEM

CONTACT SUMMARY

Respondent code	R3
Location of interview	Online
Date of interview	15 Sep 2023
Language of interview	English
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Managing partner and founder
Years of experience	30 (in Poland since 2005)
Years of other relevant exp.	N/A
Have they lead an investment?	Yes (about 40)

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. They have been cross-border since day one.	Exp.
	2. They have been investing in all mentioned modes (co-investing, lead investing, forming joint ventures)	Exp.
	3. VC firms that focus locally, without crossing borders can be successful too, by developing their "internal network" and "knowledge of the market".	(!)
	4. Start-ups can sometimes exit without leaving the region too. They succeed by finding the right niche. In the long run, this is unsustainable because they come across a competitor. For this reason, VC funds should broaden their views and scopes, geographically too.	PC perform. Return
	5. Internationalisation is a part of VC firm's strategy. Non-internationalising may have its advantages. Proximity to the local market can grant competitive advantage and allows to carry out supervisory activities without relying on third parties.	(!)
	6. A risk of internationalisation is the insufficient penetration of the market (improperly networked VC firms). This can result in getting second and third tier companies.	Risk
	7. Internationalisation requires more resources to develop the presence in the area, which in turn can grossly defocus. Given a chance of a great deal locally, VC firms should not focus on fighting for cross-border non-proprietary deal flow.	Risk

	8. A local co-investor can change how a VC firm perceives risks associated with internationalisation.	Risk Local VC perform.
	9. A country or geography can benefit from inward VC flow by getting exposure and visibility. Herd effect.	Eco. Return
	10. There can be a negative momentum created by deals that do not perform well.	Risk Eco. Risk
	11. R3 has been in contact with foreign VC, who was equipped with expertise and capital, to <u>lead</u> the follow-on round.	Exp. Problem A
	12. R3 doesn't see "negative connotations" from experiences with foreign VCs. […]. They work well and R3 wishes there were more instances, although they are very case by case.	Exp. Problem D
3: Experience	13. R3 says they reach out first when it comes to looking for a lead in the follow-on rounds. Firms that are candidates for this role should have a predisposition to do business in the region.	First
	14. R3 has been in contact with non-VC related foreign institutions. Mentions in depth relationships leading to M&A exits.	Exp.
	15. R3 puts economic integration, regulatory distance, and macroeconomic indicators as the least significant. Conditions of the region make little or no difference. VC firms that invest in Poland invest in global companies.	Econ. Int. Reg. frame. Macro ind.
	16. Normative distances (1^{st}) are most impactful as it affects the workflow. Do start-ups understand the terms in the term sheet. Are they holding up to international standards and speak the same "language"?	Norm. VC Norm. PC
	17. Specialised workforce/talent levels (2^{nd}) are a major attraction factor for the investors. "Honey calling to the bear".	Talents
4: Determinants	18. Geographical distance (4^{th}) is important due to need for travelling. There are administrative burdens such as visa requirements. The lack of a direct flight indicates difficulty.	Phys. Dist.
	19. Cultural-cognitive (3^{rd}) distances are not elaborated on.	
	20. New determinant mentioned – ability to rely on the local VC to take care of the shop, making sure the locality is taken care of. R3 agrees it could be named levels of trust and would take place in the top 3.	Local VC perform.

CONTACT SUMMARY

Respondent code	R4
Location of interview	Online
Date of interview	26 Sep 2023
Language of interview	Polish
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	General partner
Years of experience	5
Years of other relevant exp.	N/A
Have they lead an investment?	Yes

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. R4 point at the need to distinguish between the privately and publicly backed VC firms in Poland when analysing internationalisation. The former do not have restrictions when it comes to portfolio companies.	Polish eco Public fund.
	2. The primary consideration for investing in general is how fast start-ups grow, how well they perform and how fast do they conquer new markets. Geographical location is a secondary consideration.	Perform PC. Phys. Dist.
	3. There are not many investments from foreign investors in polish start-ups. R4 reasons this with the systematic problem of the polish start-up ecosystem by stating “they (start-ups) focus too much on the technology and completely don’t focus on the product and scaling of the product”. Polish founders have a narrow mindset and focus on scaling cross-border later, instead of day-one.	Polish eco Problem D Entre. Mind. Polish PC PC perform.
	4. For VC firms that internationalise, Central Eastern Europe region, which includes Poland is still an “exotic location”. Those prefer more known regions like Western Europe. They only invest in start-ups there due to the familiarity with the regulations. R4 even anecdotes that there are cases of investors that suggest migration of the company to more familiar jurisdictions.	Polish eco Reg. frame. IP migration Eco. Risk
	5. Internationalisation requires conviction and intel.	Eco. Risk
	6. R4 mentions the tendency for international VC firms to invest in later stages in polish start-ups, due to start-ups being already validated by the market.	Risk

	7. Polish system is not very voluminous. The whole VC industry ecosystem in the CEE region is comparable to the Berlin VC ecosystem. In Poland there were too many funds and they had to look cross-border.	Public fund. Polish PC (!)
	8. On a regional level internationalisation means bringing a new, good quality and new standards. R4 doesn't perceive drawbacks on a country level.	Eco. Return
3: Experience	9. R4 is in constant contact with foreign VC firms. There is a necessity to be exposed to the foreign VC firms and friends.	Exp.
	10. R4 reports being in contact with non-VC related institutions, like CVC, banks, corporate clients, start-up related institutions. R4 reports speaking to the whole ecosystem.	Exp.
	11. The first approach can happen in both ways. Foreign entities need validation after networking. VC firms seek out information on behalf of their portfolio companies. It is normal networking.	First
4: Determinants	12. Specialised workforce/talent levels (1st) are significant in Poland. Argument of technological talent, IT developers is brought up. Sales talent is “tragic”.	Talents
	13. Normative distances (7th) are insignificant. Industry practices have become uniform, the whole industry “reads the same books”.	Norm. VC
	14. Macroeconomic indicators (2$^{nd)}$ are very significant because they indicate the wealth of the internal market, how the country grows and how society is structured. Whether to invest based on macroeconomic indicators, however, is based on the individual strategy.	Macro. Ind Return
	15. No other determinants are mentioned.	
	16. Degree of economic integration (3rd), regulatory distances (4th), geographical distances (5th), and cultural-cognitive distances (6th) not elaborated on.	

CONTACT SUMMARY

Respondent code	R5
Location of interview	Online
Date of interview	13 Sep 2023
Language of interview	English
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Investment director
Years of experience	8
Years of other relevant exp.	Yes (unspecified)
Have they lead an investment?	Yes

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. R5 mentions VC financing being a statistical game. The only valid strategy is to internationalise, to ensure the good returns for LPs. One of the strategies is to target regions like Western Europe, Eastern Europe, Baltic states, Southern Europe as opposed to countries alone.	Return
	2. Most of the deals are not made face to face, so geographical distance loses its significance. Nevertheless, the ability to travel within a direct flight or a 2–3-hour flight is beneficial. Hands on supervision.	Phys. Dist. Risk
	3. From a country perspective, inward VC flow increases FDI. In the long run, the company will exit in this region, and will pay its taxes as well. In case of IP transfer, the tax on that operation will be paid in the country. The country can experience “a very large growth of employment of very skilled labour”.	Eco. Return IP migration
3: Experience	4. R5 is in constant contact with foreign VC firms. […] Particularly with those that had already invested in Poland, had had some experience with Polish founders and hold interest in this region at the time or in the future. R5 points at the concern of fundraising for the next rounds.	Exp.
	5. The logic of foreign investors is that the good deals will come to them anyways.	Foreign VC (!)
	6. Most usually, R5 approaches foreign VCs, that the other way around.	First
	7. Due to Poland’s historical political atmosphere, there are few wealthy individuals (HNWI). Major source of the Polish fundraising comes from the Polish Development Fund (PFR). In smaller VC firms it contributes to 80% or more of the total funds raised, whereas in larger it adds up to around 40%.	Polish eco Public fund.

4: Determinants	8. Specialised workforce/talent levels (1st). Polish region accounts for around a million developers, programmers which compares to the whole state of California. This has changed due to Russia's invasion into Ukraine, resulting in doubling of those numbers. The increase in quality of the companies is an attraction force. 9. Economic integration (7th) is irrelevant because the technology produced in this region is software, e.g. marketplaces, SaaS, B2C or B2B. On the other hand, bureaucracy is relatively high, and a lot of processes cannot be done online. 10. Normative distances (2nd) are very important since they represent similarity to American or Silicon Valley standards. Norms among start-ups reflect the entrepreneurial spirit and cultural fit to the investor. 11. Geographical distance (3rd). Most of the foreign investors come from Germany, Austria Switzerland (DACH). Sometimes from Czech Republic and sometimes from UK. Rarely are the investors from France or Spain. Sometimes they come from the US. 12. Macroeconomic indicators (4th), regulatory distance (5th) and cultural-cognitive distances (6th) not elaborated on. 13. Foreign VC firms, when assessing the region, look at the presence of graduates. R5 describes graduates as high-level management of successful companies, that decide to open their new companies within the same geography. This is usually accompanied by the taking over of part of the staff and can lead to being "infected" by the entrepreneurial spirit. The knowledge regarding company structure is usually carried on. The presence of graduates is not necessarily associated with the whole Polish region, but rather the technological hubs (city wide like Warsaw). R5 calls this concentration of talent. 14. R5 claims that the number one barrier is the structure of the VC financing ecosystem. Due to the PFR's restriction imposed on the VC firms, they cannot develop elsewhere but rather are tied to Polish jurisdiction and Polish companies. This is described as having a choking effect on the ecosystem.	Talents Global events Return Perform PC Econ int. Polish eco. Norm VC Norm PC Phys. Dist. Problem D Graduates Entre. Mind Tech hubs. (!) Problem A Public fund.

CONTACT SUMMARY

Respondent code	R6
Location of interview	Online
Date of interview	3 Nov 2023
Language of interview	Polish
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Managing Director (General Partner)
Years of experience	13
Years of other relevant exp.	3 (Unspecified)
Have they lead an investment?	Yes

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. A possible reason for a VC firm to seek foreign start-ups is because of insufficient number of quality deals in the local ecosystem.	Return
	2. VC firms can be too large for their own region, thus having to look cross-border for different recipients of the capital. Size of the VC fund (assets under management) usually dictates whether the fund operates internationally or regionally. R6 discerns a rule that VC firms with pre-IPO investment scope tend to invest globally, while pre-seed are focused locally.	(!)
	3. A reason for VC firms not to internationalise is the lack of brand recognition cross-border.	Risk
	4. Can VC firms replicate their added value elsewhere? VC firms that internationalise may be at risk of becoming anonymous capital.	Risk
	5. Investing cross-border is associated with information asymmetry, especially in Europe where each country has their own sets of laws and cultural differences. This translates to costs to reduce those asymmetries.	Risk Reg. Frame Soc. norms
	6. There are attempts to “hack” this system, by imposing a rule that states that investment will happen only if the company moves to a more familiar jurisdiction.	IP migration Eco. Risk
	7. Welcoming foreign VC investors can bring fund management know-how for the local VC firms. There are exchanges of talents and teams. Another benefit is the networking.	Eco. Return Norm PC

	8. A drawback for the VC is the increase in competition. Foreign VC firms that come in are usually larger brands that have existed on the market for multiple years or decades and have built their position.	Eco. Risk Power law
	9. Start-ups tend to be focused on acquiring a particular financing from abroad from a well-known VC firm. R6 points out that sometimes founders don't realise that by doing so they are going to become one of the 500 portfolio companies and they will not acquire smart capital, as opposed to the local investor who will be more engaged in that investment.	(!) Eco. Risk Norm PC Entre. Mind.
3: Experience	10. R6 is in constant contact with foreign VC firms.	Exp.
	11. R6 has co-invested with a foreign VC firm but has not co-invested multiple times with any. They have networked and bridged the gaps. Participating in events not mentioned.	Exp. Int. mode
	12. In terms of who approached first, R6 says it depends whether the parties both come from the CEE region or from CEE region and Western Europe or the US. In the first instance, VC firms are rather partners, and the first approach can be made by either side. Alternatively, in case of Western Europe and the US, usually CEE VC funds approach them, usually with a goal of finding a follow-on investor.	Phys. Dist. First
	13. R6 reports being in contact with foreign angel investors, CVCs, Funds of funds, banks, and financial instruments like EIF.	Exp Int. mode
4: Determinants	14. A new determinant suggested by the R6 is the maturity of the ecosystem. The maturity is indicated by the number of start-ups that fulfil certain criteria, like recurring revenue or even which stage of financing they are at.	Maturity
	15. Normative distances (1st) are considered the most important. This is understood by the respondent as an approach to the investors, readiness for fundraising and capacity for certain brand norms like pitch deck, financial models, and investor expectations. R6 claims that the normative distance between Poland and the US is not as large as it used to be 10 years ago.	Norm PC Polish eco.
	16. A considerable factor for inward VC flow is how internationalised are the companies themselves. Is the revenue international? Have they proven their product to be market fit, in more competitive markets?	Perform. PC
	17. R6 points out a lack of competence when it comes to marketing skills of the start-ups.	Talents

	18. The local market conditions are a factor that affects how start-ups develop. Due to the “curse of the middle-sized market”, the local market is sufficient for start-ups to never have to look cross-border. R6 brings an example of Estonia, which has a population the size of Warsaw, and taking over 100% of the local market is a matter of weeks	Local cond.

CONTACT SUMMARY

Respondent code	R7
Location of interview	Online
Date of interview	20 Nov 2023
Language of interview	Polish
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Managing Director (General Partner)
Years of experience	9
Years of other relevant exp.	N/A
Have they lead an investment?	Yes

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. Funds are more specialist than generalist these days. R7 focuses on deep tech data driven software, which means their geographical scope is wider.	Exp. Norm VC
	2. R7 is a high conviction, high engagement early-stage investor with large shareholding strategy.	Exp.
	3. Hosting foreign VC investors can result in the inflow of cheaper labour. Start-ups can gain advantage because of capital efficiency.	Capital eff.
	4. One of the risks of hosting a foreign VC investor is migration of the IP.	IP migration
3: Experience	5. R7 has invested single time with a foreign VC, and multiple times with a foreign VC. The relationship has also been on the networking level.	Exp
	6. The first approach has been usually made by R7.	First
	7. R7 perceives the relationships as always beneficial. Brings up the adage "your network is your net worth".	Int. Mode
	8. R7 reports being in contact with all kinds of non-VC related institutions, both foreign and domestic.	Exp

4: Determinants	9. Talents (1st) are the most significant. R7 points at the currently large levels of engineering talent, especially after the Invasion on Ukraine, the Ukrainian, Belarusian and Russian engineers have migrated, resulting in greater numbers of engineers than those of Germany and France combined. 10. Regulatory framework (7th) is least significant, since the IP will migrate anyways. 11. In R7's opinion taxes should be differentiated from the regulatory institutions. What comes with taxes would also be transparency of the taxation. In a new order taxation would be holding 5th place out of 8.	Global. Events IP migration Tax Transp. Reg. frame.

CONTACT SUMMARY

Respondent code	R8
Location of interview	Online
Date of interview	23 Nov 2023
Language of interview	Polish
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Managing Director (General Partner)
Years of experience	8
Years of other relevant exp.	N/A
Have they lead an investment?	Yes

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. VC funds can choose to invest abroad if their local market is too overcrowded. The supply and demand of the deals, and the imbalance between those can affect the valuations, conditions of the deals and accessibility to deals.	Supp. Dem. Eco. Risk.
	2. Another reason for VC firms to internationalise is diversification of the risk.	Return
	3. Third reason is the desire to grow and learn, obtaining new knowledge, new contacts and building network. Cross-border is a good place for that.	Return Int. mode
	4. Fourth reason for VCs to internationalise is to grant their portfolio some market penetration.	Return Perform PC
	5. Investing abroad is costly.	Risk
	6. Investing abroad is bound to some risks associated with information asymmetry, lack of experience. Due diligence is harder to perform in another region.	Risk
	7. Some foreign markets are perceived as worse due to corruption and such things. R8 repeats what other funds from CEE region said about Poland, namely that there are too many funds, because of public help.	Risk Political atm. Publ. fund. Problem A
	8. R8 claims that seed funds should focus locally and discerns the tendency for international investing, namely that larger VC funds that focus on later stages are more prone to internationalise.	Return

	9. A country can benefit from the presence of the foreign VC fund because they create good job opportunities, with high salaries. Country can benefit from taxes on sales of international sale of high margin products. 10. A risk for a country is the migration of IP. 11. Another risk could be overcrowding of the local VC funds. Larger foreign VC firms can get better start-ups and further widening the gap between the mature ecosystems and emerging ones.	Eco. Return. Econ. Int. IP migration Eco. Risk Power law
3: Experience	12. R8 reports being in contact with foreign VC firms. 13. R8 has not been investing on multiple occasions with any foreign VC firm. They have invested single time. They have both bridged the gaps (networked) and shared knowledge, practices, and trends. 14. R8 claims that it was them making the first approach to the foreign investors because they needed the follow-on investors. […] Among the roles of foreign investors there is helping them look for growth capital. In Poland there is an investment gap for start-ups that are growing. 15. They have not experienced any trouble establishing contact or building a network. Largely due to the conferences and events like CEE VC Summit. 16. R8 confirms that pension funds and insurance companies are not allowed to become LPs. When it comes to HNWIs they are harder to convince to become LPs, due to very few success stories from VC investing. Most of the potential investors have become wealthy based on trade and real estate and not technology. 17. R8 report not having a lot of contact with foreign non-VC related institutions, but local yes.	Exp. Exp. Int. mode First Problem A Int. mode (!) Perform. PC Polish eco Exp.
4: Determinants	18. Economic integration (1st) is most significant due to the easiness of conducting international business. Companies in the same economic circle can scale much faster, people, cars, goods are easily movable. 19. Macroeconomic indicators (7th) are the least significant because of the lack of apparent connection between the economy to the VC industry. R8 points out that the investment horizon is 7 years until exit and 10 years past IPO, and to the potential investors this must be attractive enough. It doesn't seem clear whether to invest due to high GDP or due to low GDP.	Econ. Int Perform. PC Macro ind. (!)

	20. A new determinant is mentioned which is the economic balance between the capital and available deals. This is a complex issue, which affects areas such as valuations, capital efficiency and accessibility to deal flow.	Supp. Dem. Capital eff. Return Perform. PC

CONTACT SUMMARY

Respondent code	R9
Location of interview	Online
Date of interview	24 Nov 2023
Language of interview	Polish
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Principal
Years of experience	2
Years of other relevant exp.	N/A
Have they lead an investment?	No

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. R9 focuses in their scope on the deep tech companies.	(!)
	2. One of the main reasons for internationalisation is looking for deals that suit the investment scope.	Return
	3. Another reason is to gain a better understanding of that region.	Int. mode
	4. Sometimes the LPs (investment mandate) can dictate whether you can internationalise or not. How good start-up performs, how necessary and good is their technology is, can have a final say in the of internationalisation. It is case-to-case.	Perform. PC Return
	5. In deep tech sector, Poland is still underdeveloped. Influence of foreign investors can teach start-up founders how financing looks like, how to obtain foreign investors (industry practices).	Norm PC
	6. Secondly, the flow of foreign investors opens other markets. In the deep tech it can translate to strategic investors, strategic partnerships, which in turn reduces dependency on the Polish market to meet those needs.	Eco. Return Perform PC
	7. It can also open commercial channels.	Perform. PC Eco Return
	8. The purchasing power of the foreign investor is also higher, meaning the tickets will be higher.	Eco Return Problem D
	9. Although R9 doesn't perceive it as a risk for the ecosystem, start-ups that experience foreign investments can defocus and stop delivering solutions in the region.	Eco Risk

3: Experience	10. R9 maintains constant contact with the foreign VCs. 11. R9 reports having co-invested multiple times with foreign investors. There were also cases of single investments as well. They have networked and bridged the gaps, invested with firms of similar investment scope. Additionally, they have exchanged practices and knowledge to some extent. Knowledge of where and how to find leads, how due diligence is performed is usually kept to themselves. 12. R9 claims that Polish VCs are keen to talk to the foreign VC firms. 13. Knowing a local investor is beneficial as they are more embedded in the local market. Foreign investor will always have a lesser understanding of the locality, in terms of start-up validation and valuation. As for drawbacks, there can be possible misunderstandings during negotiations, but that is a result of different practices. 14. R9 reports being in contact with non-VC related institutions (CVC, banks, angels). Mainly that would be CVC, as they have a deeper understanding of the demand of certain brand.	Exp. Exp Norm VC Exp Inv. Mode Norm VC Exp.
4: Determinants	15. Cultural-cognitive distances (7th) do not influence the decision to invest, in their case. 16. Normative distances (1st) are still high in Poland, which causes some misunderstandings. There are still discrepancies in the way cap table is formed, how board of directors is formed. 17. Regulatory distances (2nd) are usually not that significant, because the lead investor is familiar with them. 18. Talented workforce levels (6th) could be more significant if you consider cheaper labour. 19. Geographical distance (5th) is a problem because investment means physical travelling and being at the start-up venues. 20. "Entrepreneurial mindset" and "degree of development of the whole ecosystem (start-up)" are mentioned as new determinants. R9 stresses this relates to the deep tech industry.	Cult Norm. VC Reg. frame. Talents Phys. Dist. Entre. Mind. Maturity

CONTACT SUMMARY

Respondent code	R10
Location of interview	Online
Date of interview	29 Nov 2023
Language of interview	Polish
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Managing Director (General Partner) also Founder
Years of experience	7
Years of other relevant exp.	Yes (unspecified, as investment banker)
Have they lead an investment?	Yes

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. R10 point out that strength of internationalisation is related to the size of the current VC. Pre-seed start-ups require from their VCs more hands-on work, as opposed to the growth stage start-ups. Additionally, whether a VC fund specialises in types of technology also matters. Specialist funds tend to be more internationalised, recognised globally.	Return Int. VC
	2. All investment is portfolio investment, and internationalisation is part of diversification of risks. Risks are geographical and cyclical, and can be mitigated by diversifying over countries, years, sectors.	Risk Int. VC
	3. Another driver of investments can be talent, more specifically talent hubs, concentration of talent. R10 mentions FinTech hub in London and Marketplace hub in Berlin.	Talents Hubs
	4. The decision not to invest abroad is highly dependent on the investment strategy. It's more case to case.	Perform. PC
	5. A VC fund that wants to focus on leading, will have trouble establishing themselves as a lead in a foreign region. They may have a weaker presence in another jurisdiction.	Risk
	6. Foreign VCs increase competition on the local market. R9 stresses this is their subjective opinion.	Eco. Risk
	7. Presence of foreign VCs increases access to capital and makes financing easier. As a result, there are more of these project and chances of a start-up becoming an outlier is greater.	Eco. Return Perform. PC
	8. Foreign VCs are an opportunity to acquire follow on rounds financing.	Problem A

	9. When foreign VCs flow inward, it is associated with the flow of know-how, fresh perspective on new markets that are of interest to the start-up.	Eco. Return Perform. PC
3: Experience	10. R10 did not co-invest multiple times with foreign VCs. They have invested single time with some. They have been sustaining networking relations, claiming it's a very cooperative environment. They also have exchanged knowledge and industry practices.	Exp.
	11. For the question of who approached first, R9 states that it can go both ways. R9 has reached out to the foreign VCs, when seeking follow-on investors, and the opposite was the case when foreign investors wanted to receive deal flow.	First Problem A
	12. R10 doesn't perceive any drawbacks from these relations.	Exp.
	13. R10 has been in contact with foreign non-VC related institutions, mentions European Investment Bank.	Exp.
4: Determinants	14. Presence of workforce/talents (1st) is significant because Poland is known for its IT developers. Also brings up the US as the marketing talent, which combined with the Polish talent is a perfect mix. That can also generate technological ideas. R10 mentions the case of OpenAI, the core team of 50 people, 10 are Poles, from University of Warsaw.	Talents Polish VC Perform PC.
	15. Economic integration (2nd). Outsiders are treating us as "civilised".	Econ. Int.
	16. Regulatory distances (3rd) are still relevant because there are "exotic" legislations.	Reg. frame.
	17. Physical distance (5th) is rather friendly for foreign investors.	Phys. Dist.
	18. The scope of the investors focuses on scalability, that is why macroeconomic indicators (7th) are least significant. Start-ups must reach global scale in 5 to 10 years.	Macro. Ind.
	19. Maturity of the ecosystem was named as a new determinant. R10 ties it to the global success of the companies, which in turn accelerates the creation of next generation of start-ups. Example. UIpath from Romania. Successful start-ups can create angels.	Maturity Global succ. Talents

CONTACT SUMMARY

Respondent code	R11
Location of interview	Online
Date of interview	6 Dec 2023
Language of interview	Polish
Interviewer	MTN
Coder	MTN
Respondent overview	
Position	Managing Director (General Partner)
Years of experience	10
Years of other relevant exp.	3 (financing, consulting)
Have they lead an investment?	Yes

SEGMENT	SALIENT POINTS	THEME/PATTERN
2: Knowledge	1. VC firms internationalise to increase their deal flow potential, scale of their operation and reach. International presence allows the managers to gather more contacts, knowledge and have impact on the outcome of the portfolio.	Return Int. mode
	2. Another reason for internationalising can be personal preferences of the managers.	(!)
	3. The decision to internationalise should depend on their scale. Smaller funds should exploit their local network and contacts, their local brand to maximise the outcome.	(!) Return
	4. Insufficient scale of the fund can be a reason not to invest abroad. As for drawbacks there can be defocussing. Geographically dispersed investments can result in insufficient control and supervision, despite digitisation of the contact.	Risk Phys. Dist.
	5. A country can benefit from the foreign VCs, as it means more capital from outside of the economic circulation. Moreover, that means new contacts in the network, and more of a different smart connected capital.	Eco. Return
	6. As for drawbacks, engaging foreign VC firms does not necessarily translate to the increase in employment. It can also be a risk in terms of IP migration. Example: American VC funds like to have IP in their jurisdiction.	Eco. Risk IP migration

3: Experience	7. R11 reports having invested multiple times with the same VC. They have invested single time as well. They have networked, bridged the gaps, and introduced start-ups to each other. R11 has also been exchanging industry practices.	Exp. Int. mode Norm VC
	8. In the current firm, R11 is being mostly approached by foreign VCs. In previous ones it was different.	Exp First
	9. They perceive relations with foreign VCs as inspiring and developing. They benefit from the exchange of the contacts, knowledge, practices, and new perspective (most important).	Return Polish VC Norm VC
	10. They have never led an investment in foreign start-up.	Exp.
	11. R11 reports having been in contact with non-VC related institutions (banks, business angels, CVC, GVC, financial instruments).	Exp.
4: Determinants	12. Regulatory distance (1st) is the most significant, due to the lacking investor protection. R11 report hearing that legislative conditions are not perceived as safe. This can be a significant barrier for smaller size funds, but not really for a large size fund. Rule of law also mentioned.	Reg. frame. Risk Rule of law
	13. Normative distance (2nd) is important because it shows how closely procedures are being carried out. By procedures R11 understands investment procedures and globalisation. Polish norms are usually restrictive for start-ups to globalise.	Norm VC Norm PC
	14. Migration (3rd) and macroeconomic indicators (4th) are quite significant because they indicate whether there is potential in terms of growth. They are basic factors when considering.	Talents Macro. Ind
	15. Cultural-cognitive distances (5th) and geographical distances (6th) are personal preferences and in those terms they are significant. Example: Spanish VC must want to be here personally.	Norm soc.
	16. Degree of economic integration (7th) is least significant because there are more cases of Asian funds, American funds and Scandinavian funds that are here, which outnumber UK, Germany and France. R11 mentions Middle Eastern funds too. Based on their observation degree of economic integration is irrelevant.	Econ int.
	17. Industry norms are a derivative of regulations. Current regulations allow for claims that are unsubstantiated. Investors are overprotecting their interests which results in undermining of the start-ups. There exist better regulatory mechanisms, which could be more attractive for foreign investors.	Reg. frame Norm. VC Perform PC

	18. The time it takes to carry out procedures in the light of Polish law is a huge problem. A start-up can cease to exist before the trial is reached.	Reg. frame.
	19. One of the reasons why pension funds are not involved in VC is because of the scale they need to maintain. That scale is not possible in the VC industry yet.	(!)
	20. A new determinant has been mentioned related to “mindset of the entrepreneurs”. R11 elaborates that there is a lack of global scaling mindset. This would take 3rd or 4th place in the new structure.	Entre. Mind. Perform. PC