

How Does Social Capital Impact High-Value-Added Immigrant Entrepreneurship?

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MODULE CODE: BGLP0014

WORD COUNT: 15123



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How Does Social Capital Impact High-Value-Added Immigrant Entrepreneurship?

Abstract

The primary aim of this dissertation is to examine the impact of social capital on immigrant entrepreneurship, with a particular focus on how network, interpersonal trust, and institutional trust shape entrepreneurial activities in high-value-added sectors. The study utilises a longitudinal ethnographic approach and semi-structured interviews to gather insights from high-value-added immigrant entrepreneurs, followed by thematic analysis and an inductive multiple-case study to identify key patterns. The findings highlight the critical role of social capital, particularly the importance of weak ties and horizontal network in operational support, interpersonal trust in establishment, and institutional trust in strategic decisions across borders. In terms of contributions, this study advances the understanding of how social capital influences high-value-added immigrant entrepreneurship, offering insights into the mechanisms behind network and trust in immigrant entrepreneurial contexts.

Keywords

Social Capital, Immigrant Entrepreneurship, High-Value-Added, Network, Trust, Ethnography

Acknowledgements

I would like to express my deepest gratitude to my supervisor, Dr Konrad Miciukiewicz, for his invaluable guidance and support on my research. His feedback and encouragement have been pivotal in shaping this dissertation. I am also deeply appreciative of his role as my course instructor over the past year, where his dedication and teaching have significantly enriched and shaped my academic experience. I would also like to extend my thanks to the staffs at the Institute for Global Prosperity (IGP), whose teachings and insights into writing and research methods have greatly inspired me. Finally, I am profoundly grateful to my friends and families for their continuous support throughout this journey.

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Chapter 1: Introduction

1.1 Background and Rationale

The phenomenon of immigrant entrepreneurship has gained attention in both academic and policy-making circles, particularly in the context of its contributions to economic dynamism and innovation. Immigrant entrepreneurs have often been acclaimed for their ability to inject new ideas, create jobs, and stimulate growth in host countries.

Immigrant entrepreneurship plays a critical role in driving innovation, economic growth, and technological advancement in the global economy. The number of international migrants has risen significantly over the past decades, increasing from 84 million in 1970, constituting 2.3% of the global population, to 280 million in 2020, accounting for 3.6% of the global population (United Nations, 2020; McAuliffe & Triandafyllidou, 2021). This demographic shift has not only altered the socio-economic landscapes of many countries but has also led to the emergence of a new breed of entrepreneurs—immigrant entrepreneurs. These individuals have become pivotal in the creation and growth of businesses across a variety of sectors.

However, when one thinks of immigrant entrepreneurs, the mind often turns to images of rustic restaurants or bustling grocery stores—sectors traditionally associated with low entry barriers (Waldinger et al., 1989; Bonacich, 1993; Light and Bonacich, 2000; Morokvasic, 2017; Bailetti, 2018). Yet, in recent years, a striking trend has emerged: the rise of the high-value-added immigrant entrepreneur (OECD, 2011). These entrepreneurs, who operate in high-value-added sectors like technology, biotechnology, and finance, are at the forefront of industries that require not only technical expertise but also innovative thinking. Their ventures are characterised by a high potential for growth, innovation, and significant economic impact, both in their host and home countries.

A critical factor influencing the activities of these high-value-added immigrant entrepreneurs is social capital, which encompasses the resources embedded in social networks, trust, and institutional support. Social capital has been widely recognised as a crucial element in economic activities (Bourdieu, 1986; Burt, 1992; Portes, 1999; Portes, 2000; Putnam, 2000; Light, 2004), providing access to resources, information, and opportunities that might otherwise be inaccessible. For immigrant entrepreneurs, who often operate in environments where they lack the advantages of native-born counterparts, social capital becomes even more vital. Through networks, immigrant entrepreneurs can bridge gaps in market knowledge, access financial resources, and navigate regulatory landscapes. Furthermore, the role of trust—both interpersonal and institutional—underpins the effectiveness of these networks, influencing the willingness of individuals and institutions to collaborate, share information, and provide support.

The intersection of social capital and high-value-added immigrant entrepreneurship presents a rich area for academic inquiry. While there is a growing body of literature examining the general role of social capital in entrepreneurship, there remains a gap in understanding how these dynamics play out specifically within the context of high-value-added immigrant entrepreneurship. This dissertation seeks to address this gap by exploring the various contexts in which social capital influences the success of high-value-added immigrant entrepreneurs, with a particular focus on the role of networking, interpersonal trust, and institutional trust. By delving into these aspects, the study aims to contribute to a more comprehensive

understanding of the mechanisms that drive immigrant entrepreneurship in high-value sectors.

1.2 Research Aims and Objectives

The primary aim of this research is to investigate the role of social capital in facilitating high-value-added immigrant entrepreneurship. This involves an in-depth exploration of how different facets of social capital—namely network, interpersonal trust, and institutional trust—impact the entrepreneurial processes and outcomes for immigrant entrepreneurs engaged in high-value-added activities. By focusing on these elements, the study seeks to unravel the complexities of how immigrant entrepreneurs leverage social capital to overcome the unique challenges they face in creating high-value enterprises.

To achieve this aim, the central research question guiding this study is:

How and in what contexts does social capital influence high-value-added immigrant entrepreneurship?

This overarching question is further divided into three sub-questions, each addressing a specific aspect of social capital:

- 1. How and in what contexts does network influence high-value-added immigrant entrepreneurship?
- 2. How and in what contexts does interpersonal trust influence high-value-added immigrant entrepreneurship?
- 3. How and in what contexts does institutional trust influence high-value-added immigrant entrepreneurship?

By addressing these questions, the research aims to provide an understanding of the conditions under which social capital contributes to high-value-added immigrant entrepreneurship, thereby offering insights that could inform both theory and practice in the field of immigrant entrepreneurship.

1.3 Research Scope

This study is specifically focused on high-value-added immigrant entrepreneurs, defined as individuals who have migrated to a new country and are engaged in entrepreneurial activities that contribute to the host economy through innovation, technological advancement, or the creation of high-skilled employment. The rationale for focusing on this subset of entrepreneurs lies in their unique potential to drive economic growth and competitiveness, as well as the distinct challenges they face in comparison to both low-value-added immigrant entrepreneurs and native-born entrepreneurs.

The study is geographically targeted at immigrant entrepreneurs operating within Europe, a context characterised by its diverse immigrant population and dynamic entrepreneurial ecosystem. The European market presents a particularly relevant setting for this research, given its status as a global hub for high-tech industries, finance, and innovation, as well as its complex socio-political landscape, which has implications for trust and institutional support.

In terms of methodological scope, the research will employ a qualitative ethnographic approach, utilising in-depth interviews with high-value-added immigrant entrepreneurs, along with case studies, to explore how social capital functions within this specific context. The choice of a qualitative approach is guided by the need to capture the contextual details that quantitative methods might overlook, particularly in understanding the subjective experiences of entrepreneurs and the dynamics of their social networks.

This study focuses on high-value-added sectors such as technology or advanced manufacturing, to the exclusion of lower-value-added sectors like retail or restaurants. This focus is justified by the research aim to explore entrepreneurship that contributes substantial value to the economy, where the role of social capital may be distinctly different from that in other sectors. Additionally, the study will be limited to first-generation immigrants, recognising that the experiences of second-generation immigrants may differ significantly due to their deeper integration into the host society.

1.4 Outline of the Dissertation

This dissertation is structured into seven chapters to develop an understanding of the role of social capital in high-value-added immigrant entrepreneurship.

In Chapter 1: Introduction, it provides an overview of the study, including the background and rationale, research aims and objectives, scope and delimitations, and an outline of the dissertation. It sets the stage for the subsequent chapters by highlighting the importance of social capital in the context of high-value-added immigrant entrepreneurship.

In Chapter 2: Literature Review, it critically examines existing researches on immigrant entrepreneurship, social capital, and high-value-added entrepreneurship. It explores the theoretical frameworks that have been used to understand these phenomena and identifies gaps in the literature that this dissertation seeks to fill.

In Chapter 3: Research Methodology, it outlines the research design and methodology employed in the study. It justifies the choice of a qualitative approach and describes the methods of data collection, the selection of participants and analysis procedures.

In Chapter 4: Findings, it presents the results, organised around the research questions. It provides an inductive multiple-case study of how social capital in its various forms influences high-value-added immigrant entrepreneurship.

In Chapter 5: Discussion, the findings are interpreted in light of the existing literature and theoretical frameworks. This chapter explores the implications of the research for our understanding of social capital in high-value-added immigrant entrepreneurship.

In Chapter 6-7, it summarises the key findings and contributions of the study. It reflects on the research questions and discusses the extent to which the study has achieved its aims and objectives. The chapter also suggests directions for future research and offers recommendations for entrepreneurs, policymakers, and future scholars interested in the nexus of social capital and immigrant entrepreneurship.

Chapter 2: Literature Review

2.1 Introduction: Why Social Capital?

The theory of social capital has been introduced to explain how social context and structure impact human behaviours and interactions (Bourdieu, 1986; Burt, 1992; Portes, 1999; Portes, 2000; Putnam, 2000). Social capital is defined as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (Bourdieu, 1986), "set of resources embedded in relationships" (Burt, 1992), and "relationships of trust embedded in social networks" (Light, 2004). It refers to the resources and trust embedded within social networks. As "economic exchanges are socially embedded" (Granovetter, 1985), entrepreneurial activities strongly connect with the social and economic structure, social capital significantly influence entrepreneurial activities (Aldrich and Martinez, 2010; Turkina and Thai, 2013). For immigrant entrepreneurs, the establishment of social capital in host country is crucial (Zhou, 2004; Salaff et al., 2006; Sequeira and Rasheed, 2006), but more challenging and complex as they navigate between their home and host countries. This process is akin to transplanting a plant into new soil; just as the plant must establish new roots while maintaining its existing ones, immigrant entrepreneurs face the particularly intricate task of building new social capital while sustaining the social capital they have already developed. Despite its importance, research on immigrant entrepreneurship has less emphasis on social capital's role.

In addition, most studies about immigrant entrepreneurship concentrate on businesses with lower entry barriers (Zhou, 2004; Salaff et al., 2006), while the "shift from low-value to high-value added business" (Kloosterman and Rath, 2010) of immigrant entrepreneurship activities, calling for further understanding how social capital influences high-value-added ventures. Previous quantitative research (Turkina and Thai, 2013) has highlighted that of "horizontal networking and institutional trust is stronger for high-value added immigrant entrepreneurship than for the general level of immigrant entrepreneurship" but has not sufficiently explored how these factors impact daily entrepreneurial activities. Additionally, regional case studies (Maas, et al., 2014; Mitra and Basit, 2021) offer varied conclusions, reflecting the complex relationship between entrepreneurship and social environments. This variation indicates a need for more studies across different contexts to fully understand social capital's impact on high-value added immigrant entrepreneurship.

This study addresses these gaps by using an ethnographic approach to examine how social capital influences high-value-added entrepreneurship in daily settings. It investigates the components of social capital—network, interpersonal trust, and institutional trust—focusing on the specific contexts in which these elements operate and their roles in shaping entrepreneurial outcomes.

2.2 Theoretical Foundations

2.2.1 What is Social Capital?

Social capital, a concept widely discussed in both social and economic contexts, refers to the networks, norms, and trust that enable individuals and groups to act together more effectively to pursue shared objectives. First popularised by Bourdieu (1986) and Coleman (1988), social

capital is often considered a critical resource that individuals can leverage to access information, opportunities, and support. In the context of entrepreneurship, social capital is particularly important as it can provide entrepreneurs with the resources needed to overcome challenges, innovate, and grow their businesses.

Bourdieu (1986) introduced social capital as part of a broader framework that also included economic and cultural capital. He argued that social capital is a resource based on group membership, relationships, and networks of influence and support. Unlike economic capital, which is financial, and cultural capital, which pertains to knowledge and educational credentials, social capital derives from the social networks and connections an individual can mobilise. This conceptualisation highlights the role of social structures and relationships in providing access to resources that are not equally available to all members of society.

Coleman (1988) expanded on this by defining social capital as the social structures that facilitate certain actions of individuals within the structure. He stressed that social capital is not a single entity but a variety of different entities that share two characteristics: they all consist of some aspect of social structures, and they facilitate certain actions within that structure. Coleman's work underscores the functional aspects of social capital, emphasising how it can be used to achieve specific goals, particularly in educational and economic settings.

Social capital is multidimensional, with two key aspects being network and trust. Network refers to the connections between individuals and groups that facilitate the exchange of information and resources. Trust, on the other hand, refers to the confidence that individuals and groups have in each other, which is essential for the effective functioning of networks. Together, these dimensions of social capital can significantly influence the success of entrepreneurial ventures, particularly in uncertain and resource-constrained environments, such as those often encountered by immigrant entrepreneurs.

Several key theories including, the theory of embeddedness, strong and weak ties, and the theory of structural holes shapes the academic understanding of social capital. The concept of embeddedness, introduced by Granovetter (1985), emphasises the role of social relations in economic actions, suggesting that economic behaviour is deeply embedded in social networks. This theory challenges the notion of economic actions being purely driven by market forces, highlighting instead the importance of personal relationships and trust. Granovetter's idea of embeddedness underscores that economic actions cannot be understood in isolation from the social context in which they occur. This is particularly relevant for entrepreneurs, who rely on social networks not just for resources, but for the legitimacy and support necessary to navigate complex markets.

Another influential theory is the concept of strong and weak ties, also proposed by Granovetter (1973). Strong ties refer to close, frequent interactions within a network, while weak ties involve more infrequent interactions but with a broader range of contacts. Weak ties are particularly valuable for entrepreneurs, as they often provide access to new information and opportunities beyond the immediate network. Granovetter's analysis of weak ties illustrates how connections outside of close-knit groups can bring novel information and resources that are critical for entrepreneurial innovation and opportunity recognition.

Lastly, Burt's theory of structural holes (Burt, 1992; Burt, 2004) focuses on the gaps within a network where there are few or no connections. Entrepreneurs who can bridge these

structural holes can access diverse information and resources, giving them a competitive advantage. Burt argues that individuals or organisations that can span these gaps, or "holes," between disconnected groups can act as brokers of information and resources, often gaining significant strategic advantages in the process. For immigrant entrepreneurs, especially those in high-value-added sectors, the ability to navigate and exploit these structural holes between different markets can lead to access to unique resources, partnerships, and market opportunities.

These theories affirm the importance of social capital in entrepreneurship by illustrating how networks and relationships can be strategically utilised to gain access to resources and opportunities. This dependency on social capital is particularly evident in cases where immigrant entrepreneurs must overcome barriers such as language differences, discrimination, and unfamiliarity with local markets and regulations.

Moreover, recent studies have expanded on these foundational theories, exploring how social capital evolves in the digital age. Digital platforms and social media have transformed the ways in which networks are formed and maintained, creating new opportunities for entrepreneurs to build and leverage social capital. Online networks can complement traditional forms of networking by offering broader reach and more diverse connections, potentially enhancing the effectiveness of social capital in the entrepreneurial process (Ellison, Steinfield, and Lampe, 2007).

2.2.2 Network as a Component of Social Capital

Network, as a fundamental component of social capital, plays a crucial role in the entrepreneurial process. It involves the creation and maintenance of relationships that enable entrepreneurs to access resources, information, and support. These networks can take various forms, each with distinct implications for entrepreneurial activities.

Horizontal and vertical networking are often employed to distinguish the level at which networks operate within a hierarchy. Horizontal networking typically refers to connections between peers or entities at the same hierarchical level, fostering collaboration and exchange among equals. Conversely, vertical networking involves interactions across different levels of a hierarchy, involves connections with individuals or organisations at different levels of a hierarchy, such as mentors, investors, or government officials. Different scholars define these networks in varied contexts. For example, distinguishing within the supply chain, "Horizontal networks refer to coopereation among firms which are primarily competitors. Vertical networks relate to cooperation of partners belonging to the same chain." (Gellynck and Kühne, 2010). In geographical dimension, describing "Horizontal networks comprise businesses on the same level of the value chain and are predominantly local. Vertical networks comprise actors within the same value chain, but on different scales and predominantly from different locations" (Tuitjer and Küpper, 2022) This dissertation adopts the broader hierarchical definition, viewing horizontal networking as peer-to-peer relationships within the same level, and vertical networking as interactions across different levels (Ram, Jones, and Villares-Varela, 2017).

2.2.3 The Role of Trust in Social Capital

Trust is a critical element of social capital, underpinning the effectiveness of networks. Trust has been extensively studied across various disciplines (Welter, 2012), including

management science (Lewicki et al., 1998; Rousseau et al., 1998) and organisational theory (Lane and Bachmann, 1998; Saunders et al., 2010). Entrepreneurship scholars have increasingly focused on the role of trust within their field (Höhmann and Welter, 2005; Welter and Smallbone, 2006). Trust play distinct roles in entrepreneurship by enabling "doing business costs less" (Fukuyama, 1995) and "high tolerance of uncertainty and risk-taking" (Turkina and Thai, 2013; Newton, 1999).

Trust can be broadly categorised into two types: interpersonal trust and institutional trust.

Interpersonal trust refers to the trust between individuals, which is essential for building and maintaining relationships within networks. In the context of entrepreneurship, interpersonal trust facilitates collaboration, lower transaction cost, and enhances the flow of information and resources within networks (Putnam, 2000). When trust exists between entrepreneurs and their network partners, it fosters a willingness to share knowledge, provide support, and engage in long-term collaborations.

Institutional trust, on the other hand, refers to the trust that individuals have in formal institutions, such as governments, legal systems, and financial institutions. For entrepreneurs, institutional trust is crucial for ensuring that business operations are conducted in a stable and predictable environment. High levels of institutional trust can reduce transaction costs, as entrepreneurs are more likely to believe that contracts will be honoured, regulations will be fairly enforced, and that there will be recourse in the event of disputes (North, 1990). Conversely, low levels of institutional trust can deter investment, hinder business development, and increase the cost of doing business (North, 1990).

Building and maintaining trust can be particularly challenging in diverse or multicultural settings, such as those often encountered by immigrant entrepreneurs (Zhou, 2004). Cultural differences, language barriers, and varying expectations can all contribute to misunderstandings and mistrust. For immigrant entrepreneurs, overcoming these challenges is essential for integrating into local business networks and gaining the trust of customers, partners, and institutions (Ram, Jones, and Villares-Varela, 2017). Successfully building trust within networks enhance access to resources and reduce risks.

2.2.4 Interrelation of Social Capital, Network, and Trust

Social capital, network, and trust are deeply interconnected elements that collectively influence entrepreneurial outcomes. The synergies of these components can significantly enhance the success of entrepreneurial ventures, particularly in contexts characterised by uncertainty and risk (Woolcock, 1998).

Social capital provides the foundation for networking, as it is through social networks that entrepreneurs can access the resources, information, and support necessary for business success (Putnam, 2000). However, the effectiveness of these networks depends on the presence of trust. Without trust, networks may be fragmented, information may not flow freely, and collaboration may be limited (Granovetter, 1985). Trust, therefore, acts as the glue that holds social networks together, enabling entrepreneurs to leverage their social capital more effectively (Fukuyama, 1995).

Theoretical perspectives on the interaction between social capital, networking, and trust suggest that these elements are mutually reinforcing. Strong networks can enhance trust by

providing opportunities for repeated interactions, fostering familiarity, and establishing reputations (Burt, 1992). Similarly, high levels of trust can strengthen social capital by facilitating the formation of new networks and the expansion of existing ones. In turn, robust social capital can lead to more effective networking, as entrepreneurs with extensive and diverse networks are better positioned to identify and exploit.

In the context of immigrant entrepreneurship, immigrant entrepreneurs encounter distinctive challenges. Being embedded in a new and unfamiliar social environment, rather than their home country, they tend to face limited access to resources and potential discrimination. This is particularly pronounced in high-value-added sectors, which demand a higher level of cross-industry cooperation and heavier investment in research and development. In these circumstances, social networks serve as a crucial safety net, providing support and encouragement for these entrepreneurs to devote into their ventures.

2.3 Immigrant Entrepreneurship and High-Value-Added Ventures

2.3.1 Definition and Types of Immigrant Entrepreneurship

Immigrant entrepreneurship, generally understood as the undertaking of entrepreneurial activities by individuals who were born abroad (Dabić et al., 2020). In the process of creation and management of businesses in a host country, rather than in the entrepreneur's home country, several scholars have suggested that barriers such as limited language proficiency, lack of relevant experience, scarce resources, and insufficient social embeddedness can impede business start-ups by immigrants (Constant, Kahanec, and Zimmermann, 2009; Millar and Choi, 2008).

Despite these obstacles, immigrants often exhibit higher rates of "self-employment" compared to other groups within their host societies (Contreras-Sweet, 2015; Desiderio and Salt, 2010; Levie, 2007). While an individual's knowledge, skills, and abilities are valuable economic assets (Becker, 2009), for immigrants, the value of this human capital may be diminished due to discrimination and other barriers in the host country, leading many to pursue self-employment as an alternative to finding work commensurate with their qualifications. Usually when considering immigrant entrepreneurs, common images might include small-scale enterprises such as restaurants or grocery stores, sectors typically associated with lower entry barriers (Waldinger, Aldrich, and Ward, 1990; Bonacich, 1993; Morokvasic, 2017; Bailetti, 2018, Zhou, 2004; Salaff et al., 2006). These businesses often cater to local or ethnic communities and are characterised by relatively low capital requirements and lower levels of technological sophistication. In distinguishing between traditional immigrant entrepreneurship and high-value-added immigrant entrepreneurship, it is essential to consider the types of businesses and the value they generate.

In contrast, a recent trend (OECD, 2011) of high-value-added immigrant entrepreneurship involves businesses that contribute significantly to economic growth through innovation, advanced technology, and the creation of high-skilled employment. These ventures are typically found in sectors such as information technology, biotechnology, engineering, and advanced manufacturing. High-value-added immigrant entrepreneurs are usually highly skilled individuals with specialised knowledge and extensive professional networks. They are driven not only by economic opportunity but also by a desire to innovate and create value in new markets.

2.3.2 High-Value-Added Immigrant Entrepreneurship

High-value-added immigrant entrepreneurship represents a dynamic aspect of the innovation landscape in host country, with ventures that contribute to economic development through advanced innovation, the use of technologies, and the generation of high-skilled employment opportunities. It is "characterised by, on the one hand, a high threshold in terms of human capital, and, on the other, a large growth potential being in the early phase of the product life-cycle" (Kloosterman and Rath, 2010).

One of the defining features of high-value-added immigrant entrepreneurship is the emphasis on innovation. These "highly educated first-generation" (Kloosterman and Rath, 2010) entrepreneurs develop new products, processes, or services that offer substantial improvements over existing solutions. However, innovation is not without its conditions. The development of "high value-added economic sectors" and "the formation of technological innovations" are intricately connected, and these processes are nurtured within "open, trusted, tolerant, culturally diverse societies" (Jurgelevicius and Tvaronaviciene, 2021).

In addition to their innovative capabilities, high-value-added immigrant entrepreneurs are distinguished by their willingness to invest in research and development (R&D). The focus on high-stakes sectors also means that these entrepreneurs operate in environments that are often subject to complex regulatory requirements (Ministry of Science and Technology, 2020) and intense competition. Their ability to navigate these challenges is indicative of the strategic acumen that characterise high-value-added immigrant entrepreneurship.

The importance of high-value-added immigrant entrepreneurship extends well beyond the immediate economic contributions these businesses make. By creating high-skilled employment opportunities, these ventures play a critical role in enhancing the human capital of their host countries, thereby supporting sustained economic growth over the long term. Moreover, there is a trend of immigrants engaging in high-value-added sectors. "In Canada, for example, only one third of Chinese entrepreneurs cater to their ethnic market (see Li in OECD, 2010)."(OECD, 2011). This shift is partly due to the higher levels of education among many migrants, as well as the changing economic structures in post-industrial societies (OECD, 2010). Consequently, more studies on high-value-added immigrant entrepreneurship are needed.

2.4 Gaps in the Literature and Theoretical Framework

2.4.1 Identification of Gaps in Existing Research

Despite the extensive body of literature on social capital, networking, and trust in entrepreneurship, gaps remain, particularly in the context of high-value-added immigrant entrepreneurship. Much of the existing research has concentrated on general entrepreneurship, and most researches in immigrant entrepreneurship often examining businesses with lower entry barriers and lower levels of value creation (Zhou, 2004; Salaff et al., 2006). These studies of social capital in entrepreneurship have provided valuable theoretical frameworks, but they do not fully address the unique challenges that immigrant entrepreneurs are facing.

One notable gap in the literature is the limited understanding of how social capital operates within high-value-added immigrant entrepreneurship. While social capital is widely

recognised as a critical resource for entrepreneurs, there is a lack of research that explores its role in sectors characterised by high levels of innovation, technological advancement, and economic impact. The existing studies often treat social capital as a homogenous concept, without differentiating between its various dimensions or considering how these dimensions may interact differently in high-value-added contexts.

Another gap is the insufficient exploration of the interaction between social capital and the institutional environments in which immigrant entrepreneurs operate. In some cases, institutional trust may be fluctuating, and the regulatory environment may be unpredictable. Understanding how social capital functions in these varied contexts is crucial for developing a more comprehensive understating of immigrant entrepreneurship.

Finally, there is a lack of longitudinal studies that track the development and evolution of social capital among immigrant entrepreneurs over time. Most existing research provides a snapshot of social capital at a particular point in time, without considering how networks and trust evolve. Longitudinal studies could provide valuable insights into the dynamic nature of social capital and the interaction of social capitals and entrepreneurial activities.

2.4.2 Theoretical Framework for the Current Study

The theoretical framework for this study is designed to address the gaps identified in the existing literature and provide a comprehensive understanding of the role of social capital, networking, and trust in high-value-added immigrant entrepreneurship. This framework builds on established theories of social capital, as proposed by Granovetter (1985), Bourdieu (1986), Burt (1992) and Putnam (2000), while incorporating insights from more recent studies on the intersection of social capital and entrepreneurship (Turkina and Thai, 2013; Welter, 2012; Tuitjer and Kupper, 2022).

At the core of this theoretical framework is the concept of social capital as a dynamic and evolving resource that is crucial for entrepreneurial success. This study adopts a multi-dimensional view of social capital, recognising that it encompasses both structural aspects, networks, and relational aspects, the levels of trust within those networks. The three main components of social capital covered in this dissertation are: Network, Interpersonal Trust and Institutional Trust. By considering both dimensions, the framework aims to capture the full range of ways in which social capital influences immigrant entrepreneurial activities.

The theoretical framework for this study incorporates both network and interpersonal trust as critical components of social capital in the context of high-value-added immigrant entrepreneurship. Networks are understood as the structural dimension of social capital, encompassing the connections and relationships that entrepreneurs establish to access resources, information, and support (Granovetter, 1985; Burt, 1992). Interpersonal trust, on the other hand, represents the relational dimension, highlighting the significance of trust in facilitating cooperation and reducing transaction costs within these networks (Putnam, 2000; Fukuyama, 1995).

The framework also integrates the concept of institutional trust, recognising that the effectiveness of social capital is contingent on the broader institutional environment in which it is embedded. This perspective is informed by North's (1990) theory of institutions, which emphasises the role of formal and informal rules in shaping economic behaviour. By incorporating institutional trust into the analysis, this study aims to provide a more nuanced

understanding of how social capital operates in different institutional contexts, particularly those that are challenging or unpredictable immigrant context.

In addition, the theoretical framework for this study incorporates a longitudinal perspective, recognising that social capital is not static but evolves over time. By tracking the development of social capital throughout the entrepreneurial lifecycle, the framework aims to provide insights into how networks and trust are built, maintained, and adapted as the entrepreneur's venture grows and matures.

Chapter 3: Methodology

3.1 Research Approach

Social capital has been extensively discussed in previous literatures, with its significant impact on entrepreneurship. Among the key elements of social capital, networking, interpersonal trust, and institutional trust have been shown to notably influence high-value-added immigrant entrepreneurship (Turkina & Thai, 2013). However, there remains a gap in understanding how these elements affect immigrant entrepreneurship. This dissertation seeks to address this gap by employing an ethnographic approach to explore how entrepreneurs utilise these aspects of social capital in their daily entrepreneurial activities.

The rationale behind choosing a qualitative methodology is rooted in the nature of the research questions, which seek to explore *how* social capital influences entrepreneurial activities among high-value-added immigrant entrepreneurs. Unlike quantitative approaches, which are more suited to measuring the extent of relationships between variables, qualitative research is better equipped to delve into the underlying mechanisms, processes, and meanings that shape these relationships (Saunders, et al., 2009).

Among qualitative approaches, the decision to employ ethnography as the primary research method stems from its ability to offer an immersive understanding of how the immigrant entrepreneurs operate in real-world settings. This longitudinal approach allows for a detailed exploration of how social capital is formed and utilised, capturing the nuances of everyday interactions and practices that could be missed by other methods. By observing and understanding participants in their natural environments (Harrison, 2018), this approach provides a rich, in-depth perspective on the experiences of immigrant entrepreneurs, particularly how they navigate and leverage their networks and trust within high-value-added sectors. This method is particularly suited to uncovering the social dynamics that underpin entrepreneurial activities, making it a suitable tool for this research.

3.2 Research Design

The research design for this dissertation is centred around ethnography to conduct an inductive multiple-case study. By "treating each case as a unit of comparison to confirm or deny inferences drawn from other cases" (Toivonen et al., 2023), the aim is to "understand the dynamics" (Eisenhardt, 1989) of network, interpersonal trust and institutional trust in immigrant entrepreneurship in high-value added sectors.

This research supplemented by detailed semi-structured in-depth interviews and follow-up interviews, to explore the role of social capital in high-value-added immigrant entrepreneurship. This approach was informed by initial scoping interviews conducted with three participants to identify the factors most relevant to high-value-added immigrant entrepreneurship. These scoping interviews highlighted social capital as a critical and common element, leading to the decision to focus the main study on this area and apply theories of social capital to understand its influence on immigrant entrepreneurs.

Ethnography was chosen as the primary method for this research because it allows for an immersive investigation of the social and cultural contexts in which immigrant entrepreneurs operate. The main data source for this research is the detailed semi-structured in-depth

interviews conducted with the participants. These interviews were designed to gather comprehensive information on the entrepreneurs' contexts, focusing on two main areas. The first part of the interview collected objective information, such as the industry in which the entrepreneur operates, the length of time they have been in business, and their professional background. The second part explored the participants' perceptions of networking, interpersonal trust, and institutional trust, as well as specific examples of how these elements of social capital have influenced their entrepreneurial activities.

To ensure the accuracy and depth of the findings, follow-up interviews were conducted to track changes in the participants' views and update their progress over time. These follow-up interactions were not limited to formal interviews but included short phone calls, instant messaging, and face-to-face coffee chats, providing a flexible and ongoing means of gathering additional cases and insights.

The research design is inspired by Toivonen et al.'s (2023) study, which utilised ethnography in a fixed setting where participants interacted due to their shared environment. However, this dissertation differs in that the subjects are dispersed across various locations and industries, with no direct interaction among them. Despite this, they share common experiences as immigrant entrepreneurs in high-value-added sectors, particularly in how they are embedded within the host country's social networks. This shared social context revealed commonalities in how social capital influences their entrepreneurial activities, highlighting the relevance of the chosen research design.

3.3 Sampling and Participant Selection

The participants for this study were selected from immigrant entrepreneurs operating within high-value-added sectors. These sectors were chosen due to their significant economic impact and the unique challenges faced by entrepreneurs in these industries. The focus was on individuals who are embedded in the social structures of their host countries.

The rationale for selecting participants from high-value-added sectors lies in the commonalities they share as immigrant entrepreneurs embedded in the host country. These entrepreneurs navigate complex networks and institutional frameworks that differ from those in lower entry-barrier industries, where immigrant entrepreneurship has traditionally been more common. As more immigrants engage in high-value-added sectors, new challenges emerge that are distinct from those encountered in lower entry-barrier industries. Prior research has indicated that social capital plays a more significant role in high-value-added immigrant entrepreneurship, making it a critical focus for this study (Turkina and Thai, 2013). Additionally, businesses in high-value-added sectors contribute more substantially to economic growth and innovation, offering valuable insights for contemporary policy development and economic planning.

The sampling process utilised a snowballing technique, beginning with contacts within the researcher's network who were high-value-added immigrant entrepreneurs. Each participant subsequently extended the network by introducing additional relevant individuals. This method proved effective in recruiting participants who met the specific criteria and also eased the process of obtaining consent, considering the substantial commitment required from participants. The criteria of participants include: Firstly, participants were required to have immigrant status, defined as entrepreneurs operating in a market or country different from their birthplace. Secondly, they had to be involved in a high-value-added sector. This study

defines high-value-added industries based on two criteria: the industry's potential for rapid growth and significant economic contribution (OECD, 2011), and the requirement that the company's research and development (R&D) investment accounts for at least 5% of its revenue (Ministry of Science and Technology, 2020). Lastly, participants needed to be willing to engage in an ethnographic study lasting a minimum of 15 days, which included at least one detailed one-hour interview and two follow-up interviews. These criteria ensured that the participants were representative of the target group and that sufficient data could be collected to address the research questions.

Ultimately, seven participants were fully engaged in the study, representing a diverse range of high-value-added industries. The duration of their entrepreneurial activities varied from six months to seven years, providing a broad spectrum of experiences and insights. This diversity in both industry and experience enriched the data, allowing for a comprehensive analysis of the role of social capital in high-value-added immigrant entrepreneurship. Detailed information about the participants, including their industry sectors, the length of time they have been involved in entrepreneurship and their professional background, is summarised in Table 1.

Table 1. Information of Participants

| List | Industry | YOE in Current Firm | Position | Stage of Business | Location of Business |
|---------------|---------------------------|------------------------|----------------|-------------------|-------------------------|
| Participant 1 | Biotech | 5 years | Founder | Series A | UK |
| Participant 2 | SaaS | 3 years | Product Lead | Seed | UK & China |
| Participant 3 | AI + Web 3 | 1.5 years | Founder | Launching stage | Europe |
| Participant 4 | Advanced Manufacturing | 6 years | Senior Manager | Mature stage | Europe |
| Participant 5 | Social Media Platform | 0.5 year | Founder | Prototype stage | UK |
| Participant 6 | Ecommerce | 0.5 year | Founder | Prototype stage | UK |
| Participant 7 | Illumination | 1 year | Founder | Seed | Europe |

Source: Author's own creation.

3.4 Data Collection Procedures

The data collection for this study was conducted through a multi-stage process, beginning with scoping interviews, followed by detailed semi-structured in-depth interviews, and concluding with follow-up interactions. Each stage of data collection was designed to progressively refine the understanding of how social capital influences high-value-added immigrant entrepreneurship.

a) Scoping Interviews

The initial stage involved scoping interviews with three immigrant entrepreneurs. These interviews were exploratory in nature, conducted without applying any specific theoretical framework. The aim was to identify the exogenous and endogenous factors that significantly impact their entrepreneurial activities. Through these scoping interviews, social capital emerged as a critical factor. This finding led to the decision to focus the main research on

social capital and to apply established theories of social capital (Bourdieu, 1986; Coleman, 1988; Granovetter, 1985; Burt, 1992; Putnam, 2000) in subsequent stages of data collection.

b) Detailed Semi-Structured In-Depth Interviews

Following the scoping phase, the study progressed to detailed semi-structured in-depth interviews. Each interview lasted approximately one hour and was designed to explore the role of networks, interpersonal trust, and institutional trust in the participants' entrepreneurial activities. These interviews sought to understand how these dimensions of social capital influenced the entrepreneurs' decision-making processes, the specific contexts in which they had an impact, and how the participants perceived these elements. The semi-structured format allowed for flexibility, enabling the interviewer to probe deeper into topics that emerged during the conversation while ensuring that all key areas were covered systematically (Saunders, et al., 2009).

c) Follow-Up Interactions and Observations

To supplement the initial data collected, the longitudinal follow-up interactions were conducted using a variety of methods, including instant messaging platforms (such as WhatsApp, Instagrams, LinkedIn and WeChat), Zoom calls, and informal coffee chats. The follow-up stage lasted for a minimum of half a month, typically extending to a full month, with two participants engaging for up to one and a half months. These interactions were shorter and more fragmented than the initial interviews but provided valuable insights into how the participants' perceptions and use of social capital evolved over time.

For example, one entrepreneur (Participant 6) initially claimed that networks had little influence on her business. However, during a follow-up, it emerged that she had used a network connection to resolve a VAT-related issue by consulting a professional accountant who was known from the alumina networks. Another entrepreneur (Participant 3) also asserted that networks cannot influence him at all during the ideation stage. However, he begins engaging with individuals in his network before launching the product to gather additional comments and feedback.

This shift in perception highlighted the subtle role that networks can play in entrepreneurial activities. Moreover, some entrepreneurs reported changes in their views on social capital throughout the course of their entrepreneurial journey. For instance, one participant who was initially reluctant to discuss his business or engage in entrepreneurial competitions later realised the value of seeking feedback from trusted contacts within his network. This shift in attitude underscored the dynamic nature of social capital and its evolving influence on decision-making.

This multi-faceted data collection approach proved effective in uncovering information that might have been overlooked in a single interaction. The iterative nature of the longitudinal approach, in particular, allowed for the discovery of how social capital subtly influences behaviour and decision-making over time.

3.5 Data Analysis Procedures

The data analysis for this study was conducted using a multiple-case study design, which allowed for a systematic examination of the role of social capital across different cases of

high-value-added immigrant entrepreneurship. The process involved several key steps: transcription, coding and categorisation, thematic analysis, and cross-case analysis.

a) Transcription

The first step in the data analysis process was to transcribe all the interviews. Due to privacy concerns, not all participants consented to having their interviews or interactions recorded. In such cases, detailed notes were taken during and immediately after the interviews to ensure accuracy. These notes were then standardised into written transcripts to maintain consistency across the data set. This process was for ensuring that each participant's responses were captured in a format that could be systematically analysed.

b) Coding and Categorisation

Once the transcripts were prepared, they were imported into NVivo, a qualitative data analysis software, to facilitate coding and categorisation. The coding process involved tagging segments of text that corresponded to the study's primary areas of interest: the influence of networks, interpersonal trust, and institutional trust on entrepreneurial activities. This step allowed for the systematic categorisation of the data into these three components of social capital, making it easier to identify patterns.

c) Thematic Analysis

Following the coding and categorisation, a thematic analysis was conducted. This analysis focused on identifying themes related to the three components of social capital: networks, interpersonal trust, and institutional trust. For each theme, the cases were examined to identify common patterns in how social capital influenced high-value-added immigrant entrepreneurship. The thematic analysis provided a structured way to explore the data, allowing for the identification of recurring themes.

d) Cross-Case Analysis

The final step in the data analysis was a cross-case analysis. Within each identified theme, the individual cases were compared against one another to identify consistent mechanisms in how social capital influenced entrepreneurial activities. This comparative approach enabled the identification of patterns that were consistent across different cases, as well as the recognition of any unique or divergent experiences. By systematically comparing cases, the cross-case analysis helped to uncover underlying mechanisms and offer more generalisable insights into the role of social capital in high-value-added immigrant entrepreneurship.

Through these four stages—transcription, coding and categorisation, thematic analysis, and cross-case analysis—the study was able to systematically explore and understand the complex ways in which social capital influences high-value-added immigrant entrepreneurship. This analytical approach leads to the findings of identifying potential mechanisms and discussions on insights for stakeholders including entrepreneurs and institutes.

3.6 Ethical Considerations

This study adhered to rigorous research ethics, particularly given the sensitive nature of studying immigrant entrepreneurs in high-value-added sectors. These individuals are often highly concerned with privacy and the potential competitive risks associated with information leakage, given the intensely competitive environments in which they operate.

To address these concerns, several measures were implemented to protect the participants' identities and the confidentiality of the information they provided. Each participant was fully informed about the nature and scope of the research before any data collection began. Informed consent was obtained through a signed consent form, which outlined the specific steps taken to ensure their privacy and data security.

The consent form included the following key measures: (1) The research was conducted anonymously. Participants' names were not recorded or mentioned at any point in the dissertation, and all identifying information was carefully anonymised to prevent any possibility of tracing data back to a specific individual. (2) Before each interview, participants were explicitly advised not to disclose any information they believed could be considered commercial secrets. (3) If the interview was recorded, the recordings were solely for transcription purposes. Once transcription was completed, all recordings were permanently deleted. (4) Participants were informed that they had the right to withdraw their data at any time during the study, or up to three months after the data collection was completed. (5) All collected data were encrypted and stored securely. Online data were kept exclusively on the university's password-protected cloud storage. (6) Participants were assured that the data collected would be used strictly for academic purposes and would not be shared with any third parties.

These ethical considerations were critical to maintaining the trust and cooperation of the participants, ensuring that the research was conducted in a manner that respected their rights and protected their interests.

3.7 Limitations

This study encountered several limitations that could affect the applicability of its conclusions. To begin with, the limited duration of the observation period did not allow for the examination of a full business lifecycle, potentially omitting critical insights into longterm entrepreneurial challenges and successes. Additionally, the small sample size, comprising only seven participants, restricts the extent to which the findings can be generalised. The recruitment method, snowball sampling, further introduced a limitation, as it resulted in a participant pool that may not fully reflect the gender and ethnic diversity of the wider population of immigrant entrepreneurs in high-value-added sectors. Moreover, the subjective nature of ethnographic observation posed challenges. The close interactions between the researcher and participants may have influenced the behaviours and responses of the entrepreneurs, thereby introducing the possibility of researcher bias. Additionally, the reliance on self-reported data from interviews may have introduced bias, as participants might have unintentionally or intentionally presented their actions and decisions in a more favourable light. These limitations highlight the need for further research with a larger, more diverse sample and longer observation periods to validate and deepen the findings of this study.

Chapter 4: Findings

4.1 Introduction to Findings

This research revealed that three social capital components (Network, Interpersonal Trust and Institutional Trust) play important roles in high-value-added immigrant entrepreneurship by:

- 1. Network, particularly horizontal and weak-tie network, enhances operational effectiveness.
- 2. Interpersonal Trust is crucial for forming partnerships and is characterised by a spiralling-up process.
- 3. Institutional Trust is pervasive and guides the entrepreneur's focus towards areas with lower perceived transactional costs between the host and home countries.

Networking is the first component discussed, highlighting how entrepreneurs build, maintain, and leverage their relationships in the networks to gain access to resources, information, and opportunities. The second component, Interpersonal Trust, explores the development and maintenance of trust within personal networks, examining how this perception of trust influences the formation of partnerships and the establishment of commitment. Finally, Institutional Trust is explored in the context of how entrepreneurs perceive and interact with formal institutions such as governments, financial bodies, and regulatory agencies in both their home and host countries. Together, these components provide a comprehensive understanding of how social capital impacts entrepreneurial activities, particularly within the challenging domain of high-value-added immigrant entrepreneurship.

4.2 Network

Network is the most fundamental manifestation of social capitals, serving as the primary conduit through which entrepreneurs access vital information and resources to solve practical challenges. To comprehensively understand the impact of networks on high-value-added immigrant entrepreneurship, this section addresses three critical questions: 1) What constitutes an immigrant entrepreneur's network? 2) How are these networks established? 3) In what contexts do these networks prove most effective? By exploring the composition, formation, and application of networks, this section provides an analysis of how networking facilitates entrepreneurial activities with cases.

4.2.1 Constitution of Network

A network, in its fundamental form, is composed of three key elements: Actors (Nodes), Relationships (Ties), and Flow (Direction) (Granovetter, 1973). These components work together to create the web of connections that underpin the social capital of entrepreneurs. In analysing the responses of participants and conducting a thematic analysis, it became evident that several specific actors consistently emerged across different cases. These actors include family, friends, alumni/classmates, competitors, industry peers, clients, government, financial institutions, and academic institutions.

The presence and importance of these nodes varied depending on the industry in which the entrepreneur operated and the specific stage of the business lifecycle. For instance, an early-stage tech entrepreneur (Participant 3, 5, 6, 7) might rely heavily on academic institutions and venture capital for support, while a more established business (Participant 1, 2, 4) might

interact more frequently with government agencies and industry peers. Despite these differences, the general pattern of actors can be summarised in a simplified network, as illustrated in Figure 1.

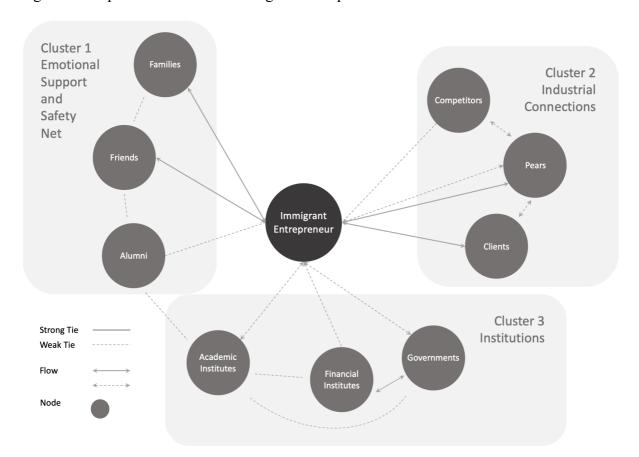


Figure 1. Simplified Network of Immigrant Entrepreneurs

Source: Author's own creation

This figure represents a simplified version of the typical network for a high-value-added immigrant entrepreneur. The arrows indicate the direction and flow of information, while the thickness of the lines represents the strength of trust within each relationship. This visualisation helps to understand how these different actors interact and how trust and information flow are crucial for the success of entrepreneurial activities in complex, high-stakes environments.

These actors can be categorised into several clusters, each serving distinct roles within the network:

Cluster 1: Emotional Support and Safety Net

This cluster includes family and close friends, who provide emotional support and serve as a safety net for the entrepreneur. These ties are typically strong, characterised by high levels of trust and frequent interaction. While they may not directly contribute to the business's operations, the support they offer is crucial for the entrepreneur's resilience and well-being, enabling them to take risks and persevere through challenges.

Cluster 2: Industrial Connections

The second cluster encompasses competitors, upstream and downstream suppliers and clients. These actors are directly involved in the entrepreneur's industry and play a vital role in the business's day-to-day operations. The relationships within this cluster can vary from strong, cooperative ties with key clients or partners to weaker, competitive ties with rivals. Information flow within this cluster is essential for staying informed about industry trends, innovations, and potential opportunities.

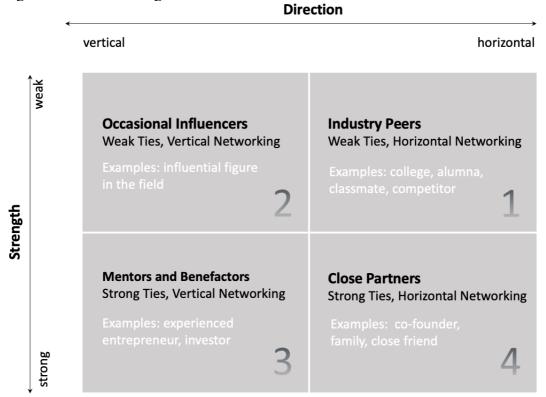
Cluster 3: Institutions

The third cluster includes government agencies (such as regulatory bodies and tax authorities), financial institutions (including banks and venture capitals), and academic institutions (such as universities and research institutes). These actors provide the structural support necessary for the entrepreneur to operate within legal, financial, and intellectual frameworks. Relationships with these institutions can vary in strength, often depending on the level of interaction required. The information flow from these institutions is often formalised, providing the entrepreneur with the necessary guidance and resources.

4.2.2 Networking and Categorisation

Networks can be categorised based on the strength of the relationships they comprise and the relative hierarchical levels of the networking participants. Granovetter's (1973) seminal work on social networks distinguishes between strong and weak ties, highlighting the varying impacts these connections have on information flow and resource access. Meanwhile, the concept of horizontal and vertical networking, as discussed by Ram, Jones, and Villares-Varela (2017), adds another dimension by considering the hierarchical positioning of the actors involved. When combined, these two dimensions create a framework of four quadrants, each representing a distinct type of networking relationship. This is illustrated in Figure 2.

Figure 2. Network Categorisation



Source: Author's own creation

4.2.2.1 Weak Ties, Horizontal Networking: "Industry Peers"

The first quadrant, "Industry Peers", involves weak ties within horizontal networks. Despite their weaker nature, these relationships are effective for the exchange of information across different areas of expertise or sectors to solve daily operational problems. Interestingly, this quadrant often goes underappreciated when entrepreneurs first consider their networks. During initial interviews, many participants overlooked the importance of these weak horizontal ties, instead focusing on stronger relationships or the insights gained from vertical connections. However, upon further reflection and during follow-up interviews, it became clear that these weak horizontal ties played a significant role in day-to-day operations, often contributing to innovation and problem-solving in ways that stronger ties did not. For detailed cases, please refer to Section 3: Information Flow Between Industry Peers.

4.2.2.2 Weak Ties, Vertical Networking: "Occasional Influencers"

The second quadrant, "Occasional Influencers", comprises weak ties within vertical networks. These relationships typically form in contexts such as industry conferences or professional events, where entrepreneurs might encounter influential figures in their field. While these connections are not frequent, they are often marked by the impact that such influential figures can have on an entrepreneur's thinking or strategic direction. However, this type of network had a relatively minor overall impact among the participants in the study.

4.2.2.3 Strong Ties, Horizontal Networking: "Close Partners"

The third quadrant, representing strong ties within horizontal networks, can be termed "Close Partners". This category includes relationships characterised by high levels of trust, frequent interactions, and collaboration among peers or equals. These are typically found in close-knit groups where individuals work together towards common goals. Examples include cofounders of a start-up, long-term business partners, or peers within the same industry who engage in regular exchanges of ideas and resources. The close cooperation within this quadrant often provides the stability and support necessary for entrepreneurs to navigate the challenges of their ventures. For detailed cases, please refer to Section 4: Interpersonal Trust During Establishment.

4.2.2.4 Strong Ties, Vertical Networking: "Mentors and Benefactors"

The final quadrant, "Mentors and Benefactors," encompasses strong ties within vertical networks. These relationships are defined by a power differential, where guidance, resources, or support are provided by individuals or institutions that occupy a higher position within the hierarchy. Examples include mentorship from experienced entrepreneurs, support from investors, or guidance from industry veterans. These relationships are pivotal for strategic decision-making, offering entrepreneurs the advice and resources necessary to scale their businesses or overcome significant hurdles. For detailed cases, please refer to Interpersonal Trust During Establishment.

4.3 Information Flow Between Industry Peers

Among these quadrants, it is particularly noteworthy how the impact of weak ties within horizontal networks ("Industry Peers") is often underestimated. Initial discussions with participants revealed a tendency to overlook these connections, focusing instead on strong ties or vertical networks. However, when asked to provide specific examples, especially during follow-up interactions, many entrepreneurs identified these weak horizontal ties as being influential on daily challenges.

Case 1: Seeking Assistance from Industry Peers for Unfamiliar Operational Issues or New Markets

It is observed that where immigrant entrepreneurs encounter unexpected operational challenges, they turn to "Industry Peers" for assistance. For example, in the case of Participant 1, the company faced a challenge when attempting to ship a product to the EU. Compliance with the EU's "REACH" regulation, which imposes specific standards for chemicals, required the company to produce several certification reports. Uncertain about who could issue these reports and whether alternative methods existed, the company was fortunate to connect with another firm experienced in selling reagents to the EU. This connection provided the guidance to address this challenge.

"This type of information isn't easily found online, and consulting specialised companies usually comes with significant costs... Through an incubator, we had a WhatsApp group where everyone would ask questions about their current challenges. For instance, someone might need advice on a specific task they only do once in their lifetime, while someone else in the group might have extensive

experience, doing the same task for their lifetime. These interactions were incredibly helpful." (Participant 1, Interview).

This case illustrates that, even within the same industry, the day-to-day challenges faced by different businesses can vary greatly. The information and support provided by industry peers can be both highly valuable and difficult to obtain through other means. Moreover, without a network of industry peers, alternative solutions to such problems would likely be costly. This example also highlights how social capital, through the flow of information within a network, significantly reduce operational costs for a company.

Case 2: Expanding Influence and Attracting Industry Peers Through Social Media

In this instance, an immigrant entrepreneur successfully expanded his influence within the industry and attracted potential industry peers by leveraging writing online. As the company embarked on a transformation to enter the UK market, the entrepreneur had to acquire new knowledge from scratch. To document this learning process, he started writing and sharing educational notes on social media.

"I began by simply documenting what I was learning and posting it as educational content on social media. Surprisingly, this drew in many potential clients who were interested in our work," (Participant 2, Interview).

This case highlights how knowledge sharing and content creation can serve as an effective tool for immigrant entrepreneurs to a new market. By proactively engaging with a wider audience through social media, the entrepreneur not only established a foothold in a new market but also built a network of industry peers. Some other participant also expressed similar opinion.

"At least in the biotech field, Twitter has become quite active, especially among those in the biological sciences. Many startups use it to announce various news updates... And LinkedIn is very useful too," (Participant 1, Interview)

This network, in turn, created new opportunities and support mechanisms within the industry, showcasing the practical benefits of leveraging social capital. The way social capital is utilised is often influenced by industry-specific characteristics. In high-value-added sectors, information tends to be less transparent, with much of it unavailable through public networks. Furthermore, the challenges encountered in these sectors are often niche and involve emerging issues. In such instances, networks play a crucial role in addressing these specialised operational problems.

4.4 Interpersonal Trust During Establishment

In the establishment phase of entrepreneurial ventures, interpersonal trust plays a critical role, particularly within Quadrants 1 and 2, which encompass strong ties. Nearly every participant in this study described how, during the early stages of their business, the support and guidance from individuals with whom they had a high level of interpersonal trust were instrumental in the successful launch of their company. Unlike the flow of information, which is more commonly observed in horizontal networking, the influence of interpersonal trust in these cases is not limited to either horizontal or vertical networking. The following examples highlight how interpersonal trust contributed to significant milestones, such as

finding a co-founder and securing angel investment. These cases also address key questions: 1) How is interpersonal trust established? 2) How is it maintained?

Case 3: Interpersonal Trust in Finding a Co-Founder

Participant 7's experience illustrates the pivotal role of interpersonal trust in forming a business partnership. The participant met his future co-founder at university, where he returned to study after working in the venture capital (VC) industry for over two years. During his time at university, he actively engaged in various entrepreneurship competitions and social events, which provided ample opportunities to network with fellow students. It was through these interactions that the participant met a student from a different department, with whom they eventually entered an entrepreneurship competition, achieving notable success. The trust between the two was built through the shared experience of competing together, where they could observe each other's strengths, work ethic, and commitment. After graduating, the two recognised a niche market opportunity in the illumination industry, combining their respective experiences to start a business together. This case underscores the importance of shared experiences and mutual respect in the formation of strong interpersonal trust, which became the foundation of their partnership.

Similarly, Participant 3 found a co-founder through a long-standing relationship with a childhood friend. Although they pursued different professional paths within the same industry after graduation, their frequent exchanges about work led them to identify a promising business opportunity. The trust established over years of friendship and professional interaction naturally evolved into a business partnership. This example further highlights how deep-rooted trust, built over time through both personal and professional interactions, can lead to successful entrepreneurial collaborations.

In another case, Participant 1 met his co-founder through an industry competition, where he was the team leader, and his co-founder by that time was the judge of that competition. Their relationship grew during the pandemic when both returned to home country and became colleagues, allowing for extensive interaction and collaboration. The trust they developed during this period, combined with positive feedback from an incubator program they joined together, solidified their decision to embark on a business venture.

Case 4: Interpersonal Trust in Securing an Angel Investor

Interpersonal trust also plays a crucial role in securing early-stage investment, as demonstrated by Participant 4. Initially operating as a trading company, they facilitated collaborations between Chinese factories and European clients. However, an opportunity arose for the company to transition from being purely a trading entity to establishing its own manufacturing facilities, a move that required substantial capital investment. At that time, the company lacked the necessary funds to seize this opportunity. Fortunately, a foreign client, who had become aware of the company's situation, offered to invest the needed capital. This significant investment enabled the company to upgrade and leading to profits. The company later repaid the angel investor at approximately four times the original amount, and the relationship with the angel investor has remained strong over years, characterised by a high level of trust and mutual respect.

In each case, whether it involved finding a co-founder or securing an angel investor, the key to building interpersonal trust lay in the consistency and quality of interactions. For example,

in the case of Participant 7, trust was built through the shared experience of competing in entrepreneurship contests, which provided a clear demonstration of each individual's capabilities and commitment. Similarly, for Participant 4, the trust with the angel investor was built through a history of successful business dealings and was reinforced by the company's eventual success and integrity in repaying the investment.

The analysis of these cases reveals that interpersonal trust is established and maintained through continuous interaction and positive reinforcement. This process can be visualised as a spiral, where each successful interaction reinforces trust, leading to an increasingly higher level of mutual confidence and reliability. This pattern suggests that the establishment of interpersonal trust is not a one-time event but a gradual process that evolves through repeated positive interactions. Moreover, once this trust reaches a certain level, it remains stable, provided there are no breaches. Thus, the questions of how interpersonal trust is established and maintained are intrinsically connected, the process of building trust also serves to maintain it over time.

4.5 Pervasive Institutional Trust

The previous discussions on networking and interpersonal trust primarily concern interactions occurring within a single country, either the home country or the host country. However, an observation in the study of immigrant entrepreneurship is that these activities often span multiple countries, leading to decisions that involve choosing between different national environments. A recurring theme among participants was the importance of the business environment, particularly institutional trust, in influencing these decisions. This suggests that institutional trust plays a crucial role in determining where immigrant entrepreneurs choose to operate, with some even relocating their businesses from one country to another based on this factor. The key questions to address are: 1) Under what circumstances does institutional trust have an impact? 2) How does it make impact?

The research indicates that immigrant entrepreneurs typically monitor both the host and home country markets, gathering information and assessing the business environments in each. Institutional trust, which refers to the confidence entrepreneurs have in the formal institutions of a country—such as legal systems, regulatory frameworks, and government agencies—emerges as a significant determinant of perceived transactional costs. Transactional costs encompass the expenses associated with conducting business, including costs related to compliance, legal disputes, and the overall ease of doing business. When entrepreneurs perceive higher levels of institutional trust in a particular country, they are more likely to allocate greater resources and effort to operate within that environment, as they expect lower transactional costs and fewer barriers to business success.

Conversely, when institutional trust is low, entrepreneurs may anticipate higher transactional costs due to factors such as bureaucratic inefficiency, corruption, or unpredictability in the enforcement of laws. In the context of immigrant entrepreneurship, this dynamic often results in a push-pull effect between the host and home countries. Entrepreneurs may feel "pushed" away from one country due to a lack of institutional trust, while simultaneously being "pulled" towards another where they perceive a more stable and supportive business environment.

Case 5 Indirect influence of institutional trust

An example of this can be seen in cases where immigrant entrepreneurs initially establish their businesses in a home country but later relocate operations to the host country. Such decisions are not merely reactive but are based on a strategic assessment of the long-term benefits and risks associated with the institutional environments in different countries. The ability to operate in multiple jurisdictions also allows these entrepreneurs to hedge against risks associated with low institutional trust, by maintaining the flexibility to shift focus as conditions change. In this case, participant 1 relocated their company from China to the UK at the end of 2022. By 2023, the company had begun gradually shifting its primary operations overseas, and now the majority of its business activities are conducted through international channels.

"The most significant change, I believe, began with the lockdown in Shanghai. From that point onwards, two major issues arose: first, a substantial decline in the government's credibility, and second, the paralysis of the Shanghai Delta region, which raised serious doubts among international markets about the stability of China's supply chain. This situation, in essence, stemmed from a lack of trust in the continuity of government policies... leading to a gradual withdrawal of foreign investment... As a result, the domestic venture capital investment market has almost ceased to exist," (Participant 1, interview)

This observation suggests that even when the government does not directly intervene in business operations, the broader societal impacts of its policies can influence public perception, which in turn affects businesses. This aligns with Granovetter's theory that "the dynamics of economic exchanges are socially embedded" (Granovetter, 1985), indicating that economic actions cannot be fully understood in isolation from the social context in which they occur.

Case 6 direct influence of institutional trust

Institutional trust plays a crucial role not only through indirect societal perceptions but also through the direct actions of specific institutions, such as government bodies and banks, which can significantly shape the business environment for immigrant entrepreneurs.

"The relationship between the government and our company is mutual dependency. On one hand, the government relies on businesses like ours to generate local tax revenue... We have regular interactions with the Bureau of Economic and Information Development, especially regarding our participation in international exhibitions. The government provides substantial support, including reimbursement of a portion of our expenses. Furthermore, since we have been recognised as a high-tech enterprise, we benefit from a significant reduction in our corporate tax rate, which has been lowered to 15%, providing us with considerable financial relief," (Participant 4, Interview)

This relationship is not merely transactional but is embedded in a broader framework of institutional support that reinforces trust. The government's involvement in providing financial incentives, such as tax reductions and support for international activities, creates a positive feedback loop where the business is incentivised to continue its operations within the country, thereby contributing to local economic growth. This example illustrates how institutional trust is cultivated through consistent and meaningful support from government

institutions, which play a critical role in reducing the perceived risks and transactional costs associated with doing business in the host country.

In addition to government support, the participant also discussed the role of banks in shaping institutional trust:

"Bank is a separate matter, particularly regarding transactions with [an area]. Recently, restrictions on receiving payments from [this area] have tightened, but... individual banks had the discretion to decide whether to process these payments. We would approach various banks to inquire if they could handle such transactions, and those banks with which we had established long-standing and good relationships would sometimes agree to process the payments for us," (Participant 4, Interview)

The discretion exercised by banks in this case illustrates the variability of institutional trust across different institutions and contexts. While government agencies may provide consistent support, the actions of financial institutions can vary significantly based on individual relationships and the perceived risks involved in specific transactions. This variability adds another layer of complexity to the business environment, where immigrant entrepreneurs must navigate not only the formal rules and regulations but also the informal practices and decisions made by key institutions.

Institutional trust exerts a pervasive influence on entrepreneurs, both directly and indirectly. Even seemingly minor actions by institutions can set off a chain of reactions that significantly affect specific industries and businesses. The impact of the same policy environment can vary greatly across different sectors, with immigrant entrepreneurs in particular industries experiencing these effects in diverse ways. Those operating in high-value-added sectors often possess greater influence over governmental discourse and enjoy enhanced international mobility. Consequently, their perception of institutional trust can lead them to redirect their efforts and resources towards countries where they perceive the transactional costs to be lower.

4.6 Conclusion of Findings

The findings demonstrate that social capital is a multifaceted resource that high-value added immigrant entrepreneurs leverage to navigate the complexities of operating in diverse and often challenging environments. Networking, particularly within horizontal and weak-tie contexts, has been shown to be vital for operational success, enabling entrepreneurs to access crucial information and resources. Interpersonal trust is equally important, particularly during the establishment phase, where it facilitates the formation of key partnerships and investment opportunities. Lastly, institutional trust emerges as a factor influencing strategic decisions regarding where to focus business efforts, often determining the geographical and operational scope of entrepreneurial activities. Collectively, these insights underscore the dynamic interplay between social capital components and how they impact entrepreneurial ventures within the high-value-added sector.

Chapter 5. Discussions

Previous studies have predominantly addressed the "what" question, establishing that social capital influences economic activities (Bourdieu, 1986; Burt, 1992; Portes, 1999; Portes, 2000; Putnam, 2000; Light, 2004) including entrepreneurship (Aldrich and Martinez, 2010), and, therefore, immigrant entrepreneurship (Zhou, 2004; Salaff et al., 2006; Sequeira and Rasheed, 2006). Furthermore, it has been demonstrated that the components of social capital—namely, network, interpersonal trust, and institutional trust—play a critical role in high-value-added sectors within immigrant entrepreneurship (Turkina & Thai, 2013).

This research advances the discussion by shifting the focus to the "how" question, examining the mechanisms through which these components of social capital—network, interpersonal trust, and institutional trust—influence high-value-added immigrant entrepreneurship. By analysing the roles of network, interpersonal trust, and institutional trust, the study shed light on the mechanisms through which social capital impacts high-value-added immigrant entrepreneurship. This chapter discusses the implications of these findings, exploring the theoretical and practical contributions to the field of immigrant entrepreneurship.

5.1 The Role of Industry Peers in Daily Operations

One of the key findings of this study is the underestimated but significant role that industry peers play in the daily operations of high-value-added immigrant entrepreneurs. This observation aligns with Granovetter's (1973) theory on the strength of weak ties, which posits that weak ties are crucial for the dissemination of information and resources, particularly in job searches. In the context of high-value-added sectors, this study suggests that weak ties manifest differently, primarily through the exchange of operationally critical information within industry networks.

To further explore the underlying reasons for this pattern, this section proposes following suppositions. High-value-added sectors are often characterised by their specialised and niche markets, where essential operational information is not readily available through public channels. Instead, this information is typically circulated within industry-specific networks, making horizontal connections with industry peers invaluable. This finding is particularly relevant for immigrant entrepreneurs who may lack deep vertical networks in the host country. Unlike native entrepreneurs who may have more established connections with higher-level industry players, immigrant entrepreneurs often find it easier to access and rely on horizontal networks, where information flows more freely among peers.

The implications of this finding suggests that in high-value-added sectors, for entrepreneurs, horizontal networks provide access to specialised knowledge and resources that are essential for navigating the operational challenges unique to these sectors. For policymakers and support organisations, this highlights the importance of fostering industry-specific associations and networking opportunities that facilitate the exchange of operational knowledge among entrepreneurs.

5.2 The Importance of Interpersonal Trust in Early-Stage Entrepreneurship

Interpersonal trust emerged as a crucial factor in the early stages of entrepreneurship, particularly in the formation of partnerships and the acquisition of initial investments. This

may due to the nascent phase of a business when formal structures and resources are still underdeveloped.

In the early stages of entrepreneurship, interpersonal trust often serves as the primary foundation upon which partnerships are built. This trust is usually established through repeated interactions and positive reinforcement, creating a strong bond between the parties involved. The study's findings indicate that such trust is particularly crucial when entrepreneurs seek to establish key relationships, such as finding co-founders or securing angel investors. In these instances, interpersonal trust compensates for the lack of formalised processes and legal frameworks that are typically present in more mature businesses.

However, it's also observed that as businesses grow, the influence of interpersonal trust tends to give its way to institutional trust. With 6 years of experiences in current mature stage enterprise, Participant 4 mentioned that "Trust between people is more likely to be established through contracts and agreements. Once these documents are in place, both parties tend to feel more secure and reassured." As companies expand, formal agreements, institutional frameworks, and contractual obligations increasingly govern relationships. This shift reflects the broader trend in which interpersonal trust, while critical in the early stages, becomes less central as businesses mature and their operations become more complex and regulated. This transition is particularly evident in sectors where information transparency is high, reducing the need for trust-based relationships.

Meanwhile, as globalisation and digital platforms reshape how entrepreneurs connect and collaborate, the mechanisms for establishing and maintaining trust also evolve. For instance, the rise of founder-matching platforms, such as Y Combinator's Founder Matching (Y Combinator, 2024), indicates a shift towards more formalised and structured approaches to forming entrepreneurial partnerships. These platforms may reduce the reliance on traditional interpersonal trust by providing alternative ways to establish credibility and compatibility among potential co-founders.

5.3 The Competition Between Host and Home Countries

Another finding of this study is the influence of institutional trust on the strategic decisions of high-value-added immigrant entrepreneurs, particularly in choosing where to operate. The finding suggests that institutional trust plays a role in how entrepreneurs allocate their resources and efforts between their host and home countries.

High-value-added entrepreneurs, due to their cutting-edged skills and specialised knowledge, often have greater mobility between different countries. This mobility allows them to strategically choose environments with higher perceived institutional trust, where the perceived transactional costs are lower, and the business environment is more stable and predictable. The study reveals that governments in both host and home countries are eager to attract high-value-added industries due to their potential for economic growth and innovation. However, the findings indicate that these entrepreneurs base their decisions also on the perceived reliability and supportiveness of a country's institutional framework rather than on financial incentives alone.

Moreover, the same new policy can generate vastly different responses from entrepreneurs depending on the industry and the type of founder. This suggests that the environment itself acts as a filter, selectively nurturing certain types of companies while discouraging others.

For instance, a lack of transparency in policy can be beneficial for some entrepreneurs:

"There are certain consultancy agencies that work specifically with the government—it's a non-public process, and they were selected in a way I'm not entirely sure about... The consulting services are free, and subsequent applications aren't very costly. It's quite advantageous."

"We also collaborate with law firms... because they are local, their relationships with local legal and tax authorities are stronger. So if there's a new policy requiring us to adjust quickly, we can be more flexible," (Participant 4, interview)

However, for another entrepreneur, the same lack of transparency could constitute an obstacle:

"The main issue is on the administrative side... dealing with the Industrial and Commercial Bureau [in the home country] can be quite frustrating, whereas it's much easier here [in the host country]. In [the home country], you often need to provide all sorts of materials and rely on intermediaries, who can be unclear in their communication. The bureaucracy is often a mystery, and you never quite know where to submit your forms, which are usually quite long for some reason. But here, you can sort it all out online with just a few clicks," (Participant 1, interview)

These contrasting experiences illustrate that what might be an advantageous condition for one entrepreneur can be a considerable barrier for another, depending on the nature of their industry and the specific needs of their business.

The diversity in participants' responses to similar institutional conditions highlights the complexity of the relationship between entrepreneurs and their environments. It also emphasizes that, for immigrant entrepreneurs—especially those in high-value-added sectors—perceived institutional trust influences how and where they allocate their efforts, often leading them to gravitate towards environments with lower perceived transactional costs and higher institutional reliability.

5.4 Practical Takeaways for Stakeholders

"However, the deficiencies in social capital in these countries are at least as alarming. Where are the efforts to encourage social capital formation?" (Putnam,1993) This section outlines the key practical takeaways for three critical stakeholders involved in high-value-added immigrant entrepreneurship: Entrepreneurs, Policymakers, and Financial Institutions, helping each stakeholder to better support high-value-added immigrant ventures.

5.4.1 For Entrepreneurs

For high-value-added immigrant entrepreneurs, effectively leveraging social capital is not just beneficial—it is imperative. Strong ties, such as relationships with mentors, industry veterans, and close peers, are invaluable for obtaining deep, nuanced insights and securing critical resources. These connections often provide the foundation for strategic partnerships and long-term growth. However, the importance of weak ties should not be underestimated. These more distant connections can offer fresh perspectives and access to opportunities that may be outside the immediate reach of closer networks.

In high-value-added sectors, where innovation and adaptability are key, these weak ties can be the gateway to new markets, emerging trends, and innovative ideas. By balancing their network in not only deepening existing relationships but also continuously expanding their reach to include new and diverse connections, this strategic approach is observed to be beneficial in this study.

In the early stages of a venture, interpersonal trust is found to be the cornerstone of success. Immigrant entrepreneurs are highly recommended to build strong, trust-based relationships with key stakeholders, including co-founders, investors, and early customers. These relationships are not just about securing immediate resources or support; they are about laying the groundwork for sustainable, long-term entrepreneurial activities. Trust is built through consistent, transparent communication, reliability, and mutual respect and accumulated in a spiralling up pattern.

Moreover, as the business environment becomes more formalised and transparent, entrepreneurs need to complement interpersonal trust with formal agreements and legal frameworks. This dual approach ensures that trust is both personal and institutional, providing a solid foundation for enduring partnerships and collaboration.

The findings also highlight the role of institutional trust in shaping entrepreneurial success, particularly for those operating across multiple jurisdictions. This requires entrepreneurs to have the understanding of the regulatory landscape, as well as the ability to anticipate and adapt to changes in government policies and economic conditions. High-value-added entrepreneurs, due to their specialised knowledge and skills, often have the advantage of mobility. This mobility allows them to strategically allocate resources and focus their efforts where the institutional environment is most supportive and the perceived transactional costs are lower.

It is essential for immigrant entrepreneurs to not only assess the current state of institutional trust but also anticipate future trends. By staying informed about potential regulatory changes, economic shifts, and political developments, immigrant entrepreneurs can proactively adjust their strategies to mitigate risks and seize opportunities. This forward-thinking approach is especially essential in high-value-added sectors, where the risk is generally higher and the cost of misjudging the institutional environment can be significant.

Meanwhile, in an increasingly digital world, entrepreneurs are also highly encouraged to leverage online platforms to expand their networks and stay connected with industry developments. Platforms such as LinkedIn, Twitter, and sector-specific forums are not just tools for networking. They are resources for gathering intelligence, identifying trends, and building a personal brand within the industry. In high-value-added sectors, where information and innovation move quickly, staying connected through these platforms can be the difference between leading and lagging in the market. In conclusion, the first step for immigrant entrepreneurs in high-value added sectors to get benefits from social capitals is to acknowledge the effect of it and follow by continuously self-reinforcing efforts in their sectors.

5.4.2 For Policymakers and Supporting Organisations

Governments and supporting organisations, such as incubators and innovation hubs, play a pivotal role in fostering an environment conducive to high-value-added immigrant entrepreneurship.

Governments that aiming to attract and retain high-value-added immigrant entrepreneurs need to create a globally competitive environment that is appealing to entrepreneurs. This involves not only fostering a supportive institutional framework but also ensuring that the regulatory, economic, and innovation landscapes are conducive to business growth and sustainability on an international scale. This involves streamlining regulatory processes, reducing bureaucratic hurdles, and ensuring that the legal framework is stable and predictable. By doing so, these organisations can lower the perceived transactional costs for entrepreneurs and create a business climate that is attractive to high-value-added ventures. Additionally, offering tailored incentives, such as tax breaks or grants for research and development, can further enhance the appeal of operating within a particular jurisdiction.

Furthermore, it is essential that policymakers tailor their policies to the specific needs of high-value-added sectors. These industries have unique requirements that may differ significantly from others, and as such, governments and organisations could engage with industry leaders and entrepreneurs to understand these needs fully. Developing industry policies that provide meaningful support, such as tax incentives or grants for research and development (R&D), can help offset the high costs and high risk associated with innovation in these sectors. Additionally, fostering public-private partnerships and creating industry-specific networks can facilitate collaboration and drive innovation within high-value-added industries.

Finally, in light of the global nature of high-value-added entrepreneurship, it is beneficial for policymakers and organisations to support and attract global entrepreneur by offering tailored visas and residency options for high-value-added entrepreneurs and providing assistance for businesses operations. By supporting the international ambitions of high-value-added immigrant entrepreneurs, governments and organisations can enhance their regions' global competitiveness and attract top talent from around the world.

5.4.3 For Financial Institutions

Financial institutions are pivotal in supporting high-value-added immigrant entrepreneurs, particularly those involved in high-risk, innovation-driven sectors. These entrepreneurs often face significant challenges in securing traditional financing due to the inherent risks and long timelines associated with their ventures. Financial institutions should develop specialised financial products that cater to the needs of high-value-added sectors, such as venture capital, R&D financing, and innovation grants. By offering flexible financing options, banks and investors can help entrepreneurs overcome the initial barriers to entry and support their long-term growth. Tailoring these products to the unique challenges of immigrant entrepreneurs can further enhance their impact and success.

Trust is a critical component in the relationship between financial institutions and entrepreneurs. Financial institutions need to build and sustain trust by offering transparent and fair financial services and understanding the specific needs of immigrant entrepreneurs. By establishing strong, trust-based relationships, financial institutions can become valuable partners in the entrepreneurial journey, offering guidance and support that extends beyond

financing alone. This trust-building process is particularly important in high-value-added sectors, where the stakes are high, and the need for reliable financial partners is paramount.

Given the international scope of high-value-added entrepreneurship, financial institutions are also expected to facilitate cross-border transactions. This includes providing services that simplify international payments, and offering foreign exchange solutions. By making cross-border transactions more accessible and efficient, financial institutions can support the global ambitions of high-value-added immigrant entrepreneurs and contribute to their success on the international stage. This support is especially crucial in sectors where international collaboration and the flow of capital, talent, and technology are key drivers of innovation and growth.

Chapter 6. Contribution, Limitations, and Future Research Directions

6.1 Contribution of the Study

This research makes a contribution to the existing body of knowledge on social capital and immigrant entrepreneurship, with a particular focus on high-value-added sectors. Previous studies have primarily concentrated on the "what"—establishing that social capital plays a crucial role in entrepreneurship and extending this understanding to the experiences of immigrant entrepreneurs (Zhou, 2004; Salaff et al., 2006). The influence of key social capital components such as networking, interpersonal trust, and institutional trust on immigrant entrepreneurship, especially within high-value-added sectors, has been acknowledged in the literature, where these elements are considered to have a particularly significant effect (Turkina and Thai, 2013).

However, this study advances the field by exploring the "how"—uncovering the mechanisms through which these components of social capital influence high-value-added immigrant entrepreneurship. Through the use of a qualitative research approach, specifically ethnography, the research captures the ways in which social capital operates within these entrepreneurial ventures. For instance, it highlights the crucial role of weak ties within horizontal networks, often overlooked in participants' initial understanding, in supporting the daily operations of these businesses. This finding underscores the importance of seemingly distant connections in facilitating access to resources and information that are vital for entrepreneurial activities in high-value-added sectors.

Moreover, the study sheds light on the spiralling-up process of interpersonal trust, which emerges as essential during the early stages of business formation. This process, characterised by continuous interaction and positive reinforcement, helps to establish strong, trust-based relationships that are foundational for securing partnerships and early investments. By illustrating how interpersonal trust evolves and sustains entrepreneurial ventures, the research provides deeper insights into its critical role during the formative phases of high-value-added entrepreneurship.

Another key contribution is the identification of institutional trust as an important factor in the strategic decisions of immigrant entrepreneurs, particularly in their choice of operational locations. This study offers insights into how perceived institutional trust influences the allocation of resources and efforts between host and home countries, with particular emphasis on the push-pull dynamics that result from varying levels of institutional trust. This aspect of the research highlights the need for a supportive and reliable institutional environment to foster long-term entrepreneurial activities.

By addressing the "how" question, this dissertation not only confirms the importance of social capital in high-value-added immigrant entrepreneurship but also uncovers the specific mechanisms and processes through which it exerts its influence. This expanded understanding provides a more comprehensive framework for scholars and practitioners alike, offering practical implications for both entrepreneurs and policymakers.

6.2 Limitations of the Study

One of the primary limitations is the relatively short duration of observation. Ethnographic research ideally benefits from prolonged engagement with participants, which allows for a more in-depth understanding of the phenomena under study. However, due to time constraints, this study could not cover the entire lifecycle of the businesses involved. As a result, certain long-term impacts of social capital, particularly those that might emerge during different stages of the business lifecycle, may not have been fully captured.

Another limitation is the sample size and composition. The study involved only seven participants, which, while providing rich qualitative data, may not be fully representative of the broader population of high-value-added immigrant entrepreneurs. Additionally, the snowball sampling method used to recruit participants could have introduced biases, as the sample may reflect certain characteristics of the initial participants' networks, such as gender, ethnicity, or industry focus, rather than the full diversity of this entrepreneurial population.

Moreover, the subjective nature of ethnographic observation introduces potential researcher bias. The close interaction between the researcher and participants can influence the data collected, as the presence of the researcher might alter participants' behaviour or responses. This challenge is inherent to ethnographic research but must be acknowledged as a limitation that could affect the generalisability of the findings.

Finally, the reliance on self-reported data in interviews poses a limitation. Participants' recollections and interpretations of events are influenced by their perceptions and experiences, which might introduce bias or result in the omission of critical details. While follow-up interviews and cross-case analysis help mitigate this issue, the potential for bias in self-reported data remains.

6.3 Future Research Directions

Given the limitations and findings of this study, several avenues for future research emerge. Firstly, there is a need for further exploration of the "how"—investigating other potential mechanisms through which social capital influences high-value-added immigrant entrepreneurship. The patterns identified in this study, such as the significance of weak ties within horizontal networks or the spiralling-up process of interpersonal trust, might not be the only pathways through which social capital exerts its influence. Future research could explore additional mechanisms or variations of these patterns in different contexts.

Secondly, the "why" behind these patterns warrants deeper investigation. Understanding the underlying reasons for the observed patterns could provide valuable insights into the dynamics of social capital in high-value-added sectors. For instance, why do weak ties within horizontal networks play such a crucial role in daily operations? What factors contribute to the spiralling-up process of interpersonal trust? Addressing these questions could enhance our theoretical understanding of social capital and its role in entrepreneurship.

Expanding the sample size and diversity in future studies is also crucial. Comparative research involving larger and more diverse samples could provide a more representative understanding of high-value-added immigrant entrepreneurship. This could include comparisons between immigrant and non-immigrant entrepreneurs, as well as between different national or cultural contexts. For example, examining how cultural backgrounds influence the formation and utilisation of social capital could yield important insights.

Additionally, comparing high-value-added sectors with lower-value-added sectors could reveal sector-specific dynamics in the use of social capital.

Furthermore, extending the observation period to cover the entire lifecycle of businesses would provide a more comprehensive understanding of how social capital influences entrepreneurial ventures over time. Longitudinal studies that track the evolution of social capital from the early stages of business formation through to maturity and potential exit would offer valuable insights into its long-term impact on business success.

Finally, future research could also explore the role of digital and online networks in the formation and utilisation of social capital, particularly in high-value-added sectors where technology plays a critical role. The rise of digital platforms and social media offers new opportunities for networking and trust-building, which could be particularly relevant for immigrant entrepreneurs operating in globalised, tech-driven industries.

In conclusion, while this dissertation has advanced the understanding of the role of social capital in high-value-added immigrant entrepreneurship, there is ample scope for further research to build on these findings. By addressing the identified limitations and pursuing new research directions, future studies can continue to enrich our understanding of this field.

Chapter 7. Conclusion

This dissertation explores how three main components of social capital—network, interpersonal trust, and institutional trust—affect high-value-added immigrant entrepreneurship. Through qualitative ethnographic research, it identifies crucial mechanisms: the significant role of weak ties and horizontal networking in operations, interpersonal trust in early business stages, and institutional trust in strategic decisions. These findings enhance academic understanding on immigrant entrepreneurship and offer practical insights for entrepreneurs and policymakers to foster high-value-added ventures in a competitive global context.

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Appendix A. In-Depth Interview Structure Design

1. Introduction

Purpose: Establish rapport, explain the purpose of the study, and obtain consent. Key Points:

- Overview of the research purpose: "The aim is to explore how social capital influences high-value-added immigrant entrepreneurship."
- Explanation of the interview structure: "This will be a semi-structured interview, where we have key topics to cover, but we are interested in your unique experiences, so feel free to elaborate or share related experiences."
- Consent: Ask whether the participant is comfortable with recording, ask them to avoid
 any commercial secret during conversation, and ask if they have any questions before
 starting.

2. Participant Background

Purpose: Gather context on the participant's entrepreneurial journey and background. Key Questions:

- Can you briefly describe your entrepreneurial journey? How did you start your business?
- What was your initial motivation for starting your business, especially in a foreign country?
- Could you describe the industry in which your business operates?

3. Network

Purpose: Explore the role of networks in the participant's entrepreneurial activities. Key Questions:

- How have your networks (personal and professional) influenced your business decisions? Who are involved?
- Could you provide examples of how networking has impacted your business, especially in the initial stages?
- How do you maintain and expand your network? Are there any specific platforms or communities that have been particularly helpful?

4. Interpersonal Trust

Purpose: Explore the role of interpersonal trust in the participant's entrepreneurial relationships.

Key Questions:

- How important is trust in your relationships with co-founders, investors, and other key stakeholders?
- Can you share an experience where interpersonal trust played a crucial role in a business decision or partnership?
- How do you build and maintain trust with new contacts or partners?

5. Institutional Trust

Purpose: Assess the participant's perception of institutional trust and its impact on their business.

Key Questions:

• How do you perceive the business environment in the host country compared to your home country?

- Have governmental policies or institutions influenced your decision to operate in a particular country? If so, how?
- Can you describe any challenges or benefits you've experienced due to the regulatory environment?

6. Challenges and Adaptation

Purpose: Explore challenges faced by the participant and how they adapted or responded. Key Questions:

- What have been the most significant challenges you've faced as an immigrant entrepreneur?
- How have you adapted your business strategies to overcome these challenges?
- Could you share any specific instances where your network, trust relationships, or the institutional environment helped you overcome a major hurdle?

7. Conclusion and Reflection

Purpose: Wrap up the interview and gather any additional insights. Key Points:

- Summarize key points discussed during the interview.
- Ask if the participant has anything else they would like to add that wasn't covered.
- Thank the participant for their time and contributions.
- Confirm if the participant is interested in receiving a summary of the research findings once completed.

Appendix B. Interview Sample Excerpt

Q: Alright. Can you briefly explain what you do? And roughly when did you start doing it?

A: We focus on improving the efficiency of early-stage biological research and development. We try to extensively modify organisms, mainly bacteria, to enable them to execute more instructions given by humans. We also modify their internal systems to make the entire bacterial system more organized. We hope to improve experimental efficiency through these modifications.

From a business perspective, we're currently focusing on how to improve protein purification, which is a relatively expensive step in protein production in the biological industry. We've developed some products to replace existing protein purification methods, hoping customers will find them useful. So we're now selling protein purification reagents.

Q: Okay. Since you're not doing a cross-border startup, where did you start initially? And how did it evolve to the current situation?

A: We started in Shenzhen, then in the summer of 2020, during the pandemic, my co-founder and I returned to China. We talked in China and thought, since we couldn't figure out how long the pandemic would last, we might as well do something interesting. We continued working in China until the end of 2022 when I came to the UK. Then the company's main business gradually moved overseas in 2023, and now the vast majority of our business is through overseas channels.

Q: Can you describe the scenario in which you met your co-founder? You mentioned a co-founder, in what context did you meet?

A: We both participated in an international genetic engineering competition before. Maybe 70% of the people in this industry now come from this competition. I participated in the competition in 2017, which was my first year, and my current partner was one of my judges at that time. So we met in Boston at the end of 2017. Later, we worked together in a community in the China region. We became quite familiar in 2018 and 2019, and in 2020, we talked more quickly and got to know each other well.

Q: How do you think the community and these industry social relationships helped you find co-founders and establish this business? What impacts did they have?

A: In our industry, a domestic predecessor in this field, Blue Crystal Microorganisms, also came from this community. Their founders were also among the earliest operators of this community. We all came from this community, so very early on, when we were still in school, we roughly knew what startup companies were like. We have many friends in this community who went to other startups, schools, or tried to start companies at schools. Every year we have an annual meeting where old members often come back. We exchange information and listen to stories. A lot of information is obtained from there.

Q: You mentioned that many other entrepreneurs in this industry came from your community. What specific impacts do you think the experiences of these other people had on you?

A: It's hard to say what specific impacts there were. Let me think. One is that we roughly know what pitfalls to avoid, when it's easy to have conflicts, when company management might have problems. There's not much positive, uplifting content. Most of the time, it just feels very tough. I think we see more, understand more real things.

Q: You just mentioned a few things, like when you might encounter pitfalls. Can you think of any more specific examples you can give?

A: I think one example is Blue Crystal. They used technology from the university, and the early data was fine, but when they tried to scale up to a slightly more industrial scale, some problems arose. Looking back, the things done in academia, the direction they considered - academia might care more about paper results or innovation, while industry cares more about usability. Academia might sacrifice some practicality to achieve innovation. These differences might be very subtle at the laboratory level, but weaknesses are amplified in an industrial environment. This reminds us that after starting a company, a lot of underlying technology needs to be redone, not from a research perspective, but from a more user-oriented perspective, focusing on whether it can be used. This is something we actually do internally from the beginning.

Q: But not everyone who comes together initially wants to start a business. So where do you think your motivation to start a business came from?

A: My motivation to start a business wasn't that strong. My biggest motivation was that I had just finished my freshman year at that time. I didn't know how long the pandemic would last. So I decided - I remember I was interning there at the time, and when my current partner came back, we talked, and thought we could do this. We had some resources on hand, technology, and data. Let's put it together and see. At first, it might have started as a small business, just to get this order done. Then the domestic environment was very good, and the timing was quite rare. So we decided to really build this thing up. So it was more about the pandemic, there weren't many choices at that time. Even by the winter of 2020, the overseas situation was very chaotic.

To be honest, we didn't know if schools would still exist at that time. Many schools were facing financial crises. It was all quite tricky. So we might as well do something we could control.

Q: You just mentioned that the domestic environment was very good. What changes in the environment occurred? How did it affect your business moving overseas?

A: The biggest change, I think, started with Shanghai's risk control. From that point on, first, there was a huge issue with government credibility. Second, the paralysis of the Yangtze River Delta region led to huge questions abroad about the stability of China's supply chain. So I think this thing is, frankly, about distrust in the continuity of policies. So there's distrust in the stability of the supply chain even if things improve in the future. As a result, foreign capital gradually withdrew.

Originally, early investments were in dollars, and after the dollar withdrew, RMB couldn't take over this market. RMB funds have their characteristics, they have their features. They have their risk tolerance for experimental cycles. This is not about who is good or bad, it's just that the current RMB funds in the market, which are mainly led by local governments for investment attraction purposes, don't have much demand for financial returns. So although

they don't have high financial return requirements, they have very high requirements for capital preservation and not losing money.

So their risk preference is much lower. For biological or AI projects that start with a 5-year timeline, it's very difficult to use 5-year funds to invest. So I think it was the situation in Shanghai at that time that made people lose perhaps the last bit of confidence. So there was a large-scale withdrawal, resulting in the current state where the domestic primary investment market almost doesn't exist anymore.

Q: Why did you choose the UK?

A: Because I studied in Edinburgh before. We looked at many countries. We looked at the US, Australia, Singapore, continental Europe, we looked at the Netherlands, France, Germany. For the US, my partner and I both studied in Europe. We don't have that many resources there. Although the environment in the US is good, in the biological industry, because verification is a very long process, unlike the internet industry where verification cycles are very short, people's trust is often based on whose student you were, or if we have the same advisor, or if we're from neighboring groups, a trust based on this master-apprentice system. Only with this kind of atmosphere can things work well.

If we're not people from this circle, frankly, many of our titles don't work in the US. So if we went there, we'd have to mix in the circle again, integrate into the circle to enjoy the conveniences there. Of course, there are many problems with recruiting people in the US. So we gave up on the US.

Secondly, in Europe, the Netherlands is actually quite good, but there's still a problem with recruiting people in the Netherlands. Because of their housing issues, which leads to the current situation where the Netherlands is vigorously implementing policies to retain people, but everyone is leaving.

Q: What specifically do you mean by housing issues?

A: It seems that renting in the Netherlands is extremely difficult, and there's a huge shortage of rental housing, so it leads to people not being able to... In London, if you're willing to pay, there's still a way. In the Netherlands, it seems to be this reason that makes it not good to rent.

The Netherlands is generally quite good, but we're also a bit unfamiliar with the place, so it doesn't have that much appeal.

Then France, the administrative procedures are too chaotic. To open a company, you need to have a bank account, but to open a bank account, you need to have local identity. By identity, I mean something like an entrepreneurship visa, or student status similar to the UK's PSW. But sometimes the prerequisite for obtaining a visa is that you need to have a company. So France falls into this strange deadlock. It takes a very long time to go back and forth.

Then we also considered Germany. The problem with Germany is that everything is very scattered. It's hard to say where to go. Munich is an option, but Munich is very expensive. Then places like Leipzig or Frankfurt, every place in Germany has similar levels of industry

or biomedical related things, including Leverkusen. As outsiders, it's hard for us to choose, we don't know where to go.

As for Singapore, you can't do R&D in Singapore. One reason is that the place is too small, frankly, no one is willing to come, and local universities are not quite enough.

The biggest problem with Singapore is still the material issue. All the instruments and consumables used in biology, for example, if you want plastic products, you have to ship by sea or air. If you ship by sea, you wait for a long time, if you air freight, it's dozens of times the price. I can't possibly use pipette tips sparingly, and things like test tubes, you can't get these goods, this is quite troublesome, this is also a constraint.

Then Australia, the market is too small, far from everyone, and there's also the talent supply problem. So in the end, the UK was a relatively balanced option. It's not very good, but not very bad either.

Q: You just mentioned that some market choices would make you feel unfamiliar. Do you have any specific cases or examples to illustrate what gives you this feeling?

A: For example, when you want to register a company, or I think the biggest point of unfamiliarity is when you want to recruit people, you don't know where to recruit. Or if you want to, for example, if we want to open a company in Germany, where does everyone order lab consumables from? Which company has discounts? Or which one is good to use? You're completely not in this community, you don't know how to do it.

Then including sometimes because the biological industry involves some things, such as the disposal of hazardous waste, these also need to be figured out from scratch. And I think there's another important point, after work you still need to live. If you're not a person in that language environment, after work you can only go back and play with Chinese people. It's not that the Chinese community is not good, it's just that your choices will be much fewer. So these are all, you can't always be in the lab or in the company when you're starting a business, right? You also can't always use business English every day, so these are also things to consider.

Q: You just mentioned about the Chinese community. Besides the Chinese community, for example, your choice to be in London or the UK, are there any other communities that can give you some other more connections?

A: We used to participate in competitions, and there's a community within this competition itself. As long as there are some industry-related gatherings, everyone will mention this competition, and maybe talk about participating in the competition that year. Some people might be 2005 participants, some might be 2024 or 2023 participants. Everyone has something to talk about. I think it's important for people to have a sense of mutual recognition before they're willing to start talking. Or at least everyone knows what the other person is talking about, which is very important. I think the community is quite good. Other than that, including now our company is in the Imperial incubator, there are many other companies around, so these are also things we can learn from each other, including things like grant applications, or like which courier to use, we can all help each other.

Q: These things you just mentioned about grant applications, finding couriers, or even recruiting people, do you have any more specific examples?

A: For example, we had something to send to the EU, but we weren't clear because according to the rules, we must comply with a treaty called REACH. Under this, there are many standards for compounds, and we need to produce various identification reports. Luckily, there was a company that had sold reagents to the EU before, so they roughly knew how to handle these things. Who should issue them, what are the compromise solutions? How did they handle it at that time? You can't find these things online, and if you find a specialized company online, they calculate by the ton for you. We just have a 50-gram thing, right? It's a waste. But we can't waste that much either, so these things are quite important.

Q: How did you get to know that company?

A: It was through the incubator. We have a WhatsApp group there, and usually people ask questions in the group. For example, if someone is short of something today or doesn't know how to do something, or sometimes there are some experiments where it's just a small step that you might only do once in your life, you call out in that group, and there might be someone who does this for a living, so these are very helpful.

Q: You mentioned recruitment earlier. Does the network here help with recruitment?

A: Recruitment is mainly from schools. We still can't afford to hire people who are job-hopping. The competition and synthetic biology community are quite tied together. Some people there know us, or we've known them for a long time. At least you know where people are, and then there are some subsequent things.

Q: For example, after knowing each other, how do you maintain that interpersonal trust?

A: After knowing, you'll definitely know what their lab is doing, their experience. When you really want to recruit, you can also ask around. When you're in a circle, it's easy to inquire. You can find out what work this person does in that lab, whether they work carefully, whether they've caused any trouble. Other questions can generally be found ways to discover. This is also an important part. So this is based on what I mentioned earlier, mainly because of the characteristics of the industry, it's more of an apprenticeship inheritance.

Q: Are there any other influences or help in terms of acquiring customers?

A: Acquiring customers is still about people we knew before. Whether on Twitter or LinkedIn, we follow each other. If there's something suitable, I think LinkedIn is a good platform where we can help each other.

Then in daily life, after work, we chat about work, about what you're doing, what we're doing. We heard about this customer, you can go talk to them. We heard about that, you can go talk. It's roughly like this, we'll mention it to each other, or get some inspiration. So I think the core is still having a place where everyone can communicate. It's important not to be fighting alone.

Q: Are there any specific examples?

A: I can't think of which customers were recommended. Of course, sometimes finding customers, you can try, but it's generally not successful. For example, people's needs, maybe at that time it was A, when I was doing BD they raised a need, but I didn't understand, so I told you it's your field, you can go talk, and after you talked, it turned out not to be the case. This situation often happens, but the connection is established this way. Next time something happens, you know, others might have needs and find you.

Q: How do you acquire customers if not through recommendations?

A: We actually advertise, maybe more on Twitter, because students of biology are quite active on Twitter now. Many startups publish various news there, these are more reliable than things like PR, wise, better than Crunchbase. I think Twitter is a very useful thing in the biological industry, LinkedIn is very useful, while things like Crunchbase, which are used more in the internet industry, are used a bit less by us.

Q: What you're doing now might not be exactly the same as what you were doing at the beginning. In the process of generating this idea and gradually evolving into what it is now, have the friends around you or the people you communicate with given any help or influence?

A: It's hard for me to think of any specific influence. People who do services will tell you how difficult it is to do services. Sometimes you might think others are incompetent, but after trying yourself, you find this thing is really difficult to do. Sometimes you have to listen to advice, you really need to speak up, I think anyway this thing is difficult to do. So I think it's like this.

Q: Have you felt that the institutional trust here has brought any obstacles or conveniences to your entrepreneurship? Institutions include banks, investment institutions, or schools themselves.

A: Mainly in administrative aspects. The biggest part of the administrative aspect is, for example, the industrial and commercial bureau. In China, the industrial and commercial bureau is very troublesome, but it's okay here. For example, if you want to make changes, you can do it very easily online, whether it's registration or changes, or submitting annual reports.

In China, to do anything, they always ask you for materials, agency, and the communication is unclear. The industrial and commercial bureau is often a mystery, you don't know where to submit materials, and usually the forms are very long, I don't know why. Here, you just click online and it's done. It's very simple, you don't need to fill in a lot of information from scratch. In China, you always have to fill in the business license address, but here, for example, with the company house, you have an account, you just need to fill in your updates, so it makes everything look very clear. This aspect is quite good.

But for example, banks here are generally more conservative. They're not very willing to open accounts for tech companies. Actually, I see many tech companies, even after reaching certain funding rounds, are still using internet banks like Wise, Tide. Including the everyday banks people use like Monzo, Starling, these are not particularly good banks, but even these don't open accounts for high-tech companies. They think the risk is relatively high, and they're afraid of bankruptcies. But honestly, it's not much loss for them, it's not like they're

investing money. And now these companies can't get loans anyway. And if you want to open a high street bank in the UK, like Barclays, it's almost impossible. But to say it's troublesome, for a startup company, internet banks are working fine until now, and many people use them. People are just a little worried about non-high street bank accounts.

In China, opening an account is normal, they just need materials. Registration in China is fine, but changes are particularly troublesome. And there's also the issue of tax jurisdiction. Here, they don't argue much about whether taxes should be paid to London or elsewhere, as corporate tax is collected uniformly.

In China, they collect separately, so for example, when we moved from Shenzhen to Nanjing, it was very troublesome. The industrial and commercial bureau approved, but the tax bureau didn't. So now our domestic entity's tax is still in Shenzhen, while the industrial and commercial registration is in Nanjing. This wouldn't be possible here, things are clearer here in this aspect.

Of course, this also has something to do with the tax distribution system. The changes in China are very opaque. The industrial and commercial bureau approves, but then the tax bureau doesn't, at this time it becomes very difficult.

Q: Don't you have any solutions for these? Just leave it stuck like this?

A: Just leave it stuck. We're now planning to move the Nanjing entity back to Shenzhen. What else can I do? Nanjing side can't do anything either. The registration is here, but social security isn't even paid here, it's very strange.

Q: What about the impact of investment institutions?

A: Investment institutions should be said to be much more conservative. Capital in the UK and Europe is relatively conservative, so there's nothing much to say about this. I think the domestic was very aggressive before, now it's very conservative, there's no money left, so I can't expect much.

Q: Besides the trust between these institutions, what about cultural differences or language barriers? Do you feel any impact?

A: I don't think there's much consideration of differences here. I actually think there were a lot of cultural differences within China. Some places have high government efficiency, some places have good market solutions, for example, Nanshan District and Guangming District in Shenzhen have very big differences. This kind of cultural difference might be even bigger than the difference between China and foreign countries, or between Nanshan and the UK.

People in Nanshan know how to handle things according to regulations, their faces might be a bit sterner, but things get done efficiently. Guangming is very chaotic, you might run an errand and inexplicably get a stamp, and what looks like a big problem turns out not to be a problem, so it's very messy.

Q: Is this related to the length of time you initially stayed here?

A: I haven't stayed in the UK for long. Before coming to the UK to open a company, I only stayed in the UK for 7 months, so I don't think there's anything. I haven't stayed here for long, indeed haven't stayed here for long, but I didn't feel anything at that time either. I think the cultural thing is quite smooth.

Q: What about language?

A: There's no language barrier either. Anyway, half of the people in our incubator are not English. So language-wise. As long as everyone speaks English, it's OK. I don't have any particular feelings about it.

Q: So for example, do you think that if your language or cultural background is different, it will have any impact on this interpersonal trust?

A: It's fine. I think as long as I can trace back to this person, I can judge whether to trust or not.

If I can't find out about this person's various states through one or two layers of connections, I think whether you're Chinese or foreign, it would be difficult for me to believe in this matter.

Q: So actually, the role of network in interpersonal trust is more important to you than being from the same ethnic group?

A: Yes.

Q: Regarding networking or trust building, do you have any channels or platforms? For example, online forums, or Twitter?

A: Yes, mainly Twitter and LinkedIn. OK, and maybe some WhatsApp groups in the incubator. This is actually the main thing, but I think there's really a lot of information on LinkedIn.

Q: Do you actively post new things and various things to establish connections between others and you?

A: Yes, we often do these things. What do you usually post? Mainly personal views, for example, we'll discuss some new paper cases, discuss some new work together, discuss when competitors collapse, these are personal opinion outputs, and there are some company status updates. Attended this meeting, attended that meeting, so others know you came to the meeting, those might have some.

Q: Is your posting frequency high?

A: Comments are more frequent, update when attending meetings, actually the frequency of attending meetings is quite low.

Q: But you actively comment under others' posts?

A: Yes, when we see it, we chat. This is similar to venting on WeChat Moments.

Q: Do you have any examples? Like after you established connections online, for example, after commenting and venting under someone's post, did you have any further discussions?

A: This might be sometimes, for example, online friends we met come offline. Otherwise, for example, meeting offline at conferences, there are some of these, or for example, I knew someone before, then after they commented, I followed them, then because of meetings, there might be some further connections, but these might not have. For example, I and Jason Kelly, the boss of our biggest competitor, actually follow each other, but I don't have anything to say to him, I don't dare to ask, right? Your stock price is hitting new lows, what can I say? Why? I'm not a shareholder, so, but it can let you have this layer of, someday, for example, if I can't continue, I want to change jobs, I can go up and ask.

Q: OK, now let's review our ethnography over the past month. What have you been doing? Anything about cross-border matters?

A: Oh, speaking of which, there is something about cultural differences. For example, Europeans don't work in July and August. We knew this before, but recently because some of our things just reached a node, we were thinking, eh, should we do some promotion? Should we send some emails to acquire customers? At this time, we suddenly realized that everyone is not working. Before, because we weren't working at this time ourselves, we didn't have such a strong feeling. Now that we're working and others are not, so this is one, I think the biggest difference is that people here really don't do much work after work. When it's time for vacation, they take it. This is very different from China.

This actually leads to many habits, for example, sometimes I think of a few things at night, I send them to others, if they're in China, they might reply at night, but here they might reply during the day. This, this is actually something many people will mention, what impact does everyone have? It's just that the reply time is different, so the overall efficiency is lower, right? That's it. For example, if you don't work for two months, for example, I now have another conference to attend in Germany, inviting me as a speaker, and they sent me an email a few days ago, in July, this meeting was originally in August, wanting to tell me because too many guests are going on vacation at this time, so they're postponing it. What can we do? Everyone is on vacation.

This is because customers are relatively slacking off. And when customers are slacking off, we ourselves relatively have fewer things to do.

The main thing is, let me think. Actually, the biggest work is in liquidating domestic things. For example, how to change the entity? How to migrate. Then some accounts need to be settled, need to be calculated clearly, and some lab consumables need to be organized, need to be moved to a new place, and also including, doing some planning, for example, some labs here, we want to sort out the supply chain here properly, so we made some plans, and maybe in the remaining time of August we'll test these, that is, for example, how effective are these alternatives? Then maybe we can save some costs here in the future. We also need to do some promotion for iGEM teams, but these don't have such a big impact on business. The main thing is that we did quite a lot on the administrative side.

Q: So because people in Europe are not working much, you've turned more energy to internal team matters?

A: Yes.

Q: So in this month or overall, in this past year, what's the rough distribution of time you've spent on domestic and foreign matters?

A: I'm abroad myself, I almost don't participate in domestic affairs, and for the company, maybe 30% of our team's energy is on some domestic things.

Q: Is your personnel allocation also in this proportion?

A: We're all online, so there's one in China, there are two in China, yes, and two abroad, it's about this size.

Q: Overall, has there been any change in this time allocation from 2020 to now?

A: What do you mean?

Q: For example, you now say 30% of your energy is in China.

A: There was no foreign business before.

Q: So in which year did a change like this occur?

A: I came out in 2022, then in 2023, 2023 we decided to do business overseas, seriously decided to do business overseas, so maybe from the summer of 2023, we tried to focus on overseas as much as possible. The summer of 2023 was a big turning point.

Q: So what happened at that turning point?

A: We figured out things abroad, for example, we found a lab today, and the domestic environment weakened again.

Q: Okay, let's take a look. So in the past month of ethnography, your main business was concentrated within the team, so more things that happened were some internal team, for example, interpersonal relationships and changes. Was there any change in external networking or relationships?

A: Not much of this.

In the past, because everyone doesn't reply to emails much, we can't be bothered to send them either. But the biological industry itself is very slow in replying to emails. Good, everyone is very busy. Everyone is very busy, but also don't know what they're busy with. This industry is like this most of the time.

Q: Why do you say very busy, but don't reply to emails? Because they're busy doing experiments, so they don't reply to emails?

A: It's not because there are many miscellaneous and fragmented things, so they often get mixed up.

Q: OK, didn't you do some work at the beginning of this month? Like sending express deliveries.

A: Yes, we sent to Pfizer, we sent out a package, but there are two orders. There's an order from India, this should be a problem from July, then an Indian customer, anyway the Indian customer didn't check the tracking number themselves, and because they didn't pay tax, anyway the goods were thrown away by customs. Who should take full responsibility for this? We later decided that the full responsibility should go to the Indian company. We sent them the tracking number, and they couldn't contact themselves, so I have no way, right? You paid, why should I babysit you, and he, you don't care about the things you bought yourself, and, do I have to think for you? It's a bit unreasonable.

Then send that order, I think it's still a problem, that is, sending things out from China is very chaotic. If you want to be fully compliant, the cost is very high. Sending from here is very smooth. In China, there are these freight forwarders, sometimes they go this line, sometimes they go that line, it's quite chaotic, so the Pfizer order hasn't been sent out until now.

Pfizer spent two weeks telling us to change to DHL. Why didn't you use DHL from the beginning? So doing overseas business from China, we still don't understand these things, how everyone is still sending reagents overseas.

Q: So you sent it from China?

A: Yes, and it's very chaotic. We have backups of all our products in China, because I'm not outside. So we send from our warehouse in China. Anyway, mainly because there are liquids, different companies say different things, everyone's statements are very inconsistent. In this aspect, foreign countries will be a bit better.

Q: So for example, like last time when you sent to the EU, you asked for some advice from other companies in the incubator. Is there anything like this in China?

A: No, everyone is, I think it's still, for example, everyone goes overseas, everyone's model is different.

Many people provide services overseas. Or, products go overseas. Products going overseas are generally large-scale shipments of materials. The volume is relatively large. Our volume is relatively small. So it's not that we declare customs for thousands of square meters at once, we're talking about hundreds of grams at a time.

Q: So actually, you belong to product export, but the volume is not that large, so there will be many strange problems.

A: People say, for example, for one thing, you might have one price for one kilogram or 100 pieces, and the same price for one piece. Service export would be a bit better. There's nothing much, that's certainly less, but service export itself is not easy to do.