


Towards a Conceptual Framework and Research Agenda for Immigrant Entrepreneurs, Entrepreneurship, and Enterprises

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ABSTRACT

This study aims to contribute to the rapidly growing literature on immigrant entrepreneurship, entrepreneurs, enterprises (IEEE) by conceptually exploring the key impacting factors and their components from an entrepreneurial ecosystem perspective. The concept of the immigrant entrepreneurial ecosystem is developed as a research approach for studying the relationship between immigrant firms and their business environments. By examining the relationship between IEEE and the dual (host- and home-country) entrepreneurial ecosystem (immigrant entrepreneurial ecosystem), it is proposed that the immigrant entrepreneurial ecosystem framework is an important tool for IEEE research. This study contends that immigrant entrepreneurs' motivation, execution, and evolution are determined by their immigrant entrepreneurial ecosystem embeddedness. By identifying factors and their components that influence IEEE, this research proposed a conceptual framework and research agenda for IEEE. The results will contribute to IEEE literature.

KEYWORDS

Dual Entrepreneurial Ecosystems, Host- and Home-Country Context, Immigrant Entrepreneurship, Necessity and Opportunity Entrepreneurship, Survival and Growth Entrepreneurship Outcomes

INTRODUCTION

Policymakers, researchers, and societies, in general, have acknowledged the importance of migration and immigrant entrepreneurs, entrepreneurship, and enterprises (IEEE) (Duan et al., 2022), a point highlighted in the United Nations International Migration Report for 2019 (UN, 2020). Accordingly, some governments have enacted policies to attract foreign-born talents and entrepreneurs into their countries (Hart & Acs, 2011), not only to solve their labor shortage problems but also to sustain economic growth. In some countries, migration and IEEE are seen as two of the critical drivers for

DOI: 10.4018/JBE.322774

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sustainable prosperity (UN, 2020). The International Organization for Migration (IOM) noted that with appropriate policies, migration can contribute to inclusive and sustainable economic growth in both home and host countries (IOM, 2020). Some governments have set up IEEE promotion programs as a strategy for socioeconomic advancement (Sonfield, 2014).

IEEE is a multidisciplinary field, with investigations carried out from various perspectives, including those of sociology, economics, immigration, business, and management (Portes & Martinez, 2020); Duan & Sandhu, 2021b). Starting in the 1960s (Zhou, 2004), IEEE research has expanded exponentially, addressing questions such as the following:

- What drives immigrants to establish their own businesses?
- How is the business environment impacting IEEE?
- What are the differences in characteristics between entrepreneurs from various ethnic backgrounds? (Kerr & Kerr, 2019).

The number of research articles published in academic journals and reports has increased exponentially in the last 20 years. Based on my Google Scholar search of “Immigrant Entrepreneurship,” the number of articles increased 5.65 times between the two two-year periods of 2000–2001 and 2016–2017; notably, 100 articles were published in the year 2000, and 600 in 2017. In 2018 and 2019, the number of articles increased to 1,220 in the Google Scholar database. For the 20 months from January 2021, the number of articles in Google Scholar reached a record high of 1,240. This finding confirmed that the interest of scholars and policymakers in IEEE is continuously growing.

So far, IEEE research has been centered on two streams: the individual (e.g., personal traits, human capital, etc.) and the business environment (e.g., local socioeconomic, political-institutional, and cultural circumstances). From the research strategy perspective, as Collins and Low (2010) pointed out that the literature on entrepreneurship often overlooks the study of immigrant or ethnic entrepreneurs, entrepreneurship, and enterprises Kerr and Kerr (2019) noted that, although early work on IEEE addressed many important issues, insufficient attention has been paid to the big picture and in-depth studies are few. From a research methodology standpoint, clearly the individual stream of analysis is commonplace. Thus, Duan et al. (2022) argued that future investigations should take the entrepreneurial ecosystem into consideration, given the importance of the institutional, cultural, political, and social context to the promotion of IEEE.

In addition to the host society’s business environment and immigrant characteristics, fragmented research indicates that the immigrant’s home country affects IEEE in certain aspects. As immigrant economic activities are changing from predominantly stand-alone to networked, new perspectives are needed to study the relationships between host- and home-country influencing factors. These include sources of funding for start-ups (Kushnirovich & Heilbrunn, 2008), access to home-country markets and other resources (Brzozowski, 2017), the change of the home-country economic position (Van Tubergen, 2005), education facilities, social capital, market knowledge and opportunities, and social norms (Duan, et al., 2021d). However, there is a lack of holistic investigation into how immigrant entrepreneurs draw resources from both host and home countries and take advantage of the co-effects to establish and grow their ventures. Recently, researchers have asked for a lens through which to examine the relative influences of the home and host country on IEEE (Duan et al., 2021b).

This study aims to fill some gaps in IEEE literature and research the phenomenon from an entrepreneurial ecosystem perspective. Scholars have noted a lack of IEEE studies regarding the ecosystem setting and recommended that the ecosystem approach should be the next trend (Duan et al., 2021b). It is well known that there are several ways to discuss ecosystems in entrepreneurship-related terms, such as innovation ecosystem, digital ecosystem, business ecosystem, social ecosystem, economic and political ecosystem, industrial ecosystem, ecosystem model of technology evolution, and value ecology. This paper, however, focuses on the entrepreneurial ecosystem in the setting of IEEE that is defined as an immigrant entrepreneurial ecosystem. The research emphasizes the settings of

the immigrant entrepreneurial ecosystem and its relationship to immigrant entrepreneurship process (motivation, execution, and evolution).

The paper is organized into six sections: The second section presents the literature review, including definitions of all related terms, and is followed by the research method section. The conceptual framework and research agenda are proposed in the fourth section. In the fifth section, the framework and agenda are summarized and contextualized, and theoretical contributions and practical implications are highlighted. The last section includes a discussion and conclusion.

LITERATURE REVIEW AND DEFINITIONS

This section delivers, a literature review and, importantly, locates definitions for the concepts of immigrant/immigration entrepreneurship, enterprises, and entrepreneurs; transnationalism and immigrants; and immigrant entrepreneurial ecosystem. Because linking IEEE and ecosystem is a new research subject, these concepts remain loosely defined and measured in the extant literature (Stam & van de Ven, 2021). Scholars have defined them in various configurations with different characteristics, so it is important to explore and refine them to support specific empirical investigations in the field (Dabić et al., 2020; Stam & van de Ven, 2021).

IMMIGRANT AND IMMIGRATION

Migration, or the movement of people, has been referred to as the third wave of globalization after the movement of goods and capital. It is becoming increasingly complex, encompassing, and impactful as a result. Although migration is not by any means new—modern humans were on the move tens of thousands of years ago—the number of people migrating across borders has reached an all-time high, accounting for more than 258 million people or 3.4% of the population, a figure that has doubled since 2000 and tripled since the 1970s (Douglas et al., 2019; Duan, 2022).

Douglas et al. (2019) queried why the meaning of the term “migrant” continues to differ so widely among not only the general public but also, practitioners, policymakers, and experts. Extant literature provided various definitions for asylum seeker, refugee, and different international workers (Table 1). It shows that migrants are a heterogeneous group of individuals. As Douglas et al. (2019) summarized that it is possible to define migrants from a legal, administrative, research, and statistical perspective. Depending on their motives, such as economic motivations, family reunions, or safety concerns, they can be distinguished. There are various ways to define migration events, including the place of origin, citizenship, residence, and duration of stay. Migration is referred to differently by different states as regular, controlled, or free migration.

According to IOM (2021), migrants are people who move away from their place of usual residence, whether within a country or across an international border. In IOM’s view, this includes both economic migrants seeking to improve their quality of life and asylum seekers, refugees or internally displaced persons, who have been forcibly displaced or require protection owing to human rights violations, persecution, violence, conflict or natural disasters. In other words, whether they are moving voluntary or involuntarily, what their reasons for moving are or how long they remain, all types of people are included in this category. In addition, legal status does not determine international movement: One person may have a legal right to enter a country (regular migrant); another may have breached conditions of entry or overstayed the legally permitted time (irregular migrant). Table 1 sets out the details of the range of categories that fall under the umbrella term “migrant.”

The development and use of these migrant categories and their definitions are shaped by many factors—from the legal and political to the methodological, as well by the temporal and spatial context. For example, a lack of clarity around some of the aforementioned migrant types, such as short-term (e.g., seasonal workers), asylum seeker (e.g., applicants already in the country), and irregular migrant (e.g., with expired visa) makes measuring international migration difficult. Globalization and increased

Table 1.
Migration terminology

Term	Definition and Description
Asylum seeker	Individuals seeking refugee status under relevant international and national agreements to avoid persecution or serious harm in a country other than their own.
Contract migrant workers	Individuals employed in a country other than their own under contractual arrangements that limit the length of their employment and the type of job they hold.
Displaced person	An individual who flees his or her state or community due to fear or danger for reasons other than those that would qualify them as refugees.
Economic migrant	This term refers to people who leave their habitual places of residence to settle outside their countries of origin to improve their quality of life. People seeking to enter a country without legal permission and/or utilizing asylum procedures without a bona fide reason are often referred to as asylum seekers. This term is often used loosely for those attempting to distinguish themselves from refugees fleeing persecution. In addition, it may equally apply to people who leave their country of origin in search of employment.
Foreign migrant workers	Individuals admitted by a receiving state for the purpose of exercising an economic activity remunerated within the receiving country. There are usually restrictions on the length of their stay and the type of employment they may hold.
Foreign students	Those admitted by a country other than their own, usually under special permits or visas, for the purpose of studying at an accredited institution in the country of residence.
Internally displaced persons (IDPs)	Individuals or groups of individuals who have been forced or required to flee or to leave their homes or places of habitual residence as a result of or for the purpose of avoiding armed conflict, situations of generalized violence, violations of human rights, and natural or man-made disasters and who have not crossed international borders.
Irregular migrant	This term refers to people who have no legal status in a transit or host country because of unauthorized entry, breach of entry conditions, or expiration of a visa. This definition includes people who were lawfully admitted to a transit or host country but stayed longer than authorized or later took up unauthorized employment (also called clandestine or undocumented migrants). As opposed to illegal, “irregular” carries a more humane connotation and carries no criminal connotation.
Long-term migrants	Individuals who move to a country other than their usual residence for at least one year (12 months) so that the country of destination becomes their new country of residence. The individual will be a long-term emigrant from the country of departure, and a long-term immigrant from the country of arrival.
Migrants	The United Nations recommends categorizing migrants into four categories: long-term immigrants (or emigrants), short-term immigrants (or emigrants), residents returning after (or leaving for) a period of working abroad, and nomads.
Migrants for settlement	A migrant for settlement is a foreigner who has been granted permission to reside in a country for a long or unlimited period of time and who is subject to virtually no restrictions regarding the exercise of economic activities.
Migrant workers	See Foreign migrant workers
Principal migrant	Immigration authorities consider the migrant within a family group to be the head of the family and admitting him or her depends on the admission of the other members.
Refugee	People who are outside the country of their nationality because of a well-founded fear of persecution based on their race, religion, nationality, membership of a particular social group, or political views are unable or unwilling to obtain protection from that country owing to such fears.
Returning migrants	Settlement migrants are foreigners who are permitted to remain for a lengthy or unlimited period of time and are subject to virtually no restrictions regarding their right to engage in economic activities. Individuals returning to their country of citizenship following international migration (whether short-term or long-term) in another country and intending to stay in their own country for at least one year upon returning.
Seasonal migrant workers	Individuals who are employed by a country other than their own for a limited period of time owing to seasonal conditions. A subcategory of foreign migrant workers.
Short-term migrant	People who move to a country that is different from their usual residences for a period of not more than three months, but not more than one year (12 months), except when the movement is for recreation, holidays, visits to friends and relatives, business, medical treatment, or religious pilgrimage.

Source: Adapted from Douglas et al. (2019), IOM (2021), and OECD (2010)

people movement have enabled self-interested politicians to overstate “illegal” migration and whip up public fears of being “swamped,” thus creating an environment in which immigrants may struggle to settle, improve their prospects, and contribute to their new country.

It is vital therefore that “migrant” is defined clearly in IIEEE research. Understanding the diversity of immigrants and immigrant communities in terms of their country of origin and background (cultural, socioeconomic, educational, occupational, linguistic), reasons for immigrating to the country, and overall patterns and numbers will help with integration as well as the formulation of evidence-based programs and policies to support entrepreneurship. These range from ensuring the safety, health and well-being of immigrants to informing them of existing policies related to, for example, the labor market, social protection, law enforcement, taxation, and finance as well as involving them in the policymaking process.

IMMIGRANT ENTREPRENEURSHIP RESEARCH

Contemporary immigrants are known to have strong intentions to pursue entrepreneurship with a high success rate (Kerr & Kerr, 2019). Several theories have been developed over the last two decades to explain this phenomenon. These include brain circulation (Saxenian, 2005), knowledge spillover (OECD, 2010), cultural diversity (Sahin et al., 2009), cross-border activities (Duan et al., 2021c), transnationalism (Drori et al., 2009), and “social network” or “transnational IIEEE” (Brzozowski et al., 2017; Sundararajan & Sundararajan, 2015). For its theoretical and empirical contributions, Saxenian’s “New Argonauts” received much attention from scholars and policy institutions. The symptomatic brain circulation perspective expanded the boundaries of IIEEE research beyond the host country alone to include both the home country and the host country (Saxenian, 2010). Similarly, Portes et al. (2002) found that between 37.5% and 78.5% of immigrant business owners have business relationships with their home countries.

As a result, some scholars have recommended studying the mechanisms through which both home and host countries influence entrepreneurial activities (Brzozowski, 2019). Other scholars have suggested examining the home-country’s influence on IIEEE from a social, cultural, and market perspective (Collins & Low, 2010). Several layers of socioeconomic and politico-institutional circumstances that exist in the home country influence the characteristics of immigrant enterprises (You & Zhou, 2019). These researchers found that individuals’ characteristics and home-country interpersonal networks affected the process of adapting to the host-country economy and forming new businesses.

Although these contributions are important, they are fragmented; there are still bits of information missing from current research on IIEEE environments. For example, the transnational entrepreneur of Drori et al. (2009) fails to take into account traditional immigrant entrepreneurs who start businesses in the host country to serve the local immigrant population (Drori, et al., 2009). A holistic and systematic investigation of the relationship between IIEEE and the environment is lacking in other studies (Kushnirovich & Heilbrunn, 2008; Sundararajan & Sundararajan, 2015; Vinogradov & Elam, 2010).

In the 1970s, scholars and policymakers began studying immigrant entrepreneurship as an academic field (Zhou, 2004). Economics, management, and sociological perspectives have been applied to IIEEE (Duan, et al., 2021). Although these contributions are important, they are fragmented; there are still bits of information missing from immigrant, ethnic, foreign, and minority entrepreneurship (Table 2). Scholars often use these terms interchangeably or with a self-explanatory definition.

Furthermore, the IOM defines migrants as people who are moving or have moved across an international border from their habitual place of residence, regardless of their legal status, whether the movement is voluntary or involuntary, what the causes for the movement are, or what the length of the stay is (IOM, 2020). Combining the IOM definition of migrants and the definitions of types of entrepreneurs in Table 1, I define immigrant entrepreneurs as individuals who moved to a new country, regardless of their reasons, and engage in starting or growing up new business ventures formally and informally.

In summary, although conventional theories are still guiding the discipline, more and more new IIEEE approaches are considering the influences of the entrepreneurial ecosystem pillars. Despite

Table 2.
Different definitions for immigrant entrepreneurship

Types of Immigrant Entrepreneurship and Entrepreneurs	Definition	Reference
Immigrant entrepreneurship and entrepreneurs	“Need is the motivation for this kind of entrepreneur. Entrepreneurship operates in a network form because migrants operate within two countries; native and resident country.”	(Butler & Greene, 1997, p. 268)
	Defined as “individuals who, as recent arrivals in the country, start a business as a means of economic survival.”	(Chaganti & Greene, 2002, p. 127)
Transnational entrepreneurship and entrepreneurs	Defined as a “set of connections and regular patterns of interaction among people sharing common national background or migratory experiences”	(Waldinger, Aldrich & Ward, 1985, p. 587)
	“TEs as social actors who enact networks, ideas, information, and practices for the purpose of seeking business opportunities or maintaining businesses within dual social fields, which in turn force them to engage in varied strategies of action to promote their entrepreneurial activities.”	(Drori et al., 2009, p. 1006)
Ethnic entrepreneurship and entrepreneurs	Defined as a “entrepreneurs that migrate from one country to another, concurrently maintaining business-related linkages with their former country of origin and currently adopted countries and communities.”	(Drori, et al., 2009, p. 1006)
International entrepreneurship and entrepreneurs	Defined as “the discovery, enactment, evaluation and exploitation of opportunities – across nation borders – to create future goods and services.”	(Oviatt & McDougall, 2005, p. 540)
	“Business organisations that, from inception, seek to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries.”	(Oviatt & McDougall, 1994, p. 49)
	A startup in which a substantial portion of its revenues is derived from the sale of products abroad from its inception.	(Knight & Cavusgil, 2004)
Ethnic (minority) entrepreneurship and entrepreneurs	Defined as “entrepreneurs that migrate from one country to another, concurrently maintaining business-related linkages with their former country of origin and currently adopted countries and communities.”	(Drori, et al., 2009, p. 1006)
Diaspore (returnee) entrepreneurship and entrepreneurs	“Returnee entrepreneurship refers to the process whereby migrants who, after living abroad for a period of time (e.g., for education or occupation), return back and start ventures in their home nation.”	(Wright et al., 2008, p. 131)
Foreign entrepreneurship and entrepreneurs	Defined as “an individual, who launches a venture in a new host country, to which the foreign entrepreneur has migrated.”	(Walch, 2015, p. 45)

Source: My elaboration from various sources listed in this table.

existing IEEE studies having revealed a list of socioeconomic and politico-institutional factors that are promoting/hindering IEEE (Duan et al., 2021a), the entrepreneurial environment and its relationship with immigrant entrepreneurs’ motivation, strategic activities, and firm performance has not been comprehensively studied.

TRANSNATIONALISM AND IMMIGRANTS

Portes and Yiu (2013) stated that the majority of immigrant entrepreneurs depend on transnational links for their business success. Therefore, it is critical to bring the term transnationalism into immigrant

entrepreneurship. The term began to emerge in international migration studies during the late 1980s and early 1990s. Researchers have long been aware that international migrants have close relationships with the relatives they leave behind, but only with the advent of transnational studies have these relationships become the focus of many researchers' attention. Scholars argue that migrants' ties across borders can affect the politics, economies, and societies of both countries, as well as migrants themselves. The existence of such connections and their practical and theoretical significance have been demonstrated in numerous empirical studies since then (Portes et al., 1999). When migration is viewed through the lens of conventional migration theory, aspects of migrants' lives remain hidden. The focus on border-crossing activities has helped illuminate these hidden aspects. There are a few existing definitions for transnationalism (Table 3) from scholars.

ENTREPRENEURS, ENTREPRENEURSHIP, AND ENTERPRISES

According to Schumpeter (1934), entrepreneurship involves exploiting opportunities for innovation. This entrepreneurship is often referred to as involving "high-growth start-ups," which are regarded as an important source of innovation, productivity, growth, and jobs (Mason & Brown, 2014; WEF, 2013). Drucker (1986) stated that an entrepreneur is one who identifies the needs of society and tries to meet them through an innovative idea. In contrast to this definition, "entrepreneurship" is referring to establishing a business entity for the purpose of generating a profit in the future. Entrepreneurs create enterprises as a result of their entrepreneurial process. Based on this causal relationship, my research emphasizes the definitions of entrepreneurship. An early definition of entrepreneurship focused on new products and innovative technology (Schumpeter, 1934), as shown in Table 4. Eventually, Drucker

Table 3.
Definitions of transnationalism

Author(s)	Definition	Description
Schiller et al. (1992a)	An emerging social process in which migrants establish social fields that cross geographical, cultural, and political boundaries.	People or institutions are linked across national borders through multiple ties or interactions.
Schiller et al. (1992b)	The process by which immigrants build social fields that connect their home country and their new home country. Furthermore, transmigrants maintain a wide range of relationships that span borders, including familial, economic, social, organizational, religious, and political relations. Transmigrants participate in social networks that connect them to multiple societies at the same time and take actions, make decisions, and feel concerns.	Transnationalism involves processes that immigrants use to build connections between their countries of origin and their countries of settlement. Transmigrants also maintain multiple relationships that span borders, including familial, economic, social, organizational, religious, and political relations.
Stiglitz, 2002	As a result of the enormous reduction in transportation and communication costs, the closer integration of countries and people has been achieved, as well as the dismantling of artificial barriers to the flow of goods, services, capital, knowledge, and (to a lesser degree) people across borders.	As a literary term, transnationalism reflects contemporary nation-state concerns while attempting to foster cultural connections.
UNESCO, 2014	People and institutions are linked across national boundaries through a variety of ties and interactions.	The term refers to accelerated globalization in the contemporary context, as well as transnational activities as those that take place frequently across national borders for significant periods of time, both at the level of individual immigrants and at the level of relatively powerful actors.

Source: My elaboration from various sources listed in this table.

(1986, 1993) defined entrepreneurship as the process of generating value for customers (Najim et al., 2013). According to Drucker (1986), entrepreneurship is not about introducing a new product, but rather, capturing the market opportunity to get closer to the customer. Researchers now emphasize the importance of identifying opportunities in the marketplace to introduce products and services that generate larger customer returns (Najim et al., 2013).

Feld's (2012) entrepreneurial ecosystem paradigm (Table 6) is aimed directly at key stakeholders, such as entrepreneurs and policymakers, and not so much at academic audiences (Stam, 2015). Practitioners will find it useful, but its causal depth and evidence base are limited (Stam, 2015). Several factors have been deemed important for the success of an entrepreneurial ecosystem in recent literature. The heart of an entrepreneurial ecosystem is the entrepreneur (being visible and connected), but a successful ecosystem also has nine other attributes (Feld, 2012, Stam, 2015). Feld (2012) emphasized the interaction between the players in an ecosystem (with a high-network density, many connecting events, and large companies collaborating with local start-ups), along with the role of entrepreneurs themselves (in leading the development of the ecosystem and as mentors or advisors). The government plays a key role in enabling all kinds of relevant resources (talent, services, and capital).

Table 4. Well-known definitions of entrepreneurship

Author(s)	Definition	Description
Drucker (1986)	Entrepreneurs are individuals or groups of individuals who have an innovative idea, and take the necessary steps to make that idea a reality, while bearing the associated risk.	Entrepreneurs establish enterprises through the process of entrepreneurship.
Cantillon (1755)	Entrepreneurship is the process of bringing money, work and businesses to the market to generate new businesses.	Entrepreneurship is the use of company formation for economic growth.
Smith (1776)	Entrepreneurship is a human activity that leads to changes in the work process.	Entrepreneurship is the transformation of work distribution among laborers that determines the wealth of nations.
Say (1803)	Entrepreneurship is synthesizing resources (land, capital, and labor) to better manage them to have higher productivity and greater returns.	The transfer of resources from one domain to another means some initiative gives the process the ability to achieve higher returns.
Knight (1921)	Entrepreneurship is a project that bears high risks associated with real uncertainty (cannot determine its chances of success).	Knight was the one who differentiated between risk and uncertainty.
Schumpeter (1934)	Entrepreneurship is a change process leading to the introduction of a new product, a new process, a new way, a new market price, or a new source of raw material for processing.	Emphasis on innovative personalities who lead customization; five forms of innovation are proposed as the engine of economic growth.
Kirzner (1985)	Entrepreneurship is awareness of the untapped opportunities in current market conditions.	Awareness or alertness refers to the ability to see what is not present in the current circumstances, but what can be created in the future.
Drucker (1986)	Entrepreneurship is the process of creating a new market and a new customer; in essence, it is the process of creating value for the customer.	Drucker does not see entrepreneurship as innovative, but simply reapplying concepts and methods to create value for the customer.
European Commission (2004)	Entrepreneurship is the process needed to generate creativity and/or innovation with sound management, within a new company or list.	This definition is closer to the broad selection of entrepreneurship definitions that takes into consideration the state of mind and expressive processes.

Source: Partially adapted from Najim et al. (2013)

Table 5.
Commonly used definitions for entrepreneurial ecosystem

Author(S)	Definition	Characteristics
Cohen (2006)	Through the support and facilitation of new sustainable ventures, a group of interconnected actors in a local geographic area is committed to sustainable development.	Networks play a critical role in supporting and facilitating entrepreneurship in a region; entrepreneurs also rely on informal networks for advice, mentoring, and moral support. Key actors include research universities, regional government agencies, professional and support services, and capital sources.
Mason & Brown (2013, p. 5)	These researchers define an entrepreneurial ecosystem as “a set of interconnected entrepreneurial actors [both potential and existing], entrepreneurial organizations [e.g., firms, venture capitalists, business angels, and banks], institutions [universities, public sector agencies, and financial bodies] and entrepreneurial processes [e.g., the business birth rate, numbers of high growth firms, levels of ‘blockbuster entrepreneurship’, number of serial entrepreneurs, degree of sell-out mentality within firms and levels of entrepreneurial ambition] which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment.”	Emerging in locations that have place-specific assets. Typically, there is at least one, and usually several, large established enterprises with significant management functions (e.g., head office or divisional/subsidiary office) as well as undertaking R&D and production activities. Most of the spill over effects of established large firms on their environment are positive. It is also the case—perversely—that in the event that they encounter difficulties, this can also have a positive impact on the entrepreneurial ecosystem by releasing talented workers who either start their own businesses or are recruited by smaller companies. The growth of an ecosystem is driven by the process of entrepreneurial recycling.
Brown & Mason (2017)	No unified definition. Typically, definitions convey the importance of localized and interdependent relationships between different entrepreneurial actors as key ingredients driving the performance of ecosystems.	Entrepreneurial actors serve as the heart of the ecosystem; entrepreneurial resource providers facilitate the transition of resources into growing firms; presence of platforms for collaboration; geographical proximity of collaboration; knowledge exchange, which serves as a basis for learning processes; entrepreneurs and infrastructure serve as a core actor of the ecosystem.
Spigel (2017)	An entrepreneurial ecosystem consists of the social, political, economic, and cultural components of a region that support the growth and development of innovative start-ups. In addition, nascent entrepreneurs and other actors are encouraged to take risks by starting, funding, or otherwise assisting high-risk ventures.	Spatial constraint of an ecosystem; an ecosystem incorporates relational governance without a clear power hierarchy or formalized enforcement methods; participants usually share technologies and exchange knowledge about challenges of developing a venture in particular.
Autio et al. (2014)	An argument is made based on the notion that entrepreneurial ecosystems play a crucial role in the process of entrepreneurship innovation. By influencing the direction and potential rewards of alternative technological development paths, as well as the types of organizational forms that will be accepted as legitimate, entrepreneurial ecosystems control the quality and direction of entrepreneurial innovation.	Evolving nature of the phenomenon; focus on creation of new ventures; spatial constraint of an ecosystem.
Acs et al. (2017)	In the entrepreneurial ecosystem approach, as in strategy and regional development literature, the interdependence between actors and factors is emphasized, but entrepreneurship (new value creation by agents) is viewed as the outcome. As a regional development literature, it focuses on aggregate value creation within a particular region.	Both entrepreneurs and firms may serve as the output of an ecosystem; less attention is paid to value capture. The central role is executed by publicly oriented (successful) entrepreneurs with a long-term commitment to the region; value is created on an individual basis.
Audretsch & Belitski (2016)	Identification and commercialization of entrepreneurial opportunities are influenced by institutional, organizational, and other systemic factors.	Geographic boundaries of an ecosystem, interdependency of actors, importance of system-level context, dualism of ecosystem (its contextual domain and individual decision-making driven by perceived assessment of the context).
Duan et al. (2022)	A dual entrepreneurial ecosystem for immigrant/transnational entrepreneurs combines various entrepreneurial resources of host and home countries to foster immigrant/transnational entrepreneurship, resulting in the emergence of new ventures and the enhancement of firm performance.	A dual entrepreneurial ecosystem includes all aspects and eco-factors of a nation-specific entrepreneurial ecosystem. Among the factors that influence entrepreneurs’ decision-making are human capital, cultural values, social norms, politics, governments, and institutions. The dual entrepreneurial ecosystem, therefore, has a systemic impact on the development of entrepreneurial strategies and the success of firms. Eco-factors are not equally weighted; rather, each eco-factor contributes different values to the process of transnational/immigrant entrepreneurship.

Source: My elaboration and partially adapted from Burda et al. (2020)

ENTREPRENEURIAL ECOSYSTEM

The concept of entrepreneurial ecosystems has been developed only in the last 20 years (Stam, 2015). As of yet, no widely accepted definition exists (Stam, 2015; Duan et al., 2022). Entrepreneurial refers to the process of exploring, evaluating, and exploiting opportunities to create new goods and services (Shane & Venkataraman, 2000). The entrepreneurial ecosystem concept was first introduced in a publication by Duvall Mel (1999), who used the concept to explain the environmental differences between Internet start-ups in Silicon Valley and similar ventures in other locations. She concluded that the success of Silicon Valley Internet firms is because they have appropriate resources from their entrepreneurial ecosystems, which are lacking in other locations. After Mel’s work, the entrepreneurial ecosystem attracted scholars’ interest in finding out about productive ecosystems for entrepreneurship. So far, several key definitions have been given to this environmental concept with the purpose of fostering entrepreneurship and business growth in a specific geographic location or population. In many cases, it has become a strategy from a governmental policymaking perspective to enhance economic growth, improve employment and build a sustainable society (Isenberg, 2011; Stam, 2015).

Entrepreneurial ecosystems are complex systems made up of social, economic, political and infrastructural components that support the development of innovative businesses and enhance their performance (Cohen, 2006). The term “entrepreneurial ecosystem” (EE) has been defined several times over the past two decades (Table 5). Although each definition has considered a number of entrepreneurial factors that interact dynamically, the general consensus is that an EE that is functional provides entrepreneurs with capital (e.g., financial, knowledge, institutional, social) to discover, assess, exploit, and take advantage of market opportunities. Several studies have extended the definition of ecosystems to include additional dimensions, including culture, market, human, government and institutional (Duan et al., 2022; Motoyama & Knowlton, 2017). In a particular ecosystem, each dimension is weighted differently.

Table 6.
Nine attributes of a successful start-up community

Attribute	Descriptions
Leadership	Strong group of entrepreneurs who are visible, accessible, and committed to the region being a great place to start and grow a company.
Intermediaries	Many well-respected mentors and advisors giving back across all stages, sectors, demographics and geographies as well as a solid presence of effective, visible, well-integrated accelerators and incubators.
Network density	Immigrant entrepreneurial ecosystem, well-connected community of start-ups and entrepreneurs along with engaged and visible investors, advisors, mentors, and supporters. Optimally, these people and organizations cut across sectors, demographics, and culture engagement. Everyone must be willing to give back to their community.
Government	Strong government support for and understanding of start-ups to economic growth. Additionally, supportive policies should be in place covering economic development, tax, and investment vehicles.
Talent	Broad immigrant entrepreneurial ecosystem talent pool for all levels of employees in all sectors and areas of expertise. Universities are an excellent resource for start-up talent and should be well connected to community.
Support services	Professional services (legal, accounting, real estate, insurance, and consulting) are integrated, accessible, effective, and appropriately priced.
Engagement	Large number of events for entrepreneurs and community to connect with highly visible and authentic participants (e.g. meet-ups, pitch days, start-up weekends, boot camps, hackathons, and competitions).
Companies	Large companies that are the anchor of a city should create specific departments and programs to encourage cooperation with high-growth start-ups.
Capital	Strong, dense, and supportive community of venture capitalists, angels, seed investors, and other forms of financing should be available, visible, and accessible across sectors, demographics, and geography.

Source: Feld (2012)

According to the World Economic Forum (WEF), an entrepreneurial ecosystem (Table 7) consists of eight pillars: accessible markets; human capital/workforce; funding and finance; support systems/mentors; government and regulatory framework; education and training; major universities as catalysts; and cultural support. WEF (2013) proposed that funding, workforce, and markets are the most critical factors in an entrepreneurial ecosystem. WEF (2013) stated that an entrepreneurial ecosystem assists entrepreneurs through providing capital in knowledge, finance, humans, and culture.

Close to WEF’s (2013) ecosystem components, Isenberg’s (2011) ecosystem consists of six distinct pillars: policy, finance; culture; supports; human capital; and accessible markets (Table 8). Isenberg (2011) asserted that the entrepreneurial ecosystem characterizes a novel and lucrative strategy for stimulating economic prosperity. Hundreds of elements make up these generic pillars, each of which interacts in highly complex and idiosyncratic ways. Isenberg (2011) also stated that generic causal pathways within an entrepreneurial ecosystem are of limited value; this is why he emphasizes the importance of context: Each ecosystem emerges under its own set of conditions and circumstances.

The business creation ecosystem identified by Global Entrepreneur Monitor (GEM) (2020) consists of 12 pillars: finance; government policies (support and relevance); government policies (taxes and bureaucracy); government programs; education at school stage; education at post-school stage; R&D transfer; commercial and legal infrastructure; internal market dynamics; internal market burdens or entry regulation; physical infrastructure; and cultural and social norms (Table 9).

Basing my research on the definitions of immigrant, entrepreneurs, immigrant entrepreneurship, transnationalism, and entrepreneurial ecosystem in Tables 2–9, I propose that the immigrant entrepreneurial ecosystem is a combination of business environments for various immigrant groups. These environments contain the host- and home-country entrepreneurial ecosystems and at least one co-ethnic community within the host country. This definition expresses three characteristics of an ecosystem for immigrants:

- IEEE is driven not only by innovative people but also entrepreneurial ecosystem dimensions, such as accessible markets, finance, government, social norms, and other factors.

Table 7.
Entrepreneurial ecosystem pillars and their components

Pillars	Components
Accessible markets	Domestic market: large, medium-sized, or small companies as customers and governments as customers. Foreign market: large, medium-sized, or small companies as customers and governments as customers.
Human capital/workforce	Management talent, technical talent, entrepreneurial company experience, outsourcing availability, and access to immigrant workforce
Funding and finance	Friends and family, angel investors, private equity, venture capital, and access to debt
Support systems/mentors	Mentors/advisors, professional services, incubators/accelerators, and networks of entrepreneurial peers
Government and regulatory framework	Ease of starting a business, tax incentives, business-friendly legislation/policies, access to basic infrastructure, access to telecommunications/broadband and access to transport
Education and training	Available workforce with pre-university education, available workforce with university education, and those with entrepreneurship-specific training
Major universities as catalysts	Promoting a culture of respect for entrepreneurship, playing a key role in idea formation for new companies, and playing a key role in providing graduates to new companies
Cultural support	Tolerance for risk and failure, preference for self-employment, success stories/role models, research culture, positive image of entrepreneurship, and celebration of innovation

Source: From WEF (2013)

Table 8.
Entrepreneurial ecosystem pillars

Pillars	Components
Funding finance	Capital: Micro-loans, angel investors, friends, family, zero-stage venture capital, venture capital funds, private equity, public capital markets, debt
Policies	Leadership: Unequivocal support, social legitimacy, open door for advocate, entrepreneurship strategy, urgency, crisis, and challenge Government: Institutions (e.g., investment and support, financial support, such as for R&D, jump-starting funds), regulatory framework incentives, (e.g., tax benefits, research institutes., legislation, contract enforcement, property rights, and labor)
Accessible markets	Early customers: Early adopters for proof of concept, expertise in productizing, reference customer, first reviews, distribution channels Networks: Entrepreneur's networks, diaspora networks, multinational corporations
Human capital	Labor: Skilled and unskilled, serial entrepreneurs, later generation family Education institutions: General degrees (professional and academic), specific entrepreneurship, training
Supports	Infrastructure: Telecommunications, transportation and logistics, energy, zones, incubators, coworking, clusters Support professionals: Legal, accounting, investment bankers, technical experts, advisors Nongovernmental institutions: Entrepreneurship promotion in nonprofits, business plan contests, conferences, associations
Culture	Societal norms: Visible successes, wealth for funders, international reputation, tolerance of risk, mistakes, failure, innovation, creativity, experimentation, social status of entrepreneur, wealth creation, ambition, drive, hunger Success stories: Visible successes, wealth generation for founders, international reputation

Source: From Isenberg (2011)

- The immigrant entrepreneurial ecosystem is like a forest that covers the host- and home country ecosystems.
- In fact, the co-ethnic community subsystem links two location-specific ecosystems.

Although each definition has considered different entrepreneurial factors that dynamically interact with one another, the universal agreement is that a functional entrepreneurial ecosystem provides capital (financial, knowledge, institutional, social, and so on) to enable entrepreneurs to discover, access, exploit, and take advantage of market opportunities.

METHOD

This research followed McGaghie et al.'s (2001) four-step process for creating new theories:

1. Select the topic.
2. Conduct a literature review.
3. Isolate the critical variables.
4. Develop a conceptual framework and research propositions.

In this paper I started my research with a focus on defining the relative terms regarding IEEE, and then I examined the contexts of these definitions. I used existing knowledge by synthesizing current IEEE and entrepreneurial ecosystem literature. I collected research papers mainly from Scopus and Web of Science databases and reports from international organizations such as OECD, Global Entrepreneurship Monitor, and the World Economic Forum. Focusing on definitions of key

Table 9.
The conditions identified by GEM that enhance (or hinder) new business creation in a given country

Attribute	Description
Finance	The availability of financial resources—equity and debt—for small and medium-sized enterprises (SMEs), including grants and subsidies.
Government policies: Support and relevance	The extent to which public policies support entrepreneurship—entrepreneurship as a relevant economic issue.
Government policies: Taxes and bureaucracy	The extent to which public policies support entrepreneurship—taxes or regulations are either size-neutral or encourage new and SMEs.
Government programs	The presence and quality of programs directly assisting SMEs at all levels of government (national, regional, municipal).
Education at school stage	The extent to which training in creating or managing SMEs is incorporated within the education and training system at primary and secondary levels.
Education at post- school stage	The extent to which training in creating or managing SMEs is incorporated within the education and training system in higher education such as vocational, college, business schools, etc.
R&D transfer	The extent to which national research and development will lead to new commercial opportunities and is available to SMEs.
Commercial and legal infrastructure	The presence of property rights, commercial, accounting, and other legal and assessment services and institutions that support or promote SMEs.
Internal market dynamics	The level of change in markets from year to year.
Internal market burdens or entry regulation	The extent to which new firms are free to enter existing markets.
Physical infrastructure	Ease of access to physical resources—communication, utilities, transportation, land or space—at a price that does not discriminate against SMEs.
Cultural and social norms	The extent to which social and cultural norms encourage or allow actions leading to new business methods or activities that can potentially increase personal wealth and income.

Source: Adapted from GEM (2023)

concepts, as well as components and elements of contexts, I summarized the fragmented knowledge and evidence after reading theoretical and empirical research papers. I could then create a conceptual framework and set of propositions after the revision processes. As depicted in Figure 1, this research established that IEEE depends holistically on three ecosystems: a host-country ecosystem, a home-country ecosystem, and a co-ethnic community system. In the next section, I present the proposed triple ecosystem framework, referred to as the immigrant entrepreneurial ecosystem, and explain the constitutive constructs and their relationships.

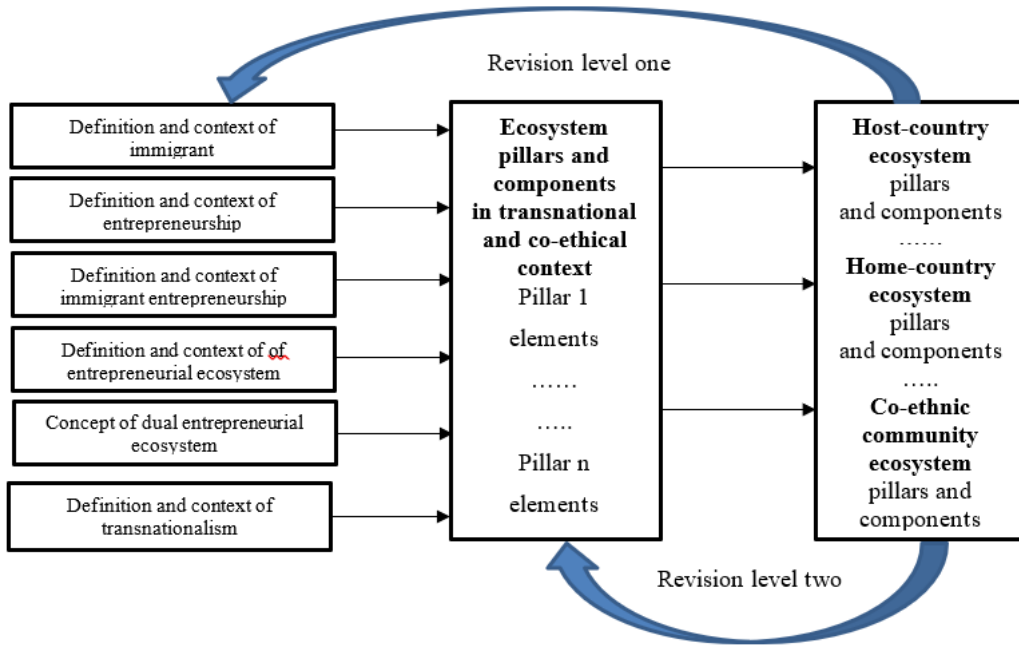
The IEEE impacting factors were mapped onto the immigrant entrepreneurial ecosystem pillars using a three-step coding process with two revisions (Figure 2). In the first step, factors influencing IEEE were extracted from the retrieved research papers. Next, each factor was coded into the categories of motivation, execution, and evolution of the entrepreneurship process. In the third step, these three category factors were mapped to ecosystem components. The first revision was from ecosystem components to research papers. As a second revision, I returned to tabulated categorized codes from ecosystem components.

PROPOSED CONCEPTUAL FRAMEWORK AND RESEARCH AGENDA

Proposed Conceptual Framework

Stemming from the literature review and definitions of IEEE and entrepreneurial ecosystem concepts, IEEE can be conceptualized as a process starting from entrepreneurial motivation driven by opportunities or recognized opportunities. The motivation interacts with accessible resources

Figure 1.
The procedure of conceptual framework creation



and opportunities in the host- and home-country ecosystems to result in entrepreneurial execution, and, eventually, survivalist and growth businesses will evolve into enterprises with a mainstream or international market focus. Figure 2 illustrates the proposed conceptual framework. The framework is consistent with conventional and current entrepreneurship, ecosystem, and IEEE theories. However, a number of new elements are built into the framework:

- Effects of the host-country, home-country, and co-ethnic community entrepreneurial ecosystem
- Ecosystem effects on immigrants' motivation to start a new firm
- The execution of entrepreneurship
- The business evolution

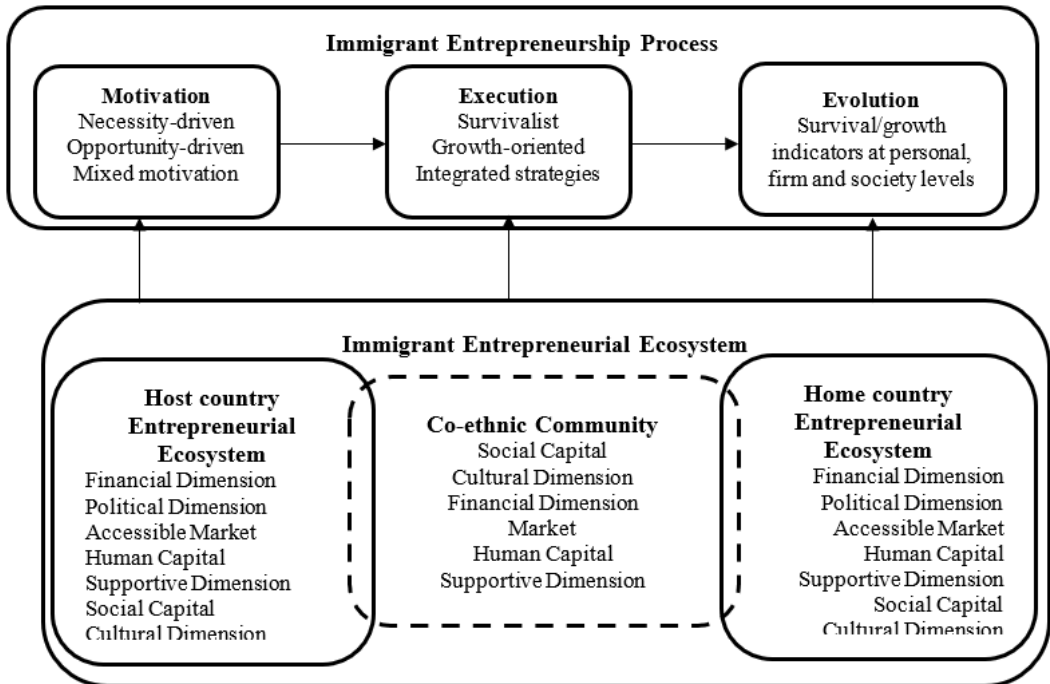
Although the framework incorporates the effects of immigrant entrepreneurs, the focus is on the impact of immigrant entrepreneurial ecosystem factors on IEEE.

As shown in Figure 2, the proposed conceptual framework for IEEE research comprises six constructs: host-country entrepreneurial ecosystem, home-country entrepreneurial ecosystem, co-ethnic community, motivations, execution, and evolution. Each component is explained in this section.

In the immigrant entrepreneurship block, immigrant entrepreneurs' motivation is where IEEE starts and is best described as necessity- or opportunity-driven (Duan et al., 2021a; Duan & Sandhu, 2021a). Entrepreneurs' motivation determines goals, strategies, the way to develop opportunities and reconfigure resources, and, eventually, influence firm performance. Entrepreneurs' execution includes establishing enterprises and growing businesses. Entrepreneurs can execute different strategies, such as survivalist, growth-oriented, or integrated strategies. Evolution refers to execution outcomes, including personal and business outcomes. Immigrant entrepreneurs often evolve their community-oriented firms to mainstream-oriented businesses and then to international enterprises. They also develop their businesses as self-employed or home-based to co-operations.

Figure 2.
Conceptual framework for IEEE research

Source: My elaboration informed by Duan et al. (2022), Gartner (1985), and You and Zhou (2019)



Several existing frameworks contributed to the development of the immigrant entrepreneurial ecosystem block. First, it applied Duan et al.'s (2022c) dual (host- and home-country) entrepreneurial ecosystem framework in which immigrant entrepreneurs operate. The immigrant entrepreneurial ecosystem is distinct from the single host-country ecosystem, which benefits native-born entrepreneurs more than immigrants. The latter are prevented from accessing the local ecosystem resources owing to cultural, political, social, and other differences between the host and home countries and other factors, such as discrimination. Duan et al. (2021c) argued that immigrant entrepreneurs can benefit from the immigrant entrepreneurial ecosystem by gaining access to opportunities in both host and home countries and, thus, be in a position to exploit more resources to develop their ventures. The authors also proposed that some of the distinctive advantages existing in immigrant entrepreneurial ecosystems are only available to immigrant entrepreneurs who are embedded in host-country, home-country, and ethnic-community ecosystems and proactively reach out to their home countries, host countries, and communities to develop opportunities and seek resources.

The causal relations among the immigrant entrepreneurial ecosystem and its effects on immigrant entrepreneurship process were drawn from Stam's (2015) framework of inputs, outputs, and outcomes of ecosystems. Stam (2015) described an entrepreneurial ecosystem as "a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship" (p. 1759), and his framework, which is supported by some scholars, illustrates that entrepreneurial activities are the outputs of an entrepreneurial ecosystem.

The immigrant entrepreneurial ecosystem provides resources and opportunities to IEEE. It is an agglomeration of resources that nurture entrepreneurial activities and lead to new ventures and enhance their performance. All immigrant entrepreneurial ecosystem elements contribute directly or indirectly, but unequally to IEEE execution and evolution. As discussed by Duan et al. (2021d), the common

factors of the immigrant entrepreneurial ecosystem are market, finance, human, institution, business support, social, legal, and culture as summarized in the immigrant entrepreneurial ecosystem block.

The execution construct represents the innovation stage in the IEEE process where opportunity entrepreneurs develop new goods, services, methods of production, and markets (Gartner, 1985; Schumpeter, 1943). It also includes business survival activities, such as income generation and servicing the co-ethnic community (Bates, 1994). Entrepreneurs search for resources in the home- and host-country ecosystems to combine them in new and creative ways to meet unmet market demands. The success of innovative strategies depends on the available resources and support from the three ecosystems. These activities may lead to firm profits and growth or firm survival.

IEEE evolution is the final outcome of the combined result of entrepreneurs' motivation, execution, and effects of the immigrant entrepreneurial ecosystem. Various studies have identified empirically the evolution of IEEE (Dual et al., 2021a; Malerba & Ferreira, 2021): Immigrant firms commonly start as ethnic community-oriented traders, and then they become host-country or mainstream-oriented companies; after that, they become multicountry enterprises. High productivity, industry leadership, employment expansion, high-profit rate, lower cost of production, community development, and personal net worth growth could be the growth indicators for opportunity-driven immigrant firms. From an economywide perspective, these outcomes also include the creation of jobs, economic and productivity growth, business competitiveness, and reduced poverty (OECD, 2010). Business stability, sustainable cash flow, and profit in a stable market are performance indicators for necessity entrepreneurs (Chrysostome & Arcand, 2009). Community development, entrepreneurial and managerial experiences, social IEEE with co-ethnics, and integration into host society are also positive outcomes for both types of immigrant entrepreneurs.

RESEARCH AGENDA

Although the entrepreneurial ecosystem has emerged as an economic development framework for creating an environment that fosters entrepreneurship, existing research on ecosystems has been largely typological and theoretical, and its association with entrepreneurial outcomes has not yet been explored (Spigel & Harrison, 2017). Moreover, the entrepreneurial ecosystem framework has rarely been applied to IEEE research (Von Bloh et al., 2019, Dual et al., 2021a).

Similarly, the effects of the immigrant entrepreneurial ecosystem on outcomes for export- and import-oriented immigrant businesses have not been investigated, although scholars have recommended further studies on how the co-effects of socioeconomic-political-cultural factors influence immigrant entrepreneurs (Duan et al., 2022). Furthermore, the majority of studies examining determinants of IEEE are at a factor rather than a system level. As Motoyama and Knowlton (2017) underlined, the connections and interconnections among the EE elements and how these affect IEEE are significant future research directions.

Future IEEE research should focus on aggregations of entrepreneurial motivation, strategy adoption, and outcomes from national, regional, and family cultural perspectives. Employing this approach would generate meaningful insights to understand how a specific cultural ideology influences immigrants' economic actions. Davidsson (2002) found that only a small proportion of entrepreneurship research is at the aggregated country level. Moreover, only a few empirical studies have surveyed the relationship between cultural norms and entrepreneurship at the aggregate level.

Based on the framework used in this study, I recommend investigating necessity-driven and opportunity-driven IEEE separately and examining survivalist and growth-oriented entrepreneurs individually. In particular, necessity-driven entrepreneurs may take an undiscovered entrepreneurial path distinct from the current well-acknowledged process started by innovation. There are pieces of evidence that indicate necessity immigrant entrepreneurs gained motivation before innovation. In contrast, opportunity immigrant entrepreneurs gained motivation after innovation.

Further research should consider predicting immigrants' entrepreneurial motivation through the use of the immigrant entrepreneurial ecosystem framework. In the context of the immigrant entrepreneurial ecosystem, future research needs to follow the paths of necessity- or opportunity-driven entrepreneurship. Research can also engage in the theory of effectuation versus causation entrepreneurship, as Hubner et al. (2022) recommended. Either way, the stages of IEEE (motivation, execution, and evolution) need to be considered.

The immigrant entrepreneurial ecosystem is an agglomeration of various entrepreneurial resources to nurture entrepreneurial activities (Stam, 2015), and these activities lead to new venture creation and enhanced firm performance. The immigrant entrepreneurial ecosystem directly or indirectly affects entrepreneurial activities and firm outcomes, but host- and home-country ecosystems are weighted unequally. Each factor in the immigrant entrepreneurial ecosystem affects IEEE through a different mechanism (Isenberg, 2011; Stam, 2015; WEF, 2013). How the immigrant entrepreneurial ecosystem and its components and elements affect immigrants' motivation, IEEE execution, and evolution is one of the most crucial future research directions.

The motivations influence the entrepreneurial execution and, hence, the business evolution. As shown in Figure 2, in addition to the immigrant entrepreneurial ecosystem, motivations determine goals, strategies, the way to develop opportunities and reconfigure resources, and, eventually, result in improved firm performance. Based on the classification by the Global Entrepreneurship Monitor (GEM), necessity-driven and opportunity-driven entrepreneurial motivations (Reynolds, et al., 2002). In the necessity scenario, immigrants are forced into entrepreneurship because of various obstacles preventing them from competing in the local labor market (Chrysostome, 2010). On the other hand, opportunity-driven IEEE is motivated by pursuit of achievements, such as the need for approval, personal development, independence, wealth creation, and following a role model. Future motivation study should separate necessity-driven and opportunity-driven IEEE. The primary future research question for the relationship between IEEE motivation and immigrant entrepreneurial ecosystems is immigrants' motivation for the start-up journey, regardless of whether opportunity-driven or necessity-driven, holistically influenced by the immigrant entrepreneurial ecosystem?

In the IEEE process, the execution construct involves development of new goods and services, methods of production, markets, and organizations (Gartner, 1985; Schumpeter, 1934). It also includes routine business activities, such as income generation and servicing an ethnic community. Entrepreneurs search for resources in the immigrant entrepreneurial ecosystem to combine them in new and creative ways and to meet unmet market demands, but the success of innovative activities depends on the availability of resources and support from that ecosystem. Successful activities lead to superior prospects for entrepreneurial firm growth, acquisition of profit, and better financial performance. IEEE strategic activities are influenced mainly by entrepreneurs' motivations and the immigrant entrepreneurial ecosystem. The dichotomy of survival strategies (Nkongolo-Bakenda & Chrysostome, 2020) and growth strategies (Kourtit et al., 2015) have been commonly used to analyze the IEEE strategic activities. The primary proposition for the relationship between IEEE execution and immigrant entrepreneurial ecosystems is IEEE execution (strategies, activities, administration), regardless of immigrant entrepreneurs' original motivation, is holistically influenced by the immigrant entrepreneurial ecosystem.

IEEE evolution is the combined result of entrepreneurs' motivations, activities, and the effects of the immigrant entrepreneurial ecosystem. If functional, the immigrant entrepreneurial ecosystem fosters high productivity, industry leadership, employment expansion, high profit rate, lower cost of production, community development, and personal net worth growth (Nicotra et al., 2018; Kotey & Meredith, 1997). Based on the OECD's (2014) view, these outcomes also reduce poverty and achieve sustainable development. Host-country social and economic integrations are indicators of outcomes for opportunity and necessity immigrant entrepreneurs (Zhou, 2004). IEEE outcomes are normally classified into financial and nonfinancial performance at personal, organizational, and societal levels

and based on business survival and/or growth indicators (Duan et al., 2020). The primary proposition for the relationship between IEEE evolution (growth or survivalist) and immigrant entrepreneurial ecosystems is IEEE evolution, regardless of whether opportunity-driven or necessity-driven immigrant entrepreneurs, is holistically influenced by the immigrant entrepreneurial ecosystem.

Therefore, one of the four research strands (Table 10) established for this paper based on the proposed conceptual framework is the exploration of eco-factor and causal effects. This strand would focus on the construct components of the immigrant entrepreneurial ecosystem and the interrelationships among them in Figure 2. Current eco-factors may or may not be sufficient to represent the antecedents of the IEEE phenomenon fully. Furthermore, although eco-factor discovery is important, studying the interrelationships and effects of these factors is more important. As Stam (2015) argued, producing EE factors might matter; clarifying what causes what is more significant. In the immigrant entrepreneurial ecosystem, the co-effects of the same eco-factors caused by two countries are worth in-depth investigation. Does an eco-factor in the host country have a complementary relationship with the same eco-factor in the home country? For example, empirical studies from Duan et al. (2021) indicated that equivalent market sizes in host and home countries positively affect IEEE firm performance. In another example, Kushnirovich and Heilbrunn (2008) found that when IEEE could not get funding from the host country, they turned to their home country. Do IEEE make the best use of eco-factors from both countries? Which eco-factor is the most important in regard to the entire IEEE process and each stage of the process? The proposed framework opens up a new way to analyze the IEEE process with a series of questions to investigate “what is cause and what is effect” (Alvedalen & Boschma, 2017, p. 887).

DISCUSSION AND CONCLUSION

There is a need to acknowledge the regional and cultural factors that are in play in environments where entrepreneurs conduct business (Baycan et al., 2012). According to Lin et al. (2019), the domestic environmental settings should be considered in IEEE studies: These include cultural, socioeconomic, and political factors. The cultural, political, and socioeconomic factors currently being used in IEEE studies are based on the direct experiences of researchers and have no theoretical or empirical evidential backing of a cause-and-effect relationship (Nicotra et al., 2018). Accordingly, the immigrant entrepreneurial ecosystem offers a complete framework to holistically analyze IEEE with respect to disciplines irrespective of geographical location; employing such a framework would enable the generation of comparable research results. New knowledge obtained through the immigrant entrepreneurial ecosystem is generalizable.

IEEE research should take into account three business environments: ethnic community, host-country entrepreneurial ecosystems, and home-country entrepreneurial ecosystems. These three ecosystems compose the immigrant entrepreneurial ecosystem. Present literature pertinent to entrepreneurial ecosystems gives minimal attention to the home country of immigrants and the co-ethnic community—that which is applicable for IEEE studies. This study recommends that IEEE research should take into consideration the immigrant entrepreneurial ecosystem because it influences the economic activities of immigrant entrepreneurs. The ethnic community ecosystem also needs to be considered in the IEEE context. This particular approach permits a complete exploration of the factors influencing IEEE. Lastly, the paper also recommends the concept of the immigrant entrepreneurial ecosystem, depicted in Figure 2, for IEEE research.

This study proposed a conceptual framework for IEEE research and evaluated the framework in light of existing empirical studies and with consideration of the context of immigrants exploiting entrepreneurial opportunities and enhancing IEEE outcomes. The focus was on the significance of the immigrant entrepreneurial ecosystem from the IEEE perspective. The results suggest that the immigrant entrepreneurial ecosystem framework and its pillars and elements need to be taken into

Table 10.
Research agenda for IEEE and immigrant entrepreneurial ecosystem

Constructs	Research Agenda
IEEE motivations	Ecosystem effects on IEEE motivation <ul style="list-style-type: none"> ▶ How do IEEE integrate and become embedded within ecosystems? ▶ What are the causal mechanisms of ecosystem factors affecting IEEE motivations? ▶ How do ecosystems affect IEEE in different circumstances? ▶ How does each ecosystem factor affect the decision-making of IEEE? ▶ What are the effects of IEEE in bridging host and home ecosystems? ▶ How can ecosystems function more productively? ▶ How do the motivations of IEEE affect IEEE strategies? ▶ How do the motivations of IEEE affect IEEE outcomes?
IEEE execution	Ecosystem effects on IEEE strategies <ul style="list-style-type: none"> ▶ What are the causal mechanisms of ecosystems effect on IEEE strategies? ▶ How does the host- or home-country ecosystem affect IEEE strategies? ▶ How do ecosystems holistically affect IEEE strategies? ▶ What are the formal/informal business strategies? ▶ What are the ethnic enclave strategies? ▶ What are the co-effects of motivations and ecosystems on IEEE strategies?
IEEE evolution	Ecosystem effects on IEEE outcomes <ul style="list-style-type: none"> ▶ What are the individual-level financial and nonfinancial outcomes? ▶ What are the organizational-level outcomes, such as business performance? ▶ What are the societal-level outcomes, such as employment? ▶ How is IEEE evolution affected by ecosystems? ▶ How is IEEE evolution affected by motivation and execution?
Immigrant entrepreneurial ecosystem	Ecosystem factor effects, co-effects, and system effects <ul style="list-style-type: none"> ▶ What are the host- and home-country legal and regulation effects and co-effects? ▶ What are the host- and home-country market accessibility effects and co-effects? ▶ What are the host- and home-country political and government effects and co-effects? ▶ What are the human capital effects within the host and home country? ▶ What are the host- and home-country business support, infrastructure effects and co-effects? ▶ What are the host- and home-country culture effects and co-effects? ▶ What are the host- and home-country social norms effects and co-effects? ▶ What are the host- and home-country funding and finance effects and co-effects? ▶ What are the host- and home-country government and political effects and co-effects? ▶ How does the host-country ecosystem affect IEEE systemically? ▶ How does the home-country ecosystem affect IEEE systemically? ▶ How do the ecosystems factors interactively affect IEEE? ▶ What is the relative weight of host- and home-country ecosystem factors? ▶ How do social capital availability/constraints affect the IEEE process? ▶ What are the effects of ethnic community on the IEEE process? ▶ How does the ethnic community bridge host- and home-country ecosystems? ▶ How do the ethnic group factors affect the IEEE process?

account when researching the IEEE phenomenon from an immigrant entrepreneurial ecosystem perspective.

Theoretically, first, this research establishes the configuration of the immigrant entrepreneurial ecosystem in terms of impacting factors and their components. Second, the study builds up the relationship between immigrant entrepreneurial ecosystem and IEEE process (motivation, execution, and evolution). Third, the research clearly indicates the immigrant entrepreneurial ecosystem consists of host- and home-country ecosystems and co-ethnic community. Fourth, based on the definitions and contexts of relative terms, the study provides pillars and components of immigrant entrepreneurial ecosystem. Finally, the study elaborates a set of research questions for future research.

Practically, the results have strong implications for policymaking in three ways. First, policymakers need to encourage immigrants to establish immigrant entrepreneurial ecosystem connections with

their home countries, thus fostering cross-country IE. Second, immigrant entrepreneurs need to use viable resources and opportunities from the immigrant entrepreneurial ecosystem to build high-growth businesses. Third, policymakers could develop a series of programs for various ethnic immigrant groups. Such programs would be more effective than general schemes for all immigrants when considering home-country ecosystem and co-ethnic community as IEEE influential ecosystems. Fourth, home-country ecosystem and co-ethnic community are important for supporting more entrepreneurial opportunities for immigrants.

Therefore, this paper argues that, because of immigrant entrepreneurial ecosystem effects, compared with native-born entrepreneurs, immigrant entrepreneurs have extra tangible and intangible resources that facilitate opportunity recognition, strategic business execution, and firm growth by assembling these resources. They are able to take resource-rich benefits from immigrant entrepreneurial ecosystem factors because of “bounded solidarity and enforceable trust” (Portes & Sensenbrenner, 1993). To an extent, it is these leverageable resources from immigrant entrepreneurial ecosystem factors that drive immigrants to have a higher rate of entrepreneurship and better firm performance (Kerr & Kerr, 2019). This can be a way to explain why immigrants are more eager to choose entrepreneurship as a career and also partially clarify why firms with owners of immigrants and natives perform greater than a single ethnicity.

The paper contributes to the IEEE field by extending the research boundary from host country to host and home countries and lifts the factor-level-focused study to system-level investigation. It also implies that the appropriate government policies and programs can foster IEEE; hence, immigrants’ social and economic integration with their new society increases.

The focus of this study was the conceptualization of the relationship between immigrant entrepreneurial ecosystems and IEEE processes, and the need to empirically examine the framework is required. I proposed that future research could be conducted to determine how the immigrant entrepreneurial ecosystem affects IEEE process. More importantly, advancing ecosystem effects on IEEE will help to promote immigrants’ social and economic advancement and integration and, consequently, contribute to both host- and home-country socioeconomic development and job creation.

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