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Are Migrant Firms Actually Different From Native Firms?

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Abstract

A matched-pair analysis was performed to verify the existence or not of significant differences between native and migrant companies regarding firm-specific variables and the governance structure. Controlling for firm size, industry and geographical location, we found that proxy values for efficiency, capital intensity of production and services and profitability are not significantly different (or not lower) than those of native-owned small business. Evidence shows that previous studies concerning the diversity of immigrant-owned businesses are likely marked biased by methodological choices that did not take account of the concentration of these companies in “disadvantaged” firm size categories, industries or geographical locations.

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1. Introduction²

In most of the literature about migrant entrepreneurship, ethnic business is seen as a 'different' business vs native-owned firm. Diversity is assumed to derive from the cognitive schemes of entrepreneurs, the adopted behaviours, and the ties to the community of origin, as well as the markets served and goods produced (Hettlage, 2008).

A further element of diversity which characterises the ethnic business is believed to be the condition of 'disadvantage' and 'blocked mobility' in which immigrants often live. Kloosterman (2000) observes, in fact, that immigrants are distinguished from the indigenous population by lower skills, by limited access to formal consultancy networks, and by barriers to the acquisition of information concerning the mainstream market. Difficulties in accessing the ordinary labour market stimulate self-employment choices which represent a strategy for survival and adaptation, and more rarely of integration.

A firm originating from the choice of self-employment is generally characterised by marginality and fragility. The positioning at the end of the queue in the markets (ie, of labour, trade exchanges, capital, among other factors) in which the immigrant is forced to operate differentiates a migrant firm's founder from a non-immigrant entrepreneur (Light, 1979). In summary, ethnic minorities are confined to a context in which economic disadvantage is more likely to be reproduced and amplified rather than eliminated. Disadvantage is somewhat reduced by support offered by members of the community of origin. In fact, ties with the community of origin play an important role in accessing credit, information and knowledge of markets. At the same time, these factors also represent constraints on a firm's size, growth, and the development of opportunities for differentiation. In the traditional view of migrant entrepreneurship, social enclaves tend to become economic enclaves as well (Portes and Jensen, 1989; Portes and Zhou, 1996).

Recently, new strands of research have promoted a revision of the stereotype that labels migrant-founded ventures as marginal organisations (Kloosterman, 2010). For example, Waldinger (2000) has emphasised the fact that activities of immigrants are generally now present in many economic sectors, not only in those more typically viewed as 'ethnic'. In addition, the same author has shown the importance of efforts to link ethnic origin products and services to markets and non-ethnic consumers: alongside underserved markets, neglected by mainstream retail chains, and protected markets of ethnic products destined for migrant communities, the entry of immigrant

² The views expressed in the article are those of the authors and do not involve the responsibility of Intesa Sanpaolo.

entrepreneurs is increasingly being observed in sectors producing goods and services destined to a significant extent for the indigenous community. Even more explicit is the conclusion suggested by Kloosterman and Rath (2010): the immigrant entrepreneur is more and more present in the ordinary segments of productive activity, including those showing higher profitability and requiring higher technical and managerial skills (Saxenian, 2002). In sum, a more differentiated view is consolidating as well as an appraisal of migrant enterprise as being less distinct from the characteristics and performances of native businesses. This conclusion leads to the questioning of whether the two groups of firms are significantly 'different'.

Ram (1997) clearly summarises the issue that represents the focus of the current contribution: "Is ethnic minority enterprise a distinctive small business phenomenon, demonstrating the importance of 'cultural' resources in fueling entrepreneurial activities?" We label this approach *Diversity hypothesis*. Or, "is it a routinely rational economic activity no different from other small-scale business endeavors?" (p. 149): we will label this view *Similarity hypothesis*.

This paper examines the differences and similarities between migrant and native businesses using a matched sample of companies in Italy. Focusing on firm-specific variables and on the structure and composition of governance, we provide new empirical evidence on issues that is relevant for the research and policy debate.

Questioning the antinomy diversity vs similarity between native and migrant companies has important consequences with regard to theoretical and policy debates.

On the theoretical level, differences between migrant and indigenous enterprises are correlated to the analysis of how socio-cultural factors and economic variables affect changes in the nature of migrant enterprise and how both components influence the strategies and organisational forms adopted. More generally, the existence of a structural gap between migrant and native companies (*Diversity hypothesis*) relegates almost all of the former to a stable and uniform condition of marginality and weakness that is difficult to overcome because, in addition to the exogenous constraints associated with the operating context in which the companies are located, there are also endogenous limitations (deficit of human capital and managerial resources) that affect their efficiency. Instead, the validation of the *Similarity hypothesis* opens the way to a different interpretation which sees migrant companies characterised, like native companies, by a wide variety and heterogeneity of behaviours and evolutionary paths. External constraints continue to persist, but have a differentiated impact on firms, making it possible to pursue diversified development trajectories.

In terms of policies, the corroboration of the *Diversity hypothesis* suggests the need to strengthen initiatives that focus on specific entrepreneurial weaknesses of individual ethnic communities (Desiderio and Mestres-Domenech, 2011). The validation of the *Similarity hypothesis*, on the contrary, leads to reconsidering the policies dedicated exclusively to migrant ventures by replacing

them with initiatives where migrant firms are conceived as a component of a broader economic aggregate and are influenced by growth constraints and managerial limits no different from those experienced by indigenous companies.

The investigation presented herein contributes to the research stream on immigrant entrepreneurship in many ways. Firstly, the adoption of a matched-peer design shows that the economic and financial firm-specific variables exhibited by migrant companies are apparently similar to those seen at native ventures. The evidence argues against previous findings, since diversity of migrant firms is likely strongly biased by methodological approaches that do not take sufficient account of the concentration of these companies in ‘disadvantaged’ firm size categories, industries or geographical locations. The weakness of the migrant firm, in fact, appears to be largely connected to the economic opportunities available and to the market spaces to which it can have access. In this sense, migrant companies would be particularly concentrated in sectors with low profitability, would favour a very small business size, and would be located in geographical areas with limited development opportunities. The employ of a methodology able to control by sector, size and location supports a less biased comparison and shows how, unlike most of the previous literature, the proxies of efficiency, capital intensity of production and services, credit access and the profitability of migrant companies are not significantly different from those of native companies. Secondly, our evidence emphasises the high propensity of migrant companies to export and their strong orientation to develop multicultural partnerships. Therefore, at least part of migrant companies has proven able to exploit bridging skills to enter foreign markets and develop economic relationships with indigenous entrepreneurs and non-co-ethnic communities. All this seems to be related to a strong variety of corporate behaviour and to the presence of mainly exogenous growth constraints (the sector, in particular) rather than strictly endogenous factors.

The paper includes four further sections. Section 2 is devoted to a literature review and discussion of the main research hypotheses concerning differences/similarities between migrant and native firms. In addition, this section provides a summary of the findings of previous empirical work that can be useful as a guide to the presentation of the chosen analysis methodology (see Section 3) and to the illustration of the results of the econometric estimates (see Section 4). Finally, we conclude in Section 5.

2. Literature background and hypotheses

The theoretical contributions and empirical studies provide conflicting indications regarding the existence of differences between migrant and indigenous enterprises. Two theoretical opposite strands can be identified. For the sake of simplicity, we shall call these orientations: *Diversity* vs *Similarity* hypotheses.

2.1 Diversity hypothesis

For a long time, the main analysis of immigrant entrepreneurship approaches has emphasised the differences between migrant companies and indigenous ventures. The reasons supporting this conclusion are various. According to the *disadvantage theory* (Light, 1979), chronic unemployment, low wages, and labour discrimination in the open market create the context for the emergence of immigrant enterprise (Cardon et al., 2008). Following this view, incompatible education or training, and limited promotional paths represent push factors at the basis of self-employment decisions (Fairlie and Meyer, 1996) while co-ethnic solidarity and financial support provided by the community of origin constitute facilitating factors (Bonacich and Modell, 1980; Waldinger et al., 1990). Similarly, the *blocked mobility approach* (Raijman and Tienda, 2000; Clark and Drinkwater, 1998, 2000) states that discrimination and racial barriers reduce the economic opportunities for immigrants in the mainstream market and force them into the ethnic business as a means of survival. As Constant and Zimmermann (2006) stated, “entrepreneurship may be the only avenue for [immigrant] socioeconomic advancement”. Migrant self-employment often is correlated with low levels of asset holdings and limited education. These features represent an important limitation for the development of migrant businesses (Fairlie and Woodruff, 2008) and, together with discrimination against ethnic minorities, are at the root of the considerable difficulties that migrant enterprises encounter in many contexts in accessing banking credit (Blanchflower, 2009; Mestres, 2010).

The limited availability of financial and managerial resources pushes migrants to start up activities in sectors with low economies of scale and reduced entry barriers. The consequence is that profitability and size growth opportunities remain low. Below-average profits and wages make the birth and survival of migrant ventures possible. At the same time, they reinforce the character of marginality, fragility and, in essence, economic inferiority compared to indigenous companies. Pecoud (2010) emphasises how migrants work in contexts whose unattractive conditions (long working hours, low return on investments, etc.) put off previous entrepreneurs, whether they came from wealthier immigrant groups or the non-immigrant population (Waldinger, 1994).

The *ethnic enclave* framework (Portes and Bach, 1985; Portes and Jensen, 1989; Portes and Zhou, 1996; Sanders and Nee, 1987, 1996; Zhou, 1992) emphasises some aspects, partly neglected, in previous interpretative models. The enclave explanation focuses on the advantages that the co-ethnic enclave offers to migrant entrepreneurs, including the benefits of cultural proximity, market knowledge, and labour markets of immigrants (Clark et al., 2015). The enclave economy offers the advantages of providing *captive* markets, especially in terms of protection from competitors outside the community (Wilson and Portes, 1980). However, barriers to entry, if they protect migrant ventures, are at the same time obstacles to the expansion of demand outside the ethnic boundaries. Furthermore, entry barriers apply to firms outside the community, but not to those within the

community: as in the perfect competition regimes, the presence of positive profits is canceled by the flow of new entrants, moderately hampered by the modest height of entry barriers and the reduced initial investment necessary for the start of the new venture (Jones et al., 2000). Therefore, the risk of overcrowded markets on the supply side is always present. Consequently, an increase in demand translates into an increase in the number of enclave companies operating with minimal profitability, not in the growth of the size of the incumbents. Finally, lower overall community income compresses the possibilities for product differentiation.

An implication of the ethnic enclave view is the isolation of migrant enterprises from mainstream markets and their low propensity to use business support agencies (Ram and Smallbone, 2002; Carter and Jones-Evans, 2006). Migrant entrepreneurs usually participate less in formal native networks, such as retail groups and trade associations (Sahin et al., 2013), implying a not negligible effect on their efficiency and profitability. As Li (1997) emphasises, the access to different opportunities suggests unequal returns for migrants and native firms. Low entry barriers, low labour costs and low capital intensity, but also price/cost competition, overcrowded markets and growth constraints are consistent with the birth of the migrant enterprise, but also with the existence of structural differences between these and indigenous ones.

A further perspective on migrant ventures is provided by the *transnational resources* view (Portes et al., 1999; Guarnizo et al., 2003; Zhou, 2004; Sahin et al., 2012). In this case, the migrant venture is not at a disadvantage vs the indigenous company, but, on the contrary, is able to exploit specific skills that can generate significant competitive benefits in international markets. Foreign-born entrepreneurs possess distinctive knowledge of their countries of birth: culture, consumer preferences, norms, history, contractual specificities and negotiating approaches (Sahin et al., 2012). In addition to the knowledge of the markets of countries of origin, migrant entrepreneurs are able to exploit the linguistic skills and social relations possessed, facilitating connections between the host economy and the one of origin (Hatzigeorgiou, 2010). Thus, migrant enterprises may benefit from a reduction in trade transactions generally associated with the establishment of commercial links with a foreign country (Portes, 1995). Migrant ventures can bridge cultural divides and exploit information, reducing costs of distribution and marketing to which companies are otherwise obliged to allocate significant resources (Hatzigeorgiou, 2010; Saxenian, 2002). As Zhou (2004) underscores, globalisation creates new opportunities: entrepreneurs with bi-cultural literacy and bi-national experiences are more likely to promote and structure global transactions. It follows that the propensity to export can be an element of differentiation (positive, in this case) between migrant and native companies.

Based on this strand of literature, we formulate the following hypothesis:

Hypothesis 1 (HP1): Ceteris paribus, most firm-characteristic variables in migrant business are significantly different from those of native businesses.

2.2 Similarity hypothesis

Recently, several theoretical schemas have proposed the revision of specific aspects of traditional interpretative models of migrant-ethnic entrepreneurship with the aim, among others, of highlighting elements that narrow the distances between migrant ventures and native enterprises. In this regard, the *breaking-out* hypothesis (Waldinger et al., 1990; Pecoud, 2010) represents a contribution of particular importance. In many contexts, particularly in the enclave economies, the competition generated by new entrants regarding an already crowded market for ethnic products and the intensification of institutional regulation has reduced the profitability of many 'conventional' ethnic activities. Consequently, the opportunities for new ventures linked to the demand developed by the immigrant population have been exhausted or greatly reduced. Therefore, the leaving of the "co-ethnic" market to move into mainstream markets turned out to be a necessity (Ram and Hillin, 1994; Engelen, 2001). The *breaking-out* theory identifies this phenomenon and provides an explanation for the tendency of migrant enterprises to overcome the boundaries of the ethnic economy to enter mainstream markets (Waldinger et al., 1990; Neville et al., 2014; Pecoud, 2010; Beckers and Blumberg, 2013). In this way, part of the advantages of an ethnic (limited, but protected) market are set aside in order to operate in wider markets in which native companies are also active. This follows the need to assimilate some characteristics of the strategy and objectives of the native companies and to review the distinctive features of the original ethnic enterprise. When ethnic enterprises seek market spaces outside the enclave economy, this requires (depends on) lower reliance on co-ethnic resources. Thus, the role of community resources changes. In mainstream markets, the co-ethnic community no longer plays an essential role in providing information, in reporting opportunities, and in guaranteeing a minimum level of demand. The family and the community can continue to transfer work and capital resources, but they lose the previous characterisation of the sole or principal support of the ethnic enterprise (Barrett et al., 1996). In fact, the growing relevance of building relationships with other non-ethnic entrepreneurs, formal institutions representing economic interests, and seeking professional advice become evident (Amin, 1995). Furthermore, the possibility of overlapping the new social and economic ties with the indigenous realities to pre-existing family and community networks opens up. The exit from ethnic markets and the entry into mainstream ones accentuates the objectives of status, profit and growth in the immigrant entrepreneur (Barrett et al., 1996). Accordingly, it has been noted that, over time, the motivations to become an entrepreneur tend to be similar to those of the indigenous population, and the search for independence, the desire to move away from a hierarchical subordination, and to carry on one's own projects become crucial (Masurel et al., 2002).

The evidence provided by Mushaben (2006) can be read in this way: if the language hurdle and the limitations associated with direct discrimination are excluded, the management hindrances faced by the Turkish entrepreneurs in Germany do not differ substantially from those of small German entrepreneurs. Piguet (1999) comes to similar conclusions, showing that the differences between ethnic business and native business tend to decrease while the perspectives of the two groups of companies seem to converge.

Pécoud (2005) and the supporters of the *convergence* hypothesis (Pécoud, 2004; Nee et al., 1994; Piguet, 1999) believe that the ethnic approach underestimates the widespread inclination towards interculturality of immigrant entrepreneurs and that the boundaries between migrant companies and native businesses are in reality quite porous. In this sense, a drawback of the paradigm of the ethnic economy is the lack of awareness regarding the spread of mixed – in-betweens – ventures while actually the relationships of employment, partnership, supply and sale can permanently involve migrants and natives (Pieterse, 2000). In addition, it has been observed that entry into mainstream markets requires information and management skills superior to those held on average by the individual immigrant entrepreneur. This leads to the involvement of non-co-ethnic collaborators and partners, and to the development of models of multicultural hybridism (Pécoud, 2004, 2010; Pieterse, 2000; Arrighetti et al., 2014a, 2017; Mueller 2014; Arrighetti et al., 2017). According to this interpretative stance, the majority of ethnic companies over time repeatedly overcome the constraints of the community and often resort to non-ethnic resources (Pécoud, 2005). Even for Italy, most recent studies have shown that cultural hybridism in ethnic enterprises does not seem to be associated with fragility and marginality. According to the evidence provided by Arrighetti et al. (2014b), businesses with hybrid connotations operating in Emilia Romagna (northern Italy) are characterised by a very strong orientation towards the local consumer and by an offer of non-ethnic products and services. Moreover, the same authors have shown that within hybrid firms, there are non-co-ethnic subjects who work both as members of the board and as employed workers.

Finally, the theory of *mixed embeddedness* developed by Kloosterman et al. (1999) downsizes the role of ethnicity to highlight the relevance of the regulatory institutional context in which migrant enterprises operate. In this perspective, a migrant venture must be evaluated not only in reference to the resources and relationships of the entrepreneur within the social environment to which it belongs, but also in relation to the institutional context, the state regulatory regime, and the competitive structure of the markets in which it operates. In fact, existing rules, laws and institutions impact business start-ups and their development (Beckers and Blumberg, 2013). By emphasising the role of the institutional context, the theory of *mixed embeddedness* de-emphasises the distances from cultural approaches and emphasises how the migrant enterprise is immersed in an environment identical to that in which the native enterprise operates, undergoes the same

conditioning, and must respect the same legal and formal constraints. It follows that, in many cases, the similarities between the two types of firms, in terms of structural and behavioural characteristics, may be greater than the differences.

Overall, the implications are that migrant ventures will show preference for mainstream markets, will have difficulties in accessing credit systems, and will encounter entry barriers similar to those experienced by indigenous companies. They will also be characterised by capital intensity, productivity and profitability that are not too different from those seen at native firms.

Hypothesis 2 (HP2): Ceteris paribus, most firm-specific variables in migrant businesses are not significantly different from those seen at native businesses.

2.3 Empirical evidence

As far as the firm-characteristic variables and the structure of company governance are concerned, the empirical literature, which compared (directly or indirectly) migrant firms with indigenous ones, reached an ambiguous result: most of the available evidence indicated that the two types of companies are different with respect to different structural and financial variables, but the exceptions are numerous and significant. Although a comprehensive survey of the contributions on the subject is not available, the information gathered in Table 1 shows that in relation to the level of capitalisation, the capital intensity of production, the entrepreneur's and firm's age, and the unit labour cost, migrant ventures report values significantly below the average. However, the same conclusions are less unambiguous in relation to other variables: access to credit, efficiency, productivity, and profitability in fact show conflicting results. In this sense, Beckers and Blumberg (2013) suggest that while first-generation Moroccan, Turkish and Chinese entrepreneurs analysed in their study operate with modest profits, the business activities of the second-generation entrepreneurs are able to achieve significant profitability. Nathan (2014) states that production complementarities between migrants and natives may increase substantially the return on capital and Constant and Zimmermann (2006) observe that the earnings of self-employed immigrants converge quickly to the earnings of self-employed natives. Heilbrunn and Kushnirovich (2007) show that, differently from what emerges in other empirical work, no significant differences appear between immigrants and indigenous entrepreneurs regarding lack of financial capital. Furthermore, some variables, such as export and intercultural propensity and firm's age, are either more favourable for migrant businesses or do not indicate an evident disadvantage. In this sense, Orser et al. (2008) support the view that immigrant-owned companies are more likely to export and that internationalisation is associated with migrant enterprise growth and efficiency. Board size is a further feature of the governance structure, with relevant (mainly negative) implications regarding

efficiency (Huther, 1997), level of goal alignment (Jaskiewicz and Klein, 2007) and performance of the firm (Cheng, 2008). Despite the importance of the topic, the relationship between ethnicity and board size has seen little investigation. Among the few contributions on the subject, Chaganti et al. (2008) argue that ethnic presence in the board is not related to the board size.

Tab. 1 Empirical literature evidence: migrant firms (MFs) vs native firms (NFs)

Variables/Proxies	Predominant empirical evidence
1) Financial resources and credit access a) Owner's Equity/Total assets b) Borrowing Costs/Total debts Jones et al, 1989; 1994; Deakins et al. 1995; Mulholland, 1997; Barrett, 1999; Bates, 2001; Ram et al, 2002; Blanchflower, Levine and Zimmerman (2003); Smallbone et al., 2003; Ram et al. 2008; Avery et al., 2009; Blanchflower 2009; Mestres 2010; Canello, 2016; Bobeva 2010; Mueller 2014; Collins, 2003; Mitchell, 2003; Constant, 2004; Elmlund, 2005; Toussaint-Comeau, 2005. Heilbrunn and Kushnirovich 2007; Aldén, and Hammarstedt, 2016.	MFs < NFs MFs = NFs
2) Under-capitalization: a) Owner's Equity/Total assets Jones et al. 1994; Ram et al 2003; Fairlie, 2005; Fairlie and Woodruff, 2008; Ram et al. 2008.	MFs > NFs
3) Capital intensity a) Tangible Assets/Sales Ram et al., 2002; Ram et al., 2007; Jones et al 2014; Canello 2016.	MFs < NFs
4) Productivity/efficiency a) Value added per employee b) Capital turnover ratio Heilbrunn and Kushnirovich, 2007; Ram et al., 2003; Vinogradov and Isaksen 2008.	MFs < NFs MFs = NFs
5) Labour cost: Sanders and Nee, 1987; Portes and Jensen, 1989; Sahin et al. 2012; Neville et al., 2014.	MFs < NFs

Finally, it is important to emphasise that some topics, especially those linked to the *convergence hypothesis*, are reported by literature as recent phenomena or are associated with evolutionary and differentiation processes that have affected migrant enterprises only in the last decades (Kloosterman and Rath, 2010; Arrighetti et al., 2014a). They probably could not have been discussed in previous works because they had not reached sufficient maturity and diffusion. Furthermore, as reported by Ma et al. (2013), the research questions and the methodologies employed have changed significantly over time. Not all approaches, especially those using samples of firms not controlled by industry, firm size and geographical location, are appropriate for direct

comparisons. All this contributes to account for the ambiguity of the results we have just highlighted, and, therefore, further empirical verifications are necessary.

Tab. 1 Empirical literature evidence: migrant firms (MFs) vs native firms (NFs) (continue)

Variables/Proxies	Predominant empirical evidence
6) Profitability (Earning) a) ROI; b) ROS; c) ROA; Beckers and Blumberg, 2013; Bates 1989; Li, 1994,1997, 2001; Jones et al., 2000; Kloosterman and Rath, 2001; Lofstrom, 2002; Ram et al. 2003; Jones et al.,1994, 2004; Constant & Zimmermann, 2006; Heilbrunn & Kushnirovich, 2007; Ram & Jones 2008; Danes et al., 2008; Nakhaie et al., 2009; Baycan-Levent and Nijkamp, 2009; Curci & Mackoy, 2010; Ensign and Robinson, 2011; Ndofor and Priem, 2011; Neville et al., 2014; Kushnirovich, 2015.	MFs < NFs MFs = NFs
7) Export propensity a) % of exporting firms Hatzigeorgiou 2010 Neville et al., 2014; Waldinger et al.,1990; Miera (2008), Orser et al., 2008; Portes et al. (2002); Zhou, 1992; Wilson and Portes, 1980; Kariv et al., 2009.	MFs >NFs
8) Firm's age a) Firm's age Cavalluzzo et al., 2002; Blanchflower et al., 2003; Aldén and Hammarstedt, 2016.	MFs < NFs
9) Entrepreneur's Age a) Members of board average age Desiderio and Salt, 2010; Mueller, 2014; Abdifatah and Robertson, 2016; Canello, 2016.	MFs < NFs
10) Intercultural Propensity a) nr. of nationalities represented in the board Hettlage R. (2008), Pieterse 2000, Pecoud, 2004, 2010; Arrighetti, Bolzani and Lasagni, 2014a and b, 2017; Mueller 2014; Arrighetti et al. 2017.	MFs >NFs
11) Board size a) n. of members of the board of directors Chaganti et al. (2008).	MFs =NFs

3. Methodology and data

3.1 Data

Data for this paper were drawn from two main statistical sources. The first is Cerved, a proprietary database that collects information on more than 1 million Italian firms yearly based on Italy's official company register. Focusing on active firms for manufacturing and services (professional services, transport, logistics, etc) sectors, it was possible to identify the country of birth for all members of the board of directors. Using this type of information, we were able to classify all firms

in two groups: native and migrant firms, according to some criteria discussed below. Cerved data were linked to balance sheet variables taken from the ISID (Intesa Sanpaolo Integrated Database) archive. ISID is a private database managed by the Intesa Sanpaolo Research Department. In the firm size classes that we considered (see below) and in the industries we analysed, the ISID archive contains 79% of the financial statements of Italian limited liability companies; this percentage rises to 88% if we consider only the manufacturing industry. All in, the ISID representativeness is fairly high.

Each member of the board of directors may be: a) born in Italy; b) born in other “industrialised” countries (EU-15, US, Japan, Switzerland, Norway, Israel, Canada, Australia, New Zealand)³; c) born in other countries. On this basis, excluding only those firms where 100% of board members are of type (b), namely born in “industrialised” nations, we have identified two main groups of enterprises as follows: *native (Italian) firms* (more than 50% of members of the board of directors were born in Italy) and *migrant firms* (at least 50% of board members were born in non-industrialised countries). For instance, when on the board we found two Italian and two non-Italian members, we categorised that firm as *migrant*, whereas when the board is made up of two Italians and one non-Italian member, we categorised that firm as *native*. Only firms retaining the same “status” (native or migrant) between 2011 and 2015 were considered⁴.

The sample of firms selected was then revised by eliminating the smallest units (with less than EUR 100,000 in turnover in 2012) and the largest ones (with more than EUR 10M in turnover) because we believe that some multinational affiliates may be present and should be left out of our work. The final sample identified includes 133,414 native firms and 1,556 migrant firms.

3.2 Empirical strategy: matching and logit regressions

Using the taxonomy discussed in the previous paragraph, our dataset can be analysed to test hypotheses HP1 (migrant firms are different from native ones) and HP2 (there is some degree of similarity between migrant and native enterprises).

First, it is necessary to consider the fact that the number of firms in the two groups (native and migrant) is not the result of a random statistical sampling. In particular, the group of native firms is largely wider than that represented by migrant firms within the ISID archives. Second, looking at the characteristics of originally selected sample enables us to show the concentration of migrant enterprises in ‘disadvantaged’ firm sizes and business sectors. As reported in Table 2, the relative presence of immigrant-owned companies is low in the manufacturing sector: 31.6% compared to more than 48% for native firms. Moreover, when the focus moves to services, it is evident that the

³ The complete list of countries is available from the authors upon request.

⁴ The degree of persistence for this phenomenon is relatively high.

relative share of advanced and profitable activities (information and communication, professional, scientific and technical businesses) is higher for native enterprises than for migrant ones. Finally, figures in Table 2 show that migrant companies are largely a small-scale business phenomenon, while in our sample there is a considerable number of medium-sized native firms. Consequently, we adopted a matched sampling approach (Rosenbaum and Rubin, 1985): we selected within the large group of native enterprises a sub-sample of “twin” units that can be combined with each migrant firm. This approach makes it possible to obtain a suitable sample for a “controlled” comparison between the types of firms in question, as some characteristics of the groups considered are quite similar in terms of construction⁵. In other words, using matching techniques we can establish an appropriate control group (Nichols, 2007). Our choice is in the spirit of Ho, Imai, King, and Stuart (2007): we use the matching methodology as non-parametric pre-processing of the data, adjusting the sample before performing our parametric analysis⁶.

To apply the matching procedure, it is necessary to establish a multidimensional similarity measure that allows us to “balance” the statistical combination starting from a set of available variables. The so-called “balancing” key observables used here are the size class (in terms of the value of turnover in 2012), the sector of activity (the ISTAT-ATECO divisions, at a 2-digits level), and the region in which a company operates. After calculating the distance, using a coarsened exact matching algorithm (Ho, Imai, King, and Stuart, 2007), it was possible to associate each of the 1,556 migrant firms with at least one Italian “twin” firm that is active in the same industry, operates in the same Italian region, and in 2012 recorded a similar turnover. In other words, our choice is to select only one “twin” native firm for each migrant enterprise. Therefore, our final sample is made of 3,108 observations (1,504 native firms plus 1,504 migrant firms). It is worth recalling that the number of native firms in our dataset (about 130,000) is much larger than the number of migrant ones (only about 1,500) and, thus, when searching for native firms with values for the key variables similar to the ones for migrant ventures, we were able to find sufficient suitable candidates for the matching. After having identified our “matched” sample, a multivariate regression technique was used to study the differences between the two groups. Typically, a logistic regression is used to study the association between a categorical dependent variable and a given set of one or more explanatory

⁵ This methodology is not frequently adopted in migrant entrepreneurship literature. A few exceptions are Crick and Chaudhry (1996), Herdandez and Kulchina (2016), and Hussain and Matlay (2007).

⁶ In particular, we performed a 1-to-1 coarsened exact matching (the command “cem” in STATA) without replacement, using the following three key balancing variables: the value of sales (5 classes), the sector (ISTAT-ATECO 2 digits) and the geographic locations of firms (Italian regions, NUTS 2).

variables⁷. In our case, the dependent variable is represented by a dummy variable assuming the value of 0 for each native firm, and the value of 1 for each migrant firm.

Table 2. Native and migrant firms in the unmatched sample: distribution by industry and sales quintile.

Industry	Native		Migrant		Total
	Firms	% share	Firms	% share	
Manufacturing	64,399	48.3	491	31.6	64,890
Transportation and storage ^a	11,944	9.0	205	13.2	12,149
Accommodation and food service activities	14,515	10.9	405	26.0	14,920
Information and communication (ICT, telecoms, etc.)	14,006	10.5	84	5.4	14,090
Professional, scientific and technical activities	18,361	13.8	169	10.9	18,530
Administrative activities ^b	10,189	7.6	202	13.0	10,391
Total	133,414	100.0	1,556	100.0	134,970

Size of sales - quintiles	Native		Migrant		Total
	Firms	% share	Firms	% share	
Sales - quintile #01 (lowest)	26,591	19.9	404	26.0	26,995
Sales - quintile #02	26,665	20.0	362	23.3	27,027
Sales - quintile #03	26,683	20.0	304	19.5	26,987
Sales - quintile #04	26,713	20.0	255	16.4	26,968
Sales - quintile #05 (highest)	26,762	20.1	231	14.8	26,993
Total	133,414	100.0	1,556	100.0	134,970

Notes: a = transport services, postal and courier activities. b = rental, travel agency, etc.

To derive a logit model, let p be the probability of being a migrant firm (case classified into group when dummy variable is 1), and $(1-p)$ the probability of being a native firm (case classified into group when dummy variable is 0). Therefore, the logit model will be:

$$\text{Logit}(P) = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \sum_{i=1}^n \beta_i X_i \quad (1)$$

where the vector X_i of our explanatory variables includes, first of all, two measures for capturing the role of financial resources and credit access. In fact, we use the ratio between owner's equity and total assets (*Owner's Equity/Total Assets*) and we also include the ratio of borrowing costs over

⁷ A possible alternative approach might be the Linear Discriminant Analysis (LDA). According to Hair et al (2006) and, more recently, to Moawad and Osman (2017), logistic regression can offer more flexibility and better outcomes than LDA, in particular when many predictor variables are continuous, as in our case.

total financial debt (*Borrowing Costs/Total Debt*), a measure that is useful for understanding if there is a gap in terms of costs for the indebtedness of the different categories of firms. It should be noted that the first one (*Owner's Equity/Total Assets*) is useful to identify possible differences between migrant and native enterprises in terms of under-capitalisation as well. Another explanatory variable is included to detect the differences in terms of capital intensity: the ratio between tangible assets and total sales (*Tangible Assets/Sales*).

Moving to explanatory variables oriented to assess the possible divergence in terms of efficiency, we include in the model the capital turnover ratio (turnover as a percentage of invested capital, *Capital Turnover Ratio*), which is often considered to be an indicator of management efficiency. Moreover, two other variables were included in our regression model: an index of labour productivity (*Value added per employee*) and the cost of labour per employee (*Wages*) in order to assess possible competitiveness advantages on the cost side for non-Italian firms.

Furthermore, two possible profitability indexes were included: return on assets (*Profitability-ROI*) and the return on sales (*Profitability-ROS*). A further variable included in the model is a dummy equal to 1 if the firm has declared some exporting activities and 0 otherwise (*Exporting Firm*). Unfortunately, in the ISID database, there are no data about the value of exports.

In order to examine the degree of similarity related to other entrepreneurship dimensions, we included in the regression the following explanatory variables: the average age for board members (*Mean age members of board*), the *age of firm* (and the same variable squared, to control for any non-linear effect), and also a dummy variable for firms having a relatively large board size (*Medium-large board size*) which is equal to 1 when board members are equal or more than three and 0 otherwise. Finally, we included an index for measuring the degree of intercultural propensity which is proxied by the number of nationalities on the board (*Intercultural Propensity*). In all the regressions, the dummies for the main geographical macro-areas (north, centre and south of Italy) have been inserted. All the financial and economic variables have been calculated using the values taken from the balance sheet data registered in the year 2012.

4. Results and discussion

4.1 Results

We describe the results of our work in two steps. First, we provide in Table 3 some basic descriptive statistics by firm group to assess some differences in firm-specific characteristics that might emerge from the comparison between migrant- and native-owned enterprises. In the last column of Table 3, an ANOVA F-test is added to indicate whether the unconditional mean value of each variable is significantly different for the two groups. After that, we discuss the results of a more standard

multivariate regression analysis, studying the role of firm-level variables in predicting the probability that a firm is classified in the group of migrant or native firms. As explained in the previous section, our results are obtained considering a matched sample of about 3,100 companies that are similar in terms of size, industry and geographic location⁸.

Table 3. Descriptive statistics (mean and median) for the matched sample, by group of firms.

	Native firms		Migrant firms		All firms		Obs	<i>F-test</i>
	Mean	Median	Mean	Median	Mean	Median		
Tangible Assets/Sales	0.61	0.11	0.28	0.06	0.44	0.08	3,108	36.0***
Borrowing Costs/Total Debts %	12.42	4.75	13.88	4.53	13.13	4.60	2,132	0.4
Owner's Equity/Total Assets	0.24	0.19	0.21	0.15	0.22	0.18	3,108	12.5***
Capital Turnover Ratio	1.49	1.24	2.06	1.64	1.77	1.44	3,108	58.5***
Labour prod.ty (value added/empl.)	42.68	35.33	42.32	28.26	42.50	32.08	2,755	0.0
Wages (labour costs/empl.)	27.61	26.53	26.07	21.00	26.84	23.67	2,755	4.3**
Profitability-ROI	0.09	0.07	0.11	0.08	0.10	0.07	3,108	2.5
Profitability-ROS	0.10	0.09	0.09	0.07	0.10	0.08	3,108	6.4**
Exporting Firm (dummy)	0.08	0.00	0.12	0.00	0.10	0.00	3,108	15.0***
Mean age members of board (years)	50.00	49.00	44.72	44.00	47.36	47.00	3,108	205.6***
Age of firm (years)	12.23	10.00	7.34	5.00	9.76	7.00	2,841	211.8***
Board Size	2.00	1.00	1.64	1.00	1.82	1.00	3,108	70.3***
Intercultural Propensity	1.01	1.00	1.47	1.00	1.24	1.00	3,108	379.0***

Source: our elaborations on Cerved and ISID data.

Note: Asterisks denote significance levels for ANOVA F-test: *=sig. 10%; **=sig. 5%; ***=sig. 1%. Labour productivity and wages are measured in thousands of euros. Board size is the number of board members. Intercultural propensity is proxied by the number of nationalities inside the board.

Table 3 shows that, first of all, the comparison between native and migrant firms in terms of capitalisation is only partially consistent with other previous results in the empirical literature. Indeed, the mean (and median) values for our proxies (*Tangible Assets/Sales* and *Owner's Equity/Total Assets*) for migrant firms are significantly lower than those for native firms. Unexpectedly, no statistically significant differences arise for borrowing costs paid by migrant and native companies. At the same time, regarding the efficiency dimensions, in our data, the capital turnover ratio is significantly higher for migrant enterprises than for Italian ones, while no significant gap is found in terms of labour productivity. Moreover, the comparison of profitability measures (ROI and ROS) seems to suggest that the differences in terms of mean and median are relatively small: ROI is slightly greater for migrant firms (but not statistically significant) while ROS is larger for Italian enterprises.

According to figures reported in Table 3, as expected from previous studies, migrant firms are significantly younger than Italian ones, but they also have on average board members who are younger than those operating in native firms. Interestingly, on the one hand, native-owned ventures

⁸ The actual number of observations used in regression is about 2,400 since not all variables were available for all firms in our matched sample.

have an average board size that is significantly larger than migrant firms, even though this difference is null in terms of median values. In fact, for both groups of enterprises, in 50% of the sample, the board is made up of a ‘solo’ entrepreneur. On the other hand, migrant enterprises display a larger mean value for the intercultural propensity (proxied by the number of nationalities inside the board) than native ones and show a higher propensity to be exporters. Finally, data in Table 3 show that on average the level of wages in migrant firms is significantly lower than in Italian firms. A complete view of correlations between main continuous explanatory variables is reported in Table 4.

A multivariate analysis reveals a significantly different interpretative outcome. The estimation of the equation (1) introduced above was carried out through a logit model. We construct a dependent variable which is 1 if the firm is a migrant firm, whereas it is 0 if the firm is native. Therefore, each positive (negative) coefficient estimated in our regression can be read as an increase (decrease) of the explanatory variable able to increase (decrease) the probability of being a migrant firm⁹. We decided to show two different sets of estimates (Table 5 and Table 6) because we have to consider that our profitability proxies, ROI and ROS, are highly correlated. Since they would not allow us to obtain statistically significant coefficients when used simultaneously in our regressions, we provide two different tables including the same list of regressors apart from the two above-mentioned variables. In addition to that, the data necessary for the construction of the ratio between financial expense and financial debt are available only for a subset of firms (about 2,100 observations) that has filed a more detailed version of the financial statements. For each table, we provided a first set of estimates (columns 1 to 2) that do not include the ratio of borrowing costs/total financial debt (*Borrowing Costs/Total Debt*), since the reduction in the sample size (as can be seen in columns 3 to 4) is sizeable and our preference is to show the results with a separate view. Likewise, we decided to show distinctly the results with (columns 1 and 3) and without (columns 2 and 4) an important regressor: *Intercultural Propensity*. The motivation for this choice relates to what is shown graphically in Figure 1: both exporting and non-exporting migrant firms recorded an average value of *Intercultural Propensity* that was larger than for native firms. Therefore, the discriminatory power of the *Exporting Firm* dummy vanishes when both variables are included in the specification. To see any change in the sign and significance for the *Export Firm* dummy, we decided to show it in separate regression estimates.

⁹ In Table 5 and 6, we reported the marginal effects, thereby allowing us to compare coefficients across variables and also across specifications.

Table 4. Correlations for explanatory variables.

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Tangible Assets/Sales	1											
(2) Owner's Equity/Total Assets	0.111***	1										
(3) Capital Turnover Ratio	-0.258***	-0.236***	1									
(4) Profitability-ROI	-0.117***	0.247***	0.191***	1								
(5) Profitability-ROS	0.188***	0.181***	-0.159***	0.617***	1							
(6) Labour prod.ty	-0.0369	0.0685**	-0.0236	0.212***	0.217***	1						
(7) Mean age members of board (years)	0.0637**	0.0404	-0.159***	-0.0972***	-0.0132	0.0444	1					
(8) Age of firm (years)	0.150***	0.152***	-0.180***	-0.112***	-0.0005	0.0273	0.398***	1				
(9) Board Size	-0.0344	0.0507*	-0.0545*	-0.0375	-0.0139	0.0466	0.0704**	0.215***	1			
(10) Intercultural Propensity	-0.0936***	0.0187	0.0391	-0.0143	-0.0457	0.0557*	0.00201	0.0285	0.450***	1		
(11) Borrowing Costs/Total Debts %	-0.0679**	0.00738	0.0391	0.0196	0.00918	0.0114	-0.0018	0.0084	-0.0098	0.042	1	
(12) Wages	0.0114	0.0229	0.00895	-0.0683**	-0.0749**	0.359***	0.176***	0.171***	0.119***	0.125***	0.0077	1

Note: Asterisks denote significance levels *=sig. 10%; **=sig. 5%; ***=sig. 1%.

Source: our elaborations on Cerved and ISID data. Board size is the number of board members.

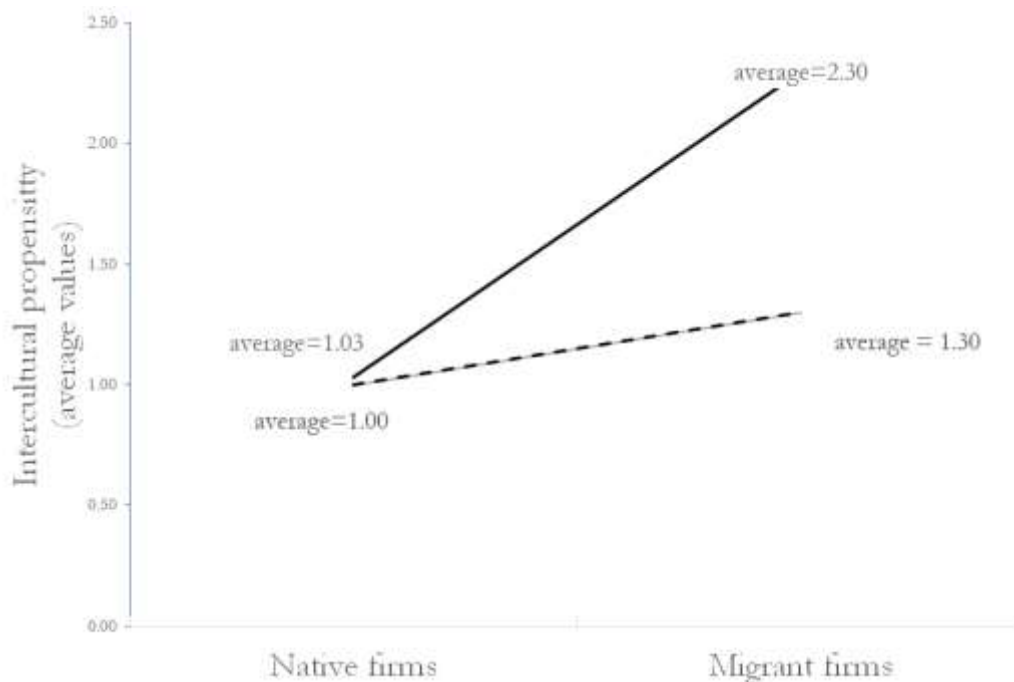


Figure 1. Average values of intercultural propensity for migrant and native firms, distinguishing between exporting (solid line) and non-exporting firms (dashed line).

Looking at the signs and significance of coefficients for the ratio between *Tangible Assets/Sales* and the ratio of *Owner's Equity/Total Assets*, we found no significant differences between migrant and native firms in terms of capital intensity and capitalisation. Likewise, results in Table 5 (see columns 3 and 4) show that there is no statistically significant dissimilarity between borrowing costs paid by migrant and native enterprises.

Migrant-owned firms operate with greater efficiency compared to native firms, as the coefficients for the capital turnover ratio are always positive and highly significant. The confirmation for a comparatively high value for the capital turnover ratio for migrant enterprises calls for an additional remark. High values for capital turnover ratios can be explained by a price policy that encourages an expansion of sales volumes, keeping profit margins low. In other words, with price competitiveness and, simultaneously, some control on profitability, migrant ventures are able to generate a more rapid rotation of invested capital than native firms (see also De Felice et al. 2015). In addition, the discriminatory power of labour productivity and wage variables is null in all estimates.

The coefficient for the dummy variable for exporting firms is always positive and highly significant with the exception of the models that include *Intercultural Propensity*: ie, we can argue that our data support the hypotheses that migrant firms are more able to export than indigenous ones, but, as stated above, since *Intercultural Propensity* is strictly associated with *Exporting Firm* and shows a larger

additional contribution as a predictor variable than the latter, it can dominate export propensity and cancel its statistical significance.

Table 5. Regression results: logit models estimating the probability of being a migrant vs a native firm (using ROI as proxy for profitability).

	[1]	[2]	[3]	[4]
Owner's Equity/Total Assets	0.035 (0.03)	0.0316 (0.03)	0.0646* (0.04)	0.0476 (0.04)
Borrowing Costs/Total Debts			0.0025 (0.02)	-0.0121 (0.02)
Tangible Assets/Sales	-0.0097 (0.01)	-0.0045 (0.01)	-0.0154 (0.01)	-0.0092 (0.01)
Capital Turnover Ratio	0.0570*** (0.01)	0.0468*** (0.01)	0.0504*** (0.01)	0.0326*** (0.01)
Labour prod.ty (value added/empl.)	0.000 (0.00)	0.000 (0.00)	0.0001 (0.00)	0.000 (0.00)
Wages (labour costs/empl.)	0.0007 (0.00)	0.00 (0.00)	0.0006 (0.00)	0.00 (0.00)
Profitability (ROI)	-0.0608 (0.06)	-0.0813 (0.06)	-0.0611 (0.08)	-0.0368 (0.07)
Exporting Firm (d)	0.2101*** (0.03)	0.0559* (0.03)	0.1955*** (0.04)	0.0475 (0.04)
Mean age members of board	-0.0073*** (0.00)	-0.0060*** (0.00)	-0.0068*** (0.00)	-0.0054*** (0.00)
Age of firm (years)	-0.0186*** (0.00)	-0.0156*** (0.00)	-0.0212*** (0.00)	-0.0169*** (0.00)
Age of firm squared (years)	0.0003*** (0.00)	0.0002*** (0.00)	0.0003*** (0.00)	0.0002** (0.00)
Large board size (≥ 3) (d)	-0.1683*** (0.02)	-0.3268*** (0.03)	-0.1300*** (0.03)	-0.2820*** (0.03)
Intercultural Propensity		0.5891*** (0.09)		0.6210*** (0.11)
Dummy Macroarea geogr.	Yes	Yes	Yes	Yes
Obs.	2,440	2,440	1,709	1,709
AUC (Area under ROC curve)	0.728	0.841	0.722	0.845

Note: Marginal effects for a logit regression from different specifications. Asterisks denote significance levels: *=sig. 10%; **=sig. 5%; ***=sig. 1%. The main criteria used for measuring the goodness of fit is the area under the ROC curve (AUC) using ROC curve analysis. The larger the value of AUC, the better the model used in data classification and prediction. Labour productivity and wages are measured in thousands of euros. Intercultural propensity is proxied by the number of nationalities inside the board.

Explanatory variables related to personal traits of the entrepreneur and the structure of corporate governance provide relatively significant support for the *Diversity hypothesis* (hypothesis 2). In fact, in all regressions, the coefficients for both the average age for board members and the firm age are negative and highly significant, supporting the view that migrant enterprises tend to be “younger” ventures than their native counterparts¹⁰. Moreover, the results in Table 5 offer additional insights

¹⁰ It should be noticed that the effect for the age of firm is non-linear, since we found a positive and significant coefficient for the same regressor squared.

regarding some firm-specific dissimilarities. On the one hand, migrant companies seem to have organisational forms that are less complex than those adopted by the native ones: the coefficient for the medium-large board size (≥ 3) dummy is negative and significant. On the other hand, the propensity for intercultural governance is significantly higher for migrant firms than for native ones. Moving to Table 6, since the pattern of estimates is very similar to that already seen in Table 5, it is relevant to focus on the coefficient for Profitability-ROS: we found no specification with statistical significance for this variable.

Table 6. Regression results: logit models estimating the probability of being a migrant vs a native firm (using ROS as proxy for profitability).

	[1]	[2]	[3]	[4]
Owner's Equity/Total Assets	0.0316 (0.03)	0.0261 (0.03)	0.0586 (0.04)	0.0462 (0.04)
Borrowing Costs/Total Debts			0.0028 (0.02)	-0.0121 (0.02)
Tangible Assets/Sales	-0.0073 (0.01)	-0.0017 (0.01)	-0.0137 (0.01)	-0.008 (0.01)
Capital Turnover Ratio	0.0534*** (0.01)	0.0420*** (0.01)	0.0472*** (0.01)	0.0303*** (0.01)
Labour prod.ty (value added/empl.)	0.0000 (0.00)	0.000 (0.00)	0.0001 (0.00)	0.000 (0.00)
Wages (labour costs/empl.)	0.001 (0.00)	-0.001 (0.00)	0.0006 (0.00)	-0.001 (0.00)
Profitability (ROS)	-0.1188 (0.08)	-0.1324* (0.08)	-0.0785 (0.10)	-0.07 (0.09)
Exporting Firm (d)	0.2093*** (0.03)	0.0550* (0.03)	0.1950*** (0.04)	0.0468 (0.04)
Mean age members of board	-0.0073*** (0.00)	-0.0060*** (0.00)	-0.0068*** (0.00)	-0.0054*** (0.00)
Age of firm (years)	-0.0184*** (0.00)	-0.0153*** (0.00)	-0.0210*** (0.00)	-0.0168*** (0.00)
Age of firm squared (years)	0.0003*** (0.00)	0.0002** (0.00)	0.0003*** (0.00)	0.0002** (0.00)
Large board size (≥ 3) (dummy)	-0.1679*** (0.02)	-0.3257*** (0.03)	-0.1300*** (0.03)	-0.2819*** (0.03)
Intercultural Propensity		0.5884*** (0.09)		0.6209*** (0.11)
Dummy Macroarea geogr.	Yes	Yes	Yes	Yes
Obs.	2,440	2,440	1,709	1,709
AUC (Area under ROC curve)	0.728	0.841	0.722	0.846

Note: Marginal effects for a logit regression from different specifications. Asterisks denote significance levels: * = sig. 10%; ** = sig. 5%; *** = sig. 1%. The main criteria used for measuring the goodness of fit is the area under the ROC curve (AUC) using ROC curve analysis. The larger the value of AUC, the better the model used in data classification and prediction. Labour productivity and wages are measured in thousands of euros. Intercultural propensity is proxied by the number of nationalities inside the board.

Finally, we can underline the good discrimination ability of our logit regression when applied to our matched sample of migrant and native enterprises. Indeed, the values of the area under the ROC curve (AUC) in various specifications varies between 0.72 and 0.85¹¹.

4.2 Discussion

This paper examined the differences and similarities between migrant and native enterprises using a matched sample of companies in Italy. Focusing on firm-specific variables and on the structure and composition of governance, we explore whether the dissimilarity between native and migrant companies, highlighted by much of the literature, is intrinsic to the organisational forms adopted and to the constraints to which entrepreneurial immigrants are subject or whether that is associated with an over-representation of migrant companies in low-profit sectors, in the segment of the very small firms, or in disadvantaged geographic areas. As a framework for the discussion, Table 7 summarises our findings.

Table 7. Variables considered in our empirical analysis and supported hypotheses.

Variables	Supported hypothesis	Our results MFs vs NFs	Migrant firm's disadvantage
1) Financial resources and credit access	HP2 Similarity	MFs = NFs	No
2) Under-capitalization	HP2 Similarity	MFs = NFs	No
3) Capital Intensity	HP2 Similarity	MFs = NFs	No
4) Productivity/efficiency	HP1 Diversity + HP2 Similarity	MFs > NFs MFs = NFs	No
5) Labour costs	HP2 Similarity	MFs = NFs	No
6) Profitability (Earnings)	HP2 Similarity	MFs = NFs	No
7) Export propensity	HP1 Diversity	MFs > NFs	No
8) Firm's age	HP1 Diversity	MFs < NFs	?
9) Entrepreneur's age	HP1 Diversity	MFs < NFs	?
10) Intercultural Propensity	HP1 Diversity	MFs > NFs	No
11) Board Size	HP1 Diversity	MFs < NFs	?

In the event that the dissimilarity is due to intrinsic characteristics of the ethnic enterprise with respect to indigenous entrepreneurship, the employ of a peer-matching methodology should continue to point to a gap in terms of efficiency, capital intensity and profitability among the two groups of firms, to the detriment of migrant companies. If the differences are not significant, on

¹¹ The area under the curve ranges from 1, corresponding to perfect discrimination, to 0.5, corresponding to a model with no discrimination ability.

the contrary, it can be concluded that the gap is largely exogenous and not attributable to specific shortcomings in the management and access to economic and financial resources by the migrant company. The estimates illustrated in the previous section seem to confirm this last hypothesis. Our empirical results provide a validation for hypothesis 1 (*Diversity hypothesis*) for a very limited number of variables. Various measures of profitability and proxies of credit access, capitalisation, capital intensity, labour per capita costs, and productivity show insignificant dissimilarities between migrant and native firms (hypothesis 2 (*Similarity hypothesis*)). Migrant firms tend to be different from native ones in terms of efficiency (capital turnover ratio) and export performance. But in both cases the averages are higher in the former than in the latter group. Entrepreneurship and governance structures appear to be dissimilar, but in this circumstance, there is no explicit weakness at migrant companies compared to native ones. The average age of firms and board members turned out to be significantly lower in migrant than in indigenous enterprises. It may depend on the disadvantages in finding a job (obtaining an income whatever it is), and at the same time, on the recent expansion of the migratory phenomenon in Italy, which inevitably involves young people. A lower incidence of companies run by a relatively large board of directors points to, on the one hand, a wide presence of individual entrepreneurship or a highly concentrated governance structure, and, on the other hand, particular care taken to avoid misalignment of the behaviours of the partners that, as a large segment of the literature previously mentioned highlighted, grows as board size increases. Our data show that migrant enterprises are characterised by a relatively high propensity to overcome the boundaries of the community and to resort to non-ethnic resources. The presence of Italians or other non-ethnic partners on the board suggests a similar vision of how businesses should be managed among a large portion of migrant and native entrepreneurs. And, this is also a clue pointing to proactiveness, not of fragility.

Taken together, the evidence in our paper suggests that existing differences between native and migrant firms are mainly due to personal traits of the entrepreneur and to a remarkable exporting performance by immigrant-owned enterprises, while for other firm-specific attributes, the two groups are reasonably similar and certainly less different than what is highlighted in the dominant literature. Finally, a condition of explicit disadvantage does not arise, given that, in most cases, diversity means better average value of the independent variable for migrant firm than the native ones.

5. Conclusions

The main research question related to the present work concerns the existence or not of significant differences between native and migrant companies with reference to the firm-specific variables and to the characteristics of the governance structure.

Much of the literature on ethnic entrepreneurship shows a substantial gap between migrant and indigenous firms. The former are characterised by economic and financial constraints and entrepreneurial resources that confine them to a condition of inferiority compared to the latter. Recently, new strands of research have emphasised a greater variety of strategic and performance profiles for migrant companies. In addition, the hypothesis has been made that migrant companies share many aspects of the management and availability of resources with native businesses, especially SMEs. The present work belongs to this last strand of research.

A matched-pair analysis allowed us to improve the comparison between the two types of companies and to refine the empirical findings. Controlling by firm size, industry and geographic location, the firm-specific variables of migrant companies are apparently more similar to those of native ventures than expected. Evidence shows that previous findings concerning diversity of businesses established by immigrants are likely biased by methodological choices that did not take into account the concentration of these companies in 'disadvantaged' firm sizes, activities or geographic locations. Thus, the weakness of the migrant firm appears to be largely related to the economic opportunities available and to the market spaces to which it can have access.

Excluding this, proxy values for efficiency, capital intensity and profitability are not significantly different (or not lower) than those for native-owned small businesses.

It is noteworthy the high propensity to export for migrant companies and their strong orientation to develop multicultural partnerships. Consequently, it is evident that at least a portion of the migrant companies are able to take advantage of bridging skills to enter foreign markets. The transnational resource approach (see Section 2) finds significant empirical validation, as ethnic diversity in the board composition seems to explain a richer articulation of market policies and non-traditional approaches to business management. Furthermore, the development of relationships with indigenous entrepreneurship and non-co-ethnic communities is likely to be a lever to overcome the managerial limits that SMEs in general often encounter.

In this perspective, a greater multicultural inclination and a lower average size of the boards of migrant companies compared to the native ones appear to be elements of strength, not of weakness. Moreover, the differential in the entrepreneurs' and businesses' average ages can be traced, on the one hand, to a more recent increase of migration flows into Italy (as well as for most southern European countries) and, on the other, to self-employment choices resulting from the urgent need to obtain a minimum level of income.

The limits of this work are at least twofold: *firstly*, the entrepreneurial team is insufficiently analysed. A broader set of variables characterising entrepreneurship in terms of motivation, growth strategies, and ability to develop networks would allow for a more accurate verification of the similarity hypothesis; *secondly*, the evidence provided that ethnic entrepreneurship is anything but homogeneous: solo entrepreneurs and micro-enterprises focused on local markets coexist with

firms that are likely to grow, are able to export, and are engaged in partnerships with non-co-ethnic individuals. Instead, frequently the migrant enterprise is represented as a subset of uniform and poorly differentiated organisational entities. Therefore, a deeper exploration is necessary to gain a better understanding of the intra-migrant firm differentiation processes.

Finally, the partial validation of the similarity hypothesis suggests the policies dedicated exclusively to migrant ventures should be reconsidered. With the exception of training in the domestic language, institutions and norms, evidence supports initiatives where migrant enterprises are conceived as a component of a broader economic aggregate and migrant firms are viewed as constrained by growth and managerial drawbacks not unlike those seen at indigenous enterprises.

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