

Italian Diaspora and Foreign Direct Investment: A Cliometric Perspective

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Abstract: Recent economic literature highlights that migrant networks help to overcome the informal barriers that exist in the international markets and boost international investment. Empirical studies on different countries confirm this prediction. This paper estimates (OLS-IV) an econometric model to study the impact of both emigration and immigration on Italy's bilateral foreign direct investment (FDI). The main result is that only the Italian diaspora has a significant positive effect on Italy's both inward and outward FDI. A theoretical framework, a profile of the diaspora and of immigration in Italy and some exemplary entrepreneurial histories help to interpret the econometric evidence.

Keywords: International investment, migrant networks, entrepreneurial histories

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More than other European countries, Italy has an important history of mass emigration, dating from the mid-XIX century and, more than other nations, maintains strong links with its diaspora. They concern cultural and social matters, but also citizenship and political affairs. Italian emigrants and their offspring are Italian citizens, vote in the country's political elections and, since 2006, have their own representatives in parliament. While these ties have become stronger with time, mass emigration has receded and finally reached an end by the beginning of the 1970s.

The remnants of other European countries' times of emigration of the past are essentially some similarities with their ex-colonies and protectorates, regarding legal systems, norms, language. Perhaps because of the labour rather than imperial nature of its emigration, Italy has maintained links that relate directly with the people of the diaspora, rather than with the foreign countries of destination.

In more recent times, the rich European economies have become receiving countries, and many international links are now built by the immigrant populations. Fullilove depicts the transnational networks of migrants as world wide webs, which are 'the human face of globalization'.¹ The economic literature has focused on the impact of networks on trade and investments between the immigrants' countries of origin and of destination. Its base hypothesis is that transnational networks boost international trade and investments because they help to overcome the barriers – due to differences in cultures, institutions and languages – that separate countries in world markets.²

Like the other rich European economies, Italy is now a receiving country. Since the beginning of the 1970s, immigration inflows have been growing rapidly, and immigrants now count for at least 5% of the total population. Immigrants, therefore, can be expected to influence Italy's exchanges with their countries of origin, as they do in other economies. However, Italy has also maintained strong ties with its diaspora, and these may also affect its bilateral exchanges. Hence, Italy stays at the centre of two potential sets of networks and, as such, represent a case of particular interest: both emigrants and immigrants could influence international transactions. Moreover, the distribution of their countries of destination and origin mostly do not overlap geographically, and, as a consequence, if significant, their influences should add up.

This paper adds to this body of literature by focusing on the impact of both immigration and emigration on Italy's bilateral foreign direct investments (FDI), and tries to understand whether and why one or the other set of networks may prevail. The paper is structured as follows.

¹ Fullilove (2008), 'World Wide Webs', p. vii.

² Among empirical studies that document a positive impact of immigrants on bilateral trade and investment are, on the UK: Girma and Yu, 'The Link Between Immigration and Trade'; on France: Combes *et al.*, 'The Trade-Creating Effects'; on Germany: Buch *et al.*, 'Where Enterprises Lead'; on Spain: Blanes, 'Immigrant's Characteristics'; on the US: Gould, 'Immigrant Links'; Head and Ries, 'Immigration and Trade Creation'; Dunlevy, 'The Impact of Corruption'; Kugler and Rapoport, 'International Labor'.

Section I outlines the theoretical framework. It is based on the explanation of the role of diaspora in prompting business between countries provided by matching and network models³ and on the strand of literature on social networks that analyses the interactions among individuals, within and between networks, in terms of ‘strong’ and ‘weak’ ties.⁴

Section II tests the relationship between migrant networks and the Italian FDI by estimating an econometric model (OLS-IV). It takes into account the stocks of Italian emigrants abroad and immigrants in Italy in the 1990-2004 period, as well as a number of other proxies for socio-cultural and institutional similarities between countries (i.e distance, quality of governance, regional agreements, religion) that can influence investment decisions by firms. The main result is that only the Italian diaspora has a significant positive effect on Italy’s both inward and outward FDI.

Section III presents a historical profile of Italian diaspora and of immigration in Italy that helps to interpret the results of the econometric analysis. In particular, it focuses on the direct ties between the communities of migrants and their countries of origin. By considering the social, cultural, institutional and economic dimensions of these ties, it shows that the strong ties that have developed between the Italian diaspora and the home country have, on the one hand, prompted FDI from and to those countries where there is a sizeable Italian community, but, on the other hand, may have led to the rejection of other interactions that would qualify as weak ties, as those with the networks of immigrants in Italy.

Sections IV and V present some exemplary entrepreneurial histories of outward and inward Italian FDI for which emigrants’ strong ties played a relevant role. As regards outward FDI, these ties have provided information, financing, managerial skills, labour force, distribution channels and demand provided to Italian firms desiring to invest abroad, while inward FDI have crucially relied on the information element. Section VI concludes. The Appendix provides details on data and sources.

I

Recent studies in economics show that differences between countries in culture, institutions and social norms are informal barriers that obstruct trade and international investments and that the international migration of people, in particular the ethnic and business transnational links that migrants and diaspora build across countries, tend to lower these barriers.⁵

³ Rauch, ‘Business and Social Networks’; Casella and Rauch, ‘Anonymous Market’; Rauch and Casella, ‘Overcoming Informational Barriers’.

⁴ Granovetter, ‘The Strength of Weak Ties’; Greif, ‘Institutions and International Trade’.

⁵ Rauch, ‘Business and Social Networks’; Gould, ‘Immigrant Links’.

Some theoretical explanations for the economic role of diaspora are provided by matching and migration models.⁶ Rauch and Casella develop a model of matching in the international markets where entrepreneurs search for partners of other countries with the aim of producing jointly. Immigrants supply entrepreneurs with information and provide matching and referral services on business opportunities in their home countries. The probability of successful matching is higher for entrepreneurs endowed with the information and the ties provided by immigrants.⁷ Several empirical studies have found a positive and significant impact of migrant networks on bilateral trade and investment between their destination and home countries.⁸

Any group of migrants is supposed to exert a positive impact on a country's external transactions, independently of their ethnicity. These models, however, do not contemplate another possibility, which is that, because of a lack of trust, entrepreneurs may reject the information and referral services provided by some groups of immigrants. Trust on the information provided by heterogeneous agents may depend on the ethnic or cultural vicinity between these agents and the potential users. As a simplifying example, consider a country where entrepreneurs can choose between the ties provided by two types of individuals, immigrants, who belong to other ethnic groups, and emigrants, who are of their same ethnicity. All agents, immigrants and emigrants, supply ties that objectively lead to the same returns and each of them relate to different foreign partners or countries (there is no overlapping). If the entrepreneurs rely more on the information provided by individuals of their same ethnicity (emigrants), and if this is so to the point that some or all of the ties supplied by the other agents (immigrants) are rejected, then the country's number of successful matching and overall returns in the international markets decreases together with the level of inter-ethnic trust.⁹ At the two opposite extremes, for very low trust levels, only the emigrants' ties will be utilized, for high and not-binding levels all the ties supplied will be used.¹⁰

⁶ Casella and Rauch, 'Anonymous Market'; Rauch and Casella, 'Overcoming Informational Barriers'; Rauch and Trindade, 'Ethnic Chinese Networks'; Kugler and Rapoport, 'International Labor'.

⁷ Rauch and Casella, 'Overcoming Informational Barriers'.

⁸ Relatively to trade: Gould, 'Immigrant Links'; Head and Ries, 'Immigration and Trade Creation'; Girma and Yu, 'The Link between Immigration and Trade'; Wagner *et al.*, 'Immigration and the Trade of Provinces'; relatively to FDI: Gao, 'Ethnic Chinese Networks'; Tong, S. J. 'Ethnic Networks'; Buch *et al.*, 'Where Enterprises Lead'; Kugler and Rapoport, 'International Labor'; Docquier and Lodigiani, 'Skilled Migration'.

⁹ This example assumes that matching and production abroad concerns only the native entrepreneurs of each country and not migrants themselves.

¹⁰ In the spatial model of Casella and Rauch individuals may reject the ties that lead to returns that are certain but lower than the uncertain returns of untied matching (Casella and Rauch, 'Anonymous Market'). Differently, in our case some ties are rejected because the individuals providing the ties are not trusted by the entrepreneurs, even when the effective returns are the same for both the accepted and the rejected ties. The lack of trust depends on the ethnic characteristics of the individuals, not on their 'spatial' positions in the matching model. Goldberg *et al.* present a principal-agent model of investments abroad where principals-investors are subject to moral hazard by the agents linked to the investments abroad. In our assumptions, investors consider the risk of moral hazard to be higher with immigrants than with emigrants, despite the effective risk is the same. The attitude is similar to that related to discrimination in the labor market (Goldberg *et al.*, 'Foreign Direct Investment'). A different strand of the literature takes into account the

Cohesiveness within social groups and relations between groups are analyzed by a strand of social networks theory. Granovetter analyses the interactions taking place among individuals belonging to a group or society and defines them in terms of ‘strong’ and ‘weak’ ties.¹¹ Ties are strong when everybody within the group knows each other, while ties are weak when each individual may know each other’s relevant characteristics either directly or by referral. The contours of weak-ties networks are less sharply defined, and members of the network interact with individuals of other groups more often than in the strong-ties case. Ties crucially affect the economic performance of groups or societies. As innovation and information flow more rapidly when running through both direct and indirect channels, the more vibrant economies are those characterized by the predominance of weak ties. In Granovetter’s view, this determines “the strength of weak ties”. Closed coalitions, in contrast, impose a limit to the spread of information and to profitable economic interactions.

Greif analyses the social, cultural and institutional factors through which transnational networks affected trade and investment in history.¹² Similarly to Granovetter, he maintains that members of diasporas with strong ties, such as the Maghribis during the Middle Ages, exerted a positive impact on the economic transactions between the countries where they resided, but also that they rejected other potentially more profitable and efficient interactions with networks and countries that were external to their coalition.

We have seen that recent empirical literature on transnational networks focused on the impact of immigrants on the bilateral economic interactions between several countries. Italy is a case of particular interest in this respect because it allows the study of the impact of both immigrant and emigrant networks. In fact, Italy has experienced massive flows of people in both directions: outward, since the mid nineteenth century until the 1970s, and inward, with rapidly growing immigration, since the 1970s. According to the basic insights of networks theory, Italy should stand at the center of a double set of world wide webs, one generated by the Italian diaspora and the other by the immigrants, and both should positively affect bilateral FDI.

The networks of emigrants and immigrants, however, differ in an essential aspect: while the former are of the same ethnicity as Italian natives, and the latter are composed by an heterogeneous collection of diverse ethnicities. According to the theories of ties and coalitions of Granovetter and Greif, these two sets of networks could affect Italian FDI in a different way if, for example, Italian entrepreneurs tended to prefer the ties supplied by individuals of their own ethnicity.

characteristics of migrants by distinguishing between skilled and unskilled individuals (Kugler and Rapoport, ‘International Labor’; Docquier and Lodigiani, ‘Skilled Migration’).

¹¹ Granovetter, ‘The Strength of Weak Ties’.

¹² Greif, ‘Institutions and International Trade’.

More precisely, an econometric testing showing a positive impact of both immigrants and emigrants on Italy's FDI would suggest that Italian entrepreneurs utilize in the same way, and trust equally, the ties provided by individuals of their same ethnicity and by immigrants and, also, that the immigrants themselves make use of their ties with the home countries. In this case, the 'Italian network', including the diaspora and entrepreneurs in Italy, would qualify as of a weak-ties type. Conversely, if only members of the diaspora significantly affected FDI, the 'Italian network' could be seen as a strong-ties coalition, which does not interact with the immigrant networks while, at the same time, the latter do not develop their own transnational links. Finally, if only immigrants affected FDI, then it could be presumed that entrepreneurs privilege the weaker, but newer, ties provided by these networks.¹³

II

In this section we test the relationship between migrant networks and Italian FDI by estimating an econometric model (OLS-IV) that takes into account the stocks of Italian emigrants abroad and of immigrants in Italy, assuming that in principle any of these networks may provide matching and referral services to investors. Moreover, together with distance, which is meant to capture transaction and other costs that increase with the geographic distance between countries, we also consider some proxies for the socio-cultural and institutional similarities between countries, as quality of governance, regional agreements and religion. These similarities, which may have been inherited from colonial times, tend to lower the informal barriers that impede international investments.

We consider the FDI position of 51 foreign countries with respect to Italy (inward FDI) and also the FDI position of Italy in these economies (outward FDI), for which Oecd and Unctad statistics are available.¹⁴ We take into account the average FDI stocks for each country over the period from 1990 to 2004. Details on data and sources of our dataset are provided in Table A1 in the Appendix. Following Goldberg *et al.*¹⁵ we choose a specification of the econometric model which focuses on the 'human' factors determining FDI. We are not attempting to explain the level of FDI from one

¹³ In the case of both immigrants and emigrants positively affecting FDI, it could be also be hypothesised that each set of networks works independently and as a closed coalition: Italian entrepreneurs with emigrants, and immigrant networks on their own. While this cannot be excluded in theory, in practice it is difficult to conceive immigrants as isolated communities within the host economy that invest abroad and receive investments from abroad.

¹⁴ Albania, Algeria, Argentina, Australia, Austria*, Brazil, Bulgaria, Canada, Chile, China, S. Korea, Croatia, Denmark*, Egypt, France*, Germany*, Japan, Greece*, Hungary, India, Indonesia, Iran, Ireland*, Israel, Libya, Luxembourg*, Malaysia, Morocco, Mexico, Norway, Netherlands*, Philippines, Poland, Portugal, UK*, Czech Rep., South Africa, Romania, Russia, Singapore, Slovakia, Slovenia, Spain*, USA, Sweden*, Switzerland, Thailand, Tunisia, Turkey, Ukraine, Venezuela. *: EU-15.

¹⁵ Goldberg *et al.*, 'Foreign Direct Investment'.

country to another, which depends upon many factors, both for the source country and the destination country.¹⁶ More precisely, we focus on the impact of the human factors on the ‘abnormal’ stocks of bilateral FDI, i.e. on those stocks that exceed or fall short of a country’s propensity to invest globally. For example, we measure France’s share of FDI into Italy relatively to the sum of all 51 countries’ FDI in Italy (which is France’s propensity to invest in Italy) and the share of France’s FDI in the world relatively to the sum of all 51 countries’ FDI in the world (France’s propensity to invest globally). Then we say that France invests an ‘abnormal’ amount in Italy if the proportion of Italy’s inward FDI originating from France is larger than the share of France’s FDI in the world. Symmetrically, we take into account also Italy’s abnormal investments abroad, by considering the part of Italian FDI in each partner country that exceeds or falls short of Italy’s propensity to invest globally. Since we are now dealing with FDI from only one country, we do not need to normalize by the total size of a country’s FDI as we did when considering inward FDI.

To determine the effect of information on the amount of FDI coming from a particular country and avoid the effect of scale – large countries invest more and receive more FDI – we employ a two-step estimation procedure for FDI into Italy (inward FDI). First we estimate

$$(1) \frac{FDI_{i,IT}}{\sum FDI_{j,IT}} = \alpha + \beta_1 \frac{FDI_{i,world}}{\sum FDI_{j,world}} + \xi_i$$

The dependent variable in Eq. (1) $\frac{FDI_{i,IT}}{\sum FDI_{j,IT}}$ measures the share of country i relative to the sum of all 51 countries’ FDI in Italy. The independent variable $\frac{FDI_{i,world}}{\sum FDI_{j,world}}$ is a scale factor (world normalization) that measures the share of country i ’ FDI worldwide relative to the sum of all 51 countries’ FDI in the world. This normalization takes into account the fact that large countries invest more and receive more FDI. We can interpret the residual term ξ_i as the ‘abnormal’ amount of FDI by country i in Italy relative to what we would expect given the importance of country i in the total FDI of the world. Countries with relatively large FDI in Italy vis-à-vis their worldwide FDI will have a positive residual.

The residuals obtained from Eq. (1) are shown in Table A2 in the Appendix. We can note that 18 countries out of 51 show positive abnormal inward FDI. Those showing the highest values

¹⁶ Among them, the size of the economies (e.g. GDP or population) and their wealth (e.g. per capita GDP), labour and capital costs, health and safety regulations, the availability of local knowledge pools or natural resources, the necessity of avoiding import duties. On the determinants of the *level* of Italian inward and outward FDI, see Murat and Pistoiesi, ‘Emigrants and Immigrants Networks’.

(Switzerland, Netherlands, Luxembourg, France, UK and Germany) have been amongst the main destinations of the Italian diasporas and nowadays host a sizeable Italian community.

Our objective is to explain this ‘abnormal’ FDI in terms of the relative quality of information on investment opportunities in Italy available to investors from country i . On that purpose, we estimate the following equation:

$$(2) \xi_i = \beta_1 + \beta_2 \frac{EMI_{IT,i}}{\sum EMI_{IT,j}} + \beta_3 \frac{IMMI_{i,IT}}{\sum IMMI_{j,IT}} + \beta_4 DIST_i + \beta_5 GOV_i + \beta_6 CH_i + \beta_7 EU_i + v_i$$

where $\frac{EMI_{IT,i}}{\sum EMI_{IT,j}}$ is the share of the Italian emigrants in country i relative to the total of Italians in

the 51 countries of our sample; $\frac{IMMI_{i,IT}}{\sum IMMI_{j,IT}}$ is the share of immigrants from country i relative to the

total immigrants in Italy from the 51 economies considered.¹⁷ EMI and $IMMI$ are respectively the stock of emigrants from Italy to country i and the stock of immigrants in Italy from country i . $DIST$ is the distance between country i 's capital city and Rome (km), which captures the role of proximity in affecting investment decisions and other investment costs that increase with distance. GOV is an index of the quality of institutions and governance, which we have derived from Kaufmann *et al.*:¹⁸ this index's values are a positive function of civil liberties, political rights, independence of the media, political stability, quality of bureaucracy, supply of public services, effectiveness and predictability of judiciary institutions and enforceability of contracts, and a negative function of regulatory burdens on foreign trade and business development and corruption.

As a proxy of ‘culture’, we include a variable on religion: CH is the share of people of Christian religion, including the Orthodox, in the overall population. A common market and institutional similarity role is captured by the dummy EU , that equals to 1 if a country is a member of the European Union in the 1995 (EU-15) and equals to 0 if not. This variable captures Italy's different propensities to invest (or receive investment) into (or from) the EU.¹⁹

¹⁷ In another work we also present regressions where the network effect is proxied by the stocks of migrants in logs. The inclusion of the stocks instead of the shares of migrants does not alter the outcome of the econometric exercise. See Murat, Pistoresi and Rinaldi, ‘Migrant Networks’.

¹⁸ Kaufmann *et al.*, ‘Governance Matters’.

¹⁹ Actually, this two-step regression procedure is not necessary, and we use it only to exhibit in the Appendix the residuals from the first stage to show which countries have positive or negative ‘abnormal’ FDI. All results we obtain from such a two-step procedure are very similar if we do one regression with the same dependent variable, but include our other explanatory variables on the right-hand of Eq. (1), as in the following one-step regression:

$$\frac{FDI_{i,IT}}{\sum FDI_{j,IT}} = \alpha + \beta_1 \frac{FDI_{i,world}}{\sum FDI_{j,world}} + \beta_2 \frac{EMI_{IT,i}}{\sum EMI_{IT,j}} + \beta_3 \frac{IMMI_{i,IT}}{\sum IMMI_{j,IT}} + \beta_4 DIST_i + \beta_5 GOV_i + \beta_6 CH_i + \beta_7 EU_i + v_i$$

Estimates from this one-step regression are presented in Murat, Pistoresi and Rinaldi, ‘Migrant Networks’.

We also model Italy's outward FDI and the variables which should help Italian investors to have access to information and judge the quality of investment opportunities abroad. Since we are now dealing with FDI from only one country, we do not need to normalize by the total size of a country's FDI as we did when considering inward FDI.²⁰ Hence, for Italy's outward FDI we simply estimate the following equation:

$$(3) \frac{FDI_{IT,i}}{\sum FDI_{IT,j}} = \alpha + \beta_1 \frac{EMI_{IT,i}}{\sum EMI_{IT,j}} + \beta_2 \frac{IMMI_{i,IT}}{\sum IMMI_{j,IT}} + \beta_3 DIST_i + \beta_4 GOV_i + \beta_5 CH_i + \beta_6 EU_i + \zeta_i$$

where the control variables are the same as for Eq. (2). Table A3 in the Appendix shows that Italy's outward FDI have 'abnormal' values in 11 countries out of 51. Most of them (Netherlands, Luxembourg, United States, France, UK, Germany, Brazil and Argentina) host large Italian communities.

The expected signs of the regressors are the same for both Eq. (2) and Eq. (3), that is, for both inward and outward abnormal FDI. We expect, except for distance, positive coefficients for all the control variables: they should increase the FDI (dependent variable) via a reduction of the information and other transaction costs related to investments abroad.²¹

In Tables 1 and 2 we present the results from the OLS estimation respectively of Eq. (2) for Italy's inward FDI and Eq. (3) for outward FDI. The estimates in columns 1 are from a general model where all the potential determinants of FDI are included, while in columns 2 we present a final parsimonious specification. F-tests of the model reduction strategy are presented in both Tables.²²

Table 1 shows that all the statistically significant variables (distance, world normalisation and emigrant networks) for inward FDI have the expected signs. A significant pro-inward FDI effect of Italian emigrants is always present. Conversely, a significant negative sign of immigrants in Italy appears in all the models. The quality of institutions (GOV), cultural and religion similarity (CH), and the proximity and historical common market area (EU dummy) do not play a significant role in explaining the propensity to invest in Italy.

Table 2 also reveals a significant pro-outward FDI effect of Italian emigrants. This is present in all the regressions, while immigrants in Italy are not statistically significant. Among the other independent variables, only the EU dummy is significant in explaining Italy's 'abnormal' outward

²⁰ Here we are considering a country's FDI (Italy's outward FDI) and not a variety of countries with different total FDI. In other words, the scale factor (e.g., the world normalization) is always the same across the cross-sectional units.

²¹ We have also controlled for the GDP and per-capita GDP. Both variables are not statistically significant in determining Italy's 'abnormal' inward and outward FDI. Results are available on request.

²² We do not report the intermediate steps of the reduction from 'general to specific' model. Also note that a 'specific to general' strategy produces the same results. Results are available on request.

FDI. It shows that Italy's propensity to invest within the EU is significantly greater than its propensity to invest in other areas.

These results confirm the findings of a previous paper, focused on trade rather than FDI: while emigrants exert a positive significant influence on Italy's bilateral trade flows, immigrant networks are not a significant determinant.²³

To conclude, in terms of the theoretical framework of Section I, these results suggest that the interactions between Italy and its diaspora are privileged with respect to those with immigrants in Italy. The 'Italian network', which includes the diaspora and the entrepreneurs at home, seems to be working as a strong-ties coalition. Furthermore, the negative coefficient of the immigrants variable shows that the immigrants' sending countries invest below normal in Italy. Hence, not only the immigrants business links appear to be weaker or inactive, but, as in the traditional model of integration (Burda, 2004), the international movements of labour and of capital appear to follow opposite directions.²⁴

²³ Murat and Pistoiesi, 'Migrant Networks'.

²⁴ Burda, 'Factor Mobility'. Moreover, Kugler and Rapoport show that the expansion of the unskilled labour force in the economy has ambiguous effects on the returns to capital: on the one hand they increase because of the increased labour supply, on the other hand, they decrease because the share of human capital (of skilled labour force) in the economy diminishes (Kugler and Rapoport, 'International Labor'). We do not control for skilled and unskilled immigration but, as we show in Section III, a great majority of the immigrant labour force in Italy is employed in low-skilled jobs.

Table 1 Determinants of the “abnormal” FDI by other countries into the Italian economy (inward FDI) – Eq. (2): cross-section regressions

	(1) OLS	(2) OLS
Constant	0.0720** (2.582)	0.089***(2.75)
European Union dummy : EU	-0.00014 (-0.009)	
Distance (logs) : DIST	-0.0112 ***(-3.12)	-0.011***(-3.18)
Governance quality index (standardised): GOV	0.0180 (0.754)	
Christian share: CH	0.00013 (0.015)	
Share of emigrants: $\frac{EMI_{IT,i}}{\sum EMI_{IT,j}}$	0.409** (2.593) (HC1:2.59; HC2:2.26)	0.43***(3.12) (HC1:3.02; HC2:2.60)
Share of immigrants: $\frac{IMMI_{i,IT}}{\sum IMMI_{j,IT}}$	-0.189** (-2.061) (HC1:-2.0; HC2: -1.77)	-0.20** (-2.62) (HC1:-2.64; HC2:-2.53)
<i>R</i> ² -adjusted	0.36	0.39
<i>N. Observations</i>	51	51
<i>F</i> –statistic testing coefficients equal to zero		F(4,44) = 0.35, p-value = 0.83

Notes: *** 1%, ** 5%, * 10% significance level. The t-value in parenthesis is based on the White’s heteroskedasticity robust standard errors. For some coefficients are also reported in parenthesis t-values (HC1 and HC2) based on different heteroskedasticity robust standard errors. HC1 is provided by MacKinnon and White (1985) and HC2 by Davidson and Mackinnon (2004).

Table 2. Determinants of the FDI from Italy into other countries (outward FDI) – Eq. (3): cross-section regressions

	(1) OLS	(2) OLS
Constant	0.0020 (0.10)	0.0036 (1.32)
European Union dummy : EU	0.0307* (1.99)	0.0406** (2.85)
Distance (logs) : DIST	-0.0017 (-0.84)	
Governance quality index (standardised): GOV	0.2259 (1.39)	
Christian share: CH	0.0059 (0.96)	
Share of emigrants: $\frac{EMI_{IT,i}}{\sum EMI_{IT,j}}$	0.3012** (2.57) (HC1: 2.39; HC2: 2.18)	0.3365** (2.85) (HC1: 2.73; HC2: 2.44)
Share of immigrants: $\frac{IMMI_{i,IT}}{\sum IMMI_{j,IT}}$	-0.0117 (-1.24) (HC1: -0.23; HC2:-0.18)	-0.0114 (-0.31) (HC1: -0.29; HC2:-0.27)
R^2 -adjusted	0.34	0.38
<i>N. Observations</i>	51	51
<i>F</i> –statistic testing coefficients equal to zero		F(3,43) = 1.23, p-value = 0.30

Notes: *** 1%, ** 5%, * 10% significance level. The t-value in parenthesis is based on the White's heteroskedasticity robust standard errors. For some coefficients are also reported in parenthesis t-values (HC1 and HC2) based on different heteroskedasticity robust standard errors. HC1 is provided by MacKinnon and White (1985) and HC2 by Davidson and Mackinnon (2004).

We also address the potential *simultaneous causality bias* due to FDI affecting migration and migration affecting FDI. For example, migrant networks may reduce transaction costs by conveying information on investment opportunities or providing contacts to facilitate FDI inflows to the migrants' origin country. In this case the causality runs from migrant networks to FDI.²⁵ However, as FDI inflows capital, know how, new technologies, they may lead to faster economic growth, better employment opportunities and higher wages. This can have a positive effect on migrant flows. In this case, the causality runs from FDI to migration flows.

This simultaneous bias may occur for both inward and outward FDI and the shares of emigrants and immigrants. For this reason we also estimate the econometric models for both inward and outward FDI by using the Instrumental Variables Method (IV). The IV estimation permits to obtain consistent regression coefficients by using instruments (in the IV terminology the 'exogenous' variables) instead of the regressors X, i.e. the migration variables (in the IV terminology the 'endogenous' variables)²⁶. These instruments must be correlated to the X, but not correlated (or scarcely correlated) with the dependent variable Y, i.e. the FDI.

The instruments we used for the emigrant network variables are: i) the predetermined stock of Italian emigrants in 1990, ii) the number of Italian schools abroad in 1990. Instruments for the immigrant networks are: a) the predetermined stock of immigrants in Italy in 1990, b) the population density in the origin country, c) the immigrant populations in the core European economies in 1990.

We remand to Tables A4 and A5 in the Appendix for a detailed description of the instruments, the endogenous variables and their combined use in the estimation. In those Tables we also report the Hausman test to discriminate between OLS and IV, the first stage F statistics on the instrument relevance and finally the Sargan over identifying test on the validity of the instruments.²⁷ All tests for instrument relevance suggest that the predetermined stock of foreign immigrants in Italy 1990 and the population density in the origin country in 1990 are weak instruments. For this reason we do not report in the tables the outcome for these IV estimations. Note that in all cases, the Hausman test suggests that the OLS regressions is preferred. To conclude, the IV analysis reinforces the outcome that Italian emigrants are a significant determinant of Italy's both inward and outward FDI.

²⁵ Buch *et al.*, 'Where Enterprises Lead'; Goldberg *et al.*, 'Foreign Direct Investment'; Javorcik *et al.*, 'Migrant Networks'.

²⁶ On the simultaneous causality bias in OLS, see Stock and Watson, *Introduction to Econometrics*.

²⁷ Ibid.

III

In this Section we try to explain the results of the econometric analysis carried out in Section II by considering in an historical perspective the main factors affecting the strength ties of the networks generated by Italian emigration abroad and foreign immigration in Italy. These are: i) effective contacts between migrants and their countries of origin, including return and circular migration, travel between host and origin countries; ii) cultural and economic ties, prompted by migrant associations of various kinds, schools in the origin country language, flows of remittances, home and host countries' subsidies to immigrant associations; iii) institutional links, such as bilateral agreements between host and home countries on migration, laws of citizenship.

Italian emigration. Emigration from Italy reached massive proportions between 1860 and 1970. It is estimated that about 25 million Italians – that is, one out of four – emigrated in that period.²⁸ Nowadays the number of people of Italian nationality or descent living abroad may approach that of the population in Italy (about 60 million).²⁹ The main destinations of emigrants were Western Europe, North and South America and Australia. Departures were dictated mainly by labor reasons and a high proportion of emigrants returned.³⁰ Not only they made their way back home more frequently than other European emigrants, but they returned also from the more distant destinations of America and Australia. Argentina, for example, was a land of permanent settlement, but also of annual (circular) migrations related to the harvesting seasons, which are reversed with respect to the northern hemisphere.³¹ Italians abroad tended to gather in ethnic communities, little Italys in the cities and rural villages into the countryside, and to remain deeply tied to the home country.³² Associations were widespread. In earlier times these consisted especially of mutual aid societies, workers' aid societies called *patronati*, social circles, but also business associations and Chambers of Commerce.³³ Remittances, since the earlier times have been conspicuous.

Except for the fascist era, when permanent departures were banned or restricted, the Italian government demonstrated interest in the emigration phenomenon and even actively regulated and backed it. It subsidized travel expenses, made agreements with the governments of destination

²⁸ Del Boca and Venturini, 'Italian Migration'.

²⁹ Gabaccia, 'Italian Diaspora'.

³⁰ Cohen, *Global Diasporas*.

³¹ Foerster, *The Italian Emigration*.

³² Gabaccia, *Italy's Many Diasporas*.

³³ The older Chambers of Commerce were established in the main destination countries of emigration between the end of the nineteenth and the beginning of the twentieth centuries. The years of foundation were: 1884 in Argentina, 1886 in the UK and France, 1887 in the US, 1902 in Brazil, 1909 in Switzerland, 1911 in Germany. These same countries registered the highest numbers of *patronati*. Conversely, in the Eastern hemisphere the Chambers of Commerce have been established much later: 1966 in India, 1991 in China, 2000 in Russia and Singapore, in 2001 in the Czech Republic. In several emerging countries of Asia and Africa they are still absent, while the *patronati* had not been created in the past and are lacking completely.

countries aimed at guaranteeing acceptable living and working standards for the emigrants, ensured repatriation in difficult circumstances, banned emigration to certain countries during pestilences, subsidized the creation of schools of Italian language and culture abroad, of Italian hospitals, and supported the existence of *patronati*.³⁴

Emigration for the Italian government meant lower demographic pressure within the country, especially amongst the poorest, inflows of hard currency and higher purchasing power through remittances, but also favorable effects on some sectors of the economy (for example, sea-transport). In fact, Italian communities abroad did more than that: they imported Italian goods in their host countries, and were also crucial for the foreign investments of Italian firms. They supplied information to potential exporters and investors on existing business opportunities, made available the financial means needed to accomplish the investments, provided managerial skills, were a reliable labor force and represented a final demand for the goods produced. However, only during short periods of time, the Italian government considered the influence of the diaspora on the internationalization of the Italian economy. At the end of the nineteenth century it subsidized the creation of Italian Chambers of Commerce abroad; but stopped by the early 1920s, with the onset of the fascist regime. After WWII the government reconsidered the matter of emigration and, with it, the role of the diaspora, but again, it was seen more as a factor that lowered demographic pressure at home and sustained Italy's balance of payments through remittances rather than one that boosted business and bilateral FDI.³⁵

A particularly important issue for emigrants was citizenship. A wish to ensure the possibility of repatriation, after decades of absence and even for the progeny, was deeply felt. In 1908 and 1911, the first two general meetings of the Congress of Italians Living Abroad focused on this issue.³⁶ In 1912 the Italian government, acting in response to the requests of emigrants, extended the right of citizenship to their offspring. The law, based on the principle of the *jus sanguinis* (adopted also in the new 1992 citizenship law), acknowledges the right to citizenship to the Italian progeny born abroad, even beyond the first and second generation. Being also compatible with dual and multiple citizenship, it allows also emigrants to become naturalized citizens in the host countries without ceasing to be Italians. There are very few examples of countries' laws of citizenship as favorable to their diasporas as the Italian one.³⁷

Despite emigration rates dropped dramatically in the 1970s, when the Italian economy reached high levels of living, the ties between the diaspora and the home country did not fade but, in some

³⁴ Foerster, *The Italian Emigration*.

³⁵ Romero, *Emigrazione e integrazione europea*.

³⁶ Foerster, *The Italian Emigration*.

³⁷ Bertocchi and Strozzi, 'The Age of Mass Migration'; Fullilove, 'World Wide Webs'.

respects, became even stronger. In 1988 the Italian government provided registered emigrants the right to vote in Italy's parliamentary elections; subsequently, it allowed the possibility of voting by post and, since the last political elections in 2006, also of having their own representatives in parliament.

While the social, political and institutional ties between the diaspora and the home country have always been tight and their strength has increased along time, their full economic implications have been rarely recognized or become object of active policies. More generally, and independently from emigration, throughout the twentieth century the attitude of the Italian authorities with respect to FDI, both outward and inward, has been extremely cautious. This may explain their scarce interest on the economic support that the diaspora could offer to the Italian FDI. However, paradoxically, the government's scarce interest may have contributed to increase the effective importance of emigrants in prompting Italian FDI. Without the government's active support and without significant colonial markets depending on their country, Italian entrepreneurs had to rely heavily on the emigrant communities abroad.

Immigration in Italy. Immigration in Italy is a relatively recent phenomenon. Since immigration rates became positive, at the beginning of the 1970s, people arrivals increased rapidly. Immigrants originate from a wide number of foreign countries, most of them developing. Some ethnic groups are overrepresented, especially from East European, North African and East Asian countries, but people from several other areas, of Sub-Saharan Africa, Asia and Latin America, are also present. Except for the minority of people originating from other European and rich countries, most immigrants in Italy do not visit their countries of origin frequently, mostly because traveling abroad has been restricted by a heavy burden of regulations on immigration and residence permits. However, immigrants send annually home huge amounts of remittances.³⁸

While the Italian law of citizenship, based on the *jus sanguini*, has proven to be extremely inclusive for the members of the Italian diaspora, it has also revealed to be strongly exclusive for immigrants. Regular immigrants and their children born in Italy can be entitled to become Italian citizens only if they fulfill restrictive conditions and go through long and cumbersome procedures. The result of this is that only a tiny share of immigrants have succeeded in becoming Italian citizens (about 0.6% of the immigrant population in 2004). At the same time, some immigrants' home countries do not allow their nationals to hold dual or multiple citizenships (i.e., China, Philippines, Egypt, Ukraine, India). This, in turn, contributes to lessen their willingness to apply for the Italian citizenship.

³⁸ Banca d'Italia, *Relazione Annuale*; World Bank, *Migration and Remittances*.

Also the propensity to form associations appears to be weaker among immigrants in Italy than for Italians abroad. However, these two phenomena are not strictly comparable. One reason is that a diaspora refers to a common nationality in different locations, while immigration concerns an heterogeneity of nationalities in a common location. Thus, the former reveals the ‘cultural’ tendency of a population to form associations abroad while the latter rather reflects the stimulus that a country provides to immigrants to form associations. Another reason is that several Italian associations abroad were formed before WWII, when proper welfare states did not still exist in many of the host countries and were replaced by mutual aid societies. These are extremely rare among modern immigrant populations in developed countries, where aid, especially in terms of health, social security and schooling, is typically provided by government institutions. Nonetheless, the propensity to form associations among immigrants in Italy seems particularly weak, especially in comparison with that of immigrants in other rich countries.³⁹

Together with the hypothesized crowding out effect exerted by Italian institutions and groups, other factors may have contributed to determine this result. One is shortest history of the immigration phenomenon in Italy relatively to other European destination countries. Time, however, turns out to be to be a secondary factor in influencing the formation of associations when the economic status and the social mobility of immigrants are taken into account. Immigrant associations tend to mushroom and thrive as the members of the immigrant communities are successful and reach higher levels of education and wealth in the host countries.⁴⁰ Recent studies have shown that, more than in other rich countries, immigrants in Italy tend to be employed in the low-skill, low-pay segments of the labor market, and that this happens independently of their education levels.⁴¹

It has been also observed that, in general, the associative activity is weaker among gender-unbalanced immigration populations. A substantial proportion of immigrants in Italy, originating from East European and from some Asian and Latin American countries, is composed by women, most of whom are employed in low-skilled jobs in the tertiary sector, such as house-keeping and elderly-caring. Their levels of education are in many cases above the average of the overall immigrant population, but the gender imbalance together with the character of jobs tend to curb the formation of associations, especially of the kind that may be conducive to economic international links and bilateral investments.⁴²

Hence, the more recent phenomenon of immigration in Italy relatively to other rich countries, together with the prevalence of low-paid jobs among immigrants, their scarce social and economic

³⁹ Moya, ‘Immigrants and Associations’; Fullilove, ‘World Wide Webs’.

⁴⁰ Saxenian, ‘Silicon Valley’s New Immigrant Entrepreneurs’; Moya, ‘Immigrants and Associations’.

⁴¹ Murat and Paba, ‘International Migration’; Barba Navaretti *et al.*, ‘Offshoring and Immigrant Employment’.

⁴² Sopemi, *International Migration*.

mobility, the weak presence of immigrants associations, are all consistent with a lack of influence of immigrant networks on Italy's bilateral FDI, and help to explain the results of the econometric exercise in Section II. They suggest that Italy's strong ties with its diaspora may have in fact crowded-out the weaker, but potentially profitable, ties with immigrant networks and, through them, with their countries of origin. This seems to be a serious problem as some of these networks are generated by immigrants from emerging fast-growing countries (i.e., China).

IV

The Italian government's neglect of the business dimension of international ties turned out to strengthen the role of Italian communities abroad in prompting both outward and inward FDI. In this section we present some exemplary entrepreneurial histories of outward FDI by Italian firms in the twentieth century to show how these have been influenced by the strong-ties type interactions between Italian diaspora and their homeland. The circumstance that the entrepreneurial histories we select in this section cover a much longer span than the 1990-2004 period of the dataset we used in the econometric analysis is justified by the fact that, as we have seen, the latter considers FDI stock data that by their very nature are the outcome of a cumulative and long-standing process dating back well before 1990. The overall picture that emerges from such entrepreneurial histories is that emigrants' networks provided Italian firms investing abroad with: i) the demand for the final products of their foreign subsidiaries; ii) the capital needed to finance the investment abroad; iii) a reliable ethnic labour force and managerial staff; iv) information on business opportunities in their countries of settlement. The first three channels have been important above all in the initial phases of internationalisation but their relevance seems to have faded after the 1970s. Conversely, the role of information channelled by emigrants appears to have become paramount over time.

The demand for final products. The possibility of relying on an ethnic demand by Italian emigrants for products they perceived as 'Italian' has long been a major factor that pushed Italian firms to invest abroad. Among the first movers were the two largest Italian mixed banks, Banca Commerciale Italiana (BCI) and Credito Italiano (CI) in the early twentieth century.

In 1906 BCI took over Banco Commerciale Italiano of São Paulo, which was renamed Banco Commerciale Italo-Brasiliano. This bank had been founded in 1900 by a group of Italian entrepreneurs and could then be used by BCI to collect deposits among the Italian community in São Paulo and secure the banking work connected with the sending of remittances to Italy. In 1910 BCI, together with its French banking partner Paribas established the Banque Française et Italienne pour l'Amérique du Sud (Sudameris), into which Banco Commerciale Italo-Brasiliano was

integrated. The reasons for this venture are to be found in the failure of French banking expansion in Brazil. Indeed, the scarcity of French immigrants in Brazil made it difficult for a large French bank to survive in Latin America, the more so as potential customers tended to turn to banks from their own country. Therefore, BCI and Paribas saw in the creation of a joint-venture (Sudameris) a way to combine the advantages of French capital and financial expertise with the presence of sizeable Italian communities in Brazil. Sudameris soon developed its own banking network in South America: after São Paulo and Rio de Janeiro, in 1912 a third branch was opened in Buenos Aires. In the 1920s Sudameris set up its own branches also in Uruguay, Chile and Colombia. All these branches were active in collecting deposits from Italian communities and in financing companies run by Italian immigrants, the most prominent of whom at the same time sat in the bank's discount commissions.⁴³

The same factors acted to prompt BCI's expansion in the US. The presence of a large number of Italian immigrants who sent remittances to their families in Italy pushed BCI to open a branch in New York in 1918. The choice of a branch was taken in spite of many restrictive regulations concerning the activity of foreign banks in the state of New York, the most important of which was the prohibition of the deposit taking function. As migration flows to the US were curtailed in the early 1920s, BCI decided to undertake direct deposit collection within the country and in 1924 established a wholly owned trust company – Banca Commerciale Italiana Trust Company of New York (BCI Trust) – for this purpose. As this was a legally-constituted US undertaking, it could take deposits in New York unfettered. In the late 1920s, BCI planned to establish further trust companies in those US cities where there was a sizeable Italian community, such as Boston, Chicago, Cleveland, Philadelphia, Pittsburgh and St. Louis. In 1929 the trust companies in Boston and Philadelphia began business while the openings of the others were abandoned after the October 1929 crash.⁴⁴

Collecting deposits among Italian immigrants and managing remittances to Italy was also one of the main determinants of CI's FDI in South America, when in 1911 it joined a group a Belgian, Swiss and French banks in setting-up Banque Italo-Belge (BIB).⁴⁵

The possibility of relying on a demand for ethnic products was particularly important for FDI carried out by food companies. A paramount case was that of Buitoni, whose venture in the US started in 1939 when it opened a Buitoni pavilion at the World Fair in New York. By the end of 1941, Buitoni created two American companies: La Bomboniera, to manage the Perugina

⁴³ Piluso, 'Le banche miste'; Piluso and Toninelli, 'Managing a Multinational Network'; Di Quirico, 'The Initial Phases'.

⁴⁴ D'Alessandro, 'Managing Multinational Banking'; Barbiellini Amidei and Goldstein, 'Italian Investment'.

⁴⁵ Piluso, 'Le banche miste'; Piluso and Toninelli, 'Managing a Multinational Network'.

subsidiary's flagship store and a warehouse in New York City, and Buitoni Products Inc., to manage two pasta restaurants inside the Fair's Amusement Area in New York. Buitoni Products restaurants initially used pasta produced by an Italian-American supplier, but in 1943 acquired a small plant for pasta production in Jersey City. In 1952, Buitoni inaugurated a new huge plant in Hackensack, NJ. However, the crisis that hit the company in the 1970s forced it to liquidate its production facilities in the US and retain only a commercial organisation.⁴⁶

Ethnic demand by Italian emigrants also drove the expansion in South America of Italy's largest car manufacturer, Fiat. In the years between the two world wars Fiat attempted to enter that market by setting up sales subsidiaries in Argentina and Brazil, but this effort was unsuccessful in the face of the competition by such US giants as GM and Ford that had established production facilities in those countries.⁴⁷

After WWII Fiat decided to undertake direct production in South America. In 1952, Fiat came to a technical backup agreement with the tractor division of the Argentine state-owned company IAME (State Aeronautical and Mechanical Industries) that led, in 1954, to the setting-up of Fiat Someca Construcciones (renamed in 1965 Fiat Concord) in Còrdoba for the production of agricultural tractors. In 1955 a plant for diesel engines production was added in the same location. Finally, in 1959, the Argentine government approved Fiat's proposal to build a new plant in Caseros (Buenos Aires), the first one for car manufacturing. The establishment of production facilities in Argentina enabled Fiat to become the market leader in that country by relying to a large extent on an ethnic clientele that perceived Fiat cars as 'Italian'.⁴⁸

In 1973 Fiat got also into the Brazilian market by establishing Fiat Automovéis in Belo Horizonte, a joint venture with the state of Minas Gerais, for the production of agricultural tractors. Within a few years car production was added. In 1986 Fiat took over the whole ownership of the company and Fiat Automovéis soon became the most important foreign subsidiary of the group. In the mid-1990s Fiat had become one of the top-three companies on the Brazilian market challenging the dominant position of the US big car manufacturers.⁴⁹

South American countries with a sizeable Italian community remained very important to Fiat's strategy also in the 1990s, when the company launched the project for its world car. As in the previous internationalisation efforts, the largest investments were once again carried out in Brazil and Argentina.⁵⁰

⁴⁶ Buitoni, *Storia di un imprenditore*; Bova, 'L'avventura americana'; Barbiellini Amidei and Goldstein, 'Italian Investment'.

⁴⁷ Bigazzi, 'La presenza in Argentina'; idem, 'Speranze deluse in Brasile'.

⁴⁸ Castronovo, *Fiat. 1899-1999*.

⁴⁹ Castronovo, *Fiat. 1899-1999*; Eakin, *Tropical Capitalism*.

⁵⁰ Volpato, 'Strength and Weakness'.

Financing FDI. Until 1990 the Italian government imposed severe constraints to capital exports. This made emigrant communities a valuable resource to Italian companies also as potential financiers of their investments abroad.

Once again, among first movers were the mixed banks. After the bank had been taken over by BCI, Italian immigrants in São Paulo retained a share of the capital of Banco Commerciale Italiano and a few year later subscribed a share of the capital of Sudameris. The same occurred with BIB established by CI. Similarly, when striving to obtain the resources necessary for its expansion in the US, BCI created in 1928 a holding company – BCI Corporation – which was also to manage the trust companies. BCI incorporated BCI Corporation and raised US\$ 1,900,000 through an offer equal to ¼ of its stock, mainly underwritten by Italian immigrants in the US.⁵¹

Also manufacturing firms relied on emigrant communities to finance their investment abroad. One exemplary case is that of Pirelli, which in 1910 established a sales subsidiary and then in 1917 a factory for electric conductors manufacturing in Argentina, with BIB participating in its capital. Pirelli's penetration in the Argentine market was hindered by the major British and German electromechanical groups, which controlled the local electricity distribution sector and had secured captive contracts for their cables and equipment. To counteract its competitors, Pirelli decided in 1911 to take part in the setting-up of an Argentine electricity company, Compañía Italo-Argentina de Electricidad, in which the Italian business community in Argentina was largely involved. In fact, one fifth of the capital of Compañía Italo-Argentina de Electricidad was subscribed by a group of Italian businessmen living in Argentina while a number of other Italian and Swiss companies were also involved in this venture.⁵²

Buitoni investments in the US relied to an even larger extent on funding from Italian emigrants. When in 1941 Buitoni Products Inc. was set up, its US\$ 40,000 capital was raised for ¾ among Italian-Americans.⁵³

Ethnic labour force and managerial staff. Emigrant communities provided foreign subsidiaries of Italian companies also with ethnic labour force and managerial staff. This was the case for both banks and manufacturing firms.

Italian managers and clerks were persistently requested in South America by both Sudameris and BIB. Italian personnel was preferred because it was able to operate in credit markets ethnically

⁵¹ Confalonieri, *Banche miste*.

⁵² Bezza, 'L'intervento del capitale italiano'.

⁵³ Bova, 'L'avventura americana'.

characterized – where it was necessary to speak the clientele’s language – such as São Paulo and Buenos Aires.⁵⁴

In the 1920s and 1930s all managers, technicians and foremen as well as most of white and blue collar workers of Pirelli Argentina were former Italian immigrants. Usually a blue collar worker was hired after having been introduced to the company by another worker or foreman (often a relative or a countryman), by an executive or middle manager, or by one of the many Italian Catholic organisations that operated in Argentina at that time.⁵⁵

In the 1940s all managers and most of the labour force of La Bomboniera and Buitoni Products Inc. in the US were also Italian immigrants or Italian-Americans. When, in 1952, Buitoni launched its macaroni dinners in supermarkets, Joe di Maggio, the retired baseball star and himself an Italian-American, was hired as testimonial and appointed vice president of the company in charge of public relations with the West Coast.⁵⁶

Also Fiat’s subsidiaries in Argentina and Brazil have relied heavily on the local Italian community for the provision of their labour force and management.⁵⁷

Information channelling. Lastly, Italian emigrants were a source of valuable information on business opportunities in their country if settlement that turned out be very important to Italian firms aiming at investing abroad.

BCI’s expansion in South America relied to a great extent on the information provided by a group of Italian entrepreneurs in São Paulo headed by Francisco Matarazzo, whose business interests ranged from textiles, to metal engineering and to finance.⁵⁸ When, after WWI, BCI started to regard the territories of the former Austro-Hungarian empire as its main area of expansion after the Americas, it relied to a great extent on the information and ties provided by Camillo Castiglioni, an ethnic-Italian Trieste-born financier who before 1914 had moved to Vienna where he had become a leading figure in the local business community.⁵⁹

Similarly, Pirelli’s involvement in *Compañía Italo-Argentina de Electricidad* was largely due to its tie with an Italian engineer, Giovanni Carosio, who in the late nineteenth century had migrated to Argentina where he had founded two electricity companies. The wave of mergers and acquisitions that occurred in the Argentine electricity industry in the first decade of the twentieth century pushed Carosio to quit these companies and rally a group of investors within the local Italian business

⁵⁴ Piluso and Toninelli, ‘Managing a Multinational Network’.

⁵⁵ Barbero and Felder, ‘Gli operai italiani’.

⁵⁶ Barbiellini Amidei and Goldstein, ‘Italian Investment’.

⁵⁷ Castronovo, *Fiat. 1899-1999*.

⁵⁸ Piluso, ‘Le banche miste’.

⁵⁹ Stanciu, ‘Italian Multinational Banking’.

community who asked Pirelli to join them in the setting-up of *Compañía Italo-Argentina de Electricidad*.⁶⁰

Fiat's expansion in Argentina after WWII hinged initially on the referral services provided by Agostino Rocca, an Italian top-manager who had migrated to Argentina in 1946. Rocca's ties with the Argentine authorities helped Fiat to sign the first agreements with the Argentine state-owned company IAME.⁶¹

The role of business information channelled by emigrants seems to have been important in particular for FDI carried out by small and medium sized firms. In this respect, an exemplary case is that of Massimo Coen, an Italian Jew who left Italy to London to escape from the anti-semitic laws passed by the fascist regime in 1938. During WWII he worked at the BBC international service to Italy and at the same time attended a course for foreign students at LSE. After the war he quit the BBC and set up Granosa Trading Co. Ltd., a company which took the agency for about thirty wool mills of the Prato textile district, that could therefore exploit the demand for Italian textile products of the Italians living in the UK. Coen's ties with the Tuscan business community brought him to also establish Etrufin Reserco, a company which represented eight Tuscan saving banks in the UK. In the 1970s he founded the consulting firm *Britalia Consultants* and became the honorary chairman of the Italian Chamber of Commerce in the UK.⁶²

Another interesting case is that of Italy's major semiconductor manufacturer, *Società Italiana Semiconductors (SGS)*. By the end of the 1970s, SGS was losing money. The recovery started in 1980 when president and CEO of the company was appointed Pasquale Pistorio, a Sicilian engineer who in the 1970s had migrated to the US to serve as international marketing director and vice president of Motorola. Relying on the knowledge of the ICT sector he had developed in the US, Pistorio led SGS to merge with France's Thomson-CSF, creating *SGS Thomson*. In the 1990s, the company, which until then had remained focused on the European market, expanded its operations in the US with the acquisition of TAG Semiconductors, Metaflow Technologies, and Arithmos.⁶³

V

The strong ties between the Italian diaspora and their homeland also boosted inward FDI. In this case the mechanism at work was constituted by the valuable information on business opportunities in Italy that companies set up by emigrants utilized to invest in Italy from abroad. This has enabled them to enter the Italian economy without having to overcome the formal and informal barriers that

⁶⁰ Bezza, 'L'intervento del capitale italiano'.

⁶¹ Castronovo, *Fiat. 1899-1999*.

⁶² Castronovo, *I cavalieri del lavoro*.

⁶³ Gianola, 'Pistorio Pasquale'.

may have halted other investors. As in this case we are dealing with mainly one factor (information channelling), this section is structured by sequentially presenting three exemplary entrepreneurial histories for which information channelled by emigrants' networks turned out to boost Italy's inward FDI: Techint, Charles Forte (Carmine Monforte) and Lee Iacocca.

Techint. Techint was founded after WWII by the Italian engineer Agostino Rocca. Born in 1895, Rocca graduated at Milan Polytechnic in 1921 and in the same year started to work as a trainee engineer at Dalmine, Italy's main producer of seamless steel tubes. In 1933 Dalmine was taken over by the state-owned holding IRI, that two years after appointed Rocca as the company's managing director. In 1937, when IRI's steel companies were grouped in the sub-holding Finsider, Rocca also became the latter's general manager.⁶⁴

After WWII, having no chances to return to a top position within Finsider and Dalmine because of his collaboration with the fascist regime, Rocca set up his own company – Compagnia Tecnica Internazionale – and in 1946 migrated to Argentina. Compagnia Tecnica Internazionale's headquarters was also transferred to Argentina and in 1947 the company was renamed Techint. The company began providing engineering services in Argentina and other Latin America countries. Construction activities soon followed, among them the southern gas pipeline in Argentina, inaugurated in 1949: seamless steel tubes for this venture were imported from Rocca's former company Dalmine. In the 1950s Techint established two subsidiaries for seamless steel tubes production: Tamsa in Veracruz (Mexico) and Siderca in Campana (Argentina), with Dalmine assuming a minority shareholding. Several managers, technicians and workers for Siderca's were also provided by Dalmine and by another Italian company, Innocenti, that had collaborated to the construction of the Dalmine plant in Apuania (Tuscany) in the late 1930s.⁶⁵

After Agostino Rocca died in 1978, his son Roberto became Techint's president. When Italy privatized the state-owned holding IRI, Techint, through its subsidiary Siderca, obtained in 1996 a controlling interest in Dalmine, the company where its founder, Agostino Rocca, had worked for more than twenty years and served as managing director before WWII.⁶⁶

In Italy, the Techint group also entered the health services sector in the mid-1990s by building and managing Istituto Clinico Humanitas, a state-of-the-art hospital and medical research institute near Milan. Specialized company Humanitas has subsequently acquired controlling interests in other important private hospitals in Bergamo, Turin and Catania.⁶⁷

⁶⁴ Rugafiori, 'Agostino Rocca'.

⁶⁵ Lussana, 'Argentina: Agostino Rocca'.

⁶⁶ Dringoli, 'Le privatizzazioni'.

⁶⁷ Pederson, *The International Directory*.

Charles Forte (Carmine Monforte). Carmine Monforte was born in Monforte Casalattico, a small village near Rome, in 1908. He emigrated from Italy to Scotland at the age of four. He worked in a cafe chain owned by his father and in 1935 set up his first milk bar as Strand Milk Bar Ltd. Soon he began expanding into catering and hotel businesses. After WWII, his company (renamed Forte Holdings Ltd) expanded to the catering and hotel sectors. By the end of the 1960s Forte Holdings managed the catering service for 125 airlines and 19 international airports and numbered 940 hotels throughout the world.

The Forte group also invested in Italy with its major investment being the construction of a big hotel complex in Sardinia. In the 1970s Charles Forte served as president of the Italian Chamber of Commerce in the UK. He was knighted in 1970 and awarded a life peerage in 1982 as Baron Forte of Ripley.⁶⁸

Lee Iacocca. Lido Anthony ‘Lee’ Iacocca was born in 1924 in Allentown, Pennsylvania, the son of Italian immigrants. Iacocca’s father ran one of the first car rental agencies in the US and passed on his love of the automobile to his son. After graduating in engineering, Iacocca began a career at Ford Motor Company. In 1960 he became vice president of Ford’s car and truck group; in 1967, executive vice president; and in 1970, president.⁶⁹

Once in a top executive position, Iacocca acted to boost Ford business with Italy. He approached Alejandro De Tomaso, an Italian-Argentine industrialist who had set up a sports car company in Modena, asking him to create a high performance European car for Ford showrooms. This car, named *Pantera* – equipped with a Ford V-8 engine – started to be sold in the US in 1971 by Ford’s Lincoln-Mercury division. In 1972 Ford acquired Ghia and Vignale, the two workshops in Italy where *Panteras* were manufactured. As many as 6,000 *Panteras* were sold in the US before Ford ended the arrangement in 1974 because safety and emissions laws would have required a major redesign of the car.⁷⁰

Iacocca was sacked by Ford in June 1978, but five months after he was named president of Chrysler and began transforming that automaker from a sluggish moneymaker into a highly profitable business.

As president of Chrysler, Iacocca once again collaborated with De Tomaso, who in the meantime had acquired Maserati in Italy. In 1984 Iacocca asked Maserati to build a convertible coupe, named Chrysler-Maserati TC. Chrysler also acquired 3.5% of the capital of Maserati, that was increased to

⁶⁸ Bigazzi, ‘Piccoli e grandi imprenditori’.

⁶⁹ Iacocca, *Iacocca*.

⁷⁰ Siano, J., ‘Alejandro De Tomaso, 74, Maker of Sports Cars, Dies’, *New York Times*, 23 May 2003.

15.6% in 1985. However, the Chrysler-Maserati TC sold poorly: between 1987 and 1990, only 7,500 cars were manufactured for the American market. Thus, Chrysler eventually receded from that venture and sold its Maserati shares to Fiat.⁷¹

In 1987 Chrysler also took over Lamborghini, another Italian sports car manufacturer. At the end of 1992, Iacocca retired, but remained a consultant to Chrysler until 1994. In the same year, Chrysler sold Lamborghini to an Indonesian investment group headed by Tommy Suharto.⁷²

After retirement, Iacocca still cultivated his ties with Italy and bought a large farm in Tuscany, specialised in wine and oil production, with the goal to export these traditional Italian products to the US.⁷³

VI

This paper shows that Italy stays at the centre of a double set transnational networks, one of emigrants and the other of immigrants. However, contrary to the theoretical predictions provided by matching models, only the former has significantly boosted the country's bilateral FDI.

We interpret this result by taking into account some key factors that, in an historical perspective, have shaped the nature of migrant ties with their home countries, and by analysing some exemplary cases of outward and inward Italian FDI. As to emigrants, we show that over time they constructed a 'strong-ties' relationship with their home country. This was the cumulative result of a number of circumstances: i) the circular nature of the Italian emigration, with many emigrants returning home regularly, maintaining enduring ties with their families and towns of origin; ii) the tendency of Italians living abroad to gather in ethnic communities, little Italys or rural villages that preserved their original culture, language and traditions; iii) the action of the Italian government, that demonstrated an interest on emigration matters, especially regarding social, institutional and political aspects. An important consequence of this is the Italian law of citizenship, which was conceived with the purpose of preserving the Italian nationality of the diaspora.

However, the Italian government, however, has long failed to recognize the importance of emigrant ties in prompting bilateral FDI. The absence of active government policies on this regard turned out to strengthen the propensity role of Italy to invest in (and attract FDI from) countries where the support of emigrants was available.

We document emigrants' ties have provided Italian firms wanting to invest abroad with valuable information, a reliable ethnic labour force and managerial staff, the demand for the final products

⁷¹ Rinaldi, *Distretti ma non solo*.

⁷² Levin, *Behind the Wheel*.

⁷³ Castronovo, *I cavalieri del lavoro*.

and often also the funding of their investments projects. These factors have been largely present across the entrepreneurial histories that we have presented in this paper.

The strong ties between the Italian diaspora and their homeland have also boosted inward FDI. In this case the mechanism at work was constituted mainly by the valuable information on business opportunities in Italy that companies managed by emigrants utilized to invest in Italy from abroad. Moreover, the Italian citizenship has given them an additional advantage with respect to other potential foreign investors.

As to immigrants, our evidence differs from theoretical predictions and from results of empirical studies on other receiving countries: immigrants in Italy have not prompted bilateral FDI. Some possible explanations for this result have been examined. Among these are: i) the shortest history of the immigration phenomenon in Italy relatively to that of other major receiving countries; ii) the gender imbalance of some immigrant communities; iii) the low-skill, low-wage level of most immigrants' jobs; iv) the scant and diminishing presence of immigrant associations in Italy.

Lastly, we suggest that Italy's strong ties with its diaspora may have in fact crowded-out the weaker, but potentially profitable, ties with immigrant networks and, through them, with their countries of origin. This could be a major problem as some of these networks are generated by immigrants from emerging fast-growing countries.

Appendix

Table A1. Data and Sources

<i>Data</i>	<i>Source</i>
<i>Distance</i>	The great circle distance in km between capital cities, which is available on http://www.wcrl.ars.usda.gov/cec/java/lat-long.htm .
<i>Italian emigrants: stocks (1990-2004 average)</i>	AIRE (Anagrafe Italiani Residenti all'Estero); register of Italians residing abroad. Ministry of Interior: http://infoaire.interno.it/ .
<i>Immigrants: stocks (1990-2004 average)</i>	ISTAT: Migration trends and foreign population. Census data on resident population.
<i>Foreign direct investment inward and outward (stocks): current prices, U.S million dollars (1990-2004 average)</i>	Source OECD International Direct Investment Statistics - International direct investment by country Vol. 2005 release 01 and UNCTAD WID Country Profiles and National Statistics
<i>Italian Schools: total number of Dante Alighieri and other Italian Schools (1990-2004 average).</i>	<ul style="list-style-type: none"> - Dante Alighieri schools - http://www.scuoladantealighieri.org/ - Italian schools abroad: Italian Foreign Ministry, www.esteri.it
<i>Religion: % of Christians (Roman Catholics, Greek Catholics, Protestants, Anglicans, Lutherans, Orthodox and other Christians) on population (1990-2004 average)</i>	<i>The World Factbook</i> , Central Intelligence Agency.
<i>Governance indexes (1990-2004 average)</i>	Kaufmann, D., Kraay, A. and Zoido-Lobaton, P., 'Governance Matters', Policy Research Working Paper 2196, The World Bank (1999).

Table A2. Abnormal inward FDI (%)*

Albania	-2.15208	Luxembou	9.40127
Algeria	-1.59962	Malaysia	-0.48457
Argentin	0.71607	Mexico	1.12805
Australi	-0.55099	Morocco	-4.84240
Austria	-1.74061	Netherla	10.17629
Brazil	-0.48297	Norway	-0.66528
Bulgaria	-1.71389	Philippi	0.80215
Canada	-2.32711	Poland	-1.79712
Chile	0.81348	Portugal	-0.57503
China	-1.86326	Romania	-1.98488
Croatia	-2.39157	Russian	-2.26108
Czech Re	-2.06033	Singapor	1.31414
Denmark	-1.71001	Slovak R	-1.87706
Egypt	-0.89842	Slovenia	-2.88379
France	7.50504	South Af	-2.28452
Germany	3.30933	Spain	-3.67001
Greece	-3.02291	Sweden	0.34775
Hungary	-2.19712	Switzerl	13.66831
India	0.33768	Thailand	0.57948
Indonesi	0.76138	Tunisia	-2.37724
Iran	-0.02146	Turkey	-1.25607
Ireland	-2.63748	Ukraine	0.94828
Israel	-0.80279	United K	3.98198
Japan	2.38237	United S	-2.29497
Korea	0.36299	Venezuel	0.80587
Libya	-1.91525		

Notes: In bold the positive 'abnormal' inward FDI. The percentage is calculated as $\xi_i \times 100$.

* Residuals ξ_i from the cross-section regression:

$$\frac{FDI_{i,IT}}{\sum FDI_{j,IT}} = \alpha + \beta_1 \frac{FDI_{i,world}}{\sum FDI_{j,world}} + \xi_i$$

Table A3 Abnormal outward FDI (%) *

Albania	-3.02839	Luxembou	12.28763
Algeria	-2.54835	Malaysia	-0.88956
Argentina	0.62485	Mexico	-0.76132
Australi	-0.07590	Morocco	-1.98070
Austria	-2.02972	Netherla	15.47556
Brazil	1.55987	Norway	-2.10775
Bulgaria	-2.58716	Philippi	-0.89460
Canada	-0.57643	Poland	-1.52437
Chile	-0.75987	Portugal	-1.39905
China	-0.84407	Romania	-2.44313
Croatia	-2.80816	Russian	-1.90342
Czech Re	-2.60358	Singapor	-0.75857
Denmark	-2.23276	Slovak R	-2.72533
Egypt	-1.99525	Slovenia	-3.11542
France	8.10217	South Af	-0.88932
Germany	3.70484	Spain	2.53178
Greece	-2.28847	Sweden	-1.83136
Hungary	-2.57059	Switzerl	4.91546
India	-1.16124	Thailand	-1.00214
Indonesi	-0.80914	Tunisia	-2.67041
Iran	-1.33501	Turkey	-1.60150
Ireland	-0.14906	Ukraine	-1.03808
Israel	-2.01551	United K	6.53649
Japan	0.09229	United S	9.78838
Korea	-0.97139	Venezuela	-0.89399
Libya	-1.79926		

Notes: In bold the positive 'abnormal' outward FDI. The percentage is calculated as $\tilde{\mathcal{E}}_i \times 100$.

*Residuals $\tilde{\mathcal{E}}_i$ from the cross-section regression:

$$\frac{FDI_{\pi,i}}{\sum FDI_{\pi,j}} = \alpha + \tilde{\mathcal{E}}_i$$

Table A.4 Determinants of the FDI by other countries into the Italian economy (inward FDI) – cross-section regressions – IV (2SLS) estimation

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$$\frac{FDI_{i,IT}}{\sum FDI_{j,IT}} = \alpha + \beta_1 \frac{FDI_{i,world}}{\sum FDI_{j,world}} + \beta_2 \frac{EMI_{IT,i}}{\sum EMI_{IT,j}} + \beta_3 \frac{IMMI_{i,IT}}{\sum IMMI_{j,IT}} + \beta_4 DIST_i + \beta_5 GOV_i + \beta_6 CH_i + \beta_7 EU_i + v_i$$

	(1) IV	(2) IV	(3) IV	(4) IV
Constant	0.09 (2.37)	0.084 (2.80)	0.095 (2.93)	0.076 (2.65)
FDI (world) normalization	0.534*** (3.68)	0.57** (2.80)	0.72*** (4.87)	0.47** (2.62)
Distance (logs)	-0.011** (-2.55)	-0.010** (-2.93)	-0.011*** (-3.12)	-0.009** (-2.71)
Share of emigrants: $\frac{EMI_{IT,i}}{\sum EMI_{IT,j}}$	0.65*** (3.51)	0.558** (2.68)	0.336* (1.87)	0.71*** (3.43)
Share of immigrants: $\frac{IMMI_{i,IT}}{\sum IMMI_{j,IT}}$	-0.36 (-1.31)	-0.17** (-2.71)	-0.18** (-2.63)	-0.15** (-2.58)
R ² -adjusted	0.58	0.60	0.58	0.58
N. Observations	51	51	51	
<i>Hausman test</i> Null: OLS is consistent	χ^2 (2) = 3.5 Pvalue = 0.16	χ^2 (1) = 0.17 Pvalue = 0.68	χ^2 (1) = 1.45 Pvalue = 0.23	χ^2 (1) = 2.46 Pvalue = 0.12
<i>First stage F statistics</i> < 10 weak instruments		F(2,45)=10.02	F(1,46)=8.54	F(1,46)=12.50
<i>Sargan over-identifying test</i>		T R ² = 4.60		
Null: all instruments are valid		Pvalue = 0.031		

Notes: : *** 1%, ** 5%, * 10% significance level. The t-value in parenthesis is based on the White's heteroskedasticity robust standard errors. The t-value in parenthesis is based on the White's heteroskedasticity robust standard errors.

Instruments and endogenous variables

Instruments for the “*share of Italian emigrants*”: predetermined stock of Italian emigrants, 1990 (logs), number of Italian schools abroad.

Instruments for the “*share of foreign immigrants in Italy*”: foreign immigrants toward core Europe (logs), predetermined stock of foreign immigrants in Italy, 1990 (logs), population density in the origin country (logs).

(1) IV estimation: 2 instruments (stock of emigrants and immigrants 1990); 2 endogenous (share of emigrants and of immigrants, average 1991-2005).

(2) IV estimation : 2 instruments (stock of emigrants 1990 and Italian schools abroad); 1 endogenous: (share of emigrants, average 1991-2005).

(3) IV estimation 1 instruments (Italian schools); 1 endogenous: (share of emigrants).

(4) IV estimation 1 instruments (stock of immigrants 1990); 1 endogenous: (share of immigrants).

⁷⁴ For this IV (2SLS) estimation we use the one-step specification of the inward FDI model presented in Note 19 which is equivalent to the two-step estimation procedure we used in Section II.

Table A.5 Determinants of the FDI from Italy into other countries (outward FDI) – cross-section regressions – IV (2SLS) estimation

$$\frac{FDI_{i,t}}{\sum FDI_{i,j}} = \alpha + \beta_1 \frac{EMI_{i,t}}{\sum EMI_{i,j}} + \beta_2 \frac{IMMI_{i,t}}{\sum IMMI_{i,j}} + \beta_3 DIST_i + \beta_4 GOV_i + \beta_5 CH_i + \beta_6 EU_i + \zeta_i$$

	(1) IV	(2) IV
Constant	0.002 (0.94)	0.004 (1.48)
European Union dummy : EU	0.037** (2.17)	0.042** (2.52)
Stock of Italian emigrants, (logs): $EMI_{i,t}$		
Stock of foreign immigrants (logs): $IMMI_{i,t}$		
Share of Italian emigrants: $\frac{EMI_{i,t}}{\sum EMI_{i,j}}$	0.477*** (3.38)	0.289** (2.03)
Share of foreign immigrants: $\frac{IMMI_{i,t}}{\sum IMMI_{i,j}}$	-0.019 (-0.38)	-0.008 (-0.21)
R ² -adjusted	0.35	0.36
N. Observations	51	51
<i>Hausman test</i>	$\chi^2 (1) = 1.81, Pvalue = 0.18$	$\chi^2 (1) = 0.076, Pvalue = 0.78$
Null hypothesis: OLS is consistent		
<i>First stage F statistics < 10 weak instruments</i>	F(2,46) = 11.32	F(1,47) = 6.36
<i>Sargan over-identifying test</i>	T R ² = 1.92, Pvalue = 0.16	
Null hypothesis: all instruments are valid		

Notes: *** 1%, ** 5%, * 10% significance level. The t-value in parenthesis is based on the White's heteroskedasticity robust standard errors.

Instruments and endogenous variables

Instruments for the “*share of Italian emigrants*”: predetermined stock of Italian emigrants, 1990 (logs), number of Italian schools abroad.

Instruments for the “*Stock of Italian emigrants abroad*”, logs, the predetermined stock of foreign immigrants in Italy 1990 (logs), population density in the origin country, 1990 (logs).

(1) IV estimation: 2 instruments (stock of emigrants 1990 and Italian schools abroad); 1 endogenous: (share of emigrants, average 1991-2005)

(2) IV estimation 1 instruments (Italian schools); 1 endogenous: (share of emigrants)

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