

Florio, Erminia; Manfredonia, Stefano

Working Paper

Ancestors, inter-generational transmission of attitudes, and corporate performance: Evidence from the Italian Mass Migration

GLO Discussion Paper, No. 830

Provided in Cooperation with:

Global Labor Organization (GLO)

Suggested Citation: Florio, Erminia; Manfredonia, Stefano (2021) : Ancestors, inter-generational transmission of attitudes, and corporate performance: Evidence from the Italian Mass Migration, GLO Discussion Paper, No. 830, Global Labor Organization (GLO), Essen

This Version is available at:

<https://hdl.handle.net/10419/233600>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Ancestors, inter-generational transmission of attitudes, and corporate performance: Evidence from the Italian Mass Migration

Erminia Florio ^{*} Stefano Manfredonia [†]

Abstract

We study the effect of the attitudes of a CEO's ancestors on firm performance. To do so, we collect detailed information on emigrants from Italian municipalities during the Age of Mass Migration (1892-1924) from Ellis Island ships lists and use emigration experience as a proxy for ancestors' risk propensity. We adopt an epidemiological approach complemented with an instrumental variables strategy and find that Italian firms managed by a CEO that belongs to a family with past emigration experience tend to perform better and to be more productive. In line with an inter-generational transmission of attitudes hypothesis, we show a positive relationship between the emigration experience of a CEO's ancestors and alternative measures of corporate risk-taking. The attitudes of a CEO's ancestors have as well consequences on firm solvency and on the cost of capital.

Keywords: Emigration; Attitudes; Corporate Performance; Mass Migration.

JEL Codes: G30; M14; Z1.

^{*}Postdoctoral Fellow, HEC Montréal and GLO Affiliate. E-mail: erminia.florio@hec.ca.

[†]PhD candidate, University of Rome Tor Vergata. E-mail: stefano.manfredonia@libero.it

1 Introduction

Chief executive officers (CEOs) practices explain a large part of the variation in corporate policies and performance (e.g., Bertrand and Schoar, 2003; Bloom and Van Reenen, 2007). Previous literature shows that personal experience and attitudes are an important predictor of their behavior within the firm (e.g., Benmelech and Frydman, 2015; Bernile et al., 2017; Sunder et al., 2017). However, individual attitudes are not exogenous but are influenced by parents' attitudes or the environment in which the individual grew up (e.g., Dohmen et al., 2012; Zumbuehl et al., 2021). Theoretical models and empirical results show that the transmission of attitudes can explain many historical phenomena and economic outcomes (e.g., Bisin et al., 2004; Doepke and Zilibotti, 2008; Guiso et al., 2006; Nguyen et al., 2018).

In this paper, we join these two lines of research and assess whether the attitudes of a CEO's ancestors can predict corporate policies and performance. While corporate finance literature mostly focuses on the consequences of culture on corporate performance by exploiting heterogeneity in cultural characteristics of people from different countries of origin but located in the same destination country (e.g., DeBacker et al., 2015; Nguyen et al., 2018), this paper focuses its attention on the inter-generational transmission of attitudes and analyses whether heterogeneity in ancestors' experience and attitudes are able to explain CEOs' behaviour and corporate performance.

Detecting differences in ancestors' attitudes is particularly difficult because of the lack of historical data. Since survey information on ancestors' attitudes is not available, a possible solution is to use ancestors' behaviour to elicit their attitudes. We use ancestors' migratory experience as a proxy for their behaviour. Previous literature shows that individual propensity to migrate is a strong predictor of their attitudes toward risk, namely individuals who are less risk averse are more likely to migrate (e.g., Conroy, 2007; Dustmann et al., 2017; Jaeger et al., 2010).

The Age of Mass Migration offers us a unique opportunity to advance our research demand. First, because of the dimension of the event: more than 30 million people moved from Europe to the United States (Abramitzky and Boustan, 2017). Second, few regulatory policies at that time allow us to identify self-selection migration processes under limited governmental influence (Abramitzky et al., 2012; Knudsen, 2019).

We use Ellis Island's passenger records and we collect detailed information on more than two million individuals that left Italy between 1892 and 1924. Using a database containing information on the universe of Italian firms, we match emigrants with current Italian managers. More specifically, following the literature (e.g., Barone and Mocetti, 2016; Brum, 2019; Gagliarducci and Manacorda, 2020), we identify families based on individuals sharing the last name and born in the same municipality the emigrant left from.

We propose an epidemiological approach to study whether the attitudes of CEOs' ancestors affect corporate performance. Since measurement errors and other sources of endogeneity can potentially affect our estimation results, we use an instrumental variables approach. More specifically, we exploit exogenous

variation in the distance between corporate headquarters and the closest historical departure port as an instrument for past emigration of CEOs' ancestors.

We find that CEOs with at least one ancestor who emigrated tend to perform better and to be more productive. More specifically, firms that are managed by CEOs that belong to a family with past emigration experience have on average a productivity higher than 4% with respect to the average firm. We show that our results hold in a series of robustness checks. Furthermore, in line with previous research (e.g., Bisin et al., 2004; Dohmen et al., 2012), we as well find that not only ancestors' experience but also the environment in which the CEO grew up affects firm performance.

We then investigate on the mechanisms that drive our results. According to the hypothesis of inter-generational transmission of risky attitudes, we find a positive relationship between ancestors' emigration experience and alternative measures of corporate risk-taking. In particular, these firms tend to have higher historical return on assets (RoA) volatility, a higher level of corporate leverage, to engage more in risky investments, and invest more in intangibles assets.

We argue that riskier corporate policies are due to differential risk-taking propensity attitudes. In order to rule out the hypothesis that corporate risky policies are instead the results of opportunism rather than CEOs' attitudes towards risk, we study the impact of having an ancestor with a past emigration experience on credit risk and ultimately on the cost of debt. The absence of a negative relationship would raise the concern that our results are driven by the match between riskier firms and CEOs rather than different risk-propensity attitudes.

We find that the link between the attitudes of CEOs' ancestors and risky corporate policies has real consequences on financing cost and firm solvency. More specifically, we find that firms that are managed by CEOs that belong to a family with past emigration experience pay higher interests on debt financing. These firms are also more likely to default on their payment, since we find a negative effect on a corporate solvency index.

Even though the majority of Italian emigrants during the Age of Mass Migration arrived to the U.S., our dataset does not contain information on the Italian emigrants who reached other destinations. Therefore, a parallel explanation of our main finding can be country-specific attitudes or know-how exported by emigrants to their successors. Theoretical models in the economic literature emphasise indeed the role of networks in facilitating the spread of information across international borders (e.g., Chaney, 2014). Information linkages have been shown to be persistent across generations and could affect corporate performance by affecting trade and management practices (Burchardi et al., 2018; Giorcelli, 2019).

Empirical evidence does not exclude these hypotheses. First, we find a positive relationship between having an ancestor that emigrated during the Great Migration and FDI to the United States. We as well show that these CEOs have better managerial practices, that we measure using the number of managers over total employees. Finally, we exclude the hypothesis that differences in corporate performance are

due to heterogeneity in managers' ability or human capital.

Our paper contributes to the growing literature in corporate finance that emphasises the importance of CEO attitudes and experience for a firm performance. Benmelech and Frydman (2015) shows that CEOs with military service are more likely to use conservative corporate policies and ethical behavior. Malmendier et al. (2011) finds that CEOs that grew up during the Great Depression are averse to debt and lean excessively on internal finance. Sunder et al. (2017) shows that CEOs' hobby of flying airplanes is associated with significantly better innovation outcomes, such as patents and citations, and greater innovation effectiveness. Bernile et al. (2017) finds a non-monotonic relation between the severity of CEOs' early-life exposure to natural disasters and corporate risk-taking. Roussanov and Savor (2014) analyzes CEOs' marital status and shows that firms run by non-married CEOs have higher stock return volatility and pursue more aggressive investment policies. We innovate with respect to this literature since we show that even ancestors' attitudes and experience can be used to predict corporate performance.

More broadly, our paper is as well related to the literature on the effect of culture and on the inter-generational transmission of attitudes on economic outcomes (e.g., Guiso et al., 2006). Previous literature shows that attitudes and preferences, such as risk aversion and time preferences, are transmitted from parents to children (Dohmen et al., 2012). It also shows that inter-generational transmission of attitudes can explain many historical events, such as the ascension of the middle class during the British industrial revolution (Doepke and Zilibotti, 2008) and the persistence of work practices across different cultures (Fernández and Fogli, 2006).

The evidence on these questions in finance is still limited. The paper that is closest to our in the financial literature is Nguyen et al. (2018). The authors show that the cultural heritage of U.S. CEOs who are the children or grandchildren of immigrants matters for corporate outcomes. Similarly, other papers use the nationality or the ancestry of the CEO to show that the characteristics of cultural heritage affect corporate policies (e.g., Biggerstaff et al., 2015; Pan et al., 2020). We depart from this literature as we do not focus on the cultural features of the home country (such as the Hofstede cultural dimensions widely used in finance). Again, the purpose of our paper is to provide evidence that heterogeneity in the attitudes of CEOs' ancestors, even with the same cultural background, can predict firm performance and corporate policies.

Finally, our paper contributes to the recent literature that analyses the impact of the Mass Migration on alternative economic outcomes. For example, Andersson et al. (2019) find a positive effect of the Swedish Mass Migration on technology adoption in sending municipalities. Karadja and Prawitz (2019) analyse the political effects of the Swedish Mass emigration to the United States and find that emigration substantially increased the local demand for political change in the home country. Sequeira et al. (2019) estimate a positive short and long run effect of the European Mass Migration on economic development in the United States. Tabellini (2020) finds a positive effect of the European Mass Migration on natives' employment and industrial production, even if immigration triggered hostile political reactions. Our

findings contribute to this literature by showing a novel channel through which emigration can affect economic outcomes, that is a higher risk propensity of emigrants and information linkages with the United States that affect corporations' performance and is persistent across generations.

The remainder of the paper is organized as follows. In Section 2, we describe the historical background of the Italian Mass Migration to the U.S. In Section 3, we illustrate the data we use in order to advance our empirical analysis. In Section 4, we discuss our identification strategy and show our main findings. In Section 5, we report results from different robustness checks to validate our results. In Section 6 and 7, we analyse potential mechanisms behind the results. Section 8 concludes.

2 Historical Background

An unprecedented and unique movement of people from European countries to the New World characterised the second half of the XIXth century and the first decades of the XXth century. The almost null presence of barriers at the entrance of destination countries encouraged this phenomenon. While the period 1850-1890 saw large flows of emigrants sailing from Northern European (more developed) countries, migration from Southern European (less developed) countries to the New World prevailed in the period 1890-1924. Among the latter, Italy registered a shift in emigration destinations from other European countries to transoceanic countries (see Figure 1). Specifically, more than 6 million Italians passed through the Ellis Island port to reach the U.S. Other popular transoceanic destinations for Italians were Argentina, Brazil, and Canada. However, total emigration rates to the U.S. were far higher than those reported for other host countries. Emigration to the U.S. started dropping after the Emergency Quota Act (1921), which imposed limits on the number of immigrants admitted from specific countries (including Italy) and the Immigration Act (1924), which further restricted the quotas set in 1921.

– Figure 1 around here –

Emigration rates in Italy differed substantially across areas. Figure 2 shows emigration patterns in Italian municipalities. Southern regions registered much higher emigration than Northern regions. As hypothesized in Hatton and Williamson (1998) and further confirmed in Spitzer and Zimran (2018), emigrants were negatively selected at the national level. Southern Italians were poorer, more illiterate, and mainly living in rural areas, therefore more willing to leave. On the other hand, Spitzer and Zimran (2018) show that self-selection in migration was positive at the local level. Using data on height, they find that taller individuals within provinces were more likely to leave.

– Figure 2 around here –

It is important to note that the rate of return migration (emigrants returning to their home country) was really high. Using Ellis Island ships record, Bandiera et al. (2013) estimate an out-migration rate,

that is the ratio of the number of out-migrants to the number of in-migrants from the same cohort and over the same decade, equal to 76 % for the 1900-10 decade, and close to 100 % over the 1910-20 decade, suggesting large migrant flows back to their origin country.

Many historians of the Great Migration and testimonials, for example the film director Frank Capra or the Italian novelist Edmondo De Amicis, wrote about the danger and the riskiness of the journey to the New Continent, driven by abuses of the crew, the fear of shipwrecks, the possibility of being landed in a country other than the one expected, and the worries about an uncertain future. Furthermore, because of the spread of contagious diseases and the accidents due to the low level of security, many Italians lost their life during the journey (e.g., Molinari, 2007).

3 The Data

Emigration data We collect emigration data by Italian municipality of last residence for years 1892-1924 from the websites *jewishgen.org* and *stevemorse.org*, which digitized the complete Ellis Island ships' lists.¹

– Figure 3 around here –

Administrative emigration data are a much more reliable source of information with respect to other official sources (Bandiera et al., 2013). Furthermore, Ellis Island passenger lists include detailed information on emigrants, such as first and last name, year of arrival, city of last residence, nationality, departure port, age, and gender.

From the complete list, we remove emigrants whose records contain typos in municipalities' names. Our emigrants' database includes information on more than two million individuals. In order to test the reliability of this database, we compare our sample with Willcox (1929), that collects information on the total number of Italian emigrants to the U.S. More specifically, we compare the time-series of emigration rates. Figure 4 shows that our sample is a strong predictor of overall emigration and confirms the high quality of our database.

– Figure 4 around here –

Firm and CEO characteristics The source of information for firm characteristics is AIDA (Bureau Van Dijk). AIDA gathers information on the universe of private Italian firms and provides detailed information about corporate management and firm performance.

More specifically, for each firm, AIDA allows researchers to download a snapshot of CEO characteristics (name, surname, gender, age, education, and place of birth). We use this information to identify

¹An example of the original records can be found in Figure 3. These lists were digitised by volunteers from the Church of Jesus Christ of Latter-Day Saints. This database has already been used in other empirical studies (Bandiera et al., 2013; Florio, 2019).

CEOs having an ancestor who emigrated during the Age of Mass Migration. In the next paragraph, we provide a detailed description of the matching procedure.

In addition, the AIDA database contains balance-sheet corporate information. In particular, we include in our dataset a measure of corporate size (number of employees), several measures of corporate profitability (such as added value per employees, turnover per employee, and turnover per staff cost) and other variables that allow us to understand corporate policies and risk (as corporate investments, leverage, and debt cost, among others).

We collect information as in 2018, the year in which we started to write this article. Following previous studies (e.g., Duval et al., 2020), we exclude from the sample micro-enterprises, that in Italy are defined as firms with less than ten employees, because of concerns about the reliability of the data, and financial and regulated firms (*SIC 6011-6099* and *SIC 4900-4999*), and we winsorise the variables at the first and the last percentiles to exclude potential outliers.

Historical emigrants’ departure port Ships directed to Ellis Island left from four Italian ports (Genoa, Naples, Palermo, and, since 1905, Messina) and one main French port (Le Havre). The French shipping company, nevertheless, was allowed to sell tickets only in northern areas up to the provinces of Lucca, Modena, Bologna, and Ferrara. Therefore, Italians from Southern and Central regions could leave solely from Italian ports (unless emigrating first to a different country).²

We measure proximity to the departure port as the inverse distance in 100 km from the centroid of the municipality to the closest departure port. To do so, we use distance matrices between the municipalities from the National Statistical Institute (ISTAT).

Matching managers with ancestors Matching emigrants during the Mass Migration with current Italian managers is possible because of the high level of Italian historical geographical fragmentation. Indeed, the country is characterised by a high number of last names and a high number of geographical divisions (Caffarelli and Marcato, 2008). Together with a low geographical mobility, it implies that a matching based on municipality of birth and last name has the potential to identify relatively small groups. For this reason, we follow the literature (e.g., Gagliarducci and Manacorda, 2020; Barone and Mocetti, 2016), and match CEOs with their ancestors who emigrated based on manager’s last name and municipality of birth.

The matching procedure is not free of measurement errors. These could arise because we match a CEO with an individual that emigrated during the Age of Mass Migration even if they do not belong to the same family (Type-2 error) or because we fail to classify two individuals that belong to the same family based on their municipality of origin and last name (Type-1 error). We deal with this problem in the econometric framework section.

²To guarantee the validity of our instrument we include in Section 5 one model specification using only the sample of Southern and Central Italian firms.

Summary Statistics A detailed description of the variables and their sources is provided in Table 1.

Summary statistics are reported in Table 2. Our final database is a cross-section of 76,055 firms. On average, 20% of our sample of CEOs have an ancestor that emigrated during the Great Recession.

We as well split the sample between firms that have a CEO with past emigration experience and firms that do not and we show in Table 3 the normalized differences in CEOs and corporate characteristics between the two groups. As rule of thumb, the two groups can be considered similar enough to proceed with a linear regression analysis if their normalized differences are within the range of ± 0.25 (Imbens and Wooldridge, 2009). In our sample, the normalized differences are all within this range and we therefore proceed with our econometric analysis.

– Table 1 around here –

– Table 2 around here –

– Table 3 around here –

4 Econometric Framework

Instrumental Variable Approach In this section, we describe the econometric approach that we use to answer to our research question.

Ideally, we would like to estimate the impact of having an ancestor that emigrated during the Great Emigration on corporate performance through the OLS model reported in Equation 1.

$$Productivity_i = \alpha_r \times \theta_s + \beta Emigrated_i + X_i' \Gamma + \epsilon_i \quad (1)$$

The dependent variable is productivity of firm i . We measure it as the natural logarithm of value added per employee. The main variable of interest is *Emigrated*, measured with a dummy variable equal to 1 if the CEO has an ancestor who emigrated to Ellis Island during the period 1892-1924. X_i is a matrix of firm-specific and CEO-specific control variables. We control for firm size, measured as the number of employees, and for a set of CEO characteristics. In particular, we control for age, age squared, gender, and college degree. $\alpha_r \times \theta_s$ are region-year fixed effects, a set of 995 dummy variables that allow us to control for regional and sectoral heterogeneity in productivity. Finally, ϵ_i is an unobserved random component.

In absence of endogeneity, β would give us an unbiased estimator of the effect of having an ancestor with past emigration experience on productivity. However, it is unlikely to be the case. As explained in the data section, measurement errors are likely to bias our results, pushing our coefficient of interest towards zero.

In order to deal with endogeneity, we adopt an Instrumental Variable (IV) strategy. In particular, we exploit headquarter proximity to the closest historical emigrants' departure port during the Age of Mass Migration as exogenous variation in the probability to have a CEO with a past emigration history.

The rationale for the use of this instrument is that the distance from historical port is a good proxy for emigration cost. Firms located in areas in which emigration has been higher are more likely to have a CEO with an ancestor who emigrated. On the other side, the exclusion restriction is likely to hold, since arguably with-in region distance from an historical port of emigrants' departure may affect corporate productivity nowadays. A similar approach has been used in other studies (e.g., Florio, 2019; Sequeira et al., 2019).

We estimate the following first-stage equation:

$$Emigrated_i = \alpha_r \times \theta_s + \beta PortProximity_i + X_i' \Gamma + \epsilon_i \quad (2)$$

In Equation 2, *PortProximity* is our instrumental variable, measured as proximity to the closest historical emigrants' departure port as the inverse of the Euclidean distance in 100 km from the centroid of the municipality in which the firm is located.

Column 1 of Table 4 reports the first stage. In line with our hypothesis, we find that 100 km increase in a firm's proximity to port increases the probability to have a CEO with an ancestor who emigrated during the Great Migration by 4%. The coefficient is as well statistically significant and it is associated with an F-test equal to 101, higher with respect to the well known critical value of 10. Therefore, we exclude the hypothesis that our instrument is weak and we proceed with the estimation of the second stage.

We report the second stage in Column 2 of Table 4. We find a positive and statistically significant effect of the instrumented variable on corporate productivity. The magnitude is as well economically meaningful. In particular, we find that having a CEO that belongs to a family with past emigration experience leads to an increase in corporate productivity equal to 4% with respect to the average firm.

The ordinary least square estimator is reported for comparison in Column 3. According to the hypothesis that measurement errors are likely to affect our findings and push the coefficient of interest towards 0, we find that in terms of magnitude it is much smaller with respect to the instrumental variable coefficient.

Reduced Form We estimate the reduced form reported in Equation 3:

$$Productivity_i = \alpha_r \times \theta_s + \beta ProximityPort_i + X_i' \Gamma + \epsilon_i \quad (3)$$

Results are reported in Column 4 (Table 4). In line with our first and second stages results, we find a positive effect of proximity to an historical departure port on corporate productivity. In terms of

magnitude, an increase in 100 km in the proximity to an historical departure port is associated with an increase in productivity of 0.2% with respect to average firm.

Falsification Test The underlying assumption beyond the validity of our instrumental variables approach is that the proximity to an historical departure port affects corporate productivity only through the emigration experience of a CEO’s ancestors. If this is the case, we should not find any effect of proximity to a historical departure port on corporate productivity for CEOs without an ancestor that emigrated.

We estimate again Equation 3 but we limit our sample to CEOs without an ancestor that emigrated during the Great Emigration. Results are reported in Column 5 (Table 4). We find that the coefficient is not statistically significant, suggesting that our instrument satisfies the exclusion restriction beyond the validity of our instrumental variables approach.

– Table 4 around here –

5 Additional Results

Alternative Measures of Corporate Performance We show that our results are not sensitive to the use of alternative measures of corporate performance and maintain the same direction when we propose alternative measures of corporate productivity.

Column 1 of Table 5 shows results from the estimation of Equation 1 when we use as dependent variable *Turnover per employee*. In line with our benchmark specification, we find a positive and statistically significant effect on this measure of corporate productivity. In terms of magnitude, it implies an increase in corporate performance equal to 6.8% with respect to the mean.

Column 3 of Table 5 shows estimation results of Equation 1 when we use as dependent variable of interest *Turnover per staff cost*. Again, we find a positive and statistically significant effect on this measure of corporate productivity equal to 24% with respect to the average firm.

– Table 5 around here –

A focus on the South and Center Italy As shown in Figure 2, emigration rates (especially to the U.S.) from central and southern regions were far higher than those from northern Italy. Therefore, in an additional specification we focus our attention on southern and central Italian regions.

We estimate Equation 1 using the instrumental variables approach and we report the estimation results in Column 1 of Table 6. In line with our main results, we find a positive and statistically significant effect of the emigration experience of CEOs’ ancestors on corporate productivity. In terms of magnitude, it implies an increase in corporate productivity equal to 2.8% with respect to the average firm in the South and Center Italy.

Excluding smaller and bigger firms We show that our results are not driven by corporation size. This exercise allows us to alleviate the concern that our results are driven by some omitted variable characteristics that affect the matching between more productive firms and CEOs that belong to a family with past emigration experience.

For this reason, we estimate Equation 1 excluding firms in the first quartile and next in the last quartile. Results are reported in Columns 3 and 5, respectively, of Table 6. The results are in line with the coefficient of the benchmark specification. In terms of magnitude, the two coefficients are within one standard deviation of the baseline model.

Focusing on unique surname In order to further mitigate measurement error bias, we show that our results still hold when we focus our attention to a sample of unique CEOs in terms of surname for a specific municipality of birth.

We report estimation results in Column 7 of Table 5. Again, our results are in line with the baseline results and within one standard deviation of the baseline coefficient.

The role of the birthplace environment of the CEO Previous literature in economics shows that not only parents influence the attitudes of the offspring, but also the environment in which the individual grew up has an impact on her attitudes (e.g., Dohmen et al., 2012). We consider it in our empirical analysis and we estimate Equation 1 using as independent variable of interest the instrumented emigration rate of CEO’s birthplace during the Mass Migration.

The results are reported in Column 9 of Table of 6. In line with our hypothesis, we find a positive effect of historical attitudes towards migration in corporate performance. In particular, one standard deviation increase in historical emigration in the municipality where the CEO grew up is associated with an increase in corporate productivity equal to 2.4 % with respect to the average firm.

– Table 6 around here –

6 The inter-generational transmission of ancestors’ risky attitudes

Corporate risky policies Previous literature in economics shows that there is a link between risk attitudes and emigration (e.g., Akgüç et al., 2016; Conroy, 2007; Dustmann et al., 2017; Jaeger et al., 2010). This link is particularly strong for emigrants during the Mass Migration. Indeed, many historians and testimonials wrote about the danger of the journey, driven by the indifference and abuses of the crew, the fear of shipwrecks and contagious diseases, the possibility of being landed in a country other than the one expected, and the worries about an uncertain future (Molinari, 2007).

We are going to test the hypothesis that the inter-generational transmission of ancestors' risk attitudes explains our findings. To do so, we estimate Equation 1 using alternative measures of corporate risk behaviour and our instrumental variable approach.

First, we look at the effect of having a CEO whose ancestors emigrated to the U.S. during the Age of Mass Migration on the historical standard deviation of the returns on assets. This variable has been used as proxy for corporate risk in several papers (e.g., Minh et al., 2020). We report results from this regression in the first column of Table 7. We find a positive and statistically significant effect. In particular, having an ancestor who emigrated during the Age of Mass Migration increases the historical standard deviation of the return on assets by 19% with respect to the average firm.

Next, we investigate the effect of attitudes on risky investments. In particular, we consider expenditures in research and development and in start up as over total assets dependent variable of interest. As reported in Column 2 of Table 7, we find a positive effect of ancestors' risk attitudes on risky investments. This finding is consistent with the idea that these firms tend to engage more in risky investments.

We then consider the relationship between ancestors' risk attitudes and corporate financial policies, specifically on the level of corporate leverage. Column 3 of Table 7 displays results from this regression. We find that having an ancestor who emigrated during the Age of Mass Migration is associated with a higher use of external capital. This result is consistent with the idea that there is a positive relationship between ancestors' risk attitudes and corporate financial risky policies.

Finally, we investigate the effect of ancestors' risk attitudes on the propensity of a firm to invest in intangibility assets. We find that having an ancestor with past emigration experience is associated with a higher share of intangibles assets. We report our estimation results in Column 4 of Table 7. Having an ancestor who emigrated during the Age of Mass Migration increases corporate intangible assets by 4%.

Credit risk and corporate solvency Our hypothesis is that risk taking propensity attitudes drive corporate risky policies. In order to exclude the hypothesis that corporate risky policies are driven by opportunism rather than risk appetite, we investigate the relationship between ancestors' attitudes and corporate credit risk. The absence of a negative relationship would raise the concern that our results are driven by the match between riskier firms and CEOs rather than different risk-propensity attitudes.

First, we study the impact of having an ancestor who emigrated during the Age of Mass Migration on corporate cost of credit. Column 5 of Table 7 reports the regression results. We find that ancestors risk attitudes increase corporate cost of credit by 21% with respect to the average value.

Second, we test the effect of having an ancestor that emigrated during the Age of Mass Migration on interest over operating profit and firm solvency. We report estimation results, respectively, in Columns 6 and 7 of Table 7. We find that riskier attitudes of CEOs' ancestors increase interest over operating profit by 10% with respect to its average value and decrease firm solvency by 26%.

– Table 7 around here –

7 Exploring alternative explanations

Human capital and managerial ability Our results clearly suggest that there is a link between CEOs’ risk propensity and corporate performance. However, there could be alternative explanations for our findings. For example, it is possible that we are capturing heterogeneity in managers’ ability rather than risk preferences.

From a theoretical point of view, the relationship between emigration and ability is ambiguous. As argued by Spitzer and Zimran (2018), emigrants were negatively selected at the national level. Southern Italians were poorer, more illiterate, and mainly living in rural areas, therefore more willing to leave. On the other hand, it is also true that self-selection in migration was positive at the local level, since stronger individuals were more likely to leave. Other papers also show that return migration can affect investment in human capital and children’s human capital (e.g., Cortes, 2004; Dustmann, 1997, 2008), that could have a lasting effect across generations and explain our findings.

Following previous literature (e.g., Arcidiacono et al., 2010), we try to investigate this hypothesis using education as proxy for managers’ ability and estimating the following Equation 4:

$$Emigrated_i = \alpha_r \times \theta_s + \beta Degree_i + X_i' \Gamma + \epsilon_i \quad (4)$$

In this Equation, *Degree* is a dummy variable equal to 1 if the CEO holds a college degree. As reported in Table 8, we find no evidence on the relationship between human capital and ancestors’ emigration experience. This finding supports the hypothesis that managers’ ability and human capital are not able to explain managers’ performance.

– Table 8 around here –

Information linkages with the United States A final hypothesis is that, since our data contain only information on emigrants to the United States, our results could be affected by country-specific information flow or know-how exported by the ancestors to their successors.

Theoretical models in the economic literature emphasize the role of networks in facilitating the spread of information across international borders (e.g., Chaney, 2014). Information linkages have been shown to be persistent across generations and could influence corporate performance by affecting trade and management practices. For example, Burchardi et al. (2018) show that ancestry composition of US counties affect firm engagement in FDI because of a reduction in information frictions. Similarly, Cohen et al. (2017), using the formation of World War II Japanese internment camps to isolate exogenous shocks to local ethnic populations, find that firms are more likely to trade with countries that have a large resident population near their firm headquarters, and that these connected trades are their most valuable international trade. Giorcelli (2019) analyses the impact of the Productivity Program (1952–1958) and shows that Italian firms that sent their managers to the US improved their performance for at least

fifteen years. Bloom et al. (2012) find that U.S. IT-related productivity advantage is primarily due to their tougher “people management” practices. Other papers show that emigrants bring with them the skills they acquire and affect regional sector specialization and technological adoption, even in the long-run (e.g., Andersson et al., 2020; Pellegrina et al., 2019).

To study this hypothesis, we analyse the effect of having an ancestor that emigrated during the Great Migration on corporate FDI. More specifically, we estimate Equation 1 using as dependent variable a dummy variable equal to 1 if the corporations hold a subsidiary in the United States. We show estimation results using our instrumental variable approach in Table 9. As reported in Column 1, we find a positive and statically significant effect. More specifically, the probability of opening a subsidiary in the United States increases by 2%. We do not find any evidence that having an ancestor that emigrated to the United States during the Mass Migration affects the probability of opening a subsidiary in other countries, as it has been reported in Column 4. These results support the hypothesis that information linkages arising from emigration patterns affect corporate FDI.

Next, we test the hypothesis that information linkages affect managerial practices. Motivated by the documented relationship between management practices and skills (e.g., Bloom and Van Reenen, 2007; Feng and Valero, 2020), we use as proxy for managerial ability the ratio between the number of managers and the number of employees. A higher manager-to-worker ratio ensures better workers monitoring, with consequent productivity gains (Giorcelli, 2019). Using this proxy as dependent variable and estimating Equation 1 using our instrumental variable approach, we find a positive and statistically significant effect (as reported in Column 6 of Table 9).

These results do not reject the hypothesis that country-specific information linkages with the United States can affect corporate performance even in our setting, as it has been highlighted in other papers (Burchardi et al., 2018; Cohen et al., 2017; Giorcelli, 2019).

– Table 9 around here –

8 Conclusions

A growing literature in corporate finance shows that managers’ attitudes and cultural heritage can explain corporate policies and performance. These studies analyse the behaviour of managers outside of the firm to elicit their attitudes or cultural features of the home country (e.g., Benmelech and Frydman, 2015; Nguyen et al., 2018; Sunder et al., 2017).

In our paper, we analyse the inter-generational transmission of attitudes exploiting heterogeneity in ancestors’ attitudes during the Age of Mass Migration in Italy. We show that ancestors’ attitudes are as good as CEOs’ attitudes to predict corporate policies and performance. To do so, we collect Ellis Island ships’ records and we merge this information with the universe of Italian CEOs. We show that firms that are managed by CEOs that belong to a family with past emigration experience tend to perform better

and to be more productive. We as well show a positive relationship between CEO ancestors' emigration experience and alternative measures of corporate risk-taking. The link between the attitudes of CEOs' ancestors and corporate policies has as well consequences on firm solvency and on the cost of capital, further confirming the hypothesis that our results are driven by CEOs' risk appetite. Overall, our findings are in line with the hypothesis of an inter-generational transmission of risky attitudes. As an additional parallel mechanism, we find that information linkages with the United States can contribute to explain our main finding.

Our paper has important implications for both practitioners and researchers. To the best of our knowledge, we show that ancestors' behaviour can be an important predictor of corporate performance, supporting previous literature showing that CEOs' personal traits can affect corporate performance. Our results are as well important to shed light on the impact of emigration on aggregate economic outcomes, suggesting novel mechanisms through which economies can be affected.

References

- R. Abramitzky and L. Boustan. Immigration in american economic history. *Journal of economic literature*, 55(4):1311–45, 2017.
- R. Abramitzky, L. P. Boustan, and K. Eriksson. Europe’s tired, poor, huddled masses: Self-selection and economic outcomes in the age of mass migration. *American Economic Review*, 102(5):1832–56, 2012.
- M. Akgüç, X. Liu, M. Tani, and K. F. Zimmermann. Risk attitudes and migration. *China Economic Review*, 37:166–176, 2016.
- D. Andersson, M. Karadja, and E. Prawitz. Mass migration and technological change. *Working Paper*, 2019.
- D. Andersson, M. Karadja, and E. Prawitz. Mass migration and technological change. 2020.
- P. Arcidiacono, P. Bayer, and A. Hizmo. Beyond signaling and human capital: Education and the revelation of ability. *American Economic Journal: Applied Economics*, 2(4):76–104, 2010.
- O. Bandiera, I. Rasul, and M. Viarengo. The making of modern america: Migratory flows in the age of mass migration. *Journal of Development Economics*, 102:23–47, 2013.
- G. Barone and S. Mocetti. Intergenerational mobility in the very long run: Florence 1427-2011. *Bank of Italy Temi di Discussione (Working Paper) No*, 1060, 2016.
- E. Benmelech and C. Frydman. Military ceos. *Journal of Financial Economics*, 117(1):43–59, 2015.
- G. Bernile, V. Bhagwat, and P. R. Rau. What doesn’t kill you will only make you more risk-loving: Early-life disasters and ceo behavior. *The Journal of Finance*, 72(1):167–206, 2017.
- M. Bertrand and A. Schoar. Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*, 118(4):1169–1208, 2003.
- L. Biggerstaff, D. C. Cicero, and A. Puckett. Suspect ceos, unethical culture, and corporate misbehavior. *Journal of Financial Economics*, 117(1):98–121, 2015.
- A. Bisin, G. Topa, and T. Verdier. Religious intermarriage and socialization in the united states. *Journal of Political Economy*, 112(3):615–664, 2004.
- N. Bloom and J. Van Reenen. Measuring and explaining management practices across firms and countries. *The Quarterly Journal of Economics*, 122(4):1351–1408, 2007.
- N. Bloom, R. Sadun, and J. Van Reenen. Americans do it better: Us multinationals and the productivity miracle. *American Economic Review*, 102(1):167–201, 2012.

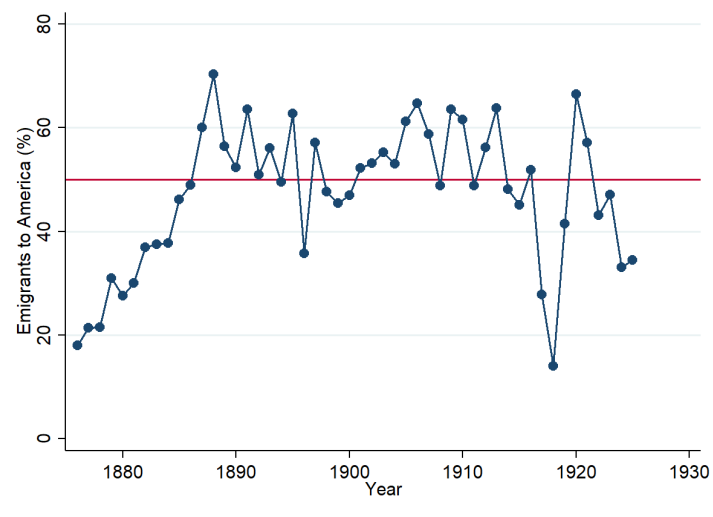
- M. Brum. Italian Migration to the United States: The Role of Pioneers' Locations. Working Paper. 2019.
- K. B. Burchardi, T. Chaney, and T. A. Hassan. Migrants, ancestors, and foreign investments. *The Review of Economic Studies*, 86(4):1448–1486, 2018.
- E. Caffarelli and C. Marcato. *I cognomi d'Italia: dizionario storico ed etimologico. A-G*. UTET, 2008.
- T. Chaney. The network structure of international trade. *American Economic Review*, 104(11):3600–3634, 2014.
- L. Cohen, U. G. Gurun, and C. Malloy. Resident networks and corporate connections: Evidence from world war ii internment camps. *The Journal of Finance*, 72(1):207–248, 2017.
- H. V. Conroy. The role of attitudes toward risk in the decision to migrate. *California Center for Population Research, UCLA, working draft*, 2007.
- K. E. Cortes. Are refugees different from economic immigrants? some empirical evidence on the heterogeneity of immigrant groups in the united states. *Review of Economics and Statistics*, 86(2):465–480, 2004.
- J. DeBacker, B. T. Heim, and A. Tran. Importing corruption culture from overseas: Evidence from corporate tax evasion in the united states. *Journal of Financial Economics*, 117(1):122–138, 2015.
- M. Doepke and F. Zilibotti. Occupational choice and the spirit of capitalism. *The Quarterly Journal of Economics*, 123(2):747–793, 2008.
- T. Dohmen, A. Falk, D. Huffman, and U. Sunde. The intergenerational transmission of risk and trust attitudes. *The Review of Economic Studies*, 79(2):645–677, 2012.
- C. Dustmann. Return migration, uncertainty and precautionary savings. *Journal of Development Economics*, 52(2):295–316, 1997.
- C. Dustmann. Return migration, investment in children, and intergenerational mobility comparing sons of foreign-and native-born fathers. *Journal of Human Resources*, 43(2):299–324, 2008.
- C. Dustmann, F. Fasani, X. Meng, and L. Minale. Risk attitudes and household migration decisions. *Centro Studi Luca d'Agliano Development Studies Working Paper*, (423), 2017.
- R. Duval, G. H. Hong, and Y. Timmer. Financial frictions and the great productivity slowdown. *The Review of Financial Studies*, 33(2):475–503, 2020.
- A. Feng and A. Valero. Skill-biased management: evidence from manufacturing firms. *The Economic Journal*, 130(628):1057–1080, 2020.

- R. Fernández and A. Fogli. Fertility: The role of culture and family experience. *Journal of the European Economic Association*, 4(2-3):552–561, 2006.
- E. Florio. The legacy of historical emigration: Evidence from italian municipalities. 2019.
- S. Gagliarducci and M. Manacorda. Politics in the family: Nepotism and the hiring decisions of italian firms. *American Economic Journal: Applied Economics*, 12(2):67–95, 2020.
- M. Giorcelli. The long-term effects of management and technology transfers. *American Economic Review*, 109(1):121–52, 2019.
- L. Guiso, P. Sapienza, and L. Zingales. Does culture affect economic outcomes? *Journal of Economic Perspectives*, 20(2):23–48, 2006.
- T. J. Hatton and J. G. Williamson. *The age of mass migration: Causes and economic impact*. Oxford University Press, 1998.
- G. W. Imbens and J. M. Wooldridge. Recent developments in the econometrics of program evaluation. *Journal of Economic Literature*, 47(1):5–86, 2009.
- D. A. Jaeger, T. Dohmen, A. Falk, D. Huffman, U. Sunde, and H. Bonin. Direct evidence on risk attitudes and migration. *The Review of Economics and Statistics*, 92(3):684–689, 2010.
- M. Karadja and E. Prawitz. Exit, voice, and political change: Evidence from swedish mass migration to the united states. *Journal of Political Economy*, 127(4):000–000, 2019.
- A. S. B. Knudsen. Those who stayed: Individualism, self-selection and cultural change during the age of mass migration. *Self-Selection and Cultural Change During the Age of Mass Migration (January 24, 2019)*, 2019.
- U. Malmendier, G. Tate, and J. Yan. Overconfidence and early-life experiences: the effect of managerial traits on corporate financial policies. *The Journal of Finance*, 66(5):1687–1733, 2011.
- S. Minh, V. Hong, L. Hoang, and T. Thuy. Does banking market power matter on financial stability? *Management Science Letters*, 10(2):343–350, 2020.
- A. Molinari. Il viaggio di emigrazione tra evento e racconto. *Appunti di viaggio. L’emigrazione italiana tra attualità e memoria*, 2007.
- D. D. Nguyen, J. Hagendorff, and A. Eshraghi. Does a ceo’s cultural heritage affect performance under competitive pressure? *The Review of Financial Studies*, 31(1):97–141, 2018.
- Y. Pan, S. Siegel, and T. Yue Wang. The cultural origin of ceos’ attitudes toward uncertainty: Evidence from corporate acquisitions. *The Review of Financial Studies*, 33(7):2977–3030, 2020.

- H. S. Pellegrina, S. Sotelo, et al. Migration, specialization, and trade: Evidence from the brazilian march to the west. In *2019 Meeting Papers*, number 863. Society for Economic Dynamics, 2019.
- N. Roussanov and P. Savor. Marriage and managers' attitudes to risk. *Management Science*, 60(10): 2496–2508, 2014.
- S. Sequeira, N. Nunn, and N. Qian. Immigrants and the making of america. *Review of Economic Studies*, 2019.
- Y. Spitzer and A. Zimran. Migrant self-selection: Anthropometric evidence from the mass migration of italians to the united states, 1907–1925. *Journal of Development Economics*, 134:226–247, 2018.
- J. Sunder, S. V. Sunder, and J. Zhang. Pilot ceos and corporate innovation. *Journal of Financial Economics*, 123(1):209–224, 2017.
- M. Tabellini. Gifts of the immigrants, woes of the natives: Lessons from the age of mass migration. *The Review of Economic Studies*, 87(1):454–486, 2020.
- W. F. Willcox. Statistics of migrations, national tables, united states. In *International Migrations, Volume I: Statistics*, pages 372–498. NBER, 1929.
- M. Zumbuehl, T. Dohmen, and G. Pfann. Parental involvement and the intergenerational transmission of economic preferences, attitudes and personality traits. *The Economic Journal. Forthcoming*, 2021.

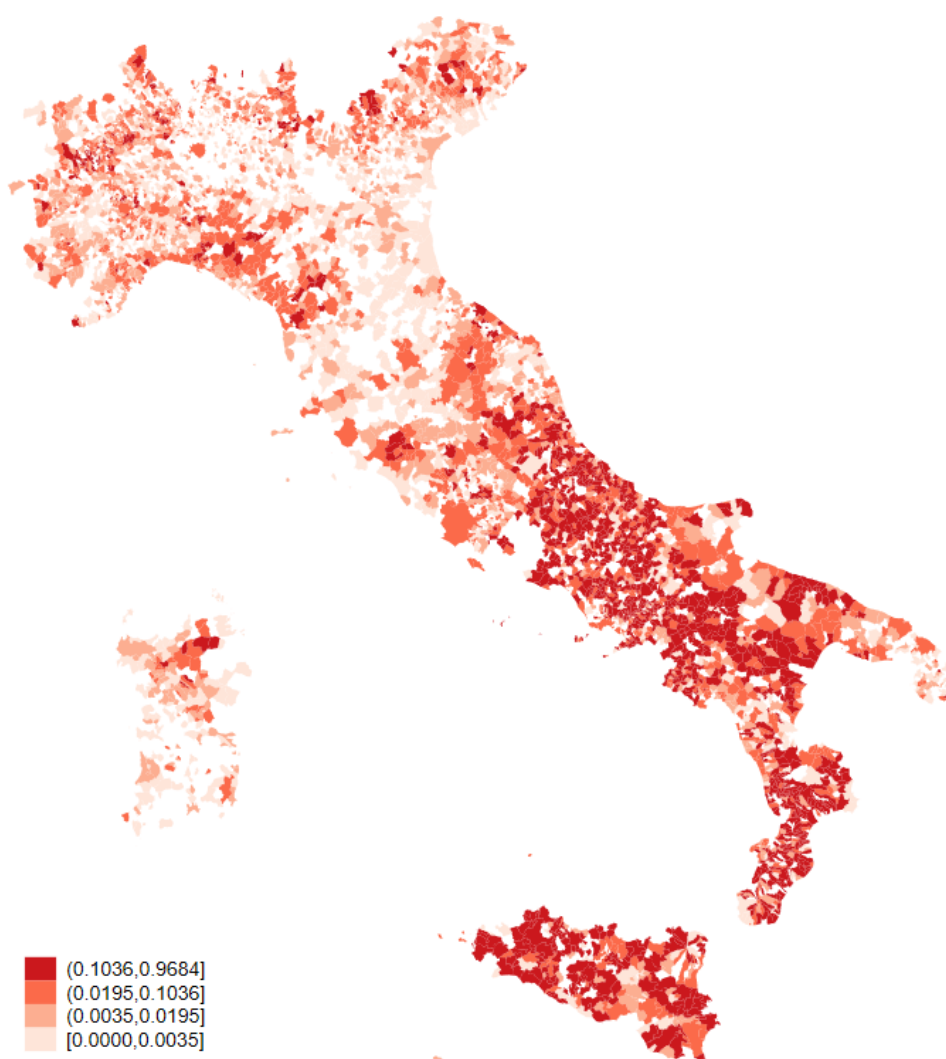
Figures

Figure 1: Validation of the data: Italian emigration to America



Note: The figure shows the share of Italian emigrants to the American continent between 1876 and 1924.

Figure 2: Emigration rate by Italian Municipality



Notes: The figure shows the distribution of the emigration rates to the United States by Italian municipality between 1876 and 1924. We define emigration rates as the ratio between the cumulative number of emigrants during the Age of Mass Migration and 1881 population.

Figure 3: Ellis Island ships' lists

THIS SHEET IS FOR STEERAGE PASSENGERS.

Last **11**

STATES IMMIGRATION OFFICER AT PORT OF ARRIVAL.

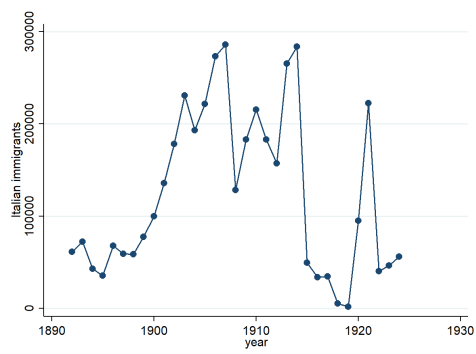
to the United States Immigration Officer by the Commanding Officer of any vessel having such passengers on board upon arrival at a port in the United States.

Arriving at Port of **NEW YORK** **27 Dec 1912**, 19**0**

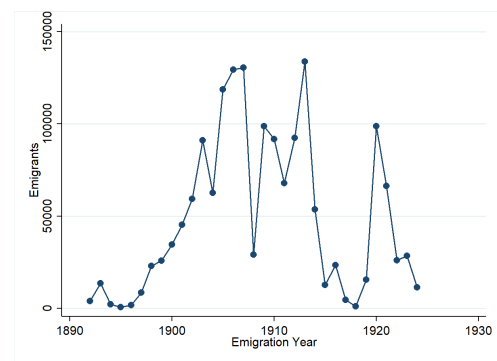
SUPPLEMENTAL INFORMATION REQUIRED BY NATURALIZATION ACT APPROVED JUNE 25, 1906.																
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
No.	Last Name	First Name	Middle Name	Date of Birth	Place of Birth	Whether going to join a relative or friend, and if so, what relative or friend, and his name and complete address.	Whether a Passenger	Whether an Alienable	Condition of Health	Deduction or Exemption	Height	Color of Hair	Color of Eyes	Color of Skin	Marks of Identification	Place of Birth
1
2
3
4
5
6
7
8
9
10
11
12

Note: The figure shows an example of a digitized document from Ellis Island administrative ships' lists.

Figure 4: Italian emigration rates to the U.S.



(a) Willcox (1929) total emigrants



(b) Ellis Island's ships' records

Notes: The figure shows a comparison between Willcox (1929) and Ellis Island ships' records.

Tables

Table 1: Variable description

Variable name	Description	Source
Emigrated	Dummy variable equal to 1 if the CEO belong to a family with past emigration experience	Ellis Island ships' lists
Female	Dummy variable equal to 1 if the CEO is a female	AIDA (BvD)
Age	Age of the CEO	AIDA (BvD)
Degree	Dummy variable equal to 1 if the CEO holds a college degree	AIDA (BvD)
Proximity to Port	The inverse of the Euclidean distance in 100 km from the closest municipality with an emigrants' departure port	ISTAT
Productivity	Natural logarithm of added value per number of employees	AIDA (BvD)
Employees	Natural logarithm of the number of employees	AIDA (BvD)
Leverage	Natural logarithm of the ratio between Total Assets and Total Equity	AIDA (BvD)
Intangibility	The ratio between Total Intangible Fixed Assets and Total Assets	AIDA (BvD)
Turnover Per Employees	Natural logarithm of corporate turnover per number of employees	AIDA (BvD)
Turnover Per Staff Cost	Natural logarithm of corporate turnover per cost of employees	AIDA (BvD)
Cost of Debt	Natural logarithm of the ratio between Borrowing Costs and Bank Debt	AIDA (BvD)
Interest over Operating Profit	The ratio between Operating Profits, Depreciation and Impairment Losses, and Borrowing Costs	AIDA (BvD)
R & D	The ratio between Research and development and start up expenditures and total assets	AIDA (BvD)
Solvency	Natural logarithm of the AIDA corporate solvency index measured as ratio between Total Equity and Total Assets	AIDA (BvD)
SD ROA	Natural logarithm of the historical volatility of corporate Return On Assets	AIDA (BvD)

Notes: The table provides the list of the variables available in our database, detailed information on the construction of each variables, and the source of the data. *Emigrated*, *Age*, *Female*, and *Degree* all refer to the CEO.

Table 2: Summary statistics

	Count	Mean	SD	p25	p75
Emigrated	76,055	0.217	0.413	0	0
Age	76,055	52.847	12.366	45	61
Female	76,055	0.195	0.396	0	0
Degree	76,055	0.351	0.477	0	1
Proximity to port	74,130	-2.282	1.207	-3.115	-1.471
Productivity	76,055	10.247	0.935	9.767	10.865
Employees	76,055	3.198	0.781	2.639	3.584
Intangibility	76,055	0.048	0.100	0	0.040
Turnover per Employees	75,866	11.266	1.186	10.448	12.097
Turnover per Staff Cost	75,868	1.522	0.622	1.026	1.872
Solvency	67,129	2.760	1.085	2.041	3.633
SD ROA	71,414	1.912	0.909	1.244	2.463
Leverage	68,051	2.090	1.206	1.273	2.709
Cost of Debt	31,392	1.613	0.706	1.135	2.132
Interest on Operating Profits	53,014	2.765	1.330	1.712	3.694

Notes: The table shows firm-level variables and summary statistics referred to year 2018. *Emigrated*, *Age*, *Female*, and *Degree* all refer to the CEO. *Emigrated* is defined as the dummy for CEO having at least one emigrant who left to the U.S. during the age of mass migration. *Proximity to port* is defined as the inverse distance in 100 km from the closest emigration port to the firm headquarters. *Employees*, *Productivity*, *Turnover per Employees*, *Turnover per Staff Cost*, *Solvency*, *SD ROA*, *Leverage*, *Cost of Debt*, and *Interest on Operating Profits* are all measured in logs.

Table 3: Balanced sample

Variable	<i>Emigrated=1</i>		<i>Emigrated=0</i>		ND
	Mean	SD	Mean	SD	
Productivity	10.17	0.93	10.27	0.93	-0.07
Turnover Per Employees	11.18	1.19	11.29	1.18	-0.07
Turnover Per Staff Cost	1.51	0.63	1.53	0.62	-0.02
Employees	3.18	0.77	3.20	0.78	-0.02
Intangibility	0.05	0.10	0.05	0.10	0.02
Liquidity Ratio	0.12	0.16	0.12	0.16	0.01
Leverage	2.10	1.21	2.09	1.20	0.01
Interest on Operating Profits	2.75	1.33	2.77	1.33	-0.01
ROA	1.31	22.35	1.56	21.48	-0.01
Female	0.19	0.40	0.20	0.40	-0.00
Age	52.97	12.52	52.81	12.32	0.01
SD ROA	1.94	0.93	1.90	0.90	0.03
Solvency	2.74	1.09	2.77	1.08	-0.02
Cost of Debt	1.65	0.70	1.60	0.71	0.05
R & D	8.17	10.81	8.12	10.84	0.00

Notes: The table shows the summary statistics of the main variables when we split the sample between firms that have a CEO with ancestors' emigration experience (*Emigrated*=1) and firms that do not (*Emigrated*=0). *Emigrated* is defined as the dummy for CEO having at least one emigrant who left to the U.S. during the age of mass migration. The last column provides normalized differences. *Employees*, *Productivity*, *Turnover per Employees*, *Turnover per Staff Cost*, *Solvency*, *SD ROA*, *Leverage*, *Cost of Debt*, and *Interest on Operating Profits* are all measured in logs.

Table 4: Main Results

	(1)	(2)	(3)	(4)	(5)
	First Stage	Second Stage	OLS	Reduced Form	Falsification Test
Dependent Variable:	Emigrated	Productivity	Productivity	Productivity	Productivity
Proximity to port	0.042*** (0.003)			0.017*** (0.006)	0.008 (0.007)
Employees	-0.001 (0.002)	-0.047*** (0.005)	-0.047*** (0.005)	-0.047*** (0.005)	-0.050*** (0.005)
Female	-0.005 (0.004)	-0.065*** (0.008)	-0.068*** (0.007)	-0.067*** (0.007)	-0.068*** (0.008)
Age	0.000 (0.001)	0.024*** (0.002)	0.024*** (0.002)	0.024*** (0.002)	0.024*** (0.002)
Age Squared	0.000 (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
Degree	-0.003 (0.003)	0.379*** (0.008)	0.377*** (0.007)	0.378*** (0.007)	0.374*** (0.008)
Emigrated		0.406*** (0.144)	0.012* (0.007)		
<i>F-test</i>		182.79			
Region \times Sector	Yes	Yes	Yes	Yes	Yes
Observations	74,128	74,128	76,055	74,128	57,944
Mean Dep. Var.	0.218	10.25	10.25	10.25	10.27

Notes: The table shows estimates from OLS and IV regressions. Columns (1) and (2) report results from 2SLS estimation. *Emigrated* is instrumented using the distance in 100 km from the closest departure port to the firm headquarters. Column (3) reports results from baseline OLS regression. Column (4) reports results from the *Reduced Form* regression. In column (5), we report the *Reduced Form* regression on the sample of CEOs with no ancestors who emigrated. All regressions include region-by-sector fixed effects. Sectors are defined according to the US SIC classification. Robust standard errors in parentheses. *p<.05; **p<.01; ***p<.001.

Table 5: Alternative Corporate Performance Measures

	(1) IV	(2) OLS	(3) IV	(4) OLS
Dependent Variable:	Turnover per Employee		Turnover per Staff Cost	
Emigrated	0.771*** (0.169)	0.012 (0.008)	0.300*** (0.090)	0.011** (0.004)
<i>F-test</i>	181.41		179.97	
Controls	Yes	Yes	Yes	Yes
Region \times Sector	Yes	Yes	Yes	Yes
Observations	73,939	75,866	73,942	75,868
Mean Dep. Var.	11.27	11.27	1.527	1.522

Notes: The table shows results from IV and OLS regressions. *Turnover per Employee* and *Turnover per Staff Cost* are defined in logs. In columns (1) and (3), *Emigrated* is instrumented using the inverse distance in 100 km from the closest departure port to the firm headquarters. Controls are: Number of employees, Female, Age, Age squared, and Degree. All regressions include region-by-sector fixed effects. Sectors are defined according to the US SIC classification. Robust standard errors in parentheses. *p<.05; **p<.01; ***p<.001.

Table 6: Alternative Samples

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS
Sample:	South and Centre		No Smallest		No Biggest		Unique Surnames		Environment	
Emigrated	0.280** (0.128)	0.046*** (0.010)	0.335* (0.189)	0.015* (0.009)	0.462*** (0.150)	0.009 (0.008)	0.392** (0.184)	0.000 (0.008)		
Local Emigrants									3.183** (1.543)	-0.370*** (0.046)
<i>F-test</i>	211.52		103.19		167.44		112.80		47.81	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region \times Sector	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	33,906	35,734	51,494	52,731	55,262	56,831	65,005	66,712	54,502	55,732
Mean Dep. Var.	9.991	9.988	10.27	10.27	10.23	10.23	10.24	10.25	10.26	10.27

Notes: The table shows results from IV and OLS regressions. Column (1) reports results from IV estimation on the sample of central and southern Italian municipalities (including isles). Columns (3) and (5) report results from IV estimation excluding the smallest and largest 25% of firms by number of employees, respectively. Column (7) reports results from IV estimation on the sample of CEOs with unique surnames by headquarters firm's municipality. Column (9) reports results from IV estimation using the share of emigrants from CEO's municipality of birth as main dependent variable. *Emigrated* is instrumented using the inverse distance in 100 km from the closest departure port to the firm headquarters. All regressions include region-by-sector fixed effects. Sectors are defined according to the US SIC classification. Robust standard errors in parentheses. *p<.05; **p<.01; ***p<.001.

Table 7: Risk Aversion

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	IV	IV	IV	IV	IV	IV	IV
Dependent Variable:	SD ROA	R and D	Leverage	Intangibility	Interest	Cost of Debt	Solvency
Emigrated	0.364** (0.163)	0.014* (0.008)	0.811*** (0.225)	0.053*** (0.017)	0.583** (0.265)	0.171 (0.197)	-0.732*** (0.207)
Employees	-0.081*** (0.005)	-0.001*** (0.000)	0.043*** (0.007)	0.001 (0.001)	0.018** (0.008)	-0.062*** (0.005)	-0.030*** (0.006)
Age	-0.011*** (0.002)	-0.000 (0.000)	-0.011*** (0.003)	0.000** (0.000)	-0.010*** (0.003)	0.000 (0.002)	0.013*** (0.002)
Age Squared	0.000*** (0.000)	0.000 (0.000)	0.000*** (0.000)	-0.000*** (0.000)	0.000** (0.000)	-0.000 (0.000)	-0.000*** (0.000)
Female	0.023*** (0.009)	-0.000 (0.000)	0.025** (0.013)	-0.001 (0.001)	-0.005 (0.015)	0.027** (0.011)	-0.027** (0.011)
Degree	-0.140*** (0.008)	-0.000 (0.000)	-0.144*** (0.011)	-0.001 (0.001)	0.090*** (0.014)	-0.098*** (0.009)	0.192*** (0.010)
<i>F-test</i>	175.74	85.63	178.09	182.80	156.73	72.94	168.97
Region \times Sector	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	69,563	39,812	66,323	74,128	51,636	30,576	65,425
Mean Dep. Var.	1.908	0.00530	2.090	0.0481	2.768	1.610	2.760

Notes: The table shows results from IV regressions. *Emigrated* is instrumented using the distance in 100 km from the closest departure port to the firm headquarters. Dependent variables *SD ROA*, *Leverage*, *Interest*, and *Cost of Debt* are all measured in logs. All regressions include region-by-sector fixed effects. Sectors are defined according to the US SIC classification. Robust standard errors in parentheses. *p<.05; **p<.01; ***p<.001.

Table 8: Managers' ability

	(1)
	OLS
Dependent Variable:	Emigrated
Age	0.000 (0.001)
Age Squared	0.000 (0.000)
Female	-0.005 (0.004)
Degree	-0.003 (0.003)
Region \times Sector	Yes
Observations	76,055
Mean Dep. Var.	0.217

Notes: The table shows results from OLS regression. The dependent variable is measured as the dummy for CEO having at least one ancestor who emigrated during the age of mass migration. The regression include region-by-sector fixed effects. Sectors are defined according to the US SIC classification. Robust standard errors in parentheses. *p<.05; **p<.01; ***p<.001.

Table 9: Additional results

	(1) IV	(2) OLS	(3) IV	(4) OLS	(5) IV	(6) OLS
Dependent Variable:	Subsidiary in the U.S.	Subsidiary abroad	Subsidiary abroad	Manager-to-worker	Manager-to-worker	Manager-to-worker
Emigrated	0.022* (0.013)	0.002** (0.001)	0.012 (0.026)	0.002 (0.001)	0.041* (0.022)	0.005*** (0.001)
<i>F-test</i>	182.80		182.80		173.75	
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Region \times Sector	Yes	Yes	Yes	Yes	Yes	Yes
Observations	74,128	74,128	74,128	74,128	70,591	72,421
Mean Dep. Var.	0.0072	0.0072	0.0273	0.0273	0.104	0.105

Notes: The table shows results from IV and OLS regressions. *Subsidiary in the U.S.* and *Subsidiary abroad* are dummy variables equal to 1 if the firm has a subsidiary in the U.S. and abroad, respectively (as of 2018). *Manager-to-worker* is the ratio between number of current managers over total employees. In columns (1), (3), and (5), *Emigrated* is instrumented using the distance in 100 km from the closest departure port to the firm headquarters. Controls are: Number of employees, Female, Age, Age squared, and Degree. All regressions include region-by-sector fixed effects. Sectors are defined according to the US SIC classification. Robust standard errors in parentheses. *p<.05; **p<.01; ***p<.001.