A PATH TO VALUE CREATION FOR FOREIGN ENTREPRENEURS

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Abstract

Research summary: Firms founded by foreign entrepreneurs constitute an influential and growing part of the world economy. Yet the existing research has given little consideration to the strategies of foreign entrepreneurs beyond their decisions to start a firm. In this paper, we address this gap by examining how foreign entrepreneurs may bring value to their firms as firm managers. We argue that foreign owner-managers may benefit their firms by having access to home-country resources. We demonstrate that, compared to hired local managers, foreign owner-managers reduce firms' operating costs by disproportionately hiring home-country labor when this labor is more cost-efficient. This effect is larger for labor-intensive industries and for entrepreneurs from less wealthy countries.

Managerial summary: Foreign entrepreneurs represent an important part of the world economy. Yet we know little of how foreign entrepreneurs manage their firms. In this paper, we examine whether foreign entrepreneurs and domestic managers hire different employees. We find that when foreign entrepreneurs manage their firms personally, they hire a larger number of foreign workers and such workers are cheaper and more productive than the local labor. Conversely, domestic managers tend to hire local employees, despite their higher relative wages. Foreign owner-managers are particularly valuable in labor-intensive industries and when their home-country labor is inexpensive.

Keywords: foreign entrepreneurs, firm performance, owner-manager, labor cost, hiring strategy

Introduction

Small businesses started by entrepreneurs represent a significant part of the economy. In the United States and Europe, for example, they account for more than 90 percent of all firms, almost half of the regions' employment, and more than 20 percent of all business receipts (Fiscal Policy Institute, 2012; Small Business Administration, 2014; European Commission, 2013).

In this paper, we focus on one important group of small businesses: firms owned by foreign entrepreneurs. We study how a strategic decision that is fundamental for every foreign entrepreneur—the choice between managing a firm personally and hiring a local manager—may affect organizational strategy and performance.

Today's large wave of international migration worldwide and the resulting high numbers of individuals starting their firms abroad make the topic of foreign entrepreneurs a relevant phenomenon. Over the past decade, foreign-born populations in the United States and Europe have increased by 30 percent, reaching 45 million and 72 million people respectively (United Nations, 2013). Additionally, modern communication and travel technologies make opening firms abroad easier for those foreign entrepreneurs who do not immigrate with their firms. Prior research has demonstrated that the foreigners are at least twice as likely to start new firms as the native-born and the foreign entrepreneurship rate is growing, whereas the native-born rate remains flat (Fairlie, 2013; Fiscal Policy Institute, 2012). As a result, foreign entrepreneurs already constitute more than a quarter of all entrepreneurs in the U.S., employing almost 5 million people and earning over half a billion U.S. dollars in revenue annually (Fairlie, 2013; Fiscal Policy Institute, 2012). Similar trends are observed in Europe: Foreign entrepreneurs, for example, own more than 165,000 businesses in Italy (Segreti, 2009) and more than 100,000 in

London, U.K. (Altinay and Altinay, 2008). These entrepreneurs are active across a wide range of business sectors, including retail, services, hospitality, construction, and manufacturing.

Despite the ubiquity of foreign entrepreneurs, work in this area is still relatively sparse: The most closely related areas of literature—international entrepreneurship (e.g., Oviatt and McDougal, 1994; Zahra, Ireland, and Hitt, 2000) and immigrant entrepreneurship (e.g., Saxenian *et al.*, 2007; Portes, Guarnizo, and Haller, 2002)—have primarily focused on the decision to open a firm abroad, whereas many other strategic decisions that accompany this choice remain largely unexplored. The literature on domestic firms, for example, has extensively studied how founding managers can affect firm strategies and performance (e.g., Souder, Simsek, and Johnson, 2012; Villalonga and Amit, 2006). These studies have demonstrated that entrepreneurs could benefit their firms when managing them personally relative to hiring an outside manager (e.g., Miller, Minichilli, and Corbetta, 2013). Similarly, one fundamental decision for foreign entrepreneurs is the choice between managing a firm personally and hiring a local manager. Given the increasing importance of foreign entrepreneurship in the global economy, we believe that a relative effect of a foreign entrepreneur-manager on firm strategy and performance should also be of interest to a broader academic and business audience.

From the theoretical standpoint, the benefits of having foreign owner-managers for firm performance are unclear since the international business literature suggests that their "liability of foreignness" may decrease their value relative to that of local managers (e.g., Mezias, 2002; Zaheer and Mosakowski, 1997). On the other hand, the transnational entrepreneurship literature points out that entrepreneurs' foreignness does not necessarily have to be a liability, but may become a benefit if foreign entrepreneurs are able to exploit social and economic resources in their home countries to the advantage of their firms (e.g., Portes *et al.*, 2002).

In this paper, we focus on one potential mechanism that foreign owner-managers may use to enhance their firms' performance relative to hired local managers. We argue that foreign owner-managers have a more direct access to their home-country labor than hired local managers. When home-country employees are more cost-efficient relative to local labor, foreign owner-managers use them more extensively to reduce firm operating costs.

We test this proposition on a unique dataset containing rich information on foreign entrepreneurial firms in Russia between 1997 and 2008. While the other data sources used in entrepreneurship research often focus on self-employed individuals and owner-managers, thereby omitting entrepreneurial start-ups with hired managers (e.g., Nanda and Sorensen, 2010), our dataset includes both types of entrepreneurial firms and allows determining whether an entrepreneur manages a firm personally or hires a local agent. To address the critical endogeneity issue of the firm-labor composition, we exploit the 2007 foreign-labor ban in retail, which exogenously limited firms' ability to use foreign labor. If foreign owner-managers benefit their firms by hiring foreign labor, this ban should hurt their firms more strongly than firms with hired Russian managers.

We find that foreign owner-managers indeed reduce operating costs by hiring more foreign labor when this labor is cost-efficient. This effect is stronger in labor-intensive industries, where labor accounts for a more significant share of operating costs, and is particularly strong for entrepreneurs from less wealthy countries. We find evidence suggesting that the advantage of foreign owner-managers is not purely informational but is largely based on their superior access to foreign labor. Moreover, our results suggest that this mechanism is not limited to a small set of the entrepreneur's family and friends willing to work for lower wages, but extends to general foreign employees.

This paper makes several important contributions to the strategy literature. First, it speaks to the research on small businesses by studying the important and growing community of foreign entrepreneurs. Prior literature on foreign entrepreneurs has largely focused on their founding decision. We extend this literature by examining how foreign entrepreneurs influence their ventures as managers and by informing the strategic choice between an owner and a hired manager. Moreover, we show that foreign owner-managers may affect their ventures in ways not yet demonstrated by the domestic-firm literature and thereby contribute to the growing literature on the role of top managers. While this literature primarily attributes the positive effect of an owner-manager to reduced agency costs, we propose an additional mechanism in the international setting: superior access to home-country resources. Moreover, while strategy studies place strong emphasis on the benefits of local networks and the liabilities of being an outsider and a foreigner (e.g., Dahl and Sorenson, 2012; Zaheer and Mosakowski, 1997), our findings suggest that personal ties and experience outside the region can be a competitive advantage by providing access to valuable resources. Finally, our paper opens several avenues for future research and poses an intriguing potential conflict between the value and costs of the foreign-labor strategy to individual firms and to the society as a whole by generating potentially conflicting individual and communal effects.

The Role of a Top Manager

The value of top managers in corporations and in entrepreneurial and family ventures has been explored extensively in the strategy literature over the past decade. In 2003, Bertrand and Schoar published a seminal paper in which they demonstrated that managers can significantly influence firms' investment, financial and organizational practices, and performance. Since then, a number of studies have contributed to further understanding of managers' effects. It has been found that

managers' origin, human capital, skills, experience, charisma, equity ownership, organizational identity, operating practices, and even overconfidence can all have significant impacts (e.g., Bertrand, 2009; Bloom, Kretschmer, and Van Reenen, 2011; Boivie *et al.*, 2011; Flynn and Staw, 2004; Malmendier and Tate, 2005; Galasso and Simcoe, 2011).

A significant part of this literature has focused on the value of managers, particularly owner-managers, in family firms and entrepreneurial ventures (e.g., Villalonga and Amit, 2006). It is believed that top managers may have particularly strong impact in start-ups and family firms, where managers have more decision power (e.g., Adams, Almeida, and Ferreira, 2005; Miller *et al.*, 2013). Existing research comparing founder-CEOs and hired managers in the domestic context has consistently demonstrated a positive relationship between founder-management and firm performance and value (e.g., Anderson and Reeb, 2003; Villalonga and Amit, 2006). While the majority of these and other studies have assumed that owner-managers benefit their firms by reducing agency costs (e.g., Anderson and Reeb, 2003; Villalonga and Amit, 2006), some recent studies have also gone beyond the agency cost mechanism to examine how strategic behavior of owner-managers may differ from that of hired managers. For example, they have found that owner-managers more aggressively pursue market expansions in young firms and make more focused mergers and acquisitions (e.g., Souder *et al.*, 2012).

While the research on the role of owner-managers in firms owned by entrepreneurs and their families has grown significantly in the past decade, it has focused almost entirely on domestic firms, whereas the role of founding managers in firms started by foreign entrepreneurs has yet received little consideration. Our study aims to address this gap and examine the role of owner-managers in ventures started by foreign entrepreneurs.

Foreign Entrepreneurship

Foreign entrepreneurship is an old phenomenon: Since colonial times, individuals have been opening firms outside their native countries in a diverse set of industries. In the 19th century, for example, foreign entrepreneurs were active in the ironworking industry in Italy (Eckaus, 1961), cotton textiles in India (Wolcott and Clark, 1999), and steel production in Russia (McKay, 1967). Today, whether the entrepreneur in question is an American opening a coffee shop in Russia or a Korean establishing a software development firm in the United States, individuals continue to leverage their experience at home to identify and exploit new opportunities abroad (e.g., Portes, 1987). Take, for example, the following case of an American entrepreneur in Japan:

> Brad Bartz, a 30-year-old Californian…foresaw a Japanese Internet boom and noticed that few companies could connect personal-computer users to the Net. In 1994 he rented office space, persuaded Sun Microsystems Inc. of Mountain View, Calif., to give him about $150,000 of computer equipment in exchange for free advertising work and created Internet Access Center KK. (Glain, 1996)

Until recently the complexities involved in opening and managing a firm abroad meant that Mr. Bartz would likely need to immigrate to Japan in order to personally manage his new business. Today, easy travel and modern communication technologies simplify the process of starting a business and allow timely control over activities of remote firms. As a result, foreign entrepreneurs have the option of being non-managing owners, living at a distance from their ventures, extending operations to multiple countries, and using entrepreneurship as a supplement to their main employment at home or abroad (Li, 2001; Oviatt and McDougall, 1994). In this case, foreign entrepreneurs typically hire a host-country manager to oversee firm operations. Relative to foreign managers, host-country managers are valued for their local connections and knowledge. They are also more likely than foreign agents to accept employment offers, since they often have lower personal investment and switching costs associated with the position. In the following section we draw on the strategy, entrepreneurship, and social capital literature to

examine how the choice between "doing it yourself" and hiring a local manager may affect the strategies of foreign entrepreneurial ventures.

Theoretical Background

When foreign entrepreneurs manage their firms themselves, how could they affect their firms relative to local managers? On the one hand, the international business literature suggests that foreign entrepreneurs are likely to suffer from a "liability of foreignness"—a competitive disadvantage resulting from unfamiliarity with local culture and market and a lack of local networks (Zaheer and Mosakowski, 1997). Research suggests that multinational firms hire local managers to mitigate this problem (e.g., Berger, Choi, and Kim, 2011; Mezias, 2002).

On the other hand, entrepreneurs may derive some advantages from their foreignness. An emerging stream of the transnational entrepreneurship literature, for example, suggests that modern foreign entrepreneurs are able to maintain business linkages with their home countries and leverage these connections to obtain superior knowledge and resources (e.g., Portes *et al.*, 2002). Home-country connections may provide access to cheap or readily available home-products or other resources, such as labor. We expect that foreign entrepreneurs may be able to hire foreign labor from two sources: directly from abroad on sponsored visas and within local ethnic communities.[1] Indeed, anecdotal evidence suggests that foreign entrepreneurs hire their home-country nationals: For example, Portes (1987) documents that Cuban entrepreneurs in Miami extensively use a Cuban workforce. Andersson and Wadensjo (2009) demonstrate that foreign entrepreneurs in Sweden are much more likely than Swedish entrepreneurs to hire

[1] One may wonder if small businesses are capable of sponsoring temporary workers directly from abroad. Prior literature provides evidence of such behavior: A recent study in Russia demonstrates that approximately 12 percent of small businesses employ temporary foreign workers on work permits (Tyuryukanova and Florinskaya, 2012). Small businesses in European countries, such as Italy and the U.K., employ temporary workers from other, often less wealthy, nations (e.g., Brunetta and Turatto, 2001; Management Today, 2013).

foreign labor. There are also known examples of foreign entrepreneurs in the U.K. and Russia sponsoring workers from their native countries (Management Today, 2013; Mikhailova and Tyuryukanova, 2009).

We expect that access to foreign labor may give a firm a cost advantage. Several studies have noted that foreign labor is often more cost-efficient than local labor. For example, almost 60 percent of small businesses that hire foreign workers in Russia do so because foreign employees are cheaper, more productive, and willing to work longer hours for the same monthly pay (Tyuryukanova and Florinskaya, 2012). Similar situations have been observed in the United States and Europe, where many groups of foreign workers are priced at a discount (e.g., Brunetta and Turato, 2001; Sanders and Nee, 1996).[2]

One may wonder why foreign workers would agree to work for lower wages than those of local employees. First, their potential wages in home countries may be relatively low. Second, their initial lack of local knowledge and language skills may reduce their alternative host-country wages. Even in Russia, where a significant share of foreign labor comes from the former Soviet Union republics, more than half of foreign workers have language problems (Tyuryukanova and Florinskaya, 2012). Indeed, a number of prior studies have reported that foreign workers and recent immigrants have difficulty obtaining jobs and are underpriced in a host country's labor market (e.g., Sanders and Nee, 1996). Third, foreign workers may use employment in ethnic firms as a transition point. Evans (1989) argues that while foreign workers are priced at a discount in the open host-country market, foreign entrepreneurs may pay them above the open-market price, even when paying them a little lower than the local labor.

[2] Although many countries, including Russia, have minimum-wage limits, the average wages in the majority of occupations, including low-skilled ones, are above the minimum wage (e.g., Bolsheva, 2012; Bureau of Labor Statistics, 2015). This gives firms flexibility to hire foreign employees for lower wages than the local labor. The

Not all foreign firms, however, are equally likely to hire foreign labor. We expect that firms with foreign owner-managers will be more likely to hire foreign employees than firms operated by hired local managers. Compared to local managers, foreign entrepreneur-managers have a more direct access to foreign labor and a better understanding of a potential value that foreign employees can bring to their firms.

Prior studies have demonstrated that in young entrepreneurial firms, hiring often becomes the responsibility of a top manager and is done with the help of the manager's private networks (Andersson and Wadensjo, 2009; Bamford, Bruton, and Hinson, 2006; Fernandez, Castilla, and Moore, 2000). Foreign workers searching for jobs also rely heavily on their private networks. A study conducted in Russia demonstrated that over 80 percent of foreign employees found their jobs via social networks and only 17 percent used formal search channels, such as recruiters and public media. Similar evidence is available for foreign workers in the U.S. and Europe (e.g., Andersson and Wadensjo, 2009; Damm, 2009; Munshi, 2003). Foreign owner-managers typically have networks abroad and in local ethnic communities, with direct ties to foreign labor, whereas local managers lack access to those networks. Therefore, we expect that foreign owner-managers will have a preferential access to foreign labor, while local managers will be more likely to hire locals.

Moreover, domestic managers may be less willing to hire foreign labor. Foreign candidates' credentials may be difficult to evaluate (e.g., Li, 2001; Sanders and Nee, 1996), and foreign employees may be hard to manage if they lack local language skills or require a different management style (Evans, 1989). Finally, managers may prefer a comfortable work

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extent of such flexibility may vary for different professions and for countries with a lower minimum wage, such as Russia, versus countries with a higher minimum wage, such as the U.S.

environment, which can be easier to create while working with one's own nationals with a similar cultural background.

Another important source of foreign labor for a young firm is an entrepreneur's family and friends. Ruef, Aldrich, and Carter (2003) have found that in U.S. start-ups, one quarter of employees are relatives or acquaintances of the entrepreneur. Zimmer and Aldrich (1987) demonstrate that foreign entrepreneurs are even more likely to hire family members and friends than their domestic counterparts, and Sanders and Nee (1996) show that relatives and friends of foreign entrepreneurs often work longer hours and for lower pay than outside employees. However, relatives and friends would be more likely to do so when an entrepreneur manages a firm personally rather than when the firm is operated by an outside manager. We expect that entrepreneurs' relatives and friends would be less willing to work, particularly for lower wages, under the supervision of a hired manager since they would not feel personal obligation to an outsider. A hired manager may also avoid hiring the owner's relatives and friends, who may feel superior to their boss. Thus, the cheap labor of the entrepreneur's family and friends is more likely available for an owner-manager than for a hired manager.

To summarize, we expect that, compared to hired local managers, foreign owner-managers should be more likely to hire foreign employees. Foreign owner-managers should also better understand the value of foreign employees. Firms with foreign owner-managers can benefit from such employees when they are less expensive or more efficient than local labor. Labor costs typically contribute significantly to the firm's total operating costs. We assume, however, that the type of employees does not significantly affect other operating costs, apart from labor costs. Thus, when holding all non-labor operating costs constant, we expect that:

Proposition 1: *Compared to hired local managers, foreign owner-managers reduce firms' operating costs by hiring more foreign labor when this labor is more cost-efficient, all else equal.*

As a next step, it would be useful to further examine the underlying mechanisms of the foreign owner-managers' superior ability to hire foreign labor. We would want to refine our understanding of the mechanisms along two dimensions: First, we would want to know if the foreign owner-managers' advantage could be purely information or would extend to preferential access to foreign labor. Second, we would want to understand whether the ability to hire foreign labor is limited to the entrepreneur's family and friends or could reach beyond this close circle. Understanding these mechanisms would help us to better predict how the foreign owner-managers' labor advantage may change over time, as firms mature and increase in size beyond the scope of the entrepreneurs' family and friends.

We would like to start by focusing on whether the labor-cost advantage of foreign owner-managers is based on the superior access to foreign labor or is purely informational. Foreign owner-managers may have better information about the cost-efficiency of foreign employees through their extensive knowledge of foreign labor markets. Alternatively, both local managers and foreign owner-managers may know that foreign labor is cost-efficient, but local managers may have limited access to foreign labor and little ability or desire to hire foreign employees. Information about the value of foreign workers may provide foreign owner-managers an initial cost advantage over local managers, but, according to the mimetic isomorphism literature, this advantage would quickly dissipate since imitation happens fairly quickly, often within a few years (e.g., Henisz and Delios, 2001). Rapid imitation may be less likely, however, if there are barriers to resource acquisition. Building networks to potential foreign employees will require significant time and effort from hired local managers.

Prior evidence in the research literature seems to point to the labor-access advantage over the pure informational advantage. Locals seem to have difficulty hiring foreign labor even when they actively try to enroll foreign workers. Larch and Lechthaler (2011), for example, compare hiring strategies of domestic and foreign firms and point out that locals would find it much more difficult and costly to hire foreign labor due to the lack of foreign networks, whereas foreigners have direct access to the foreign labor pool through their ties abroad. Foreign entrepreneurs' advantage in hiring ethnic labor also seems to persist for long periods of time, which is consistent with the access advantage. According to Portes' (1987) study of Cuban entrepreneurs in Miami in 1960–1980, foreign labor remained a competitive advantage of self-employed Cubans for almost 20 years, much longer than would be needed for the information about this advantage to be diffused to local entrepreneurs. Andersson and Wadensjo (2009) compare native and foreign self-employed workers in Sweden and find that natives are much less likely to hire foreign labor, and this likelihood does not increase for older native firms. The above evidence is consistent with the idea that in hiring foreign labor, foreign owner-managers would seem to have more than just informational advantage over hired local managers. Therefore, we expect that:

Proposition 2: *For foreign owner-managers, the advantage in hiring foreign labor is not purely informational but includes superior access to foreign labor.*

Next, we would want to understand if we could expect foreign owner-managers to hire cost-efficient foreign labor beyond their family and friends. Prior studies conducted in Australia, Sweden, and the United States provide evidence supporting the notion that foreign entrepreneurs hire foreign employees outside of their close circles (e.g., Andersson and Wadensjo, 2009; Evans, 1989; Portes, 1987; Sanders and Nee, 1996). In line with their evidence, we expect that, if needed, foreign entrepreneur-managers should be able to extend their hiring of cost-efficient

foreign labor beyond their family and friends. Foreign owner-managers may have direct access to hiring agencies abroad and within their ethnic communities. Prospective foreign employees may also reach foreign owner-managers directly with employment requests. Finally, many firms, particularly young ones, expand their employment base through referrals from current employees. If initial employees of foreign owner-managers are foreign, they are likely to refer other foreign workers through their networks. Based on these arguments, we expect that:

Proposition 3: *For foreign owner-managers, the preferential access to foreign labor extends beyond their family and friends.*

Data

We test our propositions in a setting of foreign entrepreneurial firms in Russia between 1997 and 2008. The data come from the Ruslana database, a part of the Amadeus database by Bureau van Dijk, which is intensively used in the academic research (e.g., Bloom *et al.*, 2011; Kulchina, 2014). The data are assembled from the annual reports that all firms operating in Russia are required to file annually to government agencies. Ruslana provides reliable annual financial, ownership, and top-management data on all firms located in Russia. It covers all industries and includes both public and private firms, offering a unique opportunity to examine young firms owned by entrepreneurs. Another unique feature of this database is that, by reporting top managers and owners, it allows us to distinguish between entrepreneurial firms with owner-managers and those with hired managers. For the purpose of this study, we focus on the part of

this database that represents foreign entrepreneurs. Similar to Saxenian *et al.* (2007), we define a foreign entrepreneurial firm as a firm owned solely by one or several non-Russian individuals.[3]

We define an owner-manager as a CEO who owns at least 20 percent of firm shares, based on the most conservative ownership threshold in the literature (e.g., Villalonga and Amit, 2006).[4] The *owner-manager* variable is a dummy variable that equals 1 when any of the firm owners with at least 20 percent of the ownership stake is a firm CEO and 0 when a firm has a hired local CEO.[5] Appendix 1 provides additional details on the variable construction.

Sample: We start with an unbalanced panel dataset of 6,160 firms: 52 percent of the firms have their main operation in the trade sector (retail and wholesale), 24 percent in services, 10 percent in manufacturing, 10 percent in construction, and 4 percent in other industries. The most common home countries are China (25% of firms), Belarus (12%), Turkey (10%), and India (4%). Foreign entrepreneurs manage 62 percent of firms themselves, while the remaining 38 percent of firms are managed by hired Russian managers. The owner-manager status is constant over time. The distribution of firms by country, industry sector, and management status is reported in Appendix 2. Our observation also shows that foreign entrepreneurs in Russia prefer industries with above-average labor intensity. Moreover, in these industries, the share of owner-managed firms is 67 percent, whereas in the industries with below-average labor intensity, only 48 percent of firms have owner-managers.

[3] Given that Russia was virtually closed for immigration until 1991 and still has a difficult and lengthy immigration process, we expect that the number of immigrant entrepreneurs with Russian citizenship is very small. And indeed, there are no cases in our dataset of entrepreneurs changing their status from foreign to domestic.
[4] Empirically, 20 percent is also the smallest share owned by any firm CEO in the dataset. Findings are, however, robust to the increase of the ownership threshold to 51 percent or 100 percent.
[5] The database has only four firms with foreign hired managers, and those are excluded from the analysis.

Since we focus on entrepreneurial start-ups, at the time of observation these firms are relatively young (mean age is 3 years) and relatively small (mean size is 26 employees).[6] The distribution of firms by the year of founding is shown in Figure 1. Approximately 10 percent of founded start-ups die with each additional year after entry.

Insert Figure 1 about here

Our dependent variable is the firm's cost-to-revenue ratio, *cost/revenue*, i.e., the sum of cost of goods sold and other operating expenses divided by operating revenue (e.g., Ang, Cole, and Lin, 2000). For the analysis, we removed observations with zero revenue.[7] Therefore, our final sample consists of 10,221 observations.

We also include a range of control variables comprising firm characteristics that, according to the prior research, may influence both manager choice and firm performance (e.g., Anderson and Reeb, 2003; Villalonga and Amit, 2006). These variables include the number of shareholders and the natural logarithms of assets, revenue, long debt, and age if appropriate. The definitions, statistics, and major correlations for these variables appear in Table 1.

Insert Table 1 about here

Empirical Analysis

[6] To show that our sample is similar to other entrepreneurial populations, we turn to a survey of small U.S. businesses conducted by the Fiscal Policy Institute. Their definition of a small business is closely related to ours: The survey includes entrepreneurs who own an incorporated business with fewer than 100 employees (Fiscal Policy Institute, 2012). The mean number of employees in the U.S. sample is 13.6. Our sample is also limited to incorporated firms owned by entrepreneurs. The only difference is that we do not impose a 100-employee cap. For comparison, we further limit our sample to firms with fewer than 100 employees (95 percent of our original sample). The mean number of employees in the constrained sample is 14. We also check that our findings hold for firms with fewer than 100 employees, so a few larger firms included in our original sample do not drive the findings.

[7] Firms with zero revenue have no operations in those years (often the first and last years of firm existence), whereas to examine the owner-managers' effect on operating costs we need operating firms. However, including observations with zero revenue does not change our findings.

Our empirical analysis consists of five main parts. In the first part, we present a descriptive baseline model comparing costs of firms with foreign owner-managers and hired local managers. In the second part, we examine whether foreign owner-managers reduce costs better in the situations where foreign labor could be most beneficial. In the third part, we address endogeneity concerns using an exogenous shock to the firms' ability to use foreign labor. In the final two parts, we focus on the underlying mechanisms and test propositions two and three.

Baseline model

We start from showing a baseline model from equation 1, where we compare operating costs of firms with foreign owner-managers and hired local managers. The model is estimated by OLS.

$$(cost/revenue)_{it} = \beta_0 + \beta_1 OM_i + \sum_{k=1}^{n} \beta_k Z_{kit} + I_i + C_i + R_i + D_i + Y_t + \varepsilon_{it} \qquad (1)$$

where the dependent variable is operating cost-to-revenue ratio, *i* is the firm, *t* is the year when performance is measured, OM_i is the owner-manager dummy variable, Z_{kit} are control variables, I_i are industry dummy variables, C_i are country of origin dummy variables, R_i are region of location in Russia dummy variables, D_i are dummy variables indicating the year when the firm was first opened in Russia (founding year), Y_t are the year of observation dummy variables, and ε_{it} is an error term. Henceforth, standard errors are clustered on firm.

We observe that on average firms with foreign owner-managers have a lower cost-to-revenue ratio than firms with hired local managers (see column 1 of Table 2). Of course, foreign owner-managers may have other advantages and disadvantages over hired local managers; therefore, we cannot interpret this negative relationship in favor of the labor effect. In order to test our propositions, we would want to examine whether the negative effect of a foreign owner-manager on operating costs has a larger magnitude in the situations where labor costs are expected to be more important and foreign employees are expected to be more cost-efficient.

Insert Table 2 about here

Foreign labor advantage

If foreign owner-managers reduce costs by hiring less expensive foreign labor, their negative effect on operating costs should be stronger in labor-intensive industries, where the share of labor cost in overall firm expenses is larger. Furthermore, firms with owner-managers from countries with low gross domestic product (GDP) per capita should have greater benefits, since their native labor is less expensive.[8] We measure industry labor intensity as the average labor intensity of all firms from that industry across all years of observation.[9] As a proxy for the firm labor intensity, we use the number of employees per 1,000 rubles of assets. We use a continuous measure and a dummy variable for the top five percent of labor-intensive industries—recycling, hotels, restaurants, government, and social services.

Columns 2–5 of Table 2 show that, first, owner-managers seem to more effectively reduce costs in labor-intensive industries than in capital-intensive industries and, second, this effect is larger for the entrepreneurs from countries with low GDP per capita. These findings are consistent with our expectation that if foreign owner-managers reduce costs by hiring foreign labor, this reduction should be larger in the labor-intensive industries. They are also consistent with our expectation that the value of foreign owner-managers in the labor-intensive industries should be particularly strong for entrepreneurs from less wealthy countries.

While these results suggest that foreign owner-managers may reduce costs by hiring foreign labor, it is still difficult to interpret their evidence as causal due to the potential omitted variable bias. For example, some unobserved firm characteristics may affect both operating costs

[8] At the time of the data collection, reliable GDP per capita data were available up to 2007. Thereby, the observation window for this part of the analysis is limited to 1997–2007.

[9] Industry is determined by the first two digits of the OKVED code (Russian industry classification).

and the number of foreign employees. To address this concern, we would want to take existing firms with foreign owner-managers and hired local managers and exogenously limit their ability to use foreign labor. The larger increase of operating costs in firms with foreign owner-managers relative to firms with hired local managers and relative to unaffected firms would imply that foreign owner-managers indeed reduce operating costs by hiring more foreign labor.

Exogenous variation in the ability to hire foreign labor: foreign-labor ban

We use the 2007 foreign-labor ban in retail as an exogenous policy shock to the ability of existing firms to use foreign labor: In 2007, Russia banned foreigners from working as salesmen and cashiers in firms retailing liquor and pharmaceutical products and in firms operating in retail sales in markets and outside of stores. This policy change was aimed at creating additional workplaces for local workers and market spaces for local producers and farmers as well as at increasing the quality of sold goods, particularly liquor and pharmaceuticals, where illegal substitutes and expired products are particularly harmful. Retail trade is a very labor-intensive industry (labor costs constitute 20–30% of the product costs), and the majority of foreign entrepreneurs in retail trade come from low-wage countries, such as China and Turkey. According to the field study, the new law forced business owners to replace their foreign labor with more expensive domestic employees (Mikhailova and Tyuryukanova, 2009). Russian Statistical Services report that the share of foreigners employed in trade among all foreign workers shrank from almost 30 percent in 2006 to 20 percent in 2007.

We expect that the labor ban primarily influenced firms whose main activities were in the affected areas of retail listed above. We call such firms an *affected group*. We also include a control group of all other retail firms.[10] These firms were not affected by the ban and comprise

[10] To be conservative, we exclude firms with secondary activities in any of the industries subject to the labor ban.

an *unaffected group*.[11] This group consists of firms selling food products (except alcohol), tobacco products, and non-food products (except pharma) at general and specialized stores.

We expect that if firms with owner-managers benefit from hiring foreign labor relative to local managers, the foreign-labor ban should reduce these benefits. Therefore, the foreign-labor ban should hurt foreign firms with owner-managers more strongly than foreign firms with local managers. Thus, we have a focal group of owner-managed firms affected by the ban and two potential comparison groups—firms with hired managers in the affected areas of retail trade and retail firms that were not affected by the labor restriction.[12] To take advantage of having several comparison groups and control for group-specific and owner-manager-specific changes, we use a difference-in-difference-in-differences model, as below:

$$(cost/revenue)_{it} = \beta_0 + \beta_1 OM_i \times affected_i \times post2006_t + \beta_2 affected_i \times post2006_t + \beta_3 OM_i \times post2006_t + \sum_{k=1}^{n} \beta_k Z_{kit} + \varphi_i + Y_t + \varepsilon_{it} \quad (2)$$

where the dependent variable is operating cost-to-revenue ratio, $affected_i$ is a dummy variable that equals 1 if a firm has main operations in one of the areas affected by the labor ban, *post2006* is a dummy variable that equals 1 for all years after 2006, Y_t is a year fixed effect, and φ_i is a firm fixed effect. The sample includes all retail firms. We exclude firms founded after the change, since those may be different from the pre-change entrants. The main effects of the owner-manager and the affected group and their interaction are captured by the firm fixed effects, whereas the main effect of *post2006* dummy variable is captured by the year dummy. The coefficient for the three-way interaction, OM_i*$affected_i$*$post2006$, is expected to be positive.

We observe that before the ban, 67 percent of firms in the affected areas had owner-managers, and these firms had a lower cost-to-revenue ratio than firms with hired managers;

[11] The affected and unaffected firms are similar on observed characteristics.
[12] Control and treated groups are similar on the observed characteristics and have similar pre-treatment trends.

however, after the ban foreign entrepreneurs stopped entering the affected areas, suggesting that these industries may have become less profitable without foreign labor.

The effect of the foreign-labor ban on costs can be seen in Figure 2. After the ban, the cost-to-revenue ratio of firms with foreign owner-managers increased, with the slope of the line being very different from the lines for firms with hired managers and unaffected retail firms.

Insert Figure 2 about here

Model 1 of Table 3 also demonstrates an increase in the cost-to-revenue ratio of owner-managed firms in the affected group after the labor ban. Columns 2 and 3 present more traditional difference-in-differences models: Model 2 compares owner-managed firms from affected and unaffected groups, and Model 3 compares firms with and without foreign owner-managers in the affected group. These models also show an increase in the cost-to-revenue ratio of owner-managed firms in the affected group after the policy change. These results confirm our expectation that before the labor ban, owner-managed firms hired more foreign labor than firms with hired managers and this labor was cheaper.

Insert Table 3 about here

In columns 4 and 5, we demonstrate that firms with owner-managers from countries with low GDP per capita experienced a significant increase in operating costs after the ban, whereas firms with owner-managers from countries with high GDP per capita seemed unaffected. Countries are divided at the mean GDP per capita. This observation suggests that owner-managers from wealthier countries either do not hire foreign labor for the positions affected by the ban or pay foreign employees the same or higher wages as they would pay Russian workers.

Informational advantage versus access advantage: effect of firm age

In this section, we test proposition two and examine whether foreign labor advantage of foreign owner-managers extends beyond pure informational advantage to the superior ability to hire foreign labor. We expect that if foreign owner-managers' advantage is purely informational, this advantage will very quickly dissipate with time. While the access-based advantage may also diminish with time, it will do so at a much lower rate, since acquisition and loss of network ties would take considerable time. Therefore, if the negative effect of foreign owner-managers on costs relative to hired local managers does not rapidly decrease with the firm age, we would consider it a sign that the advantage of foreign owner-managers is not purely informational.

First, we examine whether foreign owner-managers of older firms lose their superior cost advantage in the labor-intensive industries. Then, we limit our sample to the top five percent of labor-intensive industries and examine how firm age moderates the positive effect of the GDP per capita. Finally, for the models with the foreign-labor ban, we limit our sample to the affected group and examine whether the effect of the ban on firms with foreign owner-managers is weaker for older firms. We estimate our models on the complete sample, conditional on survival, and when possible, also on firms that survived for four years to eliminate any survival bias.

Our results demonstrate that the labor-cost advantage of foreign owner-managers does not quickly diminish with the firm age (see Table 4 and column 7 of Table 3). This suggests that the labor-cost advantage is more likely to be a result of superior access to foreign labor rather than pure informational advantage of foreign owner-managers.

Insert Table 4 about here

Hiring beyond family and friends: effect of firm size

To test proposition three and examine whether the ability of foreign owner-managers to hire more cost-efficient foreign labor extends beyond an entrepreneur's family and friends, we

examine whether the effects of the industry labor intensity, country of origin GDP per capita, and foreign-labor ban in retail significantly decrease in larger firms. We expect that individuals have a limited number of family members and friends who would be able to work in their businesses located abroad. As firms grow, entrepreneurs will be forced to hire more non-family employees. If foreign owner-managers are unable to do so, their cost advantage will decrease in larger firms. If the negative effect of foreign owner-managers on costs does not decrease with firm size, we would consider it a sign that foreign owner-managers reduce labor cost not only by hiring their family and friends but also by hiring general foreign labor outside of their close circles.

We measure firm size as a natural logarithm of firm assets. First, we examine whether foreign owner-managers of larger firms lose their superior cost advantage in the labor-intensive industries. Then we limit our sample to the top five percent of labor-intensive industries and examine how firm size moderates the positive effect of the GDP per capita. For the models with the foreign-labor ban, we limit our sample to firms with owner-managers and examine whether the effect of the labor ban is weaker for larger firms.

Results in Table 4 do not demonstrate a significant effect of firm size.[13] Larger firms also do not suffer less from the foreign-labor ban (see column 6 of Table 3). These findings are consistent with the notion that foreign owner-managers decrease firm operating costs not only through family and friends but also by hiring more general foreign labor.

[13] To make sure that including complex interactions does not decrease our ability to detect significant relationship for firm size, we rerun our analysis on two subsamples of firms, with assets below and above the mean. In both groups, owner-managers have lower costs in the labor intensive industries, and the magnitudes of the effect are statistically the same.

Alternative explanations and robustness checks

In considering the positive effect of the foreign-labor ban on operating costs, one might worry that it may be driven by the cost of training new domestic employees rather than by their higher wages. Training, however, should take place in the first year after the ban, whereas our results hold even if we remove this year from our sample (see column 5 of Table 5). Operating costs may also increase if after the ban foreign owner-managers move their foreign employees to different positions in the firm and hire additional domestic workers for the vacated positions. We examine whether firms with foreign owner-managers affected by the ban increased the number of their employees, but we find no such effect (see column 6).

Insert Table 5 about here

Finally, we make sure that the results are robust to the sample, measures, and model modifications. First, in columns 1 and 2, we demonstrate that our results are robust to measuring firm size with employment, rather than assets. Second, our findings hold for larger firms, with more than 20 employees (see columns 3 and 4), as well as smaller firms, with fewer than 100 employees.[14] This also suggests that our findings should not be driven by a small salary of an owner-manager since in larger firms the effect of the manager's salary on costs should be minimal. Third, while examining whether the impact of foreign owner-manager diminishes with time, we focus on the firm age. Since local managers may imitate foreign owner-managers from earlier cohorts, we also examine the moderating effect of the observation year and find no effect. The findings also remain consistent with the theory when we use operating return on assets (OROA) or ln(cost) as dependent variables (see columns 7–10 for OROA). The findings are not driven by China—the home country of the largest number of foreign entrepreneurs—or any other

influential country. Moreover, the coefficients are not driven by the pooled structure of the data and hold for the cross-section of firms observed in 2007. Finally, the findings for firm size and age also hold when we use within-firm variations of age and size with firm fixed effects.

Discussion and Conclusion

Firms owned by entrepreneurs and their families have long been a fundamental part of the global economy (e.g., Bertrand, 2009). Among them, firms owned by foreign entrepreneurs constitute an influential and growing community (e.g., Fiscal Policy Institute, 2012). However, the research on foreign entrepreneurs is largely limited to their decisions to start business ventures abroad (e.g., Zahra *et al.*, 2000), whereas other important strategic choices remain unexplored. For example, one fundamental decision for foreign entrepreneurs is the choice between a foreign owner-manager and a hired local manager, but we know little of how this choice may affect firm strategies and performance.

In this paper, we have demonstrated a novel explanation of how foreign owner-managers may affect their firms relative to hired local managers. We have argued that foreign owner-managers have superior ability to hire home-country labor relative to host-country managers. When this labor is more cost-efficient than the local labor, foreign owner-managers hire foreign nationals to reduce firm operating costs. The superior ability to hire foreign labors seems to extend beyond an entrepreneur's family and friends and beyond pure informational advantage. This also implies that it would not quickly dissipate as firms mature.

Our findings have several important implications to the strategy literature. First, they contribute to the research on entrepreneurial strategies, which has largely overlooked foreign entrepreneurs. Our findings point to a significant difference in strategies of firms with foreign

[14] These and any other unreported results are available on request.

entrepreneur-managers and hired local managers, where foreign owner-managers benefit their firms by having a superior access to home-country resources. Moreover, our findings complement prior research on the role of top managers (e.g., Bertrand, 2009). Prior studies in the domestic context have largely attributed the differences in performance of firms with owner-managers and hired managers to agency costs (e.g., Villalonga and Amit, 2006). We demonstrate that owner-managers and hired managers could also have different hiring strategies and propose a novel explanation for the value of owner-managers in the international context—the ability of foreign owner-managers to access superior home-country resources, such as labor. Our paper also speaks to the literature on the internationalization strategies of firms. The existing research highly emphasizes the liability of foreignness (Zaheer and Mosakowski, 1997) but provides less clear understanding of the potential benefits of foreignness. Our paper demonstrates, albeit in a smaller setting of foreign entrepreneurial ventures, that foreignness may be a benefit if it provides access to unique resources. Thereby, it points to the value of distant networks, which are often overlooked in strategy research that has largely focused on local ties (e.g., Dahl and Sorenson, 2012; Kalnins and Chung, 2006).

While data availability limits our findings to foreign entrepreneurs, it also points to opportunities for future research. For example, with management data on a broader set of foreign firms, one could examine the role of foreign and local managers in multinational corporations (MNCs). Surprisingly, the extant literature tells us little of how foreign managers may affect strategies and performance of MNCs. Some limited research suggests that they may add to the liability of foreignness (e.g., Mezias, 2002), whereas our study would imply the opposite. Thus, it would be important to examine if the ability to reduce firm operating costs by hiring foreign labor would extend to foreign managers of MNCs. One might also wonder if domestic

entrepreneurs may also be able to get access to foreign labor if they hire foreign managers. While prior empirical studies provide little evidence of such behavior, it would be interesting to further explore this issue in future work.

It is also worth examining how the foreign-labor mechanism may play in other institutional settings. Studies in other contexts appear consistent with the notion that foreign entrepreneurs are hiring less expensive foreign labor. Anecdotal evidence from the North America, Europe, and Australia suggests that communities of foreign entrepreneurs extensively use the labor of their nationals (e.g., Andersson and Wadensjo, 2009; Evans, 1989; Sanders and Nee, 1996). The study of entrepreneurs conducted in the U.S. also demonstrates that immigrant entrepreneurs have lower average labor costs than non-immigrant business owners (Fairlie, 2012). While these observations seem consistent with our results, we would welcome replications of our findings in other settings as well as further research on how the magnitude of the observed effect may vary in different world regions. For example, one may expect the effect of a foreign owner-manager to be larger in developed countries with open labor markets, because of a greater difference between host-country and home-country wages. However, the effect may be less pronounced in regions that limit work migration.

In respect to broader institutional and policy environment, our findings also have intriguing implications to general social welfare. The impact of hiring strategies of foreign entrepreneurs may extend beyond individual firms to the society, where the impact may not necessarily be positive. Popular press and research scholars have shown vivid interest in the impacts of foreign labor on the local communities and particularly labor markets. A recent *New York Times* article, for example, demonstrates that Chinese small textile businesses in Italy often employ Chinese labor under poor work conditions and low wages (Povoledo, 2013). Sanders and

Nee (1987) have also expressed concerns that foreign workers may sometimes get trapped in lower-paying jobs in ethnic firms. Such behavior, theoretically, may hurt social welfare of the community by increasing income disparity and suppressing local wages. Empirically, however, there has been little consistency about the presence of such effects; some studies have found that immigration decreases local wages (e.g., Aydemir and Borjas, 2011), whereas others have demonstrated no effect (e.g., Glitz, 2012). Our findings would suggest that firms with foreign owner-managers would indeed generate work places for their co-nationals rather than local residents, and these jobs would pay less. Whether this phenomenon increases disparity and decreases local wages is an open question. First, by employing co-nationals, foreign entrepreneurs may take them off the general labor market, where they would otherwise compete with the natives. Second, Ottaviano, Peri, and Wright (2013) have demonstrated that foreigners and natives may compete for different positions, which would reduce the displacement effect. Finally, Evans (1989) argues that foreign workers are often priced at a discount in the open market, whereas foreign entrepreneurs pay them higher rates, even when these rates are lower than for the locals. Indirectly, successful foreign firms may also benefit local communities by paying taxes, transferring new technologies, and increasing the demand for native workers in high-skill occupations (e.g., Ottaviano *et al.*, 2013). While our findings do not allow us to draw conclusions about the size or direction of the net welfare effect, they suggest that the value of the hiring strategies of foreign entrepreneurs to the economy and social welfare is an intriguing question that requires thorough investigation.

The social-welfare impact would also depend on whether foreign entrepreneur-managers have superior access to other resources, such as capital and technology, and whether their foreign-network advantage extends beyond cheap labor to the sectors experiencing skill

shortages, such as high-technology industries. We have taken a look at whether foreign owner-managers may retain their ability to reduce operating costs in the high-technology IT firms in Russia. While our sample of such firms was limited, we still observed that foreign owner-management was associated with lower operating costs in those firms, and this association was more pronounced for the entrepreneurs from less wealthy countries. This observation suggests that the value of foreign entrepreneur-managers may potentially extend beyond traditional small business sectors to the high-growth industries. This points to the opportunities for further investigation of the role of foreign entrepreneurs in such industries.

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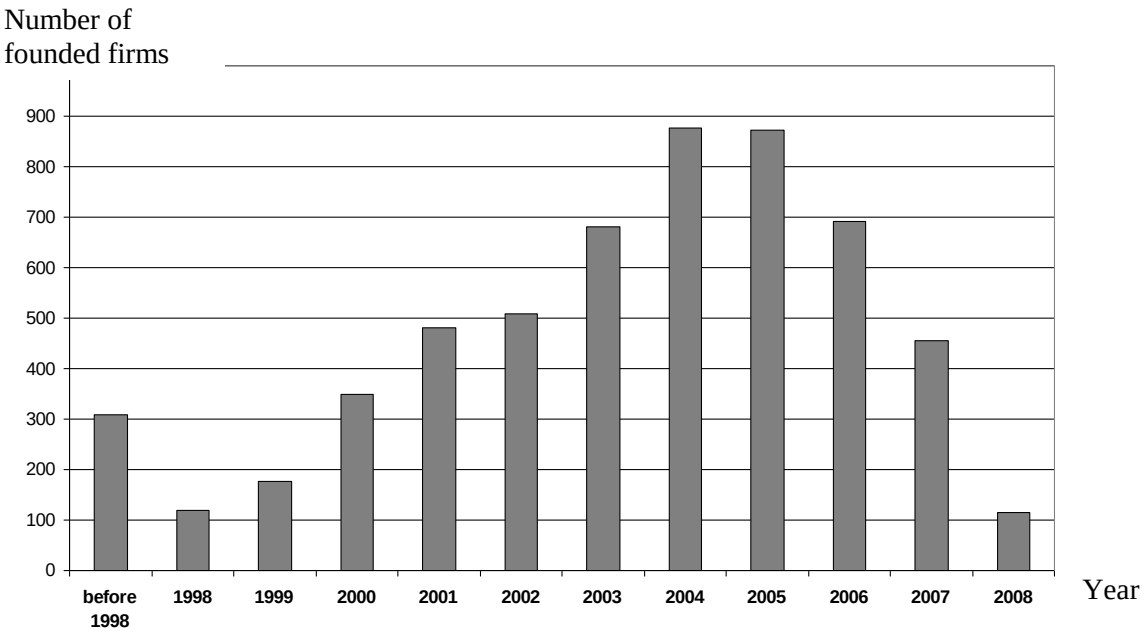
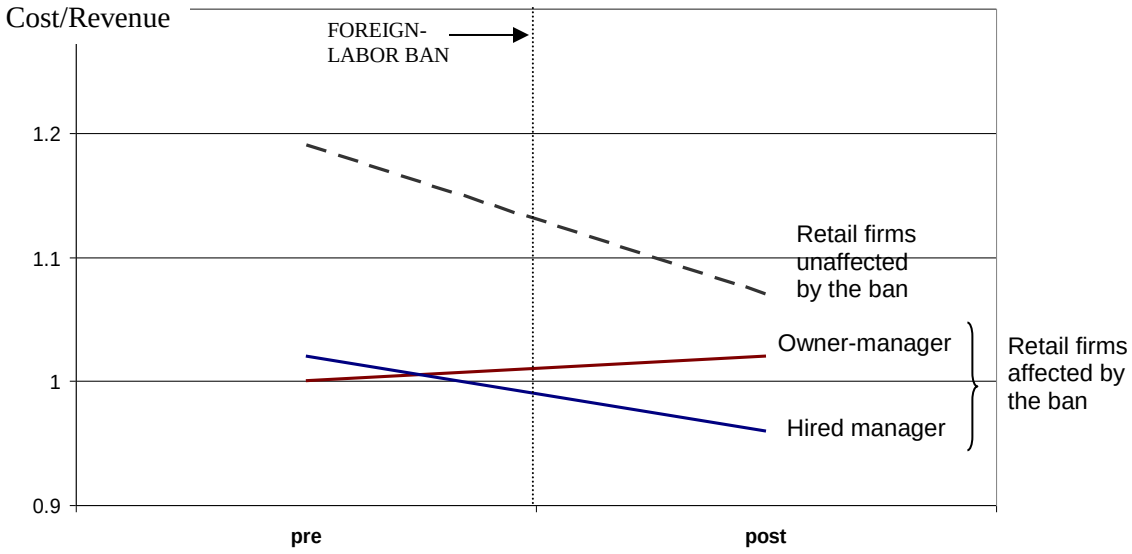


Figure 1. Distribution of firms by the year of founding.



Note: We average two years before and two years after the labor ban. Points are estimated for unaffected firms from equation (a) and for affected firms from equation (b). Assets are taken at the mean.

$$(a)(cost/revenue)_{it} = \beta_0 + \beta_1 post2006_t + \beta_2 assets_{it} + \varepsilon_{it}$$

$$(b)(cost/revenue)_{it} = \beta_0 + \beta_1 post2006_t + \beta_2 OM_i + \beta_3 OM_i \times post2006_t + \beta_4 assets_{it} + \varepsilon_{it}$$

The decrease in cost-to-revenue ratios in firms with hired managers and other retail firms is due to the increase of the local currency exchange rate, which led to lower cost of imports.

Figure 2. Effect of the foreign-labor ban on firms with and without foreign owner-managers.

Table 1. Main variables and their correlations[a]

	Variable	Description	Mean	Std. Dev.	Min.	Max.	N	1	2	3	4	6	7	8
1	Owner-manager	Equals 1 if one of the firm owners is the firm CEO and 0 otherwise	0.572	0.495	0	1	10,221							
2	Cost/Revenue	Ratio of the sum of cost of goods sold and other operating expenses to operating revenue	1.047	0.430	0.295	6.048	10,221	-0.004						
3	Ln(assets)	Natural log of the book value of assets	14.425	2.263	8.294	28.906	10,221	-0.183	-0.075					
4	Ln(long debt)	Natural log of 1+long debt	2.407	5.233	0	20.327	10,221	-0.090	0.060	0.251				
5	Age	Firm age in years; equals zero in the year of founding	3.228	2.977	0	16	10,221							
6	Ln(age)	Natural log of 1+firm age in years	1.206	0.702	0	2.833	10,221	-0.016	-0.060	0.178	0.103			
7	Ln(revenue)	Natural log of operating revenue	15.082	2.293	6.084	30.305	10,221	-0.149	-0.257	0.748	0.114	0.186		
8	Shareholders	The number of shareholders	1.084	0.382	1	8	10,221	-0.063	0.018	0.029	0.017	-0.033	0.007	
9	Employees[b]	The number of employees (reported for 2003–2008)	26.131	55.460	1	1,130	6,786							
10	Labor intensity[c]	Mean labor intensity of all firms in industry j across all years. Firm labor intensity = employees*1,000/assets	0.034	0.016	0.0003	0.182	10,220	0.074	-0.013	-0.223	-0.089	0.012	-0.148	-0.072
11	Top 5% labor-intensive industry	Equals 1 if the firm is in the top 5% of labor-intensive industries	0.020	0.139	0	1	10,220	0.050	-0.014	-0.185	-0.021	0.048	-0.142	-0.032
12	Ln(GDP per capita)[d]	Natural log of the GDP per capita in the firm owner's country, in U.S. dollars	8.231	1.456	3.441	11.436	9,240	-0.275	-0.019	0.219	0.107	0.102	0.190	0.030

a) All firm-level financial variables are in nominal Russian rubles.
b) Data on employees are available from 2003.
c) One firm did not have enough observations in its industry to calculate industry labor intensity.
d) Data on GDP per capita have been collected up to 2007.

Table 2. Industry labor intensity and country GDP per capita[a]

	(1)	(2)	(3)	(4)	(5)
Variable	Baseline model	Continuous measure of labor intensity	Dummy for top 5% of labor-intensive industries	With GDP per capita	With GDP per capita
Dependent variable			Cost/Revenue		
Owner-manager	-0.030**	0.015	-0.025*	0.218	-0.054
	(0.013)	(0.030)	(0.013)	(0.170)	(0.076)
Owner-manager*labor intensity		-1.343*		-8.510**	
		(0.725)		(4.035)	
Owner-manager*top5% labor-intensive industry			-0.152***		-0.717**
			(0.051)		(0.292)
Owner-manager*labor intensity*ln(GDP per capita)				0.897**	
				(0.458)	
Owner-manager* ln(GDP per capita)				-0.026	0.003
				(0.020)	(0.009)
Labor intensity*ln(GDP per capita)				-0.135	
				(0.349)	
Owner-manager*top5%*ln(GDP per capita)					0.071**
					(0.032)
Top 5%*ln(GDP per capita)					-0.018
					(0.024)
Ln(assets)	0.046***	0.046***	0.046***	0.045***	0.045***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Ln(revenue)	-0.086***	-0.087***	-0.087***	-0.086***	-0.087***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Ln(long debt)	0.004***	0.003***	0.003***	0.003***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Shareholders	0.018	0.019	0.018	0.018	0.018
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Ln(GDP per capita)	0.014	0.015	0.015	0.016	0.013
	(0.039)	(0.039)	(0.039)	(0.042)	(0.040)
Constant	1.429***	1.619***	1.416***	2.821***	0.684
	(0.423)	(0.223)	(0.424)	(0.287)	(0.486)
Year dummies	Yes	Yes	Yes	Yes	Yes
Date dummies	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes	Yes
N	8,501	8,501	8,501	8,501	8,501

a) Robust standard errors clustered on firm are in parentheses. *, **, and *** denote significance at 10%, 5%, and 1% respectively.

Sample: The sample includes two-digit industries with a minimum of three firms per industry and firm-country-years with available GDP per capita. Observation window is 1997–2007.

Table 3. Labor policy change: foreign employment restriction in retail in 2007–2008[a]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variable	All firms	Owner-managers	Affected group	Owner-managers			Affected group
				Low GDP per capita	High GDP per capita	Effect of size	Effect of age
Dependent variable	Cost/revenue						
Owner-manager*affected*post2006	0.455***						
	(0.137)						
Affected*post2006	-0.191*	0.247**		0.365***	-0.089	0.807	
	(0.101)	(0.096)		(0.130)	(0.333)	(0.705)	
Owner-manager*post2006	-0.306***		0.163*				-0.545**
	(0.097)		(0.087)				(0.243)
Affected*post2006* ln(assets)						-0.046	
						(0.042)	
Owner-manager*post2006* ln(age)							0.317**
							(0.113)
Affected*ln(assets)						0.030	
						(0.070)	
Post2006*ln(assets)						0.077**	
						(0.035)	
Post2006*ln(age)							-0.490***
							(0.116)
Owner-manager*ln(age)							0.184**
							(0.078)
Ln(assets)	0.063**	0.070	-0.005	0.060	-0.020	0.057*	0.026
	(0.026)	(0.034)	(0.047)	(0.042)	(0.053)	(0.032)	(0.039)
Ln(revenue)	-0.157***	-0.179***	-0.101***	-0.195***	-0.069	-0.181***	-0.125***
	(0.025)	(0.034)	(0.034)	(0.040)	(0.053)	(0.035)	(0.028)
Ln(long debt)	0.002	0.005	0.002	0.005	0.005	0.003	0.011**
	(0.004)	(0.007)	(0.004)	(0.014)	(0.005)	(0.008)	(0.004)
Ln(age)	0.137*	0.152	0.076	0.225	0.214	0.161	-0.191
	(0.075)	(0.137)	(0.090)	(0.164)	(0.005)	(0.142)	(0.123)
Constant	2.380***	2.605***	2.350***	2.500***	1.947***	2.740***	2.813***
	(0.419)	(0.509)	(0.684)	(0.847)	(0.469)	(0.531)	(0.808)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	597	350	70	274	76	350	70

a) Robust standard errors clustered on firm are in parentheses. *, **, and *** denote significance at 10%, 5%, and 1% respectively.

Note: The main effects of the owner-manager and industry and their interaction are captured by the firm fixed effects, whereas the main effect of *post2006* dummy is captured by the year dummy variables.

Sample: Sample is limited to retail firms (affected and unaffected by the ban). Model 1 includes all retail firms. Model 2 includes only firms with owner-managers. Model 3 includes the affected group only. Models 4–6 include firms with owner-managers only. Model 4 includes home-countries with below-average GDP per capita. Model 5 includes home-countries with above-average GDP per capita. Model 6 includes all retail firms with owner-managers. Model 7 includes firms from the affected group only.

Table 4. Industry labor intensity and country GDP per capita: Effect of firm size and age[a]

	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Complete sample			Top 5% labor-intensive industries		
	Age	Survived	Size	Age	Survived	Size
Dependent variable	Cost/Revenue					
Owner-manager*top5% labor-intensive*ln(age)	0.050	0.080				
	(0.078)	(0.098)				
Owner-manager*top5% labor-intensive*ln(assets)			0.012			
			(0.018)			
Owner-manager*ln(GDP per capita)*ln(age)				-0.010	-0.106	
				(0.074)	(0.074)	
Owner-manager*ln(GDP per capita)*ln(assets)						0.003
						(0.025)
Owner-manager	-0.059**	-0.031	-0.057	-1.614	-2.962	0.008
	(0.023)	(0.035)	(0.082)	(1.036)	(1.062)	(3.149)
Owner-manager*top5% labor intensive	-0.240*	-0.294*	-0.248			
	(0.131)	(0.179)	(0.231)			
Owner-manager*ln(assets)			0.002			-0.119
			(0.005)			(0.207)
Owner-manager*ln(age)	0.030*	0.013		0.810	0.828	
	(0.016)	(0.021)		(0.690)	(0.627)	
Ln(GDP per capita)*ln(assets)						-0.056***
						(0.021)
Ln(GDP per capita)*ln(age)				0.022	0.036	
				(0.060)	(0.045)	
Top5% labor intensive*ln(assets)			0.014			
			(0.015)			
Top5% labor intensive*ln(age)	-0.069	-0.078				
	(0.065)	(0.074)				
Owner-manager*ln(GDP per capita)				0.192*	0.246*	0.156
				(0.113)	(0.129)	(0.406)
Other variables	Constant, ln(assets), ln(revenue), ln(long debt), shareholders, ln(GDP per capita), ln(age) (when appropriate)					
Dummies	Industry, country, region, year, date (for Models 3 and 6)					
N	8,501	5,978	8,501	309	258	309

a) Robust standard errors clustered on firm are in parentheses. *, **, and *** denote significance at 10%, 5%, and 1% respectively.
Sample: Models 1 and 3 include all firms from the main sample. Models 4–6 include firms from top-5%-labor-intensive industries. Models 2 and 5 include firms that survived for 4 years.

Table 5. Alternative explanations and robustness checks[a]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Variable	Size as employment		Without small firms		Without 2007	Employee count	OROA as a dependent variable			
Dependent variable	Cost/Revenue					Employees	OROA			
Sample	Top labor intensive	Owner-managers	W/o small firms		Retail	Owner-managers in retail	All	All	Retail	Owner-managers in retail
			All industries	Retail						
Owner-manager	-0.473		0.071				0.028**	0.020		
	(1.676)		(0.093)				(0.012)	(0.068)		
Owner-manager*top 5% labor-intensive industry			-0.850**				0.138**	0.772**		
			(0.412)				(0.064)	(0.370)		
Owner-manager*ln(GDP per capita)*ln(employees)	-0.051									
	(0.078)									
Owner-manager*ln(GDP per capita)	0.037		-0.010					0.0004		
	(0.208)		(0.011)					(0.0008)		
Ln(employees)*ln(GDP per capita)	0.045									
	(0.078)									
Owner-manager*ln(employees)	0.527									
	(0.704)									
Owner-manager*top 5% labor intensive*ln(GDP per capita)			0.092**					-0.083*		
			(0.043)					(0.045)		
Top 5% labor intensive*ln(GDP per capita)			-0.041					0.039		
			(0.033)					(0.026)		
Affected*post2006*ln(employees)		-0.131								
		(0.098)								
Affected*ln(employees)		0.048								
		(0.106)								
Post2006*ln(employees)		0.205**								
		(0.091)								
Owner-manager*affected*post2006				0.393**	0.280***				-0.315*	
				(0.168)	(0.083)				(0.180)	
Affected*post2006		0.333		-0.203***	-0.283***	-0.175			-0.032	-0.357**
		(0.306)		(0.089)	(0.060)	(0.116)			(0.107)	(0.158)
Owner-manager*post2006				-0.073	-0.019				-0.0002	
				(0.133)	(0.059)				(0.059)	
Ln(employees)	-0.463	0.025								
	(0.698)	(0.035)								
Other variables	Constant (except Model 6), ln(assets), ln(revenue), ln(long debt), shareholders, ln(GDP per capita), industry, country, region, year, date (where appropriate)									
Firm f.e.		Yes		Yes	Yes	Yes			Yes	Yes
N	193	306	3,982	259	493	197	8,501	8,501	597	350

a) Robust standard errors clustered on firm are in parentheses. *, **, and *** denote significance at 10%, 5%, and 1% respectively. In Model 6 (xtpoisson) standard errors are bootstrapped.

Appendix 1: Variable Construction Details

Bureau van Dijk collects information from a variety of Russian government agencies. As such, it covers all business entities that initiate the registration process required for operation in Russia. The data used in our analysis encompass all foreign entrepreneurial firms that actually operated in Russia at some point between 1997 and 2008—a total of 9,879 firms.[15]

The procedure for coding management status (owner-manager or hired manager) for each firm was as follows: First, for the 2,889 firms reporting names for both owners and managers, we looked for a match between the name of an owner (with at least 20% share) and the CEO name. Among these firms, almost all (99.2%) owner-managers have non-Russian names, and almost all hired managers (99%) have typical Russian names. Thus, it appears that, as expected, when foreign entrepreneurs choose to hire a manager, this is almost always a host-country manager. We built on this observation to assign management status to the remaining firms in our dataset for which managers' names and owners' nationality (but not names) are available:[16] A firm whose CEO has a typical Russian name is assumed to have a hired manager; conversely, if the manager's name is typical of the firm's country of origin, we conclude that the firm has an owner-manager.[17] We validated this procedure on the set of firms with complete ownership and management information, and found that it correctly identified management status in 87 percent of cases.[18] We used this procedure to determine the management status of 3,271 firms from outside of the former Soviet Union. To be conservative, we dropped firms from the former

[15] We exclude business entities that registered but never operated in Russia, i.e., never filed a financial report. (Note that all firms operating in Russia—private and public, small and large—are required to file annually.) The information about the firms' inactivity was verified through the Russian Federal Tax Agency database (http://egrul.nalog.ru) and Statistical Services database (http://www.okpo.ru).

[16] On average, firms with missing owners' names are a little smaller and older but, after controlling for observed firm characteristics, have the same profitability as firms with complete information.

[17] Similar approaches, inferring the nationality or foreign ownership from names, have been broadly used in the management literature (e.g., Kalnins and Chung, 2006).

[18] Among the false cases, about half were wrongfully identified as owner-managers, and half were wrongfully identified as hired mangers.

Soviet Union with missing owners' names (3,719), to exclude possible owners with Russian names who settled there during the Soviet era. Thus, using these firms may increase the chance of identification error.

To examine the size of the potential bias introduced by our identification procedure, we compared results from the OLS and difference-in-differences regression for samples including and excluding firms where management status was identified by hand, and the coefficients were not statistically different (for example, see column 5 of Table A1).

Ruslana provides up to 12 years back of financial reports and up to 5 years of ownership and management data. For the years when ownership and management data were not yet available, we used the closest available ownership and management information.[19] We have several reasons to believe that this procedure does not result in any serious bias in our findings. Based on the firms in our sample for whom we have complete management status information, it appears that firms almost never change their management status from an owner-manager to a hired manager or vice versa, though we do observe succession among hired managers. Moreover, we obtain materially identical results if we restrict our analysis to two observation windows over which we have actual ownership and management information: i.e., for 2005–2008 and for the cross-section of firms observed in 2007 (see Table A1 for the results).

[19] This means that for 55 percent of our firm-year observations we have actual ownership and management information; for 15 percent this information is lagged by 1 year; for 20 percent it is lagged by 2–3 years; and for the remaining 10 percent it is lagged by 4 years or more.

Table A1. Complete observation samples[a]

	(1)	(2)	(3)	(4)	(5)
Variable	Industry labor intensity	GDP per capita	GDP per capita	Foreign-labor ban	Foreign-labor ban, most restricted sample
Sample	Years 2005–2007		Year 2007	Years 2005–2008	Years 2005–2008, firms with non-missing owner-names
Dependent variable	Cost/Revenue				
Owner-manager	-0.030*	-0.144	-0.162		
	(0.016)	(0.105)	(0.150)		
Owner-manager*top5% labor-intensive industry	-0.219***	-0.957**	-1.087*		
	(0.066)	(0.418)	(0.573)		
Owner-manager*Top 5%*ln(GDP per capita)		0.085*	0.104*		
		(0.045)	(0.061)		
Owner-manager* ln(GDP per capita)		0.013	0.011		
		(0.012)	(0.017)		
Top 5%*ln(GDP per capita)		-0.033	-0.019		
		(0.036)	(0.045)		
Owner-manager*affected*post2006				0.435**	0.570**
				(0.171)	(0.230)
Affected*post2006				-0.110	-0.077
				(0.121)	(0.122)
Owner-manager*post2006				-0.341***	-0.516***
				(0.119)	(0.169)
Ln(age)				0.365*	0.515***
				(0.200)	(0.167)
Shareholders	0.034*	0.035*	0.036		
	(0.018)	(0.018)	(0.031)		
Ln(GDP per capita)	0.001	-0.008	-0.054		
	(0.086)	(0.085)	(0.046)		
Constant	2.540***	2.504***	1.153**	2.686***	2.339***
	(0.825)	(0.851)	(0.492)	(0.573)	(0.662)
Control variables	Ln(assets), ln(revenue), ln(long debt)				
Dummies	Year, date, industry, country, region			Year	Year
Firm f.e.	No	No	No	Yes	Yes
N	4,740	4,740	1,695	367	241

a) Robust standard errors clustered on firm are in parentheses. *, **, and *** denote significance at 10%, 5%, and 1% respectively.

Sample: Models 1 and 2 include observations in years 2005–2007 only. Model 3 includes observations in year 2007 only. Model 4 includes observations in years 2005–2008, retail industry only. Model 5 includes firms with non-missing owner-names observed in years 2005–2008, when the actual management information is available for all firms.

Appendix 2: Distribution of Firms by Country, Sector, and Manager Type

Country	Hired Managers	Owner-Managers	Manufacturing	Services	Trade	Extraction and Agriculture	Construction and Other
Afghanistan	6	82	0	1	82	2	3
Austria	23	13	8	11	12	2	3
Belarus	236	485	80	133	444	10	54
Bulgaria	38	35	14	8	45	2	4
China	286	1,281	89	624	691	100	63
Democratic People's Republic of Korea (North Korea)	36	32	6	11	35	4	12
Estonia	41	16	8	12	30	4	3
Finland	49	32	8	16	36	10	11
France	38	21	6	18	31	0	4
Germany	151	67	25	60	106	7	20
India	74	197	18	23	219	1	10
Iran	17	93	5	8	88	6	3
Israel	64	16	9	20	37	5	9
Italy	85	56	40	40	52	1	8
Kazakhstan	32	28	9	8	37	4	2
Latvia	87	35	24	22	56	8	12
Lithuania	41	29	11	11	39	2	7
Macedonia	3	34	2	4	3	0	28
Poland	59	36	16	19	41	1	18
Republic of Korea (South Korea)	37	41	7	19	40	2	10
Serbia	19	61	4	15	16	1	44
Turkey	194	451	78	79	363	2	123
Ukraine	123	117	28	44	135	3	30
United Kingdom	23	20	4	27	7	0	5
United States	124	41	22	61	66	6	10
Uzbekistan	24	39	7	7	43	1	5
Vietnam	47	88	28	33	70	2	2
Other countries	355	402	78	164	395	16	104
TOTAL	2,312	3,848	634	1,498	3,219	202	607