

ENTREPRENEURSHIP AMONG RUSSIAN IMMIGRANTS IN NORWAY AND THEIR STAY-AT-HOME PEERS

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The level of self-employment among immigrants is often higher than among natives. The purpose of this paper was to test empirically whether selective migration with respect to entrepreneurial characteristics may explain this difference. The relevant hypotheses were tested comparing representative samples of Russian immigrants in Norway and their stay-at-home counterparts. Data from the Russian population came from the 2008 GEM study, while data on Russian immigrants in Norway were collected through a specially designed postal survey. The analysis revealed some demographic dissimilarity between the two groups, as well as a presence of selective migration with respect to entrepreneurial characteristics. This study demonstrates that immigrants (as compared to non-migrants) are more likely to report intentions to start a business. Moreover, they possess relatively large amount of specific human capital, social capital and self-confidence relevant for entrepreneurship. The paper concludes with proposed practical implications and suggestions for further research.

Keywords: Entrepreneurship; immigration; Russian; selective migration; self-employment; brain drain.

1. Introduction

While the stock of immigrants is boosting in the Western countries, entrepreneurship has been increasingly recognized as a viable method of improving the living conditions for them. Immigrants, often blocked from the general labor market, may survive and achieve some economic mobility by becoming self-employed. Through this type of activity, they may actively participate in the local social life and join important social networks. At the same time, the host countries are also expected to benefit from immigrant self-employment. Immigrant entrepreneurs are argued to cease demand for social benefits, revitalise declining regions and industries, stimulate international trade and bring a variety of new ideas and products to the market. Not surprising, politicians in developed countries,

including Norway, have started to promote initiatives encouraging immigrants to establish businesses in their new country of residence.

The question that seems to be essential in theoretical debates on immigrant entrepreneurship is: “Why do some ethnic/immigrant groups have higher rates of business participation than others?” (see, for example, Flap *et al.*, 2000; Waldinger and Chishti, 1997). In different contexts researchers have investigated the role of culture, social and human capital, discrimination, blocked mobility, opportunity structure, or a combination of several. It has also been suggested that especially “entrepreneurial” persons may be selected during the migration process. However, the selectivity question represents a major knowledge gap in the field of immigration studies (Gans, 2000). The purpose of this paper is to test empirically whether selective migration with respect to entrepreneurial characteristics does exist and to propose explanations for the phenomenon under scrutiny.

This paper also seeks to contribute to the debate considering the flows of skilled migrants from less to more economically developed countries. This process, also called “brain drain,” has received a gradually growing interest both in sending and receiving countries. This paper compares Russian immigrants in Norway to a representative sample of their stay-at-home peers, applying a previously underutilized method on the rarely studied group of immigrants from a specific country.

2. Conceptual Framework and Hypotheses

It has often been observed around the globe that immigrants of a certain origin are under- or overrepresented among the self-employed.^a Cultural predisposition (Weber, 1958), blocked mobility on the labor market (Zhou, 2004), middleman minority position (Bonacich, 1973), extensive social capital (Potocky-Tripodi, 2004; Caulkins and Peters, 2002; Fratoe, 1988; Portes and Zhou, 1992), use of ethnic resources (Light, 1984), and mixed embeddedness (Kloosterman *et al.*, 1998) have been proposed as possible explanations to this phenomenon.

Waldinger’s interactive model (Waldinger *et al.*, 1990) emphasizes the interaction between opportunity structures and ethnic group characteristics. Opportunity structures include market conditions and the routes through which access to business is obtained. Access to business-ownership is defined by the number of vacant ownership positions, the extent to which natives are vying for these slots and by government policy toward immigrants. Group characteristics include resource mobilization and predisposing factors such as blocked mobility, aspiration levels and selective migration. It is argued that some immigrant groups may be pre-selected, first of all, with respect to prior buying and selling experience.

Indeed, immigrants do not represent a random sample of the population from which they came (Feliciano, 2005). It has been reported that immigrants are different from the

^aThe terms ‘entrepreneurs’, ‘business owners’ and ‘self-employed’ are often used interchangeably in the literature on immigrant businesses (Rath and Kloosterman, 2003). In the theoretical section, we apply the exact terms used by the referred authors.

home country population with respect to their average skills (Borjas, 1999), education (Feliciano, 2005), health (Landale *et al.*, 2000), personality factors (Silventoinen *et al.*, 2007) and occupational background (Suzuki, 2002). In some cases, the unskilled persons endowed with relatively low human capital dominate the migration flows (Borjas, 1999). Alternatively, most skilled professionals are argued to migrate extensively from Eastern Europe and the former Soviet Union (Mansoor and Quillin, 2006; Ushkalov and Malakha, 2000). It is suggested in this paper that selective migration may have an effect that has not been taken into account sufficiently by the existing studies on immigrant entrepreneurship.

The human capital model (Sjaastad, 1962) assumes migration occurs if the rate of return on the investment in migration is greater than the interest cost of funds for investment in human capital. The favorable selectivity of migrants occurs if the wage differential between the destination and origin is greater for the high-ability workers (Chiswick, 1999). Highly skilled immigrants are likely to move from countries where payoff to human capital is low to countries where the payoff is high (Borjas, 1999). The inherent uncertainty associated with entrepreneurial venturing violates the assumption about the return on migration, which underpins these models. It is therefore unclear to what extent this “wealth-maximizing” (word used in Borjas, 1991) reasoning may be applicable to potential entrepreneurs. In 2007, only a few^b Russians received permission to enter Norway based on their documented intention to start a business. In the same year, 254 professionals, 234 students and 658 family members received such permission (Utlendingsdirektoratet, 2008). It is therefore doubtful that many entrepreneurs rationally choose to migrate to another country because they perceive it is more profitable to create a business abroad. Other theories of migration, such as dual labor market theory, world system theory and the “new economics of migration” approach (for review, see Massey *et al.*, 1993) also fail to predict if (and under which circumstances) self-selection of entrepreneurs occurs.

In the context of entrepreneurship studies, selective migration still lacks both theoretically sound elaboration and empirical evidences. Clark and Drinkwater (1998) suggested that immigrants, as a self-selecting group, may be “in some sense more entrepreneurial than the native-born.” However, based on the analysis of a large sample of Britain’s ethnic minorities, the authors rejected this conjecture. Based on ethnographic analysis, Kasdan (1965) suggested dominating family structure in the home country explains the differences in entrepreneurial behavior among immigrants to the United States. The author argues that the social structure of a traditional Basque community maximizes the chances for entrepreneurial personality types to immigrate. In this study, risk-taking and acceptance of change were associated with entrepreneurial personality. Maxim (1992) suggested similar psychological processes underlie both the decision to migrate and the decision to become self-employed.

Levie (2007) suggested immigrants may be positively selected with respect to their attitudes toward new business activity. Immigrants may be less risk-averse compared to

^bThe exact number, which is less than 5, is not revealed here protecting respondents from identification.

their stay-at-home peers because they have made a bold decision to move into a new unknown country. Indeed, low risk aversion is associated with both higher propensity to migrate (see, for example, [Heitmueller, 2005](#)), and entrepreneurial behaviour (for the review, see [Shane, 2004](#)).

In the same vein, [Dana and Morris \(2007\)](#) argued that the very act of emigrating may be reflective of some entrepreneurial values, such as individualism, achievement, competitiveness, risk taking and strong work ethics. Immigrants may also be more confident of their own human capital and their ability to succeed in a new uncertain environment. Utilizing the UK GEM data, the author arrived at inconclusive results about the presence of self-selection. It seems a proper assessment of the effects of selectivity requires data on both the population in the sending country and on immigrants from this specific country ([Feliciano, 2005](#)).

Dissatisfaction is argued to play a central role both for migration and business start-up decisions. On the individual level, dissatisfaction with previous work is positively associated with self-employment ([Brockhaus and Horowitz, 1985](#)). At the same time, immigrants (prior to migration) tend to be less satisfied with their jobs, educational institutions and life in general ([Silventoinen et al., 2007](#); [Hanna and Pearson, 1990](#)).

Based on the conjectures cited, one may expect that relatively more “entrepreneurial” individuals will choose to move abroad. It is suggested in this paper that the presence of selective migration is easier to detect when comparing early-stage entrepreneurial activities which are less influenced by particular post-migration conditions. Thus, the following hypothesis was developed for this study:

Hypothesis 1: The proportion of persons involved in early-stage entrepreneurial activities is higher among immigrants than among the population in their home country.

Immigrants may be pre-selected with respect to their human capital relevant for entrepreneurship. [Becker \(1993\)](#) distinguishes between general and specific human capital. General human capital, often measured as years of education and work experience, relates to the factors expected to increase the individual’s productivity for a wide range of work-related activities. Specific human capital, on the other hand, is applicable only to a specific domain. In the entrepreneurship literature, specific human capital is usually measured as managerial, industry specific and self-employment related experience ([Bosma et al., 2004](#); [Cooper et al., 1994](#)).

As far as entrepreneurship is concerned, the amount of specific human capital is especially important. To actually start a venture is probably the most effective way of learning specific entrepreneurial tasks such as initial organizing, establishing of relationships with key stakeholders, allocation of human resources, adjusting to market changes and facilitation of communication within the organization. Therefore, it is argued that immigrants coming from countries with high rates of self-employment will be over-represented among the self-employed in the host countries. Such immigrants are predisposed toward entrepreneurship because of the home country traditions for entrepreneurship and because of the relevant training they have received before migration.

The relationship between the level of self-employment in the country of origin and subsequent entry into self-employment after migration has been empirically demonstrated (Cobas, 1986; Ekberg and Hammarstedt, 1999; Yuengert, 1995). Others have failed to find support for such a relationship (Van Tubergen, 2005).

The validity of these conflicting results may be questioned if the process of migration is selective with respect to entrepreneurial experience. Entrepreneurs (at least the successful ones) may be more likely to migrate than the rest of the less developed country's population because they possess the necessary financial capital. Successful entrepreneurs may also be more likely to travel abroad (as tourists or on business). Their eventual travels perhaps provide them with information facilitating the migration decision. This conjecture accords to the theory of asymmetric information as applied to migration decision making (see Stark, 1991).

Summing up this discussion, the following hypothesis was formulated:

Hypothesis 2: Immigrants possess more specific human capital relevant for entrepreneurial activities than their stay-at-home peers.

Not only the level of specific human capital, but also individuals' awareness about their abilities, may influence the decision to start a business. Both perceived self-efficacy (Krueger *et al.*, 2000) and perceived behavioral control (Kolvereid, 1996) are important for prediction of entrepreneurial intentions. By the same token, self-reported competences are predictive of entrepreneurial performance (Chandler and Jansen, 1992). The link between confidence in one's skills/abilities and entrepreneurship has been illustrated empirically using GEM data (Arenius and Minniti, 2005; De Clercq and Arenius, 2006). It has been suggested that immigrants may be self-selected with respect to their confidence in entrepreneurial skills (Levie, 2007). Thus, the following hypothesis was developed:

Hypothesis 3: Immigrants are more confident in their abilities relevant for entrepreneurial activities than their stay-at-home peers.

Social networks may be viewed as consisting of two components: the personal networks (i.e. individual, level relationships) and cultural embeddedness (Fadahunsi *et al.*, 2000). Focusing on the individual level, this paper emphasizes the importance of knowing other entrepreneurs when making a decision to start a business. It is argued that the presence of entrepreneurs among parents (Constant and Zimmermann, 2006) and peers (Arenius and Minniti, 2005) increases the individual's likelihood of becoming a business owner. Immigrants may be pre-selected with respect to the quality and quantity of their personal networks relevant for entrepreneurial activities. It is well-established in the field of social psychology that friendship and peer affiliation are influenced by perceived or actual similarity in attitudes, traits and values (Byrne, 1971; Newcomb, 1956). Particularly, friends are argued to demonstrate similar perceptions of need for achievement and autonomy (Secord and Backman, 1964). Both these needs are traditionally argued to predict entrepreneurial behavior (for a review, see Shane, 2004). It is possible social groups characterized by relatively high needs for achievement and autonomy will include

many potential entrepreneurs and, simultaneously, many potential migrants. In this case, one may suggest that:

Hypothesis 4: Immigrants are more likely to report personally knowing other entrepreneurs as compared to their stay-at-home peers.

3. The Context of Immigration to Norway

During the first years after World War II, when foreigners temporally displaced by war left Norway, the immigrant population in the country was exceptionally small. From 1950–1960, the refugees of the war, former prisoners of the Nazi camps located in Norway and citizens of other Nordic and OECD countries migrated to Norway. In the beginning of the 1970s, when other European countries began to close the borders for working migrants, this group started coming to Norway, forming the first significant wave of immigration. The initial intention of the policymakers was to invite immigrant workers for short periods of time covering the cyclical excessive demand for labor. However, appreciating the high standard of living in Norway, the absolute majority of guest workers never left the country. As early as 1975, new laws restricting immigration of unskilled workers were introduced. When these restrictive laws were applied, the immigration did not stop, but continued through family reunion, international education programs and employment of professionals. The families of working migrants formed the second wave of immigration to Norway. From 1970–1975, Turks, Moroccans and Pakistanis constituted the majority of not-Western immigrants in Norway. The third, and by far the largest wave of immigrants, consists of refugees who started arriving in the end of the 1970s and still continues to fuel the migration process. Because isolated local conflicts usually cause sporadic flows of refugees, this type of migrants arrived to Norway in large ethnically homogenous groups. Evolution of the Norwegian migration process from working migrants and family reunification to refugees is much like the processes observed in Germany (Wilpert, 2003), France (Ma Mung and Lacroix, 2003) and other European countries.

In 2007, there were 341,830 first generation immigrants in Norway (7.3 percent of the population). When the persons born in Norway by two non-Norwegian parents are included, immigrants account for 8.9 percent of population. When children with one Norwegian and one foreign parent are added, the respective figure rises up to 13.4 percent (Statistics Norway, 2007). The immigrants are unevenly distributed around the country with the largest concentration in the Oslo region.

When immigrant entrepreneurship became an observable and significant phenomenon in Norway remains unclear because of a lack of systematic historical and statistical data. In the beginning of the 1980s, immigrant-owned shops and restaurants in central Oslo started attracting the attention of the public. In 1986/87, there were 127 “ethnic” shops owned by non-western immigrants in Oslo that constituted 44 percent of all small shops retailing daily goods. Between 1989 and 1997, non-western immigrants established 300 shops, 200 smaller outlets selling daily goods and simple food and 160 restaurants (Tjelmeland and Brochmann, 2003). Systematic national level statistics on self-employed immigrants first became

available in 2001. The level of self-employment among immigrants is constantly growing, but still remains low compared to the average self-employment level in the country.

Immigrants from Denmark, Sweden and Pakistan represented about one-third of all self-employed immigrants in Norway in 2006. Together with immigrants from Great Britain, Iran, Poland, Vietnam and Turkey, these groups accounted for almost 50 percent of all self-employed migrants (2007).

Empirical evidence reveals striking intergroup differences with respect to the percentage of self-employed (Vinogradov and Kolvereid, 2007). In 2004, as much as 12.7 percent of the immigrants from Faroe Islands and 10.2 percent of the immigrants from Hong Kong were self-employed. At the same time, just under 2 percent of the immigrants from Tanzania, Thailand and Ghana were self-employed. When divided by the world regions, immigrants from Western countries (West European countries, USA, Canada, Australia and New Zealand) demonstrated the highest average level of self-employment while immigrants from Africa and Eastern Europe are underrepresented among self-employed.

Russians (11,338 first generation immigrants), who are the focus of this paper, constitute the 15th largest immigrant group in Norway (Statistics Norway, 2007). In 2008, the main reasons for granting permission to enter Norway from Russia were work (48 percent including seasonal work), education (23 percent), family reunion (24 percent) and asylum/humanitarian reasons (5 percent) (Utlendingsdirektoratet, 2009). This group demonstrates one of the highest rates of population growth with twice as many immigrants living in Norway in 2008 as compared to 2003. The absolute majority of Russian immigrants belong to the first generation and over 85 percent of them came to Norway during the last ten years. Among Russians, the influence of factors related to inter-cohort heterogeneity, intergenerational relationships and long-term influence of the host country environment is considered to be relatively weak. Thus, Russians in Norway represent an appropriate case for a quasi-experimental research design.

4. Data and Method

4.1. Data

To test the hypotheses, a representative sample of Russian immigrants in Norway was compared to a sample of the Russian population. Despite the large number of Russians residing abroad, entrepreneurship among immigrants from Russia, and more broadly speaking, from the former USSR, is not often described in the literature. Rare exceptions are studies conducted on immigrants from the former Soviet Union in Israel (Lerner and Hendeles, 1996; Mesch and Czamanski, 1997).

In entrepreneurship studies, *gender* is one of the most frequently used control variables. Men are reported to have higher propensity to become self-employed both among natives (see, for example, Cowling and Taylor, 2001) and immigrants (Butler and Herring, 1991; Razin and Scheinberg, 2001; Bates and Dunham, 1993). In Norway, only 34 percent of immigrants from Russia are men while the gender proportion in Russia is nearly 50/50.

Because of the skewed demographic of the immigrant population in Norway and the expected differences in entrepreneurial activities, male and female respondents were analyzed independently.

Data from Russia came from the GEM study conducted in 2008 (for methodological details, see [Bosma et al., 2007](#)). A regionally stratified representative sample of adults was approached for face-to-face interviewing. The response rate was about 40 percent in Russia. Data on Russian immigrants in Norway were collected using a specially designed mail survey. The battery of questions considering entrepreneurial behavior and intentions was borrowed directly from GEM, ensuring comparability of the two datasets. Additional questions on home country and host country education, citizenship, migration time, settlement intentions and migration motives were presented to the immigrant respondents.

To identify potential respondents, phonetic analysis of first names was applied to the Yellow Pages database. This method of sampling has previously been used in research on immigrants ([Bruder et al., 2007](#); [Dassler et al., 2007](#); [Min and Bozorgmehr, 2000](#); [Shin and Yu, 1984](#); [Smallbone et al., 2003](#); [Shinnar and Cheri, 2008](#); [Chaganti et al., 2008](#); [Light et al., 1994](#); [Kasdan, 1965](#)). In sum, 1330 female and 635 male respondents were identified as having Russian-like first names and contacted.

Within six weeks after the initial mailing, 488 questionnaires were returned because the address was not valid, 120 respondents reported they could not read Russian and 21 returned questionnaires were not filled. All these respondents are considered to be non-contacts. Given that 543 questionnaires (of totally 1357 that apparently reached the respondents) were returned, the response rate was 40 percent; that is within the frames of normality for comparable surveys. As many as 406 (75 percent) respondents reported coming to Norway from Russia.

For the purposes of this paper, immigrants younger than 18 years of age at the time of migration were excluded because this exclusion increases the probability that the destination country was chosen by an immigrant and not by immigrant's parents. The final sample included 796 male and 865 female non-migrants as well as 41 male and 302 female immigrants aged 18–64. Descriptive statistics are presented in Table 1.

Table 1. Descriptive statistics.

	Nonmigrants			Immigrants		
	N	Mean/%	Std. Deviation	N	Mean/%	Std. Deviation
<i>Female respondents</i>						
Age	864	40.06	13.205	302	41.3	9.046
Married/Cohabiting	864	52.5	—	302	77.2	—
Higher education	865	20.0	—	302	60.9	—
<i>Male respondents</i>						
Age	796	38.77	12.619	38	37.84	11.573
Married/Cohabiting	795	60.1	—	38	84.2	—
Higher education	796	16.1	—	38	71.1	—

Note: For nominal scales *mean* simply represents percentage of “yes” responses.

With respect to self-reported ethnicity, immigrant respondents represent relatively homogenous group (most represented: 89 percent Russians, 7 percent Ukrainians and 1 percent Byelorussians). According to the recent census data, the population of the Russian Federation consists mostly of Russians (80 percent), Tatars (4 percent) and Ukrainians (2 percent) (GosComStat, 2002). In this study, 75 percent of the immigrants entered Norway because of the family reunion, 14 percent entered as students and only one respondent reported to be a refugee. Thus, the respondents migrated mainly voluntary. The analysis of the business descriptions provided by the immigrant respondents revealed that two-thirds of respondents had previous business experience in Russia and not in Norway. Regarding other demographic characteristics, immigrants are much better educated and more likely to be married or cohabiting than their stay-at-home peers. Male immigrants are slightly younger and female immigrants are somewhat older than non-migrants. Mean duration of residence in Norway for immigrants of both genders was about 6 years. Self-employed immigrants were engaged in many diverse industries (trade, consulting, construction, agriculture, personal services) with only medical services attracting relatively large proportion of self-employed persons (22 percent).

To assess the possible response bias, 280 out of 729 non-respondents were randomly selected and an attempt to contact them by telephone was made, resulting in 64 interviews. No differences with respect to age and geographical distribution were observed between respondents and non-respondents. However, non-respondents appeared to be significantly more likely to be single, and were also more likely to report entrepreneurial intentions and previous business ownership experience. This difference may be at least partly explained by the fact that telephone interviews provided less “don’t know/refuse to answer” responses as compared to the mail survey. Because non-respondents are even more “entrepreneurial” than respondents, this response bias does not jeopardize the hypotheses on positive selection of immigrants with respect to entrepreneurial characteristics.

4.2. Measures

A respondent was categorized as being involved in the early *entrepreneurial activities* when responding positively to at least one of the following two questions:

- (1) “Are you, alone or with others, expecting to start a new business within the next three years, including any type of self-employment or selling any goods or services to others?”
- (2) “Are you, alone or with others, currently trying to start a new business, including any type of self-employment?”

The presence of *specific human capital* was measured by asking the following questions:

- (1) “Have you, in the past 12 months, sold, shut down, discontinued or quit a business you owned and managed, any form of self-employment, or selling goods or services to anyone?”

- (2) “Have you, alone or with others, ever started a business in the past that you owned and managed?” This question was supplied with a field where the respondents could describe their previous businesses.

Self-reported confidence was assessed through the following two questions:

- (1) “Have you the knowledge, skills and experience required to start a new business?”
- (2) “Do you agree that a fear of failure would prevent you from starting a business?”

Finally, the respondents were asked if they “*personally know anyone who started a business* in the past two years.” For these and the other previously discussed items, included in the questionnaire, the following three alternative answers were available for respondents: “yes”, “no”, and “don’t know/refuse to answer”.

4.3. Control variables

The following three control variables were included into analysis: age, education and family status. *Age* is suggested to have a curvilinear relationship with the likelihood of entrepreneurial behavior because age incorporates the positive effect of experience, wealth and credibility and the negative effect of growing opportunity costs and resistance to change — all increasing with age (see Shane, 2004, for the review).

In the general population, the level of *education* is usually demonstrated to be positively related to self-employment (see Shane, 2004, for the review). In immigration studies, education obtained in the home-country, the host-country, as well as the total educational endowment has been measured. Empirical tests provide inconsistent results regarding the relationships between these three measures of education and propensity of self-employment among immigrants (see Vinogradov and Kolvereid, 2007, for the review). In this paper, education level was operationalized as the presence/absence of higher education from the home country.

Being married or cohabiting has in previous studies shown to increase the likelihood that a person is self-employed both among natives (see Shane, 2004, for the review) and among immigrants (Clark and Drinkwater, 1998; Le, 2000; van Tubergen, 2005; Borjas, 1986).

5. Analysis

Chi-square statistics (Table 2) indicate that female immigrants are significantly more likely to report intentions to start a business, being in a process of business initiation, recently shutting down or previously owning a business, possessing relevant knowledge and personally knowing an entrepreneur. Female immigrants are also less likely to express fear of failure. Thus, all the hypotheses developed in this text are preliminary supported.

However, as considering male respondents, the significant differences between immigrants and their stay-at-home peers were revealed only with respect to previous entrepreneurial experience and self-reported knowledge and skills (see Table 3). Thus, the hypothesis on selection with respect to the relevant specific human capital is supported

Table 2. Chi-square statistics, female respondents.

Hypothesis		Nonmigrants		Immigrants		Chi-square	Sig. (two-tailed)
		Count	%	Count	%		
H1	Intention to start a business						
	Yes	28	3.2	49	16.2	102.69	0.000
	No	797	92.2	209	69.2		
	Trying now to start a business						
Yes	34	3.9	30	10.0	17.43	0.000	
No	818	94.7	262	87.6			
H2	In the past 12 months shut down a business						
	Yes	4	0.5	11	3.7	18.17	0.000
	No	838	97.0	279	93.6		
	Have ever owned a company						
Yes	30	3.7	65	21.5	95.14	0.000	
No	781	96.2	234	77.5			
H3	Possess relevant knowledge						
	Yes	80	15.4	100	33.4	77.60	0.000
	No	359	69.3	113	37.8		
	Fear of failure would prevent from starting a business						
Yes	250	48.3	143	47.8	8.80	0.012	
No	125	24.1	96	32.1			
H4	Personally knows an entrepreneur						
	Yes	171	33.0	143	48.0	24.60	0.000
	No	298	39.5	146	49.0		

also for males. The third hypothesis, regarding self-confidence, receives mixed support. On one hand, immigrants, compared to non-migrants, are more likely to report possessing relevant knowledge (42.1 percent against 22.6 percent). On the other hand, differences in reporting fear of failure were not significant. The hypotheses on intergroup differences in early stage entrepreneurial activities and personal contacts with other entrepreneurs are not supported for males.

To assess the influence of control variables on the relevant differences between immigrants and non-migrants, seven logistic regressions were carried out (Table 4). In the majority of the cases, introduction of control variables did not remove the statistical significance of the differences between female immigrants and their stay-at-home peers. The only exception is the difference in self-reported fear of failure, which was not successfully predicted by the regression. Thus, for the female respondents the suggestion that

Table 3. Chi-square statistics, male respondents.

Hypothesis	Nonmigrants		Immigrants		Chi-square	Sig. (two-tailed)
	Count	%	Count	%		
H1	Intention to start a business					
	Yes	54 6.8	2 5.3	4.08	0.130	
	No	686 86.2	30 78.9			
	Trying now to start a business					
H2	Yes	44 5.5	2 5.3	1.17	0.557	
	No	744 93.6	35 92.1			
	In the past 12 months shut down a business					
	Yes	14 1.8	3 7.9	8.38	0.015	
H3	No	764 96.0	33 86.8			
	Have ever owned a company					
	Yes	36 5.0	9 23.7	22.92	0.000	
	No	690 94.9	29 76.3			
H4	Possess relevant knowledge					
	Yes	108 22.6	16 42.1	13.73	0.001	
	No	297 62.1	12 31.6			
	Fear of failure would prevent from starting a business					
H4	Yes	191 40.0	14 37.8	0.22	0.896	
	No	174 36.4	13 35.1			
	Personally knows an entrepreneur					
	Yes	176 36.8	18 47.4	2.22	0.329	
No	251 52.5	18 47.4				

demographic variables solely explain the intergroup differences in entrepreneurial intentions, relevant human capital, self-confidence and peer affiliation may be rejected.

In the male sample, the regression results suggest immigrants are more likely to report possessing relevant knowledge because they are relatively young and highly educated. Young people may be generally overconfident and higher education may provide a ground for additional self-confidence. Thus, the relevant hypothesis on selection is not supported by the regression analysis of male respondents. The only hypothesis that is supported by this analysis is the one suggesting that male immigrants have more specific human capital than their stay-at-home peers and the control variables included into the analysis do not explain this difference.

Several factors may explain why some hypotheses supported by the analysis of female respondents were not supported by the analysis of the male sample. First, the number of male immigrant respondents is low (41 against 302 female immigrants) which may disturb

Table 4. Logistic regression results.

	Entrepreneurial Intentions			Specific Human Capital			Self-Reported Confidence	
	Intention to Start a Business	Trying Now to Start a Business	In the Past 12 Months Shut Down a Business	Have Ever Owned a Company	Possess Relevant Knowledge	Fear of Failure would Prevent from Starting a Business	Personally Knows an Entrepreneur	Confidence
<i>Female respondents</i>								
Immigrant (0 = no, 1 = yes)	1.88***	1.07***	2.07***	2.02***	0.95***	-0.09	0.55***	
Age	-0.03***	-0.03**	-0.01	0.02*	-0.01	0.01	-0.03***	
Higher education (1 = yes, 0 = no)	-0.15	0.00	-0.09	-0.23	0.20	0.24	0.28*	
Married (1 = married or cohabiting, 0 = otherwise)	0.05	0.02	0.02	0.17	-0.03	-0.19	0.08	
Model chi-square	59.81***	21.14***	14.71***	82.31***	37.38***	5.49	38.179***	
Nagelkerke R ²	0.129	0.052	0.095	0.162	0.069	0.009	0.062	
<i>Male respondents</i>								
Immigrant (0 = no, 1 = yes)	-0.84	-0.78	1.86**	1.63***	0.14	-0.11	0.08	
Age	-0.06***	-0.04***	0.00	0.01	-0.02**	0.02***	-0.03***	
Higher education (1 = yes, 0 = no)	0.74**	0.70**	0.16	0.66*	1.28***	-0.05	0.43*	
Married (1 = married or cohabiting, 0 = otherwise)	0.54*	0.29	-0.86	-0.68**	0.34	0.03	0.50**	
Model chi-square	23.05***	12.79**	7.95*	20.91***	35.93***	9.67**	17.41***	
Nagelkerke R ²	0.070	0.044	0.053	0.074	0.101	0.025	0.045	

Notes: B values reported. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Dependent variables in columns.

the results. Second, the paths to migration and entry modes may be very different for men and women. However, the results for females are considered to be somewhat more reliable and generalizable than the results for males in this study, because females constitute the majority of the Russian immigrants in Norway, and also because the female sample is of better quality than the sample of males.

6. Conclusions

This study demonstrates that at least female immigrants (as compared to non-migrants) are more likely to report intentions to start a business. Moreover, they possess relatively large amount of specific human capital, social capital and self-confidence relevant for entrepreneurship. Male immigrants are also likely to demonstrate relatively large amounts of the specific human capital relevant for entrepreneurship. Blocked mobility in the general labor market can partly explain the high level of businesses experience. Because the absolute majority of Russian immigrants have spent only a few years in Norway, it is unlikely that these striking intergroup differences can be explained solely by the context of the receiving country. It is also unlikely that blocked mobility thesis solely explains the differences between immigrants and non-migrants with respect to self-confidence, fear of failure and personally knowing other entrepreneurs. Unless the context of the host-country changes the personality dramatically within a few years after arriving, one may conclude that immigrants represent a self-selected group with respect to entrepreneurial characteristics.

These results cast doubt on the use of home-country self-employment level as a predictor of self-employment among immigrants in a particular destination country. The presence of selective migration jeopardize the implicit assumptions on the representativeness of immigrants used in some comparative studies on immigrant self-employment (see, for example, Hammarstedt, 2001; Yuengert, 1995; van Tubergen, 2005; Cobas, 1986; Ekberg and Hammarstedt, 1999).

The amount of immigrants' "skills" (Borjas and Bronars, 1989) and "quality of migrants" (Borjas, 1987) has attracted much attention in the existing economic literature. Earnings differential after correction for observed human capital characteristics is usually used as a proxy of immigrants' "quality." This thesis suggests there is at least one more dimension characterizing immigrants. Even earning less than equally educated natives, immigrants may have skills that match those of natives if we take into account the preferences for particular types of self-employment. In this context, the economists' assumption that immigrants are income maximizers (Borjas, 1987) appears to be markedly simplistic.

The findings regarding selective migration are not supportive for the "model of brain circulation" proposed by Schmitt and Soubeyran (2006). This simple two-country, one-sector model differentiates individuals according to two types of talent (entrepreneurs vs. workers). The countries have different endowments of talent and all individuals choose to be workers or entrepreneurs. Allowing migration generates incentives for the relatively abundant type of individuals to move to the other country. Thus, entrepreneurs are expected to migrate to the countries where their entrepreneurial talents are relatively rare.

However, our findings indicate entrepreneurs tend to migrate disproportionately from Russia (relatively low level of business ownership and entrepreneurial aspirations) to Norway (higher level of business ownership and entrepreneurial aspirations according to GEM reports). Therefore, it is possible that migration of potential entrepreneurs leads to an even larger gap between countries rather than leading to the equilibrium on the international labor market, at least in its sector including entrepreneurs.

In immigrant sending countries, the problem of “brain drain” becomes an increasing issue. This study suggests the process of brain drain has more dimensions than has so far been depicted. In addition to “scientific immigration” (Ushkalov and Malakha, 2000; Tascu *et al.*, 2002) and immigration of skilled workers (Mansoor and Quillin, 2006), entrepreneurs tend to be overrepresented among immigrants. In countries suffering from low levels of entrepreneurship development, such as Russia (Astrakhan and Chepurenko, 2003; Aidis *et al.*, 2008), the outflow of potential entrepreneurs should attract more attention.

This study indicates Russian immigrants are both willing and able to establish new businesses. However, Russians have so far been underrepresented among the self-employed in Norway. Partly, this can be explained by the fact that self-employment level is generally low among women who constitute the majority of Russian immigrants in the country. In addition, this study suggests immigrants may meet certain barriers when actually starting a business. Thus, from the host country’s perspective, it is important to pay attention to the entrepreneurial intentions of immigrants. It is possible that relatively small interventions may cause a significant increase in the number of immigrant owned new businesses.

This paper does not reveal the mechanisms underling the selection of potential entrepreneurs in the process of migration. However, several suggestions may be made. First, entrepreneurial immigrants may be pre-selected because immigration and business venturing are associated with the same type of personality. Second, persons actively seeking new opportunities through migration may affiliate with peers who actively seek opportunities through business venturing. Thus, the relevant social networks may facilitate both immigration and entrepreneurship. Third, previous self-employment in the home country may provide the financial capital needed to migrate. The failure to be able to identify the reasons why immigrants are more entrepreneurial than their stay-at-home peers appeals for more research in this area.

References

- Aidis, R, S Estrin and T Mickiewicz (2008). Institutions and entrepreneurship in Russia: A comparative perspective. *Journal of Business Venturing*, 23(6), 656–672.
- Arenius, P and M Minniti (2005). Perceptual variables and nascent entrepreneurship. *Small Business Economics*, 24(3), 233–247.
- Astrakhan, I and A Chepurenko (2003). Small business in Russia: Any prospects after a decade? *Futures*, 35(4), 341–359.
- Bates, T and CR Dunham (1993). Asian-American success in self-employment. *Economic Development Quarterly*, 7(2), 199–214.

- Becker, GS (1993). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Chicago: The University of Chicago Press.
- Bonacich, E (1973). A theory of middleman minorities. *American Sociological Review*, 38(5), 583–594.
- Borjas, GJ (1986). The self-employment experience of immigrants. *The Journal of Human Resources*, 21(4), 485–506.
- (1987). Self-selection and the earnings of immigrants. *American Economic Review*, 77(4), 531–553.
- (1991). Immigration and self-selection In *Immigration, Trade, and the Labor Market*. JM Abowd and RB Freeman (eds.), 29–76. Chicago: The University of Chicago Press.
- (1999). *Heaven's Door: Immigration Policy and the American Economy*. Princeton, NJ: Princeton University Press.
- Borjas, GJ and SG Bronars (1989). Consumer discrimination and self-employment. *Journal of Political Economy*, 97(3), 581–605.
- Bosma, N, K Jones, E Autio and J Levie (2007). *Global Entrepreneurship Monitor: 2007 Executive Report*. Wellesley, Mass: Babson College.
- Bosma, N, M Van Praag, R Thurik and G De Wit (2004). The value of human and social capital investments for the business performance of startups. *Small Business Economics*, 23(3), 227–236.
- Brockhaus, R and P Horowitz (1985). The psychology of the entrepreneur. In *The Art and Science of Entrepreneurship*. D Sexton and RW Smilor (eds.), 25–48. Cambridge, MA: Ballinger.
- Bruder, J, D Neuberger and S Rathke-Doepner (2007). *Financial Constraints of Ethnic Entrepreneurship: Evidence from Germany*. Working paper N84. Rostock: University of Rostock.
- Butler, JS and C Herring (1991). Ethnicity and entrepreneurship in America: Toward an explanation of racial and ethnic group variations in self-employment. *Sociological Perspectives*, 34(1), 79–94.
- Byrne, D (1971). *The Attraction Paradigm*. New York: Academic Press.
- Caulkins, DD and C Peters (2002). Grid-group analysis, social capital, and entrepreneurship among North American ethnic groups. *Cross-Cultural Research*, 36(1), 48–72.
- Chaganti, RS, AD Watts, R Chaganti and M Zimmermann (2008). Ethnic-immigrants in founding teams: Effects on prospector strategy and performance in new Internet ventures. *Journal of Business Venturing*, 23(1), 113–139.
- Chandler, GN and E Jansen (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7(3), 223.
- Chiswick, BR (1999). Immigration policy and immigrant quality: Are immigrants favourably self-selected? *American Economic Review*, 89(2), 181–185.
- Clark, K and S Drinkwater (1998). Ethnicity and self-employment in Britain. *Oxford Bulletin of Economics and Statistics*, 60(3), 383–407.
- Cobas, JA (1986). Paths to self-employment among immigrants: An analysis of four interpretations. *Sociological Perspectives*, 29(1), 101–120.
- Constant, A and KF Zimmermann (2006). The making of entrepreneurs in Germany: Are native men and immigrants alike? *Small Business Economics*, 26(3), 279–300.
- Cooper, AC, FJ Gimeno-Gascon and CY Woo (1994). Initial human capital and financial capital as predictors of new venture performance. *Journal of Business Venturing*, 9(5), 371–395.
- Cowling, M and M Taylor (2001). Entrepreneurial women and men: Two different species? *Small Business Economics*, 16(3), 167–175.
- Dana, LP and M Morris (2007). Towards a synthesis: A model of immigrant and ethnic entrepreneurship. In *Handbook of Research on Ethnic Minority Entrepreneurship*. LP Dana (ed.), 803–811. Cheltenham: Edward Elgar.

- Dassler, T, C Seaman, R Bent, L Lamb and N Mateer (2007). Composing a database of minority enterprises in Scotland: A discussion based on the concept of mixed embeddedness. *International Journal of Entrepreneurial Behaviour and Research*, 13(2), 107–123.
- De Clercq, D and P Arenius (2006). The role of knowledge in business start-up activity. *International Small Business Journal*, 24(4), 339–358.
- Ekberg, J and M Hammarstedt (1999). Egenföretagare bland invandrare. *Arbetsmarknad och Arbetsliv*, 5(3), 207–217.
- Fadahunsi, A, D Smallbone and S Supri (2000). Networking and ethnic minority enterprise development: Insights from a North London study. *Journal of Small Business and Enterprise Development*, 7(3), 228–240.
- Feliciano, C (2005). Does selective migration matter? Explaining ethnic disparities in educational attainment among immigrants' children. *The International Migration Review*, 39(4), 841–871.
- Flap, H, A Kumcu and B Bulder (2000). The social capital of ethnic entrepreneurs and their business success. In *Immigrant Businesses: The Economic, Political and Social Environment*, J Rath (ed.), 142–161. Basingstoke: Macmillan.
- Fratoe, FA (1988). Social capital of black business owners. *Review of Black Political Economy*, 16(4), 33–50.
- Gans, HJ (2000). Filling in some holes: Six areas of needed immigration research. In *Immigration Research for a New Century*. N Foner, RG Rumbaut and SJ Gold (eds.), 76–89. New York: Russell Sage Foundation.
- GosComStat (2002). Population census of the Russian Federation. [www.perepis 2002.ru/index.html?id=17].
- Hammarstedt, M (2001). Immigrant self-employment in Sweden — Its variation and some possible determinants. *Entrepreneurship and Regional Development*, 13(2), 147–161.
- Hanna, JM and JD Pearson (1990). Selective migration from Samoa: A longitudinal study of pre-migration differences in social and psychological characteristics. *Social Biology*, 37(3–4), 204.
- Heitmueller, A (2005). Unemployment benefits, risk aversion, and migration incentives. *Journal of Population Economics*, 18(1), 93–112.
- Kasdan, L (1965). Family structure, migration and the entrepreneur. *Comparative Studies in Society and History*, 7(4), 345–357.
- Kloosterman, R, J Van Der Leun and J Rath (1998). Across the border: Immigrants' economic opportunities, social capital and informal business activities. *Journal of Ethnic and Migration Studies*, 24(2), 249–268.
- Kolvreid, L (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice*, 21(1), 47–57.
- Krueger, NF, MD Reilly and AL Carsrud (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432.
- Landale, NS, RS Oropesa and BK Gorman (2000). Migration and infant death: Assimilation or selective migration among Puerto Ricans? *American Sociological Review*, 65(6), 888–909.
- Le, AT (2000). The determinants of immigrant self-employment in Australia. *The International Migration Review*, 34(1), 183–214.
- Lerner, M and Y Hendeles (1996). New entrepreneurs and entrepreneurial aspirations among immigrants from the former USSR in Israel. *Journal of Business Research*, 36(1), 59–65.
- Levie, J (2007). Immigration, in-migration, ethnicity and entrepreneurship in the United Kingdom. *Small Business Economics*, 28(2–3), 143–169.
- Light, I (1984). Immigrant and ethnic enterprise in North America. *Ethnic and Racial Studies*, 7, 195–216.
- Light, I, G Sabagh, M Bozorgmehr and C Dermartirosian (1994). Beyond the ethnic enclave economy. *Social Problems*, 41(1), 65–80.

- Ma Mung, E and T Lacroix (2003). France: The narrow path. In *Immigrant Entrepreneurs: Venturing Abroad in the Age of Globalization*. J Rath and R Kloosterman (eds.), 173–193. Oxford: Berg.
- Mansoor, A and B Quillin (2006). *Migration and Remittances*. Washington DC: The World Bank.
- Massey, DS, J Arango, G Hugo, A Kouaouci, A Pellegrino and JE Taylor (1993). Theories of International Migration — a Review and Appraisal. *Population and Development Review*, 19(3), 431–466.
- Maxim, PS (1992). Immigrants, visible minorities and self-employment. *Demography*, 29, 181–198.
- Mesch, GS and D Czamanski (1997). Occupational closure and immigrant entrepreneurship: Russian Jews in Israel. *Journal of Socio-Economics*, 26(6), 597–610.
- Min, PG and M Bozorgmehr (2000). Immigrant entrepreneurship and business patterns: A comparison of Koreans and Iranians in Los Angeles. *International Migration Review*, 34(3), 707–738.
- Newcomb, TM (1956). The prediction of interpersonal attraction. *American Psychologist*, 11, 575–586.
- Portes, A and M Zhou (1992). Gaining the upper hand: Economic mobility among immigrant and domestic minorities. *Ethnic and Racial Studies*, 14(4), 491–522.
- Potocky-Tripodi, M (2004). The role of social capital in immigrant and refugee economic adaptation. *Journal of Social Service Research*, 31(1), 59–91.
- Rath, J and R Kloosterman (2003). *Immigrant Entrepreneurs: Venturing Abroad in the Age of Globalization*. Oxford: Berg.
- Razin, E and D Scheinberg (2001). Immigrant entrepreneurs from the former USSR in Israel: Not the traditional enclave economy. *Journal of Ethnic and Migration Studies*, 27(2), 259–276.
- Schmitt, N and A Soubeyran (2006). A simple model of brain circulation. *Journal of International Economics*, 69(2), 296–309.
- Secord, PF and CW Backman (1964). Interpersonal congruency, perceived similarity and friendship. *Sociometry*, 27(2), 115–127.
- Shane, S (2004). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Edward Elgar: Cheltenham.
- Shin, EH and EY Yu (1984). Use of surname in ethnic research: The case of Kim in the Korean-American population. *Demography*, 21(3), 347–359.
- Shinnar, RS and AY Cheri (2008). Hispanic immigrant entrepreneurs in the Las Vegas metropolitan area: Motivations for entry into and outcomes of self-employment. *Journal of Small Business Management*, 46(2), 242–262.
- Silventoinen, K, N Hammar, E Hedlund and M Koskenvuo (2007). Selective international migration by social position, health behaviour and personality. *European Journal of Public Health*, 18(2), 150–155.
- Sjaastad, LA (1962). The costs and returns of human migration. *Journal of Political Economy*, 70(4), 80–93.
- Smallbone, D, M Ram, D Deakins and R Baldock (2003). Access to finance by ethnic minority businesses in the UK. *International Small Business Journal*, 21(3), 291–314.
- Stark, O (1991). *The Migration of Labor*. Blackwell: Oxford.
- Statistics Norway (2007). Electronic Table. [http://statbank.ssb.no/statistikkbanken/Default_FR.asp?PXSid=0&nvl=true&PLanguage=0&tilside=selecttable/hovedtabellHjem.asp&KortnavnWeb=innvbeff].
- Suzuki, M (2002). Selective immigration and ethnic economic achievement: Japanese Americans before World War II. *Explorations in Entrepreneurial History*, 39, 254–281.
- Tascu, MV, J Noftsing and S Bowers (2002). The problem of post-communist education: The Romanian example. *The Journal of Social, Political and Economic Studies*, 27(2), 203–226.

- Tjelmeland, H and G Brochmann (2003). *Norsk innvandringshistorie. Bind 3. I globaliseringens tid, 1940–2000*. Pax Forlag A/S: Oslo.
- Ushkalov, IG and IA Malakha (2000). The “brain drain” as a global phenomenon and its characteristics in Russia. *Russian Education and Society*, 42(12), 18–34.
- Utlendingsdirektoratet (2008). *Tall og fakta 2007*. Oslo: Utlendingsdirektoratet.
- (2009). *Tall Og Fakta 2008*. Oslo: Utlendingsdirektoratet.
- Van Tubergen, F (2005). Self-employment of immigrants: A cross-national study of 17 western societies. *Social Forces*, 84(2), 709–732.
- Vinogradov, E and L Kolvereid (2007). Cultural background, human capital and self-employment rates among immigrants in Norway. *Entrepreneurship and Regional Development*, 19(4), 359–376.
- Waldinger, R and M Chishti (1997). Immigrant entrepreneurs. *Research Perspectives on Migration*, 1(2), 1–15.
- Waldinger, R, R Ward and H Aldrich (1990). *Ethnic Entrepreneurs: Immigrant Business in Industrial Societies*. Newbury Park, CA: Sage Publications.
- Weber, M (1958). *The Protestant Ethic and the Spirit of Capitalism*. New York: Charles Scribner’s sons.
- Wilpert, C (2003). Germany: From workers to entrepreneurs: In *Immigrant Entrepreneurs: Venturing Abroad in the Age of Globalization*. J Rath and R Kloosterman (eds.), 233–259. Oxford: Berg.
- Yuengert, AM (1995). Communication: Testing hypotheses of immigrant self-employment. *The Journal of Human Resources*, 30(1), 194–204.
- Zhou, M (2004). Revisiting ethnic entrepreneurship: Convergences, controversies and conceptual advancements. *The International Migration Review*, 38(3), 1040–1074.