

**Entrepreneurship in Development:**  
**First Results from China and Russia** \* \*\*

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**Abstract:** We compare results from a pilot study on entrepreneurship in China and Russia. Compared to non-entrepreneurs, Russian and Chinese entrepreneurs have more entrepreneurs in their family and among childhood friends, value work more relative to leisure and have higher wealth ambitions. Russian entrepreneurs have a better educational background and their parents were more likely to have been members of the communist party but Chinese entrepreneurs are more risk-taking and greedy and have more entrepreneurs among their childhood friends. Entrepreneurs in both countries face significant credit constraints but Chinese entrepreneurs have a more favorable perception than Russian entrepreneurs of their institutional environment.

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## 1. Introduction.

It has been increasingly recognized that entrepreneurship plays a crucial role in successful economies. The Schumpeterian approach to growth (Aghion and Howitt, 1997) advances the view that entrepreneurial dynamism is the key to innovation and growth. A growing body of research also emphasizes the role of entrepreneurs and the development of a vibrant small and medium enterprise sector in the process of economic development (World Bank, 2003). Understanding the factors that enable and hinder entrepreneurial activities is thus at the heart of this research agenda.

Paradoxically, entrepreneurship remains an under-researched topic. Schumpeter (1934) insisted on the role of the entrepreneur in the process of economic development and elaborated at length on the topic. He saw the entrepreneur as a creative, driven individual who finds “new combinations of [factors] of production” to develop a new product, corner a new market, or design a new technology. Schumpeter speculated about the psyche of the archetypal entrepreneur: he is motivated by a “dream to find a private kingdom, or dynasty...[driven by] the impulse to fight, to prove oneself superior to others, to succeed for the sake of...success itself”.

In mainstream economics however, with the exception of Baumol (see e.g. Baumol, 1968) entrepreneurship has never played a central role. For decades, the main focus of economics has been on the allocation of resources and how it is achieved by markets or by governments. It is only recently with the revival of interest in the question of economic growth that Schumpeter’s views have acquired greater salience. Empirical research on entrepreneurship in economics is surprisingly limited and much of it is devoted more to self-employment than to entrepreneurship<sup>1</sup> (see the survey in Parker, 2004), especially in the context of economic development. What explains the variation in entrepreneurial dynamism across countries?

In a broad sense, there are three distinct perspectives on entrepreneurship in the social sciences. The first is the institutional perspective emphasized by economists and political economists. This perspective focuses on the role of economic, political, and legal institutions in fostering or restricting entrepreneurship in different countries at

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<sup>1</sup> There exists a large literature on entrepreneurship in the management literature devoted mostly to advanced industrialized countries but it often lacks both theory and rigorous empirical analysis

various times. Particularly relevant institutional constraints are seen in two aspects. One aspect has to do with the credit market in financing entrepreneurial activities. For example, a major body of research in economic development has emphasized the role of credit constraints making it impossible for the poor to borrow to set up their own businesses (Evans and Jovanovic, 1989; Banerjee and Newman, 1993; Blanchflower and Oswald, 1998; Guiso et al. 2004, Hurst and Lusardi, 2004). Another aspect has to do with security of property rights in providing the right incentives for entrepreneurs. For instance, the literature on transition from socialism to capitalism has emphasized the importance of institutions securing property rights (see e.g., Johnson, McMillan and Woodruff, 2002; McMillan and Woodruff, 2001; Roland, 2000, Che and Qian, 1998) and the nefarious role of predatory behavior by government bureaucrats (Djankov et al., 2002), and organized crime (Frye and Zhuravskaya, 2000, Roland and Verdier, 2003). Security of property rights is also an increasingly important theme in the development literature (Acemoglu et al., 2002; De Soto, 2000; Besley, 1995).

The second perspective focuses on the sociological variables that are shaping entrepreneurship. Sociologists have, at least since Max Weber, emphasized the role of values (Cochran, 1971) and social networks (Young, 1971) in promoting or discouraging entrepreneurial activities (Gianetti and Simonov, 2004). Social networks may work through a variety of channels, such as family, relatives, friends, or social groups in general.

The third perspective on entrepreneurship emphasizes individual characteristics of entrepreneurs. For example, psychologists have hypothesized about the psychological traits associated with entrepreneurs – such as a personal need for achievement (McClellan, 1961), belief in the effect of personal effort on outcomes (McGhee and Crandall, 1968), attitudes towards risk, and individual self-confidence (Kihlstrom and Laffont, 1979; Liles, 1974). Personal characteristics of entrepreneurs is also a major theme of a recent work of Lazear (2002), who used the survey data of Stanford University MBA graduates and found that those with a higher number of jobs and shorter job tenures before graduate school were most likely to become entrepreneurs afterwards. He concludes that individuals who become entrepreneurs have a special ability to acquire general skills, which they then apply to their own businesses.

The current project studies entrepreneurship from all these three perspectives using a new data set to be collected from several developing countries, including some countries in transition from socialism. Our general plan is to conduct surveys in five large developing countries located in all major continents--Brazil, Russia, India, Nigeria, and China, or BRINC for short. There are several reasons why we chose to study entrepreneurship in these countries. First, they are among the largest emerging economies in the world and are located in all major continents. In particular, Brazil, Russia, India and China are currently perceived as the world's major growth engines for the coming decades. Second, entrepreneurship is only emerging in transition economies (and it is very unequally developed in developing countries) so we are able to observe out of steady state phenomena and have a glimpse at the development of entrepreneurship. From that perspective, the study of entrepreneurship in those countries might be more revealing than if conducted in advanced industrialized countries where the development of entrepreneurship has generally been more successful, is more in steady state and exhibits less variation. Third, because these are large countries, we are able to exploit substantial regional variation in institutions and culture within those countries. Identical questions asked across the different countries also allow us to ease cross-country comparisons and to draw broad conclusions for developing countries as a whole.

Our surveys cover both entrepreneurs and non-entrepreneurs in order to understand how these groups differ in terms of their individual characteristics, skills, education, intellectual and personality traits, family background, social origins, social networks, values and beliefs, and in their perception of the institutional, social and economic environment businesses face.

This paper reports and compares some findings from a pilot survey conducted in Russia in 2003-2004 and in China in 2004-2005. We find that "social networks" combined with individual characteristics play a fundamental role in explaining entrepreneurship. Indeed, those individuals whose relatives and childhood friends are entrepreneurs are more likely to be entrepreneurs – although this result should be interpreted with caution due to the likelihood of well-known omitted variable biases in the estimation of social effects (see Manski, 1993). Finally, individual characteristics as greed, and willingness to take risks are also important determinants of entrepreneurship, echoing the claims of Schumpeter and others. Chinese entrepreneurs appear to be more

risk-taking and greedy albeit less well-educated than Russian entrepreneurs. Interestingly, despite an imperfect institutional situation in both countries, Chinese entrepreneurs perceive institutions in a more positive light in terms of favoring entrepreneurship.

The paper is organized as follows. In section 2, we present the data. In section 3, we survey characteristics of entrepreneurs relative to non entrepreneurs in both countries and compare the Chinese and Russian entrepreneurs. In section 4, we present results of probit regressions explaining the decision to become an entrepreneur. In section 5, we analyze institutional aspects of expansion of entrepreneurship in both countries. Section 6 concludes.

## **2. The data.**

In both Russia and China, we surveyed individuals in seven large cities in four different regions. To capture some of the regional heterogeneity in these countries, the regions were selected to maximize the cross-regions variation in the business climate. In Russia, the survey was done in Moscow; in Nizhny Novgorod and Dzershinsk in the Nizhegorodskaya Oblast; in Perm and Chaykovsky in the Permskaya Oblast; and in Rostov on the Don and Taganrog in the Rostovskaya Oblast. In China, the survey was conducted in Beijing; in Wuhan and Huangshi in Hubei Province; in Guangzhou and Zhongshan in Guangdong Province; and in Xi'An and Baoji in Shaanxi Province.

In each country, we first surveyed a random sample of about 400 entrepreneurs – (100 in Moscow and Beijing metropolitan areas and 50 in each of the other six cities). These surveys were conducted in the fall of 2003 in Russia and in the fall of 2004 in China. We define entrepreneur as an owner-manager of a business with five or more employees because we wanted to make sure that individuals who we call entrepreneurs in our sample are more than just self-employed. After completion of the surveys of entrepreneurs in the respective countries, we conducted a survey of about 550 non-entrepreneurs in the same cities using a similar instrument.<sup>2</sup> We defined non-entrepreneurs as individuals who are not working for their own business. Non-entrepreneur surveys took place during the spring of 2004 and 2005 in Russia and China,

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<sup>2</sup> 400 entrepreneurs and 550 non entrepreneurs was the target sample size given to the survey firms in both countries. In reality, these firms interviewed a slightly larger number of individuals to make sure that in the end we have the targeted number of valid questionnaires. The actual number of observations in the empirical analysis depends on the response rates for each particular question,.

respectively. In both countries 80% of respondents in the non-entrepreneur sample were chosen randomly conditional on matching the age, gender and educational attainment of entrepreneurs from the respective entrepreneur surveys and 20% were chosen at random. Finally, in each country a short survey was run among a random sample of 1,200 individuals (with the same breakdown across cities) asking nine questions about their personal characteristics, including a question about whether or not they are an entrepreneur or self-employed to get data on prevalence of entrepreneurship across cities. Figure 1 gives these percentages for the cities in our survey. Note the higher percentages in Chinese cities.

INSERT FIGURE 1

In all of the empirical analysis, the observations are weighted with weights equal to the inverse of the probability for a particular respondent (entrepreneur or non-entrepreneur) to get into our sample. The weights reflect differences in entrepreneurship, age, gender, and education across cities in the population, as well as the city size.

### **3. Comparing entrepreneurs to non-entrepreneurs in China and Russia.**

In this section, we summarize differences in individual characteristics, social environment, values, beliefs, and perceptions of institutional environment for entrepreneurs and non-entrepreneurs in both countries. We report means for entrepreneurs and non-entrepreneurs in both countries on various questions from the survey. In order to have comparability, the means are conditional on gender, age, and education (with a quadratic term) of respondents and on city dummies. The standard errors and p-values for the differences in means between entrepreneurs and non-entrepreneurs are adjusted to allow for clustering of the error terms at the level of cities. Two types of comparisons are relevant here. First, one wants to see whether differences between entrepreneurs and non entrepreneurs are different across countries. Second, a comparison of mean values between entrepreneurs in China and Russia is also interesting.

INSERT TABLE 1

First, we summarize differences in individual characteristics of entrepreneurs and non-entrepreneurs. Entrepreneurs on average are more mobile across jobs and geographically. In Russia, entrepreneurs have lived in significantly more localities than

non-entrepreneurs and have had a significantly higher number of distinct professional activities. Although these differences have the same sign in China, they are statistically insignificant. In China, however, entrepreneurs worked in a significantly higher number of industries compared to non-entrepreneurs. This is in line with recent findings of Lazear (2002) who surveyed the population of former Stanford MBA students and found that those with a higher number of jobs and shorter job tenures before business school were most likely to become entrepreneurs afterwards. Note also a slightly higher mobility in Russia compared to China, entrepreneurs and non entrepreneurs alike.

In line with a common perception that entrepreneurship is associated with risk-taking, entrepreneurs report significantly lower risk aversion than non-entrepreneurs. When asked whether respondents were willing to accept one of two risk-neutral gambles – 1) win \$10 with probability  $\frac{1}{2}$  and lose \$10 with probability  $\frac{1}{2}$  or 2) win \$20 with probability  $\frac{1}{2}$  and lose \$20 with probability  $\frac{1}{2}$  – 77% of entrepreneurs in Russia and 90% of entrepreneurs in China responded yes (compared to 67% and 57% of non-entrepreneurs in Russia and China, respectively). Here risk-taking seems more prevalent among Chinese entrepreneurs as compared to Russian entrepreneurs but the opposite is true for non entrepreneurs.

Entrepreneurs report higher levels of satisfaction with life compared to non-entrepreneurs. First, in Russia, a significantly higher share of entrepreneurs (92%) answered yes to the question whether they are happy compared to 73% of non-entrepreneurs. In China, this difference has the same sign but is insignificant. Second, entrepreneurs report to be in significantly better health than non-entrepreneurs in both countries. Finally, entrepreneurs are taller than non-entrepreneurs. The difference in height is statistically significant only in China. In addition, entrepreneurs marry more often and have more kids. The difference in % of married is significant in Russia and insignificant in China; while the difference in the number of children is significant in China only.

There are important differences between the two countries in religiosity and school achievement of entrepreneurs compared to non-entrepreneurs. Russian entrepreneurs tend to be less religious but Chinese entrepreneurs are more religious. However, religiosity is very low in China (12% among entrepreneurs) and relatively high in Russia (68%).

Russian entrepreneurs report to have been higher achievers in school but this is not the case for China. Entrepreneurs tend to speak less foreign languages, an interesting fact. They scored higher than non-entrepreneurs on a test of cognitive ability, focusing on short-term recall (a digit-span test, available from the authors upon request) but the difference is not significant.

Another important difference that emerges relates to leisure-work choices of entrepreneurs and non-entrepreneurs. Respondents were asked whether they would retire if they received a windfall income of 100 or 500 times (5,000 times also in China) the annual GDP per capita of the country. Entrepreneurs were much less likely to respond positively than non-entrepreneurs. In both countries, a very strong reason for not retiring relative to non-entrepreneurs was the desire to earn more money. In Russia, job satisfaction and a feeling of being socially useful played a significant role also but not in China where one finds the opposite.

Now let us focus on the social environment. Compared to non-entrepreneurs, a larger share of parents of Russian entrepreneurs (73% vs 48%) achieved higher or special education. There are no differences in parents' education in China. Note also the much lower education level of parents of entrepreneurs (but also of non-entrepreneurs) in China. Nevertheless, fathers of entrepreneurs in both countries were more likely to have been bosses or directors and the difference is more striking in China than in Russia (19% vs. 12% in Russia and 30% vs. 13% in China). In Russia, both parents of entrepreneurs were more likely to have been members of the communist party but not in China. Not only is there no significant difference for fathers in China but mothers of entrepreneurs were less often members of the communist party (10% compared to 15% for non-entrepreneurs).

A very large difference that emerges in both countries is the proportion of entrepreneurs in one's family and among one's friends. Entrepreneurs in both countries are much more likely to have entrepreneurs in their family (57% in Russia and 49% in China compared to respectively 34% and 24% among non-entrepreneurs). Respondents were asked to name five friends from their childhood and adolescence, and then to report how many of these five have become entrepreneurs. The difference in response for entrepreneurs and non-entrepreneurs is striking. In China, for example, 60% of entrepreneurs had adolescent friends who became entrepreneurs compared to 24% among non-entrepreneurs. Note that friends from secondary school (or higher school or

university) are reported to have influenced the decision to become entrepreneurs. Asked if the experience of these friends from school influenced their decision to become entrepreneur, 41.3% of Chinese entrepreneurs and 21.3 % of Russian entrepreneurs said yes.

We also asked questions about values and beliefs. While there are statistically significant differences between entrepreneurs and non-entrepreneurs, the magnitude of the differences is not very large except for a few cases. A major difference is the value attached to work: 75% of Russian and 80% of Chinese entrepreneurs consider work to be very important in their life compared to 53% and 63% for non-entrepreneurs in Russia and China. This is consistent with the labor-leisure preferences reported above. Note that Chinese entrepreneurs value political freedom very strongly compared to non-entrepreneurs (73% against 28%) whereas Russian entrepreneurs value political freedom significantly less than non-entrepreneurs (62% against 74%) even though they value it highly. Entrepreneurs seem to value relations with parents significantly less than non-entrepreneurs in both countries. Asked about social norms, entrepreneurs in both countries consider that bribes are more acceptable. This probably reflects their greater experience in the business environment rather than intrinsic values. Chinese entrepreneurs consider that shirking at work can be justified. We asked many questions about trust but no strong pattern emerged. Russian entrepreneurs are considerably less trustful of foreigners and of people out of town whereas there is no significant difference in China. It is worth noting that Russians (both entrepreneurs and non-entrepreneurs) trust the government at all levels substantially less than Chinese (for example, 37% of respondents had at least some trust in the central government in Russia compared to 77% in China).

Finally, we compare individual perceptions of entrepreneurs and non-entrepreneurs about the institutional environment controlling for the average differences across cities. Chinese entrepreneurs find that local government is more favorable to entrepreneurs (82% positive answers against 70% for non-entrepreneurs). In Russia, entrepreneurs find that local government is less favorable (only 49% of positive answers) even though the difference is not significant. In general, the perception of different levels of government regarding their attitude to entrepreneurs is more negative among Russian entrepreneurs compared to non-entrepreneurs. In China, the perception of entrepreneurs

is only more negative with respect to the central government and even there the percentage of positive answers is higher than in Russia. Entrepreneurs in China also feel more secure with respect to theft of property. Russian entrepreneurs tend to distrust the courts more than non-entrepreneurs. In China, it is the opposite. When asked if they would go to court if abused by a government official, roughly 72% say yes in both countries. However, only 62% of Russian entrepreneurs respond positively whereas 80% of Chinese entrepreneurs do.

To summarize the main results of this section, entrepreneurs in both countries are risk-taking and have more entrepreneurs in their families and among their childhood and adolescence friends. Entrepreneurs value work very highly and are greedy. Russian entrepreneurs tend to come from a higher educational background but have a more negative perception of the institutional environment in which they operate compared to Chinese entrepreneurs. The latter tend to have a positive view of local governments' attitude towards entrepreneurs.

#### **4. Results of multivariate probit regressions**

In this section, we report results of multivariate analysis. We explain variation in individual decisions to become an entrepreneur in probit regressions with independent variables that can plausibly be considered exogenous to this decision. The main objective of these regressions is to see which variables are robustly associated to entrepreneurship and also to compare the differences between Russia only and China only.

INSERT TABLE 2.

The results are reported in table 2. Column 1 in Table 2 reports pooled results, columns 2 and 3 report separate results for Russia only and China only and columns 4 and 5 present a regression where all dependent variables include interactions with China dummy. The fourth column should thus be read as result for Russia<sup>3</sup> and the coefficients in the fifth column represent the difference in China relative to Russia. As above, all regressions include city fixed effects and controls for gender, age and a quadratic function of education. Standard errors are adjusted for clusters in error terms at the city level.

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<sup>3</sup> The results of column 2 and 4 are identical when the data are not weighted but they are slightly different because the weights are different in a regression including one versus countries.

The pooled results in Table 1 show that entrepreneurship is positively associated with the father having been a member of the communist party, the mother having been a boss or a director, having family and friends being entrepreneurs (social network), greed (not willing to retire to earn more money) and a positive perception of the attitude of the local population towards entrepreneurs. However, when looking at the country regressions, one sees that only the social network variables and greed are robustly significant in both countries. Note from columns 2 and 3 that height has a negative coefficient in Russia and a positive one in China. Columns 2 and 4 show that for Russia having had a father in the communist party and a mother director has positive correlation with entrepreneurship as well as for reporting to have been among the top 10% in school and also a positive perception of the population's attitude towards entrepreneurs. Column 5 shows the significant differences between entrepreneurship in China and Russia. Chinese entrepreneurs are more greedy and risk-taking (the Russia coefficient is negative but this is not the case in other specifications), are more likely to have entrepreneurs among their former school friends and were less good in school.

In terms of the importance of the different effects, since the reported coefficients are marginal effects, looking at column 1, the two most important effects are greed and having friends entrepreneurs. A one standard deviation increase in greed, increases the probability of being an entrepreneurs by about 9% while a one standard deviation increase in the "friends entrepreneurs" variable increases this probability by 7.2%.

As with most cross-section OLS regressions, we cannot rule out the possibility that an omitted variable simultaneously influenced entrepreneurship decisions of our respondents and of their families and friends. Thus, at this stage, we cannot establish a causal link between social networks and entrepreneurship; but we hope to address the question of causality in the subsequent stages of this project.

## **5. Institutional factors of expansion of entrepreneurship in China and Russia.**

We asked entrepreneurs the main source of financing of their startups. The answer can be seen in figure 2.

INSERT FIGURE 2

We see that personal savings are by far the main source of financing of new enterprises, in China even more than in Russia. Bank credit plays a very little role, though higher in Russia than in China. Help of family and friends comes before bank finance and this difference is stronger in China than in Russia. Note that the government plays no role in either country.

INSERT FIGURE 3

Turning now to sources of financing enterprise expansion the answers are slightly different as can be seen in figure 3. While retained earnings is again by far the main source of financing of enterprise expansion, bank credit plays a bigger role and is a source of finance according to more than 20% of respondents in both countries. The role of family and relatives becomes less important than that of banks as that stage though it remains more important in China compared to Russia. Again the government plays no role in either country.

INSERT FIGURE 4

We asked entrepreneurs who did not plan to expand the scale of their enterprise what are the main reasons preventing them from expanding. In China, the two most important reasons cited are first lack of demand and second the difficulty to find money. In Russia, the latter is the most important reason cited followed by “administrative pressure on larger firms”. This tends to show that Chinese entrepreneurs face a situation closer to that of a “normal” market economy compared to Russia. This is consistent with the results showing that Chinese entrepreneurs are more happy with the institutional situation for entrepreneurs in their country relative to Russian entrepreneurs. This is again confirmed by the fact that 72.5% of Russian entrepreneurs say that entrepreneurs are subject to racketeering (compared to 31.6% of Chinese entrepreneurs).

INSERT FIGURE 5

We asked entrepreneurs in both countries how serious were a series of issues. Figure 5 shows some of the answers. We see for example that high taxes, legal vulnerability, capital shortage, crime and lack of public infrastructure are perceived as more serious problems by Russian as compared to Chinese entrepreneurs. Corruption and barriers to entry are not considered much more serious in Russia than in China.

INSERT TABLE 3

Within countries, the quality of economic institutions also has a significant impact on the expansion of enterprise activities. To evaluate the effect of city-level institutional environment, we regressed a dummy that equals one if entrepreneur plans to expand sales or employment on the average city-level measures of corruption and efficiency of courts (as reported in Table 1). These regressions include controls (not shown) for industry dummies and all individual characteristics as reported in Table 2. As above, error terms are clustered at the city-level. As one can see, these institutional variables are significant and have the expected sign. Note also the country effect showing the stronger economic dynamism in China.

## **6. Conclusions.**

Russian and Chinese entrepreneurs have common characteristics relative to non-entrepreneurs controlling for age, gender and education. They are more risk-taking, place a higher value on work relative to leisure, are greedy and are much more likely to have entrepreneurs in their family as well as among childhood and adolescence friends. There are however also differences. Russian entrepreneurs have a better educational background which is not the case for Chinese entrepreneurs and are more risk-taking and greedy and are even more likely than in Russia to have had school friends who became entrepreneurs. Chinese entrepreneurs are more optimistic with respect to economic institutions in their country compared to Russian entrepreneurs. However, lack of access to external finance is a common complaint for entrepreneurs in both countries.

Our research program will determine the similarities and differences between entrepreneurs and the environment they face in other development countries. We also hope to get a better grasp of the main reasons social networks seem to play such an important role in fostering entrepreneurship.

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TABLE 1. Entrepreneurs in Russia and China (comparison of means).

	Russia			China		
	Entre- preneurs	Non Entre- preneurs	p-value for test of difference in means	Entre- preneurs	Non Entre- preneurs	p-value for test of difference in means
<b>Individual Characteristics:</b>						
Number of localities lived	2.42	2.18	0.01 ***	1.85	1.55	0.15
Number of distinct professional activities	2.76	2.54	0.06 *	2.40	2.13	0.24
Number of industries respondent worked in				1.85	1.58	0.00 ***
Accept a risk neutral gamble, %	0.77	0.67	0.00 ***	0.90	0.57	0.01 ***
Very happy or quite happy in life, %	0.92	0.73	0.00 ***	0.92	0.91	0.76
Very successful or quite successful in life, %	0.74	0.37	0.00 ***	0.64	0.43	0.01 ***
Good health, self described, %	0.12	0.07	0.00 ***	0.51	0.37	0.09 *
Got ill last week, %	0.25	0.30	0.02 **	0.04	0.08	0.00 ***
Height, cm	172.58	172.38	0.43	169.04	168.22	0.02 ***
Married, %	0.74	0.60	0.00 ***	0.84	0.80	0.53
Number of children	1.34	1.31	0.22	1.19	0.99	0.00 ***
Religious believer, %	0.68	0.78	0.00 ***	0.12	0.08	0.09 *
Cognitive text score	3.32	3.15	0.15	3.92	3.80	0.62
Top 10% in secondary school (self reported), %	0.44	0.34	0.00 ***	0.37	0.38	0.82
Top 10% in high school, college or university (self reported), %	0.41	0.38	0.13	0.36	0.38	0.10
Speak foreign language, %	0.38	0.58	0.01 **	0.35	0.49	0.22
<b>Motivation, Greed:</b>						
Retire if won 100 times GDP per capita, %	0.08	0.27	0.00 ***	0.05	0.24	0.02 **
Retire if won 500 times GDP per capita, %	0.18	0.29	0.00 ***	0.14	0.37	0.00 ***
Retire if won 5000 times GDP per capita, %	.	.	.	0.31	0.44	0.05 *
Not retire if won a large sum: I like what I do, %	0.82	0.69	0.00 ***	0.74	0.75	0.93
Not retire if won a large sum: I want more money, %	0.50	0.28	0.00 ***	0.70	0.43	0.01 ***
Not retire if won a large sum: my work serves useful social purpose, %	0.70	0.37	0.00 ***	0.18	0.81	0.00 ***
<b>Sociological Characteristics:</b>						
Father has secondary special or higher education, %	0.73	0.48	0.00 ***	0.29	0.27	0.57
Mother has secondary special or higher education, %	0.73	0.48	0.00 ***	0.14	0.18	0.46
Father was a boss or director, %	0.19	0.12	0.00 ***	0.30	0.13	0.02 **
Mother was a boss or director, %	0.08	0.00	0.00 ***	0.06	0.03	0.10
Father was a worker or employee without special education, %	0.43	0.44	0.43	0.56	0.72	0.01 **
Mother was a worker or employee without special education, %	0.30	0.53	0.00 ***	0.70	0.71	0.86
Father was a member of the Communist party, %	0.48	0.37	0.00 ***	0.40	0.31	0.42
Mother was a member of the Communist party, %	0.19	0.12	0.01 ***	0.10	0.15	0.01 ***
Members of the family were running business, %	0.57	0.34	0.00 ***	0.49	0.24	0.00 ***
Had childhood friends, who became entrepreneurs, %	0.59	0.37	0.00 ***	0.45	0.28	0.01 **
Had adolescent friends, who became entrepreneurs, %	0.67	0.48	0.00 ***	0.60	0.24	0.00 ***

<b>Values:</b>								
Friends are very important, %	0.43	0.53	0.01	***	0.60	0.66	0.16	
Relations with parents are very important, %	0.84	0.92	0.00	***	0.86	0.88	0.10	*
Financial well-being is very important, %	0.53	0.58	0.02	**	0.73	0.62	0.08	*
Leisure time is very important, %	0.23	0.26	0.02	**	0.19	0.20	0.85	
Health is very important, %	0.75	0.80	0.00	***	0.93	0.88	0.20	
Service to others is very important, %	0.21	0.29	0.00	***	0.19	0.19	0.92	
Political freedom is very important, %	0.62	0.74	0.03	**	0.73	0.28	0.00	***
Power is very important, %	0.10	0.07	0.00	***	0.32	0.26	0.01	**
Work is very important, %	0.75	0.53	0.00	***	0.80	0.63	0.00	***
Intellectual achievement is very important, %	0.43	0.49	0.00	***	0.24	0.33	0.02	**
<b>Values of Legal Social Norms:</b>								
Not paying a fare can be justified to some degree, %	0.77	0.76	0.68		0.08	0.05	0.48	
Shirking at work can be justified to some degree, %	0.54	0.58	0.27		0.23	0.07	0.00	***
Accepting a bribe can be justified to some degree, %	0.32	0.18	0.00	***	0.19	0.06	0.00	***
<b>Trust:</b>								
Most people can be trusted, %	0.16	0.22	0.05	**	0.56	0.54	0.79	
Have a lot of trust in family members, %	0.90	0.86	0.00	***	0.96	0.92	0.48	
Have a lot of trust in friends, %	0.49	0.48	0.17		0.58	0.58	0.98	
Have a lot of trust in colleagues, %	0.26	0.20	0.02	**	0.38	0.33	0.46	
Have a lot of trust or some trust in businessmen, %	0.61	0.66	0.06	*	0.71	0.46	0.02	**
Have a lot of trust or some trust in subordinates, %	0.79	0.82	0.06	*	0.95	0.83	0.02	**
Have a lot of trust or some trust in other people from town, %	0.54	0.85	0.00	***	0.42	0.50	0.29	
Have a lot of trust or some trust in foreigners, %	0.44	0.70	0.00	***	0.29	0.38	0.39	
Have a lot of trust or some trust in local government officials, %	0.40	0.40	1.00		0.69	0.59	0.07	*
Have a lot of trust or some trust in regional government officials, %	0.39	0.42	0.38		0.68	0.64	0.43	
Have a lot of trust or some trust in central government officials, %	0.40	0.41	0.76		0.75	0.75	0.99	
<b>Individual Perceptions of Institutions:</b>								
People in your town are favorable towards entrepreneurs, %	0.67	0.65	0.36		0.68	0.60	0.33	
Local government is favorable towards entrepreneurs, %	0.49	0.53	0.26		0.82	0.70	0.00	***
Regional government is favorable towards entrepreneurs, %	0.51	0.61	0.01	***	0.78	0.76	0.74	
Central government is favorable towards entrepreneurs, %	0.57	0.62	0.08	*	0.81	0.90	0.10	*
Private entrepreneurs pay bribes to avoid regulations, %	0.72	0.83	0.00	***	0.50	0.54	0.57	
Private entrepreneurs pay bribes to change rules, %	0.56	0.69	0.00	***	0.40	0.50	0.39	
Are businessmen subject to theft of property, %	0.88	0.85	0.18		0.70	0.98	0.08	*
Go to court against a business relation if cheated, %	0.66	0.71	0.01	**	0.90	0.88	0.48	
Go to court against a government official if abused, %	0.62	0.72	0.00	***	0.80	0.73	0.00	***
It is relatively easy to find money to start a business in town, %	0.21	0.16	0.02	**	0.38	0.26	0.28	

Note: The reported differences in means are conditional on city-level variation, age, gender, education, and education squared. Standard errors (and P-values) are adjusted to allow clusters of error term at the level of cities.

Table 2. Entrepreneurship in Russia and China. Probit regressions. Marginal effects reported.

	Pooled	Russia only	China only	Russia and China compared	China interaction
Father with secondary or higher education	0.003 [0.021]	-0.014 [0.012]	0.004 [0.007]	-0.008 [0.007]	0.018 [0.019]
Father was a member of the communist party	0.073 [0.036]**	0.108 [0.023]***	0.011 [0.023]	0.066 [0.015]***	-0.034 [0.036]
Mother was a boss or director	0.271 [0.116]**	0.371 [0.136]***	0.066 [0.047]	0.283 [0.124]**	-0.054 [0.030]*
Mother with secondary or higher education	-0.034 [0.023]	-0.013 [0.009]	-0.016 [0.008]*	-0.008 [0.005]	-0.031 [0.022]
Family members entrepreneurs	0.039 [0.006]***	0.05 [0.003]***	0.012 [0.007]*	0.03 [0.003]***	-0.001 [0.009]
Friends entrepreneurs (from the last place of study)	0.06 [0.010]***	0.075 [0.009]***	0.032 [0.011]***	0.045 [0.006]***	0.029 [0.012]**
Cognitive test score	0.007 [0.007]	-0.006 [0.007]	0.003 [0.005]	-0.004 [0.004]	0.011 [0.013]
Height	0 [0.002]	-0.005 [0.001]***	0.001 [0.000]***	-0.003 [0.001]***	0.006 [0.001]***
Risk-loving	0.061 [0.053]	-0.033 [0.009]***	0.08 [0.006]***	-0.019 [0.006]***	0.327 [0.069]***
Top 10% in secondary school (self reported)	0.021 [0.026]	0.087 [0.011]***	-0.009 [0.010]	0.053 [0.008]***	-0.059 [0.016]***
Greed	0.186 [0.073]**	0.097 [0.019]***	0.155 [0.015]***	0.059 [0.012]***	0.246 [0.060]***
City population perceived favorable towards entrepreneurs	0.043 [0.020]**	0.035 [0.017]**	0.011 [0.011]	0.021 [0.010]**	0.006 [0.025]
Government perceived favorable towards entrepreneurs	-0.002 [0.008]	0.006 [0.006]	-0.001 [0.006]	0.003 [0.004]	-0.005 [0.013]
Observations	1530	726	804	1530	

Robust standard errors corrected for clusters of error term at city level in brackets. Also control for gender, age, education, and education squared. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Table 3. Institutions and plans to expand sales and employment. Entrepreneur sample.

	Planned sales growth	Planned employment growth	Planned sales growth	Planned employment growth
average city-level corruption	-1.702 [0.608]**	-1.503 [0.751]*		
average city-level efficiency of courts			1.215 [0.418]**	1.047 [0.591]
Country	0.364 [0.091]***	0.026 [0.268]	0.294 [0.136]*	-0.035 [0.326]
Observations	362	342	362	342

Robust standard errors corrected for clusters of error term at city level in brackets. Also control for gender, age, education, and education squared. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%. All regressions include industry dummies and all the regressors as in the first column of table 2.

Figure 1.

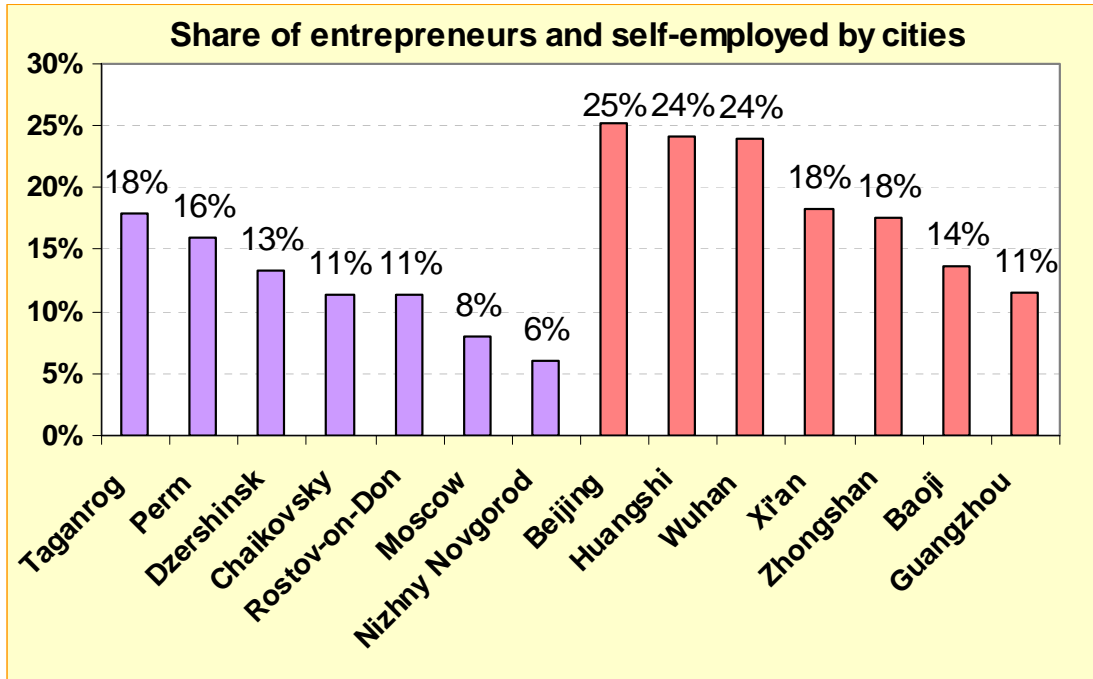


Figure 2. Sources of financing of startups.

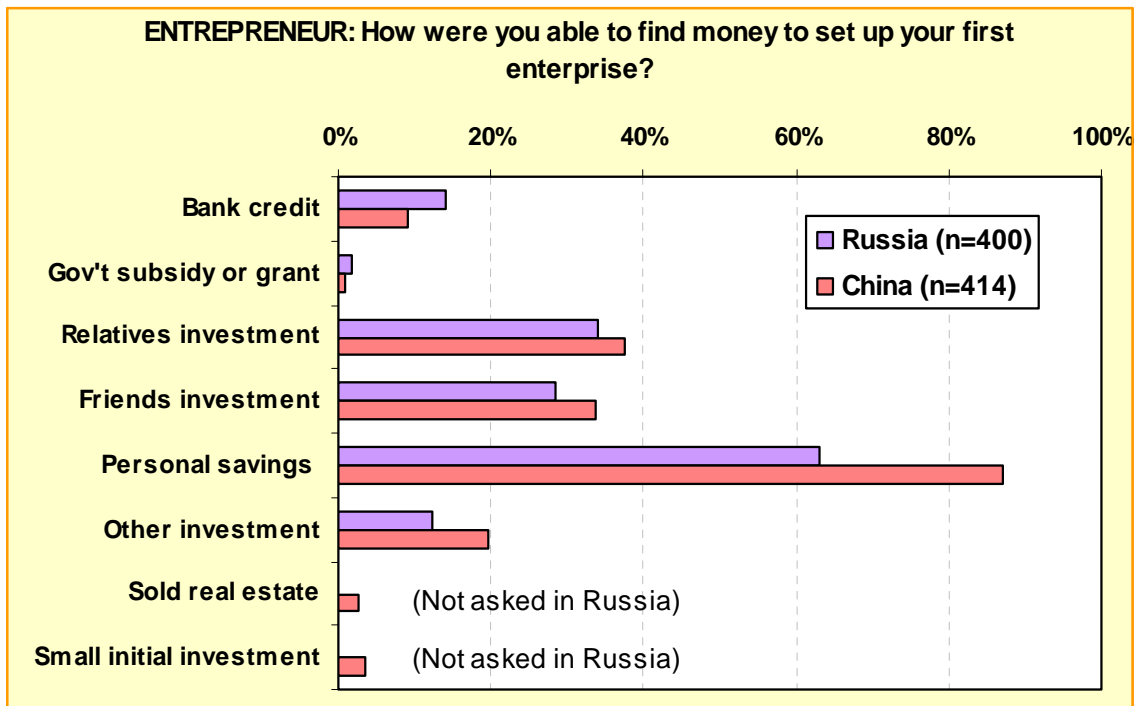


Figure 3. Sources of enterprise expansion

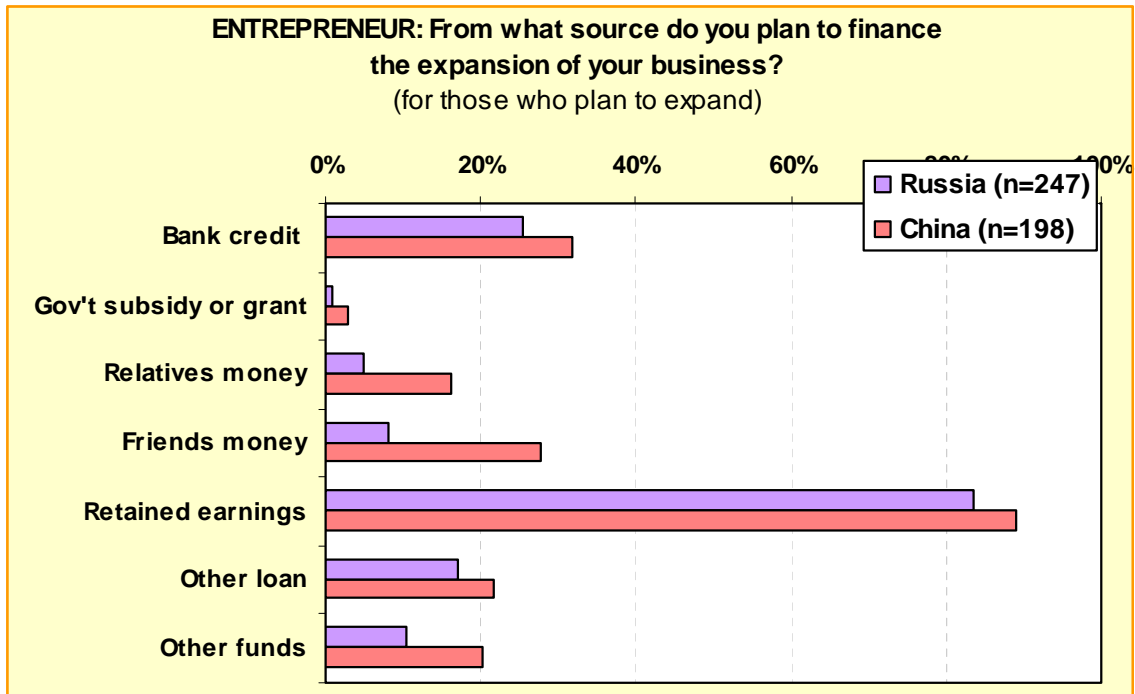


Figure 4. Main obstacles to enterprise expansion.

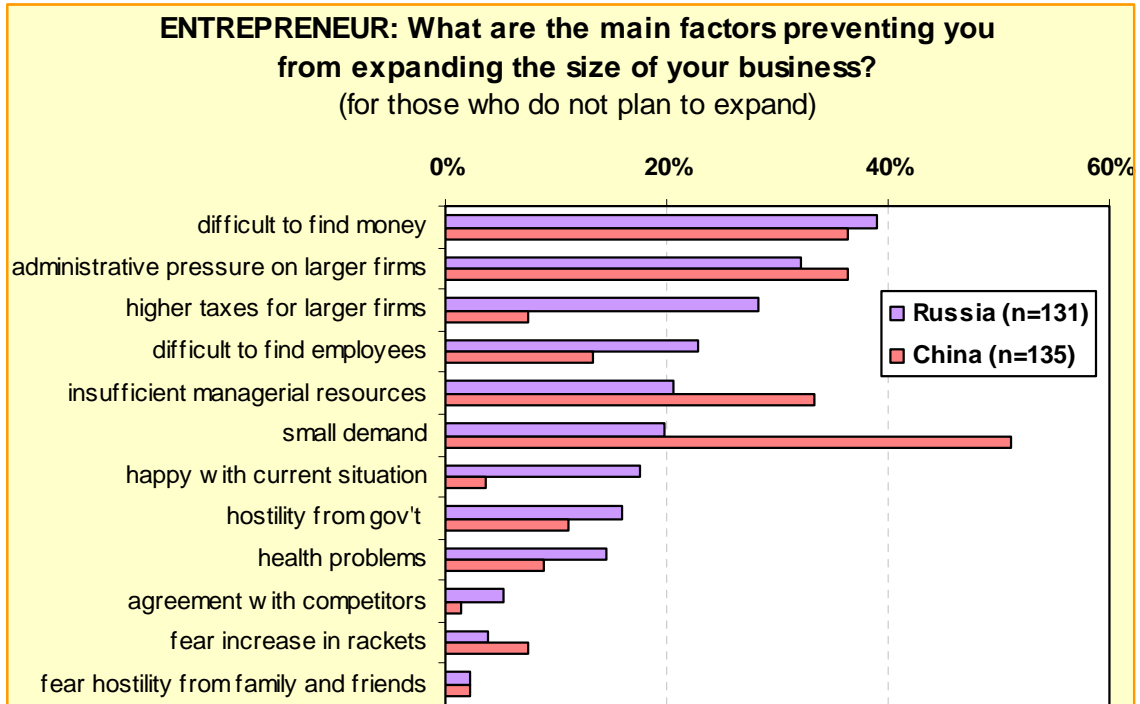
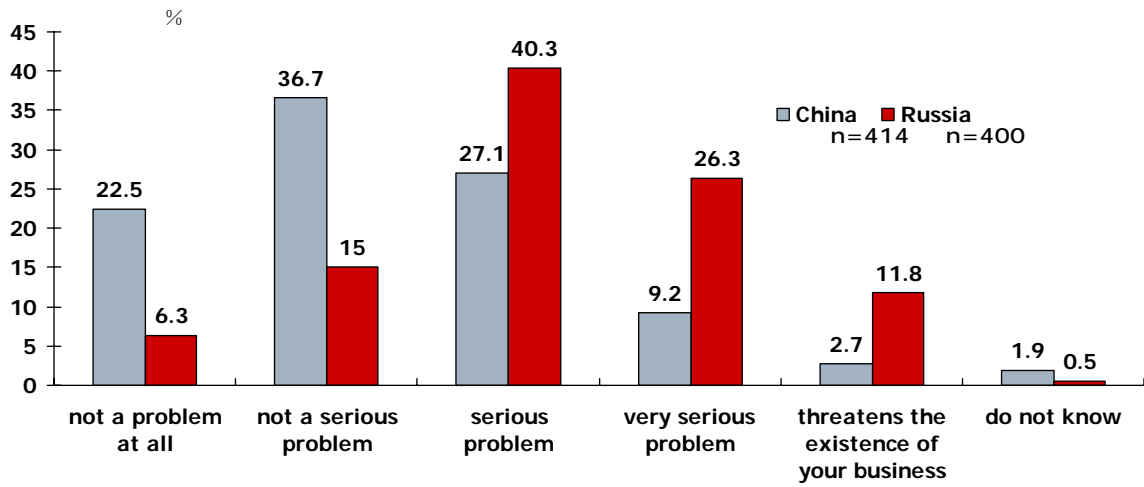
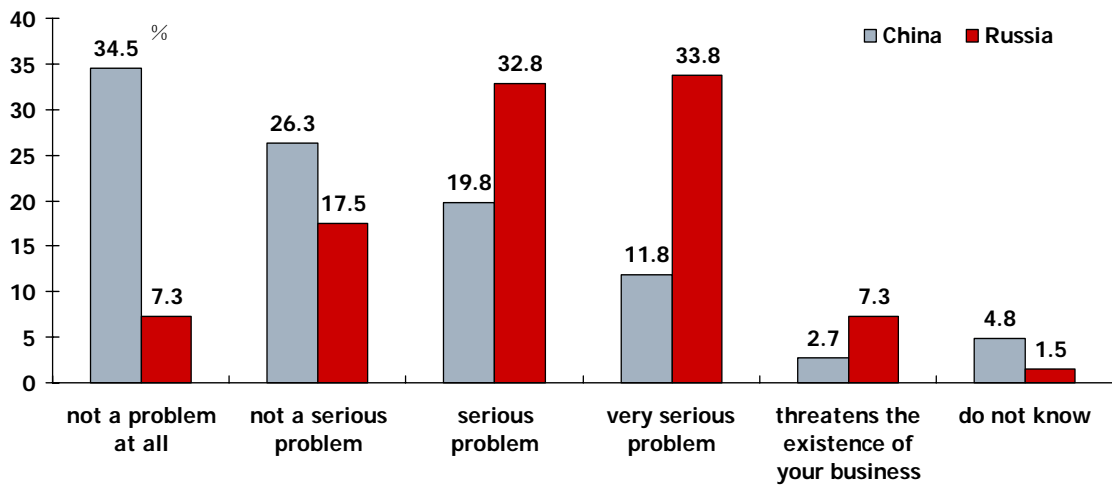


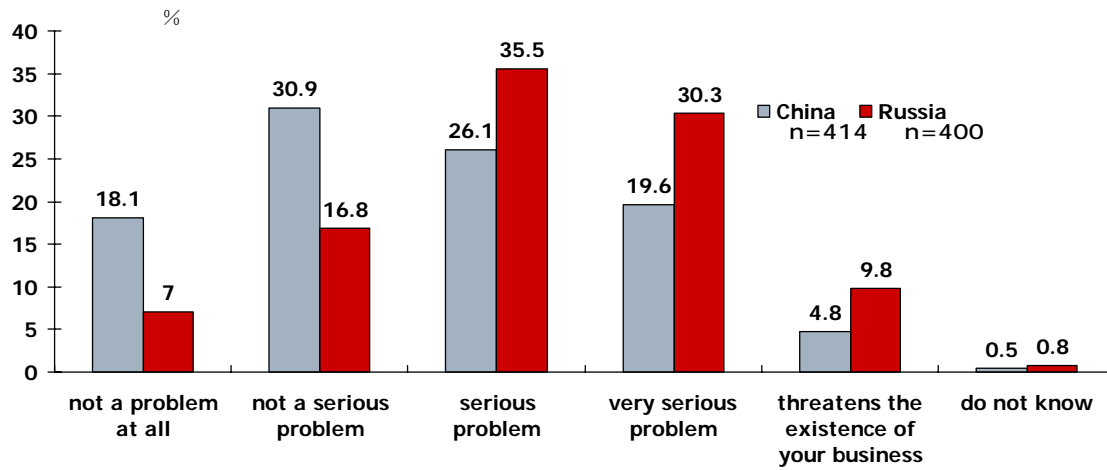
Figure 5. Problems for business: a) High Taxes



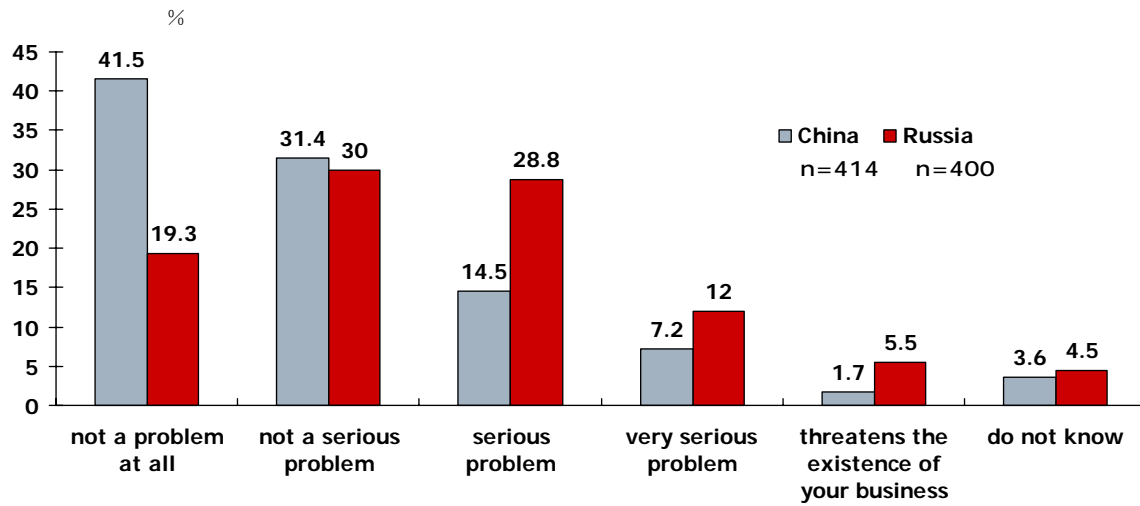
b) Legal vulnerability



c) Capital shortage



d) Crime



e) Public infrastructure

