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Combining formal and informal financial sources

Russian early entrepreneurs' and established firms' structure of external financing

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Abstract

Purpose – The aim of the paper is to analyze quantitatively and qualitatively requirements of Russian micro- and small-firms in financial sources, along with opportunities and restrictions in the mobilization of investment at the different stages of a firm's life cycle.

Design/methodology/approach – In this paper the determinants of the propensity to invest and the supply of funding are investigated by using the Global Entrepreneurship Monitor (GEM) data set for Russia in the time period from 2006 to 2011.

Findings – The paper provides the analysis of Russian early entrepreneurs' and established business owners' decisions about the preferred structure of financial sources, comprising both statistical and logistic regression approaches for this investigation. The findings indicate that in Russia the structure of financial sources of start-up entrepreneurs is predominated by "love capital" (mainly private and family savings), meanwhile, the percentage of business angels' financing is low in comparison with innovation-driven countries. Moreover, there are merely extra-economic factors, which influence informal investors' decision making on funding: personal relations with a borrower, an optimistic view on macroeconomic perspective and high status of an entrepreneur.

Practical implications – The findings in this paper suggest that this research can help the officials to formulate a program of SMEs' support at different stages of the financial chain in Russia.

Originality/value – In this paper the early and middle stages of a firm's life cycle are examined and some practical advice on a company's development and expansion are given.

Keywords Entrepreneurialism, Small enterprises, Financing, Russia, Entrepreneurship, Informal and formal financing, Venture capital, Entrepreneurial life cycle, Equity gap, New equity gap

Paper type Research paper

1. Introduction

Every firm at every stage of its development needs to find financial sources to realize its projects and expand business. Substantial growth in its capacities often requires large amounts of investments; hence, every firm seeks for access to cost-effective funding, which will allow a project to be profitable. That is why, it is very important for a firm

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to choose a proper source of financing in the capital market, in order to make effective investments and to beat its rivals.

Sources of every venture's funding usually consist of internal and external ones. As for internal sources (personal and family savings, retained profits, working capital and sale of fixed assets), they are regarded as the most appropriate source of financing, however, their availability highly depends on the profitability of a company (Lerner, 1995). The types of external sources of investment finance – equity (common and preferred stock, venture capital) and debt (bonds, bank overdraft, lease, factoring, etc.) – have their own advantages and disadvantages. Equity financing is limited by the intentions of a firm's proprietors to save their share in ownership, while debt funding should be strongly guaranteed by a company's current financial results.

Another important aspect of financing is the character of the funding: informal and/or formal. Especially for early entrepreneurs it is typical that the structure of external financing is dominated by informal sources (Beck *et al.*, 2008). Also, two main sources of informal financing are often distinguished: investments, provided by the founders themselves, their family and friends (in other words, "love money" or 3Fs – family, friends and fools); and funding provided by business angels – investors that invest money in an enterprise not because of family relations with its founders, but just due to a good idea of a nascent or even potential entrepreneur (Kaplan and Stromberg, 2000).

Formal financial sources are divided into institutional venture capital financing, bank loans, initial public offering (IPO), etc. This financial support can be provided in much greater amounts, but requirements for disclosure of accounting data are stricter.

In this paper financial sources are analyzed in terms of informal and formal external funding, however, their attraction, from the viewpoint of internal and external financing, is also investigated.

The object of the research is the body of Russian companies and their owners[1] which attract informal or formal investment and belong to different stages of development, ranging from idea and seed capital to their expansion on different markets.

In fact, the aim of the paper is to analyze quantitatively and qualitatively requirements of Russian micro- and small-firms in financial sources, along with opportunities and restrictions in the mobilization of investment at the different stages of a firm's life cycle.

Hence, several purposes are marked out:

- to draft the main financial sources for a firm at the various stages of a firm's life cycle[2];
- to estimate firms' demand for funding, on the one hand, and supply of financing, provided by informal and formal investors, on the other hand; and
- to point out typical problems and restrictions connected with the mobilization of investment in Russia.

Time period is limited to 2005-2011, in order to estimate the influence of the global economic slowdown on financial patterns.

To cover these issues, this paper is divided into three sections. The first one is devoted to the conceptual framework and overview of the recent studies relevant to the problem investigated. In Section 2 demand for informal funding and interaction with its supply are analyzed (using data of the Global Entrepreneurship Monitor (GEM)).

The last one considers formal venture financing as the key element of a firm's mature expansion and analyzes its availability and influence on a firm's financial performance and capital structure.

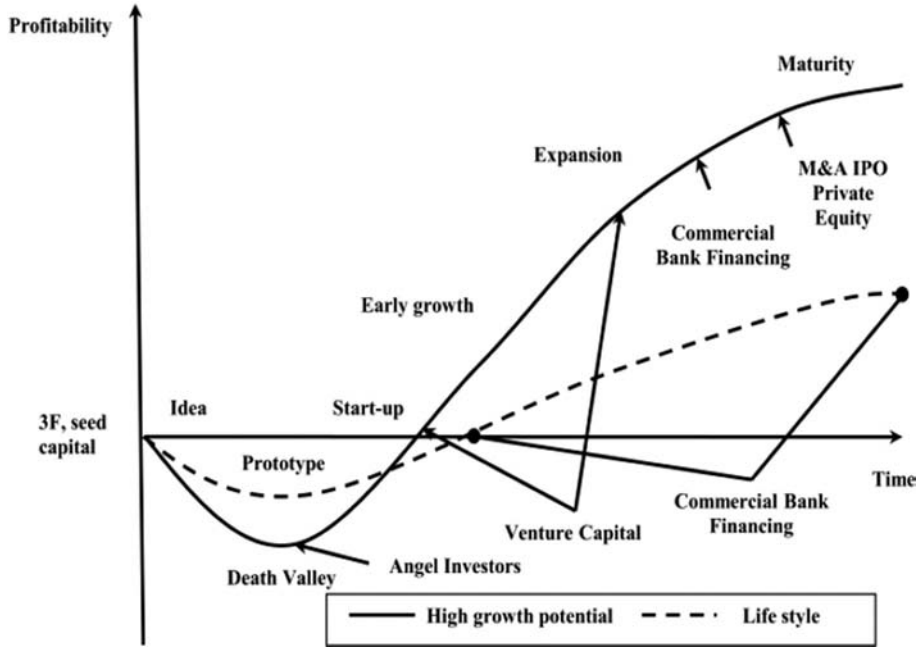
Summing everything up, the early and middle stages of a firm's life cycle are examined and some practical advice on a company's development and expansion are given.

2. Conceptual framework and literature overview

2.1 The entrepreneurial life cycle approach

The conceptual framework for this paper is a theory of entrepreneurial life cycle (or the so-called "financial chain"), in which every stage of a firm's development requires various kinds of funding. The size of investments that are needed for business developing usually increases during a company's life cycle, where different risks and financial challenges are reduced at mature levels (Berger and Udell, 1998; Wetzel and Wilson, 1985). Figure 1 shows the difference in funding at various stages of a firm's development for two types of companies: lifestyle and high-growth potential businesses (Amoros *et al.*, 2008; Brown *et al.*, 2009; Mason, 2006).

At the start-up of a new venture, funding is almost often informal[3]. First, it is "seed" capital invested by the founders, their families and friends. Second, it is business angel investment which supports especially high-growth potential companies, helping them to overcome the "death valley", the first real challenge for business expansion (Bygrave and Quill, 2007). Third, at the next stage financing greatly depends on the kind of



Note: This figure shows the theory of entrepreneurial life cycle and its peculiarities for high growth potential and life style firms

Figure 1.
Financial alternatives and entrepreneurial life cycle

a company's business: generally, lifestyle firms attract bank loans, whereas high-growth potential firms seek for the support of venture investment, remaining risky and with high-profit expectations (Ayyagari *et al.*, 2010). And, finally, after decreasing risks, traditional methods of business development at a mature stage arise, that is IPO and commercial banks financing.

2.2 The "equity gap" problem

The choice between various types of informal and formal financing usually depends on the amount of investments and the level of a firm's development. As for the size of funding, 3Fs often invest rather small amounts of money, normally below $25,000 (Figure 2)[4].

In contrast, institutional venture capital funds are allocated at the other extreme point of financing in this scheme, investing usually not below than $500,000 per project (Amoros *et al.*, 2008).

In this scheme the stage of business angels' external financing is pivotal, and it is usually defined as the "equity gap", which range is not fixed, but is often determined between $25,000 and $500,000 (Amoros *et al.*, 2008). These amounts of money are too large for "love money" and, at the same time, too small for institutional venture capital funds. In developed economies this gap, normally, is filled by business angels (informal venture financing), along with public policies of nascent business support (Storey, 2005).

Also, some authors argue that a "new equity gap" has emerged recently, which was caused by an increase in the minimum amounts of venture funds' investments, that is, this new gap has a range from $500,000 to $5,000,000 in the USA (Mason 2006). Taking it into consideration, in the following sections it is analyzed whether this gap exists in Russia and whether different financial sources are available for borrowers to fill in this gap.

2.3 The issue of investigation into informal and formal investments

Formerly, in academic papers investigation into formal funding predominated, due to easier access to necessary information and stricter rules of information disclosure for corporations (Bertoni *et al.*, 2010; Gompers and Lerner, 2003; Harisson and Mason, 2000; Marti *et al.*, 2007; Peirone, 2007; Peneder, 2010).

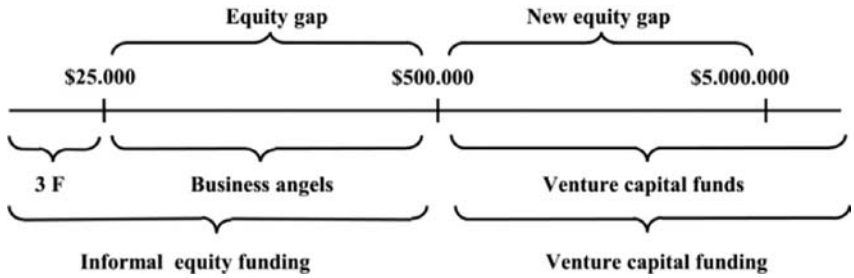


Figure 2.
Formal and informal equity funding amounts and equity gaps

Note: This figure shows potential pitfalls (the "equity gap" and the "new equity gap") in the mobilization of investments for early entrepreneurs and established business owners
Source: Mason (2006)

As for informal equity financing (business angels and particularly "love capital"), it has received less attention in academic research, however, interest in this topic has arisen recently, with availability to analyze data of the GEM in various countries.

It can be argued that the returns on informal investments, made by business angels, are significantly higher than those made by non-angels. However, rates of return on informal investments made by friends and family members of business founders are, on average, dismal (Riding, 2008). Love money accounts for more than three times as much annual investment as business angels, who in turn invest more than twice as much annually – and in many more firms – as institutional venture capitalists.

All in all, the issue of the size and effectiveness of various types of funding in Russia is crucial for the purposes of the paper, that is why in the next sections the amounts of money invested by informal and formal investors are calculated and compared.

2.4 The pecking order theory: internal and external financing

It can be argued that various sources of funding are not perfect substitutes. This fact was proved with the "pecking order" theory (Myers and Majluf, 1984). They argue that there is a certain order, which influences a firm's choice between different types of financing: every company prefers internal funding and out of external investments debt is more attractive than equity. And the reason behind it is information asymmetry between managers and external investors who ask inappropriately high rate of return. It can be argued that profitable firms can finance most of their investments with retained earnings, and less effective or loss-making companies must rely more on external funds. Hence, more profitable firms are expected to have a lower leverage than less profitable or loss-making companies (Mikócziová, 2010).

This issue is also tested in the following sections, in order to understand whether the Russian system of financial support differs a lot from the evidence, related to this topic, in developed countries.

3. The analysis of informal investment sources of Russian early entrepreneurs

In the paper the determinants of the propensity to invest and the supply of funding are investigated by using the GEM data set for Russia in the time period from 2006 to 2011.

3.1 Description of the GEM data set

The GEM research program is an annual assessment of the national level of entrepreneurial activity. Started as a partnership between London Business School and Babson College, it was initiated in 1999 with ten countries. Meanwhile, the GEM 2011 survey was conducted in 54 economies worldwide.

The research program, based on a harmonized assessment of the level of national entrepreneurial activity for all participating countries, involves exploration of the role of entrepreneurship in national economic growth.

3.2 The adult population survey

This is the primary research tool of GEM, in which each national team must survey at least 2,000 adults[5].

To ensure consistency and cross-country comparability, each country conducts exactly the same survey of its adult population at exactly the same time of the year

using the same methodology (Table AI in Appendix 1). The individual surveys are harmonized into one master dataset. The GEM Annual Report is based on the results of the adult population survey (APS) each year.

One of GEM's best known measures of entrepreneurial activity is the Early Stage Entrepreneurial Activity prevalence rate (also called TEA index). This indicator is calculated in an identical way in each country. The Early-Stage Entrepreneurial Activity rate is comparable across nations and it measures the propensity of a country to be entrepreneurial[6].

GEM's methodology captures two sources of informal financing: family members (often termed "love money") and other individuals, the latter comprising investors who have come to be known as *business angels* who invest in new and young businesses where there is no family connection.

3.3 Hypotheses and its approval

In order to analyze the requirements of Russian firms in informal financial sources, along with the opportunities and restrictions in the mobilization of investment, four hypotheses are advanced (Gudov *et al.*, 2011):

H1. During and after the global economic crisis, the share of "love capital" in the financing of entrepreneurial activity has risen in Russia.

H2. The type of relationship between an informal investor and a borrower depends on the socio-economic environment: family investors are more common in Russia, whereas in innovation-driven GEM economies with established rules and institutions external financing may be attracted without any friend- or relative connection, just because of a good business idea.

H3. Investments by Russian informal investors do not fill in the equity gap in the financing of SMEs, because most of them provide small scale "love capital" funding.

H4. In Russia informal investors are less oriented to profitability of business and economic cycle than those in some innovation-driven GEM economies, because in Russia financial decisions of "love capital" lenders are mainly driven by social empathy to the entrepreneur.

In fact, the aim of the first hypothesis is to answer the question "who finances start-ups in Russia?" The aim of the second one it to find out: "why is it so?" The purpose of the next one is: "how much investment is provided?" And the last but not least issue is: "what are the factors that influence it and what should we do?"

3.4 The analysis of the hypotheses

H1. During and after the global economic crisis, the share of "love capital" in the financing of entrepreneurial activity has risen in Russia.

In the economies with relatively small standard of living and established social relations it is typical that early entrepreneurs seek for informal funding and ask support of members of their families, friends and colleagues in order to mobilize start-up investment[7].

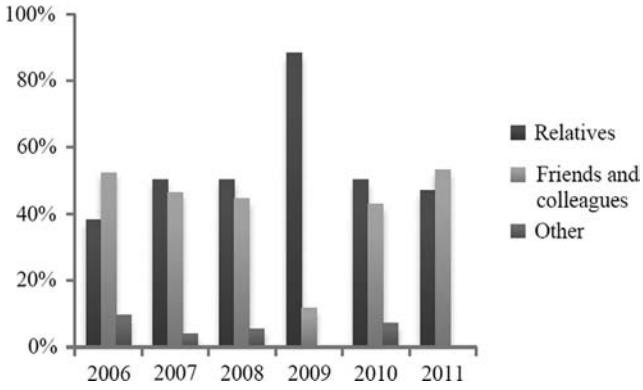
In order to understand, who provides start capital in Russia, distribution of informal investors was analyzed from 2006 to 2011 (Figure 3).

The graph illustrates that in Russia "love capital" (especially relatives' money) can be considered as a means of the last resort in financing, especially in the period of the global economic crisis (according to T-criterion, significance of 5 percent). Generally, about a half of funding is provided by relatives, the other half of it is investment by friends and colleagues, whereas the percentage of business angels is less than 10 percent of all investors. This situation reflects the fact that the business angels funding is developed on a very small scale in Russia. Thus, entrepreneurs that attract informal financial sources in Russia prefer substantially internal sources (private and family money) in comparison with external business angels' investments:

H2. The type of relationship between an informal investor and a borrower depends on the socio-economic environment: family investors are common in Russia, whereas in innovation-driven GEM economies money can be given to a person without any friend- or relative connection, just because of a good business idea.

This hypothesis aims at accounting for the reason that lies behind low activity of business angels in Russia, notably peculiarities of the socio-economic environment (Murzacheva, 2011). Some authors underlined the importance and impact of business angels in developed countries at the stage, when seed capital is required (Denis, 2004; Fenn *et al.*, 1997). The analysis of frequencies provided information about significant difference in activity of business angels in Russia and innovation-driven economies from 2006 to 2009 (Figure 4).

"Love capital" (especially relatives' investment) has the highest demand among informal sources both in Russia and in most innovation-driven economies (for the detailed results see Figure A1 in Appendix 2), whereas business angels are more wide spread in innovation-driven economies (according to T-criterion, significance



Note: This figure shows that entrepreneurs that attract informal financial sources in Russia substantially prefer internal sources (private and family money) in comparison with external business angels' investments

Figure 3.
Type of relations between an informal investor and a borrower

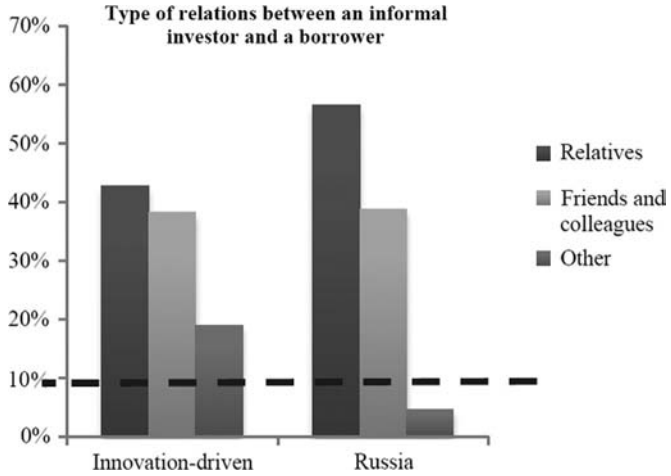


Figure 4.
Type of relations between an informal investor and a borrower between 2006 and 2009

Note: This figure shows that the level of business angels' support in Russia is significantly lower than in any innovation-driven country

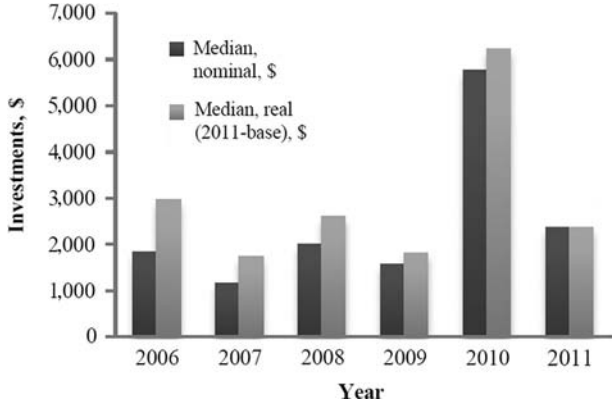
of 5 percent). However, the institutional arrangement of the market economy of innovation-driven countries stimulates more active role of the business angels ready to invest in good ideas and projects (according to ANOVA, significance of 5 percent):

H3. Investments by Russian informal investors do not fill in the equity gap in the financing of SMEs.

Since the percentage of business angels in Russia is lower than in developed innovative-driven countries, the average amount of informal investment is scanty, that is why it is naturally to predict the deficit of funding for the classical "equity gap" (Murzacheva, 2011).

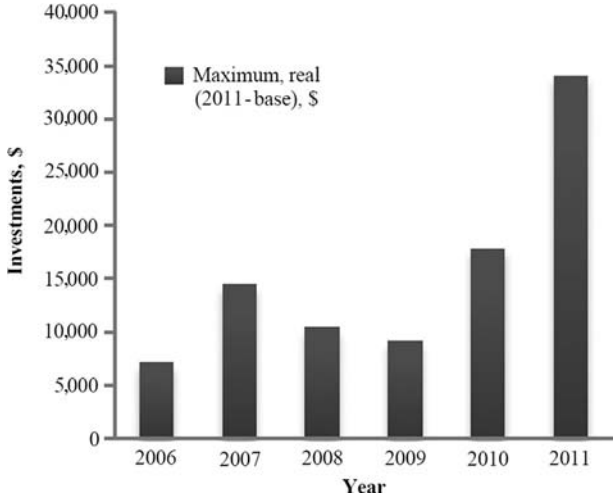
However, it is crucial to underline that the classical frontiers of the "equity gap", ranging from $25,000 to $500,000, should not be relevant to Russia without adjustment to diversity of the amounts of investments in different countries (Amoros *et al.*, 2008; Gudov *et al.*, 2011; Murzacheva, 2011). As the concept of the "equity gap" was assumed for the US enterprises' financial chain, then there is a significant issue of adjustment it to Russian firms. In this paper the ratio of the median informal investments in Russia to the median informal investments in the USA (for the time period 2006-2009) is considered as a proxy for the correction factor for shifting the frontiers of the classical "equity gap" (Tables AII and AIII in Appendix 2). It can be argued that this ratio was approximately 13 percent for the given time period, that is why the new frontiers of the "Russian equity gap" range from $3,225 to $64,500 that substantially exceed the median amounts of informal funding (Figure 5).

Thus, the "equity gap" is not filled in by informal investors (including business angels) in Russia, because more than a half of provided investment is below the low frontier of the "equity gap". Nevertheless, there is a tendency of increasing the maximum amount of an informal investment deal, but it remains lower than the upper frontier of the "equity gap" (Figure 6).



Notes: The figure shows that the "equity gap" is not filled in by informal investors in Russia; the median amounts of informal investment only in 2010 exceeded the low frontier of the "equity gap"

Figure 5.
Median amounts of informal investments in Russia



Note: The figure shows that only few deals correspond to the "equity gap" amounts in Russia

Figure 6.
Maximum amounts of informal investments in Russia

Therefore, separate deals more and more fills in the "equity gap", however, the mentioned problem has not solved yet:

H4. In Russia informal investors are less oriented to profitability of business and economic cycle than those in some developed countries. In Russia financial decisions are mainly driven by established social relations and the opinion about the status and career opportunities of an entrepreneur.

In terms of the revealed problems in informal financing, it is important to unveil some factors that influence the relations between a lender and a borrower and some intentions that motivate people to invest in start-ups in Russia (Ahmad and Xavier, 2012). In order to achieve it, the correlation between decision to provide informal investment and some possible factors that can influence it has been analyzed (Table AIV in Appendix 3).

It can be argued that in Russia personal relations with a borrower and the opinion about possessing enough skills and experience to start a new business positively influence the intention of an informal investor to start funding. Also, before and during the global economic slowdown opinions about positive macroeconomic development, entrepreneurs' high status and excellent career opportunities were also significant factors for attractiveness of the informal investment.

Moreover, in the paper not only 3Fs' and business angels' intentions are analyzed, but also people's decisions whether to be an informal investor or not are investigated from the point of view on motivation to these actions. In order to research this aspect, a logistic regression model was created and significant factors were chosen to depict qualitatively and quantitatively the probability of being an informal investor in Russia. This procedure is inevitable when dealing with input variables measured in different statistical scales, in particular nominal and ordinary ones (Murzacheva, 2011). It is a single model which imposes a limited range of restrictions on the parameters (admitting small sample sizes and different measurement scales of input variables) and delivers appropriate results (Verbeek, 2008). The input block of dependent variables is presented by three groups: demographic characteristics of entrepreneurs; social factors; motivation and self-recognition of entrepreneurs (Bygrave *et al.*, 2003; Fang *et al.*, 2008) (Table I).

This table provides information about independent variables for a logistic regression. It comprises both binary and dummy ones.

Relevant factors, which determine the probability of being an informal investor (the "busang" variable), are presented in the final logistic regression model[8]:

Table I.
The list of independent variables for a logistic regression

Name of variable	Description	Meanings
Knowent	You know someone personally who started a business in the past two years?	1 – yes, 0 – no
opport	In the next six months there will be good opportunities for starting a business in the area where you live?	1 – yes, 0 – no
suskill	You have the knowledge, skill, and experience required to start a new business?	1 – yes, 0 – no
nbgoode	In your country, most people consider starting a new business a desirable career choice?	1 – yes, 0 – no
nbstatus	In your country, those successful at starting a new business have a high level of status and respect?	1 – yes, 0 – no
fearfail	Fear of failure would prevent you from starting a new business?	1 – yes, 0 – no
gender	What is your gender?	1 – male, 2 – female
Y06	Dummy variable for 2006 year	1 – "2006", 0 – else
Y07	Dummy variable for 2007 year	1 – "2007", 0 – else
Y08	Dummy variable for 2008 year	1 – "2008", 0 – else

$$\underset{(1.3)}{\text{Busang}} = \underset{(1.3)}{-2.83} - \underset{(0.46)}{0.81}*\text{fearfail} + \underset{(1.03)}{3.12}*\text{nbgoodc} - \underset{(0.64)}{1.66}*\text{gender} - \underset{(1.42)}{2.77}*\text{Y06} + \underset{(0.78)}{2.27}*\text{Y06}*\text{gender} - \underset{(0.83)}{2.9}*\text{Y07} + \underset{(0.97)}{2.91}*\text{Y07}*\text{knowentt}$$

Thus, significant coefficients of the regression model allow to conclude that:

- Russian informal investors (including business angels) are risk averse;
- prestige of entrepreneurship greatly influence the number of informal investors (including business angels);
- men provide funding for start-ups more often than women, especially during and after the crisis; and
- before the crisis personal relations with early entrepreneurs positively affected the number of business angels.

3.5 Conclusion about informal financing in Russia

Eventually, the crucial evidence of the mentioned analysis is the fact that in Russia informal investments are oriented to borrowers who have personal relations with lenders. These circumstances lead to scanty financing and existence of the "equity gap". The main reasons for it are the mental importance of knowing an entrepreneur personally and the emphasis on the status and possible opportunities of a new venture founder.

4. Formal sources of investment in Russia

4.1 The role of formal financing in the theoretical framework

Looking back at the conceptual framework, normally, we can argue that informal capital finances only the first stage (out of three) of the entrepreneurial life cycle. The second stage is usually filled in by venture capitalists and the third one is financed with the help of the stock market and/or bank loans (Figure 7)[9].

In this paper greater emphasis is made on high-growth firms which seek for venture financing and expand by means of the instrumentality of IPO. Nevertheless, as it was mentioned previously, this paper considers the early and middle stages of a firm's life cycle, that is why the analysis of bank services is omitted, and Russian firms' benefits from IPO are also outside the scope of the paper (Ayyagari *et al.*, 2010; Rocca *et al.*, 2011). Thus, in this section venture capital tallies the proxy for early formal financing (Chen, 2010).

4.2 Related literature and data

As it is argued in previous research, venture capitalists are active participants in companies' development, providing mentoring, strategic advice, help in promotion of innovative goods and services, and assistance in recruitment of employers (Denis, 2004). In fact, the key roles of VCs are monitoring (Fama and Jensen, 1983; Lerner, 1995), professionalization (Kaplan and Stromberg, 2000) and certification (Megginson and Weiss, 1991).

In order to investigate into these opportunities for Russian entrepreneurs, a particular source of information is needed that could depict the financial performance of young companies and venture funds' supply of investment and other support provision. So, for the investigation into the market of venture investments, information from the VI to XII Russian Venture Fairs and Russian Venture Company (RVC) was used,

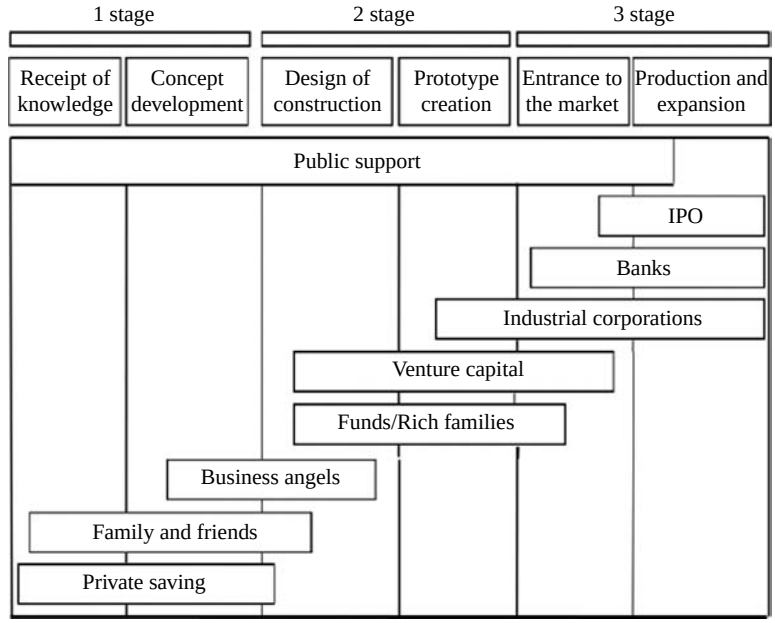


Figure 7.
Sources of funding for business financing

Note: This figure shows information about possible sources of investment in Russia that can be mobilized by early entrepreneurs and established business owners

where the interconnection between borrowers and suppliers on the venture capital market is well-established.

There, Russian companies provide information about features of their businesses, structure of their costs, expected revenue and required amount of investments[10]. Venture funds announce the average amount of an investment deal and the total money that they obtain.

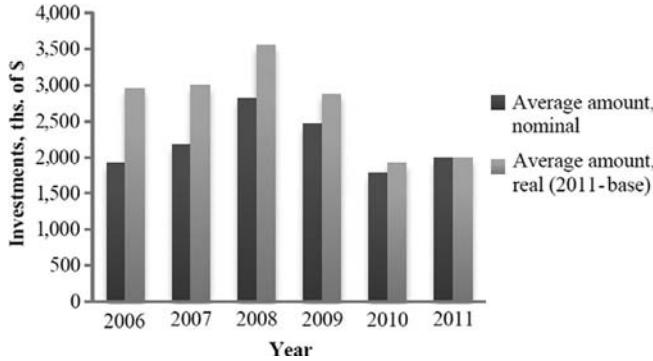
4.3 Formulation and analysis of hypotheses

Taking into consideration all the available information, two hypotheses (*H5* and *H6*) were formulated:

H5. The average amount of an investment deal decreased during the global economic slowdown and then recovered after the crisis.

In order to test this hypothesis, current data provided by the companies, which participated in the VI-XII Russian Venture Fairs, was adjusted to the price level of 2011 (Figure 8).

From the graph, the average amount of requested investment, on the contrary, decreased after the global economic crisis. Moreover, there is a time lag in requested funding in comparison with the economic cycle. This situation reflects the fact that nascent Russian companies try to adjust to new economic conditions; however, their financial decisions linger out the global changes:



Note: The figure shows the evidence that the average amount demand for investment reduced after the global economic crisis in Russia

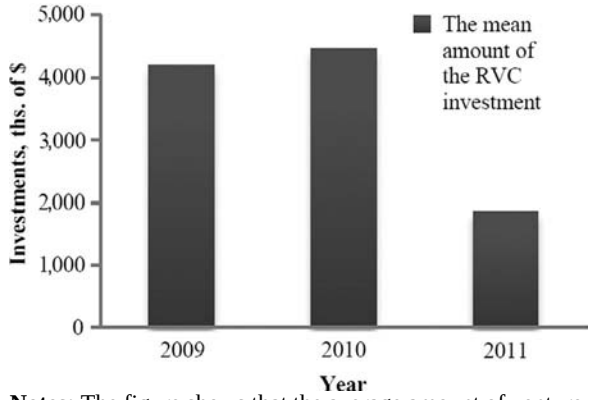
Figure 8.
Demand for venture investment in Russia

H6. The supplied amount of venture capitalists' funding does not fill in the "new equity gap" in Russia.

In terms of supply of venture funding in Russia, it is natural to emphasize the importance of the RVC that accumulated roughly 50 percent of total venture investments in Russia1[11] in 2010 (see Figure A2 in Appendix 4 to understand the role of the RVC in the Russian chain of financial support). From the official annual reports of the RVC the mean amount of a venture deal can be induced[12] (Figure 9).

Also, it is pivotal to point out that the classical frontiers of the "new equity gap", ranging from $500,000 to $5,000,000, should be adjusted to the scope of the Russian venture market.

Based on the reports of PricewaterhouseCoopers, the average venture investments in the USA in 2011 are approximately $7,700,000 per a deal. Hence, the average



Notes: The figure shows that the average amount of venture funding in Russia significantly exceeds the upper frontier of the "new equity gap" in 2009 and 2010; in 2011 the gap between these two numbers reduced

Figure 9.
The mean amount of the RVC investment

Russian venture investment was about 24 percent of the average US venture funding deal. That is why the new frontiers of the "new equity gap" can be computed from \$64,500 to \$1,200,000. As figures show, the average amount of venture financing in Russia significantly exceeds the upper frontier of the "new equity gap" for Russia in 2009 and 2010. Nonetheless, in 2011 the gap between these two numbers reduced, due to the rise in the number of investment deals, which increased by 144 percent from 2009 to 2011 and the beginning of activity of the "RVC seed fund".

Thereby, in spite of the deficit of venture investments at the middle stages of entrepreneurial life cycle, some positive shifts have occurred and the "new equity gap" problem has become less urgent in the Russian venture market.

5. Conclusions

As the Russian economy has a lot of peculiarities in various aspects, its several distinctive features in business financing are found out in this research.

First, concerning informal funding, the crucial evidence of the analysis is the fact that in Russia informal investments are oriented to borrowers who have personal relations with lenders. These circumstances lead to the scanty financing and existence of the "equity gap". The main reasons for it are the mental importance of knowing an entrepreneur personally and the emphasis on a new venture founder's status and possible career opportunities for him or her.

Second, according to a structural shift in funding to family-oriented businesses, business angels' support is not well-developed in Russia. These circumstances provide great opportunities and challenges for government projects and for improving relations between business angels and "strangers with a good idea".

Third, due to impoverished informal financing and the consequences of the global economic slowdown, the mean amount of demand for venture capital fell after the crises and has not recovered yet. Moreover, only the seed fund of RVC filled in the "new equity gap" in Russia, whereas amounts of venture investments in small and medium enterprises highly exceeded the upper frontier of the "new equity gap".

Some caveats of the mentioned conclusions are the difference in methods of collecting data for research, different sources of information and possible biased opinions of respondents that provided primary information. Also, the borders of the "equity gap" and the "new equity gap" (along with the methodology of their calculation) are to be discussed in future investigations.

The findings in this paper suggest that this research can help the officials to formulate a program of SMEs' support at different stages of the financial chain in Russia.

Notes

1. The author assumes that companies' owners usually act on behalf of their firms in decision making on funding.
2. The particular focus is at the early and middle stages of the cycle, whereas the mature stage of a firm's development is beyond the scope for the paper.
3. Adapted from Venture-Financing (2005).
4. Authors based on Mason (2006).
5. www.gemconsortium.org/docs/download/413
6. Look for further information: www.gemconsortium.org/about.aspx?page=ab_what_gem_is

7. GEM Russia 2011 Report: www.gsom.spbu.ru/files/gem_28_02_web.pdf
8. Multinomial logistic regression analysis in PASW Statistics 18 was used.
9. Adapted from the evidence of Russian entrepreneurial support: www.lexgroup.ru/spravka/best_publications/publications_invest_consulting/business-plan2-10/
10. For more information see the official web site: www.rvf.ru/rus/rvf/
11. According to the *Russian Business Newspaper*, No. 785(3), 25 January 2011.
12. http://rusventure.ru/en/

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(Appendices follow overleaf.)

Appendix 1

Table AI.
GEM national APSs: 2009 sample size and procedures

Country	Interview procedure	Sampling method	Sample count
Algeria	Face-to-face	Random walk method	2,000
Argentina	Fixed-line phone	Random dial from list	2,008
Belgium	Fixed-line phone and mobile phone	Random digit dialing	3,989
Bosnia and Herzegovina	Fixed-line phone	Random dial from list	2,000
Brazil	Face-to-face	Random choice of census tracts in every city	2,000
Chile	Fixed line and face-to-face	Random selection of a phone number from a list	5,000
China	Face-to-face	Random walk method	3,608
Colombia	Fixed line and face-to-face	Random dial from list; random sampling	2,055
Croatia	Fixed-line phone	Random dial from list	2,000
Denmark	Fixed-line phone and mobile phone	Random dial from list	2,012
Dominican Republic	Face-to-face	Random stratified	2,007
Ecuador	Face-to-face	Cluster sampling	2,200
Finland	Fixed-line phone and mobile phone	The sample is delivered by its supplier	2,004
France	Fixed-line phone and mobile phone	Random dial from list	2,019
Germany	Fixed-line phone	Random digit dialing	6,032
Greece	Fixed-line phone	Random digit dialing and random dial from list	2,000
Guatemala	Face-to-face	Random walk method	2,208
Hong Kong	Fixed-line phone	Random dial from list	2,000
Hungary	Mobile phone	Random dial from list	2,000
Iceland	Fixed-line phone and mobile phone	Random dial from list	2,005
Iran	Face-to-face	Cluster sampling	3,350
Israel	Fixed-line phone	Random dial from list	2,073
Italy	Fixed-line phone	Random dial from list	3,000
Jamaica	Face-to-face	Cluster sampling	2,012
Japan	Fixed-line phone	Random digit dialing	1,600
Jordan	Face-to-face	Random walk method	2,006
Republic of Korea	Fixed-line phone	Random dial from list	2,000
Latvia	Fixed-line phone and mobile phone	Random digit dialing and random dial from list	2,003
Lebanon	Face-to-face	Random walk method	2,000
Malaysia	Face-to-face	Cluster sampling	2,002
Marocco	Face-to-face	Random walk method	1,500
The Netherlands	Fixed-line phone	Random dial from list	3,003

(*continued*)

Country	Interview procedure	Sampling method	Sample count
Norway	Fixed-line phone and mobile phone	Random dial from list	2,029
Panama	Face-to-face	Cluster sampling	2,000
Peru	Face-to-face	Random sampling from list	2,021
Romania	Face-to-face	Systematic sampling	2,093
Russia	Face-to-face	Random walk method	1,695
Saudi Arabia	Fixed-line phone and mobile phone	Random digit dialing	2,000
Serbia	Fixed-line phone	Random dial from list	2,300
Slovenia	Fixed-line phone	Random dial from list	3,030
South Africa	Face-to-face	Random walk method	3,135
Spain	Fixed-line phone and mobile phone	Random digit dialing and random dial from list	28,888
Switzerland	Fixed-line phone	Random dial from list	2,024
Syria	Face-to-face	Random walk method	2,002
Kingdom of Tonga	Face-to-face	Cluster sampling	1,184
Tunisia	Fixed-line phone and mobile phone	Random digit dialing and random dial from list	2,000
Uganda	Face-to-face	Random walk method	2,095
United Arab Emirates	Fixed-line phone and mobile phone	Random dial from list	2,056
UK	Fixed-line phone	Random digit dialing	30,003
USA	Fixed-line phone	Random digit dialing and random dial from list	5,002

Note: This table provides information about procedures of data collection and sizes of samples for GEM countries

Table AI.

Appendix 2

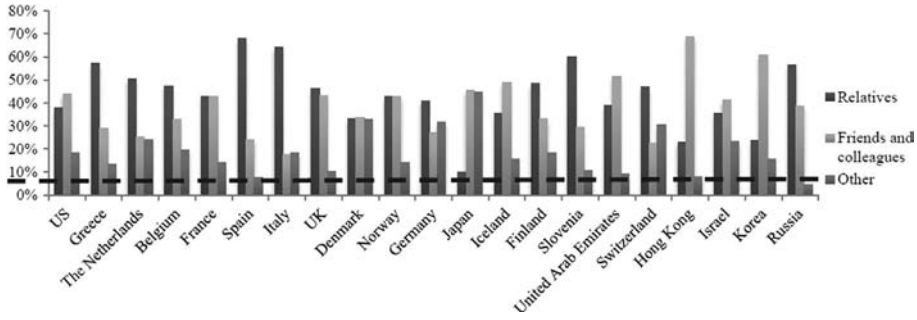


Figure A1.
Type of relations between an informal investor and a borrower

Notes: This figure shows that the level of business angels' support in Russia is significantly lower than in any innovation-driven country; calculations are based on the GEM dataset for the time period from 2006 to 2009

Russia	2006	2007	2008	2009	Mean
Median investments, nominal, (RUB)	50,000	30,000	50,000	50,000	45,000
Median investments (2009-base), (RUB)	54,500	34,230	55,850	50,000	48,645
Median investments (2009-base), $	2,008	1,339	2,247	1,575	1,792
Inflation of RUB (%)	9.7	9	14.1	11.7	
Exchange rate (RUB/$)	27.14	25.56	24.85	31.75	

Table AII.
The median amounts of informal investments in Russia from 2006 to 2009

Notes: This table reports the median amounts of informal investments in Russia between 2006 and 2009; it shows that the median informal funding in Russia was approximately $1,800, in real prices

The USA	2006	2007	2008	2009	Mean
Median investments, nominal ($)	10,000	10,000	20,000	15,000	13,750
Median investments, real (2009-base) ($)	10,290	10,380	19,920	15,000	13,897.5
Inflation of dollar (%)	3.2	2.9	3.8	−0.4	

Table AIII.
The median amounts of informal investments in the USA from 2006 to 2009

Notes: This table reports the median amounts of informal investments in the USA between 2006 and 2009; it shows that the median informal funding in the USA was roughly $13,900, in real prices

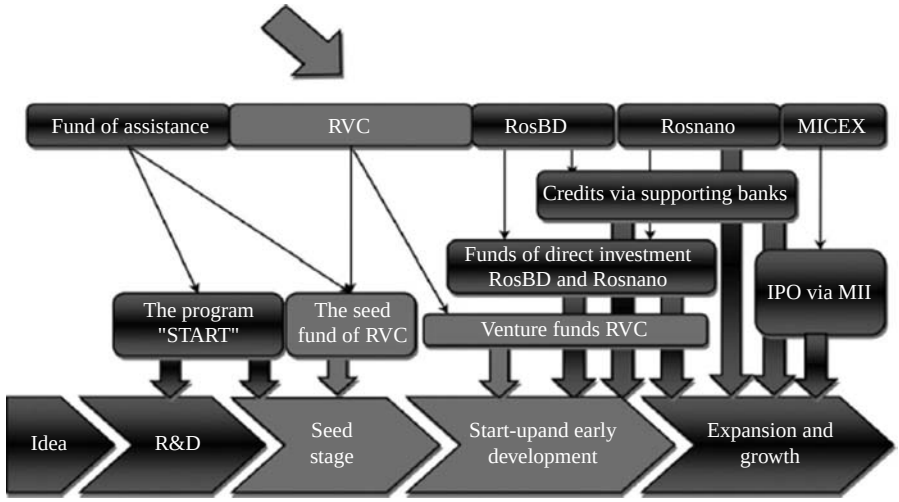
Appendix 3

Contigency	Significant variables, 95 percent significance level Russia			
"R" – the significant variable for Russia	2006	2007	2008	2009
You know someone personally who started a business in the past two years?	R	R	R	R
In the next six months there will be good opportunities for starting a business in the area where you live?	R	R	R	
You have the knowledge, skill, and experience required to start a new business?	R	R	R	R
Most people consider starting a new business a desirable career choice?		R		R
Those successful at starting a new business have a high level of status and respect?		R	R	
Fear of failure would prevent you from starting a new business?	R			
What is you gender?			R	R

Notes: This table reports that in Russia personal relations with a borrower and the opinion about possessing enough skills and experience to start a new business positively influence the intention of a informal investor to start funding; also, before and during the global economic slowdown opinions about positive macroeconomic development, entrepreneurs' high status and excellent career opportunities were also significant factors for attractiveness of the informal investment

Table AIV.
Contingency between the decision to provide informal investment and some possible factors

Appendix 4



Notes: This figure shows the role of venture capital financing and RVC in a firm's life cycle; the RVC accumulated roughly 50 percent of total venture investments in Russia (according to the *Russian Business Newspaper*, No. 785 (3), 25 January 2011) in 2010; RosBD – Russian Bank of Development; Rosnano – Russian joint-stock company that supports start-ups in nanotechnology and some other high-technological industries; R&D – research and development

Source: Adapted from the presentation of the Market of Innovation and Investment (MII) of Moscow International Stock Exchange (MICEX), January 2012, www.micex.ru/markets/stock/emitents/rii/profile

Figure A2.
The role of venture capital financing and RVC in a firm's life cycle

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