

**Financing firm start-up and restructuring in transition countries: Evidence from
Belarus, the Ukraine and Russia**

ESRC Centre for Business Research, University of Cambridge
Working Paper No. 150

Valentijn Bilsen
and
Elena Mitina

ESRC Centre for Business Research

University of Cambridge
Austin Robinson Building

Sidgwick Avenue

Cambridge

CB3 9DE

Phone: 01223 335242
Fax: 01223 335768
E-Mail: vb208@econ.cam.ac.uk

December 1999

This Working Paper relates to the CBR Research Programme on Small and
Medium-Sized Enterprises

Abstract

We investigate how entrepreneurs in Belarus, Russia and Ukraine finance start-up and restructuring. The data come from a recent enterprise survey covering 600 firms equally stratified in de novo and privatised or state-owned firms. We find that the personal funds of the main owner(s) are of crucial importance. Less than one tenth of the firms used a bank loan. Vouchers are important for financing privatisation and restructuring. The state still holds an important stake in the capital, though diminishing gradually over time. State support for start-up was rare. However, when it occurred, the share in start-up capital was important.

Keywords: finance, entrepreneurship, CIS countries, survey, firm behaviour

JEL Codes: P34, P31, M13, L2

Acknowledgements

This research was undertaken with support from the European Commission's Tacis-Ace Programme T95-4095-R "Growth and entrepreneurship in de novo, privatised and state owned enterprises: evidence from a panel survey for the CIS countries". The help of V. Kapustkin, K. Liuhto, E. Simtchenko, and V. Zaikina for data collection and feed-back is gratefully acknowledged, as well as the comments from an anonymous referee.

FINANCING FIRM START-UP AND RESTRUCTURING IN TRANSITION COUNTRIES: EVIDENCE FROM BELARUS, THE UKRAINE AND RUSSIA

1. Introduction

On the basis of new data from an enterprise survey, we investigate how entrepreneurs in post-communist transition countries finance the start-up and restructuring of their firms. We investigate whether the type of financing strategy is related to entrepreneurial characteristics, controlling for effects such as size, sector, age, macro-economic environment and the timing of the start-up or restructuring in the transition process. The survey covers the enterprise evolution since the start-up of the firm under transition. In case of state owned and privatised enterprises, which started operation before the break-up of the Soviet Union, the data cover the last two years of communist rule under Perestroika as well.

The issue of enterprise finance and entrepreneurship in transition economies is extremely important for three basic reasons. First, it effects the core of the transition process, namely the creation of the private enterprise sector. Second, looking at established market economies, which eventually serve as a model for the transition countries, there is still an ongoing debate whether it is finance or entrepreneurial talent and activity that matters for the start-up, growth and survival of the firm. The debate dates back to the dispute between Frank Knight, 1921, and Josef Schumpeter, 1934, over the nature of entrepreneurship. Third, the way it effects private sector creation determines the policy options needed to promote the transition process.

Taking into account that, contrary to those in established market economies the financial markets in most transition countries and especially the former Soviet republics are at their infancy (see e.g. EBRD 1998; Leijonhufvud, A. and Rühl, C., 1997), financing enterprise start-up and restructuring is a crucial and challenging issue

to be investigated. The following set of factors is only a brief summary of the key fields in which the CIS transition economies differ from established market economies.

1. Associated with the early development stage is a relatively larger problem of asymmetric information than in the mature Western capital markets (Corricelli et al. 1996).

2. Low savings at the start of transition were eroded by inflation.

3. A young and immature housing market with little turnover causes problems of finding collateral¹.

4. This would leave privatisation as an important vehicle to obtain personal equity and wealth. Yet these programs are not completely finished in the countries under study, in contrast to the Central European economies (EBRD, 1998).

5. There was relatively little entrepreneurial experience of operating a firm in a market type of environment. Under communist planning no private start-ups were allowed. Only small-scale agriculture and handcraft activities were allowed (Liuhto, K., 1999). There was experience in trade under communist planning, mainly to bridge the gaps of inefficient production, yet these activities are quite different from starting and developing an enterprise, and sharing the risk and uncertainties oneself. Since under communist rule there was little or no room for developing and managing a private business, especially in the former republics of the Soviet Union, one expects that the entrepreneurial know-how is of a lower level than in established market economies with a history of generations with entrepreneurial experience.

Consequently an apparent paradox arises. The factors mentioned above point to a difficult climate to get wealth to start a firm. This in turn generates a great need for external equity or debt finance. Yet following de Mezo and Webb, 1990, low self-finance signals a bad

project quality (bad entrepreneurship), generating a lower probability of obtaining external finance. There is virtually no record of entrepreneurial success. The earliest private firms started operation no earlier than the start of transition in 1991. And yet, the private sector has grown relatively rapidly in terms of number of firms. The basic question that emerges, then, is how entrepreneurs finance start-up and restructuring?

In the next section we present the theoretical and analytical background to get a better grasp of the issue. Current theoretical insights, however, are mainly based on empirical evidence from established market economies. It is useful to look briefly at the existing evidence for transition countries. The fourth section documents the general characteristics of the survey that we used to answer the above questions. The fifth section presents the analytical evidence. This is followed by concluding comments.

2. Analytical Background

Several studies of established market economies suggest that entrepreneurs are liquidity constrained (e.g., Evans and Jovanovic, 1989; Blanchflower and Oswald, 1990; Holtz-Eakin, et al, 1994a,b.; Lindh and Ohlsson, 1994; Van Praag and Van Ophem, 1995). They suggest that becoming an entrepreneur depends crucially on personal wealth. Insufficient funds prevent the start as an entrepreneur, or generate a start at a sub-optimal asset level. In the context of asymmetric information the latter generates lower growth rates and shorter survival rates, as recently shown by Brito and Mello, 1995.

Capital market imperfections due to asymmetric information limit the possibilities to obtain external finance (Stiglitz and Weiss, 1981). Because entrepreneurial quality and effort are not easily observed and measured by banks, nor the profitability of a business plan, credit rationing tends to prevail, in which case a debt-gap emerges. Consequently firms might be restricted in their investments and in their growth. Ultimately this might lead to earlier exit compared to a

situation where firms do not need external finance or where there is less asymmetric information. Commonly used mechanisms to dilute the asymmetric information problem are: 1) the request for collateral, 2) looking for a track record of past entrepreneurial successes, 3) the equity stake in the entrepreneur is business (de Meza and Webb, 1990; Cressy, 1995), and 4) the development of a close working relationship between lender/investor and borrower² (Binks and Ennew, 1996). Yet liquidity constraints effect all these instruments in a negative way, limiting the potential to bridge the asymmetric information gap and to obtain external finance.

Contrary to liquidity constraint hypotheses, recent evidence suggests that the basic determinant of success in terms of growth and survival is human capital. Indeed a crucial ingredient in the relationship between lender/investor and borrower is the ability of both parties to provide each other with relevant information (Binks and Ennew, 1996). Yet this in turn depends on their capability and know-how, as bankers/investors and as entrepreneurs. The entrepreneur must be able to convince the banker or candidate investor that his business will compensate for the risk attached to it and that he can pay back the loan or the expected return on the investment. The banker/investor must have the ability to distinguish between good and bad loans or investments.

Another way entrepreneurial know-how enters the finance relation is through self-selection. The entrepreneur can decide himself not to apply for a loan or for external equity finance rather than having the bank turn down his request for finance. Using a sample of start-ups in the UK, Cressy (1996) argues that the provision of external finance is demand driven and that firms self-select for funds on the basis of the human capital of the entrepreneur. He finds that both the assets at start-up and the survival of the firm is positively correlated with the proprietors' age and the team size, and that it is basically these human capital variables that determine survival. Older entrepreneurs have more experience, business commitment, assets and more willingness to use them for collateral (Cressy, 1995). Investigating the growth

constraints on small and medium-sized enterprises in the UK, Hughes (1998) found that firms deliberately choose to circumvent the actual and perceived inadequacies in the capital market by matching the growth to internal cash flow or through acquisitions. Sustained growers more frequently applied this strategy than the other group. Furthermore in cases where external finance was provided it was perceived to have a constraining influence on growth.

3. Evidence from Existing Studies in Transition Countries

While the importance of finance and human capital for start-up survival and growth of the firm in established market economies is still an ongoing debate, to our current knowledge little empirical evidence on that subject for post-communist countries has been presented. The results of the studies that are related to this subject vary according to area, method and class of firm size. Yet none of these directly investigate the relation between firm finance and entrepreneurship. A number of studies, however, investigate the financing of investments and restructuring of the firms. Since this is one aspect of our subject, the main findings are briefly presented.

The evidence on credit rationing for the Central European countries is mixed. Cornelli et al. (1996), find clear evidence of credit rationing for large firms in Poland, but remain less conclusive about Hungary. Lizal and Svejnar (1998), conclude that investment behaviour of large firms in the Czech Republic is not well explained by cash flow or constraints in finance. They add that this is not the case for small firms. Bratkowski, Grosfeld, and Rostowski (1999), study the effect of finance on investment for a sample of de novo firms, mostly small sized, in the Czech Republic, Hungary and Poland. They find that the provision of external finance for de novo firms works well. Substantial amounts of credit are provided to de novo firms on the basis of collateral, and this from an early stage onwards. They also conclude that the lack of external finance does not seem to be a major impediment for the growth of the firms under study.

Studies on former CIS countries focus mainly on Russia and the Ukraine. The evidence is mixed as well, yet points more towards credit constraints than in the Central European countries. Looking at the demand and supply of bank credit in Russia for medium-sized and large firms Fan et al. (1996) argue that banks are “soft” in providing credit. They find evidence of adverse selection in that firms that hold bank loans are on average financially less healthy. Nevertheless, some banks were reported to be starting to take creditworthiness into consideration by requiring collateral. Filatotchev et al. (1996), report for a sample of privatised Ukrainian firms that restructuring was preferably financed by retained profits. Bank lending was mostly limited to short term loans intended to bridge the gap in working capital needs. Webster et al. (1994) found similar evidence for a set of medium-sized and large firms in Russia. Almost half of the entrepreneurs wanted to finance future investment by internal profits. Although at the time of the survey long-term loans were not available, many managers explained that they would not be willing to accept a long-term loan because of the high risk and the high uncertainty of future economic evolution in Russia; a view that proved to be sound. According to the empirical approach of Fazzari et al. (1988), the sensitivity of investments to cash flow points to the existence of financing constraints.

The studies referred to above do not inquire about the start-up of the firms. Yet it is obvious from the literature covering mature market economies that this is an important aspect of private sector development. Surveys querying the opinion of the managers find that for small firms there is a lack of investment finance. Isakova and Klocho (1995) report that Ukrainian entrepreneurs cited the lack of finance as the number one constraint for business start-up.

To conclude, empirical findings in the existing literature on transition economies can be summarised as follows³:

1. There is mixed evidence for the existence of credit constraints among the Central European countries. The evidence suggests a higher probability that firms in CIS countries suffer from credit

market imperfections compared to those in the Central European countries.

2. There is mixed evidence for the existence of adverse selection in the credit markets of the transition countries.
3. Large and medium sized firms seem to have better access to external finance than the small, mostly de novo, firms.
4. Quite a number of entrepreneurs preferred to finance future investments with retained earnings, and did not apply for a bank loan.
5. Surveys that explicitly asked the manager's opinion confirmed that there was a great need for start-up or investment capital, yet that it was costly to obtain this through external finance.

4. The Data

The data come from an enterprise survey done in the second half of 1997 in Belarus, Russia and Ukraine in the framework of the above-mentioned project. The questionnaire covered aspects of ownership, finance, management and entrepreneurship, labour, production and basic information about the firm and the respondent. (For a detailed description of the questionnaire, see Bilsen and Mitina, 1998).

We focussed on particular regions (oblasts) that are important for the respective economies: Minsk and Gomel in Belarus, Kiev and East Ukraine in Ukraine and St.-Petersburg in Russia. Kiev and Minsk are capital cities where the headquarters of banks are located, and host the newly founded stock markets. Gomel and East Ukraine are industrial centres marked by heavy industry that were important pillars of the Soviet economy in the heydays of communist rule⁴. Nowadays these regions face enormous restructuring needs (see e.g. Van Zon, 1998; Simtchenko, 1999). St.-Petersburg is the second largest economic centre of Russia, benefiting from its position as one of Russia's most important harbours.

The whole sample consists of 600 firms of which 150 are in Belarus, 150 in Kiev, 150 in East Ukraine and 150 in St.-Petersburg. Within

each sub-sample the firms were equally stratified between new private enterprises (*de novo firms*) and firms that started operation before the start of transition. The latter consist of state owned enterprises and privatised enterprises. De novo firms were sampled from the manufacturing, trade and service sectors. State owned and privatised enterprises were mainly drawn from the manufacturing sector⁵. No restriction was imposed on the distribution between state owned and privatised enterprises.

The enterprises were selected from national business registers and local address books by the researchers involved in the project. The last source proved very useful to sample de novo firms, which are quite often micro firms that are too small to be registered in the national business register. Furthermore it helped to avoid ‘paper’ enterprises that were not operational. Table 1 gives an overview of the firms in the sample by country, firm type and size.

Note that the number of de novo firms and pre-transition firms is not the same as imposed by the sampling strategy. The stratification and selection of the firms for interview was made on the basis of the information from the business registers and local address books. After doing the interviews more detailed information about the ownership structure and the history of the firm was available that allowed us to make a more accurate classification.

Some firms in the category of state owned enterprises and privatised enterprises have a small number of employees. There are two reasons for this. The first is that our definition of state owned enterprises includes firms that are fully owned by the municipalities. These are often small and even micro enterprises. The second reason is that we capture in our sample firms that were set-up under the Perestroika regime as well. Managers were allowed to set up enterprises using leased assets from the state (Liuhto, 1999). De facto, the managers took strong leadership of the existing firms while de jure the state was still the full owner (EBRD, 1998). It was also permitted to set-up small enterprises with private funds and means. In our sample were

30 firms that started under Perestroika. Their median size in 1996 was 27 employees. The large de novo firm in St.-Petersburg is a subsidiary of a foreign company that received foreign direct investment, producing mainly for the Russian market. The one in Belarus is a booming service firm in the industrial region of Gomel.

The size classes of the de novo enterprises are comparable over the countries. Yet in the pre-transition firms regional differences can be observed in the sample. First, in Belarus more than 60 per cent of the pre-transition firms are still fully state owned. This is consistent with the slow privatisation process in this country (EBRD, 1998), and with the increased state control in the second half of the transition period (Simtchenko, 1999). The distribution between privatised and state owned enterprises for the other regions is similar. Second, both the privatised and state owned enterprises seem to be larger in St.-Petersburg than in Ukraine. However statistically, the means are not significantly different at the 5% rejection level.

Table 2 shows the distribution of the firms by sector and country. The concentration of state owned and privatised firms in the manufacturing sector, and of de novo firms in trade and services, is mainly a consequence of the sample stratification. Although not the prime target sectors for sampling pre-transition firms, almost 20% of these firms were operative in trade or services. Furthermore about 20% of the state and privatised firms operated in more than one sector, even though these are defined in broad terms. More than half of the multi-sector firms are de novo enterprises.

The respondents were in most of the cases persons with an influential position in the company. They were managers and/or owners of the company. Only 31 of the 600 questionnaires were answered by staff members, mostly accountants and engineers. For de novo firms the respondent was often the owner-founder of the company. In pre-transition firms top managers provided the answers, often assisted by their chiefs of the accounting or finance department.

A last interesting feature of the survey is the age structure of the firms. Since we investigate the financing of firm start-up, it is interesting to know in which year the firm was founded. It gives an indirect indication about the economic and financial market environment at start-up. It immediately shows as well the age of the firm and consequently its success as an entrepreneurial entity in surviving in the transition environment. One has to bear in mind that the survey was done six years after the start of transition in the CIS countries. Firms that exited the market before this point in time could not be sampled. To the degree that the characteristics of the exiting firms were different from the surviving firms the results are conditional (Dunne et al, 1989). One can also argue that six years is sufficient to miss the initial stock adjustment effects and disturbances immediately after the start of transition.

Table 3 gives an overview of the start-up cohorts by firm type. The pre-transition period was split into the years under communist planning, and the years under Perestroika⁶. Opportunities for firm management differed under Perestroika from the preceding period (Liuhto, 1999). As already argued, traces can be found in the size distribution of the pre-transition firms in our sample⁷.

No de novo firms started under communist planning or Perestroika. An interesting feature is that some state and privatised firms were started under transition. Municipalities can set up fully-owned enterprises, in which case they are classified as state owned, or partly owned, in which case they are classified as privatised enterprises. New state and privatised firms can also come from the split-up of a larger state enterprise, often in the process of restructuring.

5. How is Start-up and Restructuring Financed?

In order to answer this question we listed all de novo firms as start-ups and the privatised enterprises as restructuring firms. One can argue that state owned enterprises restructure as well. However one of the crucial factors for firm governance, namely ownership of the

assets, is not in private hands, and therefore they are not included in the present analysis.

We asked the respondents to indicate the percentage distribution of various types of funds used for the start-up or for the privatisation of the firm. Obviously state owned enterprises by definition were not privatised and their start-up was completely financed by the state. We report therefore for de novo and privatised firms only. The last option of the question allowed to fill in an unnamed source and to specify its weight. Table 4 shows the various financial sources and the corresponding averages by type of firm.

A first observation is that new firm start-up is in nine out of ten cases financed by the owner's savings. It usually is the largest portion in the start-up capital. One fourth of the new firms seek additional capital from friends and family. When used, its share in the start-up capital is rather low, yet the frequency of this source is the second highest after Own Savings. Less than one tenth of the new private firms used debt to finance start-up. Yet in cases where loans were obtained, they covered on average almost half of the start-up capital. Investment from other private firms is the third most frequently used source for financing start-up. Foreign investment only occurred in 10% of the de novo firms in our sample. However, when foreign funds were attracted, they represented on average a majority share in the start-up capital, sufficient for controlling the firm⁸. Only 3 % of the new private firms received support from a government program. Yet on average it constituted almost half of the start-up capital. "Other" financial resources for novo firms cover, among others, savings from employees, contributions from social organisations, and trade union funds.

The most important private financial source for financing privatisation appears to be the savings of the main owner. In almost half of the privatised firms it represents more than 55% of the capital of the privatised firm. The second most frequently used private financial source is privatisation vouchers. They are used in about one

quarter of the privatised firms, and represent on average 65% of the capital. Privatisation vouchers are distributed in two forms: Private Property Certificates and Compensation Certificates. Both are distributed for free. They can be used in auctions to bid or pay for assets that were designated for privatisation. In Auctions using the Private Property Certificates, preferential treatment is reserved for the personnel of the enterprise and its management. This often resulted in insider privatisation (OECD, 1997, p. 21), which is consonant with our findings. Investments from other private firms is the third most frequently used financial source, but on average the participation in the privatisation capital is lower.

It is noteworthy that in more than half of the privatised firms, state owned assets still constitute a crucial part of the total firm capital at the time of privatisation. The finding is consistent over all countries. This suggests that the privatisation process measured in terms of numbers of firms gives an over-optimistic picture of the transfer of enterprise assets into private hands. To find out whether this is a temporary or permanent feature, we looked at the share of total assets owned by the state at the moment of the interview⁹. For those firms that reported state owned assets at the time of privatisation, the average share declined from 65.2 % to 14.7% at the moment of the interview. This indicates that the relatively high share of the state in privatising enterprises is a temporary phenomenon, and that privatisation is a gradual process rather than an overnight swap of assets into private hands, even at the micro-economic level of the firm.

6. Conclusions

We investigated how entrepreneurs in transition countries financed start-up, and restructuring. Data of 215 de novo firms and 291 privatised firms are used to provide an empirical answer. The data come from an enterprise survey done in 1997 in Belarus, Russia and Ukraine. The main findings are that under the conditions of immature capital markets, the personal savings of the owner were of crucial

importance for financing both the start-up of new enterprises and the privatisation of state enterprises. Loans from banks were taken out in less than one in ten firms. A higher percentage of de novo firms obtained a bank loan than privatised firms. The asymmetric information problem at the start of the enterprise was bridged by borrowing from friends and family. This points to the importance of relational capital in the emerging financial market environment. Supplier credit and foreign capital was of comparable importance for private firm start-ups as bank loans. Few new private firms received such support in the start-up of their firm, but in the cases in which it occurred, the contribution was almost half of the start-up capital.

Voucher privatisation was found to be the second most important financial source in the privatisation and restructuring of previously state owned enterprises. We found that at the moment of privatisation, in the majority of cases the state still held an important stake in the capital. Yet this diminished gradually over time. Foreign capital, supplier credit and bank loans were far less important for privatised firms than for de novo firms. Cross investments from other private firms was often reported to make a major contribution to firm start-up and privatisation capital.

Taking into account that the survey was done before the outbreak of the Russian financial crisis in August 1998, one might expect that the probability of debt financing would diminish considerably, especially in Russia. This would mean that future enterprise development and restructuring would be more dependent on internal funding, and consequently on entrepreneurial qualities to keep the firm alive. Suggestions for further research are therefore to investigate the relation between entrepreneurial capital and financial capital in transition countries.

Notes

1. The importance of collateral for firm start-up has been clearly illustrated in Black, de Meza and Jeffreys, 1996.
2. On the condition that it is a deliberate and credible strategy of both parties to do so.
3. Note that all the studies mentioned are based on survey evidence before the start of the Russian financial crisis in August 1998.
4. East Ukraine has its stock exchange as well in Donetsk, yet it has a lower trading volume than the Kiev International Stock Exchange and the Ukrainian Stock Exchange, both hosted in Kiev.
5. Under communist planning trade was in the hands of trade organisations that were controlled by the ministries. Each had a monopoly in the whole Soviet Union for a certain range of goods. Finance and distribution services were also organised that way. After the start of transition, these organisations were abolished, making them irrelevant for sampling, or transformed into smaller units.
6. Perestroika means ‘restructuring’ or ‘rebuilding’. It was launched by M. Gorbachev at the 27th Party Congress of the Communist Party of the Soviet Union in February 1986. The laws that gave the managers the possibility to start and restructure enterprises were put in place in 1987, (Liuhto, 1999). Enterprises that started in the years 1987 to 1990 are therefore considered as start-ups under the Perestroika period.
7. The year of independence from the Soviet Union is taken as the starting year of transition. Ukraine declared itself independent in August 1991, Belarus in July 1991.

8. For a detailed study of the effects of foreign direct investment on firm performance see: Bilsen and Vanmaldegem, 1999.
9. Which is later than the date of privatisation.

Table 1: The distribution of firms by type and country and the corresponding size

<i>Country</i>	Belarus	East Ukraine	Kiev	St.-Petersburg	Total
<i>Firm type</i>					
State Owned					
No. of firms (sample share)	50 (33%)	12 (8%)	17 (11%)	15 (10%)	94 (16%)
Employment					
Average (min; max)	724 (5; 8500)	195 (16; 787)	826 (25; 3834)	1004 (3; 3199)	719 (3; 8500)
Privatised					
No. of firms (sample share)	32 (21%)	68 (45%)	59 (39%)	56 (37%)	215 (36%)
Employment					
Average (min; max)	947 (15; 3937)	458 (6; 12000)	510 (32; 4035)	1189 (6; 25004)	732 (6; 25004)
De Novo					
No. of firms (sample share)	68 (46%)	70 (47%)	74 (49%)	79 (53%)	291 (48%)
Employment					
Average (min; max)	36 (1; 600)	24 (0; 170)	34 (2; 300)	40 (0; 1200)	34 (0; 1200)
Total					
No. of firms (sample share)	150 (100%)	150 (100%)	150 (100%)	150 (100%)	600 (100%)
Employment					
Average (min; max)	470 (1; 8500)	242 (0; 12000)	313 (2; 4035)	581 (0; 25004)	400 (0; 25004)

Note: The data on employment are those for the year 1996. Source: own calculations.

Table 2: The distribution of firms by sector

<i>Sector</i>	Nr of firms	Distri- bution (%)	<i>Of which:</i> SOE's Nr. (%)	Privatised Nr. (%)	De Novo Nr. (%)
Manufacturing	267	44.5	41 (15%)	139 (52%)	87 (33%)
Trade	77	12.8	10 (11%)	17 (22%)	50 (65%)
Services	96	16.0	20 (21%)	13 (6%)	63 (66%)
Construction	11	1.8	1 (9%)	5 (45.5%)	5 (45.5%)
Multiple sectors	149	24.8	22 (15%)	41 (28%)	86 (58%)
Total	600	100.0	94 (16%)	215 (36%)	291 (48%)

Source: own calculations.

Table 3: Enterprises by year of start-up and type⁽¹⁾

<i>Period and year of starting production</i>	State owned	Nr. of firms Privatised	De novo	<i>Share in total sample (%)</i>
Communist rule	62	166	0	39
Perestroika	7	10	13	5
Transition				
1991	2	5	28	6
1992	7	9	33	8
1993	1	4	50	9
1994	4	7	60	12
1995	2	2	56	10
1996	3	6	41	9
1997	3	1	8	2
Total	91	210	289	100

(1) Start-up is defined as the date of starting production. For 10 firms the starting date of operation was not provided. Source: own calculations.

Table 4: Financial sources for the start-up of de novo firms and for the privatisation of previously state owned companies

<i>Financial sources</i>	<i>Start-ups</i>		<i>Restructuring (privatised firms)</i>	
	% of all start-ups	Average % share of start-up capital ⁽¹⁾	% of all privatised firms	Average % share of privatisation capital ⁽¹⁾
Own savings of main owner	89.4	67.3	46.9	55.1
Borrowing from friends and family	25.7	34.6	12.6	20.6
Foreign capital	10.3	56.1	3.9	22.9
Investment from other private firms	18.4	51.6	15.5	38.9
Supplier credit	9.9	45.7	2.9	30.0
Commercial or investment Loans	8.8	49.0	5.8	45
Government program	3.1	49.0	55.3	65.2
Other	8.2	63.6	41.2	59.8
Of which				
Equity	0.0	-	2.9	82.3
Privatisation vouchers	-	-	23.5	65.4

Source: own calculations

(1) Counting the firms that used that particular financial source only. Note that the percentages do not sum to 100 since quite a number of firms used more than one financial source. Of all de novo firms, 46% used one single source, 38% used two sources, 12 % used three and 4 % used four different sources to finance start-up. For the privatised firms the percentages are respectively: 52%, 28%, 10% and 9%.

Bibliography

- Bilsen, V. and Van Maldegem, P. (1999), Foreign Direct Investment and Enterprise Performance in Transition Countries. Evidence from Russia and Ukraine, *CBR Working Paper*, No. 144.
- Bilsen, V. and Mitina, E. (1998), Growth and entrepreneurship in de novo, privatized and state owned enterprises: evidence from a panel survey for the CIS countries, Questionnaire, variables, data entry, interview experience, quality control and coding of the answers. *Tacis-Ace T95-4095-R Working Paper*.
- Binks, M. and Ennew, C. T. (1996), Growing Firms and the Credit Constraint, *Small Business Economics*, vol. 8, pp. 17-25.
- Blanchflower, D.G. and Oswald, A. J. (1990), What makes a young entrepreneur? *NBER Working Paper* No. 3252.
- Bratkowski, A., Grosfeld, I. and Rostowski, J. (1999), *Investment and Finance in De Novo Private Firms: Empirical Results from the Czech Republic, Hungary and Poland*, DELTA, Paris, version April 99.
- Brito, P. and Mello, A. (1995), Financial constraints and firm post-entry performance. *International Journal of Industrial Organisation*, vol 13, pp. 543 – 565.
- Cornelli, F., Portes, R. and Schaffer, M. E. (1996), The Capital Structure of Firms in Central and Eastern Europe, *CEPR Discussion Paper*, No. 1392.
- Cressy, R. (1996), Are Business Startups Debt-Rationed?, *The Economic Journal*, vol. 106, pp. 1253 – 1270.

- Cressy, R. (1995), Commitment Lending Under Asymmetric Information: Theory and Tests on UK Startup Data, *Small Business Economics*, vol. 8, pp. 397 – 408.
- Dunne, T., Roberts, M. J. and Samuelson, L. (1989), The Growth and Failure of U.S. Manufacturing Plants, *Quarterly Journal of Economics*, vol. 104, no. 419, November, pp. 671-698.
- EBRD, (1998), Transition Report 1998, London, EBRD.
- Evans, D. and Jovanovic, B. (1989), An Estimated Model of Entrepreneurial Choice under Liquidity Constraints, *Journal of Political Economy*, vol. 97, No. 41, pp. 808 –827.
- Fan, Q., Lee, U. and Schaffer, M. E., Firms, Banks, and Credit in Russia, *CERT Discussion Paper*, No. 96/9.
- Fazzari, S., Hubbard, R. and Petersen B. (1988), Financing Constraints and Corporate Investment, *Brookings Papers on Economic Activity*.
- Filatovchev, I., Van Frausum, Y.G., Wright, M. and Buck, T. (1996), Privatisation and Industrial Restructuring in Ukraine, *Communist Economies and Economic Transformation*, vol. 8, No. 2.
- Holtz-Eakin, D., Joulfaian, D. and Rosen, H. S. (1994a), Entrepreneurial Decisions and Liquidity Constraints, *RAND Journal of Economics*, vol. 25, No. 2, pp. 334 – 347.
- Holtz-Eakin, D., Joulfaian, D. and Rosen, H. S. (1994b), Sticking It Out: Entrepreneurial Decisions and Liquidity Constraints, *Journal of Political Economy*, vol. 102, No, pp.53-75.
- Hughes, A. (1998), Growth Constraints on Small and Medium-Sized Firms, *ESRC Centre for Business Research Working Paper*, WP 107.

- Isakova, N. and Klochko, Y. (1995), *Experience Of Ukraine in Small Business Development*, Paper presented to the conference on “SME Development Policy in Transition Economies”, Wolverhampton, September 95.
- Leijonhufvud, A. and Rühl, C. (1997), Russian Dilemmas, *The American Economic Review*, vol. 87, No. 2, pp. 344 –348.
- Lindh, T. and Ohlsson, H. (1994), *Self-employment and Self-financing.*, Department of Economics, Uppsala University, 37 pp.
- Liuhto, K. (1999), The Transformation of the Soviet Enterprise and its Management: A Literature Review., *CBR Working paper*, No 146.
- Lizal, L. and Svejnar, J. (1998), Enterprise Investment During the Transition: Evidence from Czech Panel Data, *CEPR Discussion Paper* nr. 1835.
- OECD, (1998), *Entrepreneurship and Small Business in the Russian Federation*, OECD, Paris.
- OECD, (1997), *Foreign Direct Investment in Ukraine*, OCDE/GD/(97)166, OECD, Paris.
- Stiglitz, J. and Weiss, A. (1981), Credit Rationing in Markets with Imperfect Information, *The American Economic Review*, vol. 71, No. 3, pp. 393 – 410.
- Simtchenko, E. (1998), Comparative analysis of development of traditional and new firms in the transition economy of the Republic of Belarus, *Tacis-Ace T95-4095-R working paper*.

- Van Praag C.M. and Van Ophem, H. (1995), Determinants of Willingness and Opportunity to Start as an Entrepreneur, *Kyklos*, vol. 48, pp. 513-540.
- Van Zon, H. (1998), The Mismanaged Integration of Zaporizhzhya with the World Economy: Implications for Regional Development in Peripheral Regions, *Regional Studies*, vol.32, No. 7, pp. 607-618.
- Webster, L., Franz, J., Artemiev, I. and Wackman, H. (1994), Newly-Privatized Enterprises: A Survey, in Lieberman, I., Nellis, J., *Russia: Creating Private Enterprises and Efficient Markets*, The World Bank.
- Zaikina, V. (1999), Privatisation, ownership and economic performance. Evidence from the Ukraine, *Tacis-Ace T95-4095-R working paper*.