The Dynamics of Enterprise Financing in New EU Member States in Comparative Perspective: the Aftermath of the Crisis[1]

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This study employs Enterprise Survey data to analyze business environment constraints and financing sources for investment for Romanian and Bulgarian companies at the end of 2009 and investigates the change in financing sources after the global financial crisis relative to a pre-crisis period (2005). The study also investigates whether the ownership structure of a firm affects its ability to finance investment and obtain capital. It is found that Romanian enterprises are generally more confronted with business constraints than Bulgarian companies and that the three main areas of concern for Romanian enterprises are Tax Rates, Workforce Education and Access to Finance. In addition, we find evidence that in both countries foreign-owned companies find access to finance less of a constraint that companies with domestic ownership do, but curiously they do not access external financing sources as much as companies with domestic capital. In fact, in both countries companies with foreign capital rely more on internal-

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generated sources and less on debt financing than domestic-owned enterprises. Relative to the pre-crisis period, at the end of 2009 Romanian companies rely less on internal-generated funds, while they increase their use of bank debt, supplier/consumer credits and equity financing.
Key words: *financing sources, business constraints, crisis, Romania, Bulgaria*
JEL classification*: G32, P33*

Introduction

This paper analyses the major business constraints that firms operating in the 2007 New EU Member States (Romania and Bulgaria) currently face, with an emphasizing on enterprises' access to finance. In other words, we investigate the ability of Romanian and Bulgarian enterprises to access external funds for investment and try to detect any changes in this respect as a result of the global financial and economic crisis that significantly affected the vulnerable Romanian and Bulgarian economies. We are also interested in whether the ownership structure of the companies affects their ability to finance investment and obtain capital.

We begin with the premise that, if a company has easy access to external funds, then internal generated funds should not constitute the main source to finance investments. In addition, companies with a good financial situation, good perspectives and corporate governance practices should find external funds more easily accessible. On the other hand, if companies rely heavily on self-financing, this either means that financial constraints may be present, so external capital is not easily accessed or even is unavailable or firm circumstances make borrowed funds more costly.

This paper is organized in the following manner: Section 1 briefly presents the related literature, while Section 2 presents the data employed in the study. In section 3 the ten most important business constraints for Romanian and Bulgarian companies are analyzed relative

to the Eastern Europe and Central Asia group of countries. Section 4 investigates the dynamic evolution of main financing sources for companies operating in the two countries and the relationship between the financing strategy and the firm's ownership structure. Finally some conclusions are drawn.

Literature review

Studying sources of financing at a macroeconomic level, Aizenman et all. (2007) use the national income accounts to construct a self-financing ratio, indicating the stock of tangible capital supported by past national saving, relative to the actual stock of capital. They find that on average, 90% of the stock of capital in developing countries is self-financed, this fraction was stable throughout the 1990s and the greater integration of financial markets throughout the 1990s has not changed the dispersion of self-financing rates. In addition, they notice that countries with higher self-financing ratios grew significantly faster than countries with low self-financing ratios and conclude that financial integration failed to offer new net sources of financing capital in developing countries.

At a micro level, Ruiz-Vargas (2000) analyzes the differences in small business financing sources among various groups in Puerto Rico and finds that non-native owned businesses have a higher access to credit markets than natives owing perhaps, to their wealth status and economic power.

Thakor and Wilson (1995) theoretically examine the impact of bank capital requirements on a borrower's choice of financing source. They show that borrowers that approach banks are necessarily of intermediate quality and this set of borrowers diminishes as bank capital requirements increase. In addition, the authors notice that holding quality fixed, growth-oriented borrowers are more likely to prefer the capital market than borrowers expecting high cash flows early when facing a sufficiently high capital requirement.

Chow and Fung (2000) use firm level data of manufacturing enterprises in Shanghai during the period of 1989–1992 and show that small manufacturing firms in Shanghai are less liquidity-constrained than their larger counterparts in financing their fixed investment.

Laeven (2002) uses data on 198 Korean firms for the period 1991–1997 and estimates several specifications of a dynamic investment model to assess the financing constraints of Korean firms. He finds that Korean firms suffered from informational asymmetries and severe financing constraints during this period, and that these imperfections differ across firms. The study also suggests that the government's change in focus towards SMEs has been successful in the sense that it has reduced financing constraints for these type of firms and that firms with concentrated ownership are more financially constrained than firms with dispersed ownership. Klapper et all. (2002) use an extensive database of over 97,000 private and publicly traded firms in 15 Eastern and Central European countries and find that SMEs seem to constitute the most dynamic sector of the Eastern European economies, although these firms appear to have financial constraints that impede their access to long-term financing and ability to grow. Watson and Wilson (2002) use a sample of 629 UK SMEs over the five-year period from 1990 to 1995 and find evidence consistent with a pecking order in which retained equity is preferred over debt.

Perotti and Vesanver (2004) study the financing of enterprise investment in listed Hungarian firms during the first years of transition. Their empirical results indicate significant financial constraints even among the better-known firms in the period from 1992 to 1998. Also, they find evidence that foreign-owned firms do not suffer from limited external finance, state ownership does not alleviate capital constraints and larger firms do not appear to be less constrained than the smaller firms, which contrasts with the evidence in Western countries. Finally, Klapper et all (2006) analyze Polish service industry micro, small and medium enterprises (SMEs) and conclude that there is a negative influence of profitability on leverage ratios (more profitable

firms use less external financing), which supports the pecking order theory that in environments with greater asymmetric information (such as weaker credit information) firms prefer to use internal or inter-firm financing.

Data

All data used in this study is provided by Enterprise Surveys, The World Bank Group. Enterprise Surveys collect information about a country's business environment, how it is perceived by individual firms, how it changes over time, and about the various constraints to firm performance and growth. Data are available on 100,000+ firms in 123 countries and used to create indicators that benchmark the quality of the business and investment climate across countries. Companies included in the survey are included in one of the following categories, according to the number of employees: 5-19 (small), 20-99 (medium), and 100+ employees (large-sized firms). For Bulgaria, the enterprise survey for the year 2009 questioned a total of 288 companies, of which 139 micro/small, 96 medium and 56 large enterprises, while for the year 2005 the survey covers 208 companies, of which 116, 53 and 39 are respectively micro/small, medium and large. In the case of Romania the sample is larger, with 498 companies included in the 2005 survey (190 in the micro/small category, 191 medium and 117 large) and 541 in the 2009 survey (175 micro/small, 183 medium and 183 large).

Business environment constraints

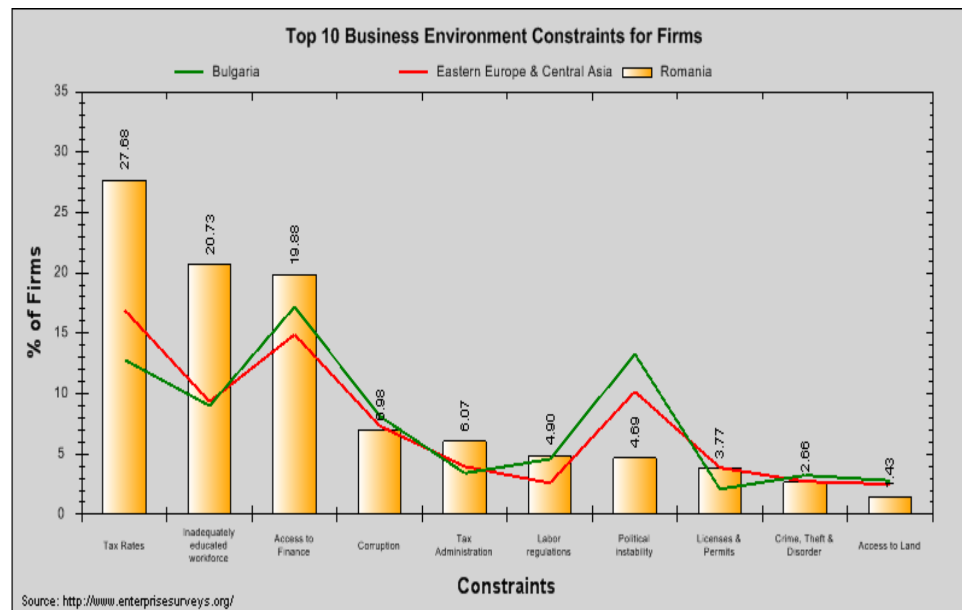
According to Popescu (2009), the „business environment” in its complexity and components includes all the external (exogenous) factors: the natural, economic, technological, social and institutional factors, likely to constrain, to validate or to modify the business decisions.

Enterprise Surveys delineate 10 business environment constraints that companies operating in different economies around the world may face. These are: Tax Rates, Inadequately Educated Workforce, Access to Finance, Corruption, Tax Administration, Labor regulations, Political instability, Licenses & Permits, Crime, Theft & Disorder and Access to Land.

Assessing the business environment constraints in the two Southern European countries by using information provided by Enterprise Surveys, we find that Romanian enterprises are generally more confronted with business constraints than Bulgarian companies and even than the group of the ten Eastern European and Central Asia economies with the highest constraints faced by their companies (See Figure 1).

At the end of 2009, the three main areas of concern for Romanian enterprises are Tax Rates, Workforce Education and Access to Finance: 27.08 percent of the Romanian companies that participated in the survey found tax rates to be the biggest constraint, while 20.73 percent think that Workforce Education is the most significant business constraint they have to face and 19.88 percent consider Access to Finance to be their highest concern while operating in Romania. Areas that pose the least concern for Romanian firms are Crime, Theft & Disorder (2%) and Access to Land (1.43%). The only areas where both Bulgarian companies (the green line) and the average Eastern European and Central Asia companies (the red line) find business constraints more significant than the Romanian companies are Corruption, Political instability, Crime, Theft & Disorder and Access to Land. It becomes evident after observing Figure 1 that business constraints for Bulgarian companies are relatively similar to constraints that the average Eastern European and Central Asia companies face, while these constraints are significantly higher for companies operating in Romania.

Figure 1: Top 10 Business Environment Constraints for Firms (2009)

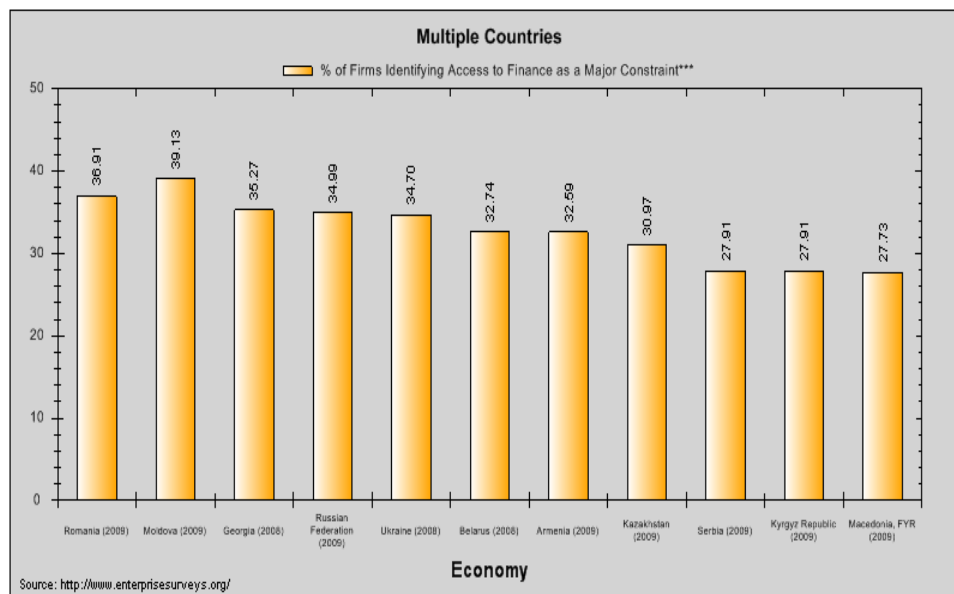


Source: Enterprise Surveys, the World Bank Group

At the end of 2009, Romania occupied a worrying second place in the EECA group of countries whose companies identify Access to Finance as a major constraint: Figure 2 shows the ten countries in the EECA region with the highest percentage of companies identifying Access to Finance as a major constraint in conducting business in the country. We can see that 36.91 percent of Romanian companies find access to finance to be a major business constraint, surpassed only by Moldova, where 39.13 percent of the companies responded in a similar manner. On the other hand, only 17.25% of Bulgarian companies identified Access to Finance as a major business constraint, this being the reason why Bulgaria is not present amongst the ten countries in the chart below.

In addition, we find evidence that in both countries foreign-owned companies do not suffer as much from limited access to external finance: Appendix 1 shows that in both cases companies with foreign ownership find access to finance less of a constraint that companies with domestic ownership do, but the difference is clearer for Romania.

Figure 2: Firms identifying Access to Finance as a major Constraint (%) (2009)



Source: Enterprise Surveys, the World Bank Group

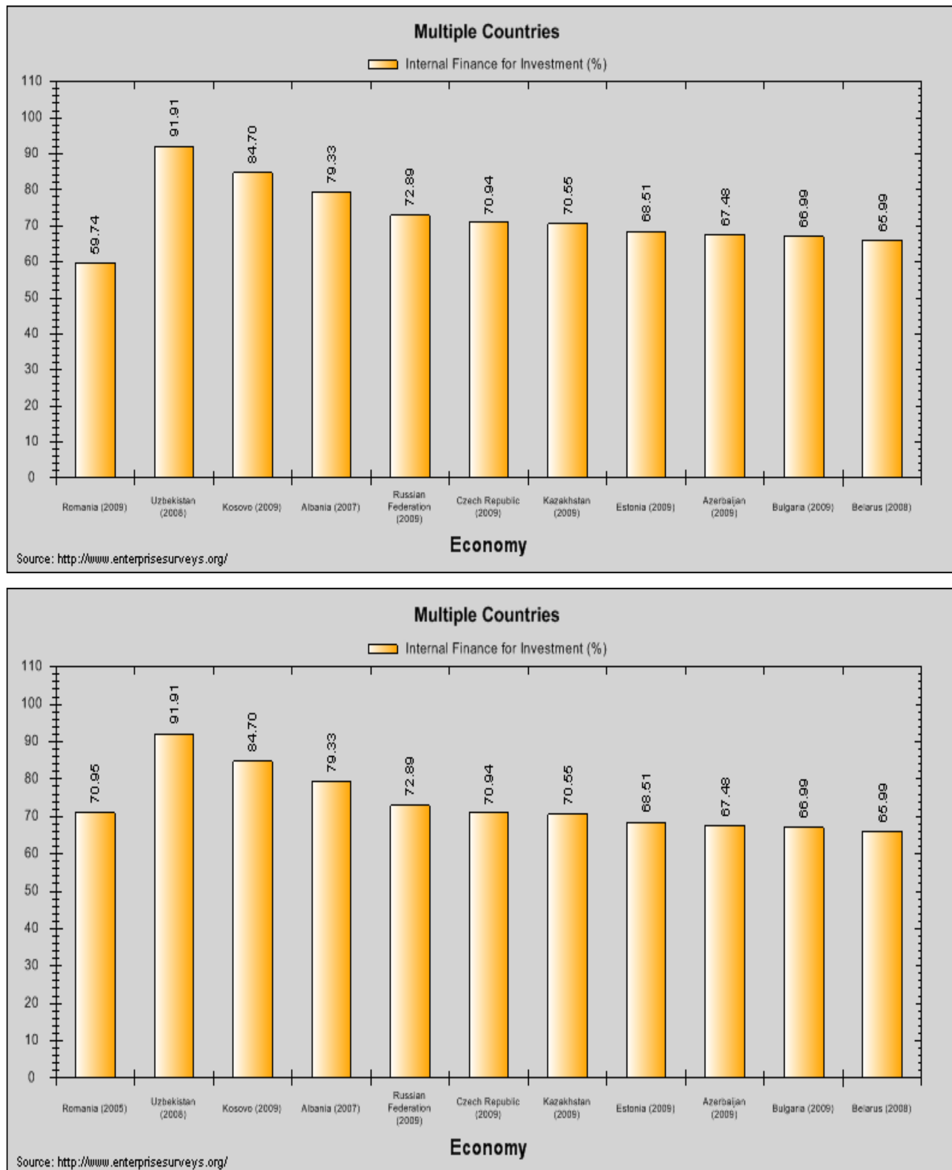
Dynamics of financing sources

In this section we investigate the dynamic evolution of main financing sources for companies operating in Romania and Bulgaria as well as the relationship between the financing strategy and the firm's ownership structure.

Internal financing for investment

At the end of 2009 only 59.74 of Romanian companies capital employed for investments came from internal sources, decreasing from a value of 70.95% at the end of 2005 (Figure 3). The percentage of internal funds found for Romanian firms at the end of 2009 is the lowest amongst the Eastern European and Central Asia (EECA) countries included in the analysis, respectively Uzbekistan, Kosovo, Albania, Russian Federation, Czech Republic, Kazakhstan, Estonia, Azerbaijan, Bulgaria and Belarus. These are the countries with the highest value for the indicator in the EECA region. The chart below shows that companies in Uzbekistan are relying almost exclusively on internal financing (91.91%), followed by Kosovo (84.7%) and Albania (79.33%), while the companies with lower levels of self financing are found in Bulgaria (66.99%) and Belarus (65.99%). In conclusion, if in 2005 Romanian companies relied more on internal finance and the percentage of internal sources was similar to the average for the ten EECA countries with the highest level of self-financing, we currently encounter a low level of internal financing in both Romania and Bulgaria relative to other EECA economies, suggesting that this source of financing became more expensive for enterprises in the two countries, perhaps due also to tax constraints, which constitutes, as mentioned, before the biggest business constraint for Romanian companies. Indeed, two of the known disadvantages of using internal funds for investment are the higher cost of this financing source due to the fact that it is not tax-deductible and also that losses (shrinking of capital) are not tax-deductible.

Figure 3: Internal Finance for Investment: Romania (2005-2009) vs. Eastern European and Central Asia countries



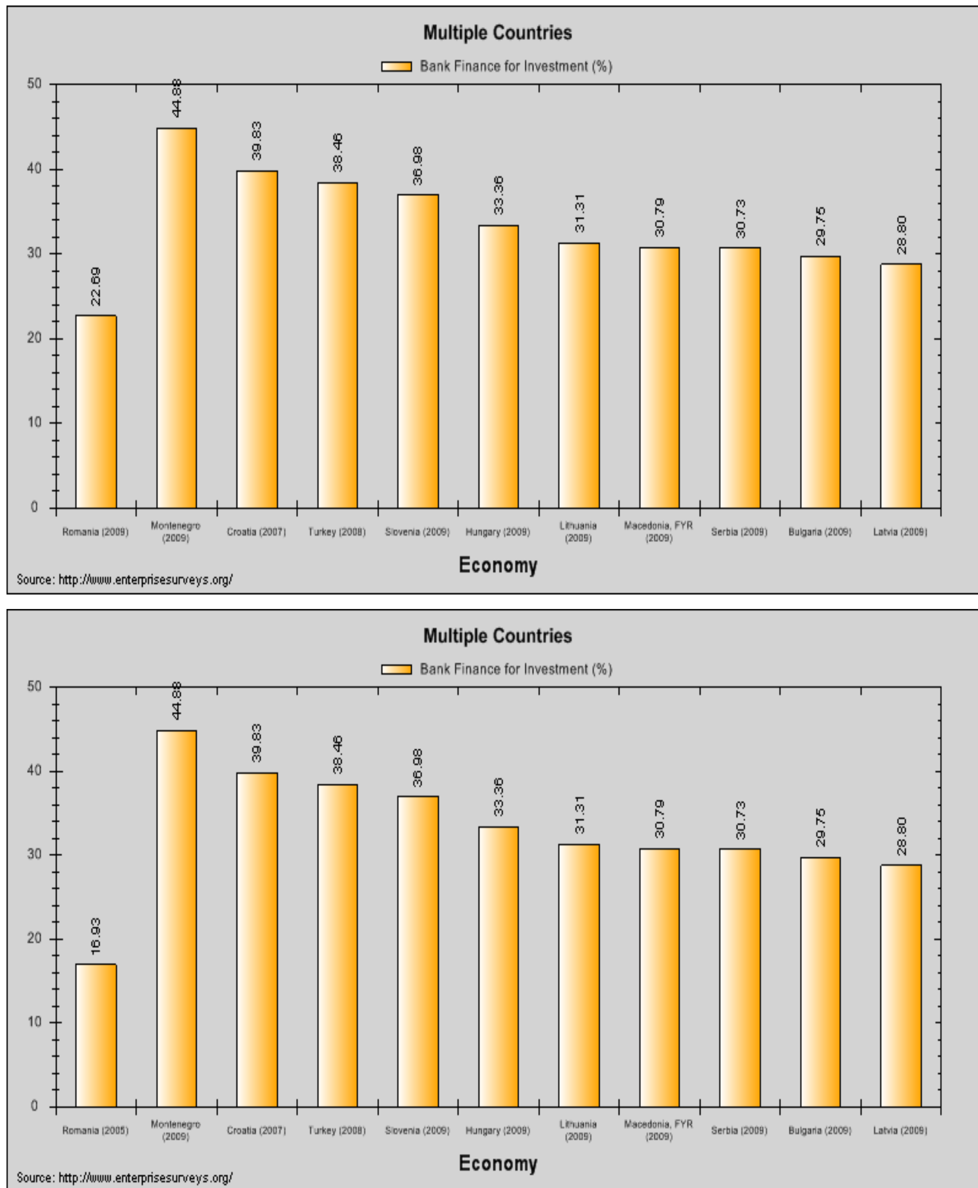
Source: Enterprise Surveys, the World Bank Group

Somewhat peculiar, Appendix 2 shows that foreign-owned firms from Romania and Bulgaria rely more heavily on internal sources that domestic-owned companies do, and the difference is impressive in the case of Bulgaria: 94.88% of foreign-owned companies' funds comes from internal-generated cash flows, while the percentage is 62.33 for domestic-owned enterprises. This suggests that in both countries companies with foreign ownership find external capital less accessible.

Bank sources for investment

On the other hand, the use of bank credits for investment by Romanian enterprises increased in 2009 relative to the pre-crisis period (2005), although remains modest in comparison with other EECA countries (Figure 4 presents Romania relative to the ten countries in EECA area where we encounter the highest percentage of bank sources used for investments by local companies): in 2009, 22.09% of the capital used for investments by companies operating in Romania came from bank sources, while the percentage was only 16.93 in 2005. When looking at other countries in the area, we notice that when it comes to bank financing Romania is well behind other economies in this group, while the first places are occupied by Montenegro (44.88%), Croatia (39.93%), Turkey (38.48%), Slovenia (36.98%) and Hungary (33.36%). Bulgaria, with 29.75 percent of investment capital of companies coming from bank sources is well above Romania in this respect, but still amongst the last countries in the EECA group in Figure 4 (ninth place).

Figure 4: Bank Finance for Investment: Romania (2005-2009) vs. Eastern European and Central Asia countries



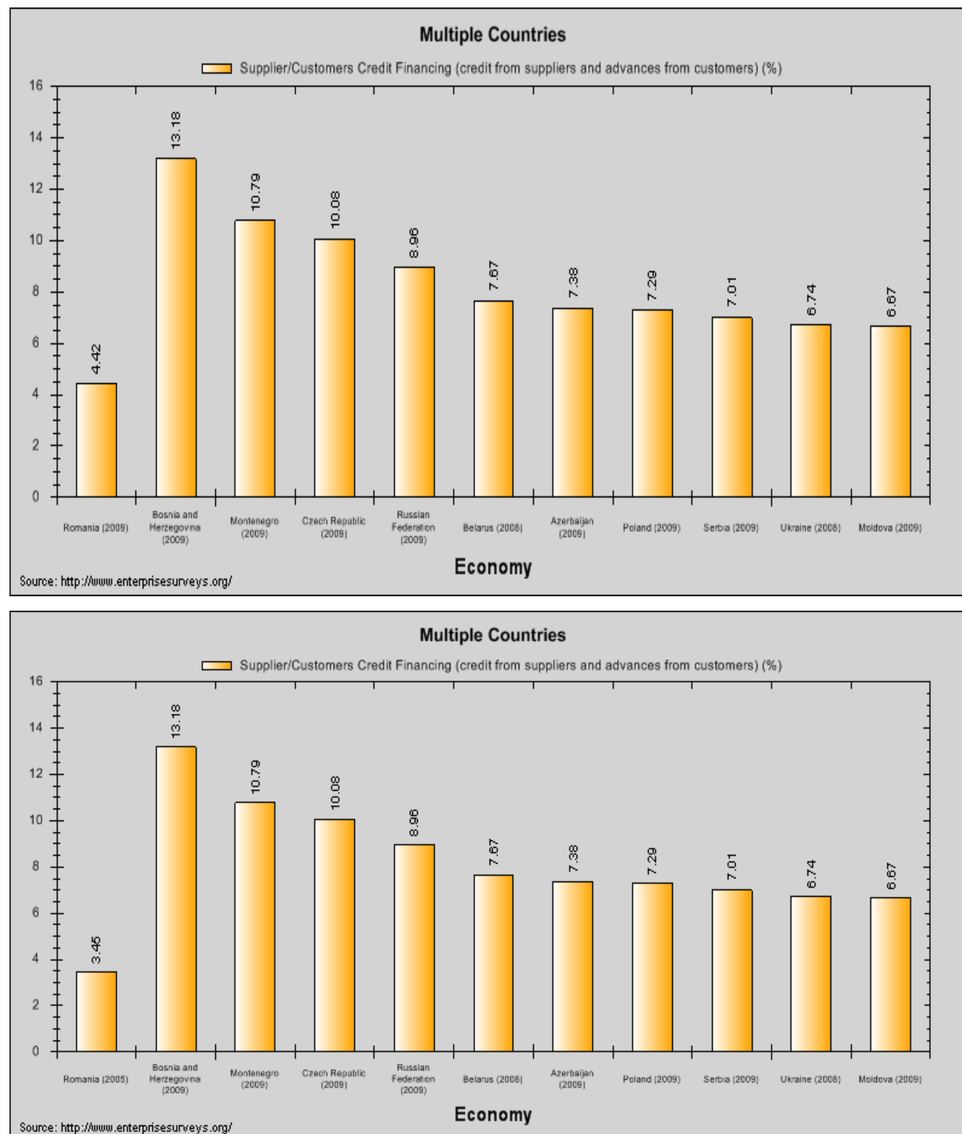
Source: Enterprise Surveys, the World Bank Group

In line with the preceding findings, when it comes to the ownership structure we find that foreign-owned companies in Romania and Bulgaria access bank funds less than domestic companies, with the most significant difference encountered in the case of Bulgaria: 5.12 of capital employed for investments by foreign-owned companies comes from banks, relative to 33.86% in the case of domestic-owned companies. For Romania, the percentage of capital having banks as a source is 13.25 for foreign-owned enterprises and 23.74 for domestic-owned firms.

Supplier/Customer Credit Financing

When it comes to relying on credits from suppliers or advances from customers as a source for financing investments, we notice that Romanian companies slightly increased this funding source from 2005 (3.45%) to 2009 (4.42%), but not enough to be part of the ten countries in the EECA area with the highest level for this indicator (Figure 5). The highest percentage of funds coming from supplier/customer credits is encountered in the case of companies from Bosnia and Herzegovina (13.18%), Montenegro (2009) and Czech Republic (10.08%). Bulgarian companies have only 2.67% of investment funds obtained from this source, not enough to be part of the top ten included in Figure 5. Although a position of trust with suppliers/customers can ease cashflow concerns for a company, our findings suggest that neither Romanian nor Bulgarian companies are in the position to beneficiate from such an advantage.

Figure 5: Supplier/Customer Credit Financing: Romania (2005-2009) vs. Eastern European and Central Asia countries



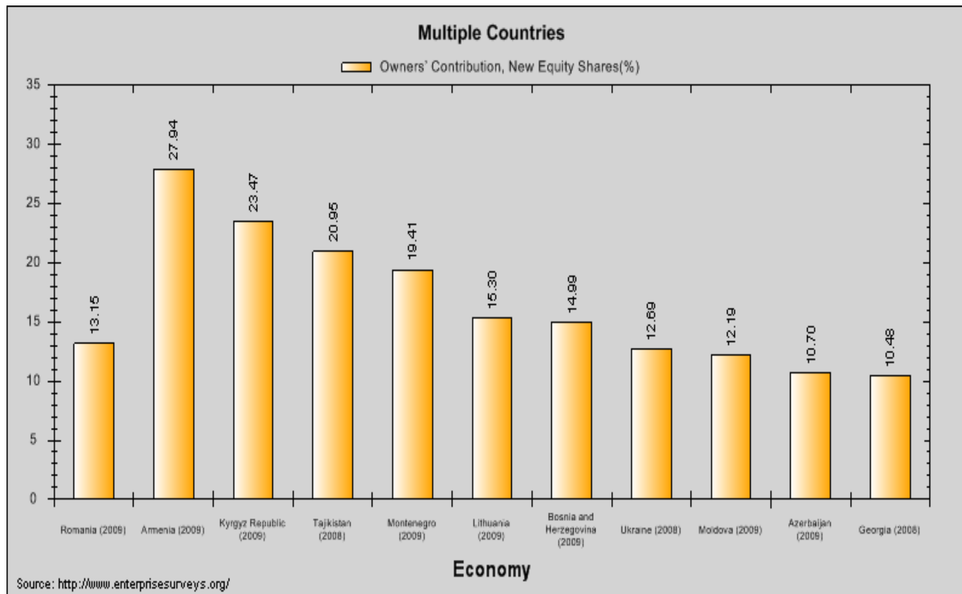
Source: Enterprise Surveys, the World Bank Group

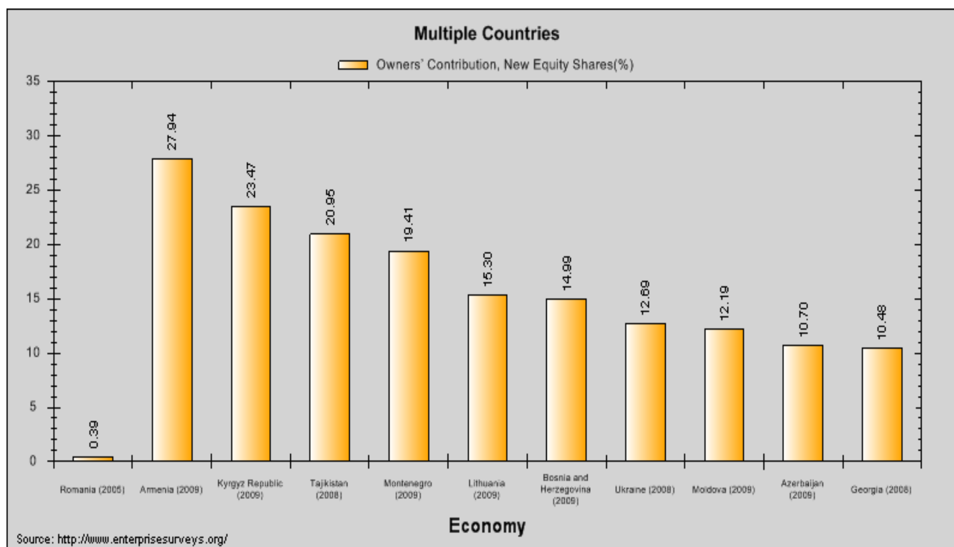
The relationship between the ownership structure and external financing does not change relative to previous observation: Foreign-owned companies in Bulgaria do not use at all supplier/customer credits as a source of financing investments, while for Romanian enterprises this source of funds is accessed in a similar manner by domestic-owned and foreign-owned companies (not presented).

Owners' Contribution, New Equity Shares

Perhaps the most notable change in financing sources for Romanian enterprises between 2005 and 2009 is found in the equity financing category (See Figure 6). If in 2005 only 0.39% of funds employed to finance investments came from equity financing, in 2009 the percentage increased to 13.15%, the seventh highest percentage in the EECA economies. The fact that post-crisis Romanian companies rely more heavily in equity financing as a source of funds may imply that debt financing became less affordable or lenders are not willing to provide funds anymore. On the contrary, Bulgarian companies do not use equity financing to obtain funds, only 0.60% of investment funds coming from this source at the end of 2009. Countries in the EECA region where companies rely most on equity financing are Armenia (27.94%), Kyrgyz Republic (23.74%) and Tajikistan (20.95%).

Figure 6: Owners' Contribution, New Equity Shares (%): Romania (2005-2009) vs. Eastern European and Central Asia countries





Source: Enterprise Surveys, the World Bank Group

In addition, contrary to previous findings, we notice that foreign-owned companies operating in Romania rely more heavily on equity financing that companies with Romanian capital do (17.42% relative to 12.68%), perhaps due to their superior experience in the field (Appendix 4). On the other hand, companies with foreign capital operating in Bulgaria do not make use of equity financing.

Conclusions

We employ Enterprise Survey data to analyze business environment constraints and financing sources for investment for Romanian and Bulgarian companies at the end of 2009 and investigate the change in financing sources after the global financial crisis relative to a pre-crisis period (2005). The study also investigates whether the ownership structure of a firm affects its ability to finance investment and obtain capital.

We found that Romanian enterprises are generally more confronted with business constraints than Bulgarian companies and even than the average Eastern European and Central Asia companies and that the three main areas of concern for Romanian enterprises are Tax Rates, Workforce Education and Access to Finance. The only areas where both Bulgarian companies and the average Eastern European and Central Asia companies find business constraints more significant than the Romanian companies are Corruption, Political instability, Crime, Theft & Disorder and Access to Land. In conclusion, business constraints for Bulgarian companies are relatively similar to constraints that the average Eastern European and Central Asia companies face, while these constraints are significantly higher for companies operating in Romania. In addition, at the end of 2009 Romania occupied a worrying second place in the EECA group of countries whose companies identify Access to Finance as a major constraint, but this con-

straint is seen as less of a problem by foreign-owned companies operating in the country.

Nevertheless, although they to not find access to external sources of capital a major problem,

Foreign-owned enterprises do not access external financing sources as much as companies with domestic capital. On the contrary, these companies rely more on internal-generated sources and less on debt financing than domestic-owned enterprises.

We find that overall at the end of 2009 Romanian companies rely less on internal-generated funds, while they increase their use of bank debt, supplier/consumer credits and equity financing relative to the pre-crisis period (2005).

Hence, our results suggests either that companies in Romania and Bulgaria seem to be less financially constrained in the post-crisis period, due perhaps by easing credit conditions, either that internal-generated sources became less available as a result of the crisis. Looking at the evolution of the value of the collateral needed for a loan, we find that it decreased in 2009 relative to 2005 in both countries, implying that easing credit conditions may be a valid reason for the increase in external financing by companies. On the other hand, the number of companies with checking or savings accounts decreased over the analysis period in the case of Bulgaria (data is unavailable for Romania), implying that the second given reason may also have some weight.

We also can report that companies with foreign capital operating in Romania and Bulgaria prefer to rely on own-sources of capital to finance investments and less on debt financing.

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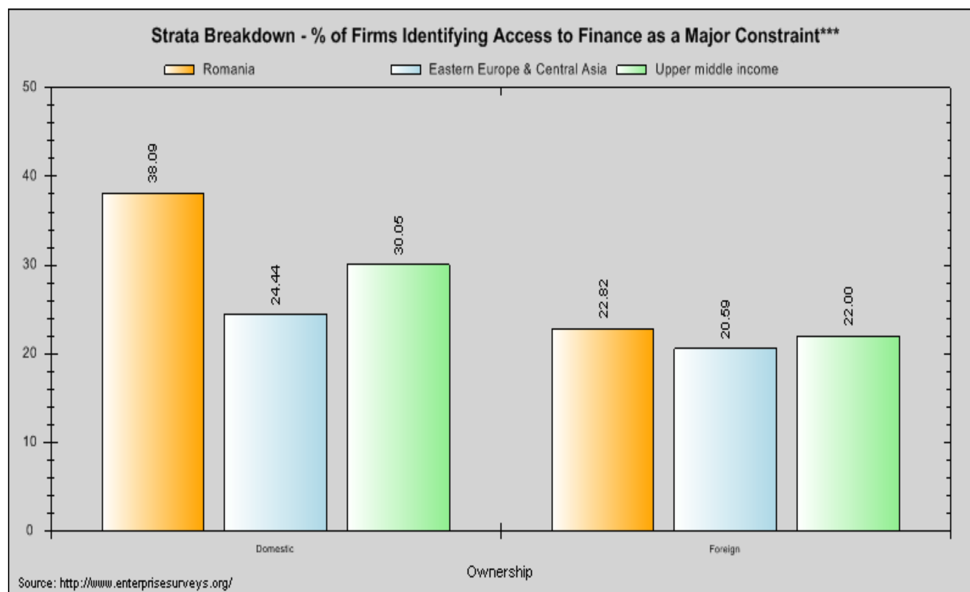
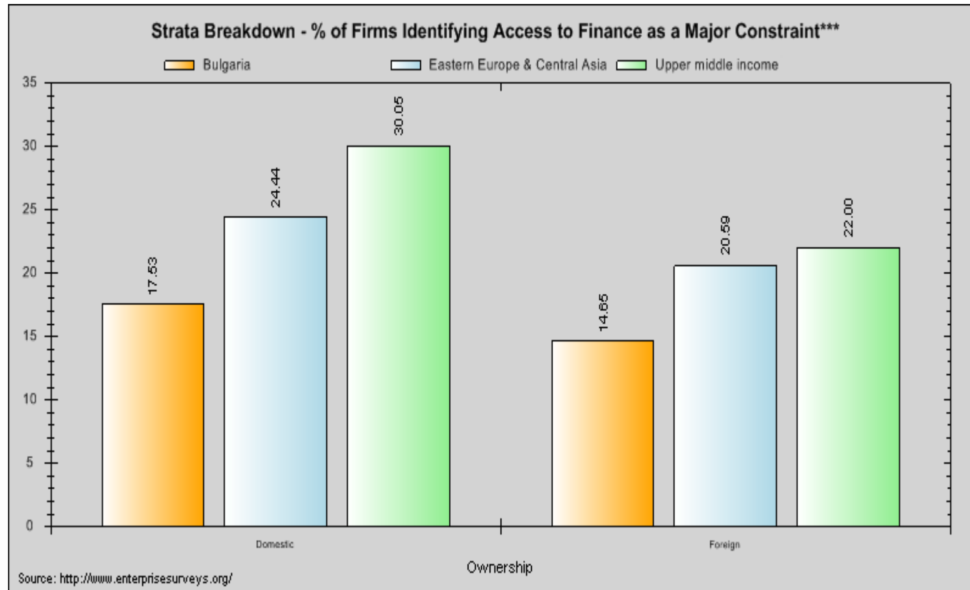
Appendix 1

Figure 7: Firms identifying Access to Finance as a major constraint (%) (2009)

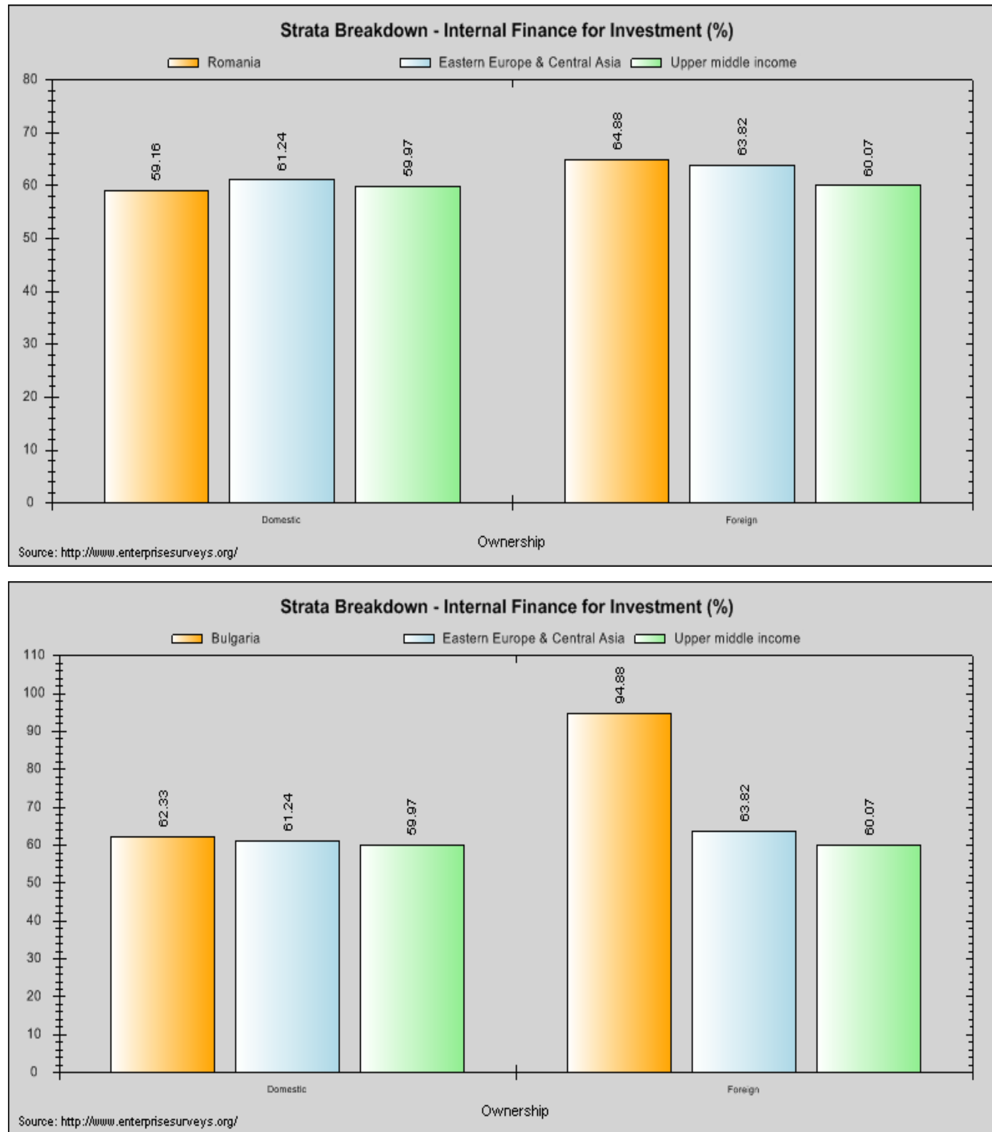




Source: Enterprise Surveys, the World Bank Group

Appendix 2

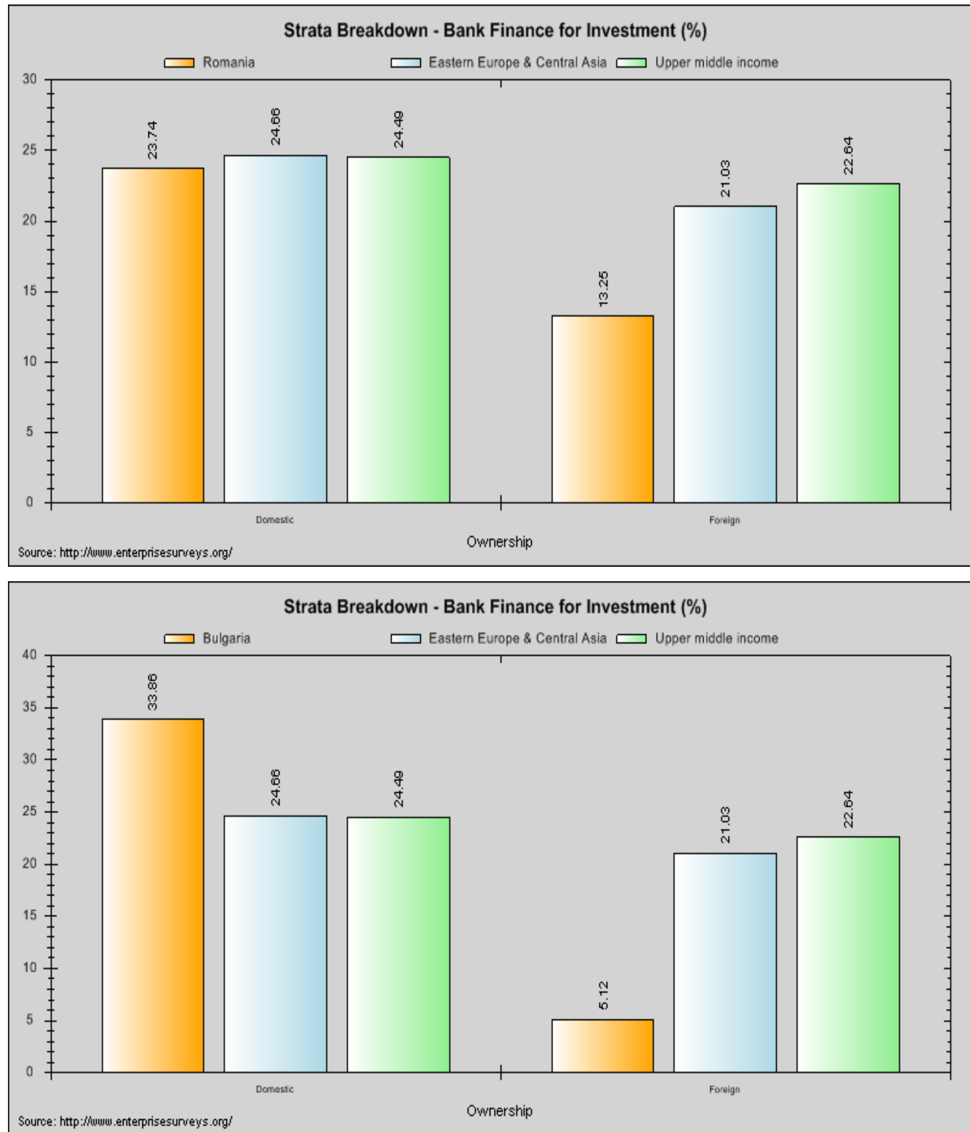
Figure 8: Ownership structure and self-financing (2009): Romania vs. Bulgaria



Source: Enterprise Surveys, the World Bank Group

Appendix 3

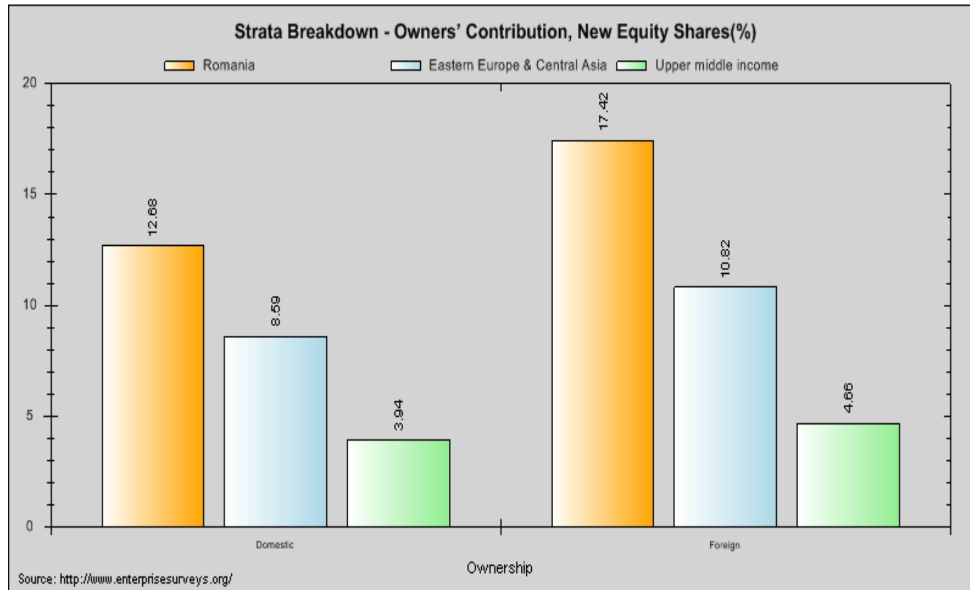
Figure 9: Ownership structure and bank-financing (2009): Romania vs. Bulgaria



Source: Enterprise Surveys, the World Bank Group

Appendix 4

Figure 10: Ownership structure and equity financing (2009): Romania



Source: Enterprise Surveys, the World Bank Group