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Magdalena Rădulescu & Elena Druica

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The impact of fiscal policy on foreign direct investments. Empiric evidence from Romania

Magdalena Rădulescu\textsuperscript{a*} and Elena Druica\textsuperscript{b}

\textsuperscript{a}Faculty of Economic Studies, Department of Finance, University of Pitesti, Pitesti, Romania; \textsuperscript{b}Faculty of Business and Administration, University of Bucharest, Bucharest, Romania

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Economic stimulus programmes can be an incentive for foreign investment, but many developing countries do not have the financial resources to successfully compete with the investment promotion packages of developed countries. Once the Central and Eastern European (CEE) countries acceded to the eurozone, they will lose their monetary instruments to adjust the macroeconomic imbalances. Using linear regression, this article presents the impact of the fiscal and monetary policies on attracting the foreign direct investments (FDIs) in Romania, based on monthly data series during 2000–2010. Based on economic literature and on such empiric analysis, the article will propose some directions for the Romanian macroeconomic policy in the short-term in the context of crisis, because the FDIs are the engine for recovery and economic growth. In Romania, empiric results have shown that monetary factors such as higher interest rates and higher inflation attracted FDIs. Fiscal factors (mainly direct taxes) seem to play a less important role, being relevant only in the long-term. So, Romania should also focus on improving the other non-financial factors that greatly influence the investment environment here (infrastructure, legal and political stability). Only then can the fiscal stimulus be effective in attracting FDIs and supporting the economic growth in the same time. The article begins with presenting some findings from the economic literature regarding taxation and FDIs, it then follows the empiric analysis for Romania and ends with conclusions and some issues for a further research.

Keywords: foreign direct investments (FDIs); Central and Eastern European countries (CEE); financial macroeconomic policies; Romania

JEL classification: F21, F23, G01, G24, G38

1. Introduction

Since the early 1990s developing countries have increasingly liberalised, privatised and deregulated their service industries, with a view to greater participation in the global economy. More welcoming policies on foreign direct investments (FDIs) have been a prominent component of this trend. National policies on FDI typically feature measures aimed at both attracting and discouraging inflows. Policies to attract FDI such as tax breaks, favourable regulatory treatment and subsidies of various sorts are usually focused on manufacturing. Meanwhile, policies restricting inward FDI are mainly concentrated in the service sector. This increased competition led more countries to their

\*Corresponding author. Email: magdalena.radulescu@upit.ro

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present similar conditions before the investors with regard to the fiscal regime, qualification of working force and infrastructure.

An analysis focused on the impact of the financial macroeconomic policies on FDIs is very important, not only in the current crisis period, but also in the view of acceding of many Central and Eastern European (CEE) countries to the eurozone. They will lose the instruments of the monetary policy and will be based only on the fiscal-budgetary policy and wages policy which depends also on the fiscal ratio. The current crisis proved that in many cases, monetary policy seemed to be an inefficient way to fight against recession and to boost the economic activity, because investors, and people generally, became very prudent regarding investments, and even about consumption.

FDIs are the engine for economic recovery and economic growth. They are responsible for the technological spillovers in the host economy, by the increase of the labour productivity and of export competitiveness and the transfer of know-how.

So, based on the findings of economic literature and the experience of other developed European countries, the aim of this article is to test empirically the impact of the fiscal and budgetary policy on FDIs in Romania. Using linear regression, this article presents the impact of the fiscal, budgetary and monetary factors on attracting FDIs in Romania, based on monthly data series during 2000–2010. Based on economic literature and on such empiric analysis, the article will propose some directions for the Romanian economic policy in the short-term in the context of crisis and in the long-term, after we adopt the euro and will not have an autonomous monetary policy and will be based only on fiscal policy. There are also some important directions for future research regarding the impact of the fiscal policy and some important non-financial factors (infrastructure, legal and political stability) on FDIs.

A series of studies in European countries suggests that taxation has a relatively low impact on FDIs as a result of reduced influence of taxes on relocation costs (Edmiston, Mudd, and Valev, 2003). Other authors show that a high level of corporate income tax discourages FDI inflows even though other factors, including volume and quality of goods and services, would be favourable to attracting FDIs. Thus, further analysis of FDIs flows between seven origin countries of multinational companies (Austria, Germany, France, Italy, the Netherlands, the UK and the US) and eight host countries (Bulgaria, Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia and Romania) during 1995–2003, Christian Bellak and Markus Leibrecht concluded that corporate income tax is a key factor in location decisions of foreign companies, having almost equal importance as the labour cost factor. A one percentage point reduction in the effective rate of corporate income tax may lead to a maximum increase FDI inflows by 4.5% (Leibrecht and Bellak, 2005).

Bénassy-Quéré, Fontagné, and Lahrèche-Révil (2001) studied the sensitivity of FDI from the tax rates for 11 OECD countries over the period 1984–2000 and they concluded that tax rates play a significant role in investment location for FDIs. Disputes about the importance of corporate taxation on FDIs location are lit, especially because many empirical studies regarding the elasticity of FDI to corporate taxation have focused most often on the issue of taxation.

The aim of this article is to analyse if the fiscal and budgetary factors impacted greatly on FDIs attracted to Romania in the last decade, including the crisis period. Romania is a developing CEE country that needs FDIs to develop. Economic literature has shown that fiscal incentives, spending for infrastructure and the depreciation of the national currency are important, but they cannot compensate for the lack of other important factors of the business environment, especially now, in such acerb competition, when all the countries
have used their tax incentives to become more friendly for the foreign investors. CEE countries focused on lowering tax, to attract FDIs, but there were other factors they could not improve, especially in the less developed CEE countries. And that was reflected by the FDIs outflows during the crisis period. Moreover, some CEE countries that avoided the crisis have invested in intensive sectors and oriented the FDIs inflows mainly to exports. But Romania and Bulgaria could not succeed in retaining the large FDIs attracted before the crisis, although they have the lowest tax on profit levels among CEE countries. The foreign investors did not consider these countries as stable ones. So, the question is whether lowering the tax, especially corporate tax on profits, can be the best, most efficient solution for these countries in their race to attract FDIs in the future? There are other taxes paid by the companies to the budget that are not appealing for the foreign investors and there is also corruption and bureaucracy. In Romania, there were a few Greenfield investments. Most of FDIs were mergers and acquisitions and reinvested profits. And most of them were attracted by the fiscal incentives and inflation rate that increased the companies’ profits. High interest rates and a depreciated national currency were also important for attracting the foreign investors. But some of these investments flowed away during the crisis period. They didn’t support Romanian economic recovery. So, what will be the solution for Romania in the future? Once it enters the eurozone, it will not have the monetary instruments to support FDIs inflows. And how efficient is the direct and indirect tax or budgetary spending in attracting FDIs? Can Romania be based only on its fiscal and budgetary policy in becoming more appealing to foreign investors? This question is valid for all developing countries, especially the ones that do not have their own currency. The empiric analysis shows the financial factors which impact more on FDIs in the short- and the long-term. The conclusions of such an analysis are important for designing an investment policy in the near future, mainly in the crisis context when countries face so many financial constraints.

Section 2 presents the findings of the economic literature regarding the use of the tax policy to attract FDIs and some evidence from European emerging countries or developed countries, to see the arguments for and against the efficiency of the fiscal policy for attracting FDIs. Recently many authors have supported the idea that tax policy seems to be less and less efficient and some other non-financial factors are more important in the actual context. Section 3 presents the econometric results of the linear regression and VAR techniques built for FDIs that show the impact of the fiscal and budgetary instruments on FDIs and comments the findings for Romania. The results for Romania are in line with the literature review and the experiences of the European countries in the last decade. Section 4 concludes the article and presents some important directions for a future research regarding the impact of the fiscal policy and some important non-financial factors (infrastructure, legal and political stability) on FDIs.

2. The impact of the fiscal policy on the foreign investments. Literature review

In recent years, the globalisation process and the gradual elimination of barriers to capital movements, including FDIs, across countries have led to the emergence of new issues. In the presence of international capital mobility, home-country corporate income tax rates and rules about how taxes paid in the host country are considered at home should influence FDIs. In fact, such influence was recognised a long time ago by the bilateral agreements that were signed to avoid double taxation of income between countries.
A home country’s taxation rules affect the effectiveness of tax incentives in the host country. Most FDI outflows originate from OECD countries, with different regimes on how they tax the activities of their multinationals abroad. For example, the foreign tax paid by US companies can be claimed as a tax credit on the US tax liabilities (up to a rate of 35%). Japan and the UK use similar tax credit systems, while other countries such as Australia, Canada, France, Germany and the Netherlands exempt more or less any profits earned abroad from home taxation (Morisset and Pirnia, 2000, pp. 1–34).

Hines (1999, pp. 305–322) found that it is attractive for US firms to use debt to finance foreign investment in high tax countries (compared to the US) and equity in low tax countries. The argument is that the debt generates interest deductions for the subsidiary and so reduces its taxable income in the host country (note that the parent firm has to pay additional taxes, but at a lower rate, in the US). Finally, the importance of the home country tax system can also be illustrated by the efforts of tax authorities to prevent the transfer of multinationals’ headquarters or other specific activities (such as R&D) to other countries.

In recent years, there has been new empirical evidence that tax rates and incentives influence the location decision of companies within regional economic groupings, such as the EU, NAFTA, or ASEAN. The location decision of foreign companies within the US has also retained the attention of several researchers (Swensson, 1994, pp. 67–83). As an illustration of this effect, it was found that the average effective tax rate plays a significant role in the decision of US companies to locate within Europe.

Haaparanta (1996, pp. 54–70) shows that countries will engage in a tax bidding process to attract FDIs, if their key motivation is to create jobs. The same reasoning could apply to research and development (R&D). Countries with large domestic markets are capable of taxing more FDIs because they benefit from positive agglomeration effects but this advantage decreases with lower trade costs, as may happen within regional grouping and Trade Unions. Overall, the outcome of tax competition is generally ambiguous because it depends on many factors.

Tax competition seems to be more intensive in some sectors such as automotive and larger firms. In any case, both the European Union and OECD have declared that tax competition is harmful to countries. However, this view has to be contrasted with the argument that variations in tax regimes are a good thing because they give tax payers more choice, and thus more chance of being satisfied, as well as some pressure on governments to compete by offering different combinations of public services and taxes (Oman, 2000, pp. 28–77).

Recent efforts to harmonise tax systems have been launched both in the industrial and developing world (the EU and some African countries). Even if tax incentives were quite effective in increasing investment flows, the costs might well outweigh the benefits. This competition is not only taking place in relatively wealthy industrial countries but also in emerging markets where governments generally face severe budgetary constraints (Bellak, Leibrecht, and Stehrer, 2009b, pp. 19–46).

There is no doubt that tax incentives are costly. The first and most direct costs are those associated with the potential loss of revenues for the host government. Incentives can be further counterproductive if they contribute to attracting more investors of the ‘wrong kind’, which is certainly the case in countries where basic fundamentals are not yet in place. They have also been significant sources of corruption, effectively screening out desirable investment, and detrimental to the processes of developing competitive markets and sound policymaking. One has to keep in mind, however, that successful examples like Singapore or Ireland are rare (Morisset and Pirnia, 2000, pp. 1–30).

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But fiscal and budgetary factors are not the only ones that impact on FDIs. There are also monetary factors (important for the transition countries, but with limited effect in the long-term, especially after those countries enter the eurozone) or external trade factors in relation with FDIs (bi-directional relation with FDIs). Regarding some important monetary factors for FDIs, Coskun (2001, pp. 221–226) suggests that lower inflation and interest rates coupled with other factors such as ‘full membership with the EU’ and high economic growth can attract foreign investors and increase the FDI inflow into Turkey. Wint and Williams (2002) show that a stable economy attracts more FDIs, thus a low inflation environment is desired in countries that promote FDIs as a source of capital flow. The inflation performance of emerging markets (including CEE countries), measured by the share of countries that had less than 10% annual inflation improved significantly during the last decade and several studies, including Dabla-Norris et al. (2010, pp. 1–32), find a positive impact of a low inflation environment on FDI inflows. Among the set of pull factors that were considered for the emerging economies, lowering corporate tax rates, tariffs and a stable exchange rate were found to be statistically important determinants of FDI inflows (Arbatli, 2011, pp.1–25).

Akinboade, Siebrits, and Roussot (2006) state that:

… low inflation is taken to be a sign of internal economic stability in the host country. High inflation indicates the inability of the government to balance its budget and the failure of the central bank to conduct appropriate monetary policy. (pp, 177–209)

Some literature offers some distinctions on the level of inflation. Rogoff and Reinhart (2003, pp. 1–43) find that high inflation does not happen in the absence of other macroeconomic problems. The cost of inflation can have prominent effects on the economy’s growth. This hindrance is more prominent at an inflation rate of 40% and higher, but they also note that a country with a higher inflation rate, especially below the 40% level, is worse off than a country with slightly lower inflation rate.

Glaister and Atanasova (1998, pp. 122–134) mention the effect high inflation had on employment in Bulgaria. Although they did not draw direct inferences to the relationship between FDIs and inflation, they seem to suggest that high inflation can cause various problems within the country to reduce its attractiveness to foreign investors.

Goldfajn and Olivares (2001, pp. 1–22) find that developing countries would allow a higher volatility of reserves and interest rate in exchange for a low volatility on their exchange rate in order to compete for FDIs.

A study on developed and developing countries (Kiat, 2008, pp. 1–85) shows that the relationship between FDIs and exchange rates were found to be inconclusive. Expert interviews suggest that research methodology should be refined and the result may prove that a devaluation of currency can induce FDI inflow. The data finds that high inflation has a negative impact on FDI inflow. The relationship is more significant in developed economies than those in the lesser developed economies, but this can be attributed to a more volatile economic environment. Based on the data analysis, inflation seems to have more impact on FDIs than exchange rates; thus maintaining inflation stability could ensure economic stability and in turn, stimulate FDIs.

The literature also suggests a wide variety of factors that can influence FDIs. Given the current situation of the foreign reserve and current account deficits, experts’ opinions
suggest that promoting export and strengthening foreign reserve can provide leverage on exchange rate stability. Real exchange rates may be more important for FDIs if the investment is oriented towards the export market (Radulescu, Druica, and Omran, 2012a, 435–447) (which is not the case for Romania).

Clausing (2000, pp.190–205) investigates the operations of US multinationals in 29 host countries from 1977–1994 and finds a strong positive relation between FDIs and exports. This relationship becomes even more pronounced when multinational activity and intra-firm trade is considered. In the analysis of FDIs and exports, Pfaffermayr (1994, pp. 337–351) employs the Granger-causality procedure and obtains a significant positive causation in both directions. Eaton and Tamura (1994, pp. 1–33) also analyse the relationship. They thereby find a strong complementary relationship. In contrast, Andersen and Hainaut (1998, pp.1–24) find a complementary relationship for the US, Japan, and Germany but not for the UK.

Lipsey (2002, pp. 1–20) show a positive relationship between US exports and FDIs for 40 countries in 1970. Furthermore, Brainard (1997, pp.520–544) finds a strong confirmation for the ‘proximity-concentration trade-off’ on the industry level for 27 US markets and identifies that when the income per capita of the partner country catches up to the US level, FDIs tends to substitute for exports. Fontagné and Pajot (2002, pp. 43–82) find complementary effects between FDI flows and trade on the sector level. The investigation of the relation between FDI and trade that is diversified by destination country or region is an under-researched issue in the empirical literature. Some studies investigating the relationship between FDIs and exports from developed to developing countries find them to be complementary.

If FDIs are market-seeking, they would have positive influences on imports into host economies, and no effect on exports (the case of Romania). For resource-seeking FDIs, the situation is just the opposite: there is an increase of exports, while imports are unaffected. For strategic asset-seeking FDIs, there are no unambiguous predictions. There is a same bi-directional argument in the case of FDIs and export. Then there are other concerns regarding market-seeking (substitute) FDIs or efficiency-seeking (complement) FDIs. To illustrate the causal relationship, several studies (UNCTAD 2001, pp.7–25) suggest that manufacturing firms first service the foreign markets by trading because trade is easier and less risky than FDIs. Then gaining knowledge about foreign countries economies, political and social conditions, the home country firms establish subsidiaries in foreign markets and then subsidiary exports. Thus, the FDI-export relation is as complicated as the other bi-causal discussion (Radulescu, Druica and Omran, 2012b, pp. 329–348).

The early literature attempted to evaluate if a generous tax policy could compensate for other obstacles in the business environment and, thus, attract multinational companies. In the mid-1980s, the literature went one step further by exploring what kind of tax instruments should have the greatest impact on the location decision of multinational companies.

Special attention was also given to the motivations and tax behaviour of the multinational company. Not only have companies tended to become more mobile, but also governments have to deal with this new dimension in the design of their national tax policy. The gradual elimination of barriers to capital movements have stimulated governments to compete for FDIs in global markets as well as reinforced the role of tax policy in this process. This recent competitive trend has to be offset by the increasing pressure that governments face to harmonise their tax policies within regional (or international) agreements. A second important issue has been the recognition that tax policies of the home and host countries are interconnected and that this link influences the behaviour of multinationals. Last but not least, there has been a growing attention to the
costs associated with tax incentives – and not only to their possible benefits. This issue has become crucial in emerging countries where budgetary constraints as well as corruption are certainly more severe than in industrial countries (Pelinescu, Radulescu, and Caraiani, 2006, pp. 143–161).

The literature has traditionally focused on the instruments linked to the corporate income tax such as tax holidays and tax allowance. Of course, these instruments are of no help to an unprofitable company and, therefore, other forms of incentives have also been widely used around the world. Exemptions from custom duties or local indirect taxes (generally to targeted sectors) do exist in many countries, even though their use has been restricted in most international and bilateral trade treaties (Morisset and Pirnia, 2000, pp. 1–30).

Incentives will generally neither make up for serious deficiencies in the investment environment. When other factors such as political and economic stability, infrastructure and transport costs are more or less equal between potential locations, taxes may exert a significant impact. This is evidenced by the growing tax competition in regional groupings such as the European Union or at the sub-regional level within one country such as the US (Clausing and Dorobantu, 2005, pp. 77–103).

A big question for government officials in developing and developed countries alike is the impact of tax, regulatory, and public expenditure policies on foreign investors. An important study of foreign investment determinants found that agglomeration – measured by infrastructure quality – is an important determinant while taxes are not a significant determinant. In contrast, a growing set of studies on taxation has arisen in the public finance literature that generally find significant tax effects, though the estimated elasticity varies significantly between them depending on the data-set used and whether the study is cross-sectional or panel. In addition, a large body of literature in regional public economics suggests that government spending that is beneficial to investors (such as public investment in infrastructure for foreign investors) should have positive effects on investment in a region (Bellak, Damijan, and Leibrecht, 2009a, pp. 267–290).

The evidence indicates that lower taxes, lower corruption, lower government consumption spending and better infrastructure attract FDIs, this is supported by the results of the paper by Goodspeed, Martinez-Vazquez, and Zhang (2006, pp. 56–63). In conclusion, the adequate provision of infrastructure seems to be just as important as low taxes and low corruption in attracting FDI. From a policy perspective, it would appear that the right approach by governments concerned with attracting foreign direct investment is to lower corruption and to keep taxes low but to maintain investment in infrastructure rather than using revenue for consumption expenditures. Keeping public revenues too low to adequately maintain or invest in infrastructure is unlikely to be a successful long-term policy.

In fact, no single factor appears to reduce capital flows volatility across the board. For instance, economic and political stability appears to reduce the volatility of portfolio flows but increases that of other flows; less competition in domestic banking systems increases FDI’s volatility while reducing that of other flows. Indeed, the results suggest that, not only is it difficult to find a single policy track effective to reduce the volatility of all types of flows simultaneously, but the forces of globalisation have reduced the relative importance of country-specific factors in favour of global factors that are beyond their control. However, there are some specific factors that could be effective in reducing the volatility of certain flows without increasing that of others: inflation is robustly and positively related with the volatility of other flows; a higher volume of reserves
tends to reduce the volatility of FDIs; the size of the banking system in terms of assets reduces the volatility of FDIs and other flows (Copaciu and Racanu, 2006, pp.1–20).

A number of countries have adopted economic stimulus packages that might have some positive impact on global FDI flows during the crisis. For example, the UK announced a value added tax (VAT) cut, and Germany launched a financial package to help small and medium-sized enterprises (SMEs) in difficulty to access credit. Also, the French Government announced measures to make credit more easily available to SMEs. The United States Federal Reserve Board has cut interests rates to a level close to zero. More recently, Japan lowered the corporate tax rate for SMEs. For large Japanese transnational companies (TNCs), it decided to allow loans by the Japan Bank for International Cooperation to them and their foreign affiliates that operate in developed countries, an extension of loans that had been previously limited to those operating in developing countries (Wells et al., 2001, pp. 1–25). It must be noted that the internationalisation, from the strategic viewpoint, is of crucial importance for the SMEs. While the expansion into new geographic markets presents an important opportunity for growth and value creation, the implementation of such a strategy involves many unique challenges. Exporting has been traditionally regarded as the first phase to entering the international markets. This entry strategy is particularly applicable to the internationalisation of SMEs because the SMEs frequently lack the resources for direct investment (Miocевич and Karanovic, 2010, p. 43). So, SMEs investments should be supported by incentives and fiscal stimulus.

Economic stimulus programmes have also been set up by numerous developing countries. Facing the negative impact of the global financial crisis, for example, the Chinese Government announced in November 2008 a public investment plan to boost economic growth, which runs until the end of 2010. By enhancing growth prospects and increasing investor confidence, the plan may contribute to attracting or maintaining FDI inflows to China. Though on a much smaller scale, the following countries have adopted similar packages – India, Malaysia, Philippines, the Republic of Korea, Thailand and Vietnam. Regarding fiscal stimulus, corporate tax rates have been lowered, for instance, in the Philippines (from 35% to 30%) and the Republic of Korea (from 13–25% to 10–20%). Special measures are also provided for SMEs in such countries as Singapore and Vietnam.

Spain was seeking to attract new FDIs to modernise its economy, after its accession to EU. In the 1990s it introduced new legislation to make the country more attractive to foreign investors. A range of incentives are provided at the central, regional and municipal levels for a variety of purposes, including environmental protection, research and development programmes, quality management programmes, job creation and cultural activities. Non-residents operating in Spain through permanent establishments must comply with tax procedures normally applicable to Spanish corporate tax (CIT) payers.

A wide range of economic incentives is offered, both by the central government and the autonomous communities, for companies that set up operations in Spain. Incentives include financial subsidies, preferential access to official credit, bonuses for the acquisition of certain material, real estate grants, incentives for research and development, tax deductions and exemptions, guarantee of dividends, bonuses and incentives for hiring and training workers and low interest loans. Any firm with foreign capital has the same access to these incentive schemes as Spanish firms. When the global financial crisis struck and the favourable international credit conditions suddenly disappeared, the Spanish economy began an inevitable adjustment process, with a substantial reduction in consumption and investment by 2008, when housing investment plummeted. At the
same time, the work of automatic stabilisers, the loss of the revenue windfalls obtained during the expansion and the expansionary fiscal programmes put in place by the government to mitigate the effects of the crisis, have led to a very rapid deterioration of public accounts (Éltető, 2010, pp. 4–17).

The empiric results of Gavilán, Hernández de Cos, Jimeno, and Rojas (2011, pp. 89–110) indicate that interest rates and demographic changes are the main changes responsible for the investment boom and the build-up of a sizable external imbalance (measured as the ratio of net foreign assets to gross domestic product (GDP)) witnessed in the Spanish economy during the expansionary phase. In this context, they find a very limited role for fiscal policy in reducing the external imbalance accumulated in Spain over the period 1998–2008. In particular, their results show that a temporary reduction of government expenditure over the expansionary phase would have reduced the size of the Spanish external imbalance by 2008 only very slightly. A more permanent tightening of fiscal policy could have even increased this imbalance.

After 1989 the economic development of Romania was supported by various incentives or benefits offered to the investors, such as free trade zones, tax exemptions on profits or employees taxes, funds for low developed areas, etc. However, once Romania has entered the European Union the number of such incentives that may be granted to various investors has been reduced as a common legal framework for all EU countries is intended to be applied. Moreover, most of the actual incentives need to be agreed with the EU before being announced and applied. The most important support measures for companies now are the EU structural funds and the state aid schemes.

Since January 1st 2004, when the Fiscal Code came into force, it has been substantially amended. The Emergency Government Ordinance No. 91/2008 brings changes with respect to investment incentives, following the provisions and trends set by the EU legislation. The code integrates key tax legislation and provides the basis for a more stable framework of tax legislation. These recent incentives are meant to establish a competitive and appealing fiscal regime, in accordance with the fiscal policy regulated by the EU.

This fiscal reform was coupled with a softening of the taxation principles on which all fiscal procedures will be based: transparency, simplicity, partnership with taxpayers, and prudence. Besides the above mentioned issues, the other most significant legal incentive offered to direct investment towards Romania is the single tax reform, introduced by the government at the beginning of 2005.

This modification made Romania one of the most competitive investment destinations in the region. Starting in 2005, following a successful model already introduced by other countries in the region, corporate and individual incomes are levied with a single tax rate of 16%. The Romanian single tax rate is competitive compared to the other countries’ levels of taxation. Bulgaria, Macedonia and Albania have the lowest single rate of 10%, with Russia at 13%.

The causes of high budget and current account deficits in CEE region are explained by excessive expenses generated by a lax monetary or fiscal policy. The economic literature shows that in developed countries, with open economies, both deficits arise as a result of an expansionist fiscal policy, the current account deficit of 50% being explained by the diminishing of the share of budgetary incomes of GDP (Botman and Kumar, 2006, pp. 23–34).

We underline that seven of the 10 ex-Communist states that are now members of EU, are now some of the top countries with low tax on profit, under a level of 20%. This situation can be a positive signal for the investors that came late in these countries,
because of their political regimes. The impact of the fiscal frame can be best observed in attracting foreign investments. That is why there were so many critics to Romania when the flat tax was adopted here. The foreign investments were also stimulated in Romania by this flat tax on revenue and on profits of 16% starting with 2005. The value of the FDI inflows in Romania in 2005–2006 was 70% higher than in the previous year, over 9 billion euro. This amount includes the acquisition of 36.8% of the shares of Romanian Commercial Bank (BCR) by Erste Bank (2.2 billion euro). Equity participation were the main component of the FDI inflows in Romania (45.1% of the total FDI), followed by the inter-group loans (33.3% of the total FDI) and the reinvested earnings (21.5% of the total FDI).

Still, in 2007, the FDI inflows in Romania decreased by 43% comparing to 2006. The main component of FDI inflows in Romania was represented by reinvested earnings (48.2% of the total FDI), followed by inter-group loans (39.6% of the total FDI) and the equity participations (only 12.1% of the total FDI). During 2008–2010, FDIs in Romania decreased significantly, because of the crisis and the investors’ lack of confidence and prudence.

The FDIs amount decreased also because of the competitor markets. Bulgaria and Hungary are two of the neighbour countries that hold some advantages into attracting investors. The tax on profit is one example. In Romania its level is 16%, while Bulgaria has a level of 10% and Latvia and Lithuania with 15%. As far as Serbian fiscal incentive measures are concerned it is important to emphasise that the tax on profit in Serbia is 10% since 2007, which represents one of the lowest rates in the region and is far lower than the EU average.

Still, regarding VAT, Romania does not hold an advantage over its main competitors in the region. Only Hungary in the CEE region has VAT of 25%, while Romania increased VAT from 19% to 24% in the crisis context. Moreover, compared to European developed countries Romania has one of the highest VAT rates in Europe. Only Denmark and Sweden (that are highly developed and with high standard of living) have a VAT rate similar to Romania (25%).

EU legislation for VAT stipulates the basic principles, but leaves the member states some options. The EU member states that have a VAT rate below 20% are: France (19.6%), Germany (19%), Spain (18%), Cyprus and Luxemburg (15%), Malta (18%), the Netherlands (19%), Bulgaria, the Czech Republic, Estonia, Italy, Austria, Slovenia, Slovakia and the UK have a VAT rate of 20%. EU member states that have the lowest VAT rate of 15% are Cyprus and Luxemburg, according to European Commission – VAT rates (2011). Other countries with a VAT rate higher than 20% are: Belgium, Denmark, Greece, Portugal, Ireland, Latvia, Lithuania, Hungary, Poland, Romania, Finland and Sweden (21–25%). The higher level of VAT (25%)is in three EU member states: Denmark, Sweden and Hungary. We have to mention that there are still states that have also super reduced levels of VAT for some products, even though the EU opinions converge to eliminate this special regime applied to some products (Spain – 4%; France – 2.1%; Ireland – 4.8%; Italy – 4%; and Luxemburg – 3%), namely food products, books, pharmaceuticals, TV licences, supply of new buildings. Also, there is a 0 VAT level, mainly used in UK for some services. There are also exemptions of VAT mainly for TV licences, social services, medical and dental care in many European countries (European Commission, 2011, pp. 220–232).

In most European Union member countries a high level of the effective investment tax rate is accompanied by a low level of FDI inflows as a percentage of GDP and vice versa. In 2005, Estonia succeeded in attracting the largest stream of FDI inflows as a
percentage of GDP, practicing an effective tax rate on an investment of 21.1% (higher than those in Romania, Bulgaria, Cyprus and Poland in the same period). The highest effective tax rate of investment observed in Spain (36.5%) was correlated with low levels of FDI inflows as a percentage of GDP (2.21%). In 2006, the countries with reduced effective tax rate of investments (Bulgaria, Romania, Slovenia and Estonia) have achieved a high level of FDI inflows to GDP. This correlation is however not valid in all situations. For example, in Poland and Ireland, the low level of taxation on investment was not accompanied by a significant inflow of FDIs.

In 2007, Bulgaria was one of the top countries that attracted the most FDIs (29.6%), practicing the lowest effective tax rate on investment (8.8%). States where the tax rate on investment was high (Italy, Germany, France) attracted a small volume of direct foreign investments (to GDP). However, Belgium and the Netherlands have recorded inflows of FDIs more than the EU average, even where there is a high rate of taxation on investment. In these countries there is, however, a special tax regime for holding companies.

Therefore, the statistical evidence on foreign direct investment inflows and the taxation of investments in European Union countries cannot provide us with clear results regarding the effects of taxation on FDI location, because there are exceptions to the rule of inverse correlation between the two factors.

Even if the tax regime is not the only factor that determines decisions for the relocation of foreign capital, reducing corporate tax rates in some new Member States has increased the attractiveness of these countries for foreign investors.

There is little evidence that the good economic performance of new EU states after the reform until the crisis period was due to the taxes themselves: this could be attributed to wider macroeconomic recovery, FDI inflows, better tax compliance and tax administration as a consequence of EU membership requirements. But, in the field of direct taxation a certain degree of tax competition is not only inevitable but also desirable, if it take the form of a fair tax competition.

3. Methodology and results of the econometric analysis for Romania. Monetary policy vs fiscal policy in Romania and their impact on FDIs

After presenting the findings in the economic literature regarding the impact of the fiscal policy on FDIs, we build an empiric model to study this impact in Romanian case, using monthly data. We used linear regression to build an equation to determine the monthly net FDIs denominated in million euro (SOLDISD_EURO) as an endogenous factor. We used as exogenous factors monthly data series during January 2000 to December 2010, such as: monthly real active interest rate of the commercial banks (MRATADOBACTIVARE) that is more significant than the monthly National Bank of Romania’s (NBR) reference interest rate, the variation of the monthly domestic non-governmental credit, also denominated in million euro (DCREDITINTERNEURO), monthly inflation (INFL) measured in variation of consumer price index (CPI), monthly variation of direct budgetary fiscal taxes (DVENITURIDIRECTEEURO) denominated in million euro, the variation of the monthly fiscal budgetary indirect taxes denominated in million euro (DVENITURIINDIRCTEEURO), the variation of the monthly NBR’s official foreign reserves denominated in million euro (DACTIVEEURO), monthly Romanian export denominated in million euro (DEXTEURO), monthly import denominated in million euro (DIMPEURO), monthly minimum reserves ratio for RON (DRATAREZMINLEI).
reserves ratio for foreign currency (DRATAREZMINVAL), variation of the foreign debt service denominated in million euro (DSDEEURO), the budgetary public spending denominated in million euro (DCHELTUELIIPUB EURO), the variation of the monetary base denominated in million euro (DM0EURO). So, we used real data for all the series that appear in the equation.

We used the state budget fiscal revenues because they represent more than 60% of the total fiscal budgetary revenues and the state budgetary spending because they represent more than 50% of the total budgetary spending. The state budget fiscal revenues include the direct fiscal taxes such as tax on profit and tax on wages and incomes (that represent 25% of the total state budget fiscal revenues) and indirect taxes such as VAT and duty taxes (that represent 75% of the total state budget fiscal revenues). They were denominated in million euro to insure the comparison with the other data series and to be expressed in real terms, just like the other data series.

The important elements for the equation have been chosen in accordance with the results obtained at the Granger causality tests. Because of their stationary character, we have used the first difference of the series in the case when the ADF (Augmented Dickey Fuller Test – data series stationary test) and PP (Pool vs. Panel Test - data series stationary test) tests have indicated the non-stationarity.

All the series with absolute values have been changed into millions of euro for their comparison, using the ROL-EUR exchange rate, and the interest rates have been converted into monthly values, instead of yearly ones. The real exchange rate has been obtained by correcting the nominal exchange rate with IPC cumulated with the basis in December 1999, monthly data.

We found an auto regressive and moving average process (ARIMA) process to determine net FDIs, using the monetary, exchange rate and fiscal and budgetary factors that belong to the macroeconomic policies used for attracting FDIs all over the world. The wages/incomes policy did not impact greatly on the FDIs, so the monthly net average wage denominated in euro could not been introduced in this equation. We also could not introduce into the equation the real exchange rate RON-EUR, because it is a derived factor, just like net average wage denominated in euro, and their impact is not significant. These two factors influence the FDIs through other factors used in this equation, namely: inflation and NBR’s official reserves for real exchange rate RON-EUR and fiscal ratio and inflation for net average wage denominated in euro.

\[
\text{soldisd}_\text{euro} = 0.298803 \times \text{soldisd}_\text{euro}(-2) + 44.25039 \times \text{mratadobactivare}(-2) \\
+ [4.701553][6.178330]0.043198 \times \text{dereditinterneuro}(-4) \\
- 0.117486 \times \text{dvenituridirecteuro}(-1) \\
+ [4.476668][-3.825285]0.072858 \times \text{dactiveeuro} + 19.81299 \times \text{infl}(-2) \\
+ 0.060332 \times \text{dvenituriiindirecteuro} \\
+ [4.426525][2.529581][2.485822]0.054633 \times \text{dexteuro}(-1) \\
+ 12.22608 \times \text{dratarezminval}(-4) + 22.30191 \times \text{dratarezminlei}(-3) \\
- [4.404110][2.793355][3.129489]0.052788 \times \text{dsdeuro} \\
+ 0.032951 \times \text{dcheltueliipub_euro}(-3) - 0.020618 \times \text{dm0euro}(-1) \\
+ [-3.761734][2.301852][-2.015409]0.020743 \times \text{dimpeuro}(-2) \\
- 0.401873 \times \text{ar}(1) + 0.999925 \times \text{ma}(1)[1.756587][-4.115524][17.14748]
\]
The determination coefficient of the equation of 0.60 proves that this is well determined, especially if we consider that we used as exogenous factors only those that belong to the macroeconomic policies (fiscal, budgetary, monetary and exchange rate policy) and some of the factors of the balance of payments (exports, imports and foreign debt service). Surely, FDI{s are influenced by more factors; some of them could not be measured economically. Some of the factors that influence FDI{s were not considered and they are important for attracting FDI{s, such as: corruption, market transparency, political stability, bureaucracy.

The differences between the coefficients of the factors considered in the above equation come from the construction of the data series. Monthly real active interest rate of the commercial banks, monthly inflation rate, monthly minimum reserves ration in RON or in foreign currency are denominated in percent, while the other data series are expressed in million euro.

The most important factor that influences FDI{s is monthly real active interest rate of commercial banks, which impacts on commercial banks lending in the economy. If the interest rate increases, it attracts FDI{s. Another important factor is represented by the previous evolution of FDI{s. Monthly inflation rate and the minimum reserves ratio in RON and in foreign currency also impact on FDI{s. If these ratios increase, they attract
FDIs, because the nominal interest rates in the economy increase as well (Rădulescu, 2007). After them, the fiscal factors follow. The monthly variation of the direct fiscal taxes impact negatively on FDIs, because investors are not attracted by an increase of the tax on profit or on wages/incomes. But, if the indirect fiscal taxes such as VAT increase, the prices rise as well, inflation erupts and so are the interest rates in the economy. So, the FDIs are attracted there by new investment opportunities and by high profits opportunities. Another factor that influences FDIs is the variation of the NBR’s official foreign reserves. If they increase, they attract FDIs because the national currency strengthens and the foreign investors become confident in that economy. After the monetary and fiscal factors, come the factors that belong to the balance of payments. So, monthly export impacts on FDIs positively. If the export increases, the nation currency strengthens and investors become confident. Moreover, as we could see from the positive influence of the indirect taxes on FDIs, the foreign investors are not interested in producing for the local market. They are much more oriented to external markets. So, if exports increase, that attracts foreign investors. The next factor is represented by monthly foreign debt service. If it increases, the foreign investors become prudent and reluctant to that economy, so FDIs diminish. The domestic non-governmental credit comes next as a factor that attracts FDIs. There is the same explication for this just like for the other monetary factors. An increase of the non-governmental credit stimulates investments and consumption and, moreover, that increases the inflation and leads to an increase of the interest rates which attracts FDIs. Then, the state budgetary spending comes and impacts positively on FDIs. Foreign investors are attracted by the subsidies granted by state or by other facilities granted by state for businesses in the economy and by large public investments in infrastructure, for example. The monthly import effect on FDIs is also positive. For a country like Romania which depends greatly on imports, exports and development are strongly connected to the imports. The variation of the monthly monetary base with 1 lag denominated in million euro impacts negatively on FDIs (Radulescu, et al., 2012a, pp. 435–447), because in just one month it cannot produce a rise of the prices in the economy and a rise of non-governmental credit or of the interest rates in order to attract FDIs. Its impact becomes positive on FDIs after two months as we will see below from equation [2] where we used monetary base with 2 lags.

The DW (Durbin Watson statistic – errors autocorrelation test) of 2.00 shows the lack of first order self-adjustment, and to be even more certain, the Q-state test is made. The residuals graph shows the exceeding of the margin only in the second half of 2004 and at the middle of 2008. The errors are bigger in 2004–2005 when the FDIs rose significantly due to the privatisation of BCR that was bought by Erste Bank (Austria) and the privatisation of the largest Romanian oil company Petrom which was taken over by the Austrian Group OMV. In the same period Electrica was privatised. So, the largest Romanian bank and the largest Romanian oil and electric companies were bought by foreign investors in that period. Smaller errors are in the second half of 2008 when the financial crisis erupted and the FDIs trend inversed because the investors became reluctant and prudent.

We believe that is interesting to present here, after equation [1], another similar equation [2] that uses total state budgetary fiscal revenues denominated in million euro, not its components, direct and indirect fiscal budgetary revenues.
This second equation proves that the overall impact of the fiscal budgetary revenues on FDIs is negative, which means that the influence of the direct fiscal budgetary revenues is more important than the one of the indirect budgetary fiscal revenues. Still, if we do not consider the fiscal revenues on their two components, the determination coefficient is lower, 0.55. The impact of the direct fiscal revenues of the state budget has an important effect in the short-term, but also in the long-term. Their impact is almost
Figure 1. The impact of direct and indirect tax, total fiscal revenues and budgetary spending on FDIs (time of impact is expressed in months on the OX axis). Source: E-views estimations
absorbed in 60 months, but not completely. Their important effects prove that foreign investors are very interested in the taxation of their businesses in Romania.

The tax on profit and on incomes seems to be much more important than the indirect taxes such as VAT or duty taxes. Those indirect taxes greatly influence consumption power. So, this may be a sign that foreign investors are not very interested in local consumption power. They are interested in the low levels of domestic wages and in the taxes on their profits, because most of them repatriate their profits, or produces in lohn or for the foreign markets, not for the local one.

Using vector autoregressive techniques (VAR) we analysed the impact of the indirect fiscal revenues of the state budget that is absorbed after 36–40 months (on OX axis). In the frame of the fiscal policy, we can see that the impact of the budgetary spending is much less than the impact of the budgetary fiscal incomes.

The impact of the variation of the budgetary fiscal revenues is absorbed after two to three years, but not completely, while the impact of the budgetary spending is absorbed in 18 months. So, the impact that lasts longer belongs to the budgetary fiscal revenues, namely the direct taxes such as tax on profit and on incomes/wages. The monetary instruments are more important and efficient for FDIs in the short run, as we could see from the linear regression, while the fiscal instruments do not impact greatly but last a few years longer (Figure 1).

The impact of the net wage is the least important factor for FDIs, because it represents a derived factor. So, the net wage depends on fiscal ratio and inflation, namely a fiscal and a monetary factor. So, the wages/incomes policy is less efficient than the monetary or the fiscal policy and it suffers influences from both macroeconomic policies. The impact of the variation of the net wage is absorbed in five months (Figure 2).

Analysing the wage policy in Romania in the entire transition period we can see that there are a little correlation between the minimum wage increase and the rise of the average wage in the economy. During the last two decades there was no correlation between the trend of the minimum wage and the number of the employees, which is not in line with the economic theory. At the middle of the last decade, the governmental wage policy induced a convergence of the national wage schemes to the minimum wage. Moreover, we can say that in Romania, the average wage is far from being influenced by the minimum wage trend, because many problems appear from the ‘black labour market’.

Figure 2. The impact of monthly net wages on FDIs (time of impact is expressed in months on the OX axis).
Source: E-views estimations.
4. Conclusions

For most of transitional economies, key resource is labour which is considered to have relatively high education and training levels (comparing to regions in South-East Asia and Latin America) and a strong scientific base. The largest FDIs were obtained here in the frame of the privatisation process due to the higher interest rates comparative to the developed economies. The TNCs exploited the size and growth potential of the CEE markets, but they mainly oriented to exports and to repatriate their profits (Ionita and Pauwels, 2008).

In Romania, monetary factors such as higher interest rates and higher inflation attracted FDIs. Fiscal factors seem to play a less important role, although it adopted a flat tax regime in 2005 and we have one of the least taxes on profits in the CEE region (except Bulgaria, Albania and Cyprus). The indirect taxes play a more important role in influencing FDIs than direct taxes such as tax on profits, although the impact of the last ones last longer. The indirect taxes influence the purchasing power of the population and this is an important factor for the entire CEE region. Moreover, in Romania, the FDIs were complementary to the domestic supply, they were not directly mainly to sectors with high added value and to exports such as in other CEE more developed countries such as the Czech Republic, Hungary or Poland. The influence of net wages does not seem so relevant, because net wages are a result of the monetary and fiscal policy. The impact of the exchange rate also diminished in the last decade as a result of a more stable framework on the exchange rate market. The NBR’s interventions on this market are rarely and less important. In the light of such findings, we are questioning if the fiscal policy will be efficient in attracting FDIs once Romania enters the eurozone and will abandon the monetary policy, although the horizon of this event seems further and further away because of the international developments in the actual crisis period. Moreover, if we consider the other non-financial factors, such as the lack of an adequate infrastructure or the generalised corruption in our country, the end of the privatisation process and the legal instability, the Romanian perspectives are not good. The advantage of the low net wages does not seem so important anymore. They are a result, not a factor for the financial macroeconomic policies. And the highly skilled labour has already left Romania and works abroad. Moreover, once the EU grew, the Asian emerging markets seem closer and TNCs can think of a relocation of their business and could leave CEE region. So, Romania, more than other CEE countries should also focus on improving the other non-financial factors that influence greatly the investment environment here, so that the fiscal stimulus can be efficient in attracting FDIs. In the crisis context, the incentives are a big budgetary burden for all countries, developed or not and once we will adopt euro, we can no longer use the monetary instruments that attracted FDIs in the past and the fiscal stimulus aren’t efficient here as the empiric analysis shows.

The other CEE more developed countries co-financed large investment projects using European structural funds for infrastructure, just like Spain and Portugal did after their EU accession. They used governmental spending to attract FDIs and to support economic growth. Romania did not manage those opportunities well. The governmental spending is directed mainly for social purposes. The level of absorption of the European funds in Romania is among the lowest in the European Union (around 10%). Romanian government focused on the reduction of the corporate income tax (the lowest in the region, except Bulgaria, Latvia and Lithuania, as we have shown in section 2), but there
is other tax for investors which represents a burden. And it has also increased the indirect tax level, neglecting the purchasing power on the market. Moreover, the FDIs should be complementary to the domestic investments.

So, just like Poland did, we should follow the Spanish and Portuguese example that invested greatly in the infrastructure after its accession to the EU by using the European funds granted after accession (for infrastructure and agriculture). That will solve many Romanian economic problems as far as FDIs are concerned and would help Romania to develop greatly in the future and to attract large FDIs, now that the Romanian low unit labour costs do not represent a great advantage anymore and the multinationals’ relocation further to the East, to Asia, is more and more prominent.

This would be a solution for attracting FDIs and for sustaining economic recovery and growth. Romania should be ready to give up its monetary autonomy, once it will accede to European Monetary Union (EMU) and be based solely on its fiscal and budgetary instruments, without jeopardising its fiscal requirements and stability imposed by the nominal convergence criteria.

The conclusions of this article are in line with some of the findings in the literature that proved the importance of fundamental factors like economic conditions and political climate. The most serious investors are often unaware of the full range of incentives on offer when they invest. Recent evidence has nevertheless shown that, when other factors such as political and economic stability, infrastructure and transport costs are more or less equal between potential locations, taxes may exert a significant impact (Morisset and Pirnia, 2000, pp. 1–30). While the macroeconomic determinants of FDI have been analysed to a considerable extent in past empirical work, the role of institutional factors such as the protection of property rights and the efficiency of the legal system has been under-explored for those countries. The empirical evidence (Gwenhamo 2011, pp. 211–223) shows that property rights and political instability are consistently an important explanatory variable of FDI in low income countries and that should be studied also for CEE region. Also the findings of Goodspeed, Martinez-Vazquez, and Zhang (2006, pp. 56–63) indicate that lower taxes, lower corruption, and better infrastructure attract FDIs. In conclusion, the adequate provision of infrastructure seems to be just as important as low taxes and low corruption in attracting FDI, as we have already stated in section 2.

So, an important subject for a further research should be testing the impact of non-financial factors on FDIs in the CEE region, but there is a limitation represented by the way of expressing and measuring the non-financial factors that could be used for an empiric research. Another important direction for a future research could be to examine more closely the effect of tax policy on the composition of FDI (greenfield, reinvested earnings and mergers and acquisition). This way, the policymakers in host countries would have a better chance of attracting the right type of investments and maximising their impact on the economy.

References


