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Highlights in this issue:

- **Competitive wages, favourable taxes and the presence of foreign investors attract FDI to CEE region.**
- **Structural reforms have a positive effect on FDI in the Baltics.**
- **The timing of reforms can create a competitive advantage.**

FDI and structural reforms in the Baltic States

*By Dalia Grigonytė**

Summary

Following the most severe economic downturn since the independence of the Baltic States, foreign investment is very much needed to support their economic recovery. This paper looks at inflows of foreign direct investment into the Baltic economies since the early 1990s, focusing on the effects of structural reforms and the business environment on attracting FDI, and draws several policy implications.

FDI inflows to the Baltic countries were driven by different factors. Initially the process of privatisation and low labour costs attracted investment into public utilities and manufacturing. Later, taking advantage of the Baltic geographical location, further FDI went to the sectors of trade and logistics. Since the beginning of the new millennium, the bulk of foreign investment was channelled to financial services.

In line with FDI literature, the econometric results based on a sample of ten CEE countries confirm that competitive labour costs, favourable business taxation and the presence of foreign investors are important determinants of FDI inflows to this region. In the case of the Baltics progress with structural reforms and control of corruption are also important determinants of FDI inflows. Interestingly, the timing of market-oriented reforms matters as much as their typology. The experience of Estonia in the banking sector suggests the possibility of a competitive advantage for the first mover.

Introduction

Foreign investment inflows to the Baltic countries played an important role in their economic development.

The transition process from a centrally planned to free-market economy has substantially changed the economic landscape of the Baltic countries over the last fifteen years, and inflows of foreign direct investment (FDI) played a prominent role in this process. While in the early 1990s FDI inflows into the Baltics were attracted by relatively cheap local (e.g. labour) resources and the privatisation process (as in other Central and Eastern European countries), later in the transition other economic and political factors came into play.

The overall performance of the three countries with respect to attracting FDI has been quite different, with Estonia getting a much larger share than its neighbours and Lithuania being relatively sidelined. One of the reasons for this divergent development was the political determination of Estonia to pursue fast economic liberalisation and create attractive conditions for foreign investment.

*** Directorate for the Economies of the Member States.**

This paper reviews patterns and trends of FDI in the three Baltic countries and the factors explaining their relative attractiveness for foreign investors. In particular the paper takes a closer look at the impact of structural reforms on FDI inflows. The research is structured as follows. The first part briefly presents the main factors attracting FDI, starting from a brief review of the economic literature. The second part describes the dynamics of FDI inflows, their composition by sector and type of investment during the last decade. The third part refers to the available EBRD indicators measuring progress with structural and institutional reforms and presents the results of a regression analysis assessing their impact on attracting FDI. The last part discusses policy implications.

What attracts FDI?

Usually the economic literature identifies two broad FDI types[i]: horizontal, i.e. market-seeking, and vertical, resource-seeking FDI. If FDI is horizontal, a foreign investor is interested in entering a (large) country's market. In the case of cost-minimizing vertical FDI, the investor is attracted by local resources. Some studies[ii] also identify efficiency-seeking FDI, which e.g. help to minimize transportation costs due to geographical proximity. Obviously, the presence in a particular country of one kind of FDI does not exclude the other.

The economic literature also suggests a wide range of characteristics of a country that can influence the decision of multi-national enterprises to invest in it. These are related to the macroeconomic environment, as well as to social[iii] and geographical[iv] conditions. The availability of good-quality and advanced infrastructure (ICT, transport networks) is also likely to be positively linked to FDI, but it is difficult to find a universal measure for the quality of infrastructure. Political stability and control of corruption are also considered to play an important role in attracting FDI. Finally, some studies[v] suggest that clustering of foreign firms is likely to attract further foreign investors while monopolistic structures will have the opposite effect.

Studies on Central and Eastern European countries[vi] point to the importance of structural reforms in attracting foreign investment to this region. Structural reforms such as liberalisation and privatisation not only send a positive signal to foreign investors that they are welcome, but they may also improve the business environment for investing companies. Fiscal incentives to attract capital, e.g. tax exemptions, can also contribute to creating favourable conditions for investors, but the existing literature is inconclusive concerning their impact on attracting FDI as the results often depend on the sample of countries used.

FDI in the Baltics

Privatisation and competitive labour costs were the main factors attracting FDI to the Baltics in 1990s.

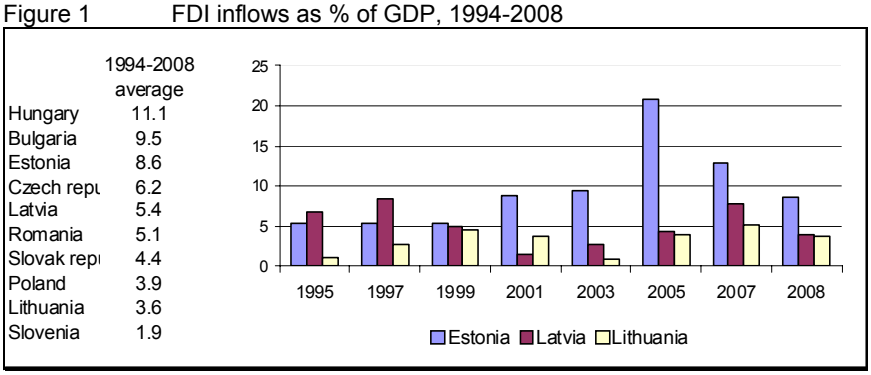
During the decade of economic transition FDI inflows to the Baltic countries were attracted by different factors. At the beginning, they were mainly driven by the availability of relatively low-cost resources as the privatisation process opened up business opportunities for foreign investors in the manufacturing sector. In particular, a qualified and relatively cheap labour force made the Baltic States attractive for global supply chains in the labour-intensive industries that were being privatised, notably food, wood and textile products. At the same time, an underdeveloped services sector created scope for horizontal FDI. Especially, the privatisation of public utilities (e.g. telecommunications) and liberalisation of the banking sector attracted significant FDI inflows. Later on, the Baltic states' convenient geographical location, nested between the EU, Russia and the CIS countries, as well as EU membership attracted efficiency-seeking FDI. Some studies[vii] suggest that factors attracting FDI to the Baltics include successful market reforms and a relatively stable macroeconomic environment.

A comparison of FDI among Central Eastern European countries (CEEC) over the last fourteen years shows remarkable differences. Estonia performed very well, ranking third within the CEEC group, while Lithuania scored much lower. On average, FDI inflows during the period 1994-2008 equalled 8.6% of GDP in Estonia, 5.4% in Latvia and 3.6% in Lithuania. Estonia has clearly outperformed the other two countries since 1997, when it overtook Latvia, and especially since

Estonia was more successful in attracting FDI than Latvia and Lithuania.

EU accession. As explained below, this is largely due to the arrival of Nordic banks to Estonia.

Figure 1 FDI inflows as % of GDP, 1994-2008



Source: Eurostat.

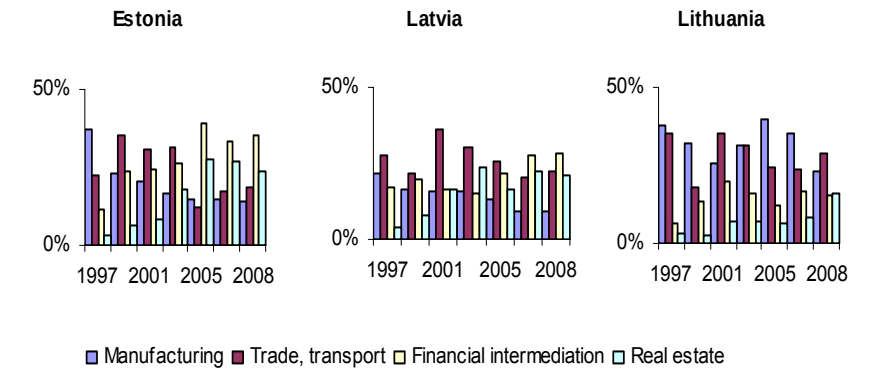
FDI position by sector

After 2000 service sector accumulated more FDI than manufacturing

Although FDI did not change much the structure of the manufacturing sector in terms of value added in the Baltics, it substantially contributed to the development of both tradable and non-tradable services. Indeed, the bulk of FDI inflows during 2000-2008 targeted the service sector, with a considerable share going to trade, transport and storage activities, given the convenient transit position of the Baltics.

A sector attracting a lot of FDI was financial intermediation and banking, which offered new business opportunities for the Nordic banks. In 2005 the Swedish Swedbank took over the Estonian Hansabank, which had several subsidiaries in Latvia and Lithuania. As in the following years Swedbank started to expand its activity in the Baltic region, it also invested through Estonian headquarters into Latvia and Lithuania.[viii] By the end of 2008, the stock of FDI in banking and financial intermediation amounted to 25% of GDP in Estonia and Tallinn became the financial hub of the Baltic region.

Figure 2 FDI positions by sector, percent of total FDI stock



Source: Eurostat and national data.

FDI structure

The success of a country in attracting foreign capital is usually measured by FDI inflows. Annual FDI inflows consist of net flows of equity capital, reinvested earnings and other capital which is mainly inter-company loans.[ix] Equity capital and reinvested earnings are related to the country's attractiveness for foreign investors while inter-company loans depend more on internal decisions of parent companies; e.g. following the consolidation of banking services in Latvia foreign banks made sizeable loan repayments to their parent companies in 2001 which resulted in a considerable drop of FDI.[x] Thus in order to compare the success of

different countries to attract foreign capital, the analysis in this paper focuses on inflows of equity capital and reinvested earnings net of inter-company loans. The drawback of using this proxy is that the length of the available time series shortens, as most CEE countries did not report detailed data until the late nineties.

Favourable taxation of reinvested earnings has probably influenced the accumulation of reinvested earnings in Estonia

Looking at the various components of FDI for the three Baltic countries over the last decade, it appears that FDI inflows in Latvia and Lithuania have been dominated by equity capital, mostly in the form of acquisitions and/ or green field investment (i.e. creation of new firms). By contrast, Estonia has had on average a much higher share of reinvested earnings. This probably has been influenced by the Estonian corporate tax system after it was reformed in 2000. In order to support the accumulation of domestically-generated capital[xi], the tax rate on reinvested earnings was brought down to zero, whereas the tax on corporate income was set to 21%.

Table 1 Types of FDI inflows

Average 2000-2008	Total inflow Euro million	Equity capital % of total	Reinvested earnings % of total	Other capital % of total
Estonia	1110.9	34.6	54.7	10.7
Latvia	678.5	64.0	29.1	6.9
Lithuania	826.2	53.6	39.1	7.3

Source: National Central Bank data.

Progress with structural reforms and attractiveness for FDI

Progress with structural reforms and an improved business environment are often mentioned among the factors that made the Baltics attractive for foreign investors. The remainder of this Focus analyses the available empirical evidence to assess whether reform efforts are (positively) associated with larger inflows of foreign investment. To this end we use a set of indicators provided by the European Bank of Reconstruction and Development (EBRD).

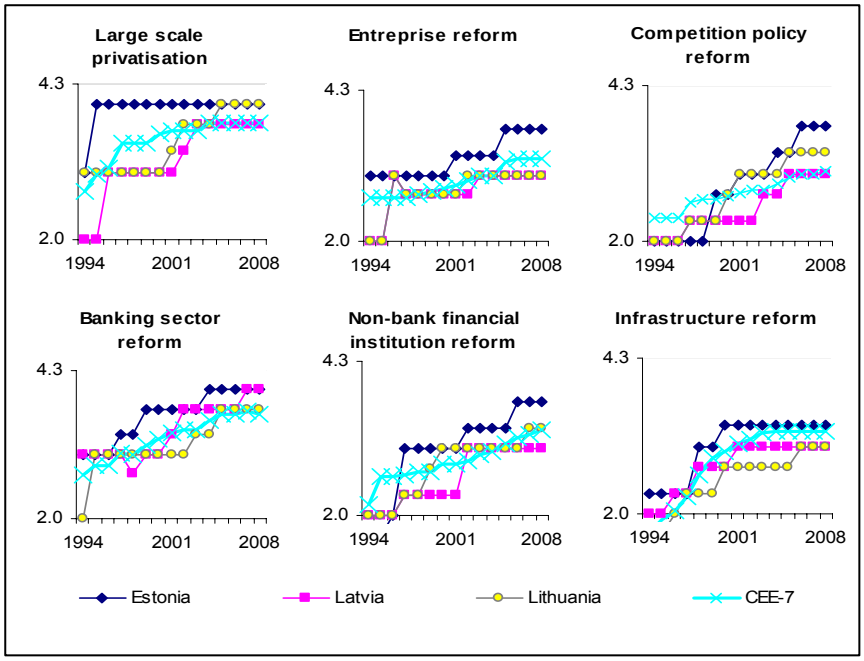
EBRD structural indicators

Since the early 1990s, the EBRD has been compiling a set of structural indicators assessing reform efforts in Central and Eastern European countries as they move from a centrally-planned to free-market economy. In particular, these indicators measure progress made with respect to the institutional and regulatory environment. For example, the index of enterprise reform measures progress made with respect to abandoning soft budget constraints [i.e. state subsidies for loss-making enterprises] and moving to an effective corporate control exercised by the market. The index for banking reform assesses the degree of compliance of national banking laws with BIS standards. The index of reform of non-bank financial institutions measures the development of non-bank intermediation and compliance of national laws and regulations with IOSCO[xii] standards. The indicator for competition policy checks for abuse of market power, barriers to entry, etc. The index of infrastructure covers dimensions such as the degree of decentralisation and commercialisation of electric power, railways, roads, telecommunication, water and waste water. The scores range from 1 to 4.3 where 1 stands for little progress and 4.3 indicates standards and performance of advanced industrial economy.

Estonia scores higher with respect to structural reforms than Latvia and Lithuania

For all three countries, large-scale privatisation and banking reform record the highest scores while progress is slower in the other four areas, in particular infrastructure restructuring (Figure 3). Although compared to the CEE-7 average (Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic, Slovenia) all Baltics are quite advanced with respect to structural reforms, Estonia has moved ahead of its neighbours with the timing of reforms. The level of reforms across the three countries is converging in the fields of large-scale privatisation, banking reforms and infrastructure. In the areas of enterprise and competition policy Estonia is not only faster but also more advanced with the implementation of reforms than Latvia and Lithuania.

Figure 3 EBRD structural indicators, 1994-2008



Source: EBRD transition report 2008, own calculations.

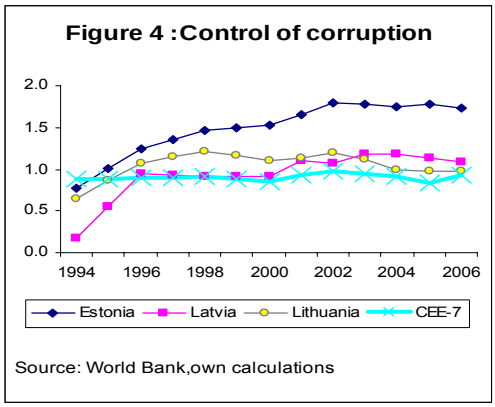
Regression setup

To answer the question of whether progress with structural reforms has a positive impact on FDI inflows, a regression analysis is run for ten EU members from Eastern Europe, including the Baltic States, as they underwent similar transition processes and joined the EU in 2004 or 2007. A general form of regression[xiii] can be summarised as follows:

$$FDI_{i,t} = \beta_0 + \beta_1 X_{i,t} + \beta_2 SI_{i,t} + \beta_3 EE \times SI_{i,t} + \beta_4 LV \times SI_{i,t} + \beta_5 LT \times SI_{i,t} + \varepsilon_{i,t}$$

As explained above, FDI inflows are measured by equity capital and reinvested earnings (net of inter-company loans) as a share of GDP, while progress with structural reforms is proxied by the EBRD structural reform indicators ($SI_{i,t}$.) The interaction terms for the Baltics control for structural reforms having a different effect in these countries as compared to the sample average.

In line with the economic literature on FDI, the regression also includes a number of control variables ($X_{i,t}$). Hourly wages, expressed in euro, control for labour costs, which are important for resource-seeking FDI. As the evidence in Table 1 suggests that the zero tax policy may have had a positive impact on reinvested earnings in Estonia, effective profit tax rates are also included as a proxy for business taxes.[xiv] National GDP usually controls for the size of the domestic market, i.e. larger economies are likely to attract more FDI. However, we prefer to use the existing FDI stock in a country as a proxy for national market size. The advantage of this measure is that it not only controls for the size of economy, as it is correlated with GDP in the given sample, but it can also indicate the clustering behaviour of foreign investors.



Finally, the model includes the World Bank index of corruption control. Since the mid 1990s control of corruption has improved in all countries considered; however, the levels of corruption vary a lot in the sample. The highest control of corruption is in Slovenia and Estonia while Bulgaria and Romania present the weakest control over the period (Figure 4). Control of corruption strengthened also in Latvia and Lithuania, however in the latter there was some deterioration after 2004.

Empirical results

The control of corruption and timing of structural reforms had a strong positive effect on FDI in Estonia

Several structural reforms are found to be positively associated with FDI inflows in the Baltics. Table 2 summarises the qualitative results[xv] with five EBRD reform indicators which have a significant impact on foreign investment in the Baltic countries. The indicator for large scale privatisation was statistically insignificant for the sample's average while the interaction term for Estonia was dropped from the regression: the large scale privatisation in Estonia was completed in the very early years of transition, thus this index is time-invariant over the estimation period (1995-2008). Even though large-scale privatisation brought the first FDI to CEE region, the reform as such was important only due to its combination with other factors like low labour costs or new business opportunities. Although progress with other structural reforms has no significant positive effect on FDI for the CEE average, it appears important for the Baltics. The positive impact of structural reforms on FDI inflows is strongest in Estonia with the largest inflows being associated with the reforms in enterprise and banking sector. In the case of Latvia FDI inflows are positively related to progress in competition policy. In Lithuania the reforms of infrastructure and non-banking financial institutions have a positive impact on FDI. The strong impact of infrastructure reform is probably related to the fact that most foreign investment to Lithuania went to the sectors of transport, trade and manufacturing. In general, the results confirm that Estonia benefited much more than Latvia and Lithuania from structural reforms. In the case of the banking sector reform this is probably related to the first mover advantage while in the area of competition and enterprise policy it could be also influenced by a higher progress with reforms.

Table 2 Determinants of FDI

	CEEC-10	Estonia	Latvia	Lithuania
Determinants of FDI inflows				
Stock of FDI (t-1)	++			
Hourly wage (t)	--			
Effective profit tax (t)	-/0			
Enterprise reform	0	++	0	0
Competition policy	0	++	+	0
Banking sector reform	0	++	0	0
Non-bank fin.inst. reform	0	+	0	+
Infrastructure reform	-	++	-	++
Corruption control	-/0	++	0	--

+ +, + or --, - indicates a (strong) positive or a negative impact on FDI, 0 shows that the variable is statistically insignificant.

Competitive labour costs, favourable business taxation and the presence of other investors have a positive impact on FDI in CEE region

Competitive labour costs, favourable business taxation and the presence of other investors appear to be significant determinants for attracting FDI to the CEE region.[xvi] Not surprisingly, competitive labour costs are confirmed to be an important factor determining investment location by multi-national enterprises. Taxation rules also appear to play a role as higher corporate taxes have a negative and mostly significant impact on foreign investment. On the contrary, the presence of foreign firms has a positive and highly significant effect on attracting further FDI.[xvii] Although control of corruption is mostly negatively associated with FDI inflows in CEE countries, this variable is not always significant. This implies that the link between better control of corruption and FDI was not straightforward in all countries, as other factors played a more important

role. However, the results vary by country. For the Baltics control of corruption seems to matter a lot for attracting foreign capital. In the case of Estonia the substantial progress made to combat corruption has a strong and positive impact on FDI while no significant effect is evident for Latvia. In Lithuania the impact on foreign investment is negative which might be related to its overall sluggish progress on corruption control (Figure 4 shows that corruption control weakened in Lithuania after 2004). This may explain why a relatively moderate difference in progress with e.g. competition reform resulted in rather large differences in FDI performance.

Policy implications

The different impact of structural reforms on attracting FDI in the Baltics could be influenced not only by the progress but also by the timing of reforms.[xviii] Estonia was much quicker than the other two countries in reform implementation and this created a competitive advantage of the first mover, namely in the sector of banking and finance. As the presence of multi-national firms has a positive impact on attracting further foreign capital, the first mover advantage could have been strengthened by herding effects.

Another factor which has probably contributed to the success of Estonia was its progress with control of corruption. Strengthening the control of corruption in Latvia and particularly in Lithuania is also important as this could increase their attractiveness for FDI.[xix]

Even though the Baltics score relatively well with respect to structural indicators in comparison to other CEECs, there is no room for complacency. In the current economic downturn, foreign investment is needed to support the economic recovery. Further reform efforts could be undertaken in the areas of infrastructure, competition and enterprise policy. The two latter types of reform should aim at reducing the abuse of market power and improve effective corporate control exercised through domestic financial institutions and markets, thereby supporting market-driven restructuring. Infrastructure reform includes some politically and socially sensitive components like the privatisation of roads or railways which is unlikely to take place. However, the progress in other infrastructure related areas e.g. decentralisation and commercialisation of electrical power might create new opportunities to attract foreign capital.

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[i] See e.g. Resmini (2006) for an overview.
[ii] See Campos and Kinoshita (2008)
[iii] E.g. the quality of labour force, see Frung, K.C. et al. (2008)
[iv] Many studies confirm that geographical proximity to FDI sending country is an important determinant explaining FDI inflows, see e.g. Demekas et al. (2005)
[v] See DG REGIO study on FDI and regional development.
[vi] See Resmini (2006) and Campos and Kinoshita (2008)
vii E.g. Hunya (2004).
[viii] E.g. in 2007-2008 the share of Swedbank amounted to 45% and 48% of total Estonian outward investment to Lithuania and Latvia. Although the activities of the Swedbank 'inflated' FDI inflows to Estonia in 2005-2008, the data available do not allow deducting the share of overall FDI which 'transited' Estonia (or any other country).
[ix]If exchange rates and values of shares were stable over time, annual FDI inflows would equal the change between FDI stocks in the current and previous year. However, in reality FDI inflows are recorded at the moment of transaction while the value of FDI stock is measured at the end of the period. The resulting differences can be quite large if the equity markets are volatile.
[x] See Hunya (2004).
[xi] See DG TAXUD 'Taxation trends in the European Union' (2009).
[xii] International Organization for Securities Commissions.
[xiii] This is a standard form of FDI equation, see e.g, Kampos and Kinoshita (2003, 2008), which we complement with specific interaction terms for the Baltic States. Given a rather small number of observations (74) we estimate it by running fixed-effects regression with Driscoll-Kraay standard errors which appears to be the best suited for the given sample.
[xiv] This data has been collected by ZEW within the EC, DG TAXUD research project, which is available at http://ec.europa.eu/taxation_customs/resources/documents/common/publications/studies/etr_company_tax.pdf
[xv] Quantitative results will be gladly provided upon request.
[xvi] We performed a robustness check by including national GDP instead of FDI stock showing that the main results would not be affected. The sign and significance of coefficients are similar in both models, i.e. there is no systematic bias in the results, using FDI stock instead of national GDP. However the goodness of fit is lower in the robustness check thus the first model (Table 3) is preferred.
[xvii] In the robustness check national GDP is also positively related to FDI inflows, but it is mostly statistically insignificant, suggesting that market size was not a primary reason to invest into CEE region.
[xviii] It could be also argued that earlier reforms in Estonia compared to neighbouring countries may reflect a more pro-active or more solid government or political set-up, which in itself may be a factor attracting FDI. As such, structural reforms, corruption control and strength of the policy and political framework may be two sides of the same coin.
[xix] Stricter control of corruption, especially at municipal and local levels of government, could also improve the implementation of existing laws and create more FDI friendly environment.

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