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that the indicators of imports and exports are cointegrated in Lithuania and Estonia; therefore, in these countries, there is a long-term relation between the indicators, they are characterised by a common trend and meet the weak condition for the validity of the sustainability of the balance of payments. The Latvian indicators of exports and imports are not cointegrated; thus, the weak condition for the sustainability of the balance of payments is not valid for this country.

In the process of checking the strong condition, the relation between the indicators of imports and exports may be put down as follows: $MM_t = EX_t + (B_{t-1} - B_t)$. We can see that MM and EX indicators will be cointegrated only when $(B_{t-1} - B_t)$ is a stationary process. $(B_{t-1} - B_t)$ is the indicator of the current account balance; hence, this condition is stricter than the previous one because the indicator includes not only the balance of trade in goods and services but also current transfers and income.

In the process of checking whether this condition is met, the assessment of the CAD indicator is performed by applying the augmented Dickey–Fuller (ADF) test for the assessment of a unit root hypothesis. After the ADF test had been performed for all three countries, we determined that CAD processes have a unit root; thus, they are not stationary, and the strong condition is not valid for these countries.

Conclusions

Model analysis showed that the main current account deficit sustainability assessment models are based on the intertemporal solvency theory, and the CAD analysis is performed based on those model expressions.

els are based on budget sustainability assessment models, when all flows into and from the country are treated similarly to budget revenue and income, while the CAD is also assessed similarly to budget deficit but, instead of general government transactions, all sectors' transactions with the rest of the world are included.

2. The main indicators for the assessment of the weak

1. The current account sustainability assessment mod-

- The main indicators for the assessment of the weak sustainability condition are imports and exports because they are important constituent variables conditioning the formation of the CAD.
- 3. The weak current account sustainability condition is valid in Lithuania and Estonia. In these countries, the indicators of imports and exports are cointegrated, are characterised by a common trend, and do not move away from each other a lot. It conditions the stability of the current account dynamics.
- 4. The strong current account sustainability condition does not satisfy the requirements due to considerable deviations from the period average for 2006–2008, when countries were having large CADs, and large surpluses in 2009–2010.
- 1. Hakkio, C.; Rush M. Is the budget deficit "too large"? Economic inquiry, 1991. Vol. 29. P.429-445. 2. Husted, S. The Emerging U.S. Current Account Deficit in the 1980: A Cointegration Analysis. The Review of Economics and Statistics. 1992. Vol 74. P. 159-166. 3. Holmes, M.; Otero, J.; Panagiotidis, T. Are EU budget deficits sustainable? Department of Economics discussion paper series. [Online], University of Macedonia, July 2008, http://econlab.uom.gr/~econwp/pdf/wp0807.pdf

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BUSINESS ENVIROMENT VS. INCENTIVES IN ATTRACTING FDI

Існуючий розрив в економічному розвитку в країнах Центральної та Східної Європи може бути зменшений за допомогою більш значних іноземних інвестицій. Для того, щоб залучити прямі іноземні інвестиції, уряди країн Центральної та Східної Європи намагаються покращити інвестиційний клімат та застосувати різноманітні стимули. Мета статті – порівняти ефективність таких дій та їх вплив на обсяги прямих іноземних інвестицій у регіоні.

Ключові слова: прямі іноземні інвестиції, ділове оточення, стимули.

Существующий разрыв в экономическом развитии в странах Центральной и Восточной Европы может быть уменьшен с помощью более крупных иностранных инвестиций. Чтобы привлечь прямые иностранные инвестиции, правительства стран Центральной и Восточной Европы стремятся улучшить инвестиционный климат и применить разнообразные стимулы. Цель статьи — сравнить эффективность таких действий и их воздействия на объемы прямых иностранных инвестиций в регионе.

Ключевые слова: прямые иностранные инвестиции, деловое окружение, стимулы.

The existing gap in economic development in CEE countries can be reduced with larger foreign investments. To attract FDI the CEE governments seek to improve investment climate and apply a variety of incentives. The aim of the paper is to compare the effectiveness of such actions and their impact on FDI volumes in the region.

Keywords: Foreign direct investment, business environment, incentives.

Most countries recognised the importance of foreign direct investments (FDI) for their economic growth and try to attract as many as possible by improving business environment and using diverse investment incentives. It is assumed that a business environment is a major factor making a country attractive for foreign investors. Riess [1] mentions regulatory and policy environment as the main driving factor for investors, Dicken [2] considers that country's attractiveness for foreign investors depends on government's policies - fiscal, monetary, trade, industrial - in creating attractive business environment. Some authors hold that FDI inflows are determined by production factor endowment. Dunning [2008] points to the availability of resources including natural resources, efficient and skilled low-cost labour force, while Sass [4] stresses market size and its growth prospects, privatisation, the role of private sector, the quality of infrastructure.

To make business environment more attractive governments have liberalized their policies, however, as most countries competing for FDI did the same it is not enough anymore just to relax investment regime. Low taxes or cheap labour are characteristic for a large number of developing and emerging economies and therefore it is necessary to bring forward for foreign investors additional stimuli hardly proposed by other nations. These stimuli include financial and other incentives provided solely to foreign investors.

Lithuania is not a leading country in attracting FDI despite that business environment is one of the most liberal among new EU member states. This gives a suggestion that for foreign investor business environment is less important than other factors including fiscal and financial incentives. Here is a contentious situation when in most international surveys Lithuania is treated as a country having

attractive investment climate but attracting much less FDI than countries with less liberal business environment. On the basis of comparison with other countries we tried to identify a relationship between FDI volumes and some factors having an impact on investor's decision.

Definition of FDI

FDI is an investment moving across the borders. The major characteristics of FDI are 10% ownership by foreign investor allowing the execution of control over an enterprise and a long run perspective. FDI is defined as "the objective of obtaining a lasting interest by a resident entity in one economy ("direct investor") in an entity resident in an economy other than that of the investor ("direct investment enterprise" [5].

FDI can be made as a greenfield investment aiming at direct financial input to establish a presence in new market. Mergers and acquisitions is another form of FDI when an operating company is taken up by another one from a foreign country. The latter is the major form as it helps to reach company objectives, namely, to attain economies of scale, increase market share and sales. Similar to acquisitions are brownfield investments which are something in between the acquisition of functioning companies and greenfield investments as acquired company is significantly reorganised. Brownfield investments are often related to privatization process.

FDI might be horizontal and vertical. Horizontal are those when multinational corporation enters foreign market with the production of the same or similar goods or services as at home. This form of investment to some extent might be regarded as a trade substitute. Horizontal FDI duplicates similar home activities and are performed in order to serve a local market better and to reduce the costs. Main reasons for such FDI are trade bariers, transportation costs, cheaper factors of production. In reality most FDI is horizontal and even horizontal FDI aimed at serving local markets have vertical FDI characteristics [6].

Vertical FDI is the location of different stages of production in diverse countries to cut costs for distinct phases of the production process [7]. Vertical FDI are related to the production of intermediate goods when a company split production process into separate phases and trasfer part of them abroad. Vertical FDI have a lower technology level and a lower spillover effects than horizontal FDIs, on other hand, countries will typically attract the type of FDI that is most beneficial given their level of development [8]. The main rationale for vertical FDI is related to additional profit received in result of differences in prices of production factors. Vertical FDI create additional international flows of goods and services. Horizontal FDI are more popular because vertical FDI are more risky as they are more focused on emerging markets and developing countries. On other hand, access to foreign markets for the company is more important than the reduction of production costs.

Business environment and investment incentives as determinants of FDI inflow

What distinguishes the improvement of business environment and foreign investment incentives? The latter are always targeted at foreign investors. Liberal countries usually establish a favourable environment for any business, local and foreign. Some other countries particularly with higher government control relax an investment climate only to foreign companies through developing specific privileges granted to foreign companies. Business environment encompasses economic conditions, regulatory and policy

framework, business facilitation mechanisms. Economic determinants include country's advantages in market size, access to markets, raw materials, infrastructure, technologies, labour skills, membership in regional blocks. Country's economic and political stability along with EU membership have an impact of FDI inflows. To be attractive country's regulatory and legal policy framework (entry and exit rules, taxation, labour market regulation, competition rules etc.) should be sound, flexible, transparent, and predictable. CEE countries lag behind the EU15 with respect to soundness of public institutions (corruption, bureaucracy, low image). Business facilitation covers instruments aimed at making business easy to perform (investment incentives, labour liberalisation, simpler bankruptcy procedures etc.). FDI are searching for countries with better intellectual property protection, lower taxes, low interests rates, simple tax administration system etc.

FDI incentives, hassle costs, social amenities and after investment services aim at promotion and facilitation of inward FDI [9]. In most countries investment promotion agencies are responsible for investment promotion and coordination. Their tasks include identification of potential investors, investor services, image building, investor generation, and other activities aimed at attracting investors [10]. Wells [11] found out that the net present value of proactive investment promotion can be approximately 4 USD for every 1 USD spent.

FDI incentives can be defined as "any measurable advantages accorded to specific enterprises or categories of enterprises by (or at the direction of) a government, in order to encourage them to behave in a certain manner" and include "measures...designed either to increase the rate of return of a particular FDI undertaking, or to reduce (or redistribute) its costs or risks"[12]. Measures of incentives may be focused on revenues, equity costs, taxes, infrastructure, labour, inputs, capital etc. and provided as financial or fiscal inducements, smooth regulations or delivery of goods or services. Often countries establish special economic zones (SEZ) to make a country more attractive for FDI. Incentives are most important in motor vehicle and transport equipment, professional equipment and electrical equipment industries [13].

There are two contentious opinions about the role of incentives in attracting FDI. Barros (14) argues that FDI incentives can have a significant impact on FDI while Villela [15] affirm that they are in principal ineffective and that market-related factors remain a key determinant for inward FDI. It is very difficult, however, to verify who is wrong and who is right.

The incentive systems in CEE countries vary considerably. Most of them applied incentives at the beginning of transition, then eliminated and once again reintroduced in late 1990s. The Czech Republic, Hungary, Poland and Slovakia started to offer generous tax holidays, SEZ, training grants, while the Baltic States relied on low rates of corporate income tax. Since 2001 incentive systems stabilized and tax rates started to fall. This led to the reduction of tax holidays and an emphasis on cash grants and stimulated some levelling up in the countries where incentives were lower [16].

Business environment and FDI

Figures below demonstrate the success of the countries from the CEE in attracting FDI. Some countries are more successful than others, but how much their success depends on the quality of business environment?

Table 1. FDI per capita in selected countries (in thousand USD)

Country	BY	BG	CR	CZ	EE	HU	LV	LT	PL	MD	RO	RU	SK	SL	UA
FDI	1.0	6.4	7.8	12.4	12.3	9.2	4.8	4.1	5.1	8.0	3.3	3.0	9.3	7.4	1.3

Source: [17]

According to Navaretti [7], due to diversity and complexity of FDI determinants it is very difficult to determine the quantity of FDI attracted by business environment or investment incentives.

Regulatory framework in different countries can be compared using OECD FDI Restrictiveness Index (closed=1, open=0) covering foreign equity restrictions, screening and prior approval requirements, rules for key personnel, and other restrictions on the operation of foreign enterprises [18]. The index indicates that the most restrictive countries for FDI are Latvia (0.85), Hungary (0.66) and Russia (0.384) while Romania (0.008), Slovakia (0.12) and Lithuania (0.05) are among the least restrictive countries. Contrary to the index Hungary is among most successful countries in attracting FDI while Lithuania is among least successful.

To find out a relationship between business environment and FDI also Indicator on the Ease of Doing Business calculated by the World Bank was used [19]. Again, a correlation between business environment and FDI per capita was not found. Latvia and Lithuania together with Estonia having the best business environment among CEE countries (rank correspondingly 21, 27 and 24) with exclusion of Estonia are less successful than countries with less attractive business conditions (rank of Czech Republic – 64, Hungary – 51, Slovakia – 48). This indicates that not business environment but other factors are more important in attracting FDI. Liberal business environment creates more turmoil and uncertainty that increase business risks and reduce attractiveness for FDI.

The third widely used indicator to measure business environment is the Index of Economic Freedom appraised by Heritage Foundation [20]. The index measures the rule of law, the role of government, regulatory efficiency and open market indicators. In index of 2012 only Lithuania and Estonia are in upper group of "mostly free" countries (rank from 6 to 28), while Ukraine and Belarus are in the group of "repressed" countries (rank from 151 to 179). However, Croatia with rank 83, Slovenia (69), Hungary (49), Slovakia (51) attracted much more FDI than Lithuania (22). It is obvious that an economic freedom is not the major factor determining the volumes of FDI, but on other hand, the absence of economic freedoms has an evidently negative impact on country's attractiveness for FDI.

The fourth indicator used to assess the impact of business environment on volumes of FDI was the Global Competitiveness Index calculated by the World Economic Forum [21]. Lithuania and Poland with high competitiveness indexes (respectively 4.41 and 4.46) received less FDI than Croatia or Slovenia with low indexes (respectively 4.08 and 4.30), however, Estonia, Czech Republic or Hungary have high competitiveness indexes (respectively 4.62, 4.52 and 4.36) and high FDI. Remarkably, the Global competitiveness index was the only one out of four where correlation between index and FDI is rather strong but this might also been explained by the methodology of calculating the index which encompasses not only business environment but also public sector, infrastructure etc.

Investment incentives and FDI

After identification of absence or low relationship between business environment and FDI an attempt was made to find out if FDI are dependent on investment incentives applied by individual countries. During such analysis three types of incentives were taken into consideration —

financial, fiscal and SEZ. The research is based on two surveys – one carried out by the World Association of Investment Promotion Agencies (WAIPA) and another one done at Vilnius University [16]. The findings based on WAIPA's data were compared with the results of the second survey where foreign investors were questioned about the attractiveness of different types of financial incentives.

Financial incentives recently became very popular tool to induce investors to make investments. Both surveys revealed that countries apply a large variety of financial incentives: subsidies related to job creation and training, wage subsidies, grants offered for the acquisition of tangible and intangible assets, administrative assistance for start-ups etc. According to WAIPA's data the largest array of such incentives is applied by Latvia, Poland, the Czech Republic, the smallest - by Slovakia and Slovenia. Both surveys showed that financial incentives related to labour force are the most attractive type of FDI incentives. Before the accession to the EU the Baltic States relied mainly on low corporate tax rates. Meantime financial incentives are widely used but with higher success only in Estonia. The findings of these surveys do not provide a possibility to claim that countries with larger array of financial incentives attract more FDI.

A large variety of fiscal instruments are applied to stimulate FDI although they can create such problems as budget deficit or market distortions. Researchers agree that such incentives, especially relief from corporate income tax are among the most popular FDI incentives in less developed countries including the CEE. Slovenia offers a deduction from the tax base, Hungary until 2011 offered tax exemptions for 80% of the corporate tax payable for 10 years, Lithuania applies triple deduction on investments in R&D, in the Czech Republic new companies are eligible for corporate tax relief for up to 5 years etc. Estonia is one of few countries where tax relief is not offered but it applies 0% tariff on reinvested profit. The survey of foreign investors revealed that reduced rates of corporate tax as well as flat tax rates are the most attractive incentive. Tax exemptions and tax holidays are quite often applied by the governments but are less preferred by investors. Important incentives for foreign investors are also withholding tax and taxation of employees. The countries with the largest application of fiscal incentives are Latvia, Bulgaria, Slovenia, and Poland. Knowing that these countries are not the most successful in attracting FDI it is possible to claim that fiscal incentives are not very efficient tool in attracting FDI.

SEZ imply the development of infrasctructure and facilities to facilitate the inflow of FDI. Slovenia uses a traditional export processing zone, Bulgaria, Hungary, Latvia, Lithuania, Poland apply a hybrid model, SEZ in traderelated activities are prevalent in the Czech Republic, Estonia, Latvia, Romania and the Slovak Republic. In Poland investors are offered industrial and technology parks. A survey of foreign investors disclosed that the most preferable SEZ were enterprise zones and industrial or technological parks while export processing zones and free ports are less attractive. Industrial parks in the Czech Republic and Hungary played an especially important role in attracting huge volumes of FDI. In Hungary in industrial parks are located more than half of the largest MNEs. In the Czech Republic and Hungary FDI in SEZ facilitated the establishment of new progressive industries while in Lithuania majority of FDI were made in traditional medium or low technology industries.

This allows to claim that SEZ and especially industrial parks are one of the most efficient tool in attracting FDI. In Hungary neither high taxes nor less restrictive business environment did not deter investors from investing in industrial parks the first of which were established already in 1990. In industrial parks is created about one third of Hungarian GDP. In Czech Republic two major industrial parks established in 1994 and 1996 attracted most important investors. During the last decade together with other financial incentives they were instrumental in attracting huge quantities of FDI.

Conclusion

FDI are one of the major instruments of economic growth therefore governments make all attempts to attract them by improving business environment and using diverse investment incentives. But do all these measures achieve their results or are just wasting of resources? Most economists argue that business environment is a major factor making a country attractive for foreign investors, others consider that the availability of resources and market size matter more while third group suppose that only investment incentives can help a country to acquire more FDI. But very likely that right are those claiming that due to diversity and complexity of FDI determinants it is very difficult if not impossible to determine the quantity of FDI attracted by business environment or investment incentives.

A comparison of four business environment indicators did not reveal a relationship between business environment and FDI quantities in CEE countries. Neither two out of three investment incentives (financial and fiscal) demonstrated a strong relationship with FDI volumes. Only a relationship between SEZ and FDI is strong enough to claim that SEZ and especially industrial parks are one of the most efficient tools in attracting FDI.

Moving Plants, Products and People// EIB Papers, 2004. - Vol. 9, No. 1. P. 10-25. 2. Dicken P. Global Shift: Reshaping the Global Economic Map in the 21st century. 4thedition. - Sage Publications, 2003. – 632 p. 3. Dunning J. H., Lundan S.M. Multinational Enterprises and the Global Economy. 2nd edition. – Cheltenham: Edward Elgar Publishing, 2008. – 904 p. 4. Sass M. FDI in Hungary – the First Mover's Advantage and Disadvantage // EIB Papers, 2004. – Vol. 9, No. 2. – P. 62-90. 5. Detailed Benchmark Definition of Foreign Direct Investment. [On line], Paris: OECD, 4th Edition, 2008, http://www.oecd.org/dataoecd/26/50/40193734.pdf. 6. Foreign direct investment statistics. How countries measure FDI 2001. [On line], Washington, IMF, 2003. http://www.imf.org/external/pubs/ft/tdis/2003/rdistat.pui 7. Navaretti G.B, Venables A.J. Multinational Firms in the World Economy. United Kingdom: Princeton University Press, 2006. – 352 p. 8. Roording N., 2003. http://www.imf.org/external/pubs/ft/fdis/2003/fdistat.pdf Vaal A. Does horizontal FDI lead to more knowledge spillovers than vertical FDI? NiCE Working Paper10-101, January 2010. - P. 1-28. 9. Promoting investment and trade: practices and issues. [On line]. New York and Geneva: UNCTAD, 2009. http://unctad.org/en/docs/diaepcb20099_en.pdf. 10. Cass F. Attracting FDI to Transition Countries: the Use of Incentives and Promotion Agencies // Transnational Corporations, 2007. – Vol. 16, No. 2. – P. 77-122. 11. Wells L. T., Wint A. G. Marketing a Country: Promotion as a Tool for Attracting Foreign Investment. Washington D.C.: FIAS Occasional Paper No.13.. World Bank. 2000. 12. Tax Incentives and Foreign Direct Investment. A Global Survey. [On line], New York and Geneva: UNCTAD, 2000, ASIT Advisory Studies No. 16. http://unctad.org/es/Docs/iteipcmisc3_en.pdf. 13. World Investment Prospects Survey 2009 - 2011. [On line], New York and Geneva: UNCTAD, 2009. http://unctad.org/en/docs/diaeia20098_en.pdf. 14. Barros P. et al. Competing for Foreign Direct Investment // Review of International Economics, 2000. – Vol. 8. – P. 360-371. 15. Villela L., Barreix A. Taxation and Investment Promotion. Banco Interamericano Desarrollo, August 2002. http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35117459 16. Miskinis A., Mikneviciute M. Comparative Analysis of FDI Incentives in new EU Member States// Transformations in Business and Economics, 2011. – Vol. 10, No. 3. – P. 72-86. 17. UNCTAD. [On line]. http://unctadstat.unctad.org/TableViewer/tableView.aspx 18. OECD'S FDI Restrictiveness Index: 2010 Update. OECD Working Papers on International Investment. [On line]. – Paris: OECD. No. http://www.oecd.org/dataoecd/32/19/45563285.pdf 19. Doing Business 2012. Doing Business in a More Transparent World. [On line]. Washington. The World Bank, 2012, http://www.doingbusiness.org/reports/global-reports/doing-business-2012. 20. Highlights of the 2012 Index of Economic Freedom Promoting Economic Opportunity and Prosperity. [On line], Heritage Foundation, 2012. https://thf_media.s3.amazonaws.com/index/pdf/2012/Index2012-Highlights.pdf. 21. Global Competitiveness Report 2011-2012. Ed. K. Schwab. [On line], World Economic Forum, 2012. http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf Надійшла до редколегії 05.05.12

1. Riess A., Uppenberg K. 2004. The Internationalisation of Production:

JEL classification G21, G28, G34

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THE EFFECTS OF A NEW FINANCIAL SUPERVISORY SYSTEM ON CONSOLIDATION IN BANKING SECTOR

Нещодавня фінансова метушня спонукала до розгляду структури фінансового регулюючого механізму. Реформа існуючої фінансової системи могла б привести до процесів інтеграції та консолідації у банківській справі, оскільки банки відіграють дуже важливу роль в економіці. Ця стаття досліджує зміни фінансової системи Євросоюзу, регулюючих правил, та збільшує потенціал перспективи фінансового сектору. В цій роботі робиться спроба оцінити фінансові структурні зміни Євросоюзу, та, щоб ідентифікувати детермінанти цих змін, досліджується роль фінансових закладів у фінансовій системі, вплив економічного розвитку, особливо для розгляду консолідуючих процесів, що відбуваються у банківському секторі.

Ключові слова: банківська справа, консолідація, регулювання фінансової системи.

Недавняя финансовая суматоха побудила к рассмотрению структуры финансового регулирующего механизма. Реформа существующей финансовой системы могла бы привести к процессам интеграции и консолидации в банковском деле, поскольку банки играют очень важную роль в экономике. Эта статья исследует изменения финансовой системы Евросоюза, регулирующих правил, и увеличивает потенциал перспективы финансового сектора. В этой делетоя попытка оценить финансовые структурные изменения Евросоюза, и, чтобы идентифицировать детерминанты этих изменений, исследуется роль финансовых учреждений в финансовой системе, влияние экономического развития, особенно для рассмотрения консолидирующих процессов, происходящих в банковском секторе.

Ключевые слова: банковское дело, консолидация, регулирование финансовой системы.

The recent financial turmoil has prompted to review the current financial regulatory framework mechanism. The present financial system reform could be a cause of the integration and consolidation processes in banking, because banks play a very important role in the economy. This article examines the changes of European Union's financial system, regulatory rules, and extending the potential of the financial sector perspective. This paper attempts to evaluate the European Union financial structural changes, and to identify the determinants of these changes, examine the role of financial institutions in the financial system, the influence of economic development, especially to consider the consolidation processes going on in the banking sector. Keywords: Banking, consolidation, financial system regulation.

The last few decades' changes in the global environment (market globalization, liberalization in finance and investment, as well as technological changes) have created a situation that facilitates consolidation process in the

financial system. Establishment the European Union was intended to create an integrated union. As market is more integrated, the easier is spreading "infection effect" (or systemic risk). This effect is particularly dangerous in a highly