SECTION

PUBLIC ECONOMY AND
INTERNATIONAL RELATIONS
THE FORECAST OF LITHUANIAN ECONOMY FOR 2011-2020

Gediminas Černiauskas¹, Igoris Panovas²
Mykolas Romeris University
Faculty of Economics and Finance Management
Ateities st. 20, LT–08303, Vilnius, Lithuania;
E-mail: 'gediminasc@mruni.eu, 'panov@mruni.eu

Abstract. The forecast is developed according to the national trends apparent in 2000-2010 as well as an application of theory of convergence in EU region. The main parameters on scrutiny are GDP, budget deficit, public debt. Interdependence of parameters of the forecast is tuned using Philips curve, Okun’s law, model of political cycle. Lithuania joining the Euro in 2015 has been used as fixed element of the model. Uncertainty of the future has been reflected by developing pessimistic, optimistic and most likely (basic) scenarios.

Key words: Lithuanian Economy, Economic Forecast for 2011 – 2020, Convergence theory.

Introduction

During the first decade of XXI century Lithuania has experienced a boom in 2002-2007, a bust in 2008 -2009 and a relatively robust recovery of 2010. The economic cycle hypothesis remains relevant and may yet repeat itself in the coming years. Economic theory has developed plenty of tools to foresee main trends of the cyclical developments and certain tools to evaluate its magnitude. Authors use Philips curve, Okun’s law, model of political cycle to construct 2000-2010 indicates certain opportunities of modeling the future.

The model for the forecast is based on assumption that there will be no drastic changes in global, European and Lithuanian economies. Convergence of Lithuanian economy with these of other EU peers as well as globalization of economy will continue. It is likely that Lithuanian economy will have to endorse stricter budget rules, to confront problem of aging by the increase in retirement age. Under assumption of relatively stable environment (most likely scenario) it is predicted that GDP annual growth will be around 5 percent in 2011-2015 and 4 percent in 2016 -2020.

Uncertainty of the future has been reflected by developing pessimistic, most likely (normative) and optimistic scenarios. The pessimistic one is based on assumption that neither EU
nor Lithuania will manage to solve problems apparent in 2010. Economic growth will be suppressed by imbalances of public finances, slow technological progress, low competitiveness of local industries on the world markets, high unemployment. The development according to the pessimistic scenario would be similar to the growth of Portugal and Hungary in 2000-2010. Under these assumptions it is predicted that GDP annual growth will be around 2 percent in 2011-2015 and 1.5 percent in 2016-2020. Higher figures of 2011-2015 do reflect opportunities of economy in the process of reaching up to the potential output after the recession of 2008-2009.

The optimistic scenario is based on very strong internal growth based on big investment projects like Ignalina Nuclear Power Plant and recovery of private consumption and external demand supported by the robust recovery of EU economy, strong growth of Russia and other Eastern economies. Under these assumptions it is predicted that GDP annual growth will be around 6.5 percent in 2011-2015 and 5 percent in 2016-2020.

The slowdown of economic growth in the second half of the period of the forecast in basic and optimistic scenarios is reflecting the convergence theory.

The model forecast is based on assumption that parameters of the labor market are strongly correlated with these of growth. The interaction between inflation and growth is less clear cut with certain arguments (e.g. based on the Philips curve) in favor of positive correlation between the growth rate and inflation.

The Forecast of GDP

Lessons of the previous decades. History of economic development in the region around Lithuania is reflected in the Figure 1. Lithuania and neighboring states had recession in 1990–1995 and 1998, followed by growth until 2007, stopped by the bust of the global economic recession of 2008-2009.

The regional experience of 1990-2000 had created an opportunity for the midterm forecasting. Big regional economies like Poland and Russia attracted attention of major international players who constructed country specific forecasts for them. Smaller countries had to mainly relay on forecasts developed for their big neighbors or to create their own estimates. Both tactics were only partially satisfactory. The first did not take country specific factors into account, as small economies may not be equal to large economies. Even if sophisticated econometrics software is used, it is very difficult to capture country specifics, especially if they are relatively unique in history. For example, large investment projects in small economies, such as Ignalina Nuclear Power Plant, could influence the development of a small country to a much greater extent than a large one.
The second tactic is used by Lithuania’s Finance Ministry, but suffers from being contained to 3 years and possibly suffering from political bias. In year 2000 a forecast of Lithuanian economy for 2000 -2010 had been developed by the Health Economic Center, Lithuanian consultancy company. The GDP figures of that forecast developed according to 3 scenarios are compared to the actual statistical data in Figure 2.

![Figure 1](image1.png)

**Figure 1.** Real gross domestic product (index, 1990 = 100)

*Source: World Bank database (June 10, 2011)*

![Figure 2](image2.png)

**Figure 2.** Match between the GDP predicted by the forecast (pessimistic, optimistic and most likely scenarios) and actual data (2000 – 2100).

*Source: Černiauskas et al, 2010 p. 253, Statistics Lithuania, 2011*
The comparison of prognostic and actual figures shows two things. First, the predicted normative scenario matched the actual general trend and the 10 year end point of the real economy. This shows that even relatively basic estimations are able to some extent predict real outcomes. However, as the boom of 2004-2007 has delivered GDP exceeding even the optimistic forecast there are opportunities for improvement of the forecasting model. Recent studies do provide certain evidence that economic growth in 2004-2007 had been overestimated by the official statistics (Černiauskas, Dobravolskas, 2011).

Even if additional studies to better evaluate historical development as well as efforts to fine tune modeling of the future are likely needed the experience of the previous decade shows that the midterm forecasts do provide certain level of accuracy in understanding the future.

**Forecast of GDP for 2011 -2020**

Modeling of the future according to basic and optimistic scenarios had been performed in to two steps. The first step was an application of *convergence theory* of the EU (Aghio et al, 2004; EC 2010). Annual statistical data of Euro zone countries and Baltic states for the period 2000-2010 (Eurostat data base) had been used to measure interdependency between the development of economy and the annual GDP growth. GDP accounted according to purchasing power parity methodology has been used to reflect economic development. GDP figures for the USA = 1.

**Figure 3. Economic growth and convergence model**

*Source: Eurostat database, 2011*
According to the model Lithuanian economy will slowly catch up with more advanced countries. The approach provides an opportunity to use data forecasted for big economies for the modeling of Lithuanians future. Data of this model with regards to the period of 2010 -2020 is reflected in Table 1.

<table>
<thead>
<tr>
<th>Year</th>
<th>USA, $</th>
<th>Lithuania, $</th>
<th>Lithuania to USA, %</th>
<th>Annual growth of Lithuanian GDP, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>317</td>
<td>125</td>
<td>39,6</td>
<td>4,4</td>
</tr>
<tr>
<td>2013</td>
<td>326</td>
<td>131</td>
<td>40,2</td>
<td>4,4</td>
</tr>
<tr>
<td>2014</td>
<td>335</td>
<td>136</td>
<td>40,8</td>
<td>4,4</td>
</tr>
<tr>
<td>2015</td>
<td>344</td>
<td>142</td>
<td>41,5</td>
<td>4,4</td>
</tr>
<tr>
<td>2016</td>
<td>353</td>
<td>149</td>
<td>42,1</td>
<td>4,3</td>
</tr>
<tr>
<td>2017</td>
<td>363</td>
<td>155</td>
<td>42,8</td>
<td>4,3</td>
</tr>
<tr>
<td>2018</td>
<td>373</td>
<td>162</td>
<td>43,5</td>
<td>4,3</td>
</tr>
<tr>
<td>2019</td>
<td>382</td>
<td>169</td>
<td>44,2</td>
<td>4,2</td>
</tr>
<tr>
<td>2020</td>
<td>392</td>
<td>176</td>
<td>44,8</td>
<td>4,2</td>
</tr>
</tbody>
</table>

Source: IMF 2011, results of modeling

As correlation between the development of economy and the annual GDP growth is very week the model does provides insights in to the future but not a clear picture of the economic reality. The second step has been used to capture economic parameters not reflected by the convergence model.

2011 – 2016. GDP is an aggregate of private consumption, investment, consumption of the government and results of external trade. It is assumed that Lithuanian economy in 2010 has been performing below the potential (Ohnsorge, Obiora, 2008). Catching with the potential will generate production and consequently relatively fast growth of private consumption in 2011 – 2015. Investment will recover from the depressed level of 2009 – 2010 thus contributing to robust economic growth in 2011 - 2016. As economy grows the Government will increase its revenues, but the emphasis on budget deficit reduction and moderating inflation would be reflected by the moderate rate of Government expenditures. Additional argument to contain Government spending in 2014 is a plan to introduce Euro in 2015. Exports will grow quite healthy but dynamics of imports will be no less strong to serve the growth of investments. Cumulative effects of all elements of demand (with private consumption and investments accelerating the growth and Government spending as well as foreign trade being neutral) will lead to the growth in 2011-2016 above the level predicted by the convergence model.

2017 -2020. Most of factors accelerating the growth will run out in 2011 - 2016. Thus the second halve of the decade will demonstrate the growth below the level predicted by the convergence model.
**Political cycle.** Lithuania is heading for general elections in 2012 and 2016. It is assumed that internal politics is going to speed economic growth during election year and slightly depress the growth during the first year of the new Government (Alesina, 1997).

**Labor market.** Parameters of the labor market have been modeled reflecting Okun’s law (Knotek, 2007) and interdependence between the growth of productivity of labor, unemployment and real wages (Blanchard, 2000; Samuelson, 2008).

Table 2 reflects final results of the modeling process.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP annual growth, %</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4.8</td>
<td>5</td>
<td>5</td>
<td>3.6</td>
<td>4</td>
<td>3.6</td>
<td>4</td>
</tr>
</tbody>
</table>

Comparison of the basic, pessimistic and optimistic scenarios is presented in figure 4.

**Figure 4.** GDP growth in Lithuania according to the basic, pessimistic and optimistic scenarios. GDP in 2010 – 100

*Source: Černiauskas et. al., 2012; Lithuanian Ministry of Finance, 2011-2012*

**The Forecast of the Budget Deficit, Public Debt**

Having relatively low public debt (according to Maastricht criterion) Lithuania has an opportunity to go different ways. 3 options of managing public finances have been under scrutiny in the frame of the forecast:

- The option foreseen by the IMF (IMF, 2011) considering continuous deficit of 4-5 percent to GDP. This pattern of development (taking into account basic forecast for GDP) may lead to the increase of debt to GDP ratio from 40 in 2010 to about 60 percent in 2020.
The option based on the assumption that the perception of no cyclical budget deficit will prevail in economic policy. Having no budget deficit from 2016 (taking into account basic forecast for GDP) may lead to the decrease of debt to GDP ratio from 40 in 2010 to about 30 percent in 2020.

- The option to have the surplus of the national budget from 2014 in order to have no public debt in year 2030.

Conclusions

The forecasting of the economy is an inspiring exercise even if the recent history of the international economy indicates a probability to have the next decade with certain ups and downs that are difficult to predict and quantify.

The model for the forecast of Lithuanian up to 2020 is based on assumptions that there will be no drastic changes in global, European and Lithuanian economies. Uncertainty of the future has been reflected by developing pessimistic, optimistic and the normative (most likely) scenario.

According to most likely scenario development of Lithuanian economy will be as follows:

- As correlation between Lithuania and its Baltic and Euro Zone neighbors is very weak, the application of convergence theory of the EU does provides only insights into the future but not clear picture of the economic reality

- Cumulative effects of all elements of demand (with private consumption and investments accelerating the growth and Government spending as well as foreign trade being neutral) will lead to the growth in 2011-2016 above the level predicted by the convergence model

- Most of factors accelerating the growth will run out in until 2015. Growth of economy will slow down. Thus the second half of the decade will demonstrate the growth below the level predicted by the convergence model.

- Having relatively low public debt (according to Maastricht criterion) Lithuania has an opportunity of a certain freedom in its fiscal policy. The option based on the assumption that the perception of no cyclical budget deficit will prevail in economic policy is considered as most likely.

Acknowledgments. The authors are particularly grateful to respectful representatives of the State Patient Fund and Health Economics Center, consultancy firm for an opportunity, to use information sources of these agencies. Special thanks for young researches Nerijus Černiauskas, Bernardas Bačiulis and Martynas Mankus who had contributed to collection and processing of the data.
References

ŠIUOLAIKINIAI MIGRACIJOS PROCESAI LIETUVOJE IR JŲ POVEIKIS EKONOMIKAI

Aldona Damulienė
Mykolo Romerio universitetas
Ekonomikos ir finansų valdymo fakultetas
Ateities g. 20, LT-08303 Vilnius
El. paštas: adamule@mruni.eu


Pagrindiniai žodžiai: migracijos procesai, ekonominė migracija, migracijos politika, emigracija.

Įvadas

Vienas šiuolaikinės visuomenės ryškiausių raidos bruožų yra nepaprastai išaugęs gyventojų migracinis mobilumas. Tarptautinė migracija, stipriai veikiama vykstančių globalizacijos procesų, suintensyvėjo visame pasaulyje, pakeitė savo pobūdį, kryptį, struktūrą. Sparčiai besivystantys tarptautiniai ryšiai politinėje, ekonominėje, socialinėje, kultūrinėje sferyje, pokyčiai valstybių sienų kontrolės srityse, tarptautinės darbo jėgos paklausos struktūroje, spartus mokslo bei technologijų vystymasis, naujos komunikacijos ir transporto technologijos sąlygoja migracijos srautų judėjimą globaliu mastu. Lietuva atkūrus nepriklausomybę ir tapus Europos Sąjungos nare, šiuolaikinės migracijos tendencijos su visomis joms būdingomis savybėmis ėmė ryškėti ir mūsų šalyje. Kaip ir daugelyje Europos šalių, Lietuvoje vykstantys ekonominiai pokyčiai padarė esminį poveikį tarptautinės migracijos procesui.

Gyventojų emigracija laikoma rimta grėsme šalies demografiniui raidai, užkio augimui ir kultūrinio savitumo išsaugojimui. Lietuva – nedidelė šalis, jeigu joje ir toliau mažės gyventojų ir didės emigracija, tai mažės Lietuvos intelektinis potencialas, bus prarandamos investicijos į

_Tyrimo objektas:_ migracija Lietuvoje. _Straipsnyje siekiama_ išanalizuoti šiuolaikinius migracijos procesus Lietuvoje ir įvertinti jos įtaką šalies ekonomikai.

_Tyrimo uždaviniai:_ 1) atskleisti migracijos sampratos įvairovę, pagrindines migracijos rūšis, įtakojančius veiksnius; 2) išnagrinėti migracijos mastą Lietuvoje ir kitimo 2001-2010 metais tendencijas, emigrantų sudėtį, emigracijos kryptis ir priežastis; 3) nustatyti ir įvertinti emigracijos sukeltas pasekmės Lietuvos ekonominiams rodikliams.

Straipsnis parašytas remiantis mokslinės literatūros šaltinių lyginamosios analizės, matematiniai statistikos, grafiniai ir apibendrinimo metodais.

_Migracijos teoriniai aspektai_

Migracija nėra naujas reiškinys. Migracija, ypač ekonominė, turi ilgesnę nei trijų šimtmečių istoriją. Šis procesas turėjo didelę įtaką žmonijos istorijai, tautų formavimui, žemių apgyvendinimui. Praėjusiam dešimtmetyje globalizacija labai pakeitė migracijos procesus, sąlygojo teritorinių migracijos tipų įvairovę, o technologijų ir komunikacijų progresas labai išplėtė gyventojų mobilumo/migracijos galimybes. Šiuolaikinėje visuomenėje gyventojų migracija yra labai dinamiškas daugialypis procesas, todėl konkrečiame nacionalinio lygmens politiniame, socialiniame, ekonominiame kontekste migracijos apibrėžimai labai varijuoja (žr. 1 lent.) (Maslauskaitė, Stankūnienė, 2007). Nežiūrint to visuose juose vyrauja du pagrindiniai kriterijai: *erdvės* (gyvenamosios vietos pakeitimas) ir *laiko* (persikėlimas tam tikram laikui) dimensijos.

Dėl įvairių priežasčių, tarp jų ir dėl migracijos politikos liberalizavimo, ne tik išaugo migracijos mastas ir pasikeitė geografiška, bet keičiasi ir jos tipai. Šalia „tradicinės“ emigracijos/imigracijos vis labiau dominuoja trumpalaikė migracija (atlikianti iš esmės tik ekonominę funkciją, nenutraukiant socialinių saitų), nepilnos šeimos migracija, plečiasi vadinamoji nereguliari migracija.
1 lentelė. Migracijos apibrėžimai

<table>
<thead>
<tr>
<th>Autoriai</th>
<th>Apibrėžimas</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Maslauskienė, V. Stankūnienė (2007)</td>
<td><em>migracija</em> yra asmenų persikėlimas santykinai ilgam laikui, gana dideliu atstumu; gyvenamosios vietos keitimas visam ar tam tikram laikui kertant teritorines ribas.</td>
</tr>
<tr>
<td>Tarptautinis žodžių žodynas</td>
<td><em>migracija</em> (lot. migratio — kėlimasis, kraustymasis), kėlimasis, kraustymasis, perėjimas iš vienos vietos į kitą; gyventojų kėlimasis iš vienos vietos į kitą;</td>
</tr>
<tr>
<td>Ekonomikos terminų žodynas</td>
<td><em>migracija</em> yra žmonių judėjimas į šalį (imigracija) ir iš jos (emigracija).</td>
</tr>
</tbody>
</table>


Veiksnių įtaka atskiries asmenims pasireiškia asmeninėms strategijoms. Pagrindinėmis asmeninėmis migracijos strategijomis gali būti: kapitalo sutelkimas stabiliai adaptacijai rinkos ekonomikos sąlygomis; „naujo starto strategija“, pragyvenimo šaltinio senatvei užsitikrinimas grižus ar negrižtant; namų ūkio ar asmens sprendimas emigruoti ir diversifikuoti pajamas tiek dėl jų...
sumažėjimo, tiek dėl potencialių kitų ekonominių rizikų; geresnio įsilavinimo strategija; santykinės gerovės padidinimo strategija; įgūdžių išnaudojimo ir karjeros strategija; šeimos susijungimo strategija (migracija siekiant gyventi kartu su šeima arba artimaisiais) (Lietuvos laisvosios rinkos institutas (2006)).

Žmone skirtingai vertina vienodas aplinkybes ar veiksnius, todėl neįmanoma identifikuoti ir nustatyti baigtinio migracijos priežasčių sąrašo. Kita vertus, pasiryždami migruoti, dažnai patys migruojantieji gerai nesuvokia motyvų. Todėl nustatyti migracijos priežastis ganėtinai sunkus uždavynys.

**Migracijos proceso mastai, tendencijos ir kryptys Lietuvoje**

Lietuva nuo pat nepriklausomybės laikų yra emigracijos šalis. Iki 1990-ųjų stebėtą pastovų gyventojų prieaugį dėl migracijos iš buvusios Tarybų Sąjungos (vidutiniškai 6–8 tūkst. žmonių per metus) pakeitė masinė emigracija (Čiarnienė ir kt., 2009). Migracijos mastai ypač išaugo 2004 m. Lietuva tapus Europos Sąjungos (ES) nare, kadangi gyventojams atsivėrė galimybės pasirinkti gyvenamąją ir darbo vietą ne tik gimtojoje valstybėje, bet ir kitose ES šalyse narėse. Tokiomis galimybėmis pasinaudojo nemažai Lietuvos gyventojų.


Eurostato duomenimis, Lietuva jau vienuolika metų turi vieną didžiausių neigiamų migracijos saldo skaičių išvykimo 1000-čiui gyventojų visoje ES. Vertinant emigracijos dinamiką atsiskleidžia akivaizdžio skaičių didėjimo tendencija. Tačiau tiksliai įvertinti iš Lietuvos emigravusių skaičių tendenciją yra sudėtinga, kadangi daugiau nei pusė (apie 60 proc.) visų emigravusiųjų neįklauso savo išvykimo (Dapkus, Matuzevičiūtė, 2008). Didžiausias deklaruotos emigracijos šuolis buvo 2010 m. dėl Lietuvos Respublikos sveikatos draudimo įstatyme nustatytos prievolės nuolatiniamis šalies gyventojams mokėti privalomojo sveikatos draudimo įmokas. 2011 m. iš šalies emigravo dar 53,9 tūkst. išvykimų deklaravusių Lietuvos piliečių.
2 lentelė. Tarptautinė migracija Lietuvoje

| Metai | Imigravo | Emigravo | Migracijos saldo | Gyventojų skaičius (tūkst.) | 1000-čiui gyventojų
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>imigrantų</td>
</tr>
<tr>
<td>2001</td>
<td>4694</td>
<td>7253</td>
<td>-2559</td>
<td>3487</td>
<td>1,4</td>
</tr>
<tr>
<td>2002</td>
<td>5110</td>
<td>7086</td>
<td>-1976</td>
<td>3475,6</td>
<td>1,4</td>
</tr>
<tr>
<td>2003</td>
<td>4728</td>
<td>11032</td>
<td>-6304</td>
<td>3462,5</td>
<td>1,4</td>
</tr>
<tr>
<td>2004</td>
<td>5553</td>
<td>15165</td>
<td>-9612</td>
<td>3445,9</td>
<td>1,6</td>
</tr>
<tr>
<td>2005</td>
<td>6789</td>
<td>15571</td>
<td>-8782</td>
<td>3425,3</td>
<td>2</td>
</tr>
<tr>
<td>2006</td>
<td>7745</td>
<td>12602</td>
<td>-4857</td>
<td>3403,3</td>
<td>2,3</td>
</tr>
<tr>
<td>2007</td>
<td>8609</td>
<td>13853</td>
<td>-5244</td>
<td>3384,9</td>
<td>2,6</td>
</tr>
<tr>
<td>2008</td>
<td>9297</td>
<td>17015</td>
<td>-7718</td>
<td>3366,4</td>
<td>2,8</td>
</tr>
<tr>
<td>2009</td>
<td>6487</td>
<td>21970</td>
<td>-15483</td>
<td>3349,9</td>
<td>1,9</td>
</tr>
<tr>
<td>2010</td>
<td>5213</td>
<td>83157</td>
<td>-77944</td>
<td>3329</td>
<td>1,6</td>
</tr>
<tr>
<td>2011</td>
<td>15685</td>
<td>53863</td>
<td>-38178</td>
<td>3199</td>
<td>4,9</td>
</tr>
</tbody>
</table>

Šaltinis: sudaryta pagal Lietuvos statistikos departamento duomenis, 2011

Pagrindinė problema ta, kad emigruoja daugiausia jauni darbingo amžiaus žmonės nuo 20 iki 34 metų (žr. 1 pav.). Emigrantai yra kur kas jaunesni nei Lietuvos gyventojų amžiaus vidurkis ir mūsų visuomenė dėl emigracijos sensta kur kas greičiau nei galėtų normaliomis sąlygomis. Emigracija keičia gyventojų amžiaus struktūrą. Tuo pačiu blogėja demografiniai rodikliai, nes tie, kurie kurtų šeimas, gimdytų vaikus, irgi išvažiuoja.

1 pav. Emigrantai deklaravę išvykimą pagal amžių 2004 – 2011 m.

Šaltinis: Sudaryta autorės, remiantis Statistikos departamento duomenimis

Dažnusia emigracijos priežastis – siekis dirbti kitoje valstybėje. (žr. 2 pav.). Tik palyginti nedidelė emigrantų dalis kaip išvykimo priežastį nurodė mokymąsi ir šimynines aplinkybes. Dauguma emigrantų tikisi kitoje valstybėje įsidarbinti, gauti didesnį atlyginimą, pagerinti gyvenimo
sąlygas, siekti geresnio išsilavinimo ir sveikatos prieţiūros (Lietuvos statistikos departamentas, 2010). Taigi galima teigtı, kad daţniausia emigraciją skatina ekonominiai veiksniai.

2 pav. Emigrantų struktūra pagal išvykimo prieţiūstis 2008 m.

Šaltinis: sudaryta pagal Lietuvos statistikos departamento duomenis, 2011


Emigracijos pasekmių ekonomikai analizė

Teoriškai emigracija kaip reiškinys turi tiek teigiamų, tiek ir neigiamų pasekmių. Šiame straipsnyje, taikant koreliacinės analizės metodą, nustatysime ryšius tik tarp pagrindinių makroekonominių rodiklių (3 lentelė) ir emigracijos masto.

Įvertinus BVP vienam gyventojui ir emigracijos koreliacinių ryšių stiprumą, gautas koreliacinių koeficientas r = 0,745 parodo stiprią teigiamą priklausomybę tarp emigrantų skaičiaus ir BVP dalies. Tenkančios vienas gyventojai. Emigracija maţina gyventojų skaičių, todėl didėjant emigracijos srautams, didėja ir BVP tenkantis vienam gyventojui. Kita vertus, dalis emigrantų pajamų, siunčiamų jų šeimai, esantiems Lietuvoje, papildo pastarųjų disponuojamas pajamas ir tuo pačiu daro teigiamą įtaką BNP ir einamajai sąskaitai. 2006–2010 metais pinigų perlaidos iš uţsienio sudarė 2,5–3,5 proc. šalies BVP. Emigrantų skaičiaus ir privačių asmenų piniginiių perlaidų į Lietuvą koreliacijos koeficientas r = 0,842 rodo stiprią teigiamą šių rodiklių priklausomybę. Savo ruoţtu didėjančios emigrantų piniginės perlaidos iš uţsienio ţenkliai didina individualaus vartojimo išlaidas šalyje. Analizuojant ryšį tarp emigrantų skaičiaus ir individualaus vartojimo išlaidų gautas koreliacijos koeficientas r = 0,767 parodo stiprų teigiamą ryšį tarp šių rodiklių. Galime daryti išvadą, kad didėjant emigracijos srautams, didėja ir
individualaus vartojimo išlaidos. Taip iš dalies prisidedama prie bendro gyvenimo lygio kilimo šalyje. Be to, šios lėšos papildo valstybės biudžetą per vartojimo mokesčius (pridėtinės vertės mokestis, akcizai ir kt.).

**3 lentelė.** Lietuvos pagrindiniai makroekonominiai rodikliai 2001-2010 metais

<table>
<thead>
<tr>
<th>Metai</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>BVP 1 gyventojui (Lt)</td>
<td>13971</td>
<td>15010</td>
<td>16490</td>
<td>18249</td>
<td>21105</td>
<td>24393</td>
<td>29230</td>
<td>33198</td>
<td>27408</td>
<td>28790</td>
</tr>
<tr>
<td>Privačių asmenų išlaidos (mln. Lt)</td>
<td>12</td>
<td>166</td>
<td>101</td>
<td>448</td>
<td>866</td>
<td>2042</td>
<td>2946</td>
<td>2993</td>
<td>2419</td>
<td>3387</td>
</tr>
<tr>
<td>Nedarbo lygis, %</td>
<td>17,4</td>
<td>13,8</td>
<td>12,4</td>
<td>11,4</td>
<td>8,3</td>
<td>5,6</td>
<td>4,3</td>
<td>5,8</td>
<td>13,7</td>
<td>17,8</td>
</tr>
<tr>
<td>Užimtumo lygis, %</td>
<td>48,3</td>
<td>49,9</td>
<td>50,8</td>
<td>50,6</td>
<td>51,9</td>
<td>52,7</td>
<td>53,9</td>
<td>53,3</td>
<td>49,8</td>
<td>47,8</td>
</tr>
<tr>
<td>Socialinės pašalpos gavėjų skaičius (tūkst.)</td>
<td>116,50</td>
<td>117,25</td>
<td>119,45</td>
<td>83,46</td>
<td>54,15</td>
<td>37,85</td>
<td>36,62</td>
<td>37,29</td>
<td>73,51</td>
<td>-</td>
</tr>
<tr>
<td>Vidutinis mėnesinis bruto DU, Lt</td>
<td>982</td>
<td>1014</td>
<td>1073</td>
<td>1149</td>
<td>1276</td>
<td>1496</td>
<td>1802</td>
<td>2152</td>
<td>2056</td>
<td>1990</td>
</tr>
<tr>
<td>Individualaus vartojimo išlaidos mln. lt</td>
<td>32094</td>
<td>34134</td>
<td>37183</td>
<td>41271</td>
<td>47060</td>
<td>53687</td>
<td>63121</td>
<td>71906</td>
<td>62110</td>
<td>-</td>
</tr>
<tr>
<td>Emigrantų skaičius</td>
<td>7253</td>
<td>7086</td>
<td>11032</td>
<td>15165</td>
<td>15571</td>
<td>12602</td>
<td>13853</td>
<td>17015</td>
<td>21970</td>
<td>83157</td>
</tr>
</tbody>
</table>

Šaltinis: sudaryta pagal LR Statistikos departamento duomenis, 2011

Kitas stiprus teigiamas tiesinis ryšys (r= 0,842) tarp emigrantų skaičiaus ir vidutinio mėnesinio bruto darbo užmokesčio patvirtina priežastį, kad didėjant emigrantų skaičiui, didėja ir vidutinis darbo užmokestis. Tokia situacija susidaro dėl darbdavių nenoro prarasti kvalifikuotus darbuotojus ir mažėjančios kvalifikuotos darbo jėgos pasiūlos, kurią lemia darbingo amžiaus asmenų išvykimas iš šalies.

Atlikus koreliacinę analizę tarp emigracijos srartų ir nedarbo nustatytas silpnas neigiamas tiesinis ryšys (r= - 0,006) rodo, kad emigracija nereiškia mažinė nedarbą. Nors mokslinėje literatūroje, teigiama, kad emigracija mažina nedarbą, teorinių pagrindų taip, bet šiuo metu tiek bedarbių skaičiaus, tiek emigrantų skaičiaus tempai yra tokie dideli, kad porinė koreliacinė analizė rodo silpną ryšį. Nereiškia mažinė nesigiai priklausomybė (r = -0,079 ) yra ir tarp emigrantų skaičiaus ir užimtumo lygio šalyje.

Tuo tarpu įvertinus ryšį tarp emigrantų skaičiaus ir socialinės pašalpos gavėjų skaičiaus, gautas koreliacijos koeficientas r = -0,567 parodo vidutinio stiprumo neigiamą priklausomybę tarp šių rodiklių. Tai reiškia, kad didėjant emigracija mažina gaunanciųjų socialines pašalpas.

Lietuvos pagrindinių ekonominių rodiklių ir emigracijos mastų priklausomybės tyrimas atskleidė, kad emigracija teigiamai įtako tokius makroekonominius rodiklius kaip: BVP vienam
gyventojui, privačių asmenų piniginių perlaidų į Lietuvą dydį, individualaus vartojimo išlaidas, vidutinį mėnesinio bruto darbo užmokestį, socialinės pašalpos išmokas.

Išvados


Sparti tarptautinė emigracija, prasidėjusi Lietuvoje nuo nepriklausomybės atkūrimo, tęsiasi iki šių dienų. Per šį laikotarpį iš šalies emigravo beveik 600 tūkst. žmonių. Teoriškai emigracija kaip reiškinys turi tiek teigiamų, tiek ir neigiamų pasekmių.


Vertinant emigracijos pasekmes šalies pagrindiniams makroekonominiams rodikliams, akcentuotinas stiprias teigiamas koreliacinis ryšys tarp emigrantų skaičiaus ir privačių asmenų piniginių perlaidų į Lietuvą bei individualaus vartojimo išlaidų. Didėjant emigracijos srautams, didėja ir privačių asmenų piniginės perlaidos. Tokios pinigų įplaukos didina visumą, prisideda prie vidaus vartojimo ir BVP augimo. Stiprus teigiamas koreliacinis ryšys nustatytas ir tarp emigrantų skaičiaus ir vidutinio mėnesinio bruto darbo užmokesčio, tai reiškia, kad didėjant emigrantų skaičiaui, didėja ir vidutinis darbo užmokesčis.

Literatūra


226
CONTEMPORARY MIGRATION PROCESS IN LITHUANIA AND ITS IMPACT ON THE ECONOMY

Aldona Damulienė

Summary

This thesis analyses the problem of migration in Lithuania and assesses the impact of migration on the economy. Contemporary migration trends began to emerge after the restoration of Lithuania's independence, and further intensified after Lithuania's accession to the European Union.

Migration is emerging as a challenge and opportunity so it is important to determine what are the migration challenges that Lithuania faces and what are the possible consequences of this process. The theoretical part of thesis defines the concept of migration, the main types of migration process and explains the theories that analysis factors that affect migration. The economic migration of Lithuanians during 2001-2011 years is analysed in the analytical part of thesis. There are assessed the imbalance between the emigration and immigration, the main causes and consequences of departure and migration policy pursued by Lithuania.

In order to identify and assess the relationship between emigration and the country's main economic indicators, the last part of the thesis is based on correlation analysis. The analysis reveals that the strongest statistically significant positive correlation is between the number of emigrants and private remittances to Lithuania. These cash inflows increase aggregate demand, domestic consumption and GDP growth.

Keywords: migration process, economic migration, migration policy, emigration.
FOREIGN DIRECT INVESTMENT IN LITHUANIA: ANALYSIS OF SITUATION AND PERSPECTIVES

Gediminas Davulis
Mykolas Romeris University
Faculty of Economics and Finance Management
Ateities 20, LT-08303 Vilnius, Lithuania
Email: geddav@mruni.eu

Abstract. With limited capital resources of Lithuania, foreign investment is a very important factor in promoting the growth of production, export, raising the quality of goods and services, creating new jobs and helping companies to successfully compete under the market conditions. The current situation and the tendencies of foreign direct investment, the investment environment are analyzed. The effect of the foreign direct investment upon the national economy is discussed. The report contains a statistic analysis and assessment of trends in the development of foreign direct investment in Lithuania and a comparative analysis with the situation in other Baltic countries.

Key words: foreign direct investment, investment promotion policy, efficiency of investment.

Introduction

In the present world there in an intensive exchange not only of goods and services, but also of capital. The capital is exported and imported in the form of international (foreign) investments. Foreign investments are of particular importance for the countries the economies of which is less developed or transitional because they can become an important factor for economy development of these countries. Foreign investments are also an important factor for the creation of the world economic system. In the world affected by globalization processes, foreign investments serve as one of the most important indicators of the national economy integration into the global market. The size of foreign investments predetermines attractiveness of the country to the international market as well as its economic relations with other states. Foreign direct investments (FDI) provide the greatest possible benefit for the country that hosts investments on the basis of which foreign direct investors and direct investment enterprises enter into long-term economic relations and interests. No wonder, that such attention is paid to the research of foreign direct investments in scientific
literature. Many authors recognize FDI as one of the most important factors for economic growth in the country.

With limited capital resources in the Lithuania foreign investments are simply indispensable for promoting production growth, creating new jobs and helping enterprises to compete more successfully in the international market. Since the very restitution of independence in the Lithuania, FDI are considered as the most important factor that promotes the economic growth. Such as attitude has formed the respective state policy with regard to foreign capital. Lithuania is constantly looking for new ways how to attract more foreign investments and create more favorable investments environment for them. To this end, tax reliefs and particular rights are granted to a strategic investor by privatizing major state objects. It is expected that FDI will create new jobs in the country will reduce unemployment, raise workers skills, and modernize the management and technologies used in production.


The purpose of this research is to refer. to the foreign scholarly writings in the sphere of FDI, to analyse the change tendencies of FDI in Lithuania and situation in this sphere in other Baltic countries. A comparative analysis of statistical data as well the analysis of scientific literature legislation and other documents has been made, graphical and modern statistical methods (correlation and regression analysis) have been used in the research.

Influence of Foreign Direct Investment on the National Economy

The impact of FDI on the economy of the host country is not single-valued - it can be both positive and negative. Foreign capital is usually invested in the following main ways: by establishing foreign owned companies or firms on the basis of partial participation; by acquiring
part of the capital of the operating company or the entire company, by setting up daughter companies; by acquiring the right to use land and natural resources and so on. International companies use direct investments especially actively by setting up their branches and daughter enterprises in different countries. By means of FDI international companies can provide support to the countries with less developed economies, i.e. to accelerate the economic and technological progress, to increase employment, transfer their organizational experience and to raise the overall level of human capital.

However, international companies may also cause serious problems. An international company with its huge material and financial resources may acquire in monopolistic market power in a foreign country in which there is its branch. These companies move the production of products harmful to the environment to other countries, usually to the developing ones. This fact worsens the ecological well-being of the investment hosting countries. Due to great economic and financial power of international companies, there may arise a threat of restriction of economic or even political independence of the country in which there is a branch of international companies. Most probably, the country ready to host foreign investment would be interested in the FDI effect on the growth of national economy. Also, it is important to find out how FDI affect the county’s employment and whether the foreign investment will not oust the local capital from the domestic market.

After analyzing data of 11 developing countries in Eastern Asia and South America in the period 1957-1997, Zhang (2011) has ascertained that in 5 out of 11 cases FDI influenced economic growth significantly. Meanwhile, Choe (2003) when investigating data of 80 developed economics and developing countries in the period in the 1971-1995 has established that FDI are positively related to economic grow. The analysis of macroeconomic data, made by Bengoa and Sanchez Robles (2003) in 18 countries of South America in the period 1970-1999 has shown the positive impact of FDI on economic growth, but the size of, effect of this assertion depended on economic conditions of the country that accepts FDI. A. Johnson (2006) has defined that FDI influence economic growth in developing countries, but they have not got a decisive significance in developed economies. Consequently, dependencies of FDI and the country’s economic growth are not single-valued; they depend on various specific economic conditions in separate countries. The investigations have illustrated that in some countries, FDI had a positive influences on economic growth, while in others such an effect was not found.

The same can be done with a new to ascertain the FDI impact on the employment level in the country. The relationship between FDI and employment in the country is also poly-semantic. On the one hand, if FDI increase the country’s competitiveness by modernizing production and help to take up new markets thereby, then they will promote employment in the country. On the other hand,
if modern technologies reduce labor demand, which is typical of developed economy countries where labor is highly paid, then the FDI impact on employment likely to be negative.

In order to determinate how FDI influence domestic investments the absolute elasticity coefficient of foreign and local investments is calculated (Davulis, 2003). If the value of this indicator is positive, then the multiplying effect of foreign and domestic investments takes place in the economy of the FDI hosting country. If the value of this indicator is negative, then the ousting effect of investments reveals itself, where foreign investments displace the local ones. The research has shown (Davulis, 2003a) that there was no investment ousting effect in Lithuania 2003. The same can be said about the present situation because there are no economic sectors in our country in which foreign investments could compete with the local one the to simple reason: there is not enough local investments to develop the countries economy.

**Legal Regulation of Investment Activities and the Investment Policy in Lithuania**

Creation of the favorable investment climate in the country is related with a precise legal regulation of investment activities. The Lithuanian legal system consisting of more than 50 laws and other legal acts make up the basis for legal regulation of investment activities. The key feature of the foreign investment law in Lithuania is that foreign investors have the same rights and responsibilities as the investors of the Republic of Lithuania, except for statutory restrictions. Legislation governing foreign investment in Lithuania is as follows: Lithuanian Constitution, ratified international treaties, laws, Government decisions and other subordinate regulations that determine investment conditions in Lithuania, investors’ rights and investment protection measures for all types of investments. The main legal regulation source of foreign investment is Constitution of the Republic of Lithuania, the rules of the fourth clause of which are of most significance for the right of foreign origin capital investment. Some constitutional laws are also attributed to the legal sources of foreign origin capital investment. An important legal source for regulating foreign investment is the Investment Law of the Republic of Lithuania adopted on July 7, 1999 (State news, 1999. No. 66-2127).

Legislation is an important factor that influences the investment climate in the country, but it is not the only one. A convenient geographical situation a well-developed production and transport infrastructure, the size of domestic market, skilled labor force, political stability, the possibility and quality of communications with other countries, local resources, the present material basic as well as not too high ecological requirements stimulated investments as well. A favourable tax system is certainly a factor that stimulates foreign investments, however its significance in often exaggerated.
The study has demonstrated (Davulis 2004) that a decisive factor in attracting FDI is attractiveness of objects to be invested rather than tax relief.

The state investment policy is the whole complex of legal and economic state measures oriented to create a favourable investment environment in the country. The ministry of Economy of Lithuania and the Lithuanian Economic Development Agency (LEDA), set up by it, play the leading sole in shaping and implementing the investment policy in Lithuania. The legal basis of the state investment policy is the Investment Promotion Programme for 2008-2013 approved of Government.

**Change Tendencies of Foreign Direct Investments in Lithuania**

We consider FDI change tendencies in Lithuania in the period after the accession to the EU. According to the data of the Lithuania Department of Statistics under the Government, the value of cumulative FDI steadily increased form 16.2 billions Lt on January 1, 2005 to 35.5 billions Lt on January 1, 2008. Due to the effect of the global financial crisis, the volume of FDI accumulated during 2008 declined and on January 1, 2009 it was 32 billionsLt, i.e. declined about 11 %. However in 2009 and 2010 it started to growing again only at much lower rate and on January 1, 2011 their volume almost reached the level of January 1, 2008, i.e. 35.1 billions Lt. In 2005, there were 70122 accumulated FDI per capita and in 2007 the volume increased up to 9473 Lt, however, in 2008 this figure dropped to 9473 Lt. FDI accumulated in 2009 and 2010 per capita gradually increased approximating to the level of 2007.

The most attractive fields to FDI in Lithuania are industry (manufacturing), trade, financial services and real estate sector. The Statistics department data in 2010 have shown that the majority of investment was in manufacturing, 27.96 %, wholesale and retail trade 13.38 %, real estate 12.44 %, financial and insurance activities 12.41 %, information and communications companies 10.69 % of the total FDI. A minimum of investment receive education, health care and the social work sectors in which only about 0.2 % of total FDI were invested. Agriculture has also attracted only a very small part of foreign investment. The rate of foreign investment in agricultural, hunting, forestry and fishery sectors does not reach even 1 %. Such a situation is predetermines by the fact that production of Lithuania’s agricultural sector is not competitive, and profitability of this branch is low.

Poland, Germany, Denmark, Sweden and the Netherlands invest most into the Lithuanian economy. In 2010, Polish investors invested more than 4 billion (11,41 % of total FDI in Lithuania), Germany 3.49 million (10.98%), Denmark almost 3.7 billion Lt (10.38%), Sweden nearly 3.15 billion Lt (8.86 %), Netherlands 3.12 billion Lt (8.7%), Russia 2.9 billion Lt (8.16%)
and Estonia 2.18 billion Lt (6.13%). Most of total FDI into the Lithuania economy come from the EU states. In 2010, FDI form the EU states made up almost 278 billion Lt (78.13%), form CIS countries - 31 billion Lt (8.7%) of total FDI.

In order to determine the FDI influence on the economy growth in the country, we use the FDI and GDP percentage ratio. The Statistics department data showed that from 2004 to 2008 both FDI and the country’s GDP have been constantly growing. The ratio between FDI and GDP was also constantly increasing form 25.8 % in 2004 up to 35.9% in 2007. In 2008, GDP continued to grow, while cumulative FDI decreased. This resulted in a decrease of the FDI and GDP ratio by 75 %, which by the end of 2008 was equal to 28.4 %. In 2009 this index increased again up to 36 %, however, this was due not so much to the increase in FDI in Lithuania as to decrease of GDP almost by 17 %. In 2010, GDP and FDI were slightly increasing and their ratio reached 37.8 %. Thus, the tendency of a constant increase of the parallel ratio between GDP and FDI to GDP (except 2008) suggests an idea that FDI promotes the economic growth in Lithuania. The results of statistical data analysis corroborate such a viewpoint - the coefficient of correlation between the volume of FDI and that of GDP is equal to 0.98. That indicates a strong positive relationship between FDI and GDP created in the country.

According to the Lithuanian Statistics department data, in the period from 2004 to 2008 with a constant increase of FDI, the unemployment rate also decline. With a decrease of FDI in 2008, the unemployment was increasing, however, in 2009 and 2010, the unemployment rate continued to increase even with the growth of FDI. The calculate correlation coefficient (r = 0.5) shows that there should be inverse relationship between the variables: with an increasing amount of FDI on the country, the unemployment rate should diminish. However, after verify significance of correlation between these variables, we have established that there is no statistically significant relationship between FDI and unemployment rate in Lithuania. Indeed, on the one hand, FDI may increase the employment in the country and on the other hand, it may increase unemployment in case the investment is into modern technologies that replace the human capital, i.e. the FDI impact on the unemployment level cannot be valuated unambiguously. Consequently, the research allows us to state that the employment to Lithuania is not so much influenced by the amount of FDI as by other factors.

**A comparative Analysis of Foreign Direct Investment in the Baltic Countries**

According to Organization for Economic Cooperation and Development (OECD) data, change tendencies of FDI in the considered period are similar in all the Baltic countries. True, yearly flows of FDI in Estonia up till 2007 were quite large and have grown from 1.4 billion in 2004 up to 1.9 billion Euro in 2006. In Latvia and Lithuania these flows in the same period were
considerably smaller: the maximum flow in Latvia was 0.7 billion Euro in 2006, and Lithuania overtook Estonia by the volume of annual FDI flow that year. In 2007, Lithuania and Latvia FDI flows have increased by 1.35 and 1.25 billion Euro respectively, while in Estonia FDI flows were negative, i.e. – 0.16 billion Euro. In 2008, Lithuania FDI flows increased up to 16, in Estonia up to 19 billion Euro, and in Latvia they declined up to 1.05 billion Euro. Since 2008 FDI flows in Estonia have been constantly decreasing and 2010 they amounted only to 0.4 billion Euro. In 2009 Lithuania FDI flows reached negative size of 1.05 billion, but in 2010 they rose up 1.7 billion Euro. FDI flows in Latvia decreased to 0.8 billion Euro in 2009, but regained the 2008 level in 2010.

General FDI quantities do not reflect the situation quite objectively, because the countries differ in size and population. Therefore the countries are compared in terms of FDI per capita. Following this indicator Estonia has an obvious advantage. In this country, FDI per capita was constantly increasing (except 2007) form 4000 Euro in 2004 up to 8400 Euro in 2010. In Lithuania this figure was steadily increasing (except 2009) from 1000 Euro in 2004 to 3000 Euro 2010, and in Latvia form 1050 Euro in 2004 up to 4000 Euro in 2010.

To compare the FDI volume and effectiveness on the international level the United Nations Conference on trade and development (UNCTAP) is used its FDI attraction and FDI potential indices. On the basis of the calculated indices ranking tables are formed that reflect the country’s attractiveness to FDI. According to UNCTAD data from the former position 55 in 2005, Lithuania rose to position 46 in 2006, however, later on its rank was constantly falling and in 2009 it dropped even into position 117, but it surpassed Latvia which had a lower place, i.e. 139. True, in the period 2005-2008 Lithuania fell behind both Estonia and Latvia. Among thee Baltic countries, Estonia has the highest score according to the FDI attraction index, which took the third place in the ranking table in 2005. In subsequent years, although its rates fell, this country has maintained rather high positions in the ranking table (place 22 in 2009). Thought in the ranking table of FDI potential Lithuania fell from position 34 to 39 in 2008, its position here can be treated as sufficiently high, i.e. Lithuania in an attractive country for foreign investment. In this respect, Estonia is a leader among the Baltic countries, which retained 30-32 position in the period 2005-2008 (in 2008 - position 31). Latvia looks a little worse it has lagged behind Estonia and Lithuania (position 42 in 2005 and 57 in 2008).

However, we should not overestimate the Estonian leaderships in the terms of attracting investment. The largest part of the Estonian FDI annual flow in 2010 consist of investment from Sweden (about 50 % of total FDI) and from Finland (about 29 % of total FDI). Note that Estonia and Finland have a particular relationship and the large Swedish FDI flows are nothing else but expansion of Swedish banks into the Estonian financial mediation sphere, because the majority of FDI flows in 2010 was directed namely in this sphere. Lithuania has already passed this stage.
Conclusions

In case the country has limited resources FDI are necessary for its economic development, because FDI are beneficial to the country’s economic growth as shown by the research. Any barriers to foreign investment in the Lithuania could be eliminated by creating a favourable investment environment in the country. To this end, the advantages of the country such as strategically convenient geographical situation, a well-developed infrastructure, especially in the transport sphere, skilled and competitive labor force and a stable business environment should be exploited maximally. The target of the long – term strategy in Lithuania would be an intensive growth of economy based on technical and technological progress stimulated by the high information technologies and investments into human capital. It is necessary to promote investments that would implement new technologies and use environment-friendly production methods and advanced management method, would produce new and competitive products and would correspondent to the needs of country’s regions. Investment should be targeted directed to the industrial and business branches that use high technologies and create high value-added production. It is necessary to extent scientific researchers in the sphere of technology creation and improvement, to strengthen the link between business and science, and to eliminate bureaucratic barriers that impede a rapid assimilation of investments.

References


235


INTERNATIONAL IMPORTANCE OF EURO AND THE STRATEGY OF ADOPTION OF EURO IN LITHUANIA

Gediminas Davulis
Mykolas Romeris University
Ateities str. 20, LT-08303 Vilnius, Lithuania
E-mail: geddav@mruni.eu

Abstract. Euro implementation and joining the European Monetary Union is one of most important task of economic policy in Lithuania. The paper analyses the possibilities of Lithuania to join the European Monetary Union and introducing the common currency, i.e. euro. The international importance of Euro, advantages and shortcomings of the common currency are discussed. The experience Germany has shown that adoption of Euro did not have a considerable influence on the price level in Germany, though it caused rise of some prices to a certain degree. On the other hand, psychological factors also had some influence on increasing in the prices. The strategy of adoption of Euro in Lithuania with taking into account the experience of other countries is presented. The perspectives of the European Monetary Union and Euro are discussed.

Keywords: Euro, European Monetary Union, international role of Euro, strategy of adoption of Euro.

Introduction

The foundation of European Union (EU), as result of the European integration process, is one of the most politically and economically significant processes in the entire history of Europe. The establishment of European Monetary Union (EMU) and the introduction of the euro ended the currency integration process which had lasted for 50 years. The euro became the key axis of integration. In the contest of the international monetary system, formation of the EMU is perhaps the most important event since the failure of the world monetary system that functioned on the basis of the Bretton Woods treaty. The first year of the functioning of the euro has shown that the single currency stabilized the fluctuation of interest, price, and exchange rates in a complicated environment of economic globalization. On the other hand the adoption of the euro is significant not only in economic, political, but also psychological terms. National currency is an important symbol of national sovereignty. A voluntary change of national currency into the euro indicates the strengthening the general European identity.
The adoption of the euro and joining the EMU remains one of most important tasks of economic policy in Lithuania till. It has been anticipated that Lithuania and Slovenia should become Euro zone countries since January 1, 2007. However, by that moment, the inflation rate in Lithuania slightly exceeded the set limit (0.1 %), and Slovenia alone joined the EMU. Thus, the adoption of the euro in Lithuania was postponed. When on the 1 of January 2007 Lithuania was expected to join the EMU, the euro zone already consisted of 12 EU member states. In the same year Slovenia and later on Cyprus, Malta, Slovakia and Estonia joined the EMU; today it unites 17 EU member states.

In order to select the proper strategy for integration into the EMU, it is important to analyse the experience of the country that successfully joined the EMU. Since the experience of functioning of the EMU is not so rich, more discussions on this point are expected in the future. The ways the adoption of a single currency can affect country’s economy was investigated by Benjamin (2007), Duisenberg (2002), Galati (2004), Gaspar (2004), Greenspan (2001), Rose (2002), Shalder (2005), Kropas, Kropiene (2005) and other authors.

The purpose of the article is to discuss the possibilities of the adoption of euro in Lithuania with reference of other countries that successfully joined the EMU.

Increase of Euro International Weight during the Pre-crisis Period

From the very adoption until the rise of the world financial and economic crisis, the euro has held a firm position among other currencies. Having replaced the national money of most EU states, the euro was continuously gaining strength and became one of the most important international currencies in the world. At present the euro can be regarded as the second world currency, successfully competing with the USA dollar. The role of the euro as a basic and reserve currency is also increasing (Pisani-Ferry, 2008). The euro being the basic currency, a wide spectrum of currency regimes is possible. One way or another, about 30 non Euro zone states have associated their currency with the euro (Benjamin, 2007). Thus, one of the outcomes of the establishment the EMU is Euro internationalization. An obstacle for a more rapid spread of the euro is the so-called “snitching costs”, i.e., consumption of time and money in the transition to another currency. (Howarth, Loedel, 2005).

The introduction of the euro was a powerful stimulus for the development of finance markets. The single currency made it possible to optimally distribute the capital in the euro zone. (European Central Bank, 2010). Due to this, more participants could make use of a larger number of financial means, because in smaller states with different money there is no possibility to form the sufficient critical mass of using certain financial means.
However, problems in the European Monetary system and especially financial problems of the Greece in the last years determined the increase of USD and relaxation of Euro (Munchau, 2008; Evans-Pritchard, 2008; Amadeo, 2012). Some authors (Jones, 2009; Ioannou, Stracca, 2011) prove that main weakness of Euro zone is inefficient fiscal regulation. Feldstein (2011) is expressed more strictly. He considers that the creation of Euro is unsuccessful experiment which is makes to days’ government crisis in some states of European Monetary Union. However, Euro’s pre-crisis position can be restored if Euro zone will be able to accept common decision and will undertake strict fiscal and monetary means (Angeloni, Sapir, 2011).

One of the major advantages for countries joining the EMU is a positive effect of trade expansion, i.e. the so-called A Rose effect (Rose, Engel, 2001). Andrew Rose has defined that trade flows between pair-countries that belong to the monetary union are on the average 100% greater than among the EU countries not belonging to the monetary union. Noteworthy is the fact that trade growth stimulates the economic growth as well. It has been established that trade increase in the country by 1% determines an increase of the gross domestic product by 0.33 %. (Frankel, Rose, 2002). The investigation of Chintrakarn (2008) confirmed these facts.

By eliminating the exchange rate in determination, the single currency diminishes risk and determines thereby a lower rate of real interest. The decreasing rate of interest, in its turn, stimulates economic growth. It must be stressed that integration into the euro zone will provides superiority to a country, i.e. an opportunity to actively represent own economic interests by participating in the EU economic decision making. The remaining EU countries have little possibilities to influence these decisions.

One of the arguments against the adoption of the euro is based on the Balassa-Samuelson effect. The Balassa-Samuelson effect means the growth of inflation within the country. In estimation of the International Monetary fund, the Balassa-Samuelson effect can increase inflation by 1 – 2 % in the EU states (Shalder, 2005).

The countries that pursue the classical monetary policy will lose this independent economic policy after joining the EMU. The Central European bank pursues the monetary policy with regard to the situation of the entire euro zone without stressing particularities of separate countries. Therefore the common monetary policy can be regarded optimal in respect of separate countries.

If the majority of Eastern European countries were accepted to EMU today, they would not avoid the price “shock “, i.e. a fair jump of prices. Even the most developed West Eastern countries, e.g. Germany have not avoided a certain increase in prices, though it was not considerable. Psychological factors are also of utmost importance for the adoption of the euro. Just like the national anthem or flag, the national currency is perhaps the most vivid indicator of sovereignty.
Loss of a right to issue the national currency can form a negative attitude for population, to the adoption of the euro.

To summary, we can affirm that, in the economic context, the adoption of the euro undoubtedly causes more positive than negative effects. However, Norris (2011) and Feldstein (2011) states that creation of European Monetary Union gave most benefit for states with stranger economy especially for Germany. On the other hand, most of rest states of European Monetary Union would have avoided contemporary economic and financial crisis if they would be joined to the European Monetary Union.

**Strategy of the Adoption of the Euro in Lithuania**

Strategy on the adoption of the euro of Lithuania was prepared on the basis of the experience gained by the countries that underwent successful adoption of the euro. The society of various countries, which adopted or pursue the adoption of euro, were or are fearfully concerned with the leap in prices that may possibly be determined by the adoption of the euro. The case of Germany proved that such fear is too far overdone.

Despite that Germany is one of the most powerful European states, having a developed economic, fears regarding the adoption of the euro were not avoided. Most people expected an abrupt rise in prices, though economically such fears were not grounded. In fact, statistical data indicated a certain rise in prices after the adoption of euro in Germany, but it was not large as perceived by the mass media and residents themselves. Besides, the rise in prices was conditioned also by other factors not related with the adoption of euro (Davulis, 2009). The adoption of the euro had some influence on prices of several services and commodities; however, no notable influence on the common price index of users was observed. Other factors, not related to the adoption of the euro, were much more significant. These are: reform of ecological tax in 2002 – 2004, health care reform in 2004, the growth of fuel prices in the period 2002 – 2006, rise in the price for energy products and food (Davulis, 2009).

Psychological issues also must be considered in estimating the adoption of the euro as a factor of price rising. People subjectively estimate information on a certain economic phenomenon, and that estimation not necessarily corresponds to facts. Users tend to notice and stress price growth rather than price fall or its stability. With regard to that, the Federal Statistical Office of Germany decided to follow the honesty principle, i.e. to present objective information to the society about changes in the price index, inflation level, etc. This strategy of communication proved to be good and has been accepted in the international arena.
Under the Resolution No 592 of the Government, dated 30 May 2005, the Coordination Commission on the Adoption of the Euro in the Republic of Lithuania was formed with the aim to ensure proper preparation for the adoption of the euro in Lithuania. To this end, seven working groups were formed that prepared the National Euro Adoption Plan and the Public Information and Communication Strategy on the Adoption of the Euro of Lithuania.

From 25 April 2007 the new Resolution of the Government of the Republic of Lithuania “On the Approval of the National Euro Adoption Plan and the Public Information and Communication Strategy on the Adoption of the Euro of Lithuania” came into force. As laid down in the National Euro Adoption Plan, the prime aim is to identify the main elements and means of euro adoption in the Republic of Lithuania that would ensure protection of consumer interests, smooth litas replacement by euro and public information. The National Euro Adoption Plan establishes the principal euro adoption elements, schedule and procedure thereof. It sets out the legal framework for euro introduction in Lithuania, as well as the institutional framework, currency exchange means and provides the instruments to be implemented in various sectors.

The National Euro Adoption Strategy is based on the following principles. Principle of continuity shall mean that all the documentation with reference to litas will remain valid for the period of validity after the replacement by the euro. The value in litas will mean the value in euro established in accordance with the irrevocable litas conversion rate against euro. Protection of consumer interests: taking up all and any means to prevent any abuse in reviewing prices, salaries, pensions, social protection benefits, etc.

Another important document in pursuit of euro adoption is the Public Information and Communication Strategy on the Adoption of the Euro of Lithuania. To avoid the shock after euro adoption, regular public information on decisions, stimulation of its citizenship and activeness in public life are of high importance. The prime aim of this Strategy is to help the society to prepare for euro adoption. This Strategy foresees the information of the public on euro introduction and factors related thereto. With reference to their competence, institutions concerned must provide to the society all the information on any aspects concerning euro adoption.

Thus, the formation of the Strategy on the Adoption of the Euro of Lithuania has taken into consideration also the experience of foreign countries that had already adopted euro. The macroeconomic analysis of processes in Baltic countries showed that Lithuania have real possibilities for adoption of Euro (Davulis, 2011). However, the first thing it should do is to strive for recovery and development of their internal markets, as well as modernise production process with a view to all state of the art technologies.

In 2008 Lithuanian Government confirmed the document of strategic directions of Lithuanian EU policy in 2008-2013. In accordance with this document Lithuania will strive to join
the European Monetary Union further pursuing strict fiscal policy and structural reforms ensuring the stability of state finance system and will apply the national law to the adoption of Euro well-timed.

Perspectives of the Economic and Monetary Union and Single Currency

We have demonstrated above what advantages for the monetary union member states are offered by a single currency. This has also been proven in practice. The euro as a currency gradually became stronger and stronger, at the same time strengthening economic power of EU Member States until the very beginning of world economic crisis. The situation, determined by the latter, has revealed serious flaws of the euro as a single currency as well. It appeared that the structure of the monetary union itself and measures concerning financial status within the union were not thoroughly considered. The situation in Greece showed a number of serious problems that a single currency might face in the case of force majeure. Here the act of saving Greece basically turned out into the rescue of the euro as a currency. However, if there is a need to save another or several monetary union members in this way, the whole euro stabilisation fund will hardly be enough. Greece is facing accusations of irresponsibility, embezzlement of monetary resources and concealment of real situation. This might be true in part, however, we are of the opinion that such a situation was caused not only by Greek government’s irresponsibility and inability to pursue relevant economic policy, all the more so as, according to the estimations, the Greek example might repeat itself in Spain, Portugal, Ireland and even Italy. Ireland is undergoing something very similar to what has recently happened in Greece, and, to our mind, such situation was mostly determined by the principle of living a debt-based life that is being promoted in the Western world. In fact, this principle has been moved to the national level as well, which led to the present conspicuous consequences.

The fact that there is no actually efficient financial regulation mechanism in the European Union to monitor how the Member States keep to the Maastricht Treaty criteria has been considered as the second most important reason, which finally placed the whole Monetary Union in such an invidious position. According to data of Eurostat (2010), at the time of economic crisis most EU Member States just waved these criteria aside. Exception was only Estonia. Estonian economics cannot be objectively regarded as being much more superior to the economics of the above-mentioned countries. However, one must admit here that Estonia did manage to maintain its financial discipline at the level likely to be envied by other countries with much more economic power. In 2009 Estonian budget deficit stayed as low as 1.7 % of gross domestic product (GDP), as compared to Germany (3.3 % of GDP), France (8 % of GDP), Great Britain (12 % of GDP), and
Greece (13 % of GDP). The EU average of budget deficit constituted 6.8 % of GDP and the respective rate in euro zone was 6.3 per cent. Even though the Estonian budget deficit amounted to 2.2 % of GDP in 2010, it still did not exceed the limit of 3 % of GDP, in this way satisfying the Maastricht criterion. Moreover, Estonian foreign debt constitutes only 7 % of GDP, which is substantially less than is required for a country to be accepted to the euro zone (Estonian Central Bank, 2011). Therefore, Estonia is one of the few EU countries satisfying the monetary union criteria. Still, even if such regulatory mechanism with the function of exercising control over national budgets was put in place, it would barely be sufficient.

If all these problems are not dealt with and no mechanism to facilitate the implementation of effective measures at EU level in emergency cases is put into operation, the future of both the euro as a currency and the Monetary Union as a whole will stay vague as it presently is. Though, the use of huge monetary support funds and the obligation placed on the part of the European Central Bank to buy governmental bonds of countries in serious financial situation might bring about uncontrollable inflation with hardly predictable consequences.

It seems sound to presume that, given the presence of a single currency, we should consider not only the coordination of monetary policy but also the enforcement of a single fiscal policy, which in its turn requires to have one single treasury, uniform markets for products and services, labour, capital and other resources, uniform revenue and finance system, as well as one common regulatory mechanism. Such a unitary economic system ought to ensure equal social guarantees for all inhabitants of its Member States. Furthermore, the consolidation of markets would also necessitate closer political integration between countries. Thus, in fact this would be quite a radical solution subsequently leading to a unitary European state. However, a question might arise whether rich countries would consent to sharing their wealth with poorer ones. Maybe they would prefer providing financial support to countries in trouble and introducing strict regulatory regime in such cases because such scenario is more convenient for them? Anyway, the present situation clearly demonstrates that the Monetary Union and a single currency will have a long-term perspective only if specific cardinal measures and closer integration between the countries are sought.

In contrary to doubtful considerations of famous economists and pessimistic forecasts about the euro, we are of the opinion that all the necessary decisions will be reached and the Monetary Union, together with a single currency, will survive and continue to develop further on because that would bring economic benefits to all countries of Europe.
Conclusions

The following conclusions can be drawn from this analysis. During a comparatively not long period of its existence Euro has become a powerful steady and reliable international currency. Therefore the entry into the EMU and the adoption of the euro will bring to the countries more possibilities and economic benefits than losses. The economics of euro gives the countries confirmed this fact.

However, as the present situation has shown, the principles relating to the formation of the Economic and Monetary Union have not been duly finalised yet and in order to guarantee future for this union a number of radical and well thought-out decisions must be taken. Lithuania confirmed its strategy of adoption of Euro and may also become the euro zone member state. However, the state should cope with its financial problem and at first to cope with inflation processes.

References
DEPRECIATION UNDER THE LAW OF THE SLOVAK REPUBLIC AND ITS RECENT CHANGES IN RESPONSE TO THE ETHICAL ASPECT OF PUBLIC FINANCE

Jaroslav Dobiš¹, Agneša Víghová²

School of Economics and Management in Public Administration in Bratislava
Železničná 14, Bratislava, Slovak Republic
E-mail: jaroslav.dobis@vsemvs.sk, agnesa.vighova@vsemvs.sk

Abstract. “Depreciation” is in common sense considered as a book-keeping cost item, representing costs related to the consumption of investments through the transformation process. Depreciation is also the source for financing of technological growth of the enterprise, on the other hand application of depreciation is resulting to the decrease of the tax obligation. Reasonable manager follows all changes in Accounting and Tax Codes of the country where he has his tax obligations. In the same time Corporate Taxes are important part of the state budgets, and therefore every change in depreciations legislation affects the quality of the business environment but revenue part of the state budged as well. Adequate and proportional settlement of the depreciation legislation is very important for both – corporation and state as well. In the article we are presenting recent and newest changes in Slovak legislation in terms of depreciations, reasons for these changes and corporate opinions about them.

Keywords: Depreciation, accounting, legislation, public finance, corporate financing.

Slovak Republic Legislation in the Area of Depreciations

By Slovak legislation there are two main groups of depreciations defined - accounting depreciation and tax depreciation.

Accounting depreciation is defined by the provisions of § 28 of Act no. 431/2002 Coll of Laws. Under that rule, an entity depreciates tangible assets other than inventory and intangible assets other than receivables, while articles of precious metal are excluded from depreciation. An entity is required to establish the plan of depreciations; under it will execute depreciations to the level of its initial price. Accounting depreciations are booked every month, and booking cannot be interrupted.

Tax depreciation is governed by Act no. 595/2003 Collection of Laws, on income tax. The Annex no. 1 of the Income Tax determines the classification of fixed assets by depreciation groups. The article 26 defines the depreciation periods, depending on the depreciation group. Under current
tax legislation in Slovakia there is the possibility of applying of balanced or accelerated depreciation methods. Depreciation method selected for particular asset cannot be changed over the whole depreciation period. Law on Income Tax provides the option to interrupt booking of tax depreciation, without setting up the limit for how long the interruption can last. Tax depreciation is annual. Act through the provisions of § 23 defines that the property which is excluded from depreciation (e.g. land, levees, national movable cultural heritage).

**Tax depreciation methods**

According Act no. 595/2003 Collection of Laws, Income tax code, two basic depreciation methods are distinguished:

a) *straight-line method of depreciation* - the annual depreciation is determined by dividing the input price of tangible assets and the depreciation provided for depreciation for that group.

<table>
<thead>
<tr>
<th>Depreciation group</th>
<th>The annual depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>¼</td>
</tr>
<tr>
<td>2</td>
<td>1/6</td>
</tr>
<tr>
<td>3</td>
<td>1/12</td>
</tr>
<tr>
<td>4</td>
<td>1/20</td>
</tr>
</tbody>
</table>

Thus, OC / 4 - if it is a property that belongs to the first depreciation of the group.

OC = cost

b) *accelerated depreciation method* – in this method of depreciation following coefficients are assigned to the following groups:

<table>
<thead>
<tr>
<th>Depreciation group</th>
<th>The coefficient for accelerated depreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the first year of depreciation</td>
<td>In subsequent years</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>

While the accelerated method of depreciation write-offs determine:

- in the first year of depreciation as follows: OC / factor in the first year of depreciation;
• depreciation in subsequent years as follows: $2 \times \frac{ZC}{\text{coefficient of depreciation in future years}}$ - the number of years during which the property has depreciated Taking $OC = CC = \text{cost residual value}$

It is interesting, that under the Law on Income Tax the tangible asset can be depreciated only by accounting depreciation, and they are tax deductible. In the case of tangible property tax costs are recognized as tax depreciation. If the accounting depreciation is greater than the tax, the difference is attributable to an item pre-tax profit.

In addition to these methods of depreciation Code of income tax defines annual depreciation for openings of pits (e.g. stone-pits, send-pits or clay-pits). It defines annual depreciations of technical or spoil bank reclamation or re-cultivation of landscapes, unless they are not of the part of fixed asset to which input prices are included. Temporary structures and workings shells are determined as a percentage of the entry price for specified periods of time.

For moulds, forms, templates and models falling under the classification codes of products 25.73.6, 28.92.1 if it is the machine for forming foundry molds from the sand, and 28.96.1 and 25.73.5 codes the determination of annual depreciation is made as a percentage of the entry price for a particular live cycle or a specified number of produced castings or extrusions.

Fixed assets leased under finance lease, other than lands, can lessee to depreciate over the term of lease up to 100% of its value. In determining of the depreciation method the accounting entity cannot apply neither balanced nor accelerated depreciation method. The amount of depreciation equals to the proportionally equal part for every month of lease, plus lease related expenses.

Changes in Depreciations in General

Any change in the law on income tax will affect both – the revenue of the state budget and revenues of natural persons and legal bodies.

This is never ending fight between public and private sector, run in terms of taxes. After 2008, facing consequences of financial crisis governments around the world developed efforts for introduction a legislation to cope with the crisis. It is a whole package of items for consideration, like costs cuts, tax increases, founding of various ways how to use public money better, finding of solutions to manage a complicated relations with the banking system.

On February 17th 2009 Slovak National Council approved an amendment to the Law on Income Tax, which came into force from March 1st 2009. By this amendment value of tangible fixed asset raised from € 996 to the amount of 1.700 € and value of intangible assets rose from the amount of 1660 € to the amount of 2400 €. In addition to above mentioned changes in depreciation...
was introduced the possibility of spreading fixed assets into separable parts, if the entry price of each detachable component is higher than 1700 €.

Among the changes we can find the following:

- Another change was the option to book detachable components individually if technical and value data, including data declaring time-related information about eventual loss and gain or change on the asset can be recorded and shown upon the request.
- Installation costs can be booked directly to costs, and without any regret to the height of these costs.
- Amendment of the Annex 1 of the Law on Income Tax brought out the possibility of the transfer of certain tangible assets from the 2nd depreciating group to the 1st depreciating group. Consequence of that was the shortening of the depreciation period of the original 6 years to 4 years.

Table 3 below shows that the impact of above-mentioned changes on the state budget is negative. Biggest impact in this negative tendency is coming from change of the level of value of tangible and intangible assets almost on double. The consequence is that accounting unit can book all value of the tangible asset up to the value of 1,700 € and intangible asset up to the value of 2,400 € in one year, if the total value of the assets is not higher than mentioned amounts.

**Table 3.** Effect of changes in the amendment of the Income Tax (ESA 95, thousands EUR)

<table>
<thead>
<tr>
<th>Category of legal change</th>
<th>Quantification of legal changes impact on the state budget of Slovak Republic in million Euros</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component depreciation of fixed assets (new)</td>
<td>legal persons + individuals</td>
<td>-199</td>
<td>-2,124</td>
<td>-4,282</td>
<td>-6,971</td>
</tr>
<tr>
<td>The increase in entry price to tangible assets</td>
<td>legal persons</td>
<td>-11,452</td>
<td>-15,833</td>
<td>-13,145</td>
<td>-3,386</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>-730</td>
<td>-1,029</td>
<td>-830</td>
<td>-232</td>
</tr>
<tr>
<td>Increase in input prices for intangible assets</td>
<td>legal persons</td>
<td>-963</td>
<td>-1,261</td>
<td>-963</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>-66</td>
<td>-66</td>
<td>-66</td>
<td>0</td>
</tr>
<tr>
<td>Accounting for formation expenses to costs directly</td>
<td>legal persons + individuals</td>
<td>Negative impact on state budget income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer of certain assets of 2 to 1 depreciation of the</td>
<td>legal persons + individuals</td>
<td>Negative impact on state budget income</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Slovak National Council (explanatory memorandum to the amendment of the Income Tax)*

As we mentioned at the beginning of this chapter, changes are affecting not only state budgets but private budgets as well.

Data in Table 4 show that investments (expressed in % of GDP) over crisis period of years 2008 – 2010 not in Slovak Republic went down. It means that existing working capital was over the
period 2008 – 2010 amortized but enterprises did not reinvest all depreciated amount in to new assets.

**Table 4.** Enterprise investments, in Slovak Republic in compare to EU member states in period of 2008 – 2010.

<table>
<thead>
<tr>
<th>Region</th>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td></td>
<td>20,7</td>
<td>19,5</td>
<td>18,6</td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td>28,0</td>
<td>23,9</td>
<td>18,7</td>
</tr>
<tr>
<td>Czech republic</td>
<td></td>
<td>18,4</td>
<td>16,6</td>
<td>16,1</td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td>18,9</td>
<td>16,1</td>
<td>14,1</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td>17,5</td>
<td>16,1</td>
<td>16,4</td>
</tr>
<tr>
<td>Estonia</td>
<td></td>
<td>23,1</td>
<td>16,5</td>
<td>15,0</td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
<td>16,9</td>
<td>11,3</td>
<td>7,4</td>
</tr>
<tr>
<td>Greek</td>
<td></td>
<td>Data not available</td>
<td>Data not available</td>
<td>Data not available</td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td>24,7</td>
<td>19,7</td>
<td>18,9</td>
</tr>
<tr>
<td>France</td>
<td></td>
<td>18,7</td>
<td>17,4</td>
<td>17,2</td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td>18,4</td>
<td>16,5</td>
<td>17,3</td>
</tr>
<tr>
<td>Cyprus</td>
<td></td>
<td>19,9</td>
<td>16,5</td>
<td>14,8</td>
</tr>
<tr>
<td>Latvia</td>
<td></td>
<td>24,7</td>
<td>17,2</td>
<td>14,2</td>
</tr>
<tr>
<td>Lithuania</td>
<td></td>
<td>20,4</td>
<td>13,2</td>
<td>11,4</td>
</tr>
<tr>
<td>Luxemburg</td>
<td></td>
<td>17,2</td>
<td>13,9</td>
<td>12,9</td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
<td>18,7</td>
<td>18,1</td>
<td>16,3</td>
</tr>
<tr>
<td>Malta</td>
<td></td>
<td>15,0</td>
<td>12,8</td>
<td>14,4</td>
</tr>
<tr>
<td>Holland</td>
<td></td>
<td>17,2</td>
<td>15,3</td>
<td>14,2</td>
</tr>
<tr>
<td>Austria</td>
<td></td>
<td>20,9</td>
<td>19,9</td>
<td>19,5</td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td>17,7</td>
<td>16,0</td>
<td>13,9</td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td>19,5</td>
<td>16,9</td>
<td>15,4</td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td>25,3</td>
<td>20,1</td>
<td>16,9</td>
</tr>
<tr>
<td>Slovenia</td>
<td></td>
<td>24,4</td>
<td>19,4</td>
<td>18,4</td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td></td>
<td><strong>22,9</strong></td>
<td><strong>18,3</strong></td>
<td><strong>17,7</strong></td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td>18,9</td>
<td>16,5</td>
<td>16,0</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td>16,7</td>
<td>14,2</td>
<td>14,4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td>14,5</td>
<td>11,9</td>
<td>12,0</td>
</tr>
</tbody>
</table>

*Source: Euro stat data*

Recent Changes in Depreciations

As per above mentioned, fixed assets leased under finance lease, other than lands, can lessee to depreciate over the term of lease up to 100% of its value. In determining of the depreciation
method the accounting entity cannot apply neither balanced nor accelerated depreciation method. The amount of depreciation equals to the proportionally equal part for every month of lease, plus lease related expenses. This was true till December 31\textsuperscript{st} 2011. Since January 1\textsuperscript{st} 2012, based on the Tax code amendment can lessee to depreciate fixed assets using balanced and accelerated method as well. Lessee has to respect the period of depreciation settled by Tax Code, with no regards to the length of lease contract. If lease contract for property which belong to the 2 depreciation group (depreciation period 6 years) last from March 2012 till October 2015 then period of depreciation last 6 years, and in course of 2012 tax subject can depreciate only proportional part of annual depreciation relevant to the period from March 2012 till December 2012. The property goes in to the books of lessee in value equal to the principal in lessor books (introduction price). Purchase costs, or other costs relevant to the acquisition of the subject matter of the lease contract, born till the moment of lease (like fee for the lease contract, transport costs, assembling costs, duty, etc.) go in to the introduction price. The price for which the lessee purchases leased property at the end of lease period is part of the introduction price as well.

New amendment to the Tax Code (Act no. 595/2003 Z.z.) introduced from January 1\textsuperscript{st} 2012 new approach to the even and accelerated method and of depreciation. Under former legislation valid until end of 2012 tax unit could book all annual value of the depreciation, even if the property was purchased in December 2012. Since January 1\textsuperscript{st} 2012 only proportional amount of the annual depreciation can be put in to the books.

The reason for introduction of above mentioned changes is coming out from ethical principles of law creating process. The lawgiver upholds the opinion that it is not fair to buy property last day of the year, to use it only one day, but to take whole value of the annual depreciation to the books.

Even voting in Slovak parliament showed that deputies were of very different opinions about this code amendment. According to the statistics of Slovak house of deputies (parliament) 143 deputies out of 150 were present at voting time in the parliament. Out of them 79 deputies voted Yes, and 60 No, 4 deputies desisted from voting.

Above mentioned legislative changes are carrying consequences to all businesses. How far they are affected by these changes we analysed on a sample of 200 business entities, 100 small business entities and 100 small size corporations. We asked them if they are aware of above mentioned changes, and what opinion they have on above mentioned changes. In 65% statuaries did not have information about this change. 35% statuaries are following new incoming legislation and had knowledge about this particular one. 10% respondents told that they find it as a fair and ethical. 27% respondents told that they are not in the position to provide fair statement on the ethical aspect, as far as they know that it seems not fair to the business but may fair to the public financing, 63% of
respondents told that they do not find it as a friendly to the business environment, especially if they are “punished” for the profit by obligation to pay advance prepayment for the tax for next year. The practice in Slovakia is, that if the company creates a profit in particular year, it does not only pay a tax from this profit, but must to pay advance payment for the tax of next year, even nobody knows if there will be profit next year as well.

Conclusions

Effort of every government should strike entrepreneurs on one side, to help them to cope with crisis through changes legislation of depreciation which will enable them to use such tools for depreciation which will give them a chance to increase their competitiveness via investing in to the new technologies. On the other side, more value will be depreciated; less amount of money will be collected to the public budget. Is that so?

Business men said that if they will more invest in to the new technologies, better chance they will create to be competitive. And it will in a long run give them better chance to create job positions, and generate profit and pay taxes. So from a long run it looks that both sides will be happy.

It is very important, that depreciation legislation is managed properly. We had an experience in Slovak republic, when computers were put in to the category of 4 years depreciations, and in certain time even in 6 year depreciation period. Prices of PCs were falling by decades of percentage every year, plus to that we were facing incredible technological progress. So enterprises, who wanted to keep their competitiveness via technological growth, had to replace computers far before they could deduct them tax vise in to the costs of the company. And that made their production more expensive.

It is very important to manage depreciation legislation equally to physical and moral amortization of assets. Sometimes need for technological changes are coming from wrong management decisions in past, or from market volatility or even from present good managerial decisions. Market value of the technology which is supposed to be sold out very often is lower than residual value in books. In such cases it would be good for entrepreneurs to have an instrument how to depreciate and deduct from earnings this financial difference, especially in situation where they can prove that technology was replaced by a new one.

The facts, that there is no chance to do tax depreciation of plots can create a problem as well. The example can be found in developed economies. Often depopulated areas can be found, for example Detroit, Michigan, USA. When in certain areas are only located companies of the same scope of activities, when product or service cycle they produce is over, companies are or moving
away or closing down. Price of such plots has negative value. There is no buyer, and such plot is just money eater. But few years ago the price of that could be sky-high. For such situation to have tax depreciation instrument could have a sense.

It should be useful, if proposals of new amendments to the Tax code will have a fundament in a good analysis. We need analysis with algorithms which will be able to provide a picture about short run and long run financial effects of amendments to the businesses and to the public finance as well.

References
CRITICIZING KOHLBERG'S MORAL DEVELOPMENT STAGES FROM FEMALE PERSPECTIVE

Selma Gultekin¹, Azize Ergeneli², Anil Boz³

Hacettepe University
Faculty of Economics and Administrative Science
06532, Ankara- Turkey

E-mail: ¹selmag@hacettepe.edu.tr; ²ergeneli@hacettepe.edu.tr; ³anilboz@hacettepe.edu.tr

Abstract. This study aims at criticizing the Moral Development Theory by Kohlberg in terms of gender. Kohlberg’s model of moral development comprises of three levels and six stages from childhood to adolescence. It’s the first level, pre-conventional stage, in which the individual is self-directed, the second level, conventional stage, in which the individual is directed to interpersonal relations and social expectations, and the last level, post-conventional stage in which the individual creates his own moral principles. According to Kohlberg’s system, women can’t climb over the third stage. According to Kohlberg, moral is a different concept for the man and the woman. Whereas according to Gilligan, in Kohlberg’s model there is a bias in terms of genders. And this ethnocentric model induces the development of an approach, which is against women. This situation in Kohlberg’s model gives rise to an evaluation that women are less rational and weak, when compared with men. Kohlberg’s model of moral development: The weakness of woman, or difference of her moral priorities?

Keywords: Moral, Moral Development, Moral Judgment; Stage, Kohlberg, Gilligan.

Introduction

There are wide range of organizational, philosophical, psychological, sociological ideas on moral issues. Naturally, it is a very controversial issue. Morality has some issues such as what is ethics, distinction of personal and social moral, universality of morality, whether or not it is related with culture, whether it shows any difference between genders. Moral can be defined as the principles that belong to good or bad and right or wrong. That is to say, moral is a system of rules. There are different perceptions about the source of moral; some scholars shows conscience and cognition; some shows wisdom; some shows feelings and some shows results of economic relationships as the source of moral. According to Sigelman (1999) and Eysenck (2004), human morality has three components (Zadanbeh & Zakerian; 2011, 48):
1. **Cognition**: Thoughts and decisions about moral issues. Emphasized by Piaget and Kohlberg.

2. **Emotions**: Feelings, such as guilt, connected to moral issues. Emphasized by Freud.

3. **Behavior**: How we behave, and the extent to which we behave honorably or not. Emphasized by social learning theorists. Studies about moral usually have been based on cognition theories. And the most known

**Kohlberg’s Moral Theory**

For many years, the dominant alternative to the behavioral analysis of morality was a cognitive one, based on the child’s development of reasoning abilities. The most famous and influential of the cognitive theories of morality was developed by Lawrence Kohlberg in the 1960s. (Travis & Wade; 1997, 265-266) Kohlberg's moral development theory is re-examination, the different designation of Piaget's theory (Baumrind, 1986). Piaget and Kohlberg have examined the moral development with a cognitive approach including learning of rule, law and principles (Gibbs, 2007). Kohlberg read complex moral stories with dilemmas to his experimental subjects. The most popular among these is the story of Heinz that Kohlberg left him facing a moral problem (Bussey & Maughan, 1982). Heinz Dilemma (White; 2011, 461):

In Europe, a woman was near death from a very unusual kind of cancer. The doctors thought that one drug—a form of radium discovered by a druggist in the same town—might save her life. The druggist paid $400 for the radium and charged $4,000 for a small dose of the drug. Heinz, the sick woman’s husband, went to everyone he knew to borrow the money and tried every legal means, but he could only raise $2000, half of the drug’s selling price. Heinz pleaded several options to the druggist: sell the drug to Heinz at a cheaper price, let Heinz pay druggist said, “No, I discovered the drug and I’m going to make money from it.” Heinz is now considering breaking into the drug store and stealing for his wife. Dilemma: Should Heinz steal the drug?

After leaving Heinz desperate, Kohlberg makes his subjects question the behavior of Heinz; asking some questions about Heinz's behavior. To Kohlberg, the reasoning behind the answers was more important than the decisions themselves (Travis & Wade; 1997, 266). He evaluates the answers according to the six stage model of the moral development (see Table 1).
Table 1. Kohlberg’s Stages of Moral Development

<table>
<thead>
<tr>
<th>Stage of moral development</th>
<th>Moral Behavior is that which:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Conventional Morality</td>
<td></td>
</tr>
<tr>
<td>Level 1</td>
<td>Avoids punishment</td>
</tr>
<tr>
<td>Level 2</td>
<td>Gains reward</td>
</tr>
<tr>
<td>Conventional Morality</td>
<td></td>
</tr>
<tr>
<td>Level 1</td>
<td>Gains approval and avoids disapproval of others</td>
</tr>
<tr>
<td>Level 2</td>
<td>Is defined by rigid codes of “law and order”</td>
</tr>
<tr>
<td>Post-Conventional Morality</td>
<td></td>
</tr>
<tr>
<td>Level 1</td>
<td>Is defined by a “social contract” generally agreed upon for the public good</td>
</tr>
<tr>
<td>Level 2</td>
<td>Is based on abstract ethical principles that determine one’s own moral code</td>
</tr>
</tbody>
</table>

Source: Adapted from Gleitman & et al., 2000

Three levels of moral development have been identified by Kohlberg (Witting & Belkin, 1990):

1. Pre-Conventional (Ages 4 to 10). The child behaves appropriately because of fear of punishment or the chance to receive a reward, but does not recognize any higher principle.
2. Conventional (Ages 10 to 13). In this stage, which Kohlberg calls conventional reasoning, other people’s expectations of conformity are the basis for judgment and conventional conformity.
3. Post-Conventional (Ages 13, or not until young adulthood, or never). This last level is one of self-accepted values, in which appropriate behavior is determined by abstract principles rather than by convention or by rewards and punishment.

The literature review shows on moral development has been long dominated by Kohlberg’s stage theory, which considers moral reasoning as the most important factor influencing moral action (Krettenauer & et al., 2011).

Gender Differences in Moral Development

According to Kohlberg moral issues vary depending on sex. As a result of his studies, Kohlberg identifies 6 steps in the development of moral consciousness. What Kohlberg calls the post-tradition moral which is reached after traditional moral is the step of the autonomous conscience that few among men can reach to. Without doing enough research on women, Kohlberg stated that women could not pass beyond the stage 3 of the ethics development theory that Kohlberg himself developed (Wark & Krebs, 1996; Flanagan, 1982).

According to Carol Gilligan, Kohlberg’s theory includes a bias in terms of gender (Walker, 1984). Gilligan opposes to male centered understanding of traditional moral in his book ‘In Another Voice’ and states that moral structure of women can not be measured with Kohlberg’s model.
According to Gilligan, upbringing processes of young boys and girls are different. Naturally, their moral priorities have differentiated (Jaffee & Hyde, 2000). Just for this reason, moral structures of women can not be measured with a model that measures moral structure of men (Flanagan, 1982).

Criticizing the theory of Kohlberg, such as Gilligan, Luce Irigaray stated that this theory deprived women of moral consciousness. In justice perspective that people focus on their own rights, Kohlberg argued that people take moral decisions by themselves (Ford & Lowery, 1986). Gilligan, however, emphasized the relationship between one and others and has developed a moral view point that points out the importance of interpersonal communication and thinking of others (Gilligan, 1982). In some researches, some conclusions that support Gilligan’s theory have been obtained (Galotti & et al., 1990; Gilligan & Attanucci, 1988). In fact, whether or not men and women possess different moral philosophies is still unclear (Dubinsky & et al., 2005).

According to Gilligan (1982), raising men to 6 step and leaving women at 3 step Kohlberg has led women to a disadvantage position compared to men (Ford & Lowery, 1986). Men acting alone from principle to solve moral problems, women solve them though negotiation by giving importance to relationship (Robertson & et al., 2007). According to Gilligan, Kohlberg’s taking men up to sixth step and leaving women on third puts women in a disadvantageous position compared to men. While men solve moral problems by acting on their own with principles, women, caring the interpersonal relationships, do it by negotiation (Carlo & et al., 2010). According to this, men behave rationally and women intuitively. In this sense, women are considered weak compared to men. According to Irigaray (1998), the following is concluded from Kohlberg’s theory: 'Women behave and act with the absence of moral consciousness’.

In opposition to Kohlberg’s “fairness perspective”, Gilligan suggests "the care perspective”. According to Gilligan (1982), altruism, developing empathy, the ability to take over responsibilities of others represent a form of rationality and morality. This situation does not make women weaker and less valuable who behave intuitively putting relationship in the center compared to men who act rationally by behaving according to principles (Ford & Lowery, 1986). Such as Gilligan, Irigaray (1998) advocates "a morality classified according to gender".

**Results and Discussion**

Kohlberg's moral theory is one of the most popular and comprehensive studies on moral development. Until today, approximately 5000 studies have been done based on Kohlberg's theory. According to Kohlberg ethics are universal (Parikh, 1980). According to ethics researchers as well, one of the most important principles of ethics is that ethics are universal. In this context, Kohlberg's claim seems to be in consensus with the claims of ethics researchers. According to ethics
researchers, while Kohlberg's studies have more rational basis, Gilligan and similar researchers’ studies are considered more philosophical and intuitive. In this sense, according to Kohlberg, men think and act rationally based on a number of principles. On the other hand, Gilligan thinks that women are relationship-focused, act intuitively and prefer negotiation (Westbrook & et al., 2011). This situation makes it difficult to measure the ethical structure. Therefore, universality theory of ethics researchers weakens. For this reason, Kohlberg's work has found more supporters on behalf of the universality of the ethical principles of ethics. However, this situation is in conflict with equality principle of ethics; because Kohlberg’s theory has led women to a weaker and passive position compared to men. According to this theory, perhaps, women behave and act deprived of moral consciousness, as Irigaray (1998) said. The literature review shows mixed support for differences in men and women on ethical decision-making (Westbrook & et al., 2011).

Do women stuck in the third stage of the ethical structure as claimed by Kohlberg’s theory or women's moral structure is immeasurable by Kohlberg's model as claimed by Gilligan? All these debates continue today. However, this is true that, as all these oppositions did not reduce the value of Kohlberg's study; even made it more popular. Besides, the critical approach of Gilligan led Kohlberg's theory to a further enlargement.

As today's ethic is devoid of a moral theory that considers men and women equal, critical approaches of Gilligan and Irigaray have been important in the start of feminist ethic discussions.

The purpose of this study is to analyze the approaches of Kohlberg and Gilligan about moral by literature review. As a result of this study, it can be suggested that there is a conflict about moral and gender in literature. This study has some hesitations about the evaluation of the women’s moral structure through Kohlberg’s model. Besides this, Gilligan’s model that is against Kohlberg’s model, because of including heuristic processes, complicates the evaluation of moral structure. This study relates the popularity of Kohlberg’s model in moral literature to the claims of its ability to evaluate both women’s and men’s moral structure together. Due to this, it is considered that the ethical handicaps of this model are disregarded.

References


UNITED NATIONS CONVENTION ON CONTRACTS FOR THE
INTERNATIONAL CARRIAGE OF GOODS WHOLLY OR PARTLY BY SEA - A CLEAR
AND REASONABLE ADVANCE FOR MODERN TRADE

Lina Jasutienė
Mykolas Romeris University
Faculty of Economics and Finance Management
Ateities st. 20, LT-08303 Vilnius, Lithuania
E-mail: jasutiene@gmail.com

Abstract. This article covers the legal amendments and potential impact of the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (hereinafter referred as the Rotterdam Rules or the Convention), with a focus on carriers' business. The Rotterdam Rules, if and when in force, will bring significant changes to the businesses of those involved in the shipping industry, in particular to the core of global shipping – carriers. The vast scope of the upcoming changes could affect carriers' business at all levels. The first part covers a short overview of legal document governing the researched subject. The second part is focused on the novelties in Carrier's liability contained in the Rotterdam Rules along with container carriage, recognition of electronic trade and freedom of contracts. The conclusion draws that these novelties will lead to transparency and predictability in doing business internationally.

Keywords: United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (the Rotterdam Rules), shipping industry, international trade, carrier’s liability, and volume contracts.

Introduction

Realizing the need for unifying the law on the carriage of goods by sea to facilitate and promote the maritime trade and the responsibility and at the same time to meet XXIs centuries modern technologies in business overall existence, the largest maritime trading and shipping countries such as China, USA, Spain, France etc. actively participated in the shaping of the United Nations Convention on Contracts for the international carriage of goods wholly or partly by Sea (Rotterdam rules¹). It is also assumed, that in modern logistics the transport customer is often less

¹ The Rotterdam Rules was officially signed on 23 of Sept. 2009. Today 24 countries are signed the Convention. For such countries, the Convention does not immediately take effect. They first have to complete their national procedure.
interested in how the goods are carried as long as the goods arrive safely and on time at their destination. No doubt, production methods have changed radically during the last decades. Manufacturers and subcontractors situated all over the world have created an ever increasing demand for transports door - to – door. These door – to door transports necessarily involve a number of different transport modes, re-loading and storage of goods while in transit. The Rotterdam rules also represent a legal response to this development as it covers not only sea transports port – to – port, but also transports ancillary to the sea transport.

Essentially, this paper addresses the above mentioned issues based upon the general comments on the main contents of the Rotterdam rules and provides the analysis of the potential influences of the rules to the modern trade and trading industry. The article is divided into two parts. The first part covers a short overview of legal document governing the researched subject. The second part is focused on the novelties in Carrier’s liability contained in the Rotterdam Rules along with container carriage, recognition of electronic trade and freedom of contracts. The conclusion draws that ratifying Rotterdam rules will lead to transparency and predictability in shipping industry and who’s involved in doing business internationally.

**Literature Review**

The regime today governing the carriage of goods by sea has been for a long time subject of criticism, such as for being out of date, fragmented, uncoordinated, leading to unpredictable results or posting obstacles for international trade development. The academics and practitioners have researched at length this topic in different aspects and have not arrived at consolidated conclusion if Rotterdam rules are the best solution for today’s modern trade. Prof. Arroyo (2009) has concluded that Rotterdam rules present long waited hope for uniformity of Maritime law, especially for Spain, while prof. Sturley (2008) has stated that it is a pity, that Rotterdam rules do not cover all multimodal transport aspects and only those where involved sea leg, prof. Bonnevie (2010) has analysed impacts to business after signing Rotterdam rules and has proved that small shippers will suffer from increased liability ceilings in volume contracts. It is worth noting the analysis of prof. Berlingierí (2010) who has demonstrated negative aspects of Rotterdam rules but also invited maritime states to adopt Convention and don’t maintain present obsolescent regime. With this in mind, there has been a lack of analysis in presenting Rotterdam rules most important novelties for business, shipping industry and carriers as core of all maritime trade - these issues are is covered by this article.

for ratification of the convention. (Today only Spain ratified Convention). The Rotterdam Rules will enter into force one year after the 20th country will have ratified it (Rotterdam rules art. 94).
Survey

Overview of the Existing Legal Regime (Form and Scope of the Convention)

By the end of the last century, three international regimes\(^2\) were in existence, together with a number of national variations\(^3\). Today the Hague - Visby rules adopted in 1968 have been in force, the regime applied in the majority of trading and maritime states although, as explained below, advances in carriage and technology mean that they no longer fulfill contemporary needs. As a matter of fact, the existence of free competing systems provides a scope of conflict i.e. questions about the proper law to be applied where a dispute arises in a state which applies Hamburg Rules, in relation to cargo carried under bill of lading subject to The Hague Visby Rules. Current situation is described by some authors as a legal Tower of Babel (Sales Pallarès, 2011) by elaborating single document for all transport operations implied, the aim is to award a homogeneous protection to the owner of the goods during the whole operation, but without increasing excessively the rigor as regards the liability of the sea carrier.

Perhaps the most significant innovation of the Rotterdam rules is its applicability to door – to – door operations. The existing maritime conventions apply only on a tackle-to-tackle\(^4\) basis, while the Hamburg Rules extend coverage slightly, based on port-to-port\(^5\) criterion. In today’s world, where contract of carriage is typically concluded on door-to-door basis it makes much more sense for the governing law to follow the commercial practice. To obtain certainty, one legal regime must govern the entire performance of the contract. However, Rotterdam rules are not full multimodal instrument. To be applied there must be international sea leg. As in some particularly European countries (also Lithuania) exist regional codes that govern inland transport the Rotterdam rules adopts a limited network principle so if the inland damage can be localized and contract for inland leg had been concluded contracting carrier is liable according to national legislation. The Rotterdam rules, as a general principle, apply to outbound and inbound shipments to or from contracting state (art.5) thus changing existing law for many countries, as today wide spread Hague-Visby rules apply only to outbound shipments from a contracting state.


\(^3\) China – one of the worlds largest trading nations – counts on a national maritime code, that incorporates elements from both Hague – Visby and Hamburg rules, the same way acts Australia and Canada, Nordic countries – which have long been major trade partners also count on national Maritime codes followed by the Hague – Visby and Hamburg rules.

\(^4\) Hague-Visby rules art. 1.e.

\(^5\) Hamburg rules art. 4.1.
Novelties in Carrier’s Liability

Under the Rotterdam rules, the carrier remains responsible for the cargo entrusted to it by the shipper during the entire period of the custody of the carrier over goods. In comparison to existing Hague – Visby rules (art. I) and Hamburg rules (art. II) where carrier’s responsibility is restricted to pure maritime operation in Rotterdam rules we meet extension of carrier’s liability in period of time which is synchronized to wider scope of Convention’s application door-to-door. However the Convention is not always door-to-door Convention because the period of responsibility can be contractually limited (Diamond QC, 2009). It is allowed (art. 12.3) to the carriage contract parties to agree on the time and location of receipt and delivery of goods and in such way define the beginning and end of the period of responsibility.

The parties (art. 13.2) of the contract may also agree that loading, handling, stowing or unloading of the goods can be performed by shipper or consignee. In this way Rotterdam rules makes FIO(S) provision valid (Nikaki, 2010). Sales under FIO terms are extremely usable in bulk and tramp trade. From the carrier’s point of view such a condition, based in Rotterdam rules, is attractive as the loading costs in some ports can vary considerably from port to port. Without knowing the ports to which the ship may be ordered to load, it is difficult to make an accurate estimate of the loading charges if the condition "free in and out" would not apply. Taking into account that damages can also occur during loading and unloading, carriers highly supported this Rotterdam rules provision.

A new element of the Convention is that the carrier is held liable under the articles 17 and 21, when cargo has not been delivered within the time agreed in the contract of carriage.

Another novelties based in convention are deletion error in navigation and limited “fire defense” as carrier’s defense for loss or damage. According to prof. Von Ziegler (2010) in modern liability regime for international transportation cannot exonerate the carrier for negligence in areas of performance which are typical to its own key service, namely transportation and navigation. Limitation of the "fire defense" to cases where a fire was not caused by ie. the master, crew and carrier's employees. Taking into account that the majority of accidents at sea are caused by fire on board, the limited "fire defense" may have a significant impact on a carrier's financial standing. This will force the carrier to attribute even greater importance to the professional qualifications of masters and crew on its ships. A more sophisticated search for highly qualified crew is likely to cause carriers additional expense.

---

6 FREE IN / FREE OUT: Freight booked FIO includes the sea freight, but no loading/discharging costs, i.e. the charterer pays for cost of loading/discharging cargo.

7 Hague – Visby rules art. 4.(a).
Other aspects of the carrier’s obligations that have changed under the Rotterdam rules include a clear statement of carrier’s core obligations as well as specific provisions in respect of cargo carried on deck.

**Container Carriage**

It is important to draw the attention to the container carriage issue which has been addressed in the Rotterdam Rules. The draftsmen of The Hague rules in the early 1920s could not anticipate the container revolution and even authors of Hague – Visby and Hamburg rules have underestimated the impact that the container revolution would eventually have on modern commercial practices. Much attention has been focused on the Convention’s application to container carriage. According to prof. P. Bonaissies (2009) in the year of 2000 approximately 100 mln. containers were transported by sea transport, in 2007 – 200 mln. prof. Bonaissies, 2009 predicted that this number will increase till 300 mln in 2015.

The popularity of container carriage can be explained that these devices, in which goods are carried, protects goods from thievery and larceny, climate and sea damage, reduce the time of loading and unloading, lessens costs of packing on the part of the shipper. The carrier has a duty to supply containers which are fit and safe for reception, carriage and preservation. This is very important provision as most of containers are owned or leased by carriers (Talal, 2011).

**Recognition of Electronic Trading**

Recognition of electronic trading is a significant area of change set out in the Rotterdam rules. Under existing maritime carriage regimes, shippers have the right to demand paper documentation which is often required to satisfy needs of banks or buyer in a sales chain (Chard, 2011), which is the reason why the shipping industry has been unable to take full advantage of technological advances. Provisions in the Rotterdam rules covering use of electronic records represent an important step forward. Electronic documents are accorded functional equivalence with paper documentation so that both have the same standing (Rotterdam rules art. 18, b.) and are interchangeable to meet practice requirements.

---

8 Rotterdam rules art. 11.
9 Rotterdam rules art. 25.
10 A container is an article of transport containing goods to be loaded onto and off the vessel quickly and easily and providing security from external risks. It’s usually manufactured from metal for multiple uses.
11 Rotterdam rules art. 14.c.
The electronic trade has introduced a number of substantial changes in international trade resulting in the reduction of costs and enhancement of the trade process. It should be well assumed that the use of e-commerce will reduce delays in the banking and postal systems. Electronic systems can also be expected to reduce opportunities for fraud which arise today from the customary use of multiple copies of bill of lading.

**Freedom of Contract**

Finally, it is very valuable to touch upon the innovation set in out Rotterdam rules which is related to the freedom of contract extended to volume contracts\(^\text{12}\). Meaning that shipments under volume contracts will be subject under to the Rotterdam rules unless the parties take affirmative steps contracting out of coverage. It is notable, that by contrast the Hague-Visby and Hamburg\(^\text{13}\) rules have no provision allowing derogation from the mandatory regimes. According to article 80 of the Rotterdam rules the carrier and the shipper may agree on certain derogation provided there is compliance with the strict conditions set out in that article\(^\text{14}\). There are big shippers and industry and trade countries such as USA in particular who support volume contracts inclusion in Rotterdam rules and there are others who do not (ie. Morocco shipping association). These pessimists (Bonnevie, 2010) are afraid that these contracts will be detrimental to the interests of small shippers and open a possibility to abuse by the carriers. This points out that in practice the shippers will be offered two freight rates by the carrier; one where Rotterdam rules apply mandatorily and the other where there are derogations are allowed. According to prof. Mukherjee and Basu Bal (2009), reduced freight rates generated by volume contracts will be offset by higher insurance rates. No derogations are allowed from those of liabilities and obligations of the Rotterdam rules that are the core of all carriage conventions such as obligation for carrier to make and keep ship seaworthy (art.14 a), properly crew, equip and supply the ship so crewed, equipped and supplied throughout the voyage (art. 14 b); shipper’s obligation to provide information, instructions and documents (art.29) and obligation to fulfil special rules by carrying dangerous goods (art. 32).

To summarize, the Rotterdam rules govern legal relationship between carriers and shippers in manner of facilitating the free flow of trade in a way as economically efficient as possible and volume contracts without any doubt will stimulate competition.

---

\(^{12}\) Article 1.2. of Rotterdam rules defines volume contract as a contract of carriage that provides for the carriage of a specified quantity of goods in a series of shipments during an agreed period of time. The specification of quantity may include a minimum, a maximum or a certain range.

\(^{13}\) Hamburg rules has a reference to carriage of goods in a series of shipments, but that provision is not comparable to article 80 of the Rotterdam rules.

\(^{14}\) Volume contract must contain a prominent statement that it derogates from the Convention and specify the derogations, the volume contract must be individually negotiated and derogation cannot be incorporated by reference from another document, nor included in a contract of adhesion.
Conclusions

The aim of this article was to analyse the Rotterdam Rule which would harmonize international legal practice on the carriage of goods by sea and would facilitate the maritime trade. It addressed the existing legal regime and legal acts governing the researched subject and it focused on the novelties in carrier’s liability contained in the Rotterdam Rules with special focus on container carriage, recognition of electronic trade and freedom of contracts. Having analysed that the paper tends to draw the following conclusion:

Firstly, the research has proved that the Rotterdam Rules itself have been a great step forward in regulating and unifying legal issues of international sea trade in general and tackling the problems of carriage liability in particular. It tries to strike a balance between the carrier’s interest and the shipper’s interest and provides sound legal background for solving any claim stemming from their contract, ensuring predictability and foreseeability in international trade. Nevertheless, new rules and its interpretation might cause some misunderstandings within legal and commercial communities.

Secondly, the analysis has demonstrated that the Rotterdam rules would extend the application of carrier’s liability, container carriage, the recognition of electronic trade and freedom of contracts.

- more precisely, the extension of the carrier’s liability for the entire sea voyage should include the liability regime of the Convention irrespective of the moment when the loss, damage or delay occurred as long as it happened during the period of responsibility of the carrier. This is in line with the present and future practice of shipping industries utilizing burgeoning advances in communications and navigation.

- detailed described container carriage in the Convention represents demanding shipping market need to use container carriage that will have to reduce errors of interpretation.

- the recognition of electronic trading should result in the shorter reduction of costs and enhance of the trade process. The rules have introduced electronic transport documents leading to the establishment of entirely document-free transportation.

- freedom of contracts provides an opportunity to create legal framework of volume contracts within whose trading carrier’s liability can be adequately flexible so that certain derogations can be made which will inure to the benefit of the carriage contract parties in terms of economic efficiency.

Thirdly, all these components set out in the Convention represent the dynamics of legal response to the current international trade and legal challenges. Its further practical application
should prove the value of this legal documents leading to the increased international trade and more transparent legal process governing the relations between the contracting parties.

References

THE STATE PROGRESS STRATEGY AND ECONOMY OF LITHUANIA

Arturas Jurgelevicius¹, Gediminas Davulis²
Mykolas Romeris University
Faculty of Economics and Finance Management
Ateities str. 20, LT-08303 Vilnius, Lithuania
E-mail: 'artjurg@mruni.eu; ²geddav@mruni.eu

Abstract. Lithuania's economy for over 20 years moves on rails of market economy. Over twenty years levers of market economy were developed, the contours of the market were formulated, but in many cases, socio-economic indicators of the satisfaction of the population and quality of living is poor in terms of physical or spiritual needs. In order to consolidate the internal and external resources it is necessary to put foundation for a systematic and consistent coordination. In this context, strategic planning becomes critical. Under conditions of globalization of the economy, strategy comes to be complex and multi-stage process. The changing environment is transforming the social and economic processes in society. These processes are not completely spontaneous and uncontrolled. Prerogative of the State is to combine social, economic, technological, cultural resources built on the achievements of scientific progress and improve quality of the social economic characteristics of the life. This paper deals with “Lithuania 2030” strategy which should provide country's development guidelines for nearest 20 years. An overview of the Strategy vision, objectives and tasks are discussed in this paper. Give a short statistical analysis showing the vision of the priorities of the strategy reflecting dissonance with the actual socio-economic situation of the country. The analysis shows that the country needed reform of the social economic situation, which should be oriented to person, education, health and social and economic changes of societal structure. Unfortunately, the strategy of Lithuania 2030 only provides general-oriented principles.

Keywords: strategic planning, socio-economic development, The State Progress Strategy, wages, real economy

Introduction

Strategic economic planning is widely considered to be an importance of both corporate and state level. A.D. Chandler (1962), one of the first authors who have presented the concept of modern strategy in scientific literature. He argues that the strategy is the company long-term goals
and objectives of anticipation, action and resources needed for selection of goals. A similar approach has K.R. Andrews (1969) and H.I. Ansoff (1965). Strategic planning principles were applied by the developed market economies of Western countries. Therefore, the role of the market economy and the state is important. The President of World Bank Mr. Wolfensohn reported (1997) at "The State in a Changing World" that "history shows that a good government - it is not a luxury but a prerequisite. Without effective government participation in the economy it is not possible to have a balanced social and economic development“. National economic strategy must be balanced at socio-economic point of view and to be focused on the quality of living (Stiglitz, et. al, 2010). National long-term economic development strategy must address the different interest groups to promote sustainable development reducing social exclusion (Čiegis et. al, 2004).

Phenomenon of strategic planning in the economic system has been dealt with relatively long time in the scientific literature. Great contribution to the modern idea of the strategic planning process was made of foreign scientists Ansoff (1965), strategic planning and economic interaction through the prism of competition examined Porter's (1990), the transitional market economy social and economic processes by Balcerowicz (1998), Lithuanian national economic strategy has been enriched by Melnikas (2002), Vasiliauskas (2004). Strategic processes formulation and analysis of their environment was provided by Griebliauskas, Miliauskas (2008). Deep analysis of the socio-economic life was researched by Rakauskiene (2006, 2011), the necessity of strategic planning of socio-economic processes of Lithuania’s competitiveness was pointed out by Meilienė, Snieška (2010), Vijeikis, Macys (2010). As Lithuania is considered to be a transitional economy, it is very important to understand socio-economic processes taking place in society (Kolodko, 2000, 2005; Stiglitz, 1999; Kornai, 1994). Liberalization and privatization, creation of legal framework, the rule of law, and the rule of private property, micro-restructuring of the industry of Lithuania have been taking place since its declaration of independence 20 years ago. Up to date, social and economic performances have been more fueled by political and lobbyists’ interests than strategic goals oriented. The performance of economy of Lithuania was marked by economic growth fluctuations and rapid growth as well as rapid fall (Cerniauskas, et. al., 2011). Implementing different economic policies post-communist countries relatively achieved various results. Post-communist countries, of course, had different start positions. However, such post-communist countries as Hungary, Poland, Czech Republic, Slovakia, and Slovenia have achieved higher economic performance and social indicators. Applying “shock therapy” or gradualist approaches were critical in the socio-economic development of these countries. Assumingly, the creation of market institutions was essential for economic leap. According to some authors, privatization should take place in the last stage of transition period (Marangos, 2005). In the case of Lithuania, 2/3 of the state property was privatized less than in two years following in the beginning of its transition in 1991-1992. Rapid and economic
illogical policies of the government destroyed market institutions and condemned the country for long and painful development. Anyway, the case of Estonia shows that long term oriented goals could be achievable. Just after restoration process of independency, Estonian government declared fiscal balanced and foreign direct investment oriented policies. Just before financial crisis in 2008, Estonia had 2 billion euros budget surplus, highest investments per capita rate among Baltic States. In this context, the role of strategic planning of the economic process increases.

The article is based on deduction method. Most recent scientific literature is analyzed. The statistical data is taken from European Statistical databases Eurostat and Lithuanian Department of Statistics. Political document and its fitness to Lithuanian conditions are analyzed by prognosis based on logic synthesis and abstractions methods. Also comparative method of statistics and political documents is used.

The Basic Principles and Goals of the Strategy “Lithuania 2030”

"State Strategy Progress 2030" is a political document, which should indicate the next 20 years of the country's direction. At the present, the document is being discussed in the parliament in order to pass as the law.

Table 1. Indicators of the State Progress Strategy, draft document “Lietuva 2030”, 2012

<table>
<thead>
<tr>
<th>Indicators of Vision Implementation</th>
<th>VALUE</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EU27 Average</td>
<td>LT 2009 / 2010 m.</td>
</tr>
<tr>
<td><strong>Index of quality of living</strong> „International Living” 2011</td>
<td>71 out of 100</td>
<td>68 out of 100</td>
</tr>
<tr>
<td><strong>Index of happiness</strong> Gallup World Poli research (2005-2009)</td>
<td>39 proc. (&quot;happy persons&quot;)</td>
<td>25 proc.</td>
</tr>
<tr>
<td><strong>Index of competitiveness</strong> World’s economic forum 2010-2011</td>
<td>4,7</td>
<td>4,3</td>
</tr>
<tr>
<td><strong>Index of democracy</strong> Economist Intelligence Unit 2010</td>
<td>8,004</td>
<td>7,24</td>
</tr>
<tr>
<td><strong>Index of innovativeness</strong> Union of Innovation 2010 (2009 m.: data)</td>
<td>0,516</td>
<td>0,227</td>
</tr>
<tr>
<td><strong>Index of globalization</strong> KOF Globalisation index 2010</td>
<td>83,3</td>
<td>74,73</td>
</tr>
</tbody>
</table>
The indicators shown in Table 1 is quite abstract and based on estimations of index like globalization, innovativeness, democracy, competitiveness, happiness, quality of living. Although these indexes are internationally recognized and used, they reflect quite abstract assessment of socio-economic developments.

The strategy provides general information, less oriented to the improvement of socio-economic processes, but the moral, humanitarian and cultural aspects of development of society. Without any doubts, strategic planning should to assess also the political economic circumstances (Ikeda, 2003). Therefore, the strategy should include the social strata and economic processes. In particular, the ongoing ideological struggle - wins one or another market ideology (Gylys, 2003).

For this reason, long-term and sustainable socio-economic development of society faces particular challenges. Strategic planning in the context of the country's national strategic objectives should include different levels of functional goals, such as.: Foreign policy, social policy, economic policy, etc. (Grebliauskas et. al, 2008). If strategic planning is regarded as the form of state intervention into market economy, according to research, at different stages of development of the state, government intervention in the market economy mechanism should be at different extent (Lapinskas, et al., 2009; Beniušienë et. al, 2008). On the other hand, the globalization, economies in transition, financial conditions and the internationalization of production processes are different and multi-vector. Systematic and consistent finding balance in the national economy is becoming a serious challenge for all countries. Corporate and national economic strategies compatibility is very important issues at macro and micro levels (Vasiliauskas, 2004). In turbulent global environment, sophisticated financial markets, the cash flows, trade of goods and services sector, long-term strategic planning can hardly focus on rigorous quantitative and qualitative parameters (Greenspan, 2007).

The State Progress Strategy states that "The strategy aims to encourage fundamental changes in society and to create all conditions for a creative, responsible and open personality formation. The strategy also emphasizes that its purpose is not the country's operators to establish the strategic objectives, but to allow the public to form freely, creatively and responsible personality.Individual thinking has to turn to the country's socio-economic progress and to ensure the quality of living. The strategy appeals to personal freedom and awareness and a sense of responsibility to promote the democratic development of society. As Porter (1990) reported nation-state to its core purpose, should seek to increase the competitiveness of the economy, as the national competitiveness - the nation's ability to combine economic, social, political and geographical advantages, culture, science and technology, and management capacity to ensure breakthrough to new kinds of resources and development opportunities. A national economic strategy should include a wider interest of society,
economic performance, political, cultural interest groups. Melnikas (2002) identifies objectives and principles of the system to be focused on long-term socio-economic development of the country.

Vision of the strategy - Lithuania is a modern, dynamic, open to the world, cherishing its national identity society and economy. The main directions of economic development strategy can be divided into the blocks:

a) The promotion of entrepreneurship among the country's population;
b) The creation of scientific research and service centers;
c) The development of business social responsibility;
d) The country's competitiveness based on the knowledge and innovative ideas.

The State Progress Strategy indicators listed in Table 1. These indicators are based on creating: a) smart economy, b) smart society, c) smart governance. On the other hand, more and more scientists speak of the qualitative parameters in assessing the real situation of the public health and the economy (Stiglitz et al., 2010). Nobel laureate says that traditional macroeconomic indicators are not really suitable for measuring socio-economic situation. The new indexation as leisure, air pollution, health, education, consumerism habits much more reflective of the real socio-economic situation in society and better respond the measurement of quality of living.

**Evaluation of Real Socio-Economic Situation of Lithuania**

As already mentioned, the Strategy is consistent with the formal strategic planning requirements. The strategy's vision is focused on the common elements as a personal breakthrough thinking and expression of creativity. The strategy is less focused on the real social and economic improvements. A real misunderstanding of the situation poses a potential threat to the overall strategy efficiencies, effectiveness, economic costs. Current socio-economic situation in the country poses a serious question of the appropriateness of the strategy for the country's conditions. According to the Lithuanian Department of Statistics 2011, unemployment rate stood at 14.8% of total employment. This rate is higher than the EU average. It should be noted that 40% of the unemployed are long-term unemployed. Long-term unemployed are persons who are the last 12 months looking for work but unable to find one. It is also about 33% of the unemployed are young people. For example, graduates of management students consist 30% of all graduates, but based on the expectations of Lithuanian industry research, industry leading business executives have difficulty finding sales, high-skilled, export managers (Confederation of Lithuanian Industrialists, 2010, Vilnius). On the other hand, there is structural unemployment - a situation in the labour market with a high level of unemployment, however it is difficult to find adequate skilled labour force. The labour market situation reveals two problems: a) the country's higher education system is
not adapted to the needs of the business b) the existence of structural labour market problems. The State Progress Strategy’s directions essentially ignores these social and economic problems, there is no strategic list of priorities on this issue.

As a preamble declared: "The Lithuanian possibilities are actually considered realistically: we cannot compete with advanced economies, because we do not have vast natural resources, that could make a substantial profit, at present we are looking the ways to create energy independence." The Strategy is trying to "circumvent" the real sector, and focuses on the different indexation rates.

Analyzing Lithuanian social and economic structure, it is clear that the situation is one of the most complexes in the EU (see Table 2).

### Table 2. Pensions and wages in post-communist countries, Eurostat, 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Pension on average, euro</th>
<th>Wage on average, euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>432</td>
<td>800</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>409</td>
<td>945</td>
</tr>
<tr>
<td>Estonia</td>
<td>365</td>
<td>789</td>
</tr>
<tr>
<td>Latvia</td>
<td>304</td>
<td>655</td>
</tr>
<tr>
<td>Lithuania</td>
<td>222</td>
<td>602</td>
</tr>
</tbody>
</table>

Consumption of the population differs in the first and tenth deciles eight times, and IX, and X deciles 3 times (Rakauskiene, 2011). According to the author's study, in I decile to 55% of income residents spend on the first necessity goods - that is foods and soft drinks. For this reason, people may not spend enough attention on health, education, culture and leisure issues. The socio-economic situation bears a deep social problems, social isolation increases, a large proportion of the society does not have the same opportunities to take advantage of public goods. Quality of living of the population is decreasing dramatically. Country's progress should be evaluated according the common good. Instead of intangible indicators like index of happiness, the priority should be set more reflecting socio-economic situation. In authors’ opinion, one of tactical goal for the next 10 years could be - the formation of middle-class society. Currently, the middle class in Lithuania consists of only 15% of the population, compared with the European Union - 60-80% (EUROSTAT, 2011).

Emigration is another very important question as the country's quality of living component. According to the Lithuanian Department of Statistics, the emigration flow has increased rapidly over the past few years. In 2010 emigration flow increased four times compared with 2009, 21 thousand and 84 thousand respectively. Reduced incomes, high emigration reduce domestic purchasing power of the population, it can be said that the internal market "shrinks." Diminishing
purchasing power will reduce government revenue collection, and therefore likely to be assumed that the Government will increase the tax rates and broaden the tax base, for example: Property tax, car fees, parking fees, health care taxed, etc. These processes rise long-term threat to the national development and stop sustainable socio-economic development of society. Although migration does have not homogeneous interpretation, most authors provide negative assessment of this process (Vainauskaitė, 2011; Stulgienė et. al, 2009). Emigration has negative consequences: the decline in population (public revenue and expenditure structure change), the social consequences of family / children, human trafficking and migrant vulnerability, lack of qualified labor, the production volume decrease (low domestic purchasing power, decreasing revenues in the budget), income differentiation and growth of social tension.

![Added value by economic activities, 2008](image)

**Figure 1.** Added value by economic activities, 2008, Lithuanian Department of Statistics

It is mentioned in the State Progress Strategy that Lithuania has to assess the situation realistically, and not to compete with industrialized countries, but to focus on innovation, knowledge and creativity. Country's exports account for about 60% of GDP, and to remain competitive in Lithuania is strategically important. There is no single factor that leads to the competitiveness indicators. Competitiveness depends on many factors and various policies (Snieška, et. al. 2010). The 1 chart shows the economic activity generated by the added value. The graph shows that the traditional sectors such as manufacturing, transportation, retail trade, real estate account for a significant amount of gross domestic product. The strategy emphasizes that the future of the State should be based on science centers and research services, based on knowledge
and innovation. Lithuania appoints as little as 0.8% of GDP for R&D spending, the European Union average is 1.25%. Member States have agreed on the Lisbon Strategy for about 3% of GDP of spending on R&D, important to stress that this indicator is aimed at Europe 2020 strategy. The sluggish funding in this area does not promise high added value in the future development, innovation and knowledge-based economy. On the other hand, the Strategy will focus on the Scandinavian countries, to take over these countries the best practices. Lithuania is seen as a leader in the service sector of five Nordic and three Baltic countries.

**Table 3. Competitiveness ranking by world’s countries (Baltic Sea region), Eurostat**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Sweden</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Finland</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Germany</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Estonia</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>Lithuania</td>
<td>44</td>
<td>53</td>
</tr>
<tr>
<td>Latvia</td>
<td>53</td>
<td>46</td>
</tr>
<tr>
<td>Poland</td>
<td>54</td>
<td>68</td>
</tr>
</tbody>
</table>

According to Lithuanian Department of Statistics, the service sector accounts for about 60% of the country's GDP. On the other hand, exports of services represent only 10% of GDP or 17% of total exports in 2008, eliminating the transportation and storage services out of services export, exports of services seems quite poor (Lithuanian Department of Statistics 2011). Transportation and logistics account.

Table 3. index of competitiveness, position in the world’s list, World Economic Forum data around 60% of total service exports. Although various National strategic documents focused on the service sector, there is a lack of priorities what kind of services should be competitive in foreign markets. It is necessary to stress that there is little emphasis on manufacturing sector. Manufacturing sector creates almost one fifth of GDP and provides economic activities for much of service sector: logistics, storage, legal and business consulting, research and development, financial, telecommunications, informational technologies subsectors.

As can be seen from Figure 2, the highest average wages hourly are 25LT (7.2 euro) in financial mediation sector, which produces only 2% of GDP (Lithuanian Statistics Department). Minimum wage is 4.85 hourly and the average gross wage in the country decreased by 5% in 2011 comparing with 2008. This is important to stress that there is no strategic orientation mentioned in the Strategy which should direct the next 20 years development of wages and working conditions.
Avoiding real sector, not emphasizing strategic priorities of real economy might rise very dangerous consequences in the nearest future.

![Figure 2. Average wages hourly by economic activities, 2010](image)

**Figure 2.** Average wages hourly by economic activities, 2010

**Conclusions**

The economy of Lithuania is market oriented economy as well as transition economy. Referring to Lithuanian economic specification the unique strategy applying to its interests should be set. The State Progress Strategy is set to be a strategy for next 20 years. Because of turbulence international environment, rapid globalization speed, production and finance internationalization it is becoming impossible to set such long term oriented strategies. For this reason newly discussed Strategy of national economic governance is focused on basic principles such as freedom of human expression, knowledge based on innovative ideas and socially responsible business. There are not much of talks in the Strategy about socio-economic situations and developments as such. Avoiding real economic sector, there is a threat for development of country’s industry, social policy and economic performance.

**References**


EUROPEAN UNION SOFT SECURITY POLICIES: A COST-BENEFIT APPROACH

Sigita Kavaliūnaitė
Mykolas Romeris University
Faculty of Politics and Management
Ateities st. 20, LT–08303, Vilnius, Lithuania
E-mail: sigita.kavaliunaite@urm.lt

Abstract. This article deals with EU challenge of designing with soft security policy that effectively achieves political and economic goals in an environment of increasing complexity and interoperability. Outlining economic aspects of soft security policy intervention designed to influence behaviour within scope of international relations is supposed to contribute to the analytical background for policy makers. The research outlines three economic evaluations affecting motivation and choices of policy makers: (1) costs of anticipated damage of possible disruption, (2) differential costs related to alternative security policy instruments and (3) differential costs related to security and economic policies combinations. A context sensitive approach to soft security policy instruments application is recommended, in which they are evaluated with specific regard to the interactional system in which they will be applied.

Keywords: soft security policy, cost-benefit approach, competitive intangibles, economic modelling, efficiency enhancers.

Introduction

Given time and resource pressures, policy makers need to choose between relying on previous approaches that have been used in a particular policy area or consider a broader range of policy instruments for tackling a particular policy issue. Current research is supposed to contribute to analytical background for policy makers for design and implementation of soft security policies that effectively achieve political and economic goals. Having defined EU soft security policy, the research is based on the findings and insights in sociological and economic literature related to the conditions that influence formation and implementation of various EU soft security policies. Those conditions include socio-cultural contexts which are related to the EU policy formation and implementation and economic variables influencing the policy choices based on cost-benefit approach. First section of the article presents assumption related to two different socio-cultural contexts in terms of the EU policy applicability that will be used for further research. The second
presents mathematical expression of the relationships of variables (identified by sociologists and economists), and formulation of the economic evaluations, affecting motivation and choices of policy makers within different socio-cultural contexts. Following recommendation (Estrada 2011, p. 1), based on an observation of the common approaches used in economic modelling papers, the current research is using multidisciplinary approach to economic modelling, as well as suggested definitions of “economic modelling”: “an academic research work, that is supported by the use of different theories as well as quantitative or qualitative models and techniques, to analytically evaluate the causes and effects of any economic phenomenon that affect society, anywhere and anytime” and “policy”: “a theoretical or technical instrument that is formulated to solve specific problems affecting, directly or indirectly, societies across different periods of times and geographical spaces” (Estrada 2011, p. 1).


In terms of this research EU policies which are oriented to solving security issues by non-coercive means will be considered as soft security policies which are either primarily focused on security or on a mixture of security and economic gains. Those policies are spreading European Union normative model to third counties either in the form of informal social interaction and social learning or in the form of EU conditionality focused on obligatory EU rule implementation on the basis of tailor made external incentives15. The term “soft security” which is encountered in 10 EU documents that reflect outcomes of political debates related to initiation, promotion, expansion and funding of EU programmes and projects outside its borders (Kavaliūnaitė, 2011, p. 234), within this research will be used for EU policies and their components that exclude coercive means, rely on attractiveness of benefits offered to their partners and are focused on transmitting particular combinations of norms, values and practices that proved to function as security and stability enhancers within EU since its interception.

Since social systems in non-EU states differ in a significant degree, it is reasonable to take into account typology conceptualized within sociological thinking on interrelation between certain types of power-conflict dynamics and types of socio-cultural contexts. In this relation Bonoma (1976) outlines three different prototypical power systems: the unilateral power system, in which a strong source imposes influence on a weak target; the mixed power system, in which partially

---

equivalent interactants bargain to agreement or deadlock; and the bilateral power system, in which interactants are in unit relation and formulate joint policy programs. The threefold taxonomy of socio-cultural contexts is also described in a number of researches (Wendt, 1999, Nye, 2004 and Boulding, 1989) in political science. On the basis of theories backing mentioned threefold taxonomy the following assumption (admitting the simplification embedded in this approach which, by not taking into account recent studies of the functioning of the EU and not referring to the data showing that the EU is being beset by territorial and economic standings, simply assumes that the EU has been positively contributing to mitigating various crisis escalations) will be used for further research which is focused on attractiveness, applicability and effectiveness of the EU soft security policies:

(1) Socio-cultural contexts in non-EU countries, which are based primarily on the unilateral and the mixed power systems, are negatively associated with the outside influence seeking to strengthen and transferring elements of the bilateral power system. Such logics could explain longstanding resistance of Russian Federation (RF) to accept legal reciprocity (suggested by the EU) in the process of negotiations on the New Partnership Agreement, and, instead of the former, insistence on “barter reciprocity” (Grajauskas and Kasčiūnas, 2009). The same principle could be traced in RF stance in respect of Energy Charter Treaty and a number of other EU initiatives. Given such context, the response to EU policy proposals is the outcome of twofold evaluations: (a) evaluation of a proposal in terms of perceived possible threat to existing socio-cultural equilibrium dominated by unilateral and the mixed powers, and (b) evaluation of a proposal based on the cost–benefit approach. Limitations and restrictions for application of EU normative power within such contexts are widely described in political literature.

(2) Socio-cultural contexts which are based primarily on the mixed and the bilateral power systems are neutral or positively associated with outside influence seeking to strengthen and transfer elements of the bilateral power system. Within such contexts the response to EU policy proposals is based mainly on the cost–benefit approach. Such logics could explain eagerness of a number of Central and East European countries to accept EU proposals aimed at increasing social stability, economic integration and transfer of EU normative model, including democratic conditionality. However, only those states that were considered as candidates to EU membership were motivated enough to implement EU designed policies in a consistent manner and were considered by EU policy makers and evaluators as quite effective in achieving rule transfer into their socio-cultural systems. According to Schimmelfennig et al. (2003, p.496) “even though the EU has used both material and social incentives to induce target governments to comply with its human rights and democracy standards, only material bargaining, and above all the incentive of membership, proved to be an effective mechanism of democratic conditionality.... the membership
incentive has been the more effective the smaller the domestic political costs of adaptation for the target governments”.

Cost – benefit Approach in Respect to Soft Security Policy: Towards Increasing of Effectiveness

Outlining economic aspects and their relationship with normative aspects of policy intervention designed to influence behaviour within scope of international relations has been made by a large number of researchers. A number of variables have been indicated within the analysis of the process of designing, implementation and modification of EU security policies. Such variables include: political costs, adjustment costs (or adoption costs), extra costs and extra benefits as well as description of benefits. According to Schimmelfennig and Sedelmeier (2004, p 672), a state adopts EU rules if the benefits of EU rewards exceed the domestic adoption costs. Adoption costs, according to Schimmelfennig and Sedelmeier, consist of opportunity costs (those of forgoing alternative rewards offered by adopting rules other than EU rules) and welfare or power costs for private and public actors (2004, p. 666). Kahler and Killick reffering to adjustment costs point out that EU conditionality can be ineffective in such cases when the target government receives other offers from different sources suggesting comparable benefits with lower adjustment costs (Kahler, 1992, p. 104 - 111; Killick, 1996, p. 221, 224). In addition, veto players can incur net adoption costs (Schimmelfennig F. et al., 2004, p.675). Extra costs and extra benefits emerge in the following context: “EU conditionality mainly follows a strategy of reinforcement by reward. Under this strategy, the EU pays the reward if the target government complies with the conditions and withholds it in case of failure of target government. It does not, however, intervene either coercively or supportively to change the cost–benefit assessment and subsequent behaviour of the target government by inflicting extra costs (‘reinforcement by punishment’) or offering extra benefits (‘reinforcement by support’)” (Schimmelfennig F. et al., 2004, p. 671-2). Therefore extra costs and extra benefits can be resulted only by the actions of accepting party. Benefits are regarded as reward in the form of incentives suggested by the EU on the basis of conditionality: “the dominant logic underpinning EU conditionality is a bargaining strategy of reinforcement by reward, under which the EU provides external incentives for a target government to comply with its conditions” (Schimmelfennig et al., 2004, p.670).

Cost and benefit analysis have been widely used by theorists focusing on social movement, social conflicts and related policies aimed at conflicts resolutions and restoring social stability (equilibrium). Analysis has been carried in majority cases on the basis of conceptualization of social or political system as a production and reproduction process. In this context benefits are often
viewed as collective goods and selective incentives, while costs are viewed as variable consisting of opportunity costs and the costs of collective action. Oberschall (1978) also suggested conflict de-escalation policy makers to provide relatively low-cost exit from destructive conflict for the protagonist. The suggestion is based on observation that conflict groups continuously persist with highly destructive conflict even in the face of low chances of success due to high costs of exiting or terminating a conflict. Some cost reducing measures have been suggested by Olson (1968), Oberschall (1978) and Frohlich et al. (1971) to tackle the free-rider issue in groups involved in processes of formation, support and implementation of collective actions, as well as in mobilizing effort at low costs by making use of existing networks among group members. The nature of collective goods, which can be shared by everybody involved in the process of design and implementation of particular policy, regardless of the amount of personal contribution to the cost of obtaining it, is usually taken into account while suggesting cost saving measures. Some of the measures are similar to those used by the EU conditionality policy (applying in small portions sanctions to non-contributors, and/or providing selective incentives to contributing members). Others (formation of solidarity groups, characterised by strength of a shared identity and high density of networks among group members, prospects of becoming a member of a polity, etc.) are the functions of specific competences which modern economics regards as competitive intangibles\(^{16}\) (human capital, reputation, credibility, etc.) in the process of analysis and quantification of efficiency enhancers within competitive paradigm\(^{17}\). Diversity, multiplicity and interoperability of competitive intangibles as well as existence of well-established systems (encompassing recruitment, training, reputation confirmation practices and standards, management techniques, etc.) shared by both policy offering and accepting parties are important conditions for turning competitive intangibles into efficiency enhancers of the process of policy formation and implementation.

Direct benefits from the realization of the policy directed towards social change differ since participants of the policy formation and implementation process belong to different categories. McCarthy and Zald (1973) distinguish constituents (those who provide resources to a mobilizing group which encompasses leadership cadre or full-time activists, and transitory teams of part-timers), adherents (those who value expected goods), bystander publics, and opponents. Each participant’s belonging to each category and their commitment to a particular collective action will be generated and sustained by a specific mix of selective incentives of gaining the desired values and by their decisions on how to seek maximization of expected net benefits. Each mix of selective incentives would be related to specific combination of expected public goods (e.g. better quality of

\(^{16}\) Role of competitive intangibles in respect of system performance has been described by: Flatt and Kowalczyk, (2008); Hao et al, (2011); Pankaj (2012)

\(^{17}\) A number of competitive intangibles are included in Global Competitiveness Index, see Porter and Schwab (2008).
education, health care, free movement in enlarged area, etc.), collective goods (e.g. better access to status, power, scarce resources, etc.), individual goods (based on expectations of higher household income) and extra benefits (based on expected ‘reinforcement by support’ provided by policy makers). In addition, if participants of policy formation and implementation process are aware of established systems related to the usage of competitive intangibles they could include in their calculation of expectations them as potential efficiency enhancers.

The above outlined variables related to costs and benefits could be summarised in a following equations:

\[ TAC = \frac{OC + MC + NEC}{f(ci)}, \text{where } f(ci) > 1 \]  

\[ TB = (PG + CG + IG + EB)f(ci), \text{where } f(ci) > 1 \]

TB - total benefits; PG – public goods; IG – individual goods; EB- extra benefits; f (ci)- function of competitive intangibles.

In multirateral context the equations will take the following shape:

\[ \sum_{i=1}^{n} TAC_i = \sum_{i=1}^{n} \frac{OC_i + (MC_i + MC_{ie}) + NEC_i}{f(ci)}, \text{where } f(ci) > 1 \]

\[ \sum_{i=1}^{n} TB_i = \sum_{i=1}^{n} (PG_i + CG_i + IG_i + EB_i)f(ci), \text{where } f(ci) > 1 \]

i – the individual policy-making/taking member party (country or institution) concerned;

n – the number of member parties concerned; MCie – the MC covered by EU institutions.

When comparing benefits over time it is important to take into consideration expectations of outcomes and not the actual outcomes as the two may differ.

\[ E_t(TB_{t+1}) = E_t((PG_{t+1} + CG_{t+1} + IG_{t+1} + EB_{t+1})f(ci_{t+1})), \text{where } f(ci) > 1 \]
symbolises expectations made at some time $t$ (which may be the present time) with the outcome $T_B$ which is the outcome in the following period $(t+1)$. The more unique a policy is or the less acquainted participants are with any given policy, the greater the difference may be between $E_t(T_B_{t+1})$ and $T_B_{t+1}$. As participants engage in the process of decision making more often, more resources are devoted to decision making and/or the projects themselves become more similar to previous ones, the two should be equal in infinity if we assume no external shocks. These resources can be signified by $n$. The greater resources devoted to correctly estimating the costs are signified by $n$ in the following equation:

$$\lim_{n \to \infty} f(E_t(T_B_{t+1}), n) = T_B_{t+1}{[4]}$$

Some of those resources will come over time as experience and be already covered in previous costs, while the other may be additional costs. Therefore, $\Delta n$ will signify change in costs inquired in extra policy formation and implementation cost/revenue analyses. Costs are usually more carefully calculated than benefits, yet the expected costs may still differ from actual costs. For a policy realization and relevant projects to be expected, the difference in $TB$ from period 1 to period 2 would be considered versus the expected total costs required for the transition:

$$\Delta T_B = f(E_t(T_B_{t+1}), n) - T_B_t{[5]}$$

if $\Delta T_B > E_t(TA_{t+1} - \Delta n_{t+1})$, the policy will be supported and implemented

On one hand, multiplicity of variables both on the cost side and the benefit side demonstrate complexity of decision making process related to soft security policies by the EU and non-EU member states policy decision makers, supporters and opponents. On the other hand, it suggests better understanding of the process which could be helpful in pursuit of ways to increase attractiveness of EU policy offers by including additional variables increasing benefits and reducing costs. Three main options could be singled out for decision makers from EU side and target government side depending on context where actual or possible disruptions (insecurities) are indicated:

1. Option of testing party’s sensitivity to existing or possible disruption (insecurity) suggests that in order to pursue with security policy costs of anticipated damage of possible disruption should be considered as significant by at least of one party (the EU or non-EU member state). However, initiating and implementing of soft security policy is possible only if disruptions
are regarded as threats to be mitigated by relevant policy by both parties and if total costs are not likely to exceed total benefits for both parties in any context. Given an interest from both sides in benefits derived from pursuing soft security policy, the decisive role will be played by the cost side of equation. If one side is more interested in pursuing with the policy in question than another, the former can either suggest taking a higher cost burden than the latter or increase a benefit package or recalculate total costs by introducing cost-saving items.

(2) Option of selecting security policy instruments for preventing disruptions in the context negatively associated with obligatory EU rule transfer (promoting human rights and democratic reform) suggests that policy makers will focus on differential costs related to alternative security policy instruments. In this context coercive and soft security policies without obligatory democratic norms acceptance are most frequently regarded as workable options for quick application. Taken this into account, in social disruption cases differential costs related to alternative options (economic, coercive economic, policies with military capabilities component) are prevailing, while in case of risks of natural disruptions (e.g. environment issues) soft security policies are chosen. However, in the cases of social instability, the soft security element is incorporated while aiming to strengthen the EU’s external ability to act through the development of both civilian and military capabilities in conflict prevention and crisis management (e.g. Peace building Partnership established in the context of the European Commission’s Instrument for Stability (Bayne and Trolliet, 2009) and others). Soft security policies in this context often are regarded as not sufficiently effective by researchers and practitioners while EU politicians continue to initiate such policies, simultaneously, however, quite frequently regarding them as playing secondary role in comparison to purely economic and coercive means. In this relation possibility to include competitive intangibles in the EU policy offer as efficiency enhancers for reducing costs and increasing benefits could be a promising field of exploration. However while focusing on creation and using of a number of competitive intangibles, limitations and restrictions resulted by the nature of dominating power system which is not ready for acceptance some of them (e.g. good governance, the rule of law, transparent and well-functioning institutions), even though they are associated with components of pillars of economic competitiveness (Porter and Schwab 2008, p. 4), should be taken into account.

(3) Option of selecting security policy instruments for preventing disruptions and instabilities in the context positively associated with EU rule transfer suggests that policy makers will focus on soft security or combinations of soft security and economic policies with obligatory normative component (promoting human rights and democratic reform). In this context differential costs related to soft security and economic/soft security policies combinations would be calculated. Such policies include environmental policies, EU Eastern enlargement policies, European
Neighbourhood Policy and others. Most of the criticism has been received in respect of implementation of combinations of soft security and economic policies on the basis of democratic conditionality with states not entitled in foreseeable future for the EU membership and thus regarding benefits package as not (sufficiently) exceeding adjustment costs. Possibility to include expanded list of competitive intangibles in the EU offer could positively result in improving soft security policies’ effectiveness. Presumption could be made that membership of the EU appeared to be a strong motivator since it suggested benefits in the form of combination of tangible and intangibles goods which proved its effectiveness in practice and its correspondence to policy accepting party’s majority’s expectations in respect of raising living standards, enhancing personal capabilities, becoming member of higher profile polity, and others.

Conclusions

Outlined above mentioned economic aspects within sociological thinking suggest that current EU soft security policies which are often regarded controversially in terms of their effectiveness, efficiency and applicability could be improved by wider application of modern efficiency enhancers categorized by economics as competitive intangibles as well as by the process of transformation of resources over time into experience which would be already covered in previous costs. Three options are defined for policy makers in terms of alternatives for choosing soft security policies and instruments for their implementation. Given both parties sensitivity to existing or possible disruptions and consideration of costs of anticipated damage as significant enough to pursue security policy, choice of soft security policy will be made if it would be regarded by both parties as effective option in terms of producing benefits exceeding the costs. Possibility to include expanded list of competitive intangibles in the EU offer is seen as a costs reducing and benefits increasing measure for a target non-EU member government. In the contexts negatively associated with obligatory EU democratic norms and rule transfer, more efficient implementation of EU soft security policies without substantial normative component could lead to prevention of possible disruptions in short term and informal transfer of EU norms and values promoting human rights and democratic reform by informal social interaction and social learning in the longer term. In the contexts that are neutral or positively associated with EU obligatory rule transfer, EU initiated soft security policies could lead to prevention of possible disruptions in short term and both obligatory and informal transfer of EU norms and values in a more consistent manner in the longer term. Wider application of competitive intangibles assumes creation and development of common interstate system necessary for the usage of competitive intangibles as efficiency enhancers. Such common interstate system should encompassing sub-systems of recruitment and training (necessary
for human capital formation) as well as reputation confirmation, credibility confirmation, etc., based on common principles and criteria. Such system would serve as the basis for forming teams of soft security policy makers, takers and implementers from EU and non EU member states. However, the suggested measures are assumed to be in line with sound EU internal policies, while the effects of internal conflicts, hostilities and differences - preventing the current union from achieving a higher level of inclusiveness – have not been taken into account. Existing internal disagreements and shortcomings as well as their effects on EU soft security policies which have not been analyzed within this paper are subject of future research.

References


THE INFLUENCE OF RESEARCH ON IMPROVING THE COMPETITIVENESS OF PRODUCTS MANUFACTURED BY THE POLISH COMPANY BOCHEM

Nikolajus Markevičius
Mykolas Romeris University
Faculty of Economics and Finance Management
Ateities st. 20, LT–08303, Vilnius, Lithuania
E-mail: bochakolita@gmail.com

Andrzej Wrzesinski
The Bochem Chemical Establishment
Dzialki Suskowolskie 22 B, 26-670 Pionki, Poland
E-mail: a.wrzesinski@bochem.pl

Abstract. One of the main objectives of the EU 2020 is the competitiveness of the European Economic Union in the world. For this purpose, the aim is to raise the level of investment in innovation, research and development to 3,0% of GDP in the EU and in Poland up to 1,7%. Objective of projection for leading industries and enterprises defines increase of Polish value-added and GDP per hour worked, which in 2010, was only 41,8% of the United States level. Article on an example of a chemical establishment Bochem, with 100% Polish capital, manufacturing adhesives for various industries, is to examine the dependence of competitiveness ranking of its products on Polish and foreign markets from the level of expenditure on research, modification and applications of both traditional and new products.

Keywords: EU 2020, GERD (gross domestic expenditure on R&D), R&D (research and development), competitiveness, Poland, Bochem

Introduction

The analysis of the influence of world progress in science and technics on global character of competitiveness shows that along with prompt scientific and technical and technological jerk in the most high technology modern branches, in creation of a huge surplus added value and penetration of new products on even rather not occupied markets, strategy of development and growth of the world technological centers are defined. One of characteristics features of increase of competitiveness ranking – evolution of the scientific research implementation mechanism and
acceleration of innovative process. Though this tendency has not only various character in the separate countries, but also aggregate a number of the general signs.

First, this increase of rates of creation of new companies in technologically progressive and perspective branches, and also a pace of liquidation of old companies in a number of common «low-technological» branches or their carrying over to other regions. Most accurately this process throughout last 20 years has been swept up in the USA, Japan, Germany and France.

Secondly, strengthening of an innovative role of small and moderate-sized companies which are basic "founders" of new workplaces owing to narrow technological specialization and necessity of adjustment of a wide network of cooperation communications. An interesting item is noticed in this connection namely that one workplace created in the field of high technology, involves appearance from 6 to 8, and in some areas till 12-15 (OECD, 2010) new workplaces in „low technology“ branches.

Following important point is companies export orientation, strengthening of the international division of labor, specialization and the manufacture cooperation, the intensification of the international transfer of technology connected with process, basically within the frameworks of licenses trade, the industrial cooperation, the joint venture societies and also foreign direct investments into local enterprises, up to the capture of 100 % of a shareholders capital. Last circumstances are essential, because rather a possession even the newest, progressive and technically perspective technology, isn't a guarantee of its successful marketing without really working logistic and economic mechanism which advantages could be realized within the frameworks of the mixed societies and other forms of scientific-technical and industrial-commercial cooperation.

The aim of the paper is to explore the trends of expenditure on R&D in EU and Poland now and in 2020, to identify the main causes affecting the competitiveness of high-tech products, to submit conclusions and proposals to improve the business activities of the Bochem Chemical Establishment. The subject of research is expenditure on R&D in EU, Poland and company Bochem. Research method – comparative analysis of statistical data.

Research and Development Review Expenditures for Europe

Globalization and rigid technological competition and emerging in the world new technological centers, for example, in the BRICS countries, and in separate directions in other states as well, put out in front of the traditional development centers, raising expenditures on R&D, new targets and objectives run up to 2020.
Europe as one of key regions in the field of development of technologies throughout long time recently has started to lose the positions in world technological division of labor. The designers of the European Union are concern about this development, therefore one of the main target Europe 2020 is the strengthening of R&D and it embodiment in the accepted strategy. Here it is necessary to notice that historically it isn’t the first program accepted by the European Union, planning measures on liquidation of backlog in the field of a science and technics from the USA and Japan. The first great progress was made in the beginning of 1984 as „The European program of researches in the field of information technics“ (ESPRIT) (Muldur, U., et al., 2006) which provided scientists on following key directions: development of the newest microelectronics, the accelerated processing of the information, technology of software, fast reorganization of systems of manufacture, was approved Five ESPRIT programs (ESPRIT 0 to ESPRIT 4) ran consecutively from 1983 to 1998. ESPRIT 4 was succeeded by the Information Society Technologies (IST) program in 1999 (Information Society Technologies Program, 1999). The program “EUREKA” (European Research Coordination Agency, 1985) which has been put forward in April, 1985 in a counterbalance to the American Strategic Defense Initiative (SDI) (Strategic Defense Initiative, 1983) was other large-scale project of the European Economic Community (EEC) countries in sphere of a science and technics. It provided carrying out of researches in the field of computer and microelectronic technologies of new generation, lasers of the big capacity, new semiconductors, artificial intelligence, working out and introduction of the newest composite materials. However the Western Europe economy finding at procyclic positive level of development of the last decade of the last century, got historical chance to finish with the „The Cold War“ on its threshold and to amplify at the expense of the new markets growth on the post-soviet territory. In euphoria of political victories Western Europe has more and more started to skid in economic and innovative victories. EEC and their allies pursue a policy of "technological throw off" and „controllable technological lag behind“ from other European countries - after the first expansion of EU at the expense of Southern Europe and after the second expansion at the expense of the Eastern Europe, what has led to turn back of the same principals against itself. Extensive growth of the European market passed ahead for many years the intensive technological growth. In far 1983 the expenditures on R&D in Germany made 2,8 % (Blick durch die Wirtschaft, 1984) from GDP, having lost since then taken rate when the expenditures on R&D has made in 2005 only 1,83 %, in 2010 – 2,0 % and the long run target in far 2020 will be 3,0 % (Europe 2020, 2010) from GDP. Since A. Smith (Smith, 1977) and D. Ricardo (Ricardo, 2006) and its theories of the nature and causes of the wealth and comparative advantages of nations, when English, for those times, the high-tech textiles was exchanged on Portuguese wine, and three industrial revolutions of XVIII-XX centuries up to three degrees of an estimation of development of the country (Bogdanova, 2011) -
technologies and intellectual property, such as patents, trademarks, licenses and other forms of intellectual property - played the increasing role in definition technological advantages and GDP per capita.

**R&D Expenditures in Europe Nowadays and Targets for 2020**

One of the main targets of the united Europe is to make by 2020 the European region most dynamically developing in the world and for these purposes to raise cumulative investments into innovations, researches and workings out up to 3 % (Europe 2020, 2010) from the European GDP. These are enough ambitious objectives meaning economic and technological heterogeneity of Europe. So, for Austria, Sweden and Finland GERD share should make by 2020 4,0 % (Eurostat, 2011). In the most technologically „backward countries“, to which belong all joined in 2004 to the EU new countries, except for Estonia, R&D expenditure share will make from 1,5 to 2,0 %. For almost all other countries R&D expenditure share should make about 3,0 % of GDP. Absolute backward countries are Cyprus (0,5 %), Malta (0,67 %) and Slovakia with only 1,0 % from the GDP. Old EU members backward countries are Italy (1,53 %), Ireland (2,0 % of GDP and 2,5 % of GNP), and also the Netherlands and Luxembourgeach 2,5 %) (Eurostat, 2011). Here however it is necessary to notice that some companies spend considerable means to the production market promotion besides R&D. To such expenditures belong creation, reputation maintenance and advertising as well. Training, presentation promotion to dealers new business models and providing to them the complete set of services in sphere of the intellectual property, basically using the trademark & patent protection and information support as well. Basically this is acknowledgement of quality and declared specifications in the description and in material safety data sheets from international recognized laboratories and the independent technological centers. Investments of the companies into such productive expenses or, in so-called, non-material assessments especially quickly grow in economies with high level of added value and are comparable or even already exceed investments into material or physical assets, such as, investments goods - buildings, equipment and etc. The investment into non-material assets define ultimately a considerable part of growth of labor productivity in such countries as Austria, Finland, Sweden, the United Kingdom, i.e. in those countries where the research and development expenditure share by 2020 will make 4 % from GDP. So for example, investments into intangible non-material assets make for Sweden 9,1% (World intellectual property organization (WIPO), 2011) of GDP. This percent is considerably higher of the investment in scientific R&D which make now only 2,5 % of GDP. The rise of Europe’s competitiveness ranking in the world as united geographical concept and heterogeneity of degree of the same competitiveness ranking inside Europe – is the basic challenge
to the EU 2020 objectives. Dividing line of so-called "two speeds" Europe is not only in the economic field and in GDP per capita, but in innovative field as well.

**R&D Expenditures in Poland**

In this connection the particular interest for investigation of "two speeds" economy perspective cohesion through investments in R&D, if not yet in 2020, but can be in the next decade, represents Poland experience, as the largest Eastern European economy in the EU. In 2020 the investments in Poland on R&D should increase in 2.3 times, in comparison with 2010, and have to reach 1.7% from the level of GDP and surpass the general rate of increase of average European investments, which will make 150% (Europe 2020, 2010). Task implementations for the leading branches and the enterprises in Poland define the increasing of added value and GDP per hour worked, which has made in 2010 only 41.8% (OECD, 2011) from level of the USA. As a rule foreign direct investments (FDI) abroad seldom or at all do not provide R&D funding at daughter companies and, these enterprises force to use innovations workings out by the mother enterprises embodied in a new product, or manufactured less satiated innovative products in comparison with mother companies. So, economies cohesion development level of old and new member states could and not take place in the visible future, what on the one hand side weakens technological force of Europe in global competition, and on the other hand lead to development disparities in the united Europe and threaten its economic safety as well. Though EU management completely realizes these threats, it does not, however, mean that West European companies possessing high-tech products will share these new workings out with competing East European enterprises.

**The Influence of R&D on the Output of the Polish Company BOCHEM**

We choose the Polish chemical company Bochem, as example, how expenditure on R&D affects the output competitiveness. The choice of the company has been caused by following factors. First, it is the company with the 100% Polish share capital. Secondly, this company works in a scope of application of highly technological chemical processes. Thirdly, production made by this company is used both in industrial, and in public sector. Fourthly, company export makes about 40% of its output, both within the EU and outside of EU market. Fifthly, products made by the company are used in such traditionally strong for East Europe branches as manufacture of building materials, furniture and woodworking, paper and rubber industries. Sixthly, output increase and many companies products find it final buyers exclusively thanks to introduction to the manufacture the newest workings out made in own research laboratory.
The basic productions made by the company are adhesives, anti-adhesive substances, solvents, modification starch, and various self-adhesive and thermoplastic linings and interlinings for the shoe industry as well.

Company Bochem share in the Polish market on adhesives for footwear about 60 %, on adhesives for the furniture industry – about 15 %, on parquet adhesives – about 13 % and on adhesives for motor industry about 10 % (Bochem, 2012).

At the same time, a share of as the adhesive basis for plasterboard plates, makes 55 %. The main modification starch buyers are factories of Knauf and Lafarge companies.

Growth of manufacture and export, are the main reasons in investments and expenditure on R&D, have made in 2009 1,8 %, in 2010 – 2,0 % and in 2011 – 2,2 % (Bochem, 2012) from a turnover and showed annual growth by 10-11 %. Company Bochem has already surpassed estimated figures in this indicator for Poland for 2020 (1,7 %) and come up with following results in 2010 to the average level of investments GERD in EU and is comparable with such country as Germany. Sales growth in 2011 in comparison with 2009 has increased by 36 %, and export by 34 %. In this connection is interesting the export dynamic to some countries groups (see Table 1.).

Table 1. Sales and export of Bochem establishment on years to some countries groups in %

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>UA, RU, BY</td>
<td>36,66</td>
<td>33,21</td>
<td>32,30</td>
<td>32,37</td>
<td>27,75</td>
</tr>
<tr>
<td>EU</td>
<td>2,34</td>
<td>7,79</td>
<td>5,70</td>
<td>6,63</td>
<td>9,25</td>
</tr>
<tr>
<td>Poland</td>
<td>61,00</td>
<td>59,00</td>
<td>62,00</td>
<td>61,00</td>
<td>63,00</td>
</tr>
<tr>
<td>Poland + EU</td>
<td>63,34</td>
<td>66,79</td>
<td>67,70</td>
<td>67,63</td>
<td>72,25</td>
</tr>
</tbody>
</table>

Source: Bochem, 2012

From resulted above the data it is possible to come to the conclusion that sales increased both extensively and intensively.

According to the table, export sales to the European Union countries constantly grew and have increased from 2007 to 2012 almost by 9 %. That makes you think that competitiveness of company Bochem products grows in EU markets at the expense of excluding of its main competitors, which are such large companies as Henkel, Wakol, Mapei, Wictor, Saba, Jowat, Simalfa, Roquette, Agrana, Cargil, Anser, Selena and others, due to its successful innovative and marketing activity. For the Bochem Establishment was possible not only to raise it presence share on 2 % on the large Polish market, but also considerably enlarge almost in 4 times the participation in the EU export markets. Regarding the relative reduction of an export share on the Ukrainian, Russia’s and Belarus markets, we can state a different situation on them due to the various economic and political reasons (Bredow, Seiffert, 1990). Reduction of a number of export positions is connected with not yet recovered output after crisis. So nowadays many companies work only
approximately on the half from their potential capacity. Another reason is a lower price level of the delivered goods for these markets. This price and quality level satisfies local importers and dealers and local quality standards. Technically it’s expressed in the smaller maintenance of the dry rest in the end-product. Thus the export reduction to these countries has occurred, with the some exceptions, not at the expense of quantity but at the expense of lower price factor in comparison with EU markets, what has led to relative shift of sales volumes towards their reduction.

Conclusions

The situation analysis in concrete chemical company Bochem shows that the successful Polish companies with 100 % participation of the Polish capital are in condition not only to reach the estimated figures in the field of GERD, provided by the targets in the strategy „Europe 2020“ as for Poland and EU, but also considerably to exceed them. It shows also that the quality of higher education in Poland, and especially in its technical disciplines are at the high competitive level, as the company Bochem didn't involve foreign experts for carrying out R&D and by the introduction of the new adhesives, the modified starch and a number of other innovations in production.

The second, from mentioned data above it is possible to draw a conclusion, that investments in R&D carry on to intensive growth of output and sales, and the investment into so-called intangible non-material assets and favor intensive sales growth.

The third, investments in R&D do new products less elastic in the markets with the big incomes and so more competitive.

The fourth, extensive sales volumes have their limits, which are connected with the market physical filling by products of the same quality, so that the consumers income growth will push out the inferior goods by the normal goods what will displace a demand curve for the inferior goods more to the left from an initial demand curve.

The fifth, the absence of the new innovative products will lead in the long run term to sales and manufactures reduction up to the company closing.

The sixth, the investments increase on R&D will lead to products creation with major added value. That will open the export possibilities on more remote markets, and not only to the nearby countries.

The seventh, export expansion on more remote markets will allow to use more possibilities of the international division of labor that will raise company profitability and will allow, even keeping the same percent of expenditures on R&D, considerably to raise them in absolute expression.
The eighth, the presence of such investment oriented enterprise in the region will raise it economic attraction, and in the country scales, will promote to increase it safety.

References
**STATE REGULATION OF TOURISM IN KAZAKHSTAN**

Lyailya Mutaliyeva  
*Kazakhstan University of Economics  
Finance and International Trade  
Kazakhstan Republic, 010000, Astana, Zhubanova str., 7  
E-mail: mutalieva_leila@mail.ru*

Madina Smikova  
*International Academy of Business  
Kazakhstan Republic, 050060, Almaty, Rosibakiyev str., 227  
E-mail: mraisovna@mail.ru*

Laura Baitenova  
*T.Ryskulov Kazakh Economic University  
Kazakhstan Republic, 050035, Almaty, Zhandosov str., 55  
E-mail: baitenova_laura@mail.ru*

The practice has shown that the tourism sector cannot develop without government support. After the state committee of tourism was liquidated in 1989, there was no department responsible for the development of tourism in Kazakhstan for 3 years. Taking into account the guidelines set by the World Tourism Organization and the final documents of The Hague Inter-parliamentary conference in 1991, the Ministry for Youth, Tourism and Sport of the Republic of Kazakhstan was established. Further restructuring of the government has lead to foundation of the Committee on Tourism and Sport under the Ministry of Education and Healthcare of the Republic of Kazakhstan.

Today the issues of tourism activities in Kazakhstan are regulated by the Ministry of Tourism of the Republic of Kazakhstan.

State regulation of the business has three aims. Firstly, it serves to protect companies from each other and create a fair and legal environment for all companies. Secondly, state control is aimed at protecting consumers from dishonest business and facilitating the production of high-quality goods and services. Finally, it pursues the object of protecting society interests from side effects of commercial activities.
The main tools of Kazakhstan legislation in the sector of rights and interests protection of tourists and subjects of the given type of activity are:

- The law of the Republic of Kazakhstan “On Protection of Consumer Rights” of May 4, 2010 № 274-IV;
- State standardization system of the Republic of Kazakhstan, SS RK 3.7-2002, Certification procedure for tourism, excursion and hotel services;
- Laws “On Standardization”, “On Certification of Products and Services”;
- State program on tourism development in the Republic of Kazakhstan for 2007-2011;
- “Development program for prospective sectors of the tourism industry of the Republic of Kazakhstan for 2010-2014” adopted in October 2010;
- The law of the Republic of Kazakhstan “On Tourism Activities in the Republic of Kazakhstan” № 211-11, 200;
- The law of the Republic of Kazakhstan “On Advertisement” № 508-II of December 19, 2003;

The latest tourism development program is the “Development program for prospective sectors of the tourism industry of the Republic of Kazakhstan for 2010-2014” which was adopted in order to implement the state program on industrial and innovative development of the Republic of Kazakhstan.

The main aims of the program are to create a tourism image, work out a marketing strategy and improve personnel policy. For the first time the development of a marketing strategy has become a key point.

The program states that tour operators in Kazakhstan deal mainly with package tours, i.e. mass standard tours. However, this tourism market has become saturated, which shows the need for developing new and unique tours.

The program stipulates the development of ecological and mountain tourism and the creation of a tourism cluster along the international transport corridor “West Europe – West China”. Funding of this program is based on the leftover principle, i.e. if the funds get into the budget, the program will be financed.

On June 13, 2001 the law of the Republic of Kazakhstan “On Tourism Activities in the Republic of Kazakhstan” № 211-11 was adopted, which established economic, social, and organizational bases for tourism activities in Kazakhstan. This decree sets clear categories and definitions used in the tourism sector, explain basic terms and concepts, distinguish responsibilities
between state and local bodies, and lays down the principles and special features of licensing tourism activities in Kazakhstan. It also covers the issues concerning contractual relationships, professional training of the specialists in this sector, tourists’ rights and obligations, and insurance policies.

Economic policy encourages tourism development and that is why it uses special budgetary, financial and fiscal measures. Budgetary measures include state funding from the budget drawn particularly for tourism and can be presented as the following:

- loans at very low interest rates intended for investing into projects of large tourism infrastructure;

- subsidies intended to encourage higher-priority sectors of tourism development.

Financial measures are used mainly for maintaining the international competitiveness of the country’s tourism sector. Sometimes countries decrease the exchange rate of their currency by devaluation, which stimulates the demand of international tourism.

Fiscal measures imply tax remissions for tourism firms and include complete or partial tax exemption or reduction of tax. As a rule, tax remissions, which vary in different countries, are offered not at the beginning of the project implementation but after it starts bringing in a profit.

Recently percent bonification and guarantee have been used when dealing with loans and subsidies, i.e. the government or a special body secures the loans given by commercial banks for tourism development. There is control of the intended resource use and assessment of the risk of using guarantees in case of debtor’s bankruptcy.

Despite the number of adopted laws, there are still some problems in the hotel industry too. After getting independence, Kazakhstan started the transition process from a 7-level hotel classification system used in the Soviet Union to the 5-star international one. Now it seems impossible for all hotels to be assessed by the 5-star system because the architectural potential and production capacities of the hotels built in the Soviet period do not allow them to be classified according to it. Thus, in 2009, 85% of hotels did not have a category assigned.

The new hotel standard adopted in 1995 is used to assess the quality of services and classify hotels. According to the State Standard of Kazakhstan there are 5 symbols which are applied to hotels description: from one-star (*) to five-star (******) category.

A hotel can be run on the basis of a license, and the certificate of conformity is issued by the certification body. Stars can be used as a sign of conformity to a certain hotel category basing on the decision of the certification body. However, there are a number of hotels which still work without a license or category.
State support is an essential factor for tourism development. Only the optimal combination of state stimulation and effective work of national tourism companies can advance Kazakhstan’s tourism product to the foreign markets.

Although tourism is one of the seven higher-priority industries of Kazakhstan’s economy and the program has been developed to create tourism clusters in some regions, there have been no fundamental improvements in its development. There have been some small changes due to the fast pace of inbound tourism development which is the most attractive from an economic point of view. The dynamics of development of different tourism types in Kazakhstan is presented in figure 1.

![Figure 1. The dynamics of tourism development in Kazakhstan.](image)

As can be seen from the data, the volume of outbound tourism has increased by 13%. Here, in order to activate tourism activity the following types of government support are necessary:

- conducting an active image-building policy to promote Kazakhstan’s tourism product and establish a civilized tourism market in Kazakhstan;
- working out methodological, systematic, and practical recommendations to improve forms and methods of tourism management in the Republic of Kazakhstan;
- designing a strategy of tourism development in Kazakhstan;
- coming up with suggestions on how to improve the mechanism of strategic management of the tourism industry, including specifying an aim and designing an organizational structure in the tourism sector;
- forming a favorable investment policy and encouraging investments both in hotel and tourism sectors.
References

2. Laws “On Standardization”, “On Certification of Products and Services”.
5. State standardization system of the Republic of Kazakhstan, SS RK 3.7-2002, Certification procedure for tourism, excursion and hotel services.
ADMINISTRATION OF DEEP AND COMPREHENSIVE FREE TRADE AGREEMENT (DCFTA)

Nino Paresashvili¹, Avtandil Abashishvili²

Ivane Javakhishvili Tbilisi State University

Faculty of Economics and Business

2 University street, 0186, Tbilisi, Georgia

E-mail: ¹ economics@tsu.ge; ² avto_aba@rambler.ru

Abstract. Eurasia Partnership Foundation, through its European Integration program, organized a roundtable discussion dedicated to streamlining the policies necessary for launching negotiations with the European Union (EU) on a deep and comprehensive free trade agreement (DCFTA). This roundtable focused on food safety and the reinstatement of sanitary and phytosanitary (SPS) measures. The roundtable brought together representatives of the government and civil society sector as well as business communities and international organizations.

Keywords: Deep and Comprehensive Free Trade Agreement (DCFTA), European Neighbourhood Policy (ENP), “Partnership and Cooperation Agreement” (PCA), Technical Barriers to Trade (TBTs), Sanitary and Phytosanitary (SPS), Measures, Intellectual Property Rights (IPR).

Introduction

Significant task of economic strategy of Georgia represents comprehensive collaboration with world states, to strengthen relationships with international organizations, to achieve successes on way of labour distribution and settling placement within world market. The objective of the economic strategy is to accelerate economic ties with other friendly states.

The modern economic policy of Georgia should proceed from the tasks which involve strengthening of market economy and integration into EURO states. Therefore the state should focus to overall development of economic interrelationships since along with benefit out of relations with participant states such cooperation has important political heft.

At the beginning of XXI century Georgia had got historic chance which opened way to develop comprehensive relations with other states of Europe and worldwide and to solve the most complicated tasks. Therefore it became vitally important to activate relations in maximum that in summary gives not only total result but also this serves to enlarge the country’s potential, to
promote economic growth. As higher and closer is the state development level the process of their integration and convergence becomes more organic.

Deepening of world economic integration gives them opportunity to achieve high economic index to raise efficiency of production, completely meet consumer demands. In this way the top role plays managing team of any state.

We should mention the fact that at present time Government of Georgia is making active attempts to be engaged in process of economic integration of our state. Georgia implements constructive, transparent and consecutive foreign policy with observation of international principles and norms of international justice. Diplomatic service of Georgia along with parliament and other corresponding state authorities is making maximum efforts in order to be integrated into western Institutes, to develop inter-beneficial economic cooperation and to make contribution to provision of international security and to obtain honourable place in Commonwealth of Independent States.

Meanwhile Georgia is trying to join the international organization: North Atlantic Treaty Organization” and “European Union”.

Relations between EU and Georgia started in 1992 as soon as it reinstated independence entailed collapse of the Soviet Union. EU was one of the first organization helping Georgia during so difficult period. In 1995 was opened Representation of European Commission. Relations with EU became more intensive after Rose Revolution in 2003, when it confirmed once more support to current economic, social and political reforms.

Between Georgia and EU while following 18 years there have been signed several Agreements, aiming to create deep partnership relations. Among them should be noted Agreement “Partnership and Cooperation Agreement” (PCA), which comes into effect in 1999. This Agreement aimed implementation of fundamental reforms which will promote inculcation of European values and convergence of the state legislation and institutes with standards of EU.

Georgia’s involvement in the European Neighbourhood Policy (ENP) opened up new prospects for the country’s deeper integration with the EU. Similar to the PCA, the ENP Action Plan (ENP AP)\textsuperscript{18}, signed in November 2006, also defined trade relations as one of priority areas of Cooperation. Unlike the PCA, which envisaged only a gradual approximation of legislation in trade-related areas the ENP AP established a list of appropriate measures in this sphere. Here again, the convergence of Georgia’s regulatory framework with EU standards was a decisive aspect.

Although initially the Government of Georgia was determined to fulfil the Action Plan within three years instead of five, it has become clear that, despite certain achievements, much of the originally planned work still needs to be accomplished. It should be highlighted that, in a number of trade-related areas (food safety, technical regulations, intellectual property rights,  

competition policy, etc.), the vision of the Georgian government differs from the EU approach. Maximum economic deregulation – the course chosen by the government – often runs counter to the policy of harmonization with the EU legislation.

The prospect of signing the Deep and Comprehensive Free Trade Agreement (DCFTA) between Georgia and the EU gave a fresh impetus to enact reforms in trade-related spheres. EU readiness to step up activity in this direction was expressed in the European Council Conclusions of 1 September 2008\(^{19}\). In the autumn of 2008, the European Commission (EC) was tasked with assessing Georgia’s degree of preparedness regarding DCFTA negotiations. In March 2009, the EC unveiled to Tbilisi the official document evaluating Georgia’s preparedness to start negotiations on DCFTA, together with a package of recommendations. The fulfilment of these recommendations was actually set as a precondition for starting negotiations. The measures outlined in this document echo the EU-Georgian ENP AP and in some instances, provide further explanation and clarification of ENP AP provisions. Although a two and half years have passed since the setting of this precondition, the government of Georgia has failed yet to achieve a desired result. Negotiations concerning the EU-Georgia Association Agreement\(^{20}\) were opened in July 2010, continued in December 2011, however one of most important issues raised in this Agreement – free trade – remains unresolved.

It has to be mentioned that, the path towards EU integration generally enjoys broad support from Georgian society and every step taken in this direction functions as a matter of increasing interest. Nevertheless, reforms launched by the Government to achieve the aims of the ENP (and now also for those of DCFTA) have not been characterized by a high involvement of civil society.

Till we move to review Agreement about profound, comprehensive and free trade it is necessary to deliberate dynamics of commercial relations between Georgia and EU states (see Fig. 1):

![Export of Georgia to EU States ($1 000)](image)

**Figure 1.** Export of Georgia to EU States ($1000)

\(^{19}\) Presidency Conclusions, Extraordinary European Council, Brussels, 1 September 2008.

\(^{20}\) The Association Agreement is set to replace the PCA.
While relations with EU Georgia took advantage of generalized system of (GSP+) preferences, that implies discount import rates for exported products. With old GSP system Georgia was given opportunity to bring 3 300 items of duty-free products, and for 6 900 items were efficient certain discounts. After receiving GSP+-beneficiary status Georgia took advantage of the right to bring to EU 7 200 duty free items of products. As the experts say, this scheme is profitable especially for chestnut exportation, since new regulation stipulates 0% duty rate whereas the old GSP scheme showed 2.1%.

The schedule vividly shows that export of Georgia to EU states since 2004 is characterized by accelerated rate. The export increase was promoted by above mentioned system of preferences. Though it should be noted that factually in 2009-2010 raised index of export have been reduced in comparison with 2008 index. This undoubtedly happened owing to events developed at those times which affected the export dynamics. We mean world financial crisis and Georgia-Russian War. Such circumstances affected also merchandise of imported products of EU. As a matter of fact the quantity of products imported from EU states is much bigger than the products exported from Georgia (see Fig. 2.). We suppose that under Agreement on comprehensive free trade Georgia will have opportunity to raise quantity of exportation products to EU states.

![Export of EU States to Georgia($1 000)](image.png)

**Figure 2. Export of EU States to Georgia ($1000)**

**Deep and Comprehensive Free Trade Agreement (DCFTA)**

The possibility of concluding a Free Trade Agreement between Georgia and the European Union (EU) was first mentioned in the European Neighbourhood Policy Action Plan (ENP AP) four years ago. Informal preparatory stage of negotiations on the Deep and Comprehensive Free Trade Agreement (DCFTA) between Georgia and the EU started in October 2008 after the EU Council tasked the European Commission (EC) to evaluate Georgia’s level of preparedness to launch these
In March 2009, the EC finalized and presented the Georgian side with a document evaluating Georgia’s preparedness for the DCFTA negotiations, along with a package of recommendations.\textsuperscript{22}

Initially, the evaluation document and corresponding recommendations covered 11 areas.\textsuperscript{10} In early 2010, however, four key areas deemed crucial by the EU for starting negotiations were singled out. These areas were:

- Technical Barriers to Trade (TBTs)
- Sanitary and Phytosanitary (SPS)
- Measures, Intellectual Property Rights (IPR)
- Competition.

**Technical Barriers to Trade (TBTs)**

In the area of Technical Barriers to Trade, the EU’s key recommendation to Georgia was to adopt and start implementing a Governmental Programme of adoption of technical regulations in line with EU acquis, in the priority industrial sectors.

On 25 August 2010, the GoG approved the Governmental Programme on Legislative Reform and Adoption of Technical Regulations in Standardization, Accreditation, Conformity Assessment, Technical Regulation and Metrology\textsuperscript{23}, which had been agreed upon with the EC services in advance. Earlier, on 16 July the GoG adopted a corresponding Strategy which had not been set as a precondition for negotiations by the EC.

In accordance with the above key EC recommendation, the GoG has started the implementation of the Governmental Program. In particular, the drafting of the Code on Safety and Free Movement of Products has started; a comparative analysis of respective EU new and global approach directives, as well as the General Product Safety Directive and the Directive for Liability for Defective Products has already been conducted and a Regulatory Impact Assessment (RIA) has been prepared.

As a precursor for launching DCFTA negotiations, the EC also demanded that the GoG achieve progress in the establishment of a domestic institutional system for technical regulation, standardization, accreditation, and metrology and conformity assessment. The Government

\textsuperscript{21} Presidency Conclusions, Extraordinary European Council, Brussels, 1 September, 2008.
\textsuperscript{22} Preparatory process for future negotiations of a deep and comprehensive free trade agreement (DCFTA) between the EU and Georgia; Follow-up of the Commission services’ fact-finding trade mission to Georgia on 13-15 October 2008; Overview of issues where additional progress is necessary, March, 2009.
\textsuperscript{23} Decree N1140 of the Government of Georgia, dated 25 August 2010, On the Approval of the Governmental Program on Legislative Reform and Adoption of Technical Regulations in the area of Standardization, Accreditation, Conformity Assessment, Technical Regulation and Metrology
responded to this requirement by providing detailed measures in the relevant Strategy designed to strengthen national institutions in the above-mentioned areas. However, no essential shifts occurred in 2010, except for the establishment of the Technical and Construction Inspection Agency for market surveillance and the Institutional Gap Assessment in the national accreditation body – the Georgian Accreditation Centre (GAC) and in the National Agency for Standards, Technical Regulations and Metrology (GEOSTM).

Thus, although the GoG adopted a Governmental Programme and Strategy conforming with the EC recommendations in the area of Technical Barriers to Trade, it could not demonstrate the satisfactory progress in institutional development.

As to technical barriers of trade it is important that along with approval of program of actions and references corresponding institutional reforms should be carried out. Furthermore it is necessary to cope with practical usage of elaborated strategies. In this scope allocation of financial recourses for foundation and development of corresponding institutions and units is rather important.

**Sanitary and Phytosanitary (SPS)**

This issue covers three main trends: the products harmlessness and plants protection. Till 2005 regulation in this sphere was mainly supported by principles retained from soviet period.\(^{24}\) Certainly this system didn’t respond international approaches and represented as unjustifiable burden for producers.

On December 27, 2005 was approved Law On Product Harmlessness and Quality, which basically changed regulation principles and corresponding institutional arrangement, it was also reflected the main approaches of EU legislation, in particular system of integrated control, which transferred focus from certification of the last product to the whole chain of production. By the Law took place gathering of dispersed and often overlapping authorities into single body, named National Service of Products Harmlessness and Protection of Veterinary and Plants.

Unfortunately, while next years the reform was came to a halt and activation of Law was often postponed. There was interrupted all articles, which represented the mechanism of execution.

In sphere of Sanitary and Phytosanitary supervision EU required to put into action interrupted articles of Law On Product Harmlessness and Quality approved in 2005. In 2010-2011 the Parliament of Georgia made changes in the Law, according to which the articles of the Law approved in 2005 was put into effect. Nowadays, the works proceed over codes of products quality

and harmlessness. These codes will be officially approved by the Parliament of Georgia in the nearest future.

One more reference of EU concerned inculcation of strategy of efficient system on product harmlessness and legislation program in Georgia. This strategy and Program, which previously had been agreed with corresponding services of EC was approved by the Government on December 28, 2010 (Decree of Government of Georgia #1756, dated December 28, 2010 “On approval of program of comprehensive strategy of harmlessness and legislation approximation).

One may say that by the end of year 2010 Georgian side shared rather late but did it all main recommendations in sphere of sanitary and phytosanitary supervision.

In order to prepare the stage of DFTA talks it is necessary for government to make the following steps:

- to display certain progress in sphere of inculcation of real mechanisms for control of harmlessness;
- to support information companies, especially in regions with the aim of informing them about requirements of legislation;
- to extend opportunities of Service on Products Harmlessness (human, material and financial recourses);
- to draw special attention to enhancement of labs for products harmlessness;
- to provide transparency of elaboration of the policy and to extend engagement business circles and civil society.

**Measures, Intellectual Property Rights (IPR)**

Affinity mechanisms of execution and protection of intellectual property with legislation of Europe is the significant component of Agreement on Free Trade. In order to converge legislation on intellectual property to European standards it is important to take the following commitments:

- Improvement of legislation base;
- To carry out activities to raise public consciousness;
- Profound study of existed situation and its analysis;

In sphere of protection of rights on intellectual property the main reference of EU implied significant improvement of execution of active legislation in order to reduce piracy and fake. It is undoubted fact that there are no efficient tools against piracy and fake in Georgia. Either local or foreign nationals make the note that the fiscal system can’t protect private property rights and all of these are negatively reflected over features of Georgian investment environment.
EU provided Government with reference to activate separate Law adjusted with EU legislation on design. On May 4, 2010 Parliament of Georgia approved Law on Design (according to Constitution of Georgia. This Law recognizes object of intellectual property – design – non-penetrability of the property right; regulates relations connected with creation of design, registration, usage, legal security and thus connected with implementation of rights). Furthermore, in patent Law were made changes which concern certificate on additional security.

- In order to accomplish DCFA references it is necessary to create by Government of Georgia efficient mechanisms in sphere of protection of intellectual property which is expressed by combat the piracy and fake actions:
  - To refine corresponding institutional units on protection of intellectual property rights in order to make profound analysis of existed situation and in case of breach of law to carry out appropriate response.
  - For fulfilment of above mentioned conditions it is necessary amounts to be allocated from Government.

**Competition**

The main demand of EC in this sphere was to make Government of Georgia to pursue efficient political system according to modern policy of competition, EU modern standards. There was recommended creation of strategy which will take into account following aspects:

- institutional attitude to free trade and competition agency, perfect investigation authority;
- elaboration of competition law with engagement of anti-trust regulation;
- provision of swift execution of this law..

Government of Georgia started accomplishment of EU strategy in 2010 after corresponding projects had been agreed with EU services (Decree of Government of Georgia #1551 of December 3, 2010 On Approval of Overall Strategy of Competition Police) In the Law On Free Trade and Competition were made changes entailed abolition of Agency of Free Trade and Competition, though its power was transferred to Legal Person of Public Law. However it should be noted that the change couldn’t extend administration and financial dependence of Agency.

In order to improve the sphere of competition it is important to make following steps:
- creation of efficient investigation system;
- elaboration of Law on efficient, engagement of anti-trust regulation, to attach governing force to anti-monopoly legislation.

For solution of above issues allocation of finances by Government is necessary.
By the end of 2010 in the format of the preparation stage for talks over comprehensive Agreement on Free Trade with EU Government of Georgia could set in conformity strategic outlook with EU references. Though for starting talks at DFTA turned to be not enough, therefore at the preparation stage Georgian side emphasized necessity of elaboration of documents on strategy. Despite this fact it is clear that till starting negotiations EC expects specified steps from Government of Georgia in viewpoint of practical implementation of approved strategic and program documents. In December 5, 2011 started official negotiations at DCFTA, though it is still unclear if mentioned Agreement will be signed between Georgia and EU.

Conclusions

Conclusion of Agreement on profound and overall free trade is rather important for Georgia. In export direction will be opened large potential for Georgia. Export of any products to EU states will be in easier order. We understand that the main barriers for trade are not the rates since they are not high in EU area. Impediments for products are represented by nontariff and technical barriers. And technical barriers are created because of legislation differences and various standards of the states and it makes difficulties to enter the market. First of all we should note technical regulations. But if technical regulations will be in harmony with EU it will make possible to conclude agreement on inter-recognition of evaluation system on conformity of quality. It means that the Quality Certificates received in Georgia will be tacitly acknowledged throughout EU area. This achievement will have special heft.

Acknowledgements. Many thanks to Foundation on Eurasia Cooperation.

References
2.Implementation of action plan for neighbouring policy of Europe in sphere of trade with Georgia in some spheres connected with it (report, 2011).
4.www.easternpartnership.org
CENTRALIZED HEAT MARKET LIBERALIZATION MISSION (IM)POSSIBLE?

Aušra Pažėraitė
Vytautas Magnus University
Faculty of Economics and Management
S. Daukanto g. 28, LT-44246, Kaunas, Lithuania
E-mail: ausra.pazeraite@gmail.com

Mindaugas Krakauskas
Lithuanian Energy Institute
Breslaujos str. 3, LT-44403, Kaunas, Lithuania
E-mail: mindaugas.krakauskas@gmail.com

Abstract. The article deals with the Lithuanian district heating sector which is currently highly integrated, local, naturally monopolistic and often municipality owned. The main problem of the sector is lack of competition leading to the high prices of the heat. Authors suggest an implementation of market liberalization as an overall recognized way to run the energy market effectively. The literature review identifies the lack of theoretical approaches addressed precisely to the district heating sector. A practical survey is made using the data from the National Control Commission for Prices and Energy and the district heating company Kauno energija. The literature review and the analysis of the current situation in the district heating sector identifies competition driving forces and gives the proper background of the market liberalisation. The article ends with the conclusions.

Keywords: District heating, market liberalization, competition.

Introduction

The whole world or better to say it’s concerned part is trying different ways to achieve sustainability, safety and cheaper way to use energy in everyday life. That is why more choice, investment and security of supply lie at the heart of the 3rd energy package. The wide-ranging rules adopted by Parliament 21 April 2009 will also improve consumer rights and promote competitiveness (Pažėraitė, Krakauskas, 2011).

The district heating sector supplies heat to more than 100 million people in Europe (Russia excluded). The total district heating capacity is more than 2 million MW and the length of the
district heating network is more than 400 000 km in Europe (Sipila et al, 2005). District heating has a higher residential market share in Central and Eastern European countries (appr. 40%) but the market share is decreasing. According to the data provided by the Lithuanian District Heating Association, Lithuanian district heating sector takes even more – 46% of the total space heating. The district heating sector takes more than 1/5 of the total primary energy consumption. This is almost equal part as for electricity. On the other hand, expenditures for the district heating are almost twice bigger than electricity. The constantly increasing price of the heat is one of the reasons consumers to disconnect from the district heating networks.

Despite this, there are no legal acts concerning district heating sector on the European Union (EU) level as it is left for each individual Member State. Lithuania does have the separate legal act for the district heating sector. This Law on Heat Sector indicates that the heat production must be based on competition between heat producers. However, it is not widely discussed. It means that a very important, in our case costly energy sector is left without proper attention from both the Lithuanian and the European Union side.

Authors assume that it could be one of the main reasons why the price for the district heating is constantly growing, as it is shown in Figure 1 prepared according to the data given by the National Control Commission for Prices and Energy (the Commission) for the years 2000-2010 (the Commission, 2000-2010).

![Average price for district heating, ct/kWh](image)
Considering all the aforesaid, authors will focus on the liberalization of the district heating sector trying to identify the possible competition driving forces. Literature review, statistical data analysis, comparative analysis of energy sectors and expert evaluation along with legal document analysis will be used to achieve the purpose.

**The Background of the District Heating Sector Liberalisation**

Strengthening of competition and even market liberalization are well known and broadly analyzed issues throughout the different literature sources. On the other hand, analysis of the heat trade liberalization has just started. The heat trade liberalization is studied in recent years in Sweden, a little bit in Finland. It should be noted that the market liberalization is seen as the process when customers are becoming eligible. Therefore the full heat trade liberalization as far as known is not carried out anywhere neither theoretically nor practically.

Such a situation implies some restrictions to find out a precise literature to carry out a review. On the other hand, it is a possibility to take a challenge to find out suitable theoretical solutions for the very important for our days problem to solve.

Authors, having a huge experience in the liberalization of the Lithuanian energy sector, have an opinion that it is well to use this experience in the district heating sector. Of course, electricity and even natural gas and district heating sectors differ a lot, but some preconditions and driving forces to implement the competition through the market liberalization are very similar. Similarities of all three sectors could be stated as following:

- the sectors are dealing with a networks infrastructure;
- the infrastructure could be treated as a natural monopoly;
- the sectors are serving customers vital needs.

In a market characterized as a natural monopoly it is usually not possible to achieve effective competition by means of a general competition regulation. It is obvious these three sectors are subject of the State regulation. On the other hand, monopolies have no incentives to implement the proper conditions for competition unless there are important driving forces from the State, customers etc.

The district heating should not be treated as a separate energy sector. Since district heating networks also offer the possibility of competition between natural gas and electricity in the market for space heating the economic efficiency of the district heating sector is critical to a synergetic use of various energy carriers (Grohnheit, Gram Mortensen, 2003). It is one of the reasons to have equal level of competition development in all these sectors.
The question of third party access (TPA) to the networks/grids has been central to the debate around the liberalization of the European electricity and gas markets due to the natural monopoly characteristics of these networks. The natural monopoly character of the grids prohibits the construction of parallel networks, and for this reason the possibility for new competitors to use the network of the incumbent monopolist is a necessary prerequisite for effective competition (Soderholm, Warell, 2011).

Generally TPA implies that a third party can access the district heating network in a non-discriminatory way, in order to supply its heat, but it exist there different forms of TPA that all are compatible with the above mentioned definition.

Regulated TPA refers to a situation of full access to the district heating networks, where the network owner has a legal obligation to allow access to the network. The networks operations are regulated ex ante, i.e., the conditions for access to the network (e.g., fees, etc.) are determined in advance.

Regulated TPA is most often way to implement competition through market liberalization in electricity sector. In fact, there is the only way to access the electricity networks in EU.

In order to implement regulated TPA, it is required to have decentralised district heating sector. In other words, a regulated TPA requires a vertical separation between the production and distribution of heat, as well as the introduction of competition at the production side. The vertical separation should be done to ensure non-discriminatory access to the network. Such separation means that the price regulation only needs to address the network operations, while the different heat producers will be competing in an essentially free market (Soderholm, Warell, 2011). In district heating markets this competition may be limited due to the market size which could be characterized as a small. In most of the cases, district heating market is local, addressed to the corresponding municipalities.

For instance, there are more obstacles to implement so popular rule to access the networks. Municipalities will not have an easy instrument to impact the portfolio of the installed heat generation units after implementing the regulated TPA. Because of the closeness of the generation to the residents, the portfolio issue could be very important in order to promote clean heat generation technologies. That’s why it is important to mention, that the regulated TPA is a very suitable instrument, but first of all to promote the competition itself.

Negotiated TPA implies that the district heating network owners are required to negotiate about access to the network with the producers of heat. The main difference between regulated and negotiated TPA is thus that the latter form implies that the network operations are determined ex post. The specific conditions for network access are negotiated between the network owner and the third party (Klom, 1995).
This kind of TPA theoretically provides the same stimulus for effective competition and retains the possibility easier to implement all the localities. At the same time the need for deeper regulation raises as well.

Finally, a so called single-buyer solution means that all potential consumers in the network have the right to negotiate contracts with all eligible suppliers to the network. The single-buyer is obliged to purchase the contracted volume from this supplier and resell it to the customer at a price equal to the contract price plus distribution or system costs (Tennbakk, 2000).

This kind of access to the network is the easiest one to implement in Lithuanian case as well. Single-buyer model leaves a lot of space for the municipal politics to implement. Therefore, it needs very strong and deep regulation form.

Most analysts argue that the Nordic electricity market reform with the regulated TPA has been relatively successful in that, for instance, the productivity of electricity companies has increased (Amundsen, Bergman, 2006). It gives a strong stimulus to resettle this good practice into the district heating sector. On the other hand, authors consider that the literature review does not provide a clear answer which from TPA model variety is the best one to implement into the district heating market.

However, the shortage of precise recipes should not be an obstacle for district heating market liberalization with a view that an important difference between electricity, natural gas and district heating sectors should be taken into account.

Current Situation in the Lithuanian District Heating Sector

Authors have made a screening and ongoing monitoring of the situation in the Lithuanian district heating sector. The analysis of legal documents shows that the competition issue is not described and discussed enough. As it was mentioned earlier in this paper, the Law on Heat Sector does not provide a prescribed ways of market liberalisation to implement. A secondary legislation talks only about the preferences in buying the heat but not about the market functioning model itself. Feed-in tariffs and purchase order should be settled down by the Commission. Therefore, the driving force of the market is based on regulation but not on competition. Competition, declared in the Law on Heat Sector, without more detailed provisions about market liberalisation becomes no more as a declaration.

One or few producers still dominating in each local market in Lithuania is one of the biggest problems to implement competition practically. Unfortunately, facing such a situation it is easier to set the price at a level that exceeds the economically efficient price. According to the data from the Commission, prices of heat for ten biggest Lithuanian local markets’ are as shown in Figure 2.
It is no doubt that consumers complain. Similar situation occurs in Sweden. This country has deregulated the district heating sector just after implementing the reforms into the electricity sector. It was made in the sense that the firms (at the time typically owned by the respective municipalities) now could set their own prices, and free entry into the market was formally introduced (Westin, Lagergren, 2002). Despite this, the competitive situation in the Swedish district heating market has since then been a highly debated topic, not the least considering the presence of large consumer price differences across different Swedish regions (Aronsson, Hellmer, 2009).

Customer complains is a rather big impulse to start market liberalization but the main driving force is a sufficient playing field for competition to implement. Lithuania has already experienced some kind of the failure in implementation liberalization in electricity sector. One of the main reasons was too small playing field for competition caused by one of the highest price for the infrastructure in whole the EU. Current situation does not look better. Reduction in the generation cost is not so important for final consumers due to the big share of network costs. The data presented by the Commission shows that electricity sector still loses dramatically in the battle for the playing field for competition (e.g. see Figure. 3). Fixed costs represent the price of infrastructure as the variable costs are related with the purchasing of heat or electricity as a commodity.

**Figure. 2.** Prices for district heating (2012.02.14), ct/kWh
Figure 3. Prices for district heating and electricity divided into fixed and variable costs (2012.02.16), %

The part of costs related with infrastructure is quite low in district heating sector. Authors believe that it should be even bigger because some new reconstructions of district heating infrastructure are vitally important. Therefore an only way to reduce the final price for customers is letting the commodity to be purchased throughout the liberalized market on competitive basis.

As one can see, district heating has a very strong driving force to achieve the price reduction. Playing field for competition takes in some cases even more than 80% (Kauno energija, 2012). In comparison with electricity where playing field for competition takes only 44% (Pažėraitė et al, 2012).

Of course, fuel prices, not as much depending on Lithuania as the biggest share takes natural gas, should be taken into account as well. It implies that playing field for competition should be reduced in both cases.

However, customers’ willingness to pay less for the heat and the strong driving force from high level of competition playing field have to make the centralized heat market liberalization as a “mission possible”.

Conclusions

Authors believe that good practice of Nordic electricity market liberalization could be extrapolated into the district heating sector.
The shortage of theoretical models addressed precisely to district heating should not be an obstacle for market liberalization in district heating sector with a view that an important difference between electricity, natural gas and district heating sectors should be taken into account.

In addition to the customers’ complains because of the high price for heat, survey identifies a very strong driving force to achieve the price reduction in district heating sector. Playing field for competition takes in some cases even more than 80%.

Overall generalization implies that the centralized heat market liberalization is not only the “mission possible”, but also a very desirable and urgent.

Acknowledgements: This research was funded by a grant (No. ATE-01/2011) from the Research Council of Lithuania. The author also wants to express her appreciation to Vytautas Magnus University.

References


HARDCORE RESTRAINTS IN AGREEMENTS: FROM PROHIBITION TO LIMITATION

Andrius Puksas
Mykolas Romeris University
Faculty of Law
Ateities st. 20, LT–08303, Vilnius, Lithuania
E-mail: andrius_puksas@mruni.eu

Abstract. The prohibition of agreements containing hardcore restraints is the point where public and private interests meet. Despite the fact that Article 101 of Treaty on the Functioning of the European Union\textsuperscript{25} prohibits such agreements, competition policy is not as rigid as it was before. Practice has shown that some of agreements containing hardcore restraints cannot restrict competition significantly. Some of them are even considered as pro-competitive. Unfortunately, the specific criteria to rehabilitate such agreements need to be found and highlighted. The practice of European Court of Justice and some national institutions are ahead of the legal regulation. This article gives some proposals how to fill this gap.

Keywords: competition, hardcore restraints, agreements, prohibition, \textit{de minimis}.

Introduction

The rules of fair behaviour in the market require not imposing restrictions on competition. However, if the restrictions are imposed they should be necessary to achieve positive goals and not to eliminate competition in substantial part of the market. This is how we can briefly summarize the content of Article 101(3) of Treaty on the Functioning of the European Union (hereinafter TFEU) which gives exemption from prohibition, imposed in TFEU Article 101(1). The latter prohibits all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have internal market competition prevention, restriction or distortion as their object or effect.

Hardcore restraints can also pass the requirements imposed in TFEU Article 101(3) and be covered by exemption. It would be enough to pass the Articles’ provisions.

Another exemption is granted by Commission Notice (EC) on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty establishing the European Community (\textit{de minimis}) (hereinafter \textit{de minimis} Notice). But the 11\textsuperscript{th} paragraph in \textit{de minimis} Notice does not allow institutions responsible for assessment process to apply the exemption. Other sources, including European Court of Justice (hereinafter ECJ) position, create preconditions for different practice.

Possibility to apply \textit{de minimis} exemption for agreements containing hardcore restraints was partly discussed in publications by prof. Alison Jones (2010, p. 808; Jones and Sufrin, 2011, p. 172) and prof. Richard Whish (Whish, 2009, p. 117). This question has not received attention in Lithuania yet.

Document analysis, systemic analysis and comparative methods were used in order to review current practice of applying \textit{de minimis} exemption for agreements containing hardcore restraints and to suggest amendments for current regulation.

**Preconditions for \textit{de minimis} Exemption Application for Agreements Containing Hardcore Restraints**

In 1969 \textit{de minimis} exemption was applied for the first time (Völk v. Vervaecke, 1969): ECJ excused an enterprise from rigorously formulated provisions\textsuperscript{26} even though the agreement contained hardcore restraints on competition. This Court decision became the basis for further application of \textit{de minimis} exemption. The terms for applying exemptions for agreements containing hardcore restraints were also set: “An exclusive dealing agreement, even with absolute territorial protection, may, having regard to the weak position of the persons concerned on the market in the products in question in the area covered by the absolute protection, escape the prohibition” (Völk v. Vervaecke, 1969). After four decades the position of ECJ is still the same. Despite that we still cannot find provisions with reference to \textit{de minimis} exemption in the TFEU. European Commission excludes hardcore restraints from the \textit{de minimis} Notice application. The same can be said about Lithuanian legislation (Resolution No. 1S-172, 2004).

Hardcore restraints compose a so called \textit{blacklist} of restrictions, presumed to be most dangerous for competition. It is held that agreement parties already seek to distort or restrict competition in the relevant market even before the agreement enters into force. It is presumed that this negative goal is programmed from the beginning. According to professor of law in King’s College (London) Alison Jones, \textit{“Hardcore restraints – essentially, restraints held to have as their object the restriction of competition and that have been identified by the Commission <…> as those\textsuperscript{26} Article 85 of Treaty establishing the European Economic Community. (1957).}
that are to be treated as always, or virtually always, unlawful under Article 101“ (Jones, 2010, p. 792). The words ‘virtually always’ from this definition do not exclude opportunity to analyze possibilities not to apply TFEU Article 101(1) for agreements containing hardcore restraints.

Professor A. Jones (Jones and Sufrin, 2011, p. 172) and her colleague professor Richard Whish (2009, p. 138) suggest to extend possibility to apply de minimis exemption to agreements containing hardcore restraints. Both of them agree that the criteria of assessment should be stricter. De minimis Notice, which entered into force in 2001, imposes some quantitative (market shares, etc.) and qualitative (if there are hardcore restraints, etc.) criteria. The suggestion to set additional criteria for hardcore restraints (which should be stricter for agreements containing restraints from the blacklist) is connected with quantitative criteria. The quantitative criteria, imposed in de minimis Notice, are:

- for parties of horizontal (between competitors) and mixed (has the features of horizontal and vertical) agreements the market share is up to 10 percent (for all participants together);
- for parties of vertical (between non competitors) agreements the market share is up to 15 percent (for each participant separately).

It is presumed that if market shares of ‘non hardcore agreements’ do not exceed thresholds for a specific category of agreement de minimis exemption is likely to be applied. For severely restricted agreements, stricter criteria should be imposed (for instance a 1-1.5 percent of market share can be such a threshold). Why the application of de minimis exemption should also be extended for agreements containing restraints from the blacklist? The following features can partly cover the answer:

- a small part in a relevant market does not distort competition significantly. Such parties are not capable to influence general situation in the market. The price fixing can be crucial for them – clients are still free to choose other ‘player in the market’. Sharing the market is also not a good idea – if the parties have small parts in the market they do not have much to share. Restraints are more dangerous to weak parties of the agreement than to their competitors, customers, or the market;
- the market has self-regulation mechanism. If the cartel of co-operation agreement containing restraints from the blacklist is between parties whose parts in the market are small, they will violate the agreement when such opportunity appears. The force of such agreements is too weak.

However, all those statements cannot rely only on quantitative criteria – the individual assessment of agreement can help answer the question if the agreement restricts competition significantly. The same mechanism should be used for assessment as during the evaluation agreements with restraints which are already covered by the de minimis Notice.
For which restraints exemption of *de minimis* Notice is currently inapplicable? Those hardcore restraints or restraints from the *blacklist* are (*de minimis* Notice, paragraph 11):

For agreements between the competitors (horizontal agreements):
- price fixing when selling the products to third parties;
- output or sales limitation;
- allocation of markets or customers.

The Guidelines on horizontal co-operation agreements\(^\text{27}\) also provide us with such hardcore restraints as price fixing, output limitation and market allocation. All restraints from the list initially contain danger for competition. For instance, the possible dangers of price fixing are price competition elimination, volume of products restriction, etc.

The list of restraints for agreements between non-competitors (vertical agreements) is longer, but there is another side – it is presumed that restraints imposed in vertical agreements are less harmful. If any new amendments to *de minimis* regulation will come into force it is likely that softer criteria will be imposed on vertical agreements. Resale price maintenance, restriction of active or passive sales to end users – these are a few examples of hardcore restraints from the *blacklist*.

The parties of horizontal agreements are on the same level of their economic activity (for example two manufacturers or two distributors), the parties of vertical agreements – on different (for instance one manufacturer, other – distributor) (Švirinas, 2004, p. 34-36). The third type of agreements are the ones where it is difficult to determine weather the parties are competitors, in Lithuanian legislation they are defined as ‘mixed’ ones (Resolution No. 1S-172, paragraph 2). Such agreements have vertical and horizontal features. Restraints that are applied to them are also from both blocks but it is presumed that mixed agreements are as dangerous as horizontal ones.

The assessment criteria have to be clear when trying to determine what kind of agreement it is. Also, rules which are imposed to conduct the assessment process should be clear. Lucid assessment criteria would be useful for:
- parties (to evaluate possible consequences of the upcoming agreement before it comes into force, for further business planning);
- institution carrying out the assessment (to facilitate and improve the assessment process, to avoid situations with contradictive decisions);
- clients and other economic units (for further behavior planning).

Clear assessment criteria can help reduce the number of complaints. If the impact of agreement is insignificant clients can always choose other service provider. Other economic units carry out their business without fear of the agreements concluded between their competitors.

The main goal of having clear criteria is to avoid situations where agreements are prohibited without a sufficient reason.

If authority carrying out the assessment process determines that provisions of the agreement impose competition restraints, EU legislation provides two possibilities to escape the prohibition:

• Possibility to apply TFEU Article 101(3). This article has similarities with the rule of reason doctrine in the USA (Steuer, 1999). The main conditions to apply this exemption: agreement should have pro-competitive features, negative impact should be reasonable and not to distort competition in the significant part of the market. “For example, a hardcore restriction may be objectively necessary to ensure that a public ban on selling dangerous substances to certain customers for reasons of safety or health is respected”.

• Possibility to apply de minimis exemption. There is no need to determine positive impact on competition – it is enough to determine weather that effect is insignificant. In case of hardcore restraints de minimis exemption is applicable in national practice.

**Current de minimis Application and Suggestions for Further Amendments**

Despite the different economic theories that suggested governing models from full market liberalization to total market control (Klimašauskienė, 2007, p. 118), the state and its institutions should refrain from actions which are not necessary. The same can also be said about prohibiting agreements. If the restrictions imposed in agreements do not restrict competition in the relevant market significantly, there is no need to abolish the validity of parties will. The appearance of de minimis exemption should be considered as a positive step to protect agreements from prohibition when their impact on competition is insignificant. However, that was exactly what happened in 1969. How did the situation change up till now and which way is preferable to chose?

*De minimis* Notice does not cover the agreements which contain hardcore restraints. The Article 4 of Regulation No. 330/2010 states that hardcore restrictions are restrictions that remove the benefit from the block exemption. The good practice is that some Commissions legal acts give reference to case-law of ECJ and the General Court.

---

29 Ibid. para. 10.
The market is dynamic so legislation should be flexible for market changes absorption, authorities should be prepared for inevitable amendments. First steps from unconditional prohibition to de minimis application for agreements containing hardcore restraints have already been made by national practice in some EU states.

In 2004 German Higher Regional Court of Düsseldorf (Linsmeier and Lichtenegger, 2004) stated that market shares are the main criteria when deciding if the agreement has significant impact on competition. Despite hardcore restrictions in their agreements smaller economic units cannot distort the whole situation in the market. Since the market share of the agreement parties was below 1 percent, the court applied de minimis exemption for this agreement containing hardcore restraints. Despite the fact that decision covered vertical agreements (exclusive distribution case) the same rules are applicable also for horizontal and mixed agreements.

In 2009 Spain National Court also stated that small thresholds of agreements’ parties in the market is the reason to analyze possibility to apply de minimis exemption. A contrary decision made by National Competition Commission was abolished. The agreement’s goal was restriction of passive sales in territories outside the distributors’ activity field. Despite hardcore restraints, the Court took into account the fact that the shares of parties are less than 5 percent in European and local market. The applicable quantitative criteria should be specified individually after assessment of each agreement; it cannot be determined by law.

Holland legislator (the Netherlands Competition Law, Article 7) prepared the basis for individual assessment abolishing the difference in quantitative criteria between restrictive agreements containing hardcore restraints and those without them. According to relevant paragraphs, here the decision will be based on evaluation of actual criteria – not only on the fact of determined restraints from the blacklist.

Those examples reflect position to extend de minimis application on hardcore restraints if parties do not restrict competition significantly. It is not surprising that changes firstly appeared where vertical agreement contained hardcore restraints. What about local practice? Lithuanian legal acts (Resolution No. 1S-172, paragraph 7-8) do not grant right to apply de minimis exemption for agreements with restraints from the blacklist, but currently it is too soon to analyze local practice: Competition Council in the Republic of Lithuania still did not have a case with an agreement with hardcore restraints that would have insignificant impact on competition. According to legal regulation the main rule is that agreements with hardcore restraints are prohibited per se. For example, in European Competition Council resolution No. 2S-10 (12 of May, 2011) fifth paragraph states, that de minimis exemption cannot be applicable for agreements which directly or indirectly

---

31 MDC Ingenieria/Productos Haller. Comision Nacional de la Competencia. (2008), No. 634/07.
determine prices, as well as it is not necessary to determine the parties share in relevant market. This illustrates a complete prohibition towards *de minimis*. A proceeding towards limitation regarding application of this exemption is reflected only in the above mentioned examples in foreign countries.

There is no doubt that future EU regulation should reflect positive practice of ECJ and member states. If there is no necessity to prohibit agreements between parties because of their insignificant impact on competition the agreement can still exist since it has no considerable influence on the market (the clients can always choose another distributor, parties are too small to act harmfully towards other enterprises, and there is no need to distort the agreement while the party’s share in the market is still insignificant).

European Commission and national authorities carrying responsibility for assessment should provide separate assessment criteria (at least quantitative) for agreements containing hardcore restraints. The *rule of reason* doctrine, which is recommended by some specialists (Ritter and Brown, 2004, p. 127) can also be adapted separately despite the fact that TFEU Article 101(3) partly reflects it.

**Conclusions**

Current regulation concerning *de minimis* exemption application needs to be examined. Article 101(1) prohibits agreements that restrict competition. There are a couple of rules that can help avoid prohibition but *de minimis* Notice does not grant the right to apply exemption for agreements containing hardcore restraints. Some of those agreements are harmless because of small market shares of the parties. The suggestion is to extend *de minimis* application on such agreements containing hardcore restraints. The amendments to *de minimis* Notice are welcome but the stricter criteria for severely restricted agreements should be imposed (for instance the 1-1,5 percent of market share can be such threshold).

The TFEU Article 101(3) is the one to be applied for agreements containing hardcore restraints. It partly reflects the *rule of reason* doctrine (Ritter and Brown, 2004, p. 127) where positive and negative impact on competition is scaled. It would be more reasonable to allow application of *de minimis* exemption for restraints from the *blacklist* – even agreements without positive impact on competition can have minor influence on market (for instance resale price maintenance where the parties are very small).

The practice of ECJ and some national institutions is ahead of the legal regulation. The national practice of some member states already formed precedents for *de minimis* application based on stricter quantitative criteria for hardcore restraints. Holland (Law on Competition of the Kingdom of the Netherlands, Article 7) is the first country to have fixed the same quantitative
criteria for agreements with and without hardcore restraints in their legal acts. Determining hardcore restraints should be a reason for more detailed analysis of factors connected with agreements.

References

12. Linsmeier, P., and Lichtenegger, M. (June 23, 2004). The German Higher Regional Court of Düsseldorf holds that hardcore restrictions are not per se appreciable if the relevant market share is below 1% (Tschechisches Bier). e-Competitions, No. 21232. Retrieved January 10, 2012 from www.concurrences.com
EMIGRATION PROBLEM IN LITHUANIA

Ona Gražina Rakauskienė¹, Olga Ranceva²
Mykolas Romeris University
Faculty of Economics and Finance Management
Ateities st. 20, LT-08303, Vilnius, Lithuania
E-mail: ¹ona.rakaus@mruni.eu; ²olga.ranc@gmail.com

Abstract. Because of increasing globalization processes international migration is becoming an increasingly important factor, which affects economic, social and demographic development of countries. The large scale migration of country’s population is always a serious problem for both native and host countries. Lithuania takes first places in the European Union for the rate of emigration. During the 22 years of independence (1990-2011), according to Eurostat data about 700 000 of residents has left Lithuania and most of them are young people. The authors of article analyze the sensitive problem of emigration in Lithuania, emigration flows in 1990-2011 and present evaluation of the survey of reasons for emigration, due to the survey strategic guidelines for reducing emigration are created.

Keywords: emigration causes, emigration consequences, reducing emigration

Introduction

After Lithuania had joined EU and free migration of people became legal; extent of emigration rate in the country particularly increased. This resulted from opportunity to migrate freely and obvious differences in economic conditions between developed European countries and Lithuania. However, emigration especially increased during 2008—2011 economic crisis. In 2010, 83 thousand people left Lithuania, whereas during first three quarters of 2011, 50 thousand people emigrated from Lithuania. Emigration is a serious problem in Lithuania; however, Lithuanian institutions do not pay too much attention to the issue. So far Lithuania has no strategies or programs implemented to reduce the amount of emigration and this problem in Lithuania has no adequate solution. The article purpose is to assess the threat of emigration problem in Lithuania, the task - to show the main causes and consequences of emigration.

Emigration causes a great danger to Lithuania. First, emigration even more worsens already negative demographic rates, which in sum leads to the decrease of the absolute number of Lithuanian inhabitants. For example, in Soviet times Lithuania had 3 million 700 thousand people,
whereas now it reaches 3 million (according to the data of 2011 population census, on 1 March, 2011 Lithuania had 3 million 54 thousand permanent residents). Therefore, the number of inhabitants dropped by almost 20 percent – this is a catastrophic result. According to Eurostat and United Nations (UN) prognosis, Lithuania will no longer have 3 million inhabitants by 2035. This will inevitably impact labor market: while decreasing in supply of labor power and the number of working inhabitants, it will be harder to support healthcare and social security systems which are funded with tax money; the need for these services will increase as the society is getting older. Emigration also causes other negative problems: income of national budget gets lower (because the number of tax payers decreases), intellectual potential of the country diminishes because smart and qualified youth leaves the country.

**Problems and Consequences of Emigration to Lithuania**

Only according to the official data of Statistics Department, in 1990—2010 half of Lithuanian inhabitants emigrated from Lithuania. However, experts say that this number is 1.5—2 times greater because the significant amount of emigration is non-official (Fig. 1). Research of undeclared migration conducted by Statistical Department shows that only every 2—3 inhabitant declares the departure while emigrating. The extent of emigration so far is not only great but is still increasing.

![Figure 1. Declared and undeclared emigration rate in Lithuania (thousands)](image)

*Source: prepared in accordance with the Department of Statistics to the Government of the Republic of Lithuania, 2012*
This rapid emigration, in terms of quantitative side of this process, has enormous impact on the changes of population number. Decrease in population number can be emphasized as one of the essential problems of emigration. Intensive migration processes have a great influence on the changes of ethnic structures of the inhabitants. Possibility of de-nationalization is often determined as a problem. As far as partial migration is concerned, when one or both parents go to work abroad and the nuclear family remains in Lithuania, social capital of Lithuania, the family, is weakened. The conception of family as a value and sense of family stability weakens.

Illegal migration also causes many problems. Two major categories of such problems are the flow of illegal migrants to/through Lithuania and illegal migration of Lithuanians to other countries. When illegal migration is in great extent, women trafficking tend to increase. On the other hand, women trafficking are promoted by material deficiency, unemployment, flaws of the system of social support and lack of knowledge of this problem. Unless the mindset of people about migration and economic conditions in the country changes, it is likely that women trafficking will remain a prevalent problem in Lithuania in the near future.

One more major problem is the loss of young people. This fact might have very severe consequences in near future because it will make demographic structure of society, i.e. only geriatric people will stay, birth rate and family development will diminish, also labor power will decrease which will be necessary to compensate by importing people from the Third World countries.

While liberalization processes of international labor market are in progress, Lithuania encounters not only emigration but also very current the “Brain Drain” problem. It means that when specialists of various fields cannot find work environment where they could self-actualize, they leave the country; thus, Lithuanian intellectual capital diminishes. General standard of living and resolution of socioeconomic problems of the country depend particularly on effective use of this the most productive part of society. After creating a well-planned national strategy, educated Lithuanian scientists in the West could and should become one of the driving forces of restoring and developing Lithuanian science. The reason of the Brain Drain is not only the general economic lag of Lithuania. The Brain Drain is also promoted by the flaws of Lithuanian science and education systems, their severe and long lasting problems. Analyses conducted by World Bank show that Lithuania is among countries which produce the least science production and innovations; even as compared with Middle and Eastern European countries. One of the most important factors which lead to the Brain Drain is the position of the government of Lithuania towards education. Investments to education are ineffective. According to the data of Eurostat, financing of one student expressed in purchasing power standards in Lithuania it is 8 times lower than in Sweden, 5 times lower than in Germany. According to this data, Lithuania leads against Latvia and Bulgaria, is
relatively in the same level with Poland, is far behind from Czech Republic and Estonia. Financing condition of students is bad, however, for the last years financing has increased. On this regard, we are one of EU leaders. However, study quality depends on education level. Education financing in Lithuania increases by very small numbers. Considering this data we can conclude that governmental financing is not given to the best and Lithuania has a flawed system for distributing money for studies. Another important factor which leads to the Brain Drain is low level of education and international acknowledgement. According to various researches, the best college/university seniors are not satisfied with the quality of education of Lithuania.

After summarizing problems of emigration (decrease in population, deformation of age structure, lack of labor power, possibility of de-nationalization, consequences of social migration, especially for family, children, the Brain Drain, human trafficking, illegal migration) which are encountered by Lithuania we can say that the problem of emigration is associated with socioeconomic situation in Lithuania and this problem should be solved at national level.

The Extent and Structure of International Migration in Lithuania in 1990—2011 and their Reasons

Emigration is almost twice as great as immigration. According to Eurostat data, Lithuania is first in European Union by the extent of emigration. The most emigrants to work go to USA, Germany, Poland, Ireland, Great Britain, Denmark, and Sweden. Since 2004 the most attractive to emigrants became the members of European Union: United Kingdom (33 percent), Ireland (16 percent), Germany (8 percent), Spain (4 percent), and Denmark (3 percent) (Fig. 2).

Lithuanians emigrate to United States of America (11 percent of emigrants), Federation of Russia (7 percent), and Belarus (5 percent).

The greatest part of emigrants consists of women. Since 2003 women make the greater part of emigrants in statistics structure, who emigrated more than men (in 2003, women – 53 percent; men – 47 percent; later women emigration out-weighted men emigration by 3—6 percent) (Fig. 3). Experts from Scandinavia claim that emigration is the problem of implementation of equal opportunities for both genders, which must be appropriately solved.
Figure 2. Emigrants who have declared their departure according to their future residence (individuals)

Source: prepared in accordance with the Department of Statistics to the Government of the Republic of Lithuania, 2012

According to the data provided by the Statistics Department, we can make a statistical profile of women. Women are more educated than men; they put more emphasis not on achievement of material, high status oriented career, but rather on professional and inner development. However, women encounter some problems in Lithuania. First, it is more difficult for women to pursue professional career. Second, a young educated woman in Lithuania has little chances to create a well-rounded family: to find an equally worth partner. In most cases, women’s value systems highly exceed men’s systems. Women in Lithuania are more educated, advanced, intellectual and more intelligent than men; they put more emphasis on development of themselves as personalities. Often, an average Lithuanian male falls short of females’ expectations and is not competitive to be their partner. This fact is supported by divorce statistics of Lithuania (according to the data of Statistics Department, in 2010 there were 10 thousand cases of divorce registered or 736 more than in 2009; every hundred marriages had 54 divorces or 9 more than in 2009) and a great comparative part of single women (around 20 percent) in Lithuania. This kind of situation pushes women to look for better chances to have their expectations met beyond the boundaries of Lithuania.
Figure 3. The number of emigrants who declared the departure from Lithuania by gender (individuals)

Source: prepared in accordance with the Department of Statistics to the Government of the Republic of Lithuania, 2012

Young people (ages 15—29) makes 40.8 percent of all emigrants. For the most part, young employable people leave: every other migrant is 20—34 ages and this tendency remains stable since 2001. In 2008, one fifth of all emigrants were inhabitants of ages 25—29, 13 percent – 20—24 ages, 14 percent – 30—34 ages; in 2007, respectively 18, 13 and 14 percent. In last two years every second emigrant was of ages 20—34. In 2010, 22.3 percent of emigrants were ages 25—29, 18.2 percent were ages 20—24, 14.4 percent ages 30—34. In 2010, 35—54 aged people made one fourth of all emigrants; in 2009 – one third. Geriatric people (aged 60 and more) made 2.6—0.9 percent of all emigrants in 2009—2010 (Fig. 4).
In summary, we can notice that it remains stable that women migrate from Lithuania more than men. It is also seen that emigration causes Lithuania to lose many young employable people. 77 percent of emigrants are aged 15—44. Among Lithuanian population people in such age range only make 43 percent. In the future decrease of young due to emigration will cause serious demographic problems because continuously decreasing number of employed people must support increasing number of unemployed ones. Inverse ration is evident while comparing the number of geriatric emigrants with the population of Lithuania. People aged 65 and over make only 1 percent of emigrants; whereas they make almost 18 percent of the population of Lithuania.

The results of implementation of economic politics in Lithuania are the main reason of labor power departures from the country. Research shows that the major part of emigrants indicate low income in Lithuania, difficult life conditions, little perspective and small number of opportunities for self-actualization as primary reasons for emigration.

The results of the research show that emigration extent will not diminish in nearest future; the state must put much effort to prevent from leaving a great part of Lithuanian inhabitants, who is now ready to leave and just waits for a good opportunity. We start to believe that the push of labor power from Lithuania happens due to the results of economic politics of the state. Unemployment, small salary, low quality standard of living and lowered expectations due to the perspectives of the...
country are the main reasons which promote employable people of Lithuania to emigrate; they show that economic politics of the state is oriented not towards the improvement of quality of life of its people but towards the decreasing of the budget deficiency at any cost. With the intention to reduce emigration, the government needs not to create sophisticated prevention programs but immediately do necessary works: increase the quality of public sector, purge business environment from redundant regulation, use the experience of other countries to implement effective program for attracting international investment, be zero-tolerant to the passiveness of officials and encourage them to initiative provide services for the inhabitants and businesses.

**High study price in Lithuania pushes the youth from Lithuanian universities.** According to the results of researches, the main reason which promotes the youth to go and study abroad is lower tuition of foreign universities, higher quality and better chances to get employed after studying (Lithuania student representative union (LSAS) in 2011 conducted a research on the intentions of higher education school seniors in Lithuania to pursue second degree education). It is interesting, particularly tuition is one of the major motivators due to which Lithuanian youth prefers to go and study abroad. For example, education is free in Denmark; Denmark is chosen by 25 percent of Lithuanian seniors. Lithuanian students in England usually take a loan for educational purposes whose obtaining and returning conditions are very favorable (returning deadline is after 25 years), 24 percent of seniors intend to leave for England. Moreover, an opportunity to find a job and to support oneself is a lot greater abroad; therefore, a youngsters from Klaipėda might find studying in Vilnius more expensive and difficult than in England even though one receives government financing.

Even 44 percent of students who intend to study abroad do not intend to come back to Lithuania and plan to remain living abroad. Although people who study abroad are not officially titled to be emigrants, a clear tendency is present that students who graduate abroad initially seek to find a job which is compatible with their qualification in Western European countries or USA and not to come back to Lithuania. Therefore, Lithuania retrieves only a small part of its “drained brains”, which could be a serious push for our economy, which lacks productivity and innovations. After analyzing the results of the research on the intentions of higher education school seniors in Lithuania, we can conclude that high studying price in Lithuania pushes the youth from Lithuanian universities. The results of this survey are a clear indicator to the state, which says that first, reforms of higher education highly contributed to the fact that due to the prices to study in Lithuanian being almost impossible, more and more students choose to study abroad. Second, Lithuanian youth does not see opportunities to realize their potential here after graduating from Lithuanian universities. Obviously, unless the current tendencies and tuitions change in Lithuanian higher education
schools, Lithuania will persist losing a part of its educated youth; and considering the tragic demographic situation of Lithuania and its prognoses, mentioned above, it seems that the state instead of encouraging the youth as the realization of the potential and the future of the state, drive this “potential of the state” out of Lithuania. It is necessary to immediately take appropriate measures which would encourage young people to create their future in Lithuania and finally implement sound phrases which declare the importance of education.

**There is a lack of self-realization opportunities in Lithuania.** It is a common view in Lithuania that emigration is first influenced by economic factors: differences in salaries, quality of life between Lithuania and foreign countries. However, we might notice that economical motivators are often overrated. One of the main reasons for emigration is that young people are not able to realize their professional potential, firstly because of vague professional career model in Lithuania. Of course, the keys to success and a good career in EU are education and professionalism which in Lithuania are underestimated. Career and material status do not depend on the level of education or qualification in Lithuania. Second, educated guy or a girl cannot meet their professional expectations in Lithuania: find an interesting job where they could grow, develop as personalities. According to the survey conducted in 2011 by the public opinion and market research company “Sprinter tyrimai,” about 15.6 percent of respondents mentioned that they are not satisfied with sociopolitical processes in Lithuania, it lacks respect and tolerance for people. People with higher education aged 26—35 who live in big cities and earn higher income more often want to emigrate because of better career perspective abroad and negative sociopolitical processes in Lithuania. This is why smart, with tendency towards professional development, youth (especially researchers, scientists) leave. They cannot find appropriate niche for themselves: professional, spiritual, intellectual and creative environment. The main reason for emigration of young people from Lithuania is inability to realize their potential, become a personality and the lack of opportunities to self-actualize in Lithuania.

Therefore, the reasons for emigration from Lithuania are not so much economical as social and particularly the lack of opportunities to self-actualize. With intention to promote return, it is necessary to have a complex emigration reduction strategy, change ideology of market and turn it towards sociopolitical priority, implement systematic reforms in science and education, in healthcare and culture, promote employers to work by socially responsible business principles to greater extent.
Conclusions

Intensive emigration flow from Lithuania creates many problems to the state and has direct influence to its socioeconomic status. The most important problems caused by emigration are the decrease of the absolute population number, deformation of age structure, lack of labor power, possibility of de-nationalization, human trafficking, and illegal migration; therefore this problem must be solved on national level.

Rapid emigration flow in Lithuania overtly shows the severe problem of emigration. The majority of emigrants are young employable people; it shows that young and educated people with high qualification and scientists leave. Therefore, flows of emigrants from Lithuania can be categorized into these two main groups: emigration of labor power and the Brain Drain. The decision of the first group to emigrate is influenced by the results of economic politics of the state and to essentially reduce the flow of emigration it is necessary to change economic and social politics. Motivators of the youth to emigrate are influenced by high studying price in Lithuania; Lithuanian youth does not see opportunities to realize its potential after graduating here in Lithuania. In is necessary to immediately take appropriate measures to promote young people to create their futures in Lithuania and finally implement the programs which declare the importance of education in Lithuania. These days Lithuania experiences the “Brain Drain,” which has enormous negative impact on the development of science in Lithuania and general national progress. It is necessary to emphasize that despite public acceptance that science is the driving force of contemporary economics of knowledge science is still not a priority in Lithuania.

In recent years it became apparent that a major part of emigrants are women. Experts from Scandinavian countries assert that emigration is the problem of implementation of equal opportunities for both genders, which must be appropriately solved. According to the statistical profile of women in Lithuania, created by the data of Statistics Department, Women are more educated in Lithuania; they put more emphasis not on achievement of material, high status oriented career, but rather on professional and inner development. However, women encounter some problems in Lithuania. First, it is more difficult for women to pursue professional career. Second, a young educated woman in Lithuania has little chances to create a well-rounded family: to find an equally worth partner. These results support the assumption that the lack of opportunities for self-actualization in Lithuania is an important reason of emigration.

With the intention to reduce the extent of emigration, long-term state politics should be directed towards the improvement of the quality of human resources, making of beneficial business environment, and insurance of stable macroeconomics. The complex emigration reduction strategy
must include such measures like: revival of agriculture and production, which will help to create more job positions and income for national budget; promotion of economic development and increase of occupation, reduction of taxes, elimination of corruption, formation of clear professional career model, reformation of higher education, healthcare and demographical politics.

References
ACADEMIC AND BUSINESS COLLABORATION: A STARTING POSITION FOR LITHUANIA’S MOVE TOWARDS RADICAL ECONOMIC CHANGES

Jurgis Samulevičius
Vilnius Gediminas Technical University,
Saulėtekio av. 11, LT-10223 Vilnius – 40, Lithuania
E-mail: jurgis.samulevicius@vv.vgtu.lt

Abstract. The concept of interaction between systems of research, teaching and practical businesses in the context of knowledge based economy and management are presented in the article. Special attempt is made for analysis of bridging local business and academic problems, solutions of which are relevant to Lithuania in the context of knowledge and globalization. In this context special attempt is made for developing new business strategies which play roles of key drivers in moving Lithuania’s economy towards radical knowledge-based economic changes. The paper attempts to make proposals for generating and effective use of synergy effects through establishing science& technology parks, business incubators, transport hubs and innovation research centers near universities which sponsor and help to spread an innovative culture amongst businesses in Lithuania. Special attempt is made for accent academic and business collaboration as priority and starting position in the process of the creation of knowledge based economy in Lithuania.

Keywords: Knowledge economy (KE), knowledge management (KM), knowledge institutions (KI), research and development (R & D), knowledge cluster (KC), entrepreneurship (E).

Introduction

The processes of academic and business collaboration via creation of knowledge economy are analyzed in many scientific works and could be defined as a system of interaction between different institutions (Goeransson, Soederberg 2005; Huseman, Godman 1999; Lahti 2007; Melnikas, Jakubavičius, Strazdas 2000; Melnikas 2008; Samulevičius, Samonis 2005).

The aim of the article. The paper aims to emphasize the importance of bridging science and business together having target to show Lithuania’s move to knowledge institutions such as integrated business centers, transport hubs, and present the vision and the challenges of these projects and institutions.

Research objective and methods. New methods of strategic management and competitiveness-boosting networking based on knowledge management are presented in the article.
The main strategy is the strengthening of Lithuania’s knowledge economy via collaboration of knowledge intensive business and science. The researcher attempted to approach the subject using statistical and institutional research couched in the analysis terms as well as using a modified Harvard-style Lithuania’s case and study actual empirical/practical processes, as they have been experienced in transition economies such as Lithuania thus bringing important evidence and empirical insights into the subject of the analysis.

Research results. The main idea was to show local experience of Lithuania in the global context. Bridging science and business together via creating a network of knowledge institutions and projects are presented as a wave of future, which represent new science and business opportunities and sponsors to realize” latecomer’s advantage” by leapfroging to the technologies and models of doing business in Post Communist and other emerging market countries, which are new for Western countries as well.

What do we know about new Nature of Business, Competitiveness and Tendencies of Knowledge Economies Development?

Knowledge is a power. In today’s era of knowledge based economies, constantly changing business environments, severe competition, and globalization, gaining the knowledge edge will greatly empower an organizations to stay on the cutting edge. Technological developments in the 21st century have transformed the majority of wealth-creating work from physically-based to "knowledge-based." Technology and knowledge are now the key factors of production. We live now in information society where a knowledge economy and knowledge management is essential. This paper aims at emphasizing knowledge based economy and knowledge management in the new information society. The success of knowledge economy depends on the interaction between national knowledge basis and innovation systems. Development tendencies of knowledge – based economy in different countries and regions are variable. The authors of scientific research maintain that the USA is a cradle of knowledge economy and forecast that the same development trends will continue till 2020 .According to an experts, Japan is one of the leading countries in knowledge – based economy too (The global trends 2015; A dialogue about the future with nongovernment experts, 2000). But the following question arises: at what level is the EU?

The aim of the Lisbon Special European Council of 23-24 March 2000 was to invigorate that EU should become the most competitive and dynamic knowledge – based economy in the world. The implementation of the Lisbon Strategy provided for developing research and innovatory enterprises by creating innovations in all fields of human activities, by creating and using new technologies, by promoting competition, by supporting education, improving the social policy and
consolidating the free market. Looking at the current region of European development trends it seems that the initial implementation of the Lisbon strategic goal was difficult, that’s why in 2004 it was reassessed and the goal was revised. That strategy was based on three main directions of the development: research and innovations was the main propeller of the growth for Europe having target Europe to become more attractive to investors and businesses.

**Knowledge Based Economy Creation Process: the Challenges for Lithuania**

Lithuania also formulated its purposes. The Government and Council for National strategy approved the Lithuanian strategy of development till the years 2010 and 2030. The decision was made, that further development of the knowledge economy infrastructure is needed. That will necessitate a better public private sector collaboration so as to arrive at innovative management models and strategies underpinning the knowledge economy in Lithuania.

Europe has recognized Lithuania as the prime transport centre in the region linking the EU and East. Therefore country is prepared to become a part of two EU priority transport corridors: West – East and South – North.

North-South direction: I corridor (the VIA BALTICA highway and the RAIL BALTICA railway), connecting Tallinn - Riga – Saločiai - Panevėžys - Kaunas - Kalvarija - Warsaw, and IA corridor (Tallinn – Riga - Šiauliai - Tauragė - Kaliningrad); - East - West corridor: IX corridor, IX B corridor branch (Kiev - Minsk - Vilnius -Klaipėda) and IX D corridor (Kaunas - Kaliningrad).

These corridors are as a key for an effective development, safe and environmentally friendly handling of the increasing amount of goods going East – West and North – South. Moreover, it helps to enhance sustainable transportation and smart IT solutions in the field of transport. As a result, these corridors stimulate the economic growth and business development (see Fig. 1).

Having target to gain ranking and competitiveness, government has to set a strategic goal for Lithuania to become the Northern Europe Service Hub by 2015-2030 with the share of exports of services making approximately 1/3 of Lithuania’s total exports and 1/3 of total FDI in Lithuania settling down in the service sector.
Figure 1. EU’s prime transport hub and interconnection of international transport corridors:

(Air, rail, sea and highway routes)

Source: www.investlithuania.com

Lithuanian Geopolitics, Business Environment and Infrastructure as a Key Driver of Lithuania‘s Move Towards Dynamic and Knowledge Based Growth

After two decades of the post-communist transformation and large scale experimentation with the European integration Lithuania needs to speed up and modernize the economy to arrive at viable 21st century global models. The big challenge before the country therefore is how to target the entire globe as Lithuania’s current or potential market in order to induce entirely new perspectives and create many more advanced opportunities for the young, newly educated people. In case this problem will not be solved in time, many of them will emigrate and thus condemn Lithuania to further transitional threats in its development on Europe’s periphery.

a) Strategic European location and infrastructure.

Having in mind that the French National Geographic Institute has concluded that Europe’s geographical centre is situated 26 km North of Vilnius (this is now registered in the Guinness book of World Records), Lithuanian business market is very easy to access, because of the geographical proximity, which can serve for incubation of new technologies. Moreover location of the country which imagine it’s business opportunity to be in crossroads of such three huge markets EU (Western Europe and Scandinavian), BSR (The Baltic Sea Region Innovation Network), and Eastern market (Russia and CIS (Commonwealth of Independent States)) in which operates more than 700 million consumers, create opportunities for companies expand their competitive edges
moving their activities out of the region generating ‘spread’ of technological innovations globally (see Fig. 2)

![Map of Europe showing markets](image)

**Figure 2.** Lithuania on the crossroads of three huge markets

*Source: [www.investlithuania.com](http://www.investlithuania.com)*

Moreover, Lithuania is a member of the international organization and unions such as World Trade organization (2001), European Union (2004), NATO (2004) and Schengen (2007). Therefore Lithuania ensures free trades between numerous markets, gets possibility to provide for customers more choices and broader range of products and qualities, and most importantly stimulates economic growth. Moreover, these memberships allow to Lithuanian to access developed markets at the lower tariffs and ensure free traffic flow at internal borders. Additionally, country gets international support and cooperation. And finally, membership makes easier and cheaper to do business in other countries and helps to expand and develop its own business market and environment. Additionally Lithuania avails of strategic European location by its infrastructure.

*b) Challenges for Lithuania- target 2030*

The chief criterion for Lithuania, before to become a full member of the EU, was the capability to withstand the European competitive pressure and become competitive and visible in globalizing world. Lithuania’s strategy was to develop higher added-value market niches that will precisely call upon the Lithuanian capabilities to create an entrepreneurial economy that is integrated continentally and globally. Knowledge economy provides such opportunities especially in the context of knowledge and innovation in the European and global business. The main goal was strengthening of Lithuania’s knowledge economy having target to catch up and surpass Western Europe in terms of dynamism. For that purpose, the scenario “Lithuania- 2030” was developed
(Kubilius, Chalmers, 2011), where new challenges of values and challenges to the leadership was chosen as a priority. People - not technologies were priorities. In this scenario dynamism of the people was chosen as a prerequisite and dynamism of technologies was chosen as a destiny. Having in disposition dynamic and highly skilled talent pool: 30% of overall population with higher education, compared to the EU average (24%), 50% speaking two foreign languages, 49 higher education institutions (22 universities and 27 colleges), 7 universities and 8 colleges hold IT curriculums, 40% talent in science and technology, with leading in the world position in mobile e-signature, highest fiber optic density in Europe, world’s fastest upload Internet in 2009, exemplary GSM penetration and densest network of public Internet access points in Europe, Lithuania is a spring board to the single European market counting over 500 million consumers as well as to Eastern markets. Stable political and economic environment ensured by EU, NATO and WTO membership, Europe’s prime transport center, innovation driven knowledge economy (global laser, biotech, IT leadership), top quality talent pool, competitive business operation environment are those predicable arguments which show that Lithuania is more than prepared for radical start in to creation of innovative economy and a country creating innovations for entire world. (Kubilius, Chalmers, 2011).

c) Strengthening of knowledge intensive business and education as a key driver for Lithuania’s future growth.

The dominant challenge for Lithuania is how to use a considerable theoretical research (e.g. biotech, lasers, ITC leadership, nanotechnologies, semiconductors, game theory) potential of the Lithuanian research institutes, universities, and industry. There is a need to develop a practice-oriented strategy for knowledge-based industries.

As concerns educational institutions in European countries, they are still somewhat attached to the subject-based teaching/learning and this problem is therefore more pronounced in Europe than in North America.

Nowadays all over the world higher education and universities are preparing themselves for new status quo and challenges which are predicted by social and economical processes and new business opportunities. Looking to the trends in global higher education, private education occupies leading positions and is on the rise. The global education market amounts to more than 2,3 trillion USD, with around 15% in the developing world (Trends in Global higher education). Private sector participation is growing while government regulations are becoming more liberalized. At the moment private higher education market is estimated to be worth more than 350 billion $ on current expenditures alone and is growing further.

As concerns private sector of higher education in Lithuania, it is rather than week. Only 3% of university students study in private sector. Some competition appear when we look to the social
sciences sector. Being more flexible, private institutions have a possibility to pay higher salaries and use foreign lectors, even some subjects possible to be bought from outside. In general, public sector of higher education in Lithuania is responsible for the most specialists available in the field of technologies, natural sciences, life sciences, humanities and arts. In the nearest future the competition between universities should not be local but global. From our point of view, public universities in the short run will be the most important driving force for competitiveness of Europe in the future.

At present there are 21 universities (state and private) and 27 colleges in Lithuania. The country is well above the EU average by the proportion of students per 1000 to the total population aged 20-29 (LT-73.21; EU-52.8) (Medvedeva, 2011). Lithuania has switched over to the European model of higher education that makes a clear distinction between university and non-university studies. They are divided into undergraduate, graduate and post graduate studies. The common time and workload framework allows for a bigger mobility of students and comparability of degrees and other higher education prospects. As concerns future of Lithuanian universities, they must be prepared for new challenges which are posed by the internationalization of higher education, aging population, global energetic, climate and macroeconomic changes. Solving these problems universities must be prepared to identify, detect, analyze and prepare recommendations for new business opportunities which are most feasible to invest in. Universities should be both initiators and leaders in this activity and have to develop new curriculum and tools, new learning approaches such as learning by doing or learning by developing, implementation of which can combine aspects of innovation in learning and business. Moreover universities should be initiators or leaders of this activity not only in their local regions, but going international. On the agenda of higher education are internationalization, cross-border education, different policy rationales and approaches to cross-border education, etc. At the moment number of international students in Lithuania is less than one percent. Therefore, most of Universities have to develop new policy challenges, new curriculum that applies to professors and students. Lithuania’s higher education is still looking for a better model of regulation of universities, for improvements which help Lithuanian universities to compete more successfully at a global level. From this point of view many changes must to come from inside of the universities. This is due to internationalization and the rapid exchange of information, via programs for the mobility of academics, administration staff and students. Right now we have some achievements: Vilnius University has participated in the EU sponsored JOIMAN project related to the management of Joint Master Programs, also is a member of different networks such as EUA, IAU, UNICA, BUP, BSRUN, etc., Vilnius Gediminas Technical University was active partner of the European research programs (6th and 7th) FRAMEWORK, PHARE, COST, EUREKA, NATO, etc., Mykolas Romeris University is unique by being one of the first in
Lithuania, member of UNESCO established organization of higher education (IAU) and the first in Lithuania university which change its status to nonprofit organization. According to WEB of World University ranking, the University of Tartu takes the first place among the Universities of the Baltic states (place 483 in the world) and Vilnius Gediminas Technical University comes second (place 634 in the world) (Ranking Web of World Universities, 2012).

Nowadays all over the world universities must be prepared for new challenges which are predicted by rapidly changing socioeconomic processes. They must be prepared to identify, detect and analyze new business opportunities. It could well be that knowledge management is that vehicle and that frame of mind that can help support research networks, which are the lifeblood of the integration in to European research.

All these achievements show us that internationalization of higher education is demand-driven priority of leading universities in Lithuania, which can support emerging economies, developing and transition countries to build or strengthen their capacity of higher education. Bridging science and business or academic collaboration is a new agenda and new target how to survive under conditions of uncertainty we have in mind conditions of global recession.

**Bridging Science and Business together: Lithuania’s Case Study**

In today’s world separate market participants are unable to achieve good results which knowledge economy requires. The key for solving problems are networks, clusters and other common activities. In the network of such knowledge institutions there are very popular objects of knowledge economy such as knowledge camps, houses, towers, islands, technological parks, valleys, transport hubs, etc.

Five integrated R&D centers (valleys) were introduced in Lithuania during 2007 – 2009, two of which are in Vilnius (Santara and Sunrise Valleys of electronics, nanotechnologies, ITT and biomedicine), two are in Kaunas (Santaka and Nemunas valleys of ITT, mechatronics, chemistry and agriculture) and one maritime valley in Klaipėda (Sunrise Valley).

By developing valleys in Lithuania it is sought to create clusters of research, higher education and knowledge-based economy of an international level, to speed up the creation of knowledge-based society and to strengthen Lithuania’s competitiveness.

Valleys in Lithuania are created seeking to concentrate, renew and optimize the infrastructure, which would enable state-of-the-art technologies and other most promising sectors of science, technologies and business to be developed, relations between scientific research and higher education to be strengthened, close interaction between scientific research, science, higher
education and knowledge-intensive business to be ensured, as well as to engage in training researchers and other specialists.

Also, it is sought to develop scientific co-operation of the highest level on the national and international scale, to attract necessary foreign investments of great intellectual potential, and on the basis of research and higher education, as well as knowledge-intensive business to create clusters of knowledge-based economy.

Good conditions for successfully activities started in Vilnius “Sunrise Valley” where special social enterprise “Sunrise Valley” in May of 2003 was established.

Vilnius University and Vilnius Gediminas Technical University, well known Lithuania’s corporate leaders: ALNA, SONEX, OMNITEL, BITE GSM, EKSPLA, Laser Research Institute, the members of the Knowledge Economy Forum of Lithuania were founders of this public unit. In February 2004 Vilnius City Municipality became a stakeholder in public company “Sunrise Valley”, EKSPLA Ltd. transferred its authorities as “Sunrise Valley” stakeholder to Association of Laser and Photonics Science and Business Institutions in July 2005. Association unites nine Lithuanian R&D institutions and business companies.

In reality “Sunrise Valley” accumulated theoretical and practical potential of the best Lithuanian research Institutes, Universities, think tanks, consultants, firms and organizations and is ready to tap into the growing stock of global knowledge and adapt it to local needs. The overall aim of creating “Sunrise Valley” cluster is to contribute to the growth of knowledge economy and increased competitiveness of Lithuania worldwide.

“Sunrise Valley” project objectives are: to provide modern conditions for quality education and research linked to professional activity and business environment, generate employment opportunities for highly qualified university graduates, scientists and other specialists, provide favorable conditions for commercialization of research, act as an indispensable link between currently active science and technology parks and business incubating system in Vilnius, provide basis for local and foreign investment for the research projects.

Conclusions

The paper concludes that bridging science and business together via knowledge based economy is a wave of the future:

1. The transition towards a knowledge economy requires that policy makers understand the comparative strengths and weaknesses of their countries and then act upon them to develop appropriate short and long term policies and investments.
2. Lithuania will need to develop higher added-value market niches that will precisely call upon the Lithuanian capabilities to create an entrepreneurial economy that is integrated continentally and globally. Knowledge economy provides such opportunities especially in the context of knowledge and innovation in the European and global business.

3. Bridging science and business together provides a compelling platform to research the issues of upgrading competitive advantage in developed countries and contract out non–core competencies to emerging markets.

4. Conclusion was made, that the bridging science and business together via creating a network of knowledge institutions and projects based on innovative scheme such as Sunrise and Santara Valley in Vilnius, Santaka and Nemunas Valley in Kaunas, Maritime Valley in Klaipėda deliberately modeled after the Silicon Valley, California, created the starting position. Post communist and other emerging market countries are well advised to jump to these new opportunities as they represent the best chance yet to realize the “latecomer’s advantage” by leapfrogging to technologies and models of doing business which are new for Western countries as well.

References


THE PROSPECTS OF INDIA AND THE EUROPEAN UNION ECONOMIC COOPERATION

Jusif Seiranov
Mykolas Romeris University
Faculty of Economics and Finance Management
Ateities st. 20, LT-08303, Vilnius, Lithuania
E-mail: j.seiranov@mruni.eu

Raj Sekhar Basu
Indian Council for Cultural Relations Chair in Indian Studies at
Mykolas Romeris University
Ateities st. 20, LT-08303, Vilnius, Lithuania
E-mail: rajsekharbasu2001@yahoo.com

Abstract. The article discusses the question of scale and trends in the development of economic relations of India and the European Union. External trade, mutual direct investments, the EU member countries bilateral relations with India during the last decade are reviewed and analysed. The efficiency of existing India-EU cooperation mechanism, its ability to provide better quality comparing to bilateral relations are questioned.

Keywords: the European Union (EU) and India economic cooperation, the EU-India strategic partnership, the EU and India external trade

Introduction

This year the relations of the European Union and India mark half a century history. It was back in 1962 when India’s Prime Minister Jawaharlal Nehru appointed Ambassador to European Economic Community, predecessor of the EU. Quite modest at the start and overshadowed by ties with former metropolitan power Britain, the EU-India relations over decades grew into strategic partnership, highly valued by both sides.

Despite striking differences, there are certain similarities between the EU and modern India. The EU and India occupy comparable land areas (4.3 mln. km² and 3.3 mln. km²). The EU unites 27 different nations, while India is a federation uniting 28 states. As R. Harshe (2007) notes, both subcontinents provide rich diversity of peoples, cultures, languages as well as disparities among
different parts within both entities. Both the EU and India are market economies and pluralistic democracies, which makes a solid foundation to regard them “as natural partners” (Wagner, 2008).

The purpose of the article is to analyse the scope and trends of the EU-India economic relations, to review the recent developments of the EU-India cooperation institutional framework, to discuss what measures could be taken to avoid the stalemate of cooperation extension. The methods used in the paper are the analysis the scholar studies and official documents, analysis and comparison of statistical data.

India’s Reappearance on the Global Stage

For four decades after independence India seemed to be an Asian giant with a dwarf economy. As A.Maddison’s studies showed, since the beginning of the 1st millennium India’s share of the world production reduced from 1/3 to humble 3.1% by 1970s (see Table 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>1 A.D.</th>
<th>1000</th>
<th>1500</th>
<th>1700</th>
<th>1870</th>
<th>1950</th>
<th>1973</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>India’s share in world economy, by purchasing power parity</td>
<td>32.9%</td>
<td>28.9%</td>
<td>24.5%</td>
<td>24.4%</td>
<td>12.2%</td>
<td>4.1%</td>
<td>3.1%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Source: The World Economy: A Millennial Perspective

The return of India to the world economy scene followed after 1991 liberal reforms, which opened up the potential accumulated by previous developments. By 2011 the share of India in world GDP by purchasing power parity by different estimations is about 5.5%. It is worth to note that in current prices India enjoys just 2.74% (World Bank, 2011), remaining in the lower-middle income group of the countries. Many researchers agree that the rapid growth of India economy is explained by combination of various factors. Most important of growth drivers are the following:

- High share of saving and investment. The gross capital formation share to GDP increased from 24.2% 34.8% from 1990 to 2010.
- “Demographic dividend” effect, when the share of working population is growing faster than the number of dependants.
- Robust domestic demand and rising purchasing power of growing Indian middle class.
- Globally competitive information and communications technology (ICT) sector and rising manufacturing sector, ensuring India’s positions as world outsourcing hub.
- Extended higher education system, providing qualified English speaking employees.
Alongside with the drivers of growth there are numerous forces restraining India’s sustainable development, among them: state of public finances and governance, high inflation rates, formation of oligarchic structures in economy and corruption, social and regional disparities, remaining poverty and illiteracy. However the overall balance of diverse factors play in India’s favour. The average GDP growth rate during 2000-2010 was 8.0%, the projected growth for the period 2010-2014 is 7.8%, providing India second leading position among largest emerging economies after China (World bank, 2012).

The new quality of Indian and other emerging economies was highlighted in 2001 Jim O’Neil’s report "Building Better Global Economic BRICs“. Since then the evaluations and forecasts were corrected only to fix faster pace of change. According to Goldman Sachs (2009) report by 2027 India’s has to even up with Japan, thus becoming third single nation economy of the world after China and US. It is natural, that the actual rise and growth prospects of Indian economy affect the EU and India economic relations.

The Scope and Trends of Economic Relations between the EU and India

Till the end of 1990s the Indian issue was far from the EU priorities. The agenda of the EU economic cooperation with India coincided with developing world issues. The dynamic development of India’s trade in goods and services, the rise if direct and portfolio investments, the competition with other economies (first of all with USA) for attractive Indian market pushed the EU for building strategic relationship with India.

External trade. Given the present position of India in the EU external trade, Indian stance looks quite modest compared with the leading partners and even some European states such as Switzerland and Norway. In the Table 2 the trade partners are ranked according to their volume of trade in 2010.

During the period 2001-2011 the total EU external trade increased by 72.5%. While the EU-USA trade decreased by 0.9%, trade with India grew 3 times (201.7%), the rate next only to China (208.1%) and Russia (214.6%) results.
Table 2. Extra-EU27 trade in goods, by main partners 2001-2011 (million EUR)

<table>
<thead>
<tr>
<th>Year\country</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra EU-27</td>
<td>1863850</td>
<td>1828866</td>
<td>1804502</td>
<td>1980477</td>
<td>2232289</td>
<td>2512888</td>
<td>2675571</td>
<td>2876194</td>
<td>2303637</td>
<td>2854882</td>
<td>3215053</td>
</tr>
<tr>
<td>United States</td>
<td>448892</td>
<td>430552</td>
<td>385406</td>
<td>394873</td>
<td>416194</td>
<td>444691</td>
<td>433292</td>
<td>436901</td>
<td>364750</td>
<td>412284</td>
<td>444708</td>
</tr>
<tr>
<td>China (except HK)</td>
<td>112665</td>
<td>125247</td>
<td>147694</td>
<td>177068</td>
<td>212152</td>
<td>258726</td>
<td>304409</td>
<td>326350</td>
<td>296518</td>
<td>395759</td>
<td>428288</td>
</tr>
<tr>
<td>Russia</td>
<td>97476</td>
<td>98912</td>
<td>107889</td>
<td>129984</td>
<td>169287</td>
<td>213244</td>
<td>234047</td>
<td>283172</td>
<td>183355</td>
<td>244686</td>
<td>306627</td>
</tr>
<tr>
<td>Switzerland</td>
<td>140140</td>
<td>134509</td>
<td>130472</td>
<td>137213</td>
<td>149162</td>
<td>159429</td>
<td>169251</td>
<td>178336</td>
<td>162400</td>
<td>189682</td>
<td>212895</td>
</tr>
<tr>
<td>Norway</td>
<td>73553</td>
<td>76173</td>
<td>78685</td>
<td>86074</td>
<td>101054</td>
<td>117664</td>
<td>120035</td>
<td>139698</td>
<td>106423</td>
<td>121110</td>
<td>140060</td>
</tr>
<tr>
<td>Japan</td>
<td>126655</td>
<td>117106</td>
<td>113365</td>
<td>118119</td>
<td>117813</td>
<td>122281</td>
<td>122014</td>
<td>117341</td>
<td>92775</td>
<td>109618</td>
<td>116415</td>
</tr>
<tr>
<td>Turkey</td>
<td>43954</td>
<td>51215</td>
<td>58109</td>
<td>72862</td>
<td>90707</td>
<td>91758</td>
<td>99671</td>
<td>100156</td>
<td>80286</td>
<td>103526</td>
<td>120176</td>
</tr>
<tr>
<td>India</td>
<td>26412</td>
<td>28012</td>
<td>28636</td>
<td>33523</td>
<td>40408</td>
<td>47006</td>
<td>55763</td>
<td>61148</td>
<td>53041</td>
<td>67997</td>
<td>79676</td>
</tr>
<tr>
<td>South Korea</td>
<td>39105</td>
<td>42214</td>
<td>42452</td>
<td>48602</td>
<td>54677</td>
<td>63678</td>
<td>66046</td>
<td>65140</td>
<td>53935</td>
<td>67023</td>
<td>68476</td>
</tr>
<tr>
<td>Brazil</td>
<td>38172</td>
<td>34096</td>
<td>31509</td>
<td>35884</td>
<td>40181</td>
<td>44972</td>
<td>53767</td>
<td>62245</td>
<td>47352</td>
<td>63745</td>
<td>73481</td>
</tr>
</tbody>
</table>

Data source: Eurostat 2012 (1); EU DG Trade, 2012

Graphical results of Table 2, presented in Fig. 1 show that generally emerging economies take share of trade previously enjoyed by traditional partners, such as USA and Japan.

Figure 1. Changes in external trade with the EU top 10

Source: Eurostat 2012 (1); EU DG Trade, 2012

More detailed analysis of India’s trade with EU shows that present position is explained by low base. As seen from Table 3, tripling the volume of trade in a decade raised India’s rank among the EU exports from 17 in 2001 to 8 in 2011. Similar progress was achieved in EU imports: India’s
rank went high from 15 to 8 in the same period. Though world recession of 2009 hit the EU-India trade (-13.3%), the after-crisis period demonstrates rapid recovery (28.2% and 17.2% of year on year growth in 2010 and 2011).

**Table 3.** EU-2727 trade in goods with India by year: value (millions EUR), share (%), ranking

<table>
<thead>
<tr>
<th>Year</th>
<th>EU-27 exports to India in millions of EURO</th>
<th>India’s share in EU-27 exports (%)</th>
<th>India’s ranking in EU-27 exports</th>
<th>EU-27 imports from India in millions of EURO</th>
<th>India’s share in EU-27 imports (%)</th>
<th>India’s ranking in EU-27 imports</th>
<th>EU-India total external trade</th>
<th>growth in percents, year on year</th>
<th>EU-India balance of trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>12950</td>
<td>1,5</td>
<td>17</td>
<td>13462</td>
<td>1,4</td>
<td>15</td>
<td>26412</td>
<td>6,1</td>
<td>-513</td>
</tr>
<tr>
<td>2002</td>
<td>14330</td>
<td>1,6</td>
<td>16</td>
<td>13682</td>
<td>1,5</td>
<td>15</td>
<td>28012</td>
<td>2,2</td>
<td>648</td>
</tr>
<tr>
<td>2003</td>
<td>14572</td>
<td>1,7</td>
<td>15</td>
<td>14064</td>
<td>1,5</td>
<td>15</td>
<td>28636</td>
<td>17,1</td>
<td>507</td>
</tr>
<tr>
<td>2004</td>
<td>17154</td>
<td>1,8</td>
<td>13</td>
<td>16369</td>
<td>1,6</td>
<td>15</td>
<td>33523</td>
<td>20,5</td>
<td>784</td>
</tr>
<tr>
<td>2005</td>
<td>21322</td>
<td>2,1</td>
<td>14</td>
<td>19086</td>
<td>1,6</td>
<td>15</td>
<td>40408</td>
<td>20,5</td>
<td>2236</td>
</tr>
<tr>
<td>2006</td>
<td>24392</td>
<td>2,4</td>
<td>14</td>
<td>22614</td>
<td>1,7</td>
<td>15</td>
<td>47006</td>
<td>18,6</td>
<td>1778</td>
</tr>
<tr>
<td>2007</td>
<td>29177</td>
<td>2,4</td>
<td>14</td>
<td>26586</td>
<td>1,9</td>
<td>14</td>
<td>55763</td>
<td>9,7</td>
<td>2591</td>
</tr>
<tr>
<td>2008</td>
<td>31603</td>
<td>2,5</td>
<td>14</td>
<td>29545</td>
<td>2,1</td>
<td>14</td>
<td>61148</td>
<td>-13,3</td>
<td>2057</td>
</tr>
<tr>
<td>2009</td>
<td>27593</td>
<td>2,6</td>
<td>14</td>
<td>25448</td>
<td>2,2</td>
<td>14</td>
<td>53041</td>
<td>28,2</td>
<td>2145</td>
</tr>
<tr>
<td>2010</td>
<td>34804</td>
<td>2,6</td>
<td>14</td>
<td>33193</td>
<td>2,3</td>
<td>14</td>
<td>67997</td>
<td>17,2</td>
<td>1611</td>
</tr>
<tr>
<td>2011</td>
<td>40419</td>
<td></td>
<td>14</td>
<td>39257</td>
<td></td>
<td>14</td>
<td></td>
<td></td>
<td>1162</td>
</tr>
</tbody>
</table>

*Data source: Eurostat, 2012 (1), EU DG Trade, 2012*

Characteristic feature of the EU-India trade are rather balanced positions of export and import flows, with steady slight trade deficit of India, as shown in Fig.2. This favourably differs from situation with the EU-China huge trade deficits.

**Figure 2.** EU-27 trade with India, 2001 – 2011, millions of EUR

*Source: Eurostat, 2012 (1), EU DG Trade, 2012*
There is certain asymmetry in trade relations between EU and India, caused mostly by difference in sheer size of the partners. While currently India has just 2.5% in EU total external trade, the share of the EU in India’s total external trade is much higher: 12.2% in exports and 18.8% in imports, 14.8% in total trade. It is worth to note that this asymmetry improves with the growth of Indian economy.

**Direct investments.** Another important dimension of the EU and India economic ties are direct investments. The accumulated stock of European direct investments in India steadily grew more than more than 4 times in the period from 2004 to 2010.

<table>
<thead>
<tr>
<th>FDI stocks\Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-27 direct investments stocks in India</td>
<td>8076</td>
<td>10579</td>
<td>12359</td>
<td>16372</td>
<td>17790</td>
<td>27179</td>
<td>34408</td>
</tr>
<tr>
<td>India’s direct investments stocks in EU-27</td>
<td>584</td>
<td>2502</td>
<td>2289</td>
<td>4618</td>
<td>6200</td>
<td>5303</td>
<td>6999</td>
</tr>
<tr>
<td>Balance of FDI</td>
<td>7492</td>
<td>8077</td>
<td>10070</td>
<td>11754</td>
<td>11590</td>
<td>21876</td>
<td>27409</td>
</tr>
</tbody>
</table>

*Source: Eurostat, 2012 (2)*

Asymmetry of flows should be noted; still the pace of Indian investments in the EU became quite visible with famous acquisitions of last years, such as Land Rover and Jaguar companies. Traditionally Indian businesses prefer to invest in United Kingdom

**Figure 3. Asymmetry of the EU-India direct investments**

*Data source: Eurostat, 2012 (2)*
**Member states weights in the EU-India relations.** One more important dimension of analysis are the India’s relations with the EU members. Previously dominated by United Kingdom, now structure of relations with various EU countries is more balanced. Changes in the structure of external trade in years 2001, 2006 and 2011 are seen from Table 5.

**Table 5.** EU-27 trade with India and shares of EU member countries, 2001 - 2011

<table>
<thead>
<tr>
<th>EU Countries</th>
<th>Trade with India in 2001</th>
<th>Share of EU trade</th>
<th>Trade with India in 2006</th>
<th>Share of EU trade</th>
<th>Trade with India in 2011</th>
<th>Share of EU trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 27</td>
<td>26412</td>
<td>100,0%</td>
<td>47006</td>
<td>100,0%</td>
<td>79819</td>
<td>100,0%</td>
</tr>
<tr>
<td>Belgium</td>
<td>4703</td>
<td>17,8%</td>
<td>7661</td>
<td>16,0%</td>
<td>13212</td>
<td>17,0%</td>
</tr>
<tr>
<td>Germany</td>
<td>4667</td>
<td>17,7%</td>
<td>9854</td>
<td>21,0%</td>
<td>17352</td>
<td>22,0%</td>
</tr>
<tr>
<td>France</td>
<td>2377</td>
<td>9,0%</td>
<td>4452</td>
<td>9,0%</td>
<td>6840</td>
<td>9,0%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>6237</td>
<td>23,6%</td>
<td>8473</td>
<td>18,0%</td>
<td>12523</td>
<td>16,0%</td>
</tr>
<tr>
<td>Italy</td>
<td>2702</td>
<td>10,2%</td>
<td>5142</td>
<td>11,0%</td>
<td>8522</td>
<td>11,0%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1542</td>
<td>5,8%</td>
<td>3019</td>
<td>6,0%</td>
<td>5809</td>
<td>7,0%</td>
</tr>
<tr>
<td>Rest of EU 27</td>
<td>4184</td>
<td>15,8%</td>
<td>8405</td>
<td>18,0%</td>
<td>15561</td>
<td>19,0%</td>
</tr>
</tbody>
</table>

*Source: Eurostat, 2012 (3)*

Comparison of the data, presented in Fig.4 shows eventual decrease of United Kingdom share in trade with India, but generally the structure remains steady for the whole decade.

![Shares of EU members in EU-India trade, 2001](image1)

![Shares of EU members in EU-India trade, 2011](image2)

**Figure 4.** Comparison of structure of EU-India trade by member countries 2001 - 2011

*Source: Eurostat, 2012 (3)*

The so called “Big Three” (Germany, France and United Kingdom) represent about half of all turnover. The six top countries have up to 4/5 of all external trade with India, though the share of
the rest of the EU slightly grows. This fact gives an economic explanation of certain weaknesses of multilateral interaction with India, as bilateral negotiations between India and certain EU members are often more effective.

**The Institutional Framework of the EU-India Cooperation**

The formation of institutional framework of the EU and India cooperation was the object of study of plenty European, American and Indian researchers. It is worth to mention vast Routledge studies, Institute for Security Studies (European Union), Centre for European Studies of Jawaharlal Nehru University. C. Wagner (2008) and U. S. Bava (2008) agree that economic and trade issues are leading for the EU. Researchers stress the compatibility of partners’ economies, though there are areas in which India and the EU may act as direct competitors (energy supplies from Middle East). Within last decade The EU–India cooperation acquired all elements of Strategic Partnership mechanisms (SP) practiced by the EU. This includes annual summits, High Level and ministerial dialogues, sectoral cooperation. According to G. Grevi and G. Khandekar (2011) the EU supports ten single nation strategic partnerships, which can be classified as Americas (USA, Canada, Mexico), BRICS (Brazil, Russia, India, China, South Africa) and Asia (Japan, South Korea). Alongside with single nation partnerships there are group mechanisms. There is much criticism about efficiency of the EU SPs, “some of which are not really partnerships, and most of them are not very strategic” (Balfour, 2010).

Comprehensive and critical analysis of evolution and current state of the process is provided by R. Jain (2011). The progress of institutional relations was dynamic in 2000-2007. In this period EU-India Strategic Partnership (European commission, 2004) was signed, Joint Action Plan (Council of European Union, 2005) accepted. For the midterm period The European Commission worked out “India: Country Strategy Paper 2007-2013” (European Commission, 2006). The breakout of world financial crisis and further developments with sovereign debts and Euro crisis interrupted further rapid progress in the EU-India partnership developments. The goal to reach comprehensive Free Trade agreement, which looked as a natural next cooperation step by 2010 is eventually delayed. India, often accused for its bureaucracy, cannot break through bureaucratic proceedings of eurocrats and prefers to reach deals in bilateral talks with member states instead of multilateral EU mechanisms (Sachdeva, 2009).

The resource which could be used for further development of relations could be potential of medium and small EU member countries which with some exclusions (Nordic countries) were significant actors in the EU-India partnership building.
Conclusions

The last decade was a period of unprecedented growth of scale of economic cooperation between the EU and India. Though the smooth development was interrupted by 2009 world recession, next years saw further growth.

Except few areas, in which partners may act as competitors, in most fields there is high compatibility between India and EU economies.

Analysis of external trade shows high asymmetry between India’s share in EU trade and EU’s share in India’s trade. It could be forecasted that these imbalances may decline with the growth of India’s economy.

Analysis of direct investments shows certain asymmetry between India’s investments in EU and EU’s investments in India.

The trade between the EU and India from the EU side is dominated by few member states. The structure of the trade was rather steady during the last decade, with a slight trend of increase of the rest members’ share.

The impressive progress reached in past period marked by establishing of Strategic Partnership may come to a stalemate due to lasting flat development and India’s preference to act at bilateral level with major actors. Long prepared FTA agreement is delayed.

One of possible outcomes could be the use of potential of medium and smaller EU members.

References
INDUSTRIALIZATION LEVEL AND EXPORT PERFORMANCE

Vladimir Shatrevich¹, Janis Zvanitajs²
Riga Technical University
Kalku St. 1, LV-1658, Riga, Latvia
E-mail: ¹Vladimirs.Satrevics@rtu.lv, ²Janis.Zvanitajs@rtu.lv

Abstract. Sustainable development requires Latvian manufacturing industry to maintain and improve sustainable competitive advantages and innovations. This paper analyzes the elements of a structure for achieving sustainability, because achieving sustainable development is a significant factor for national strategy. The hypothesis is that export volatility is affected by the level of industrialization and the level of product cycle for exporting product. The volatility of export growth for products is much higher for the developing than for the industrial countries. This paper is analytical study of different aspects of export for manufacturing industry in Latvia, some research has found evidence that diversification encourages competition and the introduction of new technology. Results of the study could suggest that diversification may proceed along two basic patterns, and that, for developing countries, different effects on overall volatility could be associated with each pattern.

Keywords: sustainable development, export, production branch, industry development, economic growth, strategic theory of the company.

Introduction

Industrial development and technology level has had an important role in the economic growth of developed countries. The main emphasis is on describing their growth processes and strategies are discussed. We need to analyze the role of industrial development, the contribution of a range of policies affecting growth performance, and the impact of growth on country income dynamics. This paper is based on hypothesis that export instability is related to the degree of industrial development of the exporting country due to product cycle theory of comparative advantage, and uses empirical support for this hypothesis (Mullor-Sebastian, 1988). This paper analyses government diversification policies effect on export instability. The aim of this paper is to analyze the implications of the empirical findings of the presented studies, to present the results of further work undertaken more recently, and to discuss their policy implications.
The current understanding of economic growth for country usually is based on the neoclassical growth model developed by Solow (1956). In the Solow model, capital accumulation is a major factor contributing to economic growth. This means that productivity growth (measured as an increase in output per worker) is result from increases in the amount of capital per worker, or capital accumulation (Fagerberg, 1994). The rate of technological process is assumed to be constant and not affected by economic incentives. Several studies have found that capital and labor actually explain only a fraction of output growth and that allowing for the quality of the labor force (human capital) only partially reduces the unexplained growth – or Solow residual. Endogenous growth theory, initiated by Romer (1986, 1990) and Lucas (1988), focuses on explaining the Solow residual. Technological change becomes endogenous to the model and is a result of the choices of economic agents (Veloso and Soto 2001).

Technological progress is stimulated through R&D activities. Unlike other production inputs, innovative ideas and knowledge can increase the productivity of existing knowledge. Because of this, the marginal productivity of capital does not decline with increasing GDP per capita, and incomes does not appear to be similar across countries. Technological change and innovations are essential sources of structural change in case of production branch. In Schumpeter’s view, innovations lead to “creative destruction”, a process whereby sectors and firms associated with old technologies decline and new sectors and firms emerge and grow. More productive and profitable sectors and companies substitute less productive and less profitable ones and aggregate productivity in the economy increases. Technological change nowadays is the center of modern economic growth. Based on the observation that, beginning with the Industrial Revolution, technological change took place mainly in the manufacturing sector, authors like Kaldor (1970) and Cornwall (1977) have argued that the expansion of production sector is a driving force for economic growth.

Moreover, Cornwall (1977) saw technological change in certain manufacturing sectors as a driving force for productivity growth in several other sectors. Syrquin (1986) observes that, when overall growth accelerates, manufacturing typically leads the way and grows faster than other sectors. At low income levels, the share of manufacturing in GDP is, however, low and its immediate contribution to aggregate growth also insignificant.

In developed countries, research and development (R&D) activities are the main reason for technological change. One of the forces that affect structural change is international and local demand. At low income levels, individuals spend a significant part of their income on basic products (e.g. food). (see Fig. 1).
Figure 1. Share of services, industry and agriculture in GDP, EU25 (1995–2004)

Source: Ameco database (2006)

Changes in demand will also change sectors employment and output shares and impact the economy’s labour productivity. Furthermore, international trade has an impact on countries’ specialization and on the rate of industrialization (structural change within industries). Countries tend to specialize in the production for which they have a comparative advantage and import products which are relatively expensive to produce domestically. Trade openness is also likely to bring foreign investment into the country. It is also likely to increase productivity as domestic companies are facing external competition. However, the composition of foreign trade matters as well as the openness of trade (e.g. Amable, 2000). Moreover, specialization in itself does not necessarily lead to higher growth rates. This is most evident in the case of developing countries dependent on exports of primary products.

Methodology

The theory attempts to explain the instability of exports from developing countries in terms of the role of residual suppliers played by developing countries. The aim of paper is to observe new categories of products to a country’s basket of exports, because it is the most prevalent meaning in the literature. For Central and Eastern European countries, there are only several studies that examine the effect of exports on economic growth by using the latest time series techniques.

The main idea is a hypothesis that the export instability of products is inversely related to the level of industrialization of the exporting country, but that no such relationship exists for products in mature stage of their life cycle (mature products). Growth products are in the early stages of their life cycles, and their characteristics include the following: the technology used in
their manufacture is relatively complex and changes frequently, product differentiation is high and protected by patents, and their markets usually are oligopolistic. Opposite features characterize mature products. The explanation suggested above for the relationship between export instability and industrialization was that developing countries may be expected to play a role of residual or alternate suppliers of growth products on world markets due to their late entry into the world markets for growth products. It is difficult for developing countries to spend on research and on product development and make loyalty of consumers to products manufactured. This takes into account both demand factors, such as consumers preferences and the business cycle, and supply factors, such as the lack of human skills in developing countries. Because developing countries are likely to be residual suppliers of growth products, they probably absorb a relatively large share of demand fluctuations during the business cycle, being able to expand their exports of these products during the upcoming phase of the business cycle, when industries are working close to capacity in industrialized countries, but experiencing a decline in sales (or in the growth rate of sales) during the downturn phase. At that phase the established and mature suppliers from industrialized countries can satisfy a larger proportion of world demand. Therefore, the export instability of growth products can be expected to be higher for developing than for industrialized countries, as in case of Latvia.

As fiscal policy in Latvia in the years after EU accession was procyclical, the necessary reserves were not created. Consequently, the fall in tax revenues due to the recession, the government’s need to lead out the largest domestically owned bank, forced Latvia to turn to the IMF and the EC for financing its expanding budget deficit. Unfortunately, too often the most attention is given to specific consolidation numbers, not to the specific result. The most important goal for the government is to return to a situation in which government revenues compensate expenditures.

Last year, Latvia’s economy stabilized after its deep recession 21.4 per cent GDP decline during 2008-2009. In 2010, GDP fell by a further 0.3 per cent but returned to growth in year-on-year terms during the third quarter. In the fourth quarter, growth had reached 3.6 per cent. The recovery is mainly export driven. Exports continue to perform well, supported by renewed competitiveness and good sales in old as well as new markets. On the other hand, domestic demand is improving only slowly.

In March 2011 Latvian industrial output increased by 1.4% compared with February. Manufacturing showed the increase of 3.7% achieved in manufacture of computers and electronic equipment, metal products, wood and wood products, pharmaceutical and chemical products, which in March reported growth by more than 6%. Industrial growth in Latvia mostly depends on exports, including the increase of prices for the exported products. The price growth indicated over the last year in a number of production industries has allowed raising the profits without increasing output.
For example, in 2011 Quarter 1, excluding the impact of pricing – in constant prices, exports grew by 21.1%, and imports – by 23.9%. However, the price increase strategy cannot be exploited permanently and will have to be replaced with rising of competitiveness by increasing the production capacity and boosting of productiveness. Latvia meanwhile is following the path of increasing the quantity of existing goods and raising the prices.

In March exports of goods made another record exceeding the mark of 500 million. Compared with March 2010, exports have risen by 38.5% to 502.9 million Lats. Even faster growth of 39% has been registered in imports. Consequently, in March foreign trade balance deteriorated and a deficit of 122.3 million Ls appeared. Significant growth was observed in manufacture of metal where exports rose by 72.6% compared with March 2010. As in Latvia’s exports mostly the goods with low added value are dominating.

The reason is growing imports, driven by manufacturing and a weak recovery in domestic demand. The main driving forces of exports still are wood and wood products, metals and metal products, agricultural and food products.

**Figure 2.** Industrial production output of Latvian Goods, %

*Source: CSB*

Therefore, if developing countries diversify by exporting more growth products, they are likely to add to their export basket products whose instability is high and strongly related to the business cycle; thus, total export instability may increase because the fluctuations of the additional exports would be high and would not tend to cancel each other out. These may be the reasons why diversification policies have often resulted in higher export instability in developing countries.
There are two methods to test it directly by observing how growth and mature exports from developing and from industrialized countries differs in relation to the business cycle. But it is difficult to identify the relevant markets for each exporting country and the appropriate cyclical variable. It is needed to support the hypothesis that the instability of growth products were higher for developing than for industrialized countries, and the instability of mature products were not substantially different for developing and for industrialized countries, there is an inverse relationship between instability and the level of industrialization for exports of growth products, but not for exports of mature products. This would indicate that growth exports from developing countries, but not from industrialized countries, have a strong cyclical component, and that mature exports from both developing and industrialized countries have either a weak or no cyclical component.

Second method was chosen to conduct the empirical tests. The hypothesis proposed was tested using trade data for two groups of products exported by developing and industrialized countries during the period of 2005-2010.

The empirical results provided strong support for the hypothesis; by various types of machinery exports from developing and industrialized countries. It is possible to identify the existence of a highly significant relationship between export instability and economic development for growth products.

Empirical findings prove that the export instability of a particular product is not necessarily the same for every exporting country. Thus, factors such as competition from other suppliers, the development of technology in industrialized countries' have been responsible for export fluctuations (Love, 1983). The differences in the degree of export instability of products followed a clear and
consistent pattern: the instability of growth products was much higher for the developing than for the industrialized

Table 1. Percentage of firms that exports by industry

<table>
<thead>
<tr>
<th>SIZE number employees</th>
<th>1-24</th>
<th>25-99</th>
<th>100+</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textiles</td>
<td>7%</td>
<td>22%</td>
<td>46%</td>
<td>30%</td>
</tr>
<tr>
<td>Leather</td>
<td>10%</td>
<td>57%</td>
<td>75%</td>
<td>46%</td>
</tr>
<tr>
<td>Garments</td>
<td>11%</td>
<td>39%</td>
<td>80%</td>
<td>55%</td>
</tr>
<tr>
<td>Agroindustry</td>
<td>23%</td>
<td>27%</td>
<td>56%</td>
<td>38%</td>
</tr>
<tr>
<td>Food</td>
<td>7%</td>
<td>24%</td>
<td>43%</td>
<td>26%</td>
</tr>
<tr>
<td>Beverages</td>
<td>6%</td>
<td>14%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Metals and machinery</td>
<td>7%</td>
<td>26%</td>
<td>47%</td>
<td>28%</td>
</tr>
<tr>
<td>Electronics</td>
<td>15%</td>
<td>16%</td>
<td>62%</td>
<td>43%</td>
</tr>
<tr>
<td>Chemicals and pharmaceutics</td>
<td>10%</td>
<td>20%</td>
<td>33%</td>
<td>22%</td>
</tr>
<tr>
<td>Construction</td>
<td>7%</td>
<td>7%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>Wood and furniture</td>
<td>4%</td>
<td>26%</td>
<td>62%</td>
<td>26%</td>
</tr>
<tr>
<td>Non-metallic and plastic materials</td>
<td>9%</td>
<td>21%</td>
<td>43%</td>
<td>24%</td>
</tr>
<tr>
<td>Paper</td>
<td>5%</td>
<td>10%</td>
<td>31%</td>
<td>18%</td>
</tr>
<tr>
<td>Sport goods</td>
<td>45%</td>
<td>100%</td>
<td>100%</td>
<td>63%</td>
</tr>
<tr>
<td>IT services</td>
<td>8%</td>
<td>11%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>10%</td>
<td>24%</td>
<td>34%</td>
<td>26%</td>
</tr>
<tr>
<td>Accounting and finance</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Advertising and marketing</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other services</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Retail and wholesale trade</td>
<td>0%</td>
<td>100%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>Transport</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>50%</td>
<td>0%</td>
<td>83%</td>
<td>55%</td>
</tr>
<tr>
<td>Auto and auto components</td>
<td>17%</td>
<td>19%</td>
<td>21%</td>
<td>20%</td>
</tr>
<tr>
<td>Other transport equipment</td>
<td>40%</td>
<td>56%</td>
<td>63%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Export instability of growth products for the developing as for the industrialized countries less. In contrast, the instability of mature products was very similar for both categories of countries: The results provide further support for the hypothesis that there is an inverse relationship between export instability and the level of industrialization of the exporting country for growth products.

Model and Results

In the paper empirical analysis was made considering using the common approach of testing the hypothesis of non-causality as a test of linear restrictions on the coefficients of a finite dynamic model, which can be a vector autoregressive in the level data (VARL), a vector autoregressive in differentiated data (DVAR) or a vector error correction model. The model type is given by the number of cointegrating vectors. Before applying the causality tests, we must determine if cointegration exists. Johansen and Juselius’ (1990) multivariate cointegration model is based on error correction representation given by the following equation:
\[ \nabla Y = \alpha Z_{t-1} + \sum_{i=1}^{p-1} \beta_i \nabla Z_{t-i} + A_t \] [1]

Where: \( Z_t \) is a 3X1 vector of three non-stationary variables, \( \nabla \) is backward differentiation operator, \( \alpha \) and \( \beta_i \) represent the coefficient matrices.

The equation (1) describes the representation of type vector error correction model (p-1) of the stochastic system. The stationarity of \( \nabla Z_t \) is verified by the requiring that the roots of the equation lie outside the unit circle and \( A_t \) is a 3X1 vector of independent and identically distributed errors. The rank of the matrix \( \alpha \) contains information about the long-run relationship.

Using the latest econometric time series techniques, there is possible to detect a causal relationship between exports and economic growth for all Central and Eastern European countries in bivariate and trivariate systems.

Empirical evidence from Granger causality tests using VARL, DVAR or VECM models could indicate a feedback effect between exports and GDP.

Lack or inconsistency of policies as macroeconomic and political stability, adequate infrastructure and highly trained labour force can explain the lack of support for the export-led hypothesis in many of CEE countries. Strong policies that promote exports are more than desired.

**Conclusion**

As the results of the research we have several main policy implications for government. This section discusses them, because in the post-recession period Latvian government policy has shown solid interest in the export-led growth through various export promotions policies.

The first conclusion is that export diversification does not necessarily reduce overall export instability because the instability may be high and strongly related to the business cycle, so that fluctuations in the exports of different products would not tend to cancel each other out. Diversification does not lead to a decrease in traditional exports. Producing for export allows achieving greater economies of scale than it would if it produced exclusively for its domestic market. This is especially important for small developing countries that have very narrow domestic markets as Latvia, and encourages competition and the introduction of new technology.

There are appears to be an inverse relationship between export instability and the level of industrialization for export products. The volatility of export growth for products is much higher for the developing than for the industrial countries. Total export volatility may increase as a result of diversification because the fluctuations would be high.

In Latvian industrial low value added branches are dominated. Second conclusion would consist of exporting additional growth products. Because of the characteristics associated with the
growth products, they are usually of high value added, so the instability exports correlated with the business cycle of the products produced for export. That means, that the increase in the quantity of products exported may result in greater instability. In this case, the most likely outcome of diversification will lead to increase in overall instability.

Latvian manufacturers have succeeded in maintaining or increasing export. However, specialization in sectors with low value added and a declining share in total global trade has resulted in a decline in total export share, pointing to a structural competitiveness problem. Government policy which stimulates exporting mature products, usually innovative ones, will lead to lesser instability. In this case, diversification could result in lower overall export instability.

In case diversifying their exports into manufactures developing counties can expect the instability of the new exports, instability will be higher the more sophisticated products are used. Countries which have a relatively weak industrial sector and little experience selling manufactures abroad will has less stable or in other words them export will be volatile.

Volatility during the early years of diversification for developing countries may still be relatively high for the additional popular products, until the exporting country strengthens its position on world markets. Therefore, unreasonable diversification could lead to a decline in overall export instability, to no change, or to a small increase.

So as business cycle affects demand for certain products more than for others, this conclusion must be taken under consideration when choosing export development policies.

References


SOME TRENDS IN THE UKRAINIAN-LITHUANIAN ECONOMIC RELATIONS
IN THE CONTEXT OF EUROPEAN INTEGRATION

Anatoliy Velihorsky
Chernihiv State Institute of Economics and Management
Department of Economics
Striletska st. 1, 14003, Chernihiv, Ukraine
E-mail: veligorsky@yahoo.com

Igoris Panovas
Mykolas Romeris University
Faculty of Economics and Finance Management
Ateities st. 20, LT–08303, Vilnius, Lithuania
E-mail: panov@mruni.eu

Abstract. This paper is an attempt to characterize the development of Ukrainian-Lithuanian economic relations and identify areas of common interests of both countries at the strategic and tactical levels, opportunities and prospects for deepening cooperation in the process of European integration. The purpose of his paper is: based on specific transformational change at the turn of the twenty-first century, analysis of the features of economic cooperation between Ukraine and Lithuania at the present stage, determination of strategic direction and significance of bilateral cooperation, the study of problems that prevent the intensification of economic relations of the two states.

Keywords: international cooperation, Ukraine, Lithuania, European integration, foreign trade liberalization, international investment.

For many centuries Lithuanians and Ukrainians lived not only in the neighborhood, but in one state. At first it was a Grand Duchy of Lithuania, then the Rzecz Pospolita, then the Russian Empire and the USSR. However, different versions of cohabitation does not lead to feelings of hostility or resentment between the two nations. The legacy we inherited is tradition of friendly relations between peoples and nations of Lithuania and Ukraine, which must be protected and developed. Objectively, the most solid basis of these relations is economic cooperation. The essence of cooperation lays in the field of mutual benefits that derive from exchange of goods, services and financial resources. The focus on economic issues ensures stability and guarantees better
geopolitical position of the two countries in Europe, contributes to the signing of various international agreements, creates a favorable climate for attracting foreign investment. It is obvious that the opportunities, the depth and direction of this cooperation depend on the productive capacity, the structure of economic relations and political situation in the participating countries.

At the turn of the XX-XXI centuries Ukraine and Lithuania after the breakup of the Soviet Union began to look for options for their own economic development. Lithuania, in a relatively short period of time, conducted price liberalization, privatization, created new banking and financial system, has moved quickly to a stable market economy. In the geopolitical sphere Lithuania was oriented to join the European Union and NATO with the support of the majority of the population. These objectives were successfully achieved in 2004. Due to the high degree of economic openness Lithuania has attracted a significant amount of investment, both from EU countries and from Russia. Journal «Wall Street Journal Europe» in the early twenty-first century assessed the Lithuanian economy as one of the most liberal in Central Europe. Among the 27 post-socialist countries, Lithuania was the first, along with Poland, Hungary and the Czech Republic. According to the Lithuanian Department of Statistics leading investors in Lithuania - Sweden, Denmark, Germany, Poland and Russia. The main sectors in which foreign capital was invested are the manufacturing, financial intermediation, transport, communication services and trade (Advantage Lithuania, 2005).

The liberal foreign trade policy has stimulated the rapid growth of foreign trade. In 2010, according to the WTO Lithuanian exports compared to 1992 increased almost 25 times, while imports - more than 20 times which is one of the highest rates in Central and Eastern Europe (ECE, 2000; WTO, 2003; WTO, 2011). An important factor in enhancing trade relations Lithuania was a treaty with the EU signed in 1995, according to which the parties committed themselves to liberalize trade in industrial goods in 6 years. The EU abolished tariffs on these goods from the date of entry into force of the treaty, and they were gradually reduced in Lithuania, until 2001, when zone of free trade in industrial goods between Lithuania and the European Union became fully operational. As a result, the main trend in the development of geographic areas of foreign economic relations of Lithuania during the 90's was the growth in trade with the EU and the reduction of the CIS countries. In 2004, after EU enlargement, it accounted for more than 65% of exports and about 60% of imports of the Republic of Lithuania (AL, 2005). In the intervening period there have been quite significant changes in the commodity structure of foreign trade of the Republic, which are generally difficult to assess unambiguously. On the one hand, the share of exports of manufactured goods and machinery is gradually increasing. The economic crisis in 1998 in Russia forced Lithuanian companies to shift from the undemanding Russian market to European, which affected the quality of exported goods. But these positive changes occur slowly and Lithuania still lags in
this respect behind not only from Hungary, the Czech Republic and Slovakia, but also from Poland and Estonia. Much more than the above-mentioned countries in the export of products is the mining industry, though, as you know, the country is not rich in minerals. This situation is associated with the use of refining capacity built back in Soviet times, as well as re-exports to the West Russian mineral resources. Given the variability of world market, and almost one-sided dependence in the supply of raw materials from one country, Lithuania’s specialization can hardly be assessed as promising. But the rapid growth of exports of services is certainly a progressive process. During the period from 1993 to 2010, the republic has increased it exports more than 20 times (WTO, 2002; WTO, 2011), which is one of the best results among the countries of the region. This is mainly transit and transportation services, but they allow Lithuania to reduce negative trade balance. In general, Lithuanian exports, especially to the EU, is still dominated by low-tech, labor-and material-intensive products, is poorly diversified and concentrated in a few industries.

Rapid economic development in Lithuania during 1992-2007 (which even made it possible to call it "Baltic tiger") was due not only to drastic market reforms, increasing economic openness and active cooperation with the EU, but also to some extent using inherited from the Soviet Union sufficiently developed industries, industrial infrastructure, and accumulated human capital. However, the weaknesses of the Lithuanian economy are scarce raw materials, lack of own energy resources, low competitiveness of products (especially in the Western European market), the trade deficit, high unemployment, a significant dependence on financial assistance from the European Union. Most clearly these problems manifested themselves during the crisis period 2008-2009. More than 40% of the real estate market collapsed, which grew rapidly in previous years thanks to loans from the financial funds of EU, a significant reduction was observed in services (20%) and retail trade (25%). In general, in 2009 according to the IMF Lithuania's GDP fell by 14.7%, which was one of the worst rates of GDP in the world (IMF, 2011). The change of government and the adoption of anti-crisis program, the basic components of which was budget cuts, higher taxes and the elimination of tax exemptions, allowed to stabilize the situation. More attention has been paid to measures to enhance and strengthen the competitiveness of exports. In particular, its industry and geographic diversification, development of transport and logistics, support of high technology and the resumption of lost trade relations with former partners in the post-Soviet space.

The similar problems, but in a slightly different level, now have to solve the Ukrainian economy. During the last twenty years, significant changes have also occurred. They have been linked primarily to the systemic transformation of the economy and society, liberalization of economic activity, 10 years of transformational recession (when the economy has lost 65% of GDP) and the subsequent recovery processes. It is natural that the reforms have included foreign economic activity of Ukraine. The new trends have appeared. Among them - the liberalization of
foreign trade relations, aimed at creating an open economy. However, the latter was carried out slowly and inconsistently. The reason was lack of geopolitical certainty, conflict of interests of major political forces concerning content of the reforms and direction of integration into the global economy. As a result, Ukraine has not had during the transitional period certain foreign trade policies and failed to create a favorable climate for attracting foreign investments. The country's leaders have repeatedly applied measures of tariff and non-tariff regulation under the banner of protecting domestic producers, which created opportunities for corruption and extraction of shadow incomes and slowed competitiveness of national production.

Ukraine's accession to the WTO, which could lead the country's foreign trade policy in line with international rules and traditions, was one of the longest and most complicated in the history of the organization. Submitting an application as early as 1993, the country joined the organization only in 2008. The reason is that certain political forces have made Ukraine's accession to the WTO a stake in the political game. In fact, long-term interests of the country's economic development have been put directly dependent on interests of certain business groups. These forces, slowing down the reform of the national trade regime, in fact, for over 10 years hindered the integration of Ukraine into the global economy.

In 2010, according to the WTO, Ukrainian exports compared to 1992 increased by almost 7-fold, while imports – nearly 9 times (ECE, 2000; WTO, 2003). However, the foreign trade turnover of goods per capita in Ukraine is still low. It is almost 5 times lower than in Lithuania (respectively $3150 and $15232 in 2008-2010) (WTO, 2011).

Ukraine, as Lithuania, is characterized by specific geographical reorientation of foreign trade. In 1992, the share of CIS countries in exports was 56% (including Russia, more than 40%), in 2010 Russia's share dropped to 26% and the share of European countries contrary increased to nearly 32%. The share of CIS in imports has also dropped down and share of European countries has increased (State Statistics Committee of Ukraine 2010).

In general, the reorientation of Ukraine's trade to the developed countries, as well as geographical diversification of foreign trade should be assessed positively. First, diversification provides greater stability of the trade. Second, the CIS markets are less reliable because of the opacity and frequent changes in trade regimes. Third, they have weaker stimulus for the growth of competitiveness than the markets of developed countries.

As regards the commodity structure of foreign trade of Ukraine, it has changed slightly. International specialization inherited from socialism is actually preserved. Raw materials, intermediates and products with a relatively low degree of processing prevail in the exports. Their share in exports - 70% (including iron and steel products - up to 35%, production of the mining industry - up to 15%, agricultural products - up to 15%, wood and significant part of the chemical
industry). In recent years, the share of machinery, equipment and vehicles in the export of Ukraine does not exceed 15-17%. Ukrainian machinery and equipment, as well as other products with high added value are consumed mainly in the CIS countries and in developed markets are uncompetitive largely because of poor quality.

The share of mineral products in Ukraine imports decreased slightly, although it still remains at 35%, primarily due to fuel. According to this data republic is the leader in the region. Positive shift in the structure of imports is an increase of the share of machinery, equipment and vehicles up to 22-25% in recent years. But the main reason was the quick growth of number of imported automobiles, especially cars, which largely indicates the nature of imports of these products as the consumption (SSCU2011).

Ukraine's economy, as well as the Lithuanian economy has developed rapidly during 2000-2007, but was significantly affected by the crisis of 2008-09. The fall in prices for products of steel and chemical industries, as well as the aggressive foreign borrowing of the Ukrainian banks have slowed down growth rates in 2008 and a reduced GDP by 14,5% in 2009 (IMF, 2011). Economic growth recovered in 2010-2011., but it has been insufficient to overcome the crisis.

The strengths of the Ukrainian economy are significant agricultural and natural resource potential, favorable geographical position, developed enough electric power, machinery and heavy industry, the availability of such unique industries as rocket and aircraft design and construction, a significant domestic market. However, this potential is being exploited highly inefficiently. Absence of sound industrial policy and structural reforms have made Ukrainian economy vulnerable to external shocks. Heavy industry, characterized by very high energy consumption and one-sided dependence of gas and oil supplies from Russia. The country has high levels of corruption and 50% of GDP is produced in the informal sector. The Republic needs to strengthen the capital market, including foreign investments, optimize public spending, reducing the external debt, improving trade and payments balances. Ukraine needs improvement of the legal framework, higher efficiency of government and political stability.

As we know from the theory of comparative advantages, strengths and weaknesses of the economies of different countries make it possible to develop mutually beneficial economic cooperation. Ukraine and Lithuania in this respect are no exception.

Regional European integration opens significant prospects for deepening cooperation between the two countries. The Republic of Lithuania joined the European Union in 2004, and Ukraine on a base of broad support among the population, has made the final decision in favor of European integration. We hope that all the legal procedures will be fulfilled and the EU and Ukraine will sign documents of the association and free trade zone in 2012. In this context,
cooperation between Ukraine and Lithuania has become an important part of the European integration processes.

At the strategic level, it is important for Ukraine to promote national economic interests in the EU (in particular, through the mediation of Lithuania) and maintain economic and political stability within the country and the region. The latter is also in interests of Lithuanian Republic. For both countries energy security is important through diversification of energy sources, as well as more active innovation and competitiveness policy.

At the tactical level, Ukraine seek to attract Lithuanian and other European direct investments, to solve the problem of trade deficit (including the countries of the EU), to intensify trade relations with the Baltic countries, to harmonize own legislation with EU legislation, to ensure functioning of a free trade agreement, and association with the EU, to abolish the visa regime with Europe. For most of these areas, Lithuania can provide practical assistance to Ukraine. The tactical aim for Lithuania is to reduce dependence on external sources of funding, increase trade and investment cooperation with Ukraine, enhancing trade relations with the countries of the Black Sea region, and to solve the problem of imbalance in power supplies. Booth countries are also interested to overcome the consequences of the economic crisis more quickly, to cooperate in the European energy system and to resist jointly to Russian expansionist energy policy.

Drawing attention to the moments mentioned above we can talk about their gradual embodiment into a reality that will eventually have a positive impact on relations between the countries. In particular, trade and economic relations between Ukraine and the Republic of Lithuania are regulated by the basic treaties of the European Union and a number of bilateral documents. These include the Agreement on the Promotion and Mutual Protection of Investments, the Convention on avoidance of double taxation, as well as other agreements in the field of finance, customs, and operational mutual assistance of tax authorities. Currently, the legal basis of Ukrainian-Lithuanian relations in the field of foreign economic relations consists of over 40 intergovernmental and interagency agreements, as well as about 30 agreements on regional cooperation.

The two countries have established a number of organizations with the purpose to coordinate activities in all fields of cooperation; in particular, one of these institutions is a high-level Intergovernmental Council for Cooperation between Ukraine and the Republic of Lithuania. To deal with current issues and make recommendations necessary for the further development and deepening of relations in economy, trade and science, there is Intergovernmental Ukrainian-Lithuanian commission on trade-economic and scientific-technical cooperation. An effective mechanism is the Ukrainian-Lithuanian commission on European integration.
Trade turnover between the two countries is growing. In 2008, the first time in bilateral relations overall turnover at more than $1 bln has been achieved. According to State Statistics Committee of Ukraine Ukrainian exports during this period amounted to $432.3 mln (119.0%) and import - $724.1 mln (190.2%), negative for Ukraine Balance - $291.8 mln. In 2009 foreign trade turnover of Lithuania and Ukraine fell under the influence of the global financial crisis and reached $603.8 mln. Ukrainian exports during this year amounted to $193.5 mln. (-55.2%), while imports of Lithuanian goods to Ukraine - $410.3 mln (-43.3%), negative balance for Ukraine - $216.8 mln. In 2010 reduction in foreign trade was over. Trade turnover between the two countries increased by 49.4% reaching to $ 901.9 mln. Ukrainian exports during this period amounted to $264.4 mln (36.6%). Ukraine has imported Lithuanian goods for $637.5 mln. (55.4%), negative balance of - $373.1 mln.. In January-November 2011 the volume of foreign trade in goods between Ukraine and Lithuania, as compared to the same period in 2010 increased by 26.3% and amounted to $1018.1 mln. At the same time Ukrainian exports totaled $295.9 mln. (27.7%) and import - $722.2 mln. (25.8%), the balance is negative - $423.3 mln. The negative balance of trade in goods between Ukraine and Lithuania due to the large imports of oil products from Lithuania, which accounted for more than 60% of the total imports. In general, during the 2000-2011 period the volume of foreign trade in goods between Ukraine and Lithuania increased more than 5 times (SSCU, 2010; SSCU, 2012).

The largest share in the structure of exports of goods from Ukraine to Lithuania take up such groups as ferrous metals and products made of them - more than 20%, machinery and various kinds of equipment - more than 10%, wood and wood products, cereals, oil seeds; vegetable oil. The structure of Lithuanian exports dominated by petroleum products - 60 - 70% in different years, machinery and mechanical appliances, plastics, chemical products (SSCU, 2011).

Priority in economic and trade cooperation between Ukraine and Lithuania is cooperation in the energy industry. The Ukrainian side is interested in the use of the Lithuanian experience of the organization of energy security, switches on alternative energy production and transportation. Lithuania, as an EU member, is interested in a stable transit of energy through Ukraine to the European Union. At the bilateral level discussions take place addressed the involvement of the Lithuanian side to participate in the completion of the Odessa-Brody pipeline with a possible branch to the territory of Lithuania, attraction of Lithuanian capital into the projects related to oil and gas on the shelf of the Black Sea, export to Lithuania of Ukrainian electricity, use of experience of Ukrainian experts in the construction of new nuclear power plant in Lithuania, the use of Ukrainian materials and equipment at this site.

Given the geographic position of the two countries and their desire to diversify foreign trade relations, another promising area of cooperation is transport, which is regulated by the Programme
of Cooperation of transport systems of Lithuania and Ukraine, as well as the recently signed during
the visit of President of Lithuania to Ukraine (11.22.2011,) the Memorandum of Understanding
between the Ministry of Infrastructure of Ukraine and the Ministry of Transport and
Communications of Lithuania. “It is very important for Ukraine's integration into the European
community, for economic development between our countries”, - said Dalia Grybauskaite. These
documents provide for concerted action on the expansion of international transport corridors, which
pass through the territory of two states. One of the main achievements in this area is a transit route
of the railway combined transport "Viking", which overcomes the distance between the two
countries in a relatively short period of time, sufficiently reducing the time in the transit of
supplies."Viking" was initiated in 2003. The route passes through Ukraine, Belarus and Lithuania
and connects a chain of marine containers and piggyback lines of the Baltic region with a similar
systems of Black, Mediterranean and Caspian Seas. The total length of the route "Viking" is 1733
km. This project opens the best direction for the transport of goods in Ukraine, Moldova, Turkey,
the Caucasus and the Balkans. The most time efficient route for this corridor is the Odessa-
Klaipeda-Odessa. The parties reached agreement on the continuation of this route to Latvia, Estonia
and Scandinavia. Active negotiations has also been carried out concerning cooperation in the
strategically important for the Baltic region project of the railway from Warsaw to Tallinn.

An important area of Ukrainian-Lithuanian Foreign Economic Relations is investments of
Lithuanian capital in Ukraine, and Ukrainian - in Lithuania. According to the Statistical Service of
Ukraine, Lithuanian direct investments in Ukraine at 01.07.2011 amounted to $87.7 mln. (about
0.2% of total foreign investment in Ukraine). Ukraine took the 6th place among the investments
recipient countries from Lithuania. Lithuanian capital is invested in real estate, banking, commerce,
agriculture, forestry, mining and manufacturing industries, construction, transport and
communications. In the framework of the implementation of investment projects in Ukraine there
are about 270 enterprises with the Lithuanian capital. Among the companies that are active in the
Ukrainian market can be identified such Lithuanian business entities as JSC "Hanner", JSC "Utenos
trikotažas", JSC "Arvi", JSC "Vakarų medienos grupė", JSC "BT Invest", JSC "Kalvis ". The most
striking examples of the results of the Lithuanian capital in Ukraine - are trade network "Eco",
which has branches in all regional centers of the republic, and "Sandora" company, which controls
about 45% of the juice market in Ukraine, as well as exports its products to more than 20 countries
around the world. In 1995, Lithuanian businessmen Igor Bezzub and Raimondas Tumenas provided
seed money to implement the business plan of Professor of Nikolaev Shipbuilding Institute Sergei
Sypko. Established company was owned by Bezzub and Tumenas - 45% each, 10% - Sypko. In
March 1996, released its first product package. In 2000 the plant was put into effect plant mashed
and semi-finished products. In 2006 opened production facility № 2, in which products are
manufactured in PET. In 2007, PepsiAmericas and PepsiCo signed an agreement to jointly acquire 100% stake in LLC "Sandora" for $678.7mln. Sales Offices LLC "Sandora" serve most of the territory of Ukraine. LLC "Sandora" exports 20% of its products, representing more than 60% of Ukrainian exports of juice. The company's products in over 20 countries around the world: USA, UK, Germany, Sweden, Israel, Greece, Poland, Canada, as well as in neighboring countries - Russia, Belarus, Moldova, Lithuania, Latvia, Estonia, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Turkmenistan and Tajikistan (Sandora 2010)

The total volume of direct investments from Ukraine to Lithuania as of 01.01.2010 amounted to $3.9 mln. Ukrainian investments have been made in manufacturing (food processing and metal products). The largest investment project in Lithuania remains the acquisition in 2006 by the Ukrainian company "Roshen" 100% of the Lithuanian producer "Klaipedos konditeria" (about $2 mln).

Scientific and technological cooperation between Ukraine and Lithuania becomes increasingly important in the context of European integration. Among areas of cooperation, which are implemented by countries in recent years - medicine, research in biotechnology and agriculture, bioengineering and genetics, resource and environmentally friendly technologies, alternative energy sources, new materials and chemicals, environment and natural resources management, information and new manufacturing technologies, nanotechnology. In November 2011, during the official visit of President of Lithuania to Ukraine Dalia Grybauskaite, a cooperation program in science and technology for 2011-2015 was signed between the Ministry of Education and Science of LR and the State Agency for Science, Innovation and Informatization of Ukraine, which is aimed at further implementation of the Agreement between the Government of Ukraine and Government of the Republic of Lithuania on cooperation in science, education and culture from 4.8.1993 (UEL, 2011)

Ukraine and Lithuania have significant experience and are interested in deepening and diversification of economic cooperation. Association Agreement and the establishment of a free trade zone between the EU and Ukraine opens up new opportunities for increasing trade volume between the two countries, enhance mutual investment and cooperation in energy, construction and transport, will be more fruitful contacts in the scientific-technical sphere.

References
6. Sandora - www.sandora.ua