Macroeconomic Performance and Economic Competitiveness of the Baltic States

Keywords

macroeconomic performance, economic indicators, convergence criteria, economic competitiveness, the Baltic States.

1. Introduction

A lot has been said and written in recent years about Europe’s progress – or lack of progress. Before attempting to evaluate this progress, it is nevertheless appropriate to understand what is meant by ‘competitiveness’. There is no clear and single definition of competitiveness in economics or in public policy literature. It is a somewhat vague concept, which comprises three different levels of understanding: the macro-economic or country level, the intermediate or industries level, and the micro-economic or enterprise level. Competitiveness could be defined, at basic level, as the ability of an entity or a group (a company, a set of companies, a region, a country, a group of countries, etc.) to operate efficiently and productively in relation to other similar entities or groups. This ability can be measured by the entity’s “advantage or disadvantage in selling its products in international markets”\(^1\), and, as a consequence of this, by its capacity to achieve economic growth. The World Economic Forum, for instance, defines a country’s competitiveness as the ability of a national economy to achieve sustained rates of economic growth as measured by the annual changes in per capita GDP.

However, these definitions are too narrow to grasp the complexity of what competitiveness entails. In the United States (USA), where the concept of competitiveness originated in the 1980s, the Report of the President’s Commission on

\(^1\) IDABC (2005, p.6).
Competitiveness (1984) made it clear that competitiveness “is not just a measure of the nation’s ability to sell abroad and to maintain trade equilibrium”. The report defined a country’s competitiveness as being “the degree to which it can, under free and fair market conditions, produce goods and services that meet the test of international markets while simultaneously expanding the real incomes of its citizens. Competitiveness at the national level is based on superior productivity performance and the economy’s ability to shift output to high productivity activities which in turn can generate high levels of real wages. Thus, we state that competitiveness is associated with rising living standards, expanding employment opportunities, and the ability of a nation to maintain its international obligations.

Therefore, the competitiveness of an economy has two complementary dimensions:

1) the capability of private firms based in that economy to compete successfully in the marketplace, and
2) general increases in welfare across the population.

The OECD definition of competitiveness as “the ability of companies, industries, regions or supranational regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels on a sustainable basis”, was subsequently adopted by the EU’s statistical arm, Eurostat. For a country, a region or a city, increasing competitiveness thus translates into an economy-wide sustainable improvement in living standards; for an industry, into a dominant market position through the sale of high quality products; for a firm, into long-run growth in profits and sales through rising market share.

Therefore, the purpose of the article is to present the macroeconomic performance indicators, which suit the determined economic competitiveness framework, with reference to the Central and Eastern European Countries (CEEC) and the Baltic States in particular.

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2. Macroeconomic performance in CEEC and the Baltic States

The macroeconomic performance in the CEEC (Central and Eastern European Countries) and the Baltic States (Estonia, Latvia and Lithuania) in particular, will be estimated according to the following economic criteria:

1) inflation rate;
2) economic growth (GDP);
3) unemployment rate;
4) government budget balance;
5) arguments for Euro introduction.

2.1 Inflation

Significant progress has been made by accession countries in achieving lower and more stable rates of consumer price inflation compared to the Euro Zone average. Yet even in 2003, three of the new EU member states (Lithuania (-1.1), Poland (0.7) and the Czech Republic (-0.1)) had the lowest inflation rates of any country now in the EU (Table 1), with Estonia (1.4) and Latvia (2.9) catching up.

Table 1. Consumer Price Inflation in CEE Countries, 1997-2003

<table>
<thead>
<tr>
<th>Annual &amp; change in consumer prices</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lithuania</td>
<td>8.8</td>
<td>5</td>
<td>0.7</td>
<td>0.9</td>
<td>1.3</td>
<td>0.4</td>
<td>-1.1</td>
<td>2.3</td>
</tr>
<tr>
<td>2. Cyprus</td>
<td>3.3</td>
<td>2.3</td>
<td>1.1</td>
<td>4.9</td>
<td>2</td>
<td>2.8</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>3. Malta</td>
<td>3.9</td>
<td>3.7</td>
<td>2.3</td>
<td>3</td>
<td>2.5</td>
<td>3.1</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>4. Latvia</td>
<td>8.1</td>
<td>4.3</td>
<td>2.1</td>
<td>2.6</td>
<td>2.5</td>
<td>2</td>
<td>2.9</td>
<td>3.5</td>
</tr>
<tr>
<td>5. Czech Republic</td>
<td>8</td>
<td>9.7</td>
<td>1.8</td>
<td>3.9</td>
<td>4.5</td>
<td>1.4</td>
<td>-0.1</td>
<td>4.2</td>
</tr>
<tr>
<td>6. Estonia</td>
<td>9.3</td>
<td>8.8</td>
<td>3.1</td>
<td>3.9</td>
<td>5.6</td>
<td>3.6</td>
<td>1.4</td>
<td>5.1</td>
</tr>
<tr>
<td>7. Poland</td>
<td>15</td>
<td>11.8</td>
<td>7.2</td>
<td>10.1</td>
<td>5.3</td>
<td>1.9</td>
<td>0.7</td>
<td>7.4</td>
</tr>
<tr>
<td>8. Slovenia</td>
<td>8.3</td>
<td>7.9</td>
<td>6.1</td>
<td>8.9</td>
<td>8.6</td>
<td>7.5</td>
<td>5.7</td>
<td>7.6</td>
</tr>
<tr>
<td>9. Slovakia</td>
<td>6</td>
<td>6.7</td>
<td>10.4</td>
<td>12.2</td>
<td>7.2</td>
<td>3.5</td>
<td>8.5</td>
<td>7.8</td>
</tr>
<tr>
<td>10. Hungary</td>
<td>18.5</td>
<td>14.2</td>
<td>10</td>
<td>10</td>
<td>9.1</td>
<td>5.2</td>
<td>4.7</td>
<td>8.9</td>
</tr>
<tr>
<td>Euro-zone</td>
<td>1.6</td>
<td>1.1</td>
<td>1.1</td>
<td>2.1</td>
<td>2.3</td>
<td>2.3</td>
<td>2.1</td>
<td>1.8</td>
</tr>
</tbody>
</table>


Many of the accession countries have tended to have higher average rates of inflation that existing EU members over the period 1997-2004, but that significant progress has been made. Indeed during this period four of the accession countries have out-performed Greece (3.7 in 2003) on inflation and Lithuania has had lower inflation than four of the first wave of 12 countries inside the Euro Zone.
2.2 Economic growth

Considering that the economic growth in the EU in 2004 was estimated to be 1.4% as compared with 2003, the economic growth in the CEEC was far beyond the average of the Euro zone countries, namely Latvia (6.2%, when the average of 2000-2004 was even higher, namely 7.05%), Lithuania (6.9%, though the average for 2000-2004 is lower to 6.6%) and Estonia (5.4% with the 2000-2004 average of closing on 6%) – the three Baltic States were leading the economic growth and competitiveness through the year 2004 (Table 2).

Table 2. Annual % change in real national output in CEEC countries (GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Latvia</td>
<td>6.8</td>
<td>7.9</td>
<td>6.1</td>
<td>7.4</td>
<td>6.2</td>
<td>7.05</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3.9</td>
<td>6.4</td>
<td>6.8</td>
<td>9</td>
<td>6.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Estonia</td>
<td>7.3</td>
<td>6.5</td>
<td>6</td>
<td>4.7</td>
<td>5.4</td>
<td>5.98</td>
</tr>
<tr>
<td>Hungary</td>
<td>5.2</td>
<td>3.8</td>
<td>3.5</td>
<td>2.9</td>
<td>3.2</td>
<td>3.85</td>
</tr>
<tr>
<td>Slovakia</td>
<td>2</td>
<td>3.8</td>
<td>4.4</td>
<td>4.2</td>
<td>4</td>
<td>3.68</td>
</tr>
<tr>
<td>Cyprus</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3.4</td>
<td>3.28</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3.9</td>
<td>2.7</td>
<td>3.4</td>
<td>2.3</td>
<td>3.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Poland</td>
<td>4</td>
<td>1</td>
<td>1.4</td>
<td>3.7</td>
<td>4.6</td>
<td>2.94</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3.3</td>
<td>3.1</td>
<td>2</td>
<td>2.9</td>
<td>2.9</td>
<td>2.84</td>
</tr>
<tr>
<td>Malta</td>
<td>6.4</td>
<td>-1.2</td>
<td>1.7</td>
<td>0.4</td>
<td>1.4</td>
<td>1.74</td>
</tr>
<tr>
<td>Euro-zone</td>
<td>3.5</td>
<td>1.6</td>
<td>0.9</td>
<td>0.4</td>
<td>1.7</td>
<td>1.62</td>
</tr>
</tbody>
</table>


2.3 Unemployment rate

There remain large differences in unemployment rates across the European Union in 2003 – from the lowest in the Netherlands (3.8%) to the highest in Poland (19.2%) (Figure 1); this might be taken as evidence that the accession countries are a long way off real economic convergence with single currency countries. Would joining a fixed exchange rate system and then a common currency make the unemployment problem worse in a nation like Poland? Or would it provide a stimulus to trade, competition and investment and a catalyst for further structural economic reforms that, in the medium term, will boost employment rates?

Lithuania, Latvia and Estonia are not really coping with the unemployment situation too well, as the rates are 13%, 11% and 10.5% respectively. It is obvious that particular regions in the Baltic States (as noticed in other CEEC) have the unemployment rates skyrocketing high, up to 20-28%, which considerably influences the
In Lithuania, for example, Northern (Naujoji Akmene, Siauliai, Salcininkai) and some Southern (Varena) cities and countryside settlements experience high unemployment situation, in individual cases up to 35%. Though, there are cases, when new mayors of Druskininkai city and the Curonian Split – Neringa have considerably revived the economic activities in the municipalities and twice reduced the unemployment rates in 2003-2005.

2.4 Government budget balance

The amount that a government borrows is another of the Maastricht Treat convergence criteria and it is also part of the terms and conditions of the EU Fiscal Stability Pact. Table 3 indicates that the government budget deficits of the Czech Republic, Hungary, Poland and Slovakia were all in excess of 4% in 2003; indeed, the Czech deficit was way above the 3% Maastricht maximum! – Almost off the radar in fact at -12.9%.

The Baltic States are coping incredibly well in this respect, Estonia being the leader balancing the government budget at 2.6; Lithuania at -1.7% and Latvia at -1.8%, which means all three Baltic
States complying to this particular Maastricht Treat convergence criterion.

Table 3. Government budget balance of EU, USA and Japan, 2003 (as % of GDP)

<table>
<thead>
<tr>
<th>Budget balance as % of GDP</th>
<th>Budget balance as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CEEC</strong></td>
<td><strong>Rest of the EU, the USA and Japan</strong></td>
</tr>
<tr>
<td>1. Estonia</td>
<td>1. Finland</td>
</tr>
<tr>
<td>2. Lithuania</td>
<td>2. Denmark</td>
</tr>
<tr>
<td>3. Latvia</td>
<td>3. Sweden</td>
</tr>
<tr>
<td>4. Slovenia</td>
<td>4. Spain</td>
</tr>
<tr>
<td><strong>Euro-zone</strong></td>
<td>5. Belgium</td>
</tr>
<tr>
<td>-2.7</td>
<td>6. Ireland</td>
</tr>
<tr>
<td>5. Slovakia</td>
<td>7. Austria</td>
</tr>
<tr>
<td>-3.6</td>
<td>-1.1</td>
</tr>
<tr>
<td>6. Poland</td>
<td>8. Italy</td>
</tr>
<tr>
<td>-4.1</td>
<td>-2.4</td>
</tr>
<tr>
<td>7. Hungary</td>
<td><strong>Euro-zone</strong></td>
</tr>
<tr>
<td>-5.9</td>
<td>-2.7</td>
</tr>
<tr>
<td>-6.3</td>
<td>-2.8</td>
</tr>
<tr>
<td>9. Malta</td>
<td>10. Netherlands</td>
</tr>
<tr>
<td>-9.7</td>
<td>-3.0</td>
</tr>
<tr>
<td>10. Czech Republic</td>
<td>11. Greece</td>
</tr>
<tr>
<td>-12.9</td>
<td>-3.2</td>
</tr>
<tr>
<td></td>
<td>12. United Kingdom</td>
</tr>
<tr>
<td></td>
<td>-3.2</td>
</tr>
<tr>
<td></td>
<td>13. Germany</td>
</tr>
<tr>
<td></td>
<td>-3.9</td>
</tr>
<tr>
<td></td>
<td>14. France</td>
</tr>
<tr>
<td></td>
<td>-4.1</td>
</tr>
<tr>
<td></td>
<td>15. United States</td>
</tr>
<tr>
<td></td>
<td>-4.9</td>
</tr>
<tr>
<td></td>
<td>16. Japan</td>
</tr>
<tr>
<td></td>
<td>-7.4</td>
</tr>
</tbody>
</table>


2.5 Arguments for introducing the Euro in CEEC and the Baltic States

The advantages of joining the Euro:

1) **Reductions in currency risk** – this will enhance trade and investment flows between accession countries and the rest of the Euro Zone

2) **Reduction of transaction costs** and increased price and cost transparency in markets

3) **Lower interest rates** – which will boost capital investment and promote long-term growth

4) **Higher investment and trade** will help to speed up the process of real economic convergence

5) **Politically important symbol** of their commitment to Europe

Disadvantages of joining the Euro. It is important for the accession countries to enter the single currency with strong economic fundamentals – some economists argue that a period of consolidation is required for most of these countries before they become better prepared for irrevocable Euro entry.
1) **ERM (Exchange Rate Mechanism)** constraint: Having to spend two years inside the ERM II may prove to have a de-stabilising effect on the accession countries – particularly due to the high rate of capital inflows (putting upward pressure on their currencies)

2) **Retaining monetary policy freedom:** As they settle into the Single Market – it makes sense for them to retain some monetary policy autonomy e.g. in setting interest rates and retaining the option of exchange rate adjustments

3) **Budget deficits:** Many of the accession countries have high budget deficits – they might come under pressure to reduce these fiscal deficits by cutting government spending / raising taxes – which will be politically unpopular and which will hit short term economic growth

4) **Concentrate first on the supply-side:** In the near term, the accession countries might be better suited focusing on supply-side economic reforms designed at raising productivity and promoting entrepreneurship rather than becoming too obsessed with joining the Euro. This will improve the flexibility of their economies and will strengthen the ability to cope with shocks to economic activity and employment.

5) **Harder for the ECB to set rates:** The arrival of the 10 newcomers to the Euro, with their generally higher rates of growth than in Western Europe, will also complicate the work of the European Central Bank when they join the Eurozone. The ECB is responsible for setting the single official interest rate for the Euro, no easy task considering the different level of economic development

3. Fostering of an environment conducive to business economics and competitiveness: the case of the Baltic States

   The Swiss business school IMD has developed a simple, useful framework of competitiveness based on a set of “golden rules,” which include:
   - creating a stable and predictable legal framework;
   - investing in traditional and technological infrastructure;
   - promoting private savings and domestic investment;
developing aggressiveness on the international markets and attractiveness for FDI;

focusing on quality, speed and transparency in government and administration;

maintaining a relationship between wage levels, productivity and taxation; and,

investing heavily in education and in life-long training of the labor force.

These “golden rules” can be seen in the economic policymaking of Estonia, Latvia, and Lithuania over the past several years. The next steps will be centered on enhancing the quality of public administration and targeting investment in infrastructure and education, and further streamlining regulations, including licensing procedures. Specifically, efforts will continue to simplify procedures and reducing costs in the areas of:

- taxation and customs;
- labor markets;
- SME development;
- export promotion;
- restructuring and bankruptcy;
- management of state property; including energy sector restructuring; and
- financial market development.

If we go back to the labour market issue in the Baltic States, we will discover that with fixed exchange rate regimes, labour market flexibility is essential to ensure adjustment to exogenous shocks on world markets. The past three years have shown that Baltic labour markets are indeed relatively flexible. There are few constraints on hiring and firing, minimum wages are fairly low and unemployment insurance is modest. Still, unemployment is high, and tends to be geographically concentrated, as labour mobility is limited. The share of long-term unemployed is growing, and there are mismatches between the skills of the unemployed and the needs of new enterprises. In segmented labour markets, there is simultaneously high unemployment and labor shortages. The Baltic governments are keenly aware of the “skills gap” and aim to better tailor education to labor market needs. Other measures to address the unemployment
include regional and sectoral variation of minimum wages and reducing taxes on labor income.

Turning to financial sector reforms, all three Baltic countries have participated in the joint IMF-World Bank Financial Sector Assessment Program. The FSAP reports found that Baltic countries financial sectors are generally well regulated. Non-bank financial segments remain less developed, while there is a need to strengthen oversight and regulation in securities and insurance. As the recovery of the Baltic economies has accelerated, credit growth has reached high levels. So far, ratios of non-performing loans have remained modest, but the rapid credit expansions warrant monitoring.

We can observe the need for efficient and targeted social spending, for effective public administration, and most of all, for high economic growth. Regional income disparities are significant, as incomes in the Baltic capitals are far above national averages, while some regions have income levels of just 60% of the national average. These regional disparities will require constant attention so that discontent of those groups of population does not lead to slow growth, characterized by continued revenue weakness and further expenditure cuts; high fiscal deficits crowding out private sector; and increasing current account deficits.

Pension reform is another area requiring attention. Although the pay-as-you-go systems have been strengthened and elements of fully-funded system introduced, the lack of viability of the systems and unfavorable demographics call for accelerated implementation of reforms.

The FDI development in the environment of “new economy” will depend on the existence of strong technological infrastructure and innovative capacity of the countries. Some principle indicators for the knowledge-based economies collected by the OECD (1996)\(^3\) were:

1) expenditures on R&D,
2) employment of engineers and technical personnel,
3) patents and
4) international balances of payments in technology.

Expenditure of the three Baltic countries on R&D is still below the EU level (old 15 members). In Estonia (0.9% in 2002)

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\(^3\) OECD, *The Knowledge Based Economy*, Paris OECD/GD/(96)102, p.46.
expenditures R&D per capita are higher than in Lithuania (0.7% in 2002) and Latvia (0.5% in 2002)\textsuperscript{4}. Latvia and Lithuania are also below the more advanced Central East European (CEE) countries like Hungary, Czech Republic, Slovenia and Poland (Runiewicz, 2004).

Similarly, the productivity of the R&D systems in terms of the patent applications is rather low when compared to EU old members. Estonia is performing again a bit better than Latvia and Lithuania. The US patenting is very marginal and reflects the low international relevance of the innovations.

When trying to explain the reasons for this low patenting one should notice that the relative number of researchers in Baltic states is not so low – 0.98% in Estonia, 0.81% in Lithuania and 0.69% in Latvia, while in the EU 15, it was 1.38% (2001). However, the research staff in Baltic states is specialized in basic science, when it should be rather in applied research and development.

Diffusion and absorption of new technologies crucially depends on the presence of skilled workforce. According to Eurostat data (2002) the percentage of firms that had undertaken training since 1999 was in Estonia 63%, in Lithuania 43% and Latvia 53% (comparing to the EU-15 level of 62%). The positive trends have been observed in the percentage of employees that had undergone some training paid or provided by the employer. In Estonia this numbers were above the EU 15 level (26%) – 34%, in Lithuania 24% and Latvia 26% (2001).

One of the significant facts for the country’s innovativeness is the public and private expenditures on the education (Table 4). It is important to note that the expenditure on education as a percentage of GDP has been reduced during the transition. Public expenditures on R&D in Estonia were 55% in 2004 as opposed to 79% in 2002 of GDP, similarly in Lithuania: reduced to 54% (2004) from 79% 2002) and Latvia: reduced from 43% (2002) to 25% in 2004.


\textsuperscript{4} www.europa.eu.int/strind/innore
(2002) to 17% (2004) in Latvia (2002)\textsuperscript{5}. Estonia (30.4%) and Lithuania (23.2%) have the highest share of economically active population with the third level of education among CEEC. The Baltic States lag behind the EU-15 in all indicators except SME’s innovation cooperation, working population with third level of education.

Table 4. Selected Innovation Indicators for the Baltic States, 2004 (%)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>EU-25</th>
<th>EU-15</th>
<th>The Baltic States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Estonia</td>
</tr>
<tr>
<td>S &amp; E graduates</td>
<td>11.5</td>
<td>12.5</td>
<td>6.6</td>
</tr>
<tr>
<td>Working population with the 3\textsuperscript{rd} level education</td>
<td>21.2</td>
<td>21.8</td>
<td>30.4</td>
</tr>
<tr>
<td>Public expenditure R&amp;D expenditure</td>
<td>0.67</td>
<td>0.69</td>
<td>0.55</td>
</tr>
<tr>
<td>Business expenditure R&amp;D expenditure</td>
<td>1.27</td>
<td>1.30</td>
<td>0.22</td>
</tr>
<tr>
<td>EPO hi-tech patents</td>
<td>26.0</td>
<td>30.9</td>
<td>2.6</td>
</tr>
<tr>
<td>EPO patents</td>
<td>133.6</td>
<td>158.5</td>
<td>8.9</td>
</tr>
<tr>
<td>SMEs innovating in house</td>
<td>31.7</td>
<td>32.1</td>
<td>36.9</td>
</tr>
<tr>
<td>SMEs innovating cooperation</td>
<td>7.1</td>
<td>6.9</td>
<td>11.3</td>
</tr>
<tr>
<td>Innovation expenditure</td>
<td>2.15</td>
<td>2.17</td>
<td>1.43</td>
</tr>
<tr>
<td>ICT expenditures/GDP</td>
<td>6.3</td>
<td>6.2</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Source: compiled from European Innovation Scoreboard-2004, p.29.

Innovation policy plays an important role in catching up strategy of Baltic States. The beginning of transition brought deep changes in the R&D policies. In Estonia and Latvia the industrial branch institutes were to large extent closed down. On contrary in Lithuania the block funding of industrial R&D institutes has been maintained and some of them have been transformed into state institutes and have been financed through state contracts (Martinson, et al., 1998).

4. The competitiveness of knowledge-based economy (R&D and innovation): the case of Lithuania

Research and the recent economic success of many (often small) countries suggest increasingly strong links between knowledge and productivity, competitiveness, and economic growth. In Lithuania, strengthening these links and moving toward a knowledge-based economy require simultaneous progress on innovation indices (Figure 1):

- Developing education systems and human resources to ensure that citizens are equipped to acquire, apply, and share knowledge.
- Establishing innovation systems that bring together networks of researchers and businesses to improve commercial applications of science and technology.
- Building an information society infrastructure that gives all people access to affordable and effective information and communications technology—supporting education, innovation, and networking.
- Providing an economic and institutional framework that ensures a stable macroeconomic environment as well as increased competition, flexible labor markets, and adequate social protection.
Equally, significant steps have been taken to reinforce the national innovation support in Lithuania. Since 1996, there has been a Lithuanian Innovation Centre operating, which mission is to support and promote commercialization of scientific and technological achievements and offer assistance in technology transfer. Other institutional bodies supporting the national innovation system is Lithuanian Development Agency for Small and Medium Sized Enterprises (creating the favorable conditions for the development of SMS innovation capacity) and Lithuanian Development Agency (developing project attracting foreign investors) (Valentinavicius, 2005). The government’s policies for future support of technology and innovation are set out in “Programme for Innovations in Business”, which to enhance the international competitiveness of Lithuanian business by intensifying the application of new scientific achievements and technological innovations (OECD, 2001).

According to the Global Competitiveness Report 2002/2003 recently issued by the World Economic Forum, Lithuania’s current
ability to compete internationally ranks 49\textsuperscript{th} among 75 countries – well ahead of the Russian Federation and Ukraine yet placing Lithuania among the less competitive countries soon to join the EU. In terms of likely future competitiveness, Lithuania ranks 43\textsuperscript{rd}, suggesting that current policies will slightly improve matters. Still, these rankings indicate that considerable improvements are needed if Lithuania’s income convergence with current EU members is to accelerate.

Lithuania’s relatively low ranking based on these two elements points to the challenges ahead: 1) a country’s future competitiveness, again according to the World Economic Forum, is largely a function of its ability to innovate (as indicated by a technology subindex, on which Lithuania ranks 41\textsuperscript{st} – among the lowest of the EU accession countries) and 2) the quality of its public institutions (where Lithuania ranks 34\textsuperscript{th}) and macroeconomic environment (where Lithuania’s relatively low ranking – 56\textsuperscript{th} – may have been influenced by the Russian Federation’s financial crisis).

According to EKT (2004), the following organizations are supporting innovation in Lithuania:

1. **Lithuanian Innovation Centre (LIC)**. The main purpose of the LIC is to encourage and develop Lithuania’s scientific potential, exploiting its strong scientific tradition, increasing the country’s economic competitiveness, creating new jobs, and ensuring its successful integration into the international market. Its main activities are:
   - technology transfer: the export and import of technology,
   - the introduction of innovative commerce,
   - information services,
   - the promotion of high-tech entrepreneurship.

2. **Kaunas University of Technology (KUT) Innovation Centre (IC)**. The KUT Innovation Centre’s main objectives are to stimulate innovatory processes in Lithuania, to transfer innovations from science to industry, to implement new technologies, and to develop small and medium enterprises (SME). Its main activities are:
   - to search for innovations in scientific institutions, to carry out marketing, and to solve any problems in implementing innovations;
• to support the development of small and medium business by participating in international innovation and sme programs, projects, and events;
• to supply business consultations.

3. **Science and Technology Park (Vilnius).** The purpose of the Park is to foster an innovative culture. Its main activities are:

- In the field of innovation (organizing the creation of new technologies, organizing projects, manufacturing and examining prototypes, creating new jobs, commercialising research results, and increasing Lithuanian participation in international research and development projects);
- In the field of consultation (marketing technologies, providing technological advice, supplying partner and project searches and assistance, and assisting the establishment of small technological business);
- Real estate management.

4. **NOVA Science and Technology Park (Kaunas).** The NOVA Science and Technology Park was founded in 1995. Its main activities are:

- **Research:**
  - Alternative energy sources;
  - Laser and plasma technologies;
  - Physical-chemical research with new technologies and materials;
  - Biotechnology;
- **Innovations:**
  - Project pre-surveys;
  - The creation of showcase enterprises and technological lines;
- **Higher education:**
  - Immediate goal: preparing for new lines of technology and training company’s personnel; retraining courses;
  - Distant goal: training engineers, technicians, and managers.

Specialization: alternative energy sources, laser and plasma technologies, and biotechnology.
5. Concluding remarks on economic competitiveness and innovation in CEEC and the Baltic States: implementation of the policy

*Competitiveness, innovation and the promotion of entrepreneurship* are critical conditions for ensuring economic growth in an enlarged EU. Efforts to *foster knowledge transfer* through the stimulation of new and fast-growing SMEs, the development of innovative clusters, and the promotion of technology transfer between industry sectors are essential if we want to develop and maintain a dynamic and competitive platform for European enterprises. The IRC (Innovating Regions of Europe) Network represents a very good example of how a specific action can bring these key elements together by *providing an effective mechanism for technological cooperation* between firms and institutions. Innovation can most easily be promoted at the local level. Local actors, like the IRCs, are needed to foster links between companies and public organisations and to establish the entrepreneurial activity necessary to let innovative companies prosper and grow.

It is worth recalling that the Community cohesion policy is one of the pillars of the European construction together with the single market and monetary union. Nearly a third of the Community budget is allocated to this area. *It is the only policy of the European Union that explicitly addresses economic and social inequalities.* It involves a transfer of resources between Member States for the purpose of supporting economic growth and sustainable development.

The enlargement of the Union presents an unprecedented challenge for the internal cohesion, since it has led to the widening of the economic development gap and a doubling of socio-economic disparities.

The Community financial support through the Structural Funds can act as a catalyst, helping to mobilise national and regional policies and resources and to target them more resolutely on the Lisbon objectives. For this reason the *Commission suggests* to *integrate the future cohesion policy into the Lisbon strategy.*

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Cohesion policy will thus become a key vehicle for their realisation via the national and regional development programmes.

The Commission proposes that the future cohesion policy should from the year 2007 on concentrate on three priorities:

1) economic and social convergence;
2) regional competitiveness; and
3) territorial cooperation.

The “Convergence” objective concerns the less developed Member States and regions with a specific view to the new Member States. The target can be compared with the current “objective 1” interventions. This objective would concern those regions, in which per capita GDP is less than 75% of the Community average. **Around 78% of the cohesion budget could go to this heading.**

The Commission proposes that cohesion policy actions should focus on a limited number of Community priorities which reflect the Lisbon agenda. The proposed key themes are the following:

- innovation and the knowledge economy,
- environment,
- services of general economic interest (basic infrastructures such as transport, telecommunications and energy networks, water supplies and environmental facilities),
- employment.

**Innovation** is to become one of the key issues for which the regions will be eligible to receive funding. For illustration, the European Regional Development Fund would provide support for modernising and diversifying the economic structure, with particular attention to innovation and enterprise. This would imply for example to create closer links between research institutes and industry, to develop R&D activities, to improve access to finance and know-how, to encourage new business ventures, to favour the use of information and communication technologies (ICTs), to stimulate the development of environmentally clean technologies.

The Network of Innovating Regions in Europe (IRE) is an extensive network supporting innovation. Open to all regions in the EU and Associated countries of the RTD Framework Programme, the primary aim of the network is to enable regions to access new tools and schemes for innovation promotion and to
develop their **regional innovation strategies**. The IRC Network has been extended to include **71 regional IRCs in 32 countries** covering all Member States, the Candidate Countries, and several EEA and Associated States of the Research Framework Programme. This phase has also seen the Network gain a foothold in South America with the establishment of a pilot centre in Chile.

The IRC Network represents an **effective mechanism for technological cooperation between firms and institutions**. We are the largest network in Europe for transfer of technology. We have achieved a considerable number of technology transfer agreements, helped numerous companies to raise their international profile, to find new European partners, and to access new markets.

**Innovation** can most easily be promoted **at the local level**. Local actors, like the IRCs, are needed to foster links between companies and public organisations and to establish the entrepreneurial activity necessary to let innovative companies prosper and grow. In common with our policy objectives, the wide range of IRC services continue to be targeted at **technology-orientated SMEs**, but are also available to **larger companies, research institutes, universities, technology centres and innovation agencies**.

Three IRCs are currently operational in the **Baltic States**. They involve most of the entities active in the innovation field at local level. Some of the best “success stories” of the IRC network have been performed by one of the Baltic IRCs.

In **Lithuania**, the IRC is formed by a consortium of two members: “Lithuanian Innovation Centre” and “Science and Technology Park”. After matchmaking meetings organised by IRC Lithuania and IRC Northern Germany, the German ICT Company A/H/R is in technical cooperation with **Inovaciniai Sprendimai** (Innovative Solutions), a young Kaunas-based start-up. The partnership is a transnational solution to the problem of local ICT skills shortages currently being felt in many European regions.

The **Latvian IRC** is run only by an organisation: the “Latvian Technological Centre”. The Latvian and Lithuanian IRCs helped **UAB Technologija**, a spin-off from the Kaunas University of Technology in Lithuania, to find a partner in Latvia for a technology transfer agreement that brings benefits to both the companies involved.
The **Estonian IRC** is managed by a consortium of four entities: “Tartu Science Park”, “Tallin Technology Park Development Foundation”, “Enterprise Estonia” and “Archimedes Foundation”. Thanks to the Estonian IRC, a technique developed and commercialised by an Estonian company is being used in Spain to find a more efficient and environmentally-friendly way to ensure mussels are safe to eat. Wider food safety applications could follow. This successful technology transfer is an excellent example of how the IRC network's flexibility and initiative can make things happen.

### 6. Comprehension check

1. What are the convergence criteria for the newly accepted CEEC and Baltic States in to the EU?
2. What are the advantages of introducing the Euro in the EU, CEEC and the Baltic States taken separately?
3. What are the disadvantages of introducing the Euro in the EU, CEEC and the Baltic States taken separately?
4. Discuss on innovation criteria, which are important in determining a country’s competitiveness. How Poland would differ from the Baltic States in innovation criteria and why?
5. Discuss how the Baltic States could become more competitive economies, select adequate economic criteria to prove your statements.

### 7. Recommended reading


8. References


16. The Eurostat Concepts and definition database
