Towards a Coordinated Investment Strategy for Riga, Tallinn and Vilnius

A report for

BaltMet Invest

Baltic Sea Region
INTERREG III B Project

Alf Vanags (alf@biceps.org)
Mark Chandler (mark.chandler@sseriga.edu.lv)
Zane Leduskrasta (zane.leduskrasta@lu.lv)
Sirje Padam (sirje.padam@inregia.se)

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Executive summary

1 Introduction

This report is the result of an 18 month process in which the team followed a not always linear path. The particular challenge was how to incorporate the cross border element inherent in the idea of a coordinated investment strategy. In order to address this we have tried to move away from a model where the Baltic capitals are competing for investment and perhaps in the context of a growing shortage of workers competing also for people. This is line with the views of the EU Commission in its working paper on cohesion policy and cities (EC (2005)) where it is argued that competition can be counterproductive and the Commission’s working paper emphasises ‘coordination or strategic alliances’ as a ‘tool for balanced development’. The cooperative approach to a regional strategy is also evident at the political level in the recently published report on Europe’s Strategy for the Baltic Sea Region from the Baltic Strategy Working Group of 7 MEPs who have called for greater economic integration in the region including with Kaliningrad. Kaliningrad could indeed represent an opportunity to extend the methodology developed in the BaltMet Invest coordinated investment strategy. Here interestingly, the most recent evidence shows that the three Baltic metropolises are becoming increasingly integrated in terms of both trade flows and a common network of foreign direct investment (FDI).

The starting point of the report is the strategic and economic importance of the three Baltic capitals, Riga, Tallinn and Vilnius, in their countries and in the region. This is developed in the section on the economic role of the capitals. This importance is consistent with the EU policy context. In its working paper on cohesion policy and cities (EC (2005)) the European Commission underlines the importance of cities as key players in regional development, including cities located in peripheral areas. This is rather important for the Baltic capitals who, while peripheral in global and even EU terms, are arguably better located on the southern shore of the Baltic Sea than are Stockholm and Helsinki.

After analysing the economic role of the capitals the report examines evidence on what it is that investors look for. This followed by a discussion of the relative importance of competition and cooperation. A key element of the report is to turn the individual city visions into a common vision of “The Baltic region as the most attractive investment area in CEE” and the actions the city councils can take in promoting this.

2 The economic role of the capitals

Ever since the 13th and early 14th centuries the three Baltic capitals have played a pivotal role in regional development – a role that much predates the emergence of the nation states of which they are now the capitals.

Today Riga and Tallinn dominate the economies of Latvia and Estonia with about one third of the Latvian and Estonian population and from one half to two thirds of GDP. Lithuania is

1 Christopher Beazley, Michael Gahler, Satu Hassi, Toomas Hendrik Ilves, Girts Valdis Kristovskis, Henrik Lax and Alexander Stubb.
more dispersed with Vilnius generating about one third of GDP on the basis of about one sixth of the Lithuanian population.

The Baltic capitals are the main national and regional attractors of both investment and employment and their continuing attractiveness for capital and people is a prerequisite for transformation of living standards in the Baltic countries towards the EU average where currently they lag towards the bottom of the European league table. Rapid economic development of the capital city has sometimes been regarded as being at the expense of development in the rest of the country. However, urban development and economic growth seem to be related; high economic growth in cities is positively correlated with economic growth nationally. By international standards, the Baltic capitals stand out as being highly concentrated locations of population within their national economies.

In all three countries it is evident that in comparison with the country as a whole, the metropolises are specialised in the service sector. Besides being important drivers of economic growth, the labour market of cities are generally more diversified and dynamic than that in the rest of the country. Compared to rest of the country cities and metropolitan areas in that respect specialise in fields that are knowledge intensive. This shows in a large share of population with high level of education.

Despite that the Baltic capitals still lag far behind most European cities. Neighbouring EU capitals, including Helsinki, Copenhagen and Stockholm have a GDP per capita that exceeds the Baltic ones by a factor of four or five.

The three capitals receive a very high share of their country’s incoming foreign direct investments. Another important feature is that we can observe many cross investments between the Baltic capitals. A high proportion of Baltic direct investments abroad take place in each of the other Baltic States indicating increasing economic linkages. The general pattern of investments originating from other countries than the Baltics is that one capital serves as a gateway for the original investment; in a later phase the investor goes to the other two capitals. The neighbouring Baltic countries are also key trading partners for each other. This gives the residents of each Baltic capital a direct interest in developments in the others.

3 What do investors look for?

Investment decisions are based on expected profits. This is true of local as well as foreign investors. Important for foreign investors for choosing where to invest is most often a combination of different factors such as economic growth, stability of macro economy and low costs. Other aspects that play a significant role include infrastructure, easy access to markets, availability of suitable land, availability of labor with the right qualifications.

Investors in the Baltic capitals were surveyed to find advantages of Baltic capitals compared to other potential investment sites. For investors in Riga the geographical location as well as location in the centre of the Baltics is often cited as a key advantage. Riga is also a seaport, has excellent credit ratings, there is low risk and relatively low taxes. Vilnius is regarded as having good quality of infrastructure; it is also seen as a gateway to Belarus, Poland and Kaliningrad. Whereas Tallinn is regarded as having a good location and its seaport is a positive factor. Other positive factors in Tallinn include: innovative and good quality business services, high scores in international ratings and business friendly policies. Strong economic growth, low risk and macro stability contribute to the attractiveness of all three Baltic capitals.
Common problems of the Baltic capitals mentioned by the investors are: small markets, rising input costs, shortages of production land and qualified staff. Other issues include uncertainty about land use planning.

4 Cooperation or competition?
A similar economic structure makes the three Baltic capitals competitors for economic development in a number of fields. All cities compete for foreign investments, but the intensity of competition in all fields are not the same. Clearly there is competition between the Baltic capitals for western financial and IT sector investments, as well as investments in financial services. Competition is generally least between Vilnius and Tallinn, partly because of their lower level of contact.

Being so close together they seem as one area to a foreign investor. Riga and Tallinn ports strongly compete with each other for shipments. In general, the whole East European region competes, and competitors to all capitals and each city separately are found everywhere.

Geographic location and individual city identity give the Baltic capitals somewhat different roles. Tallinn is more oriented towards the Nordic countries than the other capitals – both early business contacts, history and geographical location have supported these developments. Riga historically has closer links with Sweden and Denmark. It is also often regarded as the centre of the Baltic countries, and in many cases cooperation between Estonia and Lithuania takes place through Latvia (or Riga for this purpose). Even in the era of information technologies when many business operations can be performed through the internet and other communication technologies, Baltic wide activities are often easier to operate from the centre. Vilnius is traditionally more closely linked to Poland, which is a big and developing market. Hence the three capitals complement each other and connect regions that are otherwise difficult to access, for example, the Polish market for Latvia or the Finnish market for Lithuania.

A second source of complementarities between the Baltic metropolises exist where costs preclude action by a city acting alone and where projects would not be realized without participation of all three. The market size of each separate country led by the capital is often too small for strategic investors whereas the Baltic region as a whole strengthened by the close links with neighboring countries and the rest of the EU is a much more attractive destination. Therefore developing common infrastructure and promoting the region as a whole in the ‘far abroad’ have ‘public good’ characteristics and provide a logic for collective action.

5 Visions
A city’s vision of how it would like to develop sends an important message about the city to visitors, workers and potential investors. Accordingly, Riga, Tallinn and Vilnius have all in recent years developed their own visions and development strategies. Moreover they are bound by national development plans, political interests and different EU political planning documents.

Riga seeks to position itself as “the most efficient Baltic Sea region gateway to Eastern neighbouring markets”, “an interesting cultural experience” and “the driving force of Latvian development”. Tallinn strives towards two goals: – to simultaneously be “Enterprising
Tallinn” and to be a city where people feel good – “Tallinn the city of well-being”. The central vision of Vilnius municipality is to make Vilnius “the most modern city in Central and Eastern Europe”. The long term vision of Vilnius municipality is to make Vilnius thrive on a “new economy developed by an advanced society that lives in a distinctive environment”.

Again we see the competitive efforts from each of the municipality to be the winner, to be the first and the best. With clear economic benefits we propose a cooperative strategy for the benefit of all three cities with a common vision: “The Baltic region as the most attractive investment area in CEE”. This current strategy document leans towards the area of common interest and cooperation as illustrated in the diagram below. Thus it seeks to enforce and supplement individual city development plans and other strategic documents.

The rationale for municipal cooperation is in the belief that a cooperative strategy represents a positive sum game that yields benefits to all. In fact, municipal cooperation is more a question of the will to make it work than of significant financial outlay.

Five strategic directions have been identified as priorities for developing a coordinated investment attraction framework:

1. The Baltic Region becomes as a common area for attracting foreign direct investment.
2. Efficient and customer-oriented city administration.
3. Easy access and good infrastructure
4. High quality Human Resources
5. Attraction and activation of nonexistent or not fully exploited industries

Moreover we have identified and suggest potential investment target areas for each separate city that follow from the analysis of economic profile, historical specialization and city own development plans and visions. There is much overlap in these areas: gateway functions, IT, fashion and design, conferences and exhibitions etc. but we see it as quite normal that cities as similar as the three Baltic capitals should indeed be active and operating in similar areas. Very likely, these will be important activities in some or all of the metropolises in say 2030 – what
we cannot tell and what is fruitless to attempt to predict is the new activities that will emerge by then.

6 The role of the city council
Most of the economic activity of cities that, like Tallinn, Riga and Vilnius, operate in a market economy will always be generated by the private sector with minimal intervention by the city council except in its role in routine planning and licensing activities. Nevertheless, the city council has a number of important direct roles that help to shape the city economy and some indirect ones. At the same time it is important to understand that the city council role is limited and it cannot substitute for the market in the era of market economy.

What then is the role of an active ‘investment attraction’ policy? Investment, both local and from the outside will come to locations that are ‘attractive’. Our surveys of investors in the Baltic capitals confirms that ‘attractiveness’ is in part determined by factors outside the control of city authorities, such as geographical location, and partly by factors that the city can influence, such as infrastructure or the ease of access to land and property. Good, modern infrastructure is beneficial in its own right to those who live and work in a city, but is also an important signal to visitors and potential investors.

The rapidly growing economic integration of the Baltic States and their capitals underlines that investment in one location is likely to have beneficial spill-over effect in the other cities in terms of both trade and an expansion of investment. This strongly supports the idea of a coordinated, as opposed to competitive, approach to investment in the region.

7 Concluding remarks
Co-operation is rooted in realizing the power of the region vs each separate country. The benefit from cooperation much increases with the growing economic integration of the region. The political goal must be to increase the belief that cooperation is positive sum game. Regional cooperation is very much how the EU sees the way forward in terms of EU urban development.
1 Introduction: why the Baltic capitals matter

Always and everywhere cities have been both the location and the drivers of economic development. The three Baltic capitals, Riga, Tallinn and Vilnius, are no exception. Ever since the 13th and early 14th centuries the three cities have played a pivotal role in regional development – a role that much predates the emergence of the nation states of which they are now the capitals.

Today Riga and Tallinn dominate the economies of Latvia and Estonia with about one third of the Latvian and Estonian population and from one half to two thirds of GDP. Lithuania is more dispersed with Vilnius generating about one third of GDP on the basis of about one sixth of the Lithuanian population.

The Baltic capitals are the main national and regional attractors of both investment and employment and their continuing attractiveness for capital and people is a prerequisite for transformation of living standards in the Baltic countries towards the EU average where currently they lag towards the bottom of the European league table.

Cities are important in the EU policy context. In its working paper on cohesion policy and cities (EC (2005)) the European Commission underlines the importance of cities as key players in regional development, including cities located in peripheral areas, noting that ‘cities such as Dublin, Helsinki and Stockholm have become major players in the knowledge economy, despite their peripheral location’ (EC (2005) p4). This is rather important for the Baltic capitals who, while peripheral in global and even EU terms, are arguably better located on the southern shore of the Baltic Sea than are Stockholm and Helsinki.

There is a tendency (perhaps a natural one) to see the Baltic capitals as being in competition – competing for investment and perhaps in the context of a growing shortage of workers competing also for people. But city competition can be counterproductive and the Commission’s working paper (EC (2005)) emphasises ‘coordination or strategic alliances’ as a ‘tool for balanced development’ (p3).

The most recent evidence shows that the three Baltic metropolises have rapidly become increasingly integrated in terms of both trade flows and the common network of foreign direct investment (FDI). Quite remarkably, in 2005 Lithuania and Estonia emerged as Latvia’s joint leading export partners, overtaking Germany and the UK. Our analysis of recent FDI shows that Baltic neighbour countries are the main destinations of locally generated foreign direct investments. Retail outlets such as Maxima, Double Coffee or Drogas as well as the banks provide the visitor to the three capitals with direct visual confirmation of a common economic space.

The importance of a coordinated approach to the Baltic Sea region has been emphasised at the political level in the recently published report on Europe's Strategy for the Baltic Sea Region from the Baltic Strategy Working Group of 7 MEPs who have called for greater economic integration in the region including with Kaliningrad. Kaliningrad could indeed represent an opportunity to extend the methodology outlined in this paper.

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2 This is less true for the relationship between Vilnius and Tallinn.
3 Christopher Beazley, Michael Gahler, Satu Hassi, Toomas Hendrik Ilves, Girts Valdis Kristovskis, Henrik Lax and Alexander Stubb.
2 What can the city council do?

Most of the economic activity of cities that, like Tallinn, Riga and Vilnius, operate in a market economy will always be generated by the private sector with minimal intervention by the city council except in its role in routine planning and licensing activities. Nevertheless, the city council has a number of important direct roles that help to shape the city economy and some indirect ones.

The city council directly affects the city economy as:

- The owner/instigator of investment projects
- Provider of land for private projects
- Employer
- Provider of services and infrastructure

In these spheres the city has direct control of how resources are allocated and a coherent and consistent approach to investments and other resource allocation decisions can maximize both economic and non-economic benefits. Annex 1 outlines the principles of an investment evaluation methodology for investments that helps to optimize the use of the city’s own resources.

At the same time it is important to understand what the city council cannot do:

- It cannot do everything!
- It cannot substitute for the market
- It should not seek to pick ‘winners’.

What then is the role of an active ‘investment attraction’ policy? Investment, both local and from the outside will come to locations that are ‘attractive’. Our surveys of investors in the Baltic capitals confirms that ‘attractiveness’ is in part determined by factors outside the control of city authorities, such as geographical location, eg Vilnius is gateway to Belarus or Kaliningrad or Riga and Tallinn are port cities, and partly by factors that the city can influence, such as infrastructure or the ease of access to land and property. Good, modern infrastructure is beneficial in its own right to those who live and work in a city, but is also an important signal to visitors and potential investors. The modern tram system in Montpellier in the south of France is a visible testimony to the city’s high tech economic base.

There is a clear case for raising awareness of our cities and their attractions in the outside world. This may be done directly by publicity but perhaps equally important, indirectly, through promotion of the city as a conference venue. Nothing works better than ‘learning by seeing’. Here, the city authorities as owners of potential venues may play a direct role by upgrading facilities and actively seeking conference business.

Is there a case for actively seeking the development of clusters of particular ‘footloose’ industries? The market is surely the best judge of what to locate, where to locate it and to bear the risks associated with those choices. Indeed, examination of potential target areas for the three metropolises reveals much overlap: gateway functions, IT, fashion and design, conferences and exhibitions etc. Very likely, these will be important activities in some or all
of the metropolises in say 2030 – what we cannot tell and what is fruitless to attempt to predict is the new activities that will emerge by then.

The rapidly growing economic integration of the Baltic States and their capitals underlines that investment in one location is likely to have beneficial spill-over effect in the other cities in terms of both trade and an expansion of investment. This strongly supports the idea of a coordinated, as opposed to competitive, approach to investment in the region.

3 City visions of Riga, Tallinn and Vilnius

A city’s vision of how it would like to develop sends an important message about the city to visitors, workers and potential investors. As the Commission’s working paper notes ‘people want to live and work in cities with a distinct identity’ (EC (2005), p7). Accordingly, Riga, Tallinn and Vilnius have all in recent years developed a vision of their future development.

According to its development strategy to the year 2025, Riga’s long term development vision is „Rīga – iespēju pilseta ikvienam” or “Riga – the city of opportunity for everyone”. The strategy is built around the Riga citizen and its three priorities are:

- A highly educated and skilled society;
- An economy that exploits the East-West connection;
- City development on a human scale within a high quality environment.

Riga seeks to position itself as “the most efficient Baltic Sea region gateway to Eastern neighbouring markets”, “an interesting cultural experience” and “the driving force of Latvian development”. This is to be achieved through diversity: through the development of logistics and multimodal transport services sector, through employment in high technologies, and through the development of culture and science, as well as of finance and tourism.

Parallel to an economy that is based on Riga’s East-West gateway advantage a second driving force is seen as the development of high value added both in production and services. Therefore Riga is envisaged as a centre of innovation and knowledge creation; biotechnologies, pharmacy and various areas of physics are mentioned as examples.

Tallinn strives towards two goals: – to simultaneously be “Enterprising Tallinn” and to be a city where people feel good – “Tallinn the city of well-being”.

Tallinn’s strategy for the development of entrepreneurship and its business environment is built on four factors:

- growing investments (from home and abroad),
- high and growing levels of local business culture,
- infrastructure development,
- adequate availability of a high quality workforce.

What kind of entrepreneurship does Tallinn envisage?

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4 Rīga - iespeju pilseta ikvienam (2005)
5 Source: Strategy “Tallinn 2025”
Tallinn aims for a diversified business structure, which combines advanced service based enterprises with an industry base that is moving towards high technology. Tallinn also sees itself as an emotion-based economy (cultural economy, creative economy) that includes on the one hand tourism-oriented services and, on the other, entrepreneurship that is connected to international logistics and transportation services.

Four channels of entrepreneurial development are envisaged:

1) An emotion based economy – transforming Tallinn into the main festival centre and tourist attraction of the Baltic Sea Region.
2) Knowledge intensive entrepreneurship – increasing Tallinn’s competitiveness and export capacity in world markets and encouraging the entrepreneurs in Tallinn to take an active role in more sophisticated sectors of business.
3) A mediating economy – transforming Tallinn into a mediator between the East and the West

The central vision of Vilnius municipality is to make Vilnius “the most modern city in Central and Eastern Europe”. It is envisaged as an international centre of politics, business, science and culture. The long term vision of Vilnius municipality is to make Vilnius thrive on a “new economy developed by an advanced society that lives in a distinctive environment”.

Vilnius sees its future as gateway to Lithuania, and as such, attractive to both domestic and international business. It offers a modern transportation system ensuring fast and convenient connections with the region and the world. It envisages exploiting the potential of advanced technologies and the information economy that will stimulate innovations in the country and in the whole region. It aims to develop a modern economy that would be closely linked to the currently existing potential in the areas of science and education.

The city sees the “advanced society” as the road to new economy built on dynamism, information technology, and the best of ideas coming from both the Western and Eastern culture, encouraging and fostering diversity. The city municipality is committed to the following goals:

- creation of a favourable environment for business and investments;
- increasing the international competitiveness of Vilnius;
- development of commercial and industrial urban territories;
- promotion of the information society;
- improving social infrastructure;
- a balanced development of the city’ transportation system and international transport connections.

The accent is on dynamism and on creative work performed by young people and skilled professionals. The advanced society is underpinned by the confluence of the best of Western and Eastern culture, fostering diversity. The city is in the process of creating a distinctive environment by pursuing urban development that is “in harmony” with the city’s heritage, it strives to high standard of living. The future of Vilnius will be defined by a fast take-up of

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new technology and even development. This is expected to yield environmental, social and dynamic benefits.

4 An economic profile of Riga, Tallinn and Vilnius

4.1 Overview

The Baltic states and their capitals remain rather little known in the outside world and even Baltic people have a poor idea of where their countries and cities stand in relation to even the rest of northern Europe. This profile of the capitals is intended to provide an informative snapshot of the economies of Riga, Tallinn and Vilnius in relation to other comparators in the region and Europe generally.

The first major observation is that by international standards, the Baltic capitals stand out as being highly concentrated locations of population within their national economies. This is illustrated in Figure 1 where Riga and Tallinn, with about 30% of the population are much more concentrated than any other European capital with the exception of Reykjavik. Lithuania, where Vilnius is complemented by other medium sized cities in the form of Kaunas and Klaipeda, is much less concentrated with only 16% of the Lithuanian population in Vilnius. Nevertheless, as compared with other European countries, even the population of Vilnius is rather highly concentrated.

![Figure 1: Population of capitals as % of total population of the country (end of 2004)](image)


The concentration of economic activity in Estonia and Latvia is even greater in terms of Gross Domestic Product (GDP) where Tallinn and Riga account for about 60% of the national
economy (year 2003 data) (see Figure 2). Vilnius generates about 35%. Thus, in Estonia and Latvia the capitals have a very dominant role in the national economy as compared with other countries, while the share of Vilnius is more similar to that of other north European capitals.

*Figure 2: Ratio of GDP of the capital in national economy (PPP weighted)*

Although the weight of the Baltic capitals is different in their national economies, their absolute size in terms of value added created is about the same (see Table 1).

*Table 1: Gross Value Added 2003, in euro and percentages of national total*

<table>
<thead>
<tr>
<th></th>
<th>GVA, million</th>
<th>% of national</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riga</td>
<td>4 580</td>
<td>58</td>
</tr>
<tr>
<td>Tallinn</td>
<td>4 256</td>
<td>59</td>
</tr>
<tr>
<td>Vilnius</td>
<td>5 182</td>
<td>35</td>
</tr>
</tbody>
</table>

Sources: National statistical offices and central banks.

A key aspect of the economic environment of the Baltic capitals is that they are located in the fastest growing region of Europe. Comparative real GDP growth rates for a number of selected countries over the last three years are shown in Table 2 below. This shows the Baltic states far outperforming the EU-15 as a whole and outstripping even such fast growing countries as Ireland and the Czech Republic. The cities are of course both contributors to the growth of the region and beneficiaries from it and this relationship is discussed in the next section.
Table 2: Growth of Real Gross Domestic Product in Europe

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU15</td>
<td>1.1%</td>
<td>2.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Estonia</td>
<td>6.7%</td>
<td>7.8%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Latvia</td>
<td>7.2%</td>
<td>8.5%</td>
<td>10.2%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>10.5%</td>
<td>7.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Germany</td>
<td>-0.2%</td>
<td>1.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Finland</td>
<td>1.8%</td>
<td>3.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.5%</td>
<td>3.1%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.7%</td>
<td>3.7%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.7%</td>
<td>1.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Poland</td>
<td>3.8%</td>
<td>5.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Ireland</td>
<td>4.4%</td>
<td>4.5%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3.2%</td>
<td>4.7%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Source: Eurostat

The economic role of the capitals

Rapid economic development of the capital city has sometimes been regarded as being at the expense of development in the rest of the country. However, urban development and economic growth seem to be related; high economic growth in cities is positively correlated with economic growth nationally. The role of capitals, being the importers and transmitters of knowledge and new technology is important also from the national point of view because economic renewal spreads to the rest of the country. Supporting the city as a driver in the national economy and its role as an import haven helps countries to stay competitive.

This is confirmed by the recent European Commission report on cohesion policy and cities (EC (2005)) where it is observed that for two centuries, towns, cities and metropolitan areas have driven economic development in Europe, creating growth, innovation and employment. Recent research on city economics points out several important driving forces of economic development in metropolitan areas.

The important role of metropolitan areas as trade and production centres is linked with scale economies, advantages that are directly connected to their size. Metropolitan areas as market places are advantaged by the fact that both sellers and buyers tend to prefer large markets to small ones. In addition, production conditions improve with the market size for many companies. Co-location in a city offers a cycle of mutual benefits for firms. In many specialised industries, there are efficiency benefits associated with the co-use of common resources. This in turn creates a market for other companies who are suppliers of inputs and consultancy services. For these reasons cities tend to have high economic diversity.

Labour markets in cities are large and diversified, making it easier for the people to find a new job. Moreover cities offer broader career opportunities. At the same time, companies can recruit from a large pool of competencies. All these aspects reduce transaction costs in the labour market and results in a higher efficiency in matching demand and supply.
Knowledge spreads and develops where people meet. Personal contacts play an important role for creativity and innovation. The concentration of employment in limited territory enhances opportunities for professional contacts between people. Metropolitan regions are also important sources of knowledge because they generally have concentrations of higher education and research and an important function as providers of knowledge. There are indications that the size of the knowledge capital may be even more important than market size measured in population. The success of relatively small size cities, such as Dublin, Helsinki or Stockholm, supports the proposition that not only size matters.

Cities are also attractive for consumers offering a large and diverse supply of services and culture.

The Baltic capitals still lag far behind most European cities. Neighbouring EU capitals, including Helsinki, Copenhagen and Stockholm have a GDP per capita that exceeds the Baltic ones by a factor of four or five. This can be seen as an opportunity to create a virtuous circle of development benefiting not just Riga, Tallinn and Vilnius but also the national economies as a whole.

Table 2: GDP per head of capitals in 2001

<table>
<thead>
<tr>
<th>City (larger urban zone)</th>
<th>GDP per head, Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riga</td>
<td>5,663</td>
</tr>
<tr>
<td>Tallinn</td>
<td>7,435</td>
</tr>
<tr>
<td>Vilnius</td>
<td>6,342</td>
</tr>
<tr>
<td>Amsterdam</td>
<td>36,457</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>38,443</td>
</tr>
<tr>
<td>Dublin</td>
<td>28,830</td>
</tr>
<tr>
<td>Helsinki</td>
<td>32,512</td>
</tr>
<tr>
<td>Stockholm</td>
<td>37,070</td>
</tr>
<tr>
<td>Warsaw</td>
<td>9,224</td>
</tr>
</tbody>
</table>

Sources: Urban Audit, and Statistical office of Estonia for Tallinn

This is the latest data at city level available from the Eurostat Urban Audit.
Data is gathered every 5th year and the next audit is due in 2006

Production structure
In all three countries it is evident (see table 3) that in comparison with the country as a whole, the metropolises are specialised in the service sector (tertiary). While it is natural to expect that agricultural production is at a low level in metropolitan regions, for all three capitals the share of manufacturing (secondary sector) is also below the national figures. In Lithuania the national share of manufacturing is more than 30 percent, but in Vilnius County only 26 percent. Latvia as a whole and Riga have the lowest share of value added in secondary sector. However, when we compare to other capital cities in Europe, the Baltic capitals still have relatively low shares of tertiary employment. Data from EuroStat’s Urban Audit shows that tertiary sector employment in European capitals mostly ranges from 70 to 90 percent of the total, with the Baltic capitals at the bottom of this range.
Table 3: Gross Value Added, metropolitan regions and national data 2003, three sectors

<table>
<thead>
<tr>
<th></th>
<th>Primary sector</th>
<th>Secondary sector</th>
<th>Tertiary sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riga</td>
<td>1%</td>
<td>19%</td>
<td>80%</td>
</tr>
<tr>
<td>Tallinn</td>
<td>1%</td>
<td>25%</td>
<td>74%</td>
</tr>
<tr>
<td>Vilnius</td>
<td>2%</td>
<td>26%</td>
<td>72%</td>
</tr>
<tr>
<td>Latvia</td>
<td>Primary sector</td>
<td>5%</td>
<td>23%</td>
</tr>
<tr>
<td>Estonia</td>
<td>4%</td>
<td>28%</td>
<td>67%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>6%</td>
<td>32%</td>
<td>62%</td>
</tr>
</tbody>
</table>


Besides being important drivers of economic growth, the labour market of cities are generally more diversified and dynamic than that in the rest of the country. Cities typically specialise in fields that are knowledge intensive. This shows in a large share of population with high level of education.

The level of education is relatively high in the Baltic countries. At the country level the share of population with tertiary educations is 12 percent Latvia, 18 percent Estonia and 14 percent Lithuania. The concentration is higher in the capitals than in the rest of the country. The population of Tallinn and Vilnius have a significantly higher share of tertiary education than has Riga. Tallinn and Vilnius stand out internationally with a particularly high share of higher educated people.(see Table 4).

Table 4: Resident population with tertiary education, 2001

<table>
<thead>
<tr>
<th>City</th>
<th>Percentage</th>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riga</td>
<td>16%</td>
<td>Latvia</td>
<td>12%</td>
</tr>
<tr>
<td>Tallinn</td>
<td>29%</td>
<td>Estonia</td>
<td>18%</td>
</tr>
<tr>
<td>Vilnius</td>
<td>29%</td>
<td>Lithuania</td>
<td>14%</td>
</tr>
<tr>
<td>Amsterdam</td>
<td>24%</td>
<td>Netherlands</td>
<td>15%</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>20%</td>
<td>Denmark</td>
<td>17%</td>
</tr>
<tr>
<td>Dublin</td>
<td>17%</td>
<td>Ireland</td>
<td>14%</td>
</tr>
<tr>
<td>Helsinki</td>
<td>28%</td>
<td>Finland</td>
<td>20%</td>
</tr>
<tr>
<td>Stockholm</td>
<td>18%</td>
<td>Sweden</td>
<td>15%</td>
</tr>
</tbody>
</table>


All three capitals have a high share of employment in the service sector. Employment specialisation can be shown at the industry level for Riga, Tallinn and Vilnius with the help of the location quotient. See figure 3.

---

7 The location quotient measures the relative share of employment in a given sector in the capital as compared with the rest of the country. Thus, a value of 1 means that the sector is entirely concentrated in the capital. A value in excess of zero means some degree of specialisation in the capital and a negative value means that the sector is concentrated outside the capital.
Figure 3: Specialisation of employment in Riga, Tallinn and Vilnius, 2003*

Looking at industry level specialisation relative to employment nationally, the capitals are less similar. Riga has the highest concentration of employment in “Real estate and business services”. The same industries are important in Tallinn and Vilnius, as well, but they rank third and second. Tallinn and Vilnius show the highest concentration in “Financial intermediation”. Riga’s second most important concentration is within “Financial intermediation” and Tallinn’s is “Hotels and Restaurants”. Riga’s third specialisation is “Wholesale and Retail Trade” and Vilnius’ is “Transport and Telecommunications”. Other notable differences are that “Manufacturing” and “Construction” are relatively more important in Riga and Tallinn, but having clearly lower concentrations in Vilnius.

4.2 Economic linkages

The three capitals receive a very high share of their country’s incoming foreign direct investments (FDI). Another important feature is that the growing flows of outgoing foreign direct investments from Baltic countries concern the capitals. For the large investments such as Hansapank group, Lattelekom, Snoras bankas, Bite GSM, Hypermarket and others the actual investment often is not a local one but flows indirectly from outside the Baltic countries (Sweden, Finland, Germany, Norway etc.) and are channelled through one of the Baltic countries to the other two.
Riga Investment in Tallinn and Vilnius

Tallinn is an important location for Riga investments. At the end of 2005 there were more than 350 Latvian enterprises registered in Estonia. Most of them arrived between 2003 and 2005. Wholesale and retail companies make up almost one half of the Latvian enterprises in Estonia. Recent investments to Tallinn include banking and insurance. Investments from Riga to Vilnius are concentrated to finance and service sectors, in many cases the same ones as in Tallinn. Investments from Riga to Vilnius have in many cases preceded the investment to Tallinn.

Table 5: Riga investments in Tallinn and in Vilnius (selected)

<table>
<thead>
<tr>
<th>Riga investments in</th>
<th>Tallinn</th>
<th>Vilnius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baltiteras (1995) – Monald Metals AS wholesale of metals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vincents (2006) - car retailing</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BTA - insurance (coming 2006)</td>
<td>Baltic Polis</td>
</tr>
<tr>
<td>Real Estate</td>
<td>BREM (2001) real estate maintenance (Partly Latvian)</td>
<td></td>
</tr>
<tr>
<td>IT services</td>
<td>Lattelecom (2002)</td>
<td></td>
</tr>
</tbody>
</table>

Tallinn investment in Riga and Vilnius

Riga is a very important destination for Tallinn’s investments to Latvia. The main reasons to invest in Latvia are geographical proximity, growth potential and earlier contacts, according to a survey of Estonian investors, (Varblane, 2004). Very few investments concern vertical investments, instead the majority of Estonian FDI to Latvia concerns horizontal expansion, i.e. expanding firm or sales networks to Latvia.

Many Tallinn investments are made outside Vilnius. One large investment from Tallinn that has gone outside Vilnius is the Tallinn based shipbuilding and ship repair yard, BLRT that has invested in Klaipeda. Tallinn investments to Vilnius concern mainly the service sector.
<table>
<thead>
<tr>
<th>Tallinn investments in</th>
<th>Riga</th>
<th>Vilnius</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing</strong></td>
<td><em>Hipo</em> – Management and design in Tallinn, production in Riga <em>Elme Messer Gaas</em> – production unit in Latvia (sales in Riga and Liepaja) <em>Interinfo Baltic OÜ</em> – printing and electronic media</td>
<td><em>Harju Elekter</em> – buys 51 percent of Lithuanian Company UAB Rifas</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td><em>Merko Ehitus (SIA Merks in 1997)</em></td>
<td><em>Merko Ehitius</em> – UAB Merko Satyba was established in Lithuania in 1998.</td>
</tr>
<tr>
<td><strong>Wholesale and Retail Trade</strong></td>
<td><em>Hypermarket</em> – current owner Rimi Eesti üõ <em>Magnum medical (1999)</em> <em>BWT King</em> – wholesale of clothing and footwear <em>Sportland International - leisureware</em> <em>Baltika Group – clothing</em></td>
<td><em>Baltika Group – retail of Estonian made clothes</em> <em>Elme Messer Gaas – sales in Vilnius</em></td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td><em>PKL – PKL towing services</em> <em>Tallink - boat traffic Riga-Stockholm</em></td>
<td></td>
</tr>
<tr>
<td><strong>Financial services</strong></td>
<td><em>Hansapank</em> <em>Hansa liising</em> <em>Lohmus, Haavel and Viisemann (LHV)</em> <em>Ergo Kindlustuse AS - insurance</em></td>
<td><em>Hansapank</em> <em>Hansa liising</em> <em>Lohmus, Haavel and Viisemann (LHV)</em> owns 100% Hermis Finansai</td>
</tr>
<tr>
<td><strong>Real Estate</strong></td>
<td><em>Fenniger</em> <em>Pro Capital</em> <em>Aeroc International</em> <em>Neotrust</em></td>
<td></td>
</tr>
<tr>
<td><strong>IT services</strong></td>
<td><em>Microlink acquire: Parks and Lvnet in 1999, Foretech and VAR in 2000</em></td>
<td><em>Microlink acquires: Skaitmenines Kommunikacijos and Taide in 1999</em></td>
</tr>
<tr>
<td><strong>Business services</strong></td>
<td><em>EMOR TNS – Estonian market research subsidiary in Latvia Baltic Market and Media Facts</em></td>
<td><em>EMOR TNS – Estonian market research subsidiary in Lithuania Baltic Market and Media Facts</em></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td><em>Olympic Casino Group Baltija</em></td>
<td><em>Olympic Casino Group Baltija</em> <em>Vilniaus vingis</em> - 25.21% owned by investors of Hansapank*8 <em>Vilniaus baldai</em> - 7.33% owned by investors of Hansapank</td>
</tr>
</tbody>
</table>

### Vilnius investment in Riga and Tallinn

It should be noted that many of the largest Lithuanian companies are not based in Vilnius (e.g *Mazeikiu Nafta*). Also, Vilnius is the Lithuanian city furthest from Riga and Tallinn. For both these reasons much of the Lithuanian investment in Riga and Tallinn comes from outside Vilnius (e.g. *Utenos Trikotazas*). At the same time, some of the most significant investment from Vilnius to Latvia goes outside of Riga (e.g. *Bolderaja*). As with Riga, much of the Lithuanian investment in Tallinn comes from outside Vilnius (e.g. *Kauno pieno centras*). The main investments from Vilnius to Riga and Tallinn are found in the retail sector.

---

8 Source: www.nse.lt
Table 7: Vilnius investments in Riga and in Tallinn (selected)

<table>
<thead>
<tr>
<th>Vilnius investment in</th>
<th>Riga</th>
<th>Tallinn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Wholesale and Retail Trade | *VP Market Vilniaus Prekyba*  
*Apranga* and *Leuvo* opened –Zara /Armani, Imitz and Etam  
*Armitana* (*Salamander*) - shoe retail  
*Danbalt International* – shoe retail  
*Gurda* (2003) - stationary  
*Sinerta* (2003) – office equipment  
*Alnos biuro sistemos* (2004) - office equipment  
*Dalios baldai* (formerly *Siguldos baldai*) – furniture retail  
*Audimas* – retail of sportswear | *T Market Vilniaus Prekyba*  
*Apranga* and opened–Zara /Armani – clothes (2004  
*Lelija* - clothes  
*Armitana* (*Reno and Salamander*) -shoes.  
*Minolta Baltia* – office equipment |
| Hotels and restaurants | *Cili Pica*  
Hotel “Monika” (2006) |        |
| Transportation        |      |        |
| Real Estate           |      |        |
| IT services           | *Comliet* (2002) - installations, intranet systems. |        |
| Business services     |      |        |

Investments from Tallinn to Riga and Vilnius to a large extent involve financial services. Other industries represented are wholesale and retail trade, IT and business services as well as manufacturing and construction. The main investments from Vilnius to Riga and Tallinn are found in retailing sector, hotels and restaurants and lately in banking sector. Riga investments in the other two capitals are concentrated in retail (to smaller extent than Vilnius to Riga), financial sector and IT services. Conclusion is that the main linkages between Baltic capitals concern service sector investments, dominated by consumer services. We find cross investments between the three capitals in almost all economic sectors, indicating and implying more interdependence and movement towards common market. What should be noted that there are no investments in education sector between the Baltic countries.

The general pattern of investments originating from other countries than the Baltics is that one capital serves as a gateway for the original investment. In a later phase the investor goes to the other two capitals, which is probably what one can expect from companies dealing with consumer services. There will be little competition over a wide range of goods due to geographical convenience.
The neighbouring Baltic countries are key trading partners for each other (see Table 8). This is noticeable especially for exports. The other two Baltic countries are particularly important as trading partners for Latvia, where it is seen that quite remarkably Lithuania and Estonia have become the Latvia’s number one export destinations, overtaking Germany and the UK.

**Table 8: Trade partners 2005 (shares and rank)**

<table>
<thead>
<tr>
<th></th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latvia</td>
<td>Lithuania 10.8 (1)</td>
<td>Lithuania 13.7 (2)</td>
</tr>
<tr>
<td></td>
<td>Estonia 10.8 (1)</td>
<td>Estonia 7.9 (4)</td>
</tr>
<tr>
<td>Estonia</td>
<td>Latvia 8.7 (3)</td>
<td>Lithuania 6.0 (5)</td>
</tr>
<tr>
<td></td>
<td>Lithuania 4.6 (6)</td>
<td>Latvia 4.7 (6)</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Latvia 10.3(2)</td>
<td>Latvia 3.9 (4)</td>
</tr>
<tr>
<td></td>
<td>Estonia 5.9 (5)</td>
<td>Estonia 2.8 (10)</td>
</tr>
</tbody>
</table>

Source: National statistical offices

Latvia’s main export products to Estonia and Lithuania are chemicals, followed by processed food products to Lithuania and textiles to Estonia. The main exports from Estonia to Latvia are chemicals and to Lithuania consist of processed foodstuffs. Lithuania’s dominating export article to Latvia and Estonia is mineral products (refined oil products).

### 4.3. Human resources

**Population dynamics and forecasts**

In contrast to Western Europe where most capital cities gained population in the 1990s (for example Helsinki and Stockholm that gained 12 and 10 percent because of internal migration) population dynamics has been very negative in the Baltic capitals. Initially there was a loss of population because of the emigration of Soviet military personnel, then low and falling birth rates contributed and more recently there has been a tendency for people to move to the outskirts of the capital, physically outside the city borders, but commuting to work in the capital. During the past few years population has stabilised in all three capitals, see Figure 4.

**Figure 4: Population of Baltic capitals (thousands) 1990-2005**

![Population Chart](chart.png)

Sources: Statistical offices of Estonia, Latvia and Lithuania.
According to the long run population forecast, commissioned by Harju County Government, the population of Harju County is expected to remain roughly at the current level until 2025 – approximately 530 - 540 thousand inhabitants. The population inside the borders of Tallinn is predicted to decrease to approximately 355 thousand from the current 400 thousand. On the other hand, the number of inhabitants in hinterland is expected to rise to 175 - 185 thousand. At the same time rising income means that it becomes economic for people to commute to Tallinn, sometimes staying there during the work week, from more distant locations in Estonia. Thus the mid-week population of Tallinn is much higher than the official resident population.

Long-term population projection for Latvia indicates under-replacement of generations in the future as well as a rapid ageing of the population in the next couple of decades. There is a rapid reduction (absolute and relative) in the number of children. The medium term population structure is already largely known and it is clear that in 2020 the number of young people at age 15-19 years will be half of those in the year 2000. Population in Riga would is expected to follow the same trends, meaning a potential shortage of future workforce. The City Government would like to break the negative trend and stimulate population growth in the city.

In Vilnius, current trends suggest that the number of Vilnius inhabitants continues to shrink and, we expect this to continue for at least the next 3-5 years. Thus the population of Vilnius is likely to be around 550-570 thousand in 2010.

**Education and training**

Estonia, Latvia and Lithuania are in the process of integrating their higher education system into the European model. Education reforms from Soviet type education have been completed and adjustment has been achieved to meet the high demand for education, especially in social sciences. Private higher education institutions have emerged that provide one fourth of higher education study places.

Number of students per 1000 population in tertiary education is very high by international standards. In Latvia with 55 students in tertiary education in 2002/2003 it is the highest in Europe and Lithuania and Estonia follow in 3rd and 4th places respectively.

However, Table 9 shows the proportion of students in natural sciences and engineering is very low in Latvia and Estonia.

<table>
<thead>
<tr>
<th>2002*</th>
<th>Graduates in natural sciences and mathematics (% of total)</th>
<th>Graduates in engineering and technology (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>6.0</td>
<td>12.1</td>
</tr>
<tr>
<td>Latvia</td>
<td>6.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Lithuania</td>
<td>4.9</td>
<td>20.7</td>
</tr>
<tr>
<td>EU-15</td>
<td>11.1</td>
<td>14.6</td>
</tr>
</tbody>
</table>


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9 Tammaru, T. Tallinna Linnastu Rahvastikuprognoos, Tartu Ülikool, Harju Maavalitsus, Tartu 2001
10 Demography centre of the University of Latvia.
Education in Latvia and Estonia is very much social sciences and humanities oriented. The number of students enrolled in natural sciences and mathematics indicate that sciences and engineering, although claimed to be at a high level by world standards, are not popular in Baltic countries, especially in Latvia.

The following characteristics are typical of the Baltic education market and partly explain the high interest in social sciences (economics, business administration, finances, law) programmes:

- High proportion of older students (acquiring second diploma after Soviet education);
- Low proportion of students in natural sciences and engineering because of very high demand for social sciences education by older generation students;
- Poor matching between educational outcome and business needs.

In all Baltic countries Continuing Vocational Training (CVT) is regularly organized in the big enterprises, but in medium size enterprises (10-49 employees) the training is only organized in every second of them (see table 10) whereas in Northern countries it is done in 87% of enterprises sized 10-49, and nearly all enterprises with more than 50 employees.

<table>
<thead>
<tr>
<th></th>
<th>Estonia</th>
<th>Latvia</th>
<th>Lithuania</th>
<th>Northern countries (Norway, Sweden, Finland, Denmark)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>63</td>
<td>53</td>
<td>43</td>
<td>89</td>
</tr>
<tr>
<td>Including with the number of employees:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 – 49</td>
<td>58</td>
<td>49</td>
<td>37</td>
<td>87</td>
</tr>
<tr>
<td>50 – 249</td>
<td>85</td>
<td>70</td>
<td>60</td>
<td>97</td>
</tr>
<tr>
<td>250 +</td>
<td>96</td>
<td>91</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>


It appears that enterprises in Baltic need to pay more attention to employee training. The problem with low productivity (and higher unemployment within recent graduates) is not that the education institutions produce graduates with inappropriate qualification; it is that the skills are not sufficiently adapted and accommodated. Local enterprises are currently not prepared to invest in employees. This is characterized also by the fact that only 28% of enterprises in Latvia evaluate employee qualification and discuss training necessity (in Estonia – 44%, Lithuania – 42%). Investors in Baltic countries would most probably find workforce that has similar level of productivity provided the same level of training as in “old” Europe countries.

**Unemployment**

The ongoing economic boom together with migration to Ireland, UK and Sweden following EU accession means that unemployment rates have fallen rapidly in the Baltic countries as a whole and in the capitals in particular. Indeed there is now the emergence of significant shortages in sectors such as construction.
Cost of human resources

Figure 5 shows that average monthly wages in Baltic countries presently much lower than in the EU-15.

![Figure 5: Wage levels (Denmark = 100) in 2005](image)

Source: Wage level in a selection of European countries - FEE data (Federation of European Employers)

Figure 6: Labour productivity per employee in CEE, 2003

![Figure 6: Labour productivity per employee in CEE, 2003](image)

Source: Eurostat

At the same time Labour productivity in all Baltic countries is only some 40% of the EU average, and Latvia, Estonia and Lithuania lag behind all other new EU member states see Figure 6.

Labour market challenges

Emigration (both of highly qualified and low skilled labour force) is the key emerging labour market challenge in all three capitals. It has displaced long-term unemployment as a problem
– unemployment, including long term unemployment, has been dramatically reduced by the ongoing economic boom in the Baltics.

Since EU accession in 2004 a large, but not precisely known, number of workers have moved to Ireland, the UK and Sweden. More are likely to go to Finland, Greece, Portugal and Spain who opened their doors in May 2006. Employers increasingly report labour shortages, especially (but not restricted to) in construction and hotel and restaurant sectors. The brain drain (emigration of highly educated workers) is not a new problem, but nowadays we see also the departure of less qualified people. Latvia and Lithuania are especially affected, and the issue is high on political agenda. Expansion of the labour force in the capitals at the expense of regions is no longer very realistic, since now capitals have to compete with Ireland and UK. The Baltic capitals may need to turn to Ukraine, Belarus and Russia for qualified staff.

4.4. Business environment

Taxation

Across the Baltic States we observe not only differences in tax rates, but also variation in the structure of taxation. Although all three states have the so-called flat tax on personal income, in Lithuania the tax rate on self-employed providers of services is lower than that on employees’ wage income. The structure of corporate taxation also varies; there is no corporate income tax in Estonia, while in Latvia dividends are not taxed. The resultant combined tax on individual’s income from profit, at only 15 percent, is thus considerably lower in Latvia than in the other two Baltic States At the other end of the Baltic range Lithuania has a more standard approach to the taxation of profit; it combines a corporate income tax of 15 percent with a withholding tax on dividends of 15 percent, making a combined tax on profit income of about 28 percent. Looking to the future, it is also noteworthy that Estonia will soon be forced to either reinstitute the corporate income tax or remove taxation of dividends to foreign parent companies due to concerns from the EC that its current tax rules are discriminatory against dividends to non Estonian parent companies. Tax rates on personal income are being reduced in both Estonia and Lithuania, with legal schedules of rate reductions till 2008. It is worth pointing out that for small unincorporated business these much higher rates (currently 24 percent in Estonia, 25 percent in Latvia and 27 percent in Lithuania) are the tax rates paid on profits.

However, in other ways the Baltic States do appear as a distinct group in the Central and Eastern European region. They have a uniform VAT rate of 18 percent, the lowest in the region. And their combined tax rates on profit are lower than all other countries in the region except Slovakia, which recently followed in Latvia’s footsteps by abolishing taxation of dividends. They compare even more favourably in this regard with the countries of the pre-2004 EU. To take the example of a country known for its relatively light taxation by European standards, the UK corporate income tax rate is 30 percent (19 percent for companies with profit under €430,000) and the tax on dividends reaches as high as 32.5 percent.

Local tax power is almost completely absent in the Baltic States. The main exception is the ability in Estonia to set the property tax rate and establish a sales tax, although the latter has not been done by Tallinn. Latvian and Lithuanian municipalities have the power to abate property taxes. Latvian local authorities collect their own property taxes and Riga, along with a few of the other largest Latvian cities, administers collection of the personal income tax. Since cities receive much of their revenue from tax sharing of the personal income tax they have some incentive to compete for residents, particularly those with higher income.

**Corruption**

Latvia is consistently ranked as the most corrupt of the three Baltic states. In the 2004 Transparency International Corruption Perceptions Index\(^\text{14}\) Estonia is ranked 31\(^\text{st}\), followed by Lithuania ranked 44\(^\text{th}\) and Latvia ranked 57\(^\text{th}\). Hence the three Baltic states are comparable to the Visegrad countries with Estonia ranked higher (equal to Slovenia) and Latvia ranked joint lowest with Slovakia. The Global Competitiveness Report\(^\text{15}\) finds that both Latvia and Lithuania ranked worst on the “policy consequences of legal political donations”, suggesting political corruption is a bigger problem than administrative corruption in these countries. In Estonia it was the “business costs of irregular payments” that stood out as the most acute aspect of corruption. It is also worth noting that corruption is perceived to be a larger problem in local government structures than in national, and this explains low Baltic enthusiasm for giving local government more autonomy.

**Basis of investment decisions**

The global real estate services firm “Cushman & Wakefield Healey & Baker” carries out surveys with top business executives and asks them to rank the attractiveness of European cities. In the 2004 edition, the interviewees were asked to rank the importance of twelve factors. ‘Easy access to markets’ was chosen as the most important factor. “Communication factors continue to be very important, as well as the availability of qualified staff. Cost factors are ranked behind these, with quality of life issues rated as the least important,” says David Hutchings. (www.cushmanwakefieldeurope.com/servlets/site/readArticle?newsID=1208)

The most common concern among those interviewed relate to the need of improving communications. Top comes public transport within cities, followed by traffic congestion and transport links with other cities. However, none of the Baltic capitals are included in the survey.

Another report from the same firm, published in 2003, draws the conclusion that availability of modern property – whether for offices, retail or distribution – is a catalyst to attract businesses to European emerging markets. The availability of land and industrial property is key for manufacturing investments.

From these studies it is possible to conclude that:

The ranking of business attractors are according to international surveys the following:

- Easy access to markets

\(^{14}\) www.transparency.org
- Communication infrastructure
- Availability of qualified staff
- Cost factors
- Quality of life

According to the survey done by the Italian Chamber of Commerce, the main factors that influenced Italian investments into Lithuanian market are:

1. Commercial interests in Baltic countries – 47%
2. Cheap work force – 33%
3. Highly qualified work force – 20%

4.5. Infrastructure

Property markets

Construction of modern office space is at a high level in all three capitals. Demand has, however, grown more rapidly than construction, in Riga and Tallinn, in particular. Office rents have increased and so have the number of pre-lease and pre-sale deals. At the end of 2005, Riga’s A and B class office market stock reached close to 100,000 sqm. The overall vacancy rate was about 10%. Tallinn’s office stock increased to 220,000 sqm in 2005 and the overall vacancy rate dropped to 5%. In Vilnius office stock increased to 140,00 sqm and the vacancy rate was 10%. In Riga and Tallinn prices of production premises have increased rapidly during the past two years. However, developments of retail and warehouse rents were relatively stable in the second half of 2005 in all three capitals, according to Colliers International, see Table 11.

<table>
<thead>
<tr>
<th></th>
<th>Office class A</th>
<th>Office class B</th>
<th>Shopping centre</th>
<th>Warehouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riga</td>
<td>16.5</td>
<td>10.6-14.2</td>
<td>15-35</td>
<td>3.5-4.5</td>
</tr>
<tr>
<td>Tallinn</td>
<td>12-19</td>
<td>6-12</td>
<td>12-18</td>
<td>5.8</td>
</tr>
<tr>
<td>Vilnius</td>
<td>14.5-17.4</td>
<td>7.5-15.9</td>
<td>12-20</td>
<td>4.05-5.21</td>
</tr>
</tbody>
</table>


Internet, telephone and similar services

In the survey about IT&T access published on LETA in 2003 all three Baltic countries were classified as upper access countries, not very far from Ireland and Cyprus, but the Baltic Countries are still less developed than the Nordic countries, who scored the highest values in the survey.

According to Eurostat prices of long distance telephone calls are relatively high in Latvia and Lithuania when comparing to Estonia and to other European countries. However, the price of natural gas is relatively lower than in other European countries.
Table 12: Public services tariffs in some European countries

<table>
<thead>
<tr>
<th></th>
<th>Telecommunications</th>
<th>Electric energy</th>
<th>Natural gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>local calls (EUR; incl. VAT)</td>
<td>10 min. call with USA (EUR; incl. VAT)</td>
<td>Private persons (EUR/kWh; excl. taxes)</td>
</tr>
<tr>
<td>Belgium</td>
<td>0,54</td>
<td>1,83</td>
<td>0,11</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0,48</td>
<td>3,40</td>
<td>0,07</td>
</tr>
<tr>
<td>Denmark</td>
<td>0,37</td>
<td>2,73</td>
<td>0,09</td>
</tr>
<tr>
<td>Estonia</td>
<td>0,25</td>
<td>2,60</td>
<td>0,06</td>
</tr>
<tr>
<td>Latvia</td>
<td>0,42</td>
<td>6,90</td>
<td>0,05</td>
</tr>
<tr>
<td>Great Britain</td>
<td>0,56</td>
<td>3,37</td>
<td>0,08</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0,39</td>
<td>8,10</td>
<td>0,05</td>
</tr>
<tr>
<td>Poland</td>
<td>0,35</td>
<td>10,50</td>
<td>0,06</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>0,37</td>
<td>2,70</td>
<td>0,06</td>
</tr>
<tr>
<td>Spain</td>
<td>0,28</td>
<td>2,21</td>
<td>0,09</td>
</tr>
<tr>
<td>Hungary</td>
<td>0,39</td>
<td>3,80</td>
<td>0,08</td>
</tr>
<tr>
<td>Germany</td>
<td>0,42</td>
<td>1,23</td>
<td>0,13</td>
</tr>
<tr>
<td>Sweden</td>
<td>0,30</td>
<td>1,12</td>
<td>0,09</td>
</tr>
</tbody>
</table>

Source: Eurostat 2004

The number of fixed internet connections is on the rise in the Baltic countries. By having 10 connections per 100 inhabitants, Estonia comes close to Finnish and Swedish figures of 15 fixed internet connections. Mobile penetration is also growing rapidly in the Baltic countries, in 2004 penetration was 59 percent in Latvia, 84 percent in Estonia and 79 percent in Lithuania, see table below.

Table 13: Telephone and internet, 2004

<table>
<thead>
<tr>
<th></th>
<th>Fixed internet connection per 100 inhabitants</th>
<th>Cellular mobile subscribers per 100 inhabitants</th>
<th>Main telephone lines per 100 inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>10.2</td>
<td>84</td>
<td>33</td>
</tr>
<tr>
<td>Latvia</td>
<td>2.4</td>
<td>59</td>
<td>28</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3.7</td>
<td>79</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: Tallinn Facts and Figures 2005 and International Telecommunication Union

In September 2004 there were two mobile operators in Latvia: LMT and Tele2, with a penetration rate of 29 and 34 percent respectively. Tariffs varied between 2.5-18.5 eurocents per minute depending on time of day and operator. In 2005 the third operator BITE GSM received a license and started operations in Latvia that brought down tariffs and increased competition.
In Estonia, there were three mobile operators—EMT, Elisa (formerly Radiolinja) and Tele2—until October 2004. The fourth operator, Bravocom, based on Estonian capital, launched its services in November 2004. Bravocom put a downward pressure on prices of mobile phone calls with offers of 1.5 EEK/minute (approximately 10 eurocents per minute), the other operators have followed.

There are three mobile operators in Lithuania. Mobile tariffs vary up to €0.23 per minute depending on the time of day and operator.

**Transport infrastructure**

The road distance between the cities is about 300 kilometers. From Vilnius to Riga it is 300 kilometers and from Riga to Tallinn 307 kilometers, see table.

<table>
<thead>
<tr>
<th></th>
<th>Riga</th>
<th>Tallinn</th>
<th>Vilnius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riga</td>
<td>-</td>
<td>307</td>
<td>300</td>
</tr>
<tr>
<td>Tallinn</td>
<td>307</td>
<td>-</td>
<td>605</td>
</tr>
<tr>
<td>Vilnius</td>
<td>300</td>
<td>605</td>
<td>-</td>
</tr>
</tbody>
</table>


In a European Union perspective the Baltic capitals are located in the periphery. The distance from the three Baltic capitals to the heart of the European Union in Brussels is more than 2,000 kilometers. Moscow is at a distance of 1,000 kilometers from all the Baltic capitals. The closest major cities when considering road distance are St Petersburg and Warsaw. However, Helsinki (not shown in the table below) is very close to Tallinn, about 85 kilometers across the Gulf of Finland.

<table>
<thead>
<tr>
<th></th>
<th>Riga</th>
<th>Tallinn</th>
<th>Vilnius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berlin</td>
<td>1,229</td>
<td>1,533</td>
<td>1,053</td>
</tr>
<tr>
<td>Brussels</td>
<td>2,130</td>
<td>2,437</td>
<td>1,957</td>
</tr>
<tr>
<td>Moscow</td>
<td>1,011</td>
<td>1,085</td>
<td>1,023</td>
</tr>
<tr>
<td>St Petersburg</td>
<td>570</td>
<td>359</td>
<td>704</td>
</tr>
<tr>
<td>Warsaw</td>
<td>654</td>
<td>961</td>
<td>481</td>
</tr>
</tbody>
</table>


All three capitals have an international airport offering major European destinations. Growth has been rapid at all airports and each of them served about 1.5 million passengers in 2005. After becoming members of the European Union there are direct flights to Brussels from each of the airport. Intercontinental flights are not available from Baltic capitals.

Riga and Tallinn are located by the sea. The seaports in Riga handle both international passenger traffic and goods. The number of passengers was 229 thousand in 2004. In terms of goods shipments Riga’s port is Latvia’s second after Ventspils. In total 24.4 million tons of cargo were handled in 2005 by the port of Riga. In terms of passengers the port of Tallinn is substantially larger than Riga, handling 6.7 million passengers in 2004 and 7.0 million in

Vilnius lacks a seaport but is still an important transport node, hosting major road and railway junctions of Lithuania. Riga hosts several international passenger lines connecting Riga with St Petersburg, Moscow and Vilnius. The major freight transport links with Russia use railways. For Tallinn railways have the main importance for freight transport between Estonia and Russia. The passenger traffic with St. Petersburg and Riga has been interrupted. The only remaining international passenger destination is Moscow.

5 Looking forward: competition and cooperation among the Baltic capitals

Looking forward to development prospects for Riga, Tallinn and Vilnius we select aspects of the picture that give maximum insight into future trends:

- Current investments: these provide an indication of what infrastructure and business capital will be available in the cities in the foreseeable future.

- Stakeholder views as to what is necessary for further development of the metropolises.

- How far are the capitals complementary and how far competitive?

5.1 Where are current investments pointing?

Investment is the ultimate forward looking economic activity. Hence, it is potentially helpful to extract information from the market on the configuration of investment. This is a way to extract information that exists in society in disaggregated form. A key source of data covers foreign direct investment, particularly relevant given the international context of this project. Another key aspect is the infrastructure investments being undertaken or planned. These investments will form the basis for business in the coming decades and thus, for good or for ill, will automatically shape the future of the cities.

Tallinn

Bank of Estonia data gives the following information on foreign direct capital in Estonia by the end of September 2005.\(^\text{16}\)

- Most FDI has come from Sweden, with Finland in second place. Two thirds of the inflow from the beginning of 2003 to the end of September 2005 came from Sweden.

---

\(^{16}\) There is no comprehensive data on investments for Tallinn or Harju county, thus we have to rely on information for all of Estonia. However, about 80 percent of these investments concern Tallinn, so data should give a relatively accurate picture on current investments into the city. Source: http://www.eestipank.info/pub/en/dokumendid/statistika/.
• Financial intermediation dominates, followed by real estate, renting and business activities and then by manufacturing, and the same is true of the inflow from the beginning of 2003.
• One third of Estonian outward investment has gone to Lithuania and another third to Latvia. During the second quarter of 2005 there was a huge Estonian FDI in Russia that tripled Estonia’s stock of direct capital there.
• At the end of September 2005 the stock of foreign direct capital in Estonia was €10.4 bn and Estonia’s direct capital abroad was €1.4 bn.

The big infrastructure projects planned in Tallinn are as follows.

Large business infrastructure projects:

• Dvigatel area (Ülemiste City). Located next to Tallinn Airport. 33 ha (max 53 ha). Investments estimated 6–8 bn EEK.
• Muuga Industry Park. Located adjacent to Muuga cargo port. 78 ha.
• TEHNOPOL – Tallinn Science/Technology Park. 7 km from Tallinn city centre next to Tallinn University of Technology. 10 ha of land with several existing buildings, cluster of IT firms. Joint project of Tallinn City, TUT, Ministry of Economic Affairs.

Residential/commercial

• Admiraliteedi marina. 4.2 ha; 500 – 600 apartments; 3 years. Estimated investment: ca 1.5 bn EEK.

Logistics

• Sakala Centre. Multifunctional centre in the city centre. Estimated investment: ca 300 mln EEK.

City of Tallinn investments into infrastructure

• Northern bypasses around the city centre (2008-2010).
• Tallinn Airport plans extension doubling the passenger service area.
• City Tram – „Tallinn Tram” light rail connecting centre and eastern and western parts of Tallinn with the city centre. 3.9 bn EEK project. The first stage of building a new tramline between Lasnamäe, Tallinn city centre and Mustamäe begins in 2006. 14 million EEK has been reserved in the city budget in 2006-2007. The French consultancy Systra has proposed a new tram line of 10.6 kilometres between Lasnamäe the city centre as a first phase and another connection between the city centre and Mustamäe, 8.7 km as a second phase. The first phase is planned to be completed in 2015 and the second phase at the end of 2020.

Riga

Accumulated company capital gives the following picture on comparative advantage in June 2005:
• Sweden stands out as the main source of FDI, with Estonia in second place.
• Banking (NACE 65) and “other business activities” (NACE 74) stand out as the largest recipients of FDI to date. NACE 74 includes call centres, security firms and consulting – so called footloose sectors.
• Swedish investment is particularly large in “other business activities” (NACE 74).
• One third of Latvian outward investment goes to Lithuania and another quarter to Estonia.
• Over a third of Latvian direct investment in Lithuania is in banking.
• At end 2004 the total stock of foreign direct capital in Latvia was €3.4 bn; Latvian direct capital abroad was €0.2 bn.

However, looking only at more recent flows (2003 to June 2005) gives the following picture:

• Big inflows in banking and “other business activities”.
• Largest inflows from Estonia.
• Marked fall in Latvian direct capital in Lithuania in 2004.

Major infrastructure projects in Riga include:

• Construction of the Southern Bridge over the river Daugava.
• Plans to build a tunnel under the river Daugava.
• Construction of the multi-storey Hansabanka high rise building.
• Development of Kipsala island for use as a business district.
• Construction of two major sports arenas in the city centre.
• Planned development of park and ride connected to the tram network.\footnote{“Rigas attistabas plans”, section 9.5. <http://www.rdpad.lv/rpap/>}

**Vilnius**

The accumulated foreign direct capital stock gives the following picture on comparative advantage up to the beginning of 2005:

• Denmark and Sweden stand out as the main sources of FDI.
• But the largest number of investors by far came from Germany.
• Banking (NACE 65) and post and telecom (NACE 64) are the largest recipients of FDI to date.
• More than half of Lithuanian outward investment goes to Latvia and another 5 percent to Estonia.
• Almost half of Lithuanian outward investment and over three quarters of its direct investment in Latvia is in the retail trade.
• The total foreign direct capital stock in Lithuania was €4.7 bn, Lithuanian direct capital abroad was €0.3 bn.

However, looking only at more recent flows (2003 and 2004) gives the following:
• Big inflows in electricity, gas and water supply and in chemicals and refined petroleum products (NACE 23&24).
• Largest inflows from Russia and Germany.
• Largest increase in number of investors came from Estonia, although there was a marked decrease in the size of the Estonian FDI stock in Lithuania during the period.
• Huge jump in Lithuanian investment in Latvia in 2004, the flow to Latvia in 2004 was more than the whole stock of investment in all countries at the beginning of the year!

Banking and the chemical industry are potential areas of comparative advantage for Lithuania. Banking may benefit from the educated workforce and comparative technological openness in the country relative to other areas outside the pre-2004 EU. The chemical industry may build on the existence of a refinery in the country and the tradition of this industry. However, the chemical industry is likely to be challenged by competition from China.

What does seem clear, however, is the important role played by Latvia as a place for Lithuanian direct investments, particularly in the retail sector. Given the proximity of the two states this relationship seems likely to continue. And the retail markets of these countries are thus seen as areas of strong complementarity. That gives Vilnius quite a direct benefit from any increases in Latvian income.

Turning to investment projects in Vilnius sheds light on the infrastructure available to the city over the next couple of decades.

• “The New Part of the City Centre” is the name given to developments along a dual carriageway on the North side of the main river through Vilnius, the Neris. This moves the city centre away from the Old Town, which is located on the South side of the Neris.  

• The Old Town Southern Motorway. This will create a bypass around the South side of the Old Town and increases the speed of access to the airport. The City aims to complete this in 2007.
• Modern Tram and Parking System. Two lines totaling 23 km are planned to connect residential areas and the city centre. The city plans to start construction in 2007.
• Lentvaris Industrial Area. Infrastructure investments planned in the transport and engineering infrastructure of this SW portion of the city. Construction period: 2006-2008.
• Seskine Sports Centre. A national stadium for international sports events and entertainment next to Acropolis. Construction period: 2007 –

Vilnius has also entered into a strategic partnership with Kaunas, the duopolis strategy. Due to the two cities’ proximity projects such as the transcontinental airport and mega shopping and entertainment city in Kaunas can be complements to Vilnius’s own assets and assist in the development of Vilnius.

What do we learn from investments?

The key lessons from the investments are the following:

• A high proportion of Baltic direct investments abroad take place in each of the other Baltic States. This gives the residents of each Baltic capital a direct interest in developments in the others.
• Large infrastructure investments in new commercial zones are currently underway in each of the Baltic capitals that will change the structure of these cities quite markedly. These include the development of the Dvigatel area near Tallinn airport, development of Kipsala in Riga and the new city centre on the North bank of the Neris river in Vilnius.
• Similarly major investments are taking place in the transport infrastructure. Current examples include the construction of new tram lines in Tallinn, the Southern Bridge in Riga and the Old Town Southern Motorway as well as Southern bypass in Vilnius.

Hence the following policy implications are apparent:

1. It will be important for policy to consider the positive benefits that flow to residents in each city from economic growth in the other cities as a result of their investment there.
2. Current issues with regard to commercial and transport capacity are already being addressed and hence these concerns are less urgent than other areas that are yet to be dealt with.

5.2. Views of the stakeholders

Investors are key stakeholders in the future of the Baltic capitals. Focus group interviews carried out in each city in 2005 give insights into how they see the picture.

Basis of Investment Decisions

Investment decisions are based on expected profits. This is true of local as well as foreign investors. Important for foreign investors for choosing where to invest is most often a combination of different factors such as economic growth, stability of macro economy and low costs. Other aspects that play a significant role include:

• infrastructure,
• easy access to markets,
• availability of suitable land
• availability of labour with the right qualifications.

Access to land and property as a basis for investment decisions is held out as essential for countries in Central and Eastern Europe by the real estate services firm Cushman & Wakefield Healey & Baker. In their research they draw the following conclusion: "The availability of modern property – whether for offices, retail or distribution – is a catalyst to
attract businesses to these emerging countries. Where space of the right quality is not available, economic development will be slowed."

For finding information on Baltic capitals investors in many cases rely on personal contacts and banks. Lawyers and real estate developers are other professionals who help investors finding information. Investors also use official channels, including investment agencies and embassies. There are also examples of investors who have collected the information themselves.

**Advantages of the Baltic Capitals**

For investors to Riga geographical location is often cited as a key factor. Riga’s and size location in the centre of the Baltics and Riga are often pointed out as important advantages. Riga is also a seaport, has excellent credit ratings, there is low risk and relatively low taxes. Concentration and intellectual potential also influence investment decision and investors originating from the East find knowledge of Russian an important positive factor.

Vilnius is regarded as having good quality of infrastructure. It has also been pointed out that the area around the city is more densely settled than that of Riga or Tallinn. And that there is a friendly attitude. Vilnius is also seen as a gateway to Belarus, Poland and Kaliningrad.

Tallinn is regarded as having a good location and its seaport is a positive factor. Other positive factors include: innovative and good quality business services, high scores in international ratings and business friendly policies. High living standards and closeness to Helsinki and St Petersburg seem to have a positive influence as well.

Strong economic growth, low risk and macro stability contribute to the attractiveness of all three Baltic capitals.

**Problems of the Baltic Capitals**

Common issues mentioned in the focus groups are: small markets, rising input costs, shortages of production land and qualified staff. Other issues include uncertainty about land use planning.

Tallinn and Estonia are small markets, thus making Tallinn less attractive for investments than cities in Poland and Russia and its neighbouring Baltic capitals. Another problem for Tallinn is shortage of skilled labour. This is partly a consequence of Estonia’s smallness and due to structural mismatch between the educational system and labour market demand.

Although office space is easily accessible in Tallinn, the city struggles with an insufficient supply of production land with long waiting times for building permits. Assessments estimate that only 50 percent of the land market works properly. In Tallinn, it has been pointed out that there are discrepancies between the Master plan and detail plans, making property development uncertain. In Vilnius, land acquisition is very time consuming and prices are high. Production companies find it especially difficult due to a lack of industrial zones.

According to interviews in Riga and Tallinn, intervention by politicians into day-to-day city issues is a potential problem since it leads to discontinuity in city policies. Bureaucracy is present in all cities, but the process of confirmation of projects is reportedly slower in Riga.
than in Tallinn and Vilnius. Corruption and a “Soviet attitude” have been mentioned as problems in Riga, in particular.

The flow of investments into cities depends on several factors. Some factors are outside the control of municipalities whereas other can be dealt with at the local level. In 2001, Tallinn established a separate municipal agency “Tallinn City Enterprise Board” to deal with investment issues. The information point of Tallinn City Enterprise Board has helped to reduce bureaucracy and increase access to information. Stakeholders in Riga and Vilnius would also welcome a specialised institution in the city for co-ordinating matters of investment.

### 5.3 Competition or complementarity

A similar economic structure makes the three Baltic capitals competitors for economic development in a number of fields.

All three Baltic countries have a large share of exports of wood, textiles and food. They are all mediators of Russian raw materials thereby earning considerable incomes from this role. The similarities are present also at the level of the three capitals. However, through product differentiation similarities as well as differences can be a foundation for economic co-operation.

The level of competition is closely linked to the field. The diagram below identifies the areas of competition between the three metropolises. In general, the whole East European region competes, and competitors to all capitals and each city separately are found everywhere. For industrial investments average sized Polish towns are competitors. For cruise tourism St Petersburg is the magnet. In conference tourism Baltic capitals compete with Helsinki and Stockholm. Asia competes for investments in metal manufacturing and textiles. But for the purpose of this project we specifically look at the three capitals.

<table>
<thead>
<tr>
<th>Competition for foreign investment</th>
<th>Tallinn – Riga</th>
<th>Riga - Vilnius</th>
<th>Vilnius – Tallinn</th>
</tr>
</thead>
<tbody>
<tr>
<td>- in production, manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in financial services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in tourist services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in other services (local)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in retail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in IT sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in ports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Russian cargo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North-South cargo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Passengers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ports</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Areas of competition

All cities compete for foreign investments, but the intensity of competition in all fields are not the same. Clearly there is competition between the Baltic capitals for western financial and IT sector investments, as well as investments in financial services. Whereas they do not compete for investments in retail and services that are linked to residence. Overall, the competition for investments is present in sectors where investments in one city would remove the need to invest in the others, meaning that the investment ‘point’ would serve all three countries. Here it is important to note that even though the particular investment is placed in another city, it can create benefits all round via other impacts. Also competition is generally least between Vilnius and Tallinn, partly because of their lower level of contact.

The competition that is linked to the geographical location of the three cities is slightly dual. Riga and Tallinn ports strongly compete with each other for Russian transit shipments towards Western Europe. Belarusian, Russian and Ukrainian cargo is also channeled through Vilnius and Lithuanian ports, which creates a strong competition for highly beneficial flows of goods. On the other hand the orientation of Tallinn port towards Helsinki is a unique situation and hard to compete with for the others. Vilnius, on the other hand, has better road infrastructure and connections to the rest of Eastern Europe and other EU member states.

Areas of complementarity

Geographic location and individual city identity give the Baltic capitals somewhat different roles. Tallinn is more oriented towards the Nordic countries, especially Finland, than the other capitals – both early business contacts, history and geographical location have supported these developments. Riga historically has closer links with Sweden and Denmark. It is also often regarded as the centre of the Baltic countries, and in many cases cooperation between Estonia and Lithuania takes place through Latvia (or Riga for this purpose). Even in the era of information technologies when many business operations can be performed through the internet and other communication technologies, Baltic wide activities are often easier to operate from the centre. Vilnius is traditionally more closely linked to Poland, which is a big and developing market. Hence the three capitals complement each other and connect regions that are otherwise difficult to access, for example, the Polish market for Latvia or the Finnish market for Lithuania.

A second source of complementarities between the Baltic metropolises exist where costs preclude action by a city acting alone and where projects would not be realized without participation of all three. In other words where a critical mass is required joint action may be the solution. The market size of each separate country led by the capital is often too small for big (strategic) investors whereas the Baltic region as a whole strengthened by the close links with neighbouring countries and the rest of the EU is a much more attractive destination. Therefore developing common infrastructure and promoting the region as a whole in the ‘far abroad’ (for example, US and Japan) have ‘public good’ characteristics and provide a logic for collective action.
6 Approaches to development

We start with three directions for development strategies that set the stage for the investment strategy in the next section of this report. These approaches provide us with framework for thinking about efficient city strategies.

Higgledy piggledy growth.
Historically many cities have grown in an unplanned way, both architecturally and economically. Jane Jacobs argued that this led to increased attractiveness of urban environments. Economically, we would be suspicious of planning and regulation that cannot be based on a sound rationale for market failure. The higgledy piggledy approach implies that investments should be evaluated separately without recourse to overall plan or vision. It argues that any developments that group similar activities or architecture together spatially have a hidden cost in destroying the beauty and opportunities that stem from an apparently more chaotic structure.

Preferred sectors
Perhaps the other extreme from the higgledy piggledy growth approach is that of preferred sectors, also known as “picking winners”. In their current development plans the cities have often referred to promoting high technology industries and services. The economic literature is replete with arguments against government attempts pick winners. However, it may be less harmful if it is conducted with a clear aim to target sectors that are associated with positive externalities to society. It must also be recognised that local government is often forced to pick winners to a certain extent due to its responsibility for education and marketing the city. Hence if sector preference is implemented mainly in these areas it may be rational to some extent.

Model cities
This approach looks for successful cities that could be seen as models for the Baltic capitals. Cities that have already reached approximately the level of economic development projected for Riga, Tallinn and Vilnius in 2030 and that are of a similar size include Gotenburg and Karlsruhe. (More details on the peer selection process are given in appendix A.) Potential lessons from these models include:

- successful cities provide high quality public transportation, eg the tram trains pioneered in Karlsruhe;
- successful cities have engaged in far reaching school reform, eg the freedom of choice to attend any school in the region in Goteborg.
- successful cities have much lower proportions of dwellings lacking basic amenities than the Baltic capital cities.
- successful cities have much higher proportions of immigrants from other EU countries in their population than the Baltic capital cities.

7 A cooperative strategy for investment attraction

Vision: “The Baltic region as the most attractive investment area in CEE”

The three cities have their own visions and development strategies; moreover they are bound by national development plans and different EU political planning documents. This current strategy document leans towards the area of common interest and cooperation as illustrated in the diagram below. Thus we seek to enforce and supplement other strategic documents.

The rationale for municipal cooperation the belief that a cooperative strategy represents a positive sum game that yields benefits to all. In fact, municipal co-operation is more a question of the will to make it work than of significant financial outlay.

Five strategic directions have been identified as priorities for developing a coordinated investment attraction framework:

1. The Baltic Region becomes as a common area for attracting foreign direct investment.
From some distance, the Baltic countries often perceived as one entity. This forms an opportunity for marketing co-operation between Vilnius, Riga and Tallinn.

Activities

1.1. Pool common marketing resources outside Scandinavia, Northern Europe and the CIS to promote a single Baltic region as an investment target.
1.2. To prepare investment attraction system and procedures, as well as identify responsible units within the city council for management of this process, in order to ensure an effective and transparent investment attraction system.
1.3. Coordinate investment procedures in all the capitals, indicating that Baltic
countries are a common investment target region.
1.4. Form a common Baltic capitals investment agency that would be accessible and
free-of-charge for all investors. It can operate in a virtual fashion. Potential
investors easily study investment possibilities in all capitals via a common internet
portal. These web pages are then linked to those of local municipalities, allowing
the investor to make direct contact with whoever is actually offering the
investment support service.
1.5. Ensure exchange of information between municipalities and supply information to
investors not only about the particular city and procedures but also about the other
two.

2. Efficient and customer-oriented city administration.
The Baltic capitals have already had great success in receiving investments from abroad.
However, currently the cities are losing some of their cost advantage, thus placing much more
focus on how the city works. Investors who have to make time consuming efforts to contact
civil servants for permits, certificates may move their focus from the Baltic capitals to other
rising economies in the region.

Activities:

2.1. All forms of mutual learning. Regular seminars with participation of all three cities
on live issues of municipal work.
2.2. Common workshops to share experience and facilitate the cooperation via personal
contacts of municipality employees.
2.3. Workshops to exchange expertise, inviting other peer cities to learn from it or
organizing a common study trip to that city.
2.4. Organizing a competition for the best innovation in municipal administration, eg
management of building permits
2.5. Joint work on technical issues requiring specialized knowledge.

3. Easy access and good infrastructure
Easy internal and external access to the region is a precondition to preclude economic
isolation. Air transport as well as road and rail infrastructure are means to boost business
activity and attract foreign investment.

Activities:

3.1. Improve external accessibility to the region by air transport, including
intercontinental flights
3.2. Improve accessibility by sea transport, particularly for cargo purposes
3.3. Ensure cooperation for infrastructure development - cooperation projects in public
transport, road construction, airport accessibility
3.4. Ensure easy availability of road and transport information, including maps,
information centres and road signs
3.5. Improve infrastructure and transport that is used for leisure and tourism purposes,
particularly cruise ferries, camping facilities
4. **High quality human resources**

Availability of high quality labour is one of the most important preconditions for investment placement decisions. Cities face similar challenges of ageing and diminishing labour force.

**Areas of activity:**

4.1. Attraction of highly qualified workforce internationally via easier work permits and lodging facilities
4.2. Higher labour productivity via higher quality education and training

5. **Attraction and activation of nonexistent or not fully exploited industries**

Cities have to search new niches in global market.

**Areas of activity:**

5.1. Exploit the capacity of universities for innovation and knowledge-based industries.
5.2. Attraction of foot-loose industries such as international conferences and fairs.
5.3. Cooperation in tourism industry offering Baltic-wide packages and offering cultural diversity

**Some target areas for each city:**

Here we suggest some investment target areas for each separate city that follow from the analysis of economic profile, historical specialization and city own development plans and visions. There is much overlap in these areas and we see it as quite normal that cities as similar as the three Baltic capitals should indeed be active and operating in similar areaa.

**Tallinn**

- Transit gateway in the direction Northern Europe and Northern part of Russia – rest of Europe
- IT sector
- Finance and banking sector
- Exhibition and conference services

**Riga**

- Gateway in the direction Russia and Belarus – Western and Central Europe
- Fashion and arts sector
- Exhibition and conference services
- IT sector

**Vilnius**

- Gateway in the direction Belarus and Ukraine – rest of Europe
- Film industry
- Tourism
- Conferences sector
How achieve to cooperation?

Co-operation is rooted in realizing the power of the region vs each separate country. The benefit from cooperation much increases with the growing economic integration of the region. The political goal must be to increase the belief that cooperation is positive sum game. As already mentioned in the introduction regional cooperation is very much how the EU sees the way forward in terms of EU urban development.

Appendix A. Comparator cities

The following table shows current and projected levels of per-capita output in the metropolitan areas of the three Baltic capitals. The average real growth rates of the Baltic States in the period 1996 – 2004 was 6.8 percent in Lithuania, 6.9 percent in Latvia and appears to have been similar for Estonia. Hence the following table projects future growth at an average of 7 percent per annum, and for illustrative purposes also shows what happens if long range growth averages only 6 percent.

<table>
<thead>
<tr>
<th></th>
<th>Current in thsd. EUR (year)</th>
<th>2030 projection (7% growth)</th>
<th>2030 projection (6% growth)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riga</td>
<td>6.7 (2001)</td>
<td>48</td>
<td>36</td>
</tr>
<tr>
<td>Tallinn^</td>
<td>7.6 (2002)</td>
<td>51</td>
<td>39</td>
</tr>
<tr>
<td>Vilnius</td>
<td>8.1 (2001)</td>
<td>58</td>
<td>44</td>
</tr>
</tbody>
</table>

Sources: Eurostat; Statistics Estonia. ^Harju County.

Using this data we can look at cities that are currently at these income levels to ask what the Baltic capitals may need to look like by the time they achieve similar income levels. Hence the Baltic capitals would be projected to have per-capita income of €48,000 to €58,000 and a resident population of 400,000 to 757,000. However, for comparison with Western cities it is more important to take into consideration metropolitan population. The Baltic metropolitan populations range from 525 thsd. in Tallinn to 1,020 thsd in Riga. The metropolitan population of Vilnius is 709 thsd.

However, no European cities within this range of metropolitan population fall within the projected range for GDP per capita. The closest peer city appears to be Karlsruhe in Germany. Although this city has a resident population of only 280 thsd, its metropolitan population is 698 thsd and per-capita GDP is €44 thsd. Wiesbaden may also prove a good peer since its metropolitan population is 455 thsd. (13% below range) and a GDP per capita of €40 thsd. (17% below range), although Wiesbaden’s resident population is only 271 thsd. Among Nordic cities, the closest fit is Goteborg, followed closely by Aarhus and Helsinki.

---

21 Hannover is similarly close to the ranges overall, but its metropolitan population of 1,284 thsd. makes it less of a fit than Wiesbaden.
<table>
<thead>
<tr>
<th>City</th>
<th>Per capita GDP</th>
<th>Metropolitan population</th>
<th>Resident population</th>
<th>Total divergence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>% difference from range</td>
<td>Value</td>
<td>% difference from range</td>
</tr>
<tr>
<td>Karlsruhe</td>
<td>44</td>
<td>-8</td>
<td>698</td>
<td>0</td>
</tr>
<tr>
<td>Wiesbaden</td>
<td>40</td>
<td>-17</td>
<td>455</td>
<td>-13</td>
</tr>
<tr>
<td>Goteborg</td>
<td>34</td>
<td>-29</td>
<td>797</td>
<td>0</td>
</tr>
<tr>
<td>Aarhus</td>
<td>32</td>
<td>-33</td>
<td>641</td>
<td>0</td>
</tr>
<tr>
<td>Helsinki</td>
<td>41</td>
<td>-15</td>
<td>1214</td>
<td>19</td>
</tr>
</tbody>
</table>

Sources: Eurostat, Urban Audit.

Hence initially we seek information on the model cities of Karlsruhe and Goteborg. The following information would be useful for the Baltic capitals:

1. What infrastructure elements do these cities have that are lacking in the Baltic capitals?
2. What municipal services do these cities have that are lacking in the Baltic capitals?

**Karlsruhe**

1. Infrastructure

Karlsruhe pioneered the use of tram-trains for public transport, whereby trams run on the same track as trains. The system has already been copied by a few other cities and is proposed for Wroclaw.\(^{22}\)

A confederation of the region’s cities, called the *Technologieregion Karlsruhe*, encourages the development of the high technology industry. Approximately 20 percent of employment in the Karlsruhe region is in high technology firms.\(^{23}\)

**Goteborg**

Goteborg projects itself as the logistic centre of Scandinavia.\(^{24}\)

The City of Goteborg has been upgrading its public transportation infrastructure following an agreement signed in 1998 with the National Road Administration.\(^{25}\) The upgrade has included the following elements:

- The Gota tunnel
- Widening of the E6 motorway
- Construction of the Kringen circular tram line.

Education:

\(^{22}\) [http://en.wikipedia.org/wiki/Tram-train]
\(^{23}\) [http://en.wikipedia.org/wiki/Karlsruhe]
\(^{24}\) [http://www.businessregiongoteborg.com/]
\(^{25}\) [http://www3.goteborg.se/ekonomi/arsbok03/eng/]

43
• 29,000 persons took part in adult education in 2002.
• Since 1997 every school has been obliged to produce a quality report.
• 14 percent of pupils attended independent schools in 2002.
• A new system has given pupils choice of attending any school in the region for upper secondary education. Consequently an increasing number of Goteborg pupils have been attending schools in other municipalities.

### Benchmarking Statistics from Urban Audits

<table>
<thead>
<tr>
<th></th>
<th>Riga</th>
<th>Tallinn</th>
<th>Vilnius</th>
<th>Goteborg</th>
<th>Karlsruhe</th>
<th>Helsinki</th>
</tr>
</thead>
<tbody>
<tr>
<td>% foreign EU nationals in population</td>
<td>0.1</td>
<td>0.1</td>
<td>0.3</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>% of dwellings lacking basic amenities</td>
<td>20</td>
<td>19</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>7.7</td>
<td>7.5</td>
<td>5.6</td>
<td>5.3</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>% in part time employment</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>12</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>% of employment only self-employed</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>12</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>% students not completing compulsory education</td>
<td>4</td>
<td>2</td>
<td>11</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Number of students in universities and further education per 1000 population</td>
<td>112</td>
<td>86</td>
<td>114</td>
<td>63</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td>Population density (residents per km²)</td>
<td>2465</td>
<td>2525</td>
<td>1384</td>
<td>1030</td>
<td>1612</td>
<td>2974</td>
</tr>
<tr>
<td>% journeys to work by car</td>
<td>36</td>
<td>59</td>
<td>66</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road accidents resulting in death or serious injury per 1,000 population</td>
<td>2.6</td>
<td>1.2</td>
<td>1.9</td>
<td>0.3</td>
<td>0.8</td>
<td>0</td>
</tr>
<tr>
<td>Average time of journey to work</td>
<td>28</td>
<td>23</td>
<td>21</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of day time to night time population</td>
<td>1.1</td>
<td>1.1</td>
<td>1</td>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility by rail (EU27=100)</td>
<td>22</td>
<td>21</td>
<td>32</td>
<td>30</td>
<td>210</td>
<td>22</td>
</tr>
<tr>
<td>Number of ITC students</td>
<td>4,392</td>
<td>3,411</td>
<td>6,530</td>
<td>4,952</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers per 100 pupils at secondary education level (ISCED level 2)</td>
<td>1.8</td>
<td>1.8</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Percentage of employed producing ICT content</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Annex 1: Investment methodology

A.1 Basic principles

For projects that are either direct investments of the municipality, or use land or other important resources provided by the municipality, and also for large commercial projects that are expected to have a major impact on the city it is important to subject them to a coherent and consistent evaluation methodology. There is a well know methodology for undertaking such an analysis. It consists of the following elements:

- Impact analysis
- Financial appraisal
- Cost benefit analysis
- Ex post evaluation

Who should undertake such analysis or evaluation? Clearly the city itself cannot do a detailed appraisal of all the projects that it is in one way or another involved in. Ideally, the city authority should have an investment department, staffed by professionals who understand the basic principles of investment appraisal and cost benefit analysis and can adequately evaluate the quality of an investment appraisal. Given the existence of an investment department, large investment proposals should be required to come with an impact analysis, a financial appraisal, and a cost benefit analysis prepared by the investor and the task of the investment department would be to examine and evaluate the proposal and to explain the implications to the non-specialist. For projects where the city itself is the major investor the investment department might itself do the appraisal or it could be outsourced to outside professionals and then subject to the same scrutiny as an outside investment.

A.2 Impact analysis

The first stage of any investment appraisal is to undertake an impact analysis. This exercise can be thought of as having three analytical steps, each with an increasing level of technical sophistication:

- Step 1: what is the direct impact or output of the project?
  - eg construction of a new road: how many km of road will be produced?

- Step 2: what is the intermediate impact?
  - eg by how much will journey times be reduced? What are the indirect impacts eg what is the impact of the new road on air quality in the city?

- Step 3: what is the impact on the city economy?
  - eg what is the number of jobs created? What is the impact on the value added created in the city?
A.3 Economic and financial analysis of projects

After the impacts of a project have been identified, eg the cost savings, the employment impact, the environmental impact etc, it is often useful for possibly makers, decision makers and evaluators of the project to have at their disposal a single figure that summarises (adds up) the impact of a project. In practice, there is interest in two aspects of a project – the financial impact and the economic impact. Financial analysis is concerned with the financial impact of a project and economic analysis is concerned with the broader economic impact of the project.

For some programmes, especially for projects over a given size in financial terms it is mandatory to include both financial and economic analysis of the project as part of the project proposal. Even when such analysis is not obligatory it is useful information for project owners.

Usually, the financial impact of a project is summed up in a single figure called the financial rate of return (FRR) and the economic impact is summed up in the economic rate of return (ERR). These concepts are explained below.

Typically, financial and economic analysis for a project will actually be carried out by experts (possibly outside experts) but project owners will have to identify the inputs for the analysis and need to understand the results.

Financial analysis

The aim of the financial analysis is to examine the financial viability or sustainability of a project as well as its impact on the budget of the implementing agency. A financial analysis consists of the following steps.

1. Identify all the financial outflows and inflows of the project

2. For each period of the lifetime of the project calculate the net cash flow in that period ie the cash inflows to the project in that period minus the cash outflows in that period.

3. Convert the cash flows into a single figure, namely the financial rate of return (FRR)

Once the net cash flows (or simply cash flows) have been identified they can be written as an array:

\[ C_0, C_1, C_2, \ldots, C_T \]

Where the subscript represent the periods of the project ie the subscript ‘0’ refers to the start period, ‘1’ to the next period and so on. The subscript ‘T’ refers to the last period of the project. Sometimes T is known in advance eg if the project is something like a training course which is known to last for say 5 years. More often the end date is not known eg in the case of an infrastructure project such as a building or a road. In such cases some cut off point in the future is chosen (sometimes related to the ‘economic’ life of the object).
Th array of cash flows already represent important information about the financial impact of the project – thus each period’s cash flow indicates the budgetary impact of the project. For example $C_0$ is likely to have quite large outlays ie initial investments, but if there is grant finance for the project there may be cash inflows as well.

However, the cash flows still do not represent a single figure summary of the project. Moreover, how do you add up cash flows accruing at different points in time? The answer is you do so by discounting future cash flows. By discounting a future cash flow into a present value, in other words you make comparable a cash flow accruing two, ten, or twenty years in the future with a cash flow accruing today.

Thus

$$C_1/(1+i) \quad \text{represents the present value of a cash flow accruing in period } 1$$

$$C_2/(1+i)^2 \quad \text{represents the present value of a cash flow accruing in period } 2$$

and

$$C_n/(1+i)^n \quad \text{represents the present value of a cash flow accruing in period } n$$

Present values can be added up to yield a net present value (NPV):

$$\text{NPV} = C_0 + C_1/(1+i) + C_2/(1+i)^2 + \ldots \ldots + C_T/(1+i)^T$$

The interest rate ‘$i$’ should reflect the cost of funds to the implementing agency. For public agencies this is often centrally laid down. The NPV of a project summarises the profitability of the project – a positive NPV implies that the project is profitable and a negative NPV that it is unprofitable. A zero NPV means that the project is just breaking even in present value terms.

The zero NPV is also conceptually useful. Thus given the cash flows we can ask what is the interest rate or discount rate that just makes the NPV zero. In other words what is the ‘$r$’ that yields:

$$C_0 + C_1/(1+r) + C_2/(1+r)^2 + \ldots \ldots + C_T/(1+r)^T = 0$$

The ‘$r$’ that satisfies this is the internal rate of return (IRR) or since this is a financial analysis it is the financial rate of return (FRR). A positive FRR means that the project is profitable, a negative one that it is unprofitable. A project with a higher FRR as compared with one that has a lower FRR means that the project with the higher FRR is more profitable than the other. There is an exact equivalence between NPV and IRR (FRR):

$$\text{NPV} > 0 \iff \text{IRR} > 0$$

$$\text{NPV} < 0 \iff \text{IRR} < 0$$
NPV = 0 ↔ IRR = 0

Economic analysis or cost-benefit analysis

Although the financial impact of a project is always important, when we consider public sector projects either at central or at local level we are usually interested in more than this. Indeed, often a project is undertaken by the public sector precisely because its benefits cannot be easily captured as revenues. Such projects are unlikely to be financially profitable and hence are unlikely to be undertaken by the private sector. Examples of such projects include: environmental projects such as cleaning up a river where it is not easy to charge the public for the benefits; training courses for the unemployed where the training has both a public and a private benefit but the unemployed are unable to finance their own participation; transport projects where user charges are either difficult to apply or are politically unpopular (eg roads).

Projects that have significant non-monetary costs and benefit are usually appraised with the help of cost benefit analysis (CBA).

Cost benefit analysis

- Sometimes also called economic analysis or economic appraisal. In distinction from financial analysis or economic appraisal CBA looka at all the costs and benefits of a project, including both monetary (cash) and non-monetary ones.

- CBA is a toolkit that provides a way of summarising in one figure the overall impact of a project/

- The summary figure can be the NPV of a project (where the in addition to cash lows we now include money values of non-cash costs and benefits) or the internal rate of return – IRR (called in the case of CBA the economic rate of return (ERR)

The basic elements

- Cash flows

- Non-monetary impacts eg environment

- Shadow prices: social valuation vs private valuation

- Adding up costs and benefits over time

The basic structure of the economic analysis or CBA is the same as the financial analysis: first identify all the costs and benefits for each period – here the extra problem is to identify and convert into money values all impacts not included in the cash flows.; second convert into an array of net benefits for each period; and third convert to present values and add up.
Cash flows

- Fairly straightforward – project cash outlays and project cash revenues. These can be taken directly from the financial analysis

- Example: water treatment plant
  - Initial investment costs
  - Running costs
  - Extra revenues from increased water charges

- These should be set out for each period of life of project

Much of what CBA is about is valuing in money terms what are actually non-monetary impacts and with adjusting for deviations between social and private cost or benefit (shadow prices)

Non-monetary impacts

The non monetary impacts of a project can come in many forms which may be both positive or negative Where possible these impacts should be converted to money form. For many standard cases there are well established techniques for doing this.

- A project may lead to better drinking water. Better water can lead to better health and this can be evaluated in monetary terms

- Some projects may lead to improved environment – there are many techniques to put money values to environmental benefits (and costs). For example a better or worse environment may change property values eg an airport in a given area will create noise pollution and this will have an impact on property values. The difference in property values between with and without the airport may be used to estimate the monetary impact of the noise pollution.

- The on monetary benefits/costs when valued in money terms should be added to the net cash flows

Social vs private valuation

- Even when costs and benefits accrue in money terms social and private valuations sometimes diverge and hence private outlays or revenues may need to be adjusted to reflect social valuations. These adjustments are sometimes made by using shadow prices. Shadow prices are the prices that reflect the social value of a resource as opposed to it market value

- For example: suppose a project uses worker who would otherwise be unemployed
• Private cost of a worker irrespective of whether s/he would otherwise be unemployed = wages

• Social cost of an otherwise unemployed worker = zero (may not be exactly zero because the unemployed worker may engage in some non-market productive activities)

• **Shadow wage**: weighted average of market wage rate and true social cost of otherwise unemployed workers. Where the weights are the proportion of workers that are expected to be drawn from other employment and from unemployment.

**Adding everything up**

As in the case of the financial analysis the first summary description of a CBA is an array of net benefits for each period:

\[ B_0, B_1, B_2, \ldots, B_T \]

Where the Bs consist of cash flows (re-evaluated at shadow prices where necessary) + the money values of non-monetary impacts.

Some of the Bs might be negative: eg the first one or several to reflect initial investments … possibly also the last ones. Some project might have negative net benefits at the end because of the need for ‘cleaning up’ eg a coal mine or a nuclear power station

Can we just add up the Bs?

Answer – no. just as in financial analysis we need to calculate net present values

\[ B_0 + B_1/(1+r) + B_2/(1+r)^2 + \ldots + B_T/(1+r)^T = NPV \]

Where NPV: net present value. The interest rate or discount rate here should again reflect the cost of resources to the project and for public sector projects is usually set centrally.

The \( r \) that makes \( NPV = 0 \) is the:

**IRR or internal rate of return or in the terminology of CBA it is the**

**Economic rate of return** (ERR) of a project.

A positive NPV or a positive ERR means a project is worthwhile in economic terms. A project may have a positive ERR even though it has a negative FRR. The non-monetary impacts may be sufficient to offset poor financial impacts. It is of course normally the case that the ERR exceeds the FRR (Why?)
Example

We consider the following project:

- a new regional training centre for long-term unemployed
- It takes two years for the project to be fully operational ie first trainees are admitted in year 2
- Benefits: 100 trainees each trained for 2 yrs.
- The training yields a productivity gain with a net present value of 500 euro
- Life of project: 5 years, so there are 4 sets of graduates
- Costs:
  - Infrastructure costs 50000 euro
  - Staff and other running costs 6000 euro in year one and 12000 euro when running at full capacity
  - Trainee opportunity cost 20 x 100 euro

The net benefit flows are shown below. Note in this case there are no financial inflows (eg no training fees) so, even though the project is worth undertaking from an overall economic point of view (it has a positive ERR) the net cash flows are all negative so the project has a negative financial NPV and hence also a negative FRR.

<table>
<thead>
<tr>
<th>Period</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital</td>
<td>-50000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Running</td>
<td>-6000</td>
<td>-12000</td>
<td>-12000</td>
<td>-12000</td>
<td>-6000</td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td>50000</td>
<td>50000</td>
<td>50000</td>
<td>50000</td>
<td></td>
</tr>
<tr>
<td>Net benefit</td>
<td>-50000</td>
<td>-8000</td>
<td>-16000</td>
<td>34000</td>
<td>34000</td>
<td>42000</td>
</tr>
<tr>
<td>ERR</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An example: use of cost benefit analysis in transport projects

Characteristics of transport projects eg road

City governments often have responsibility for major transport projects, and the characteristics of transport projects are such that CBA is rather frequently used for ex-ante evaluation.

- Transport projects are often rather costly: for example 1km of motorway in France costs 7m euro; the cost of an airport runway can run into billions
• Services delivered are frequently received without the beneficiary paying user charges
• There are often important environmental effects
• Benefits accrue in a variety of non-monetary ways

Types of benefit of a road project eg a bypass

Benefits accrue in a variety of ways some of which are relatively easy to measure and others that are more difficult. Some of the main types of benefit are:

• A better road reduces vehicle operating costs – relatively easy to measure
• A better road generates time savings – in principle quite difficult to measure but there is a well developed methodology
• Environment effects: these may be both positive and negative
• Indirect effects on economy: a better road can stimulate the local economy. Such effect can be quite difficult to measure and often project owners are excessively optimistic about such effects

Who benefits from a bypass?

There may be both gainers and losers from the building of a bypass. The main categories of beneficiaries of a bypass are:

• The users of bypass: unless the bypass is accompanied by restrictions on traveling through the town all users of the bypass must gain as compared with the pre bypass situation (why is this?)
• Users of town roads: typically will benefit as people switch to the bypass
• Other people: traders in the town could lose (fewer people traveling through the town) or they could gain because better traffic conditions encourage people to shop.

Who are the users of the bypass?

The evaluation of the impact on users depends the kind of user. The following are the main categories. All three types of user benefit but by different amounts

• Those who switch from driving through town to using the bypass (normal demand)
• Those who divert to the bypass from other routes (diverted demand)
Those who now find it worthwhile to make a journey because of the bypass when they did not do so before (generated demand)

Valuing time saved

Journey time saved is an important benefit of the bypass for users. The value of time saved depends on what kind of time and what type of user.

- If the time saved is working time then this is typically valued at cost to the employer i.e. wage + labour taxes
- If the journey is made in non-working time then this is usually valued at less than wage rate and hence at less than the value of working time.
- Waiting time: people are extremely avers to time spent ‘waiting’ i.e. in a traffic jam and this is typically valued more highly than ‘moving time’
- Freight: time saved on freight is valued on the basis of cost savings for vehicle operators

Some estimates of the value of time

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Value Estimation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business trips:</td>
<td>$(1+t)$ wage</td>
</tr>
<tr>
<td>Commuting and leisure:</td>
<td>0.3 wage (adult)</td>
</tr>
<tr>
<td></td>
<td>0.15 wage (child)</td>
</tr>
<tr>
<td>Waiting</td>
<td>$1.5 \times \text{(value of trip by purpose)}$</td>
</tr>
<tr>
<td>Freight:</td>
<td>$\text{vehicle time cost}$</td>
</tr>
<tr>
<td></td>
<td>$\text{+driver time cost}$</td>
</tr>
</tbody>
</table>

Where $t$ is the rate of labour tax.

Soft projects

Mostly the above discussion of CBA has been in terms of what might be called ‘hard’ projects i.e. infrastructure investments. Often in the structural funds context projects have a ‘soft’ component i.e. it might be that there is an investment in a new building – the hard component, within which an existing activity e.g. administration or training will be carried out in a new way – the ‘soft’ component. How should we undertake a CBA of the soft component?

Answer: basically in the same kind of way. For each activity for each period it is necessary to calculate the costs and benefit – monetary and non-monetary. In the case of, say, administrative improvements the benefits may come in the form of reduced costs. In the case of services provided by a local authority there may be revenues in the form of fees.

In some cases for a soft project where the benefits are intangible and difficult to measure in money terms it might be possible to take a ‘cost efficiency’ approach, In other words to ask...
which of a set of alternatives can achieve a given objective most efficiently ie at least cost in present value terms.

Annex 2 Methodology for developing an investment strategy

Introduction

This document is created to summarize the experience, the lessons learned and the best practices from the BaltMet Invest project for developing coordinated investment strategies. This is a summary of investment strategy methodology to analyze the process and prepare framework for development of investment strategies for similar city regions.

This particular project is concerned with joint investment strategy for three Baltic Capitals that are characterized by similar socioeconomic situation, culture, roles and visions, i.e., more similar than different, more competitors than cooperation partners. Nevertheless the authorities have agreed to develop coordinated investment strategies.

This methodology describes, firstly, the general process for development of an investment strategy for a city/region and secondly, puts particular emphasis on describing circumstances for development of joint or coordinated investment strategies.

What is a city investment strategy?

The City Investment Strategy, simply put, is the Council or Municipality partnership with city stakeholders to get things done. City alone can never finance all the things a growing city needs without huge impacts on the taxpayers. However there are many investors who have the means and desire to get involved in the city’s development in some way. The City Investment Strategy sets out the vision, goals and objectives to indicate the economic development course of the city that is most desired and most appropriate given the existing economic and social situation.

There are no fully defined guidelines on what exactly an investment strategy should look like. It can be as brief or as detailed as one likes, as long as it addresses the goals and objectives for coping with problems identified and making the city more attractive for diverse communities to live, work and invest. A strategy is a framework for future action, but it is not a work plan – it does not assign specific tasks to specific organizations. Rather, it proposes strategic directions to focus the attention and energies of stakeholders in a common direction and suggests priorities which should be the first focus of this effort.

A city investment strategy never stands alone. It is one of a series of strategic policy documents along with city and national development plans, employment plan, environmental plan, cultural plan and other sectoral strategies. Following elections, a new city government typically comes with its own development plans and priorities. A municipality investment strategy should therefore form a component of a broader community-wide strategic plan for development, providing a focus on strengthening the local economy.
When creating a city investment strategy one should bear in mind that usually the city and the surrounding regions comprise a single economic region, they benefit from and they need each other.

Developing an investment strategy for a city or cities is not a one off action. It is a continuous process of developing and revising it regularly to keep it up to date and in accordance with current economic and political situation. For the case of joint or coordinated investment strategies, when two or more municipalities commit themselves to closer cooperation and coordinated development and updating the strategy is even more important.

**Strategic planning process**

We suggest a five stage strategic planning process for development of successful and viable investment strategy.

A Five Stage Strategic Planning Process:

- **Stage 1:** Organizing the effort
- **Stage 2:** Doing the current economic situation assessment and development analysis
- **Stage 3:** Creating the Investment Strategy
- **Stage 4:** Implementing the Investment Strategy
- **Stage 5:** Reviewing the Investment Strategy

Stages 1 to 3 are concerned with actually developing the strategy from the point where there does not exist such. Stages 4 and 5 go a little bit further and talk about what actually to do with the strategy and make it living. The Baltmet project does not go as far as implementing and reviewing the strategies, it is behind the scope of the project, but nevertheless for the full record we state it here.

**Stage 1: Organizing the effort**

The first step in developing an investment strategy is to organize the effort. This commonly consists of 5 steps and can be performed simultaneously:

- **Step 1:** Initiate the Investment strategy
- **Step 2:** Establish a local government investment strategy development team
- **Step 3:** Establish a political process within the local government that supports investment strategy
- **Step 4:** Develop a stakeholder partnership group to advise and support the process
- **Step 5:** Develop systems to work with other levels of Government to support the local economic development process

**Step 1: Initiate the investment strategy**

Initiative is typically a random process and can come from different sources, often (although not always) it is the city government. Someone has to take responsibility for starting the
process and getting the work started. Even if the initiator is not the city government, it is crucial to have local government support for the process as most certainly it will be the one to implement the strategy. But the success of the local economic development depends on collective efforts of public, private and non-governmental sectors.

**Step 2: Establish an investment strategy development team**

The strategic planning begins by identifying people from all sectors (government, industry, NGO, academic institutions) that are interested and willing to contribute their skills and experience. The strategy development team can be of different size and consisting of different people involved in city development planning. The crucial thing however is that this initiative is at the very beginning supported by high level local political actors and decision makers. Ideally the strategy development team is led by such a decision maker responsible for city development and/or investment attraction. Such team should be established in each of the partner institutions involved in the project and interested in future cooperation. Teams have to be of similar level and responsibilities, representatives there have to be able to give a certain level of commitment for common decisions taken.

For cooperation projects there should be one independent body to balance the interests. This partner has to be well informed about the situation in all municipalities and have to have good expertise and experience in investment strategy development. It has the role of actually performing the economic situation assessment, development analysis and drafting up the investment strategy.

**Step 3: Establish a political process within the local government to support the investment strategy**

There is little point in working on developing an investment strategy if there is no supportive political process to ensure that it receives adequate resources and hence can be implemented. For that purpose the investment strategy draft and all the associated actions are to be communicated regularly to authorities and decision makers if they are not a part of team already. It is equally important that this is simultaneously done by all partners to ensure balanced and smooth operation. Media should be informed.

**Step 4: Develop stakeholder involvement to advise and support the process**

The involvement of stakeholders in the development of investment strategy from the very beginning is essential for the success of the project to ensure support to the political decisions that are later based on the strategy. It is important, initially, that stakeholders are consulted on ideas and strategies. Once involved, the stakeholders become insiders and are equally responsible and interested in results.

The selection of stakeholders to participate has to be treated with attention to make sure that all groups are represented: businesses, politicians, media, citizens, potential investors. Influential personalities and experienced practitioners are welcome.
Step 5: Develop systems to work with other levels of government

Most probably the investment strategy will need actions that are not the direct responsibility of the involved municipality alone. It will acquire cooperation with neighbouring institutions, with national government, different councils and boards. And those different levels of government can both hinder and advance the investment strategy implementation; consequently it is necessary to collaborate with all levels of government not only at the actual implementation of the strategy, but also during its elaboration. During the development of the strategy the cooperation will take the form of information – opinion, later concrete actions will be asked from the other governments and regulators.

Stage 2: Doing the current economic situation assessment and development analysis

Knowing the context of the local economy is crucial to help the stakeholders strategize for the future. The situation assessment is probably the most important and the most objective part of planning and strategizing the economic development.

Essentially it consists of three steps:

Step 1: Data collection
Step 2: Current situation overview
Step 3: Development analysis

Step 1: Data collection

Data collection is a first step in an economic assessment. The analytical boundaries of the local economy assessment need not be limited the administrative jurisdiction of the municipality, but rather defined by the economic relationships in a geographic area, such as the metropolitan region or a city and its rural hinterland. In a small country where the city or region accounts for big share of national GDP, the impact and relation to the whole national economy has to be taken into account.

Data are collected from all the available quantitative and qualitative statistical sources and knowledge to help identify the strategic direction for the local economy. Information that is not contained in existing data has to be ordered or gathered by the work group. The data necessary for current situation overview and description of the structure of local economies are as minimum the following:

1. Demographic information:
   - Population, projected growth rate
   - Employment
     - By sectors
     - Age structure of labour force
     - Structure of employment
     - Earnings/labour cost
     - Unemployment, its structure
Education (country level)
  ▪ HE establishments, types
  ▪ Education attainment by numbers and types, especially look at engineering and sciences
  ▪ Training: assess skill/occupational shortages/oversupply, training programmes

2. Economic structure of three metropolises and regions
  ▪ Industrial structure by sectors and dynamics
  ▪ Investments – foreign and domestic (dynamics)
  ▪ Trade between cities

3. Business environment
  ▪ Taxation
  ▪ Corruption
  ▪ Supporting business networks
  ▪ Local authority development support – services offered
  ▪ Access to funding

4. Infrastructure
  ▪ Land, real estate and office space – availability and costs
  ▪ Internet, telephone and similar services – availability and costs
  ▪ Transport links to major markets
  ▪ Accessibility by air, rail, water transport

If the plan is to create a common investment strategy for several cities or municipalities, the already existing linkages and their force have to be identified:

5. Cross patterns of ownership of companies across the municipalities
6. Similarity indices of the three economies
7. Revealed comparative advantages between the municipalities
8. Survey of companies that are operating in all municipalities and survey of joint ventures:
   ▪ Basis of their investment decisions
   ▪ Factors determining the investment climate
   ▪ Problems
   ▪ Business needs

Typically this specific data would come from different sources, especially if cooperation to be established is between different countries, consequently particular attention has to be paid to comparability of data and statistics. If data is not comparable (i.e., different methodology is used in collection) or if it is not available for any of the economies, situation analysis and comparison will be inconvenient and sometimes impossible.

Step 2: Current situation overview

The second step involves analyzing this data. Several tools including an analysis of investment climate in each municipality, benchmarking and regional economic indicators can be used. In case of common investment strategies define complementarities and areas of competition of all parties. Also important is comparative information on the resources and activities of neighbouring communities or other regional, national or international competitors not involved in the project.
One should not forget to include local and national economic development projects and programmes that are already happening in the area. Typically each municipality or city already has a development plan and a vision and goals for its future development. The partners must share the information on local development projects and programmes that are already happening in the area, national development plans where they are binding for municipalities. These can not be disregarded but rather taken as exogenous information.

**Step 3: Development analysis**

Once the current situation or economic profile is analyzed, the next step to follow is elaboration of development analysis of investment possibilities and seeing forward looking aspects. Based on the current situation analysis, defined areas of competition and cooperation, and visions and goals of three municipalities, the first procedure is to evaluate if the visions and goals are realistic at all based on the current situation findings, and second – suggest the ways of development. In cooperation projects the development analysis will attempt to identify key advantages for the partners to cooperate together with key complementarities as well as areas where synergies may arise that cannot be directly identified by market participants. The report will serve as an outline for preparation of the investment strategies.

The development analysis as basis for investment strategy aims to identify:

1. Where the current investments are pointing;
2. View of stakeholders;
   a. Basis of investment decisions;
   b. Advantages and disadvantages for each municipality;
3. Competition and complementarity areas
4. Evaluation of current visions and development plans
5. Proposed development strategies (this may include benchmarking against cities/regions currently in higher development)
6. Proposals for municipal cooperation

**Stage 3: Creating the Investment Strategy**

Being the main output of the whole process, the investment strategy is actually a summary and conclusions of the results of current situation overview and the development analysis. It balances investment interests with social and environmental needs, and for joint strategies – individual municipality interests with the common goal.

The investment strategy has a number of components:

**Vision:** Describes stakeholders’ consensus on the preferred economic future of the Community
**Goals:** Based on the overall vision and specify desired outcomes of the economic planning process

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Objectives: Establish the performance standards and target activities for development of each goal. They are time bound and measurable

Programmes: Set out approaches to achieving realistic economic development goals. They are time bound and measurable

Projects and Action Plans: Implement specific program components. They must be prioritized and costs established. They are time bound and measurable

In practice the investment strategy may not contain detailed programmes and projects, but it should contain at least the first three elements. A coordinated investment strategy may concern only the fields of common interest and co-operation.

Stage 4: Implementing the Investment Strategy

The entire investment strategy ‘life-cycle’ goes beyond the BaltMet project. Nevertheless here we briefly note the actions to be taken in respect of making the investment strategy live.

Once developed and approved by stakeholders and all parties, strategy implementation is normally driven by an implementation plan. The implementation plan lays out budgetary, human resource and institutional and procedural implications of implementing the investment strategy, as well as responsible bodies, time tables, sources of funding, impacts, results and framework for evaluation of the progress. The success of a joint investment strategy is particularly dependent on commitment by the partners.

It is important that the political commitment from the partners in the case of joint strategies is equally strong also during the implementation phase as in the development stages. The strategy that is developed for the particular partners is only efficient and working if every partner is ‘in’. It takes one to renege on the commitment and the whole strategy is in danger.

Stage 5: Reviewing the Investment Strategy

A review of the investment strategy and implementation plan should occur regularly. The review should use established monitoring and evaluation indicators of the local economy and of the resources available for the strategy effort. During the review changes in economic situation should be assessed, as well as impacts and changes due strategy implementation. It has to cover also political situation and changing international and interregional circumstances. Alongside the review of the entire strategy, systems should be in place to monitor the progress of every project. These systems will give stakeholders the tools they need to adjust the strategy in response to dynamic local conditions. As programs or projects are completed or deemed no longer appropriate, new ones will be identified.

Good Practice for Strategy Success

Experience from the BaltMet project suggests the following good practice principles for development of a joint investment strategy:

• Organized approach, all the time communication of intermediate results to all stakeholders and partners;
Simultaneous analysis of administrative structures to ensure efficiency in strategy implementation;
Municipalities demonstrate strong political will to implement it;
Partners have to share a common goal, common vision for what the investment strategy is developed;
Commitment to participate and act, or in other words discipline, from beginning to the end by all partners is essential for the success;
Plan for regular reviews of the investment strategy.

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