

STATE OF THE REGION REPORT™



2008

Sustaining growth at the Top of Europe

Key messages

- **The Baltic Sea Region is facing a significantly more complex economic and political context for collaboration than 12 months ago, especially after the global economic crisis reached a new quality in mid-September**
- **The Baltic Sea Region is well positioned to weather the global economic storm better than most of its peers, although for individual countries in the Region, especially Iceland, Estonia, Latvia, and to some degree Russia, there are tough challenges ahead**
- **The Baltic Sea Region's medium-term economic performance remains strong and has up to the summer been characterized by many economies operating close to capacity at the top of the business cycle; since September the economic climate has, however, cooled significantly**
- **The Baltic Sea Region remains one of the most competitive regions in the world, not much changed relative to last year. Different parts of the Region continue to rely on significantly different sets of competitive advantages**
- **The Baltic Sea Region has the potential to become a role model for a new integration approach in Europe, especially if the EU Baltic Sea Region Strategy leads to a new level of alignment between local, national, and cross-national policies**
- **The Baltic Sea Region devotes significant political attention to the environment and energy efficiency. These efforts have resulted in clear achievements in both areas, but especially where collaboration on the level of the Region is required more is needed to get to effective action.**

By Dr. Christian Ketels

Prepared for the Baltic Development Forum in collaboration with the Nordic Investment Bank (NIB) and the Nordic Council of Ministers (NCM)

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Foreword

Why are some regions more successful than others?

This straight forward, yet complex question has become easier to give an answer to due to the annual State of the Region Report. Key factors influencing competitiveness of the Region have been identified and traced since the first report was published in 2004. The 2008-report gives further insights by adding new aspects and by highlighting political events that have influenced the Baltic Sea Region's economic environment. This year's report also highlights two important sectors shaping the future of the region, environment and energy, important in their own right but also in relation to the competitiveness of the region.

How can the Baltic Sea region become more prosperous and competitive through better use of existing EU-instruments and policies?

The 2008 State of the Region Report is also taking up this question. The background is well known: In the first half of 2009, the European Commission will present to the Council a proposal for a strategy for the Baltic Sea Region which is expected to be adopted by the end of 2009 during the Swedish EU-presidency. The effectiveness and

development of the co-operation in the Baltic Sea Region and the political will of decision-makers will be tested in the coming months. The 2008-State of the Region Report will be a useful tool for everyone who wants to follow and take part in the political process, also within the EU.

Since 2004, a very positive trend has characterized the Baltic Sea Region's economic growth and development. This year, the situation is somewhat different. The internationally high growth rates have fallen considerably due to both domestic factors and internationally imposed conditions, such as the financial crisis. The need for an open mind towards collective evaluation, critical review and benchmarking of the drivers for competitiveness and sustainable growth is more important when the economy is meeting a strong headwind. From this perspective, this year's report should be even more relevant to all decision-makers and stakeholders in the Region.

Noting that the analysis and conclusions in the report are those of the author and do not necessarily reflect the views and commitments of our organizations. We wish everybody good reading and hope it will inspire to even further cooperation among actors in our shared region.

Copenhagen / Helsinki

November 2008



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Executive Summary

The 2008 State of the Region Report is the fifth edition in this series of annual evaluations of competitiveness and cooperation across the Baltic Sea Region. The Report is organized into three parts: Part A of the Report describes the economic, political, and institutional context in which regional collaboration in the Region operates. Part B covers different aspects of the Region's competitiveness, including an assessment of its economic performance, an evaluation of its competitiveness fundamentals, and its position regarding the European Union's Lisbon Agenda. Part C looks at the relations of the Baltic Sea Region towards the institutions and policies of the European Union, and the performance of the Region in the areas of environment and energy.

Part A discusses the context in which regional cooperation in the Baltic Sea Region, home to a population of 57.5 million and an annual GDP of about €1450 billion, takes place. The *macroeconomic situation* in the Baltic Sea Region has changed considerably over the last 12 months. The slowdown that was only starting to become visible at the time of last year's State of the Region Report has become visible at all geographic levels and turned into a global economic crisis few thought possible. While the current outlook is bleak, the Baltic Sea Region seems better positioned to weather the storm than most peers if the world economy returns to some level of normality soon. But in the meantime regional cooperation could be under pressure due to the tendency to focus on domestic affairs at times of crisis and the heterogeneity of acute economic challenges faced by individual countries across the Region. The *political context*, too, has seen important changes, that have made the political logic for Baltic Sea Region cooperation more complex but also created opportunities. An impasse in Brussels is dangerous but the search for a new European integration approach has made regional collaboration among neighboring countries more attractive as a complement. Tensions between Russia and the West can clearly have a negative impact but the Baltic Sea Region could be a bridge both sides want to keep open. The dangers of increasing protectionism are real but could motivate new efforts to remove

those barriers within the Baltic Sea Region that remain. The *institutional context*, an important condition to turn political will for collaboration into action, has also opened up for change, not the least after the Swedish CBSS presidency in 2007 launched a review of the institution. The Report provides a short overview of the main relevant cross-national institutions and their current action priorities. There are signs that the coordination between the many institutions for cross-national collaboration is improving and the bottom-up nature of the multitude of

Part B tracks the competitiveness of the Baltic Sea Region, continuing an assessment that was first done five years ago. The Baltic Sea Region continues to be among the most competitive economies in the world, and there have been few changes in the Region's overall position since the 2007 State of the Region Report. Where changes occurred, they were driven more by the increasingly different business cycle situation that individual countries in the Region were exposed to. The analysis of underlying competitiveness is structured on the basis of the new Global Competitiveness Index framework. On *macroeconomic competitiveness*, the Region combines a very strong institutional base with solid macroeconomic policy. However, while this pattern characterizes the Nordic countries that feature large in the aggregate number of the Baltic Sea Region, they do not apply equally well to the rest of the Region. In Germany, macroeconomic policy continues to be weaker, even after recent improvements. In the Baltic countries and Poland institutional quality tends to be much weaker while the record on macroeconomic policy is mixed. In Russia, macroeconomic policy is solid while institutional quality remains one of the key weaknesses the country is facing. On *microeconomic competitiveness*, the Region truly competes as a knowledge-driven economy, with strengths in education, technology, innovative capacity, and business sophistication. But this description again fits best for the Nordic countries with other parts of the Region providing variations of the underlying themes of strong skills. Germany has less of a high-tech bend and a weaker overall education system but is strong

on innovation and especially its business sector. The Baltic countries and Poland largely leverage their comparative advantages from solid skills at relatively low wages in the proximity of western European markets. Russia has a large and growing domestic market while it is only starting to try leveraging its remaining scientific capabilities. From the perspective of the European Union's Lisbon agenda, the Baltic Sea Region remains in a leading position, despite losing some position in two of its traditional strengths, environment and innovation.

Part C, a special section for this year, provides basic facts on two issues that have an important impact on the Region's competitiveness, but are also important political issues in their own right: the relations of the Baltic Sea Region towards the institutions and policies of the European Union, and the performance of the Region in the areas of environment and energy. The EU member countries in the Baltic Sea Region have joined the EU at different times and with different motivations, factors that have an important impact on their behavior within the EU. Despite these differences, the Region has a strong track record on the implementation of EU rules and regulations. The Baltic Sea Region makes wide use of the significant financial resources that the European Union makes available. As for the EU overall, the profile of overall spending does not match the priorities one would set from a competitiveness perspective. Agricultural spending remains too large and there is relatively little spending on projects for participants in groups of neighboring countries rather than EU-wide networks. In 2007, the European Council charged the European Commission with the development of a EU Baltic Sea Region strategy. The process builds on the foundations laid in

the Region over previous years, is grounded in a broad consensus on key principle, and has a clear perspective for adoption and launch during the upcoming Swedish EU Presidency. But to achieve success, both within the Region and as a facilitator of broader reforms in the European integration process, a number of important additional factors currently often neglected need to be acknowledged.

The overall quality of the environment is good, in the Baltic Sea Region and policy action is high, maybe even higher than the level of environmental quality already reached. The activities have at the national level gone far beyond rhetoric and include a wide mix of research-funding, market incentives, regulation, and communication campaigns. At the Baltic Sea Region level, however, implementation remains a challenge and the Baltic Sea itself continues to be in a precarious state. In energy the Region has made clear progress in moving to more sustainable sources. But despite all progress, the Region has achieved only a moderate reduction of greenhouse gas emissions and remains increasingly dependent on energy imports. And despite a significant shift to renewable sources of energy, the dependency on imports remains high and is likely to worsen over time. Collaboration at the level of the Region has provided some useful input but much remains to be done, both in the integration of the energy markets and the further development of energy policies. Companies from the Region have already achieved significant market success in the field of energy and environmental-technologies. While more consistent evidence is needed and competition will undoubtedly increase, this is a clear area of opportunity for the Baltic Sea Region.

Introduction

Why a State of the Region Report? The 2008 State of the Region Report is the fifth edition in this series of annual evaluations of competitiveness and cooperation across the Baltic Sea Region. The series was created to inform decisions about regional economic cooperation in the Region, to track the impact of these decisions on competitiveness, and to communicate the Region and its willingness to upgrade both internally and externally. The Report continues to bring the Baltic Sea Region to life in a very concrete way.

This year's Report follows the broad structure that we have developed since 2004. Section A provides a discussion of the broader context in which regional cooperation and competitiveness occurs. This year, there is a stronger focus on the macroeconomic shocks that have been hitting the Region. While the Report is more concerned about the medium- to long-term growth potential of the Region, the current financial crisis has dramatically altered the context for this debate. The Report also looks at the political and institutional environment for collaboration, two factors that are important as the Region is discussing new ways to move to the next level of working together. Section B presents the latest results on the competitiveness of the Baltic Sea Region. We look at economic performance, underlying microeconomic competitiveness, and the position of the Region's countries in terms of the European Union's Lisbon Agenda. Section C finally addresses two issues that are crucial for the competitiveness of the Baltic Sea Region but that are much more than just tools for economic success. The European integration process and EU policies have always been a critical dimension for collaboration in the Baltic Sea Region. The EU Baltic Sea Strategy, an ambitious effort to use the EU as a forcing mechanism to review and coordinate action priorities across the Region, has put the role of the EU again on the top of the agenda. The quality of the environment and energy supply are two other issues that have concerned countries in the Region for some time. The upcoming Climate Summit in Copenhagen, the Baltic Sea Action Plan developed by HELCOM, and the work on the environment as part of the EU Baltic

Sea Strategy process are all reasons why these two themes now have a special weight in the discussions within the Region.

What is the Baltic Sea Region? For our analysis, we define the Baltic Sea Region – as in previous years – to include the Baltic countries (Estonia, Latvia, and Lithuania), the Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden), northern Germany (Hansestadt Hamburg, Mecklenburg-Vorpommern, and Schleswig-Holstein), northern Poland (Pomorskie, Warminsko-Mazurskie, and Zachodnio-Pomorskie), and most parts of Russia's Northwestern Federal District (excluding the four regions least connected to the Baltic Sea Region: the Republic of Komi, Arkhangelskaya oblast, Nenetsky AO, and Vologodskaya oblast).

This Region, as measured in this Report, is currently home to 57.5 million people, although this number is about 50,000 less than last year and shows the continuing slow downward trend in population. The Nordic countries—together now representing about 45% of the Region's inhabitants—have gained in population but the decrease elsewhere, especially in north-western Russia and the Baltics, was even higher. The Region's labor force of now 27.7 million employees has been growing by close to 500,000 in 2007, the highest growth ever measured for the Region. Again, this growth has come more from the Nordic countries than from the Baltics, Poland, and Russia. The Region creates an annual GDP of slightly above €1,450 billion. The Nordic countries account for about 73% of the total, slightly less than last year. Northern Germany still comes second with a share of 14%, which, however, is falling. Northwestern Russia, now at 5.3%, continues to grow, while the Baltic countries are stabilizing at 4%. Northern Poland, finally, accounts for 2.6% of regional GDP with a slightly growing share.

For comparisons, the Report looks depending on data availability at the EU-15 (the western European EU members), the EU-10 (the EU members that joined the EU in 2004, the EU-27 (all current EU members), and some other world regions like NAFTA.

This section of the State of the Region Report describes the context for cross-national cooperation in the Baltic Sea Region. One dimension is the current macroeconomic climate, another are the institutional structures that exist for collaboration in the region, and a third the political climate for open trade and investment. All three have an influence on the opportunities, challenges, and motivations facing the Region in working together on upgrading competitiveness.



Section A:

The context for cross-national cooperation in the Baltic Sea Region

Regional cooperation among neighboring countries, on upgrading competitiveness as well as on other policies, does not happen in a vacuum. In the minds of the policy makers regional cooperation is only one of several potential levers for policy action. Whether or not politicians use this lever depends on the political, economic, or environmental challenges they face, on the structures of institutions they can use, and on the political incentives they have, given the pressure from important interest groups. These mechanisms work in the Baltic Sea Region as well as in many other regions. To motivate political action, understanding and addressing this political context is at least as important as identifying the right action steps through an economic analysis of the competitiveness of the Region.

This section of the Report looks at the state of three dimensions that are important drivers for the likelihood that regional cooperation occurs:

The **macroeconomic climate** in the region, especially how it plays out at the national level, has a huge impact on governments' action priorities. There is no simple relationship between a slowing economy and a diminishing willingness for regional collaboration. But the burden of proof gets harder for regional collaboration to defend an important position on the overall policy agenda. "All politics is local" – this view of Tip O'Neill, longtime speaker of the U.S. House of Representatives, is especially true in times of crisis. Only when regional collaboration is seen as significant and beneficial will it remain an geographic level important for policy making even in a time of crisis. However, if regional collaboration is instead seen as marginal to how countries fare in the face

of global economic challenges, it will be hard to convince the public and politicians that such collaboration is a good investment of time and energy.

The **political climate** surrounding the Baltic Sea Region affects the context in which regional collaboration takes place, setting the stage for the opportunities and challenges the Region faces in addressing competitiveness issues. Within the Region, the general state of relations between individual countries and groups of countries, especially between the EU members and Russia, affects their ability to collaborate on competitiveness issues. Beyond the Region, the effectiveness of EU institutions can provide more or less room for collaboration in a sub-region like the Baltic Sea Region. And globally, the governance of the international economy, in particular the general willingness to keep national markets open for trade and investment, feeds into the returns that regional collaboration can deliver.

The **institutional structures** in the Region, in the public sector as well as the private sector, also matter. Without established structures, public policy does not have the necessary tools readily available, even when there is a will for joint action. Structure should follow strategy but in reality it is often structure that dictates which strategies and action plans are feasible. Structures also matter for the demand that politicians face for regional collaboration. If nobody asks for joint action, it is much less likely that governments will take and sustain the initiative themselves. If specific institutions or large policy initiatives like the EU Baltic Sea Strategy are operating, there will be an inherent dynamic to keep them alive even when the appetite for launching new cross-national efforts is waning.

- **The global economic environment, traditionally providing tailwind for the Baltic Sea Region, has first lost steam and since September moved dramatically towards being a drag on the Region's economy**
- **The Baltic Sea Region was until the summer heading towards full capacity utilization at the end of the business cycle but is now expected to experience a sharp slow down**
- **Individual countries in the Baltic Sea Region are getting increasingly heterogeneous in their business climate, with Iceland, Estonia, and Latvia facing painful recessions while the Nordic countries are in a good position to weather the global crisis with more modest downturns**

1. The macroeconomic climate

Over the last 12 months, the macroeconomic climate in the Baltic Sea Region has changed considerably. The slowdown that was only starting to become visible at the time of last year's State of the Region Report is now seen at all geographic levels and has turned into a global economic crisis of a scale few observers foresaw. The global context has swiftly changed from being a benevolent driver of growth to a source of challenges for the Region. The regional economy has slowed down in response, with a significant amount of the pain still ahead of us. And the economic situation of individual countries in the Region has started to become more heterogeneous, ranging from relative resilience to acute crisis.

The global context

The global economy has started to produce significant headwind for the Baltic Sea Region economy. The cyclical slowdown that was bound to occur at some point has been first triggered and then amplified by the crisis that has been spreading from the U.S. markets to the global financial system. Markets for equities, credit, and currencies have experienced a roller-coaster ride of previously unimagined dimensions. September 15th, 2008, the first day of trading after U.S. investment bank Lehman Brothers was allowed to go bankrupt, was a watershed event after which volatility and uncertainty multiplied. Global demand has slowed down significantly and the expectations

for future growth have become pessimistic as the financial market crisis is quickly starting to affect consumption and investment decisions around the world.

Stock market valuations have dropped dramatically across the globe, with values that now seem low compared to earnings. Whether these prices are more the reflection of an expected deep recession or an overshooting of herd behavior remains to be seen. Many market participants have lost their trust in being able to forecast future trends, leading to wild price swings in reaction to short-term news or sentiment.

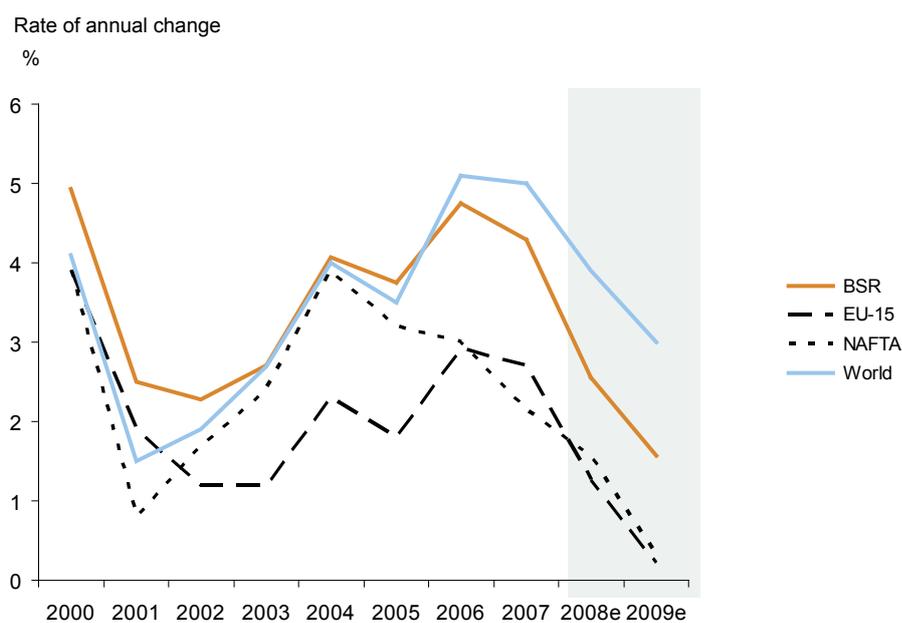
Interest rates were first raised in reaction to inflationary pressure from a combination of rising energy and food prices, emerging supply-side constraints after years of growth, and the effects of relatively soft monetary policy in the past, which have led to a significant rise in inflation as well as inflationary expectations. But as the financial market crisis made borrowing increasingly difficult and threatened to result in a recession, Central Banks have taken dramatic action to inject liquidity and lower interest rates. Inflation remains an issue in a number of countries, but a significant drop in energy and commodity prices in reaction to the expected slowdown in demand has removed an important driver of price increases. What remains are the possible second-round effects from workers trying to compensate for earlier inflation by demanding higher wages. With unemployment already rising, the ability to push through such wage increases is seriously weakened.

Exchange rates first registered a significant devaluation of the US-Dollar. This trend had been driven for a while by the external imbalances of the U.S. economy and then gained pace as the country's growth rate slowed down ahead of its global peers. But as the crisis started to hit other economies as well, particularly in Europe, and global investors looked for traditional safe havens, the US-Dollar quickly started to regain value against many foreign currencies.

What started as a relatively traditional boom-bust overheating crisis in the U.S. subprime market turned into a systemic crisis blocking the functioning of many financial markets. The crisis

has led to fundamental changes in the financial services industry and has left governments already now with a huge position in many financial markets. The toll of the crisis on the economy is huge and rising: there is a massive fiscal impact on governments that had to bail out financial institutions, although these costs could shrink significantly if the assets taken over can be sold in better market conditions in the future. There is a quickly growing impact on financially healthy companies that cannot secure credits to finance investments under the current market conditions. There is a strong effect on consumer sentiment that is now expected to drive many parts of the

Figure 1: Economic Growth



Source: EIU (2008), IMF (2008)

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global economy into recession. And finally there is the uncertainty of how the policy response to the crisis will change the longer-term fabric and competitiveness of economies.

Global GDP growth has significantly slowed, and is expected to almost halve between 2007 and 2009. The United States, suffering from a financial crisis that has led to massive policy interventions by the Federal Reserve Bank and the U.S. federal government, has led this trend. Especially the financial system continues to contain significant risks that could easily translate into further shocks. Although the U.S. was the first country to experience a slowdown, the real sector of its economy has traditionally been quite fast to bounce back. Quickly rising exports boosted by a significantly weaker currency could soften the blow and flexible labor markets can help to reallocate labor quickly. Whether this will happen again this time, as the Dollar regains value and global demand slows, remains to be seen.

The European economies, and to a lesser degree Japan, have started to experience a slowdown in GDP that is at least as fast than in the U.S. Already by late summer, the IMF estimated that the European banking system had in aggregate suffered higher losses from the subprime crisis in the U.S. than their American competitors. Since then, key financial institutions in a number of European countries had to be rescued by governments that also announced wide-ranging de-

posit guarantees. Access to credits is tightening, economic sentiment has plummeted, and domestic demand is slowing down. Exports do not provide much relief. Initially, a strong Euro has been hurting exporters and cut into their profit margins. The more recent devaluation of the Euro could have some positive effect but is balanced by slowing demand on key export markets. Insufficient flexibility on labor and goods markets have been exacerbating supply bottlenecks that drive up inflation, thus forcing the European Central Bank to keep interest rates high for longer than elsewhere. These rigidities also carry the risks that the long-term unemployment effects from the current crisis – with its negative impact on domestic demand – will be more severe in Europe than in the United States.

Emerging economies, including the BRIC countries Brazil, Russia, India, and China, have not been immune to the crisis that hit the advanced economies. Compared to previous crises, their financial situation tends to be much stronger, with many of these countries having lower external debts and significant foreign exchange reserves. Nevertheless, the dependence on exports to advance economy markets as well as a combination of fragile domestic financial markets with significant presence of foreign investors has taken their toll. Growth in these economies will remain higher than in Europe and the U.S. but it will slow down significantly relative to the recent past.

Understanding the financial crisis

The interplay of risk, leverage, and liquidity is at the core of the current financial crisis sweeping global markets. The opening up of financial markets, in combination with years of relatively expansionary monetary policy in the U.S. and many emerging economies, has created a large pool of capital looking for returns from financial institutions in an increasingly competitive market. The first response from financial institutions was a collective discounting of risks that seemed more and more justified the longer the growth era lasted. The second response was to increase leverage more and more, using new types of financial instruments to create higher returns per invested capital that traditional economic activity could not achieve. The third response was to increasingly

shift the financing of long-term assets, like mortgages, to short-term funding sources, like money markets, that seemed to be growing exponentially in their depth.

As the miscalculation on the risk profile of U.S. subprime loans became apparent, the repercussions swept through the system. Risk assessments were revised in other markets as well, lowering the value of risky assets and raising the costs of financing them. Uncertainty about the actual quality of assets, partly driven by the complex new financial products that had entered the market, raised the reservations of providing further credit to counterparties. Leveraged positions then became quickly untenable as companies had little buffer to deal with falling underlying asset values. Massive deleveraging set in. Finally, liquidity dried up as the deleveraging and revised risk assessment shut

The Baltic Sea Region

The macroeconomic climate in the Baltic Sea Region is characterized by the fall-out from the global financial crisis meeting a domestic business cycle downturn and weakening global demand. Overall, the Baltic Sea Region economy has been holding up better than other parts of Europe and the world economy. This has been the case despite the dramatic financial meltdowns in Iceland and, to a much lesser degree, Russia and the growth collapse in the Baltic countries, in particular Estonia and Latvia. But the challenges for public policy to keep it that way have clearly increased. And even in this slightly optimistic scenario the Region is facing a significant downturn in economic activity.

The slowdown of GDP growth in the Baltic Sea Region in late 2007 and early 2008 has been primarily driven by the domestic economy, but is now being accelerated by the fall-out from the global financial crisis and the resulting growth slowdown. Private consumption growth, traditionally the largest contributor to overall changes in GDP, has increasingly slowed down since 2007 with a negative outlook for the coming year. This development breaks a positive trend that had been in place since 2001. Government consumption growth has increased slightly in 2007 but is not expected to provide much support for growth in 2008, when budgets were still

in anti-inflationary mode for most of the year. For 2009, the situation could be different, depending on how many of the currently discussed government programs become reality. Investment, traditionally the most volatile component of GDP, had accelerated at an increasing rate since 2002 but is now quickly losing momentum. Net-exports are in the meantime starting to become less of a drag on GDP growth; while in the past imports had been grown faster than exports, the slowing economy is narrowing the gap between the two. The most direct danger is now the collapse of demand from key export markets which, in combination with increasing nervousness by domestic consumers and an increasing risk-averse position of the banking sector, could lead to a serious slowdown.

The financial crisis hit the Baltic Sea Region somewhat later than the U.S. and continental Europe. In late September/early October, Iceland saw the complete collapse of its financial system. Russia had to close its equity markets numerous times and government support was given to a number of financial institutions. The German government had to come to the rescue of individual banks and ultimately provided a general support scheme. In mid-October 2008, the Prime Ministers of Denmark, Latvia, and Sweden announced their support for the financial sector rescue package, with capital injections into banks, that had been agreed upon by the Euro-Zone countries and the UK.

down many financial markets, giving the last push to companies dependent on recurrent short-term refinancing.

Traditional crises had their origins in bad assets, while the current crisis has for many companies been driven by bad liabilities. A comparison of Iceland and the Baltic countries shows how the current crisis is different from old ones. The Icelandic banks were aggressive lenders but their demise had almost nothing to do with bad loans in their portfolios that could not be repaid. Their failure was driven by their inability to refinance long-term lending as global financial markets started to shut down. Initially, Icelandic banks tried to compensate by offering very attractive rates for deposits to private customers. But the inflow of this capital was not enough to meet the huge

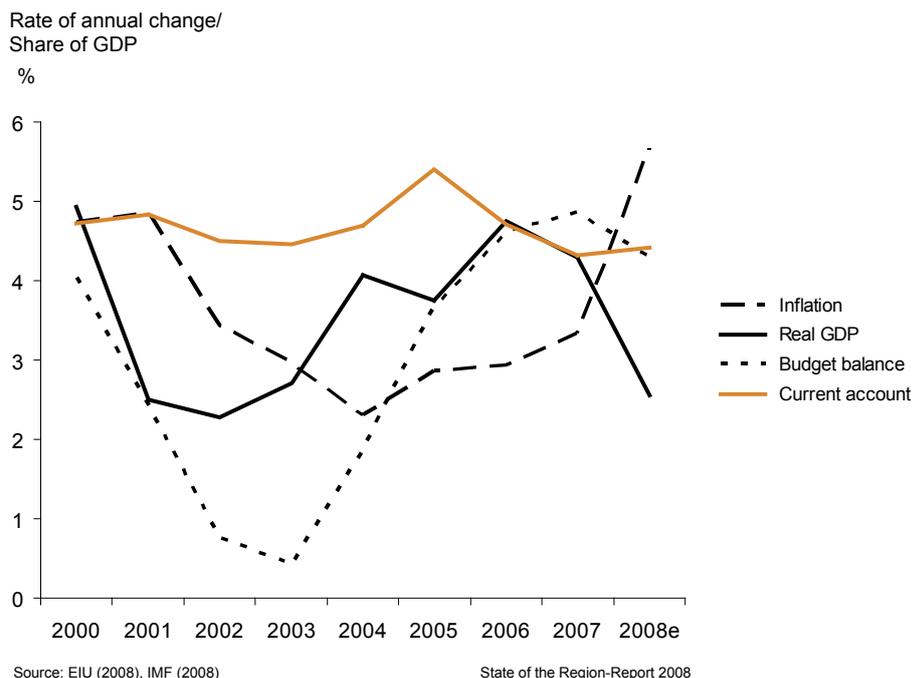
short-term refinancing needs that the Icelandic banks had as a consequence of their rapid growth. And with a home base in a small economy and the smallest currency area of the world, neither the Icelandic Central Bank nor the government could back them up. Icelandic banks have paid with their existence for taking on a new type of "refinancing" risk. The Swedish banks in the Baltic countries were also aggressive lenders and are now suffering from rising default rates. But with a sound capital base, these losses can be shouldered even when refinancing on the international markets has become all but impossible. Swedish banks that have made significant money on their lending in the past are now paying with a loss of profitability for taking on a significant amount of traditional credit risks.

Before the financial crisis hit, monetary policy conditions in the Region had been generally stable with Central Banks stuck between increasing inflationary pressure and slowing demand. With economies operating close to capacity, the tendency had been tilted slightly more towards monetary tightening than in other countries. After the crisis reached the Region in October, monetary policy has shifted course dramatically, with Central Banks in most countries cutting interest rates in line with their foreign peers. As a consequence of the economic and monetary policy changes, the Region has experienced a dramatic change in its foreign exchange rate outlook. The Region had experienced continued exchange rate appreciation for much of last year but since late summer a resurgent US-Dollar has regained some ground. This revaluation has gained dramatic momentum during October, when the Swedish Krona lost 20% and the Euro 15% against the US-Dollar in one month. The pressure has been higher for smaller currency areas, forcing the Danish Central Bank to raise rather than lower interest rates in an attempt to keep its parity against the Euro.

Given the bleak external environment and the serious issues some individual countries in the Region face, a significant slow off growth

across the Baltic Sea Region is to be expected. And there is a further downward risk if the global financial meltdown cannot be stopped and leads to a full-blown recession. But if financial markets return to some degree of normality within the next few months, the Baltic Sea Region should be able to stabilize growth at a rate that will be lower but still above the level of many peer regions. The one-time effect of a contracting real estate sector is over, public balances are well positioned to deal with the blow of lower GDP growth, both inflation and imports are already slowing down in response to the weaker economic climate, and the banking sector in the Region looks relatively sound overall. A critical factor for the pace of the resumption of growth will be the labor market; if unemployment remains moderate despite the slowdown, private consumption should stabilize and the pressure on public balances will be moderated. This is not only a question of avoiding job losses - they will be almost inevitable as companies adjust to slower demand - but of the ability to enable job creation in new companies and, over time, in existing companies that start to see renewed market potential. That would be the scenario for a slow return to a solid growth path based on domestic factors.

Figure 2: Key Economic Indicators: Baltic Sea Region



Countries in the Baltic Sea Region

The difficult international economic environment has amplified the differences in economic situation that already existed across the Region. Countries with solid fundamentals have benefited while countries that had been riding on more temporary sources of economic growth had to bear the full brunt of financial markets risk aversion.

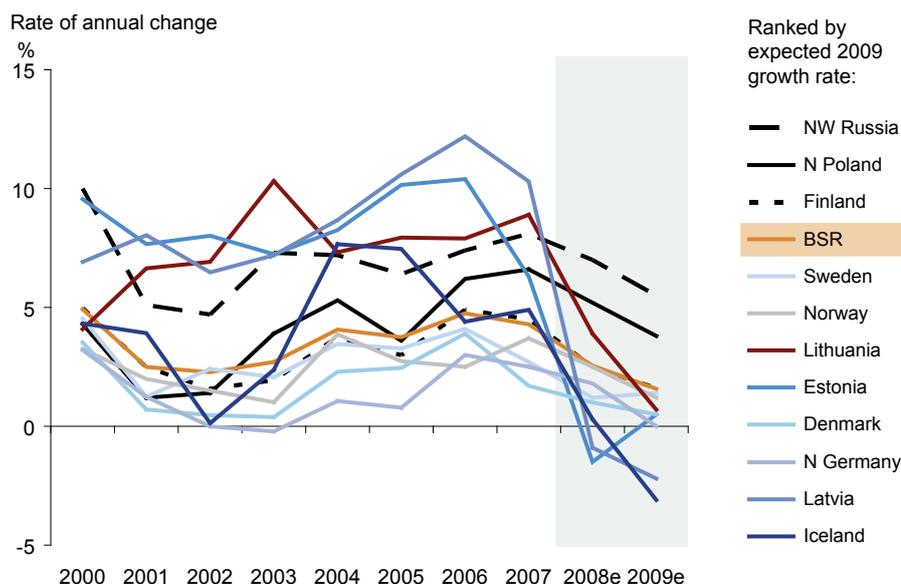
The Nordic countries have overall been more resilient than most other parts of Europe. A combination of solid initial conditions with the ability to - until very recently - rely on stable export markets in Germany and the emerging economies has helped. With the German economy fast losing momentum, the pressure on Nordic countries is increasing. But solid public finances leave them much better prepared to deal with the cyclical downturn than their peers in Continental Europe and the UK.

Sweden, the largest economy of the Region, has seen GDP growth rates fall significantly from a high of 4.5% in 2006 to 2.8% in 2007 and an expected 2% in 2008. In 2007, domestic demand in addition to strong investment and, foreshadowing trouble, and stock building have been the drivers of growth, with exports and also govern-

ment consumption playing a moderating role. In 2008, private demand growth is expected to slow down to around 2.5%, a significant but not dramatic drop from 3.1% the previous year. Export growth has been holding up better, while imports have developed much less dynamically than previously. Worryingly, investment growth has almost halved and companies have reduced stocks which, given softening demand, indicates significant cuts in production. Business leaders have clearly adopted a much more skeptical view of the future, and highly visible redundancies in the automotive sector and banks have added to the gloom. Financial markets, too, have taken a beating, with the Stockholm Stock Exchange among the markets suffering the most globally. Banks have been hard hit, especially those strongly exposed to the faltering economies in the Baltic countries. But a report of the Swedish Financial Supervisory Authority from October 2008 found little reason to see the banks' stability in danger.

Despite the slowing economy, inflationary pressure has been increasing longer than in other countries. House prices continued to rise well into the year. With consumer demand still strong, capacity utilization high, and import prices going up for most of the year, consumer prices are

Figure 3: Economic Growth: Baltic Sea Region countries



Source: EIU (2008), IMF (2008)

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expected to rise by more than 3% in 2008. The sharp drop in the Swedish Krona will, at least in the short term, add inflationary pressure, reducing the advantage from falling energy and commodity prices. Until October, the Central Bank viewed the inflationary risks, also from wage growth, higher than the risks of the economy slipping into a real recession, and raised the interest rates in a number of steps, most recently in early September. With the crisis reaching a new phase in October, the Central Bank changed course to lower interest rates in late October with further reductions possible. With interest rates at still relatively high levels, the Central Bank has sufficient “fire power” to provide support through stable or falling interest rates.

Fiscal policy has broadly paralleled the pattern of monetary policy; government consumption has been kept under control over recent years, and as long as the inflationary pressure was high, the government made only moderate use of fiscal policy instruments to sustain growth. In its last budget proposal from September, however, more significant steps were announced on spending as well as on the reduction of taxes on companies and labor. The spirit clearly is to support demand while also giving incentives for production capacity to rise and thus inflationary bottlenecks to disappear. It remains to be seen whether the steps taken so far are sufficient. Using fiscal policy wisely in the face of increasing unemployment rates in the run-up to an election will be a serious test of the government’s political nerve.

Norway’s economy is gradually slowing down after reaching a peak of 3.5% growth last year. Private consumption is weakening and investment is expected to halve in 2008 compared to the previous year. While the economy is already weakening, the tight labor market continued to create high wage pressure. Rising import prices are adding to inflation and fuelling strong growth in import values. Falling oil prices and strong losses on Norwegian financial markets have worsened the situation over the last few months. The government’s actions to support the banking sector have been complicated by criticism that a Norwegian-owned bank was favored relative to banks headquartered outside of Norway.

In a macroeconomic environment that is getting more challenging, the political pressure

on the Norwegian government is increasing to tap into the formidable wealth from oil and gas exports created in the stabilization fund. Over the medium term this would risk pushing inflation rates even higher, especially if there is no strong focus on improving the productivity and the production capacity of the Norwegian economy. In 2008 fiscal policy aimed to reduce inflationary pressure by lowering the non-oil budget deficit. The planning for 2009 implies a more expansionary approach, which would give a demand push of about 0.7% of GDP.

Denmark’s economy has, after a sustained period of solid growth, experienced the most dramatic slowdown of GDP growth in the Nordic region. Driven by a faltering real estate market, slowing exports, and a deterioration of investment rates, GDP growth halved from 2006 to 2007 and is expected to slow some more in 2008.

Denmark has experienced the economic slowdown earlier than its peers in the Baltic Sea Region. Fast growth in previous years had brought the economy to capacity constraints and fuelled a boom in real estate prices. In 2007, the housing boom finally hit its peak and the slow-down in construction was the main reason for weaker GDP growth. At the same time, Danish exports were facing capacity constraints in meeting higher foreign demand while imports surged to serve the strong domestic market. Net trade started to become a drag on overall growth rates.

In 2008, the Danish economy faces further challenges as global demand slows down. Supply-side constraints remain, keeping inflationary pressure high if not increasing. But the still strong labor market, testament to the ability of the flexible Danish market in dealing with business cycle shocks, has kept unemployment low. This has contributed to stable private consumption, the largest part of overall demand, and to only slightly weaker public balances. The necessity to raise interest rates in order to defend the parity between the Danish Krona and the Euro might have negative effects on local investments and exports to neighboring Sweden that has seen its currency devalue against the Euro.

The outlook for the Danish economy is serious but not traumatic: private consumers seem to have reacted calmly to the loss of housing assets, and domestic demand growth even seems to gain

momentum this year. Unemployment remains low as the flexibility of the Danish labor market has absorbed the economic shock.

Finland has so far been less affected by the global crisis and is experiencing a more normal slow-down of economic activity as growth rates continue to come down from the surprisingly high level of 4.3% in 2007. Finish banks have come out largely unscathed of the financial market turbulences in the U.S. and real estate prices seem to be slowing down in an orderly fashion. Private consumption and investment are now both weakening, a classic business-cycle pattern. The rising import prices have pushed import growth higher, so net exports do not provide any support for GDP growth. Consumer confidence has been dropping in recent months. Government consumption is starting to accelerate, with previous years of solid fiscal surpluses providing ample short-term room for maneuver.

The labor market continues to present challenges. Despite higher unemployment than in the other Nordic countries, wage pressure has been significant, indicating the presence of labor market inflexibility. Higher wages, combined with the global price pressure from energy and food products, are creating further inflation risks. Wages are in 2008 expected to grow faster than productivity, contrary to the last two years where unit labor costs fell.

In *Iceland*, the economic risks that have been building up since last year have materialized in a way few observers thought possible. In the first half of 2008, the development followed a traditional pattern of an economy moving from overheating to slowdown. The real estate market experienced a significant slow-down and private consumption overall is expected to contract in real terms in 2008. Only positive growth in net exports helped the economy to remain at positive overall growth.

As the global financial crisis unfolded, the situation for Iceland quickly moved from challenging to traumatic. Initially, speculative attacks against the Icelandic currency led to a drop in the Krona that further fuelled inflationary pressure on the domestic market. The bilateral currency swap arrangements of the Bank of Iceland with the other Nordic central banks in May 2008 were successful in the short-term to strengthen market

confidence, especially in the exchange rate. But when the financial crisis hit with full strengths in September and October, Iceland did not have the resources to react; internal policy blunders might have added at least to the speed of the crisis. In late September, the Icelandic government stepped in to take ownership of Glitnir, of the countries three leading banking groups, to avoid bankruptcy. In early October, the government nationalized the two remaining large banks Kaupthing and Landsbanki. With emergency sell-offs of their international assets, the Icelandic financial sector that had been thriving with risk-taking, highly-leveraged business models has essentially been wiped out. The Icelandic government is turning to outside help for meeting the significant financing gap to cover the international liabilities of the nationalized banking sector. The Icelandic Krona has lost most of its functions in international currency trade and there are renewed calls to seek the shelter of Euro-Zone membership. Some Icelandic investors have been forced to sell their companies at knock-down prices, reducing the economy that had become a symbol of the opportunities for small countries in the global economy, to its base of fishing and energy-intensive aluminum production.

Northern Germany is so far benefiting from the relative resilience that the German economy has shown over the last year in the face of global economic turbulences. Even the implication of German banks in the fallout of the U.S. subprime crisis initially seemed to have limited impact on overall financial markets and the real economy. GDP growth has slowed down, but was higher than expected in the first quarter of 2008. Export growth slowed in 2007 after the buoyant development in the previous year but was still at a high level. The unemployment rate finally started to drop significantly, providing support both for public finances and domestic consumer demand. Investment rates remained at high levels.

In recent months, however, the outlook for the German economy has clearly deteriorated. The German banking system has received a serious blow through its implication in the U.S. real estate markets. Especially the publicly-owned Landesbanken have fared badly and the whole system of Landesbanken is coming under renewed scrutiny. Company investments, traditionally the

most forwarding looking part of GDP, are slowing down. The sentiment of business leaders and consumers is weakening. While the economy is slowing down, pressure for more significant wage increases remains visible after years of moderate wage growth and skill shortages in many sectors. The reduction in unit labor costs relative to other EU countries that had supported German exports especially prior to 2007 is slowing down markedly, further weakening the position of German companies. Public balances that had almost achieved neutrality in 2007 are set to deteriorate moderately as the economy slows down.

The *Baltic countries* have turned from record-fast growth to recession in an astoundingly short amount of time. The key driver has been the real estate market, where strong construction activity as the result of speculative buying finally got caught up by the lack of underlying demand. The drop in construction activity had a directly detrimental effect on GDP growth. The repercussions on private consumers who were suddenly faced with much lower net wealth further exacerbated the drop in GDP. Export growth is still holding up much better, but the weakening economic climate in the world economy, especially Europe, will add to the woes of the Baltic economies.

Estonia and *Latvia* have been affected most dramatically, seeing growth rates moving to zero (Latvia) or even negative figures (Estonia) by the second quarter of 2008. Both countries registered drops in industrial production, while exports continue to grow. While default rates on loans are rising, the banking system with its overwhelming share of foreign-owned banks seems stable. Unemployment, however, remains at moderate levels, stable in Estonia while slightly increasing in Latvia. The flexibility of the labor market will be important to limit a further escalation of the crisis.

The crucial question for the two countries is whether the depth of the downturn, combining a normal cyclical downturn with the sudden burst of speculative overheating, will fundamentally hurt the medium-term growth path they are on. The governments of both countries have launched measures that are designed to both support short-term economic activity and lead to improvements of medium-term competitiveness. The Latvian government, for example, has launched an ac-

tion plan that tackles administrative barriers for companies and provides financing instruments, especially for SMEs. In the short-term, a resumption of growth will depend on the ability to succeed in export markets that have slowed down relatively to previous years. In the medium-term, regained domestic consumer confidence, once the burden of fast credit growth has been absorbed, will become crucial.

Lithuania, the largest of the Baltic countries, has historically been lagging behind its neighbors in the development of the business cycle. This has now enabled the country to avoid a “hard landing”. The overheating in the economies of their Baltic neighbors led Lithuanian banks to tighten lending standards, and consumers to moderate credit demand, before the overheating had become unmanageable.

GDP growth has slowed down but remains solidly on the positive side at around 5%. Higher oil transit trade, a traditional hallmark of the Lithuanian economy, helped push up trade values by more than 20%. Lithuania has avoided the overheating of the real estate and local credit markets; this has led to lower growth rates than in the other Baltic countries in the past but now limited the impact of the weakening economy to a normal business cycle downturn.

Northern Poland has benefited from the strong growth that the entire country experienced since 2006. Strong export growth, strong investment growth, driven in part by solid foreign direct investment inflows, and rising domestic demand have driven the development of the Polish economy. The acceleration of the economy has led to a significant appreciation of the Zloty, despite some downward pressure most recently in the wake of general concerns about Central European economies. With real wages growing at a fast pace and the currency becoming more attractive, significant numbers of Poles have returned from the UK and other countries, providing limited relief for the growing supply bottlenecks.

The medium-term outlook is mixed; slow growth in major export markets, especially Germany, and a deteriorating cost position due to the currency appreciation and fast wage growth, will test the new strength of the Polish economy. And the recently more expansionary fiscal policy of the government elected into office in October 2007

have made the task of controlling inflationary pressure even harder for the Central Bank. But compared to many other countries in the region, Poland is still in an easier macroeconomic situation than most of its peers. Against this background, the 2009 budget presented by the government in September foresees higher spending on education and infrastructure while reducing the budget deficit by a third.

Northwestern Russia continues to grow at high but slowly decreasing rates. The St. Petersburg and Leningrad oblast economy, the heart of Russia's north western region, is slightly underperforming the Russian average. Especially in the overheating construction market there are signs that supply is outstripping demand. New construction has slowed down significantly.

Double digit inflation is starting to eat away the nominal income gains of consumers.

The Russian economy overall has benefited from the high oil prices as well as the ensuing boom in consumer demand that has attracted a large amount of foreign direct investment. A combination of three factors has created significant problems in recent months that are likely to lead to a slow down of growth.

First, the fast growth of Russian demand has exposed more and more supply-side bottlenecks throughout the year, leading to upward pressure on inflation. The way in which the Russian Central Bank has used foreign currency buying to slow the appreciation of the Ruble until September, has led to fast growth in money supply, fuelling inflationary tendencies further. While some inflation is natural for an economy in Russia's current situation, rates that are consistently in double-digits are a problem.

Second, the political risk that was always seen to be a factor has reappeared in force over the last few months. After the smooth transition from the Putin to the Medvedev-Putin administration created some hope for stabilization, a number of events have led to a significant change in sentiment. Putin's public attacks against a Russian company came first, leading to a significant drop in the Russian stock market. Next was the public row between BP and its Russian partners about the governance in their TNK-BP joint venture.

Then the Georgia conflict came as the last chapter, leading to capital outflows estimated at \$21 billion in the first few weeks and a dramatic drop in the Russian stock market as foreign investors pulled out en masse.

Third, the global financial crisis has exposed both the fragility of the Russian financial system and the country's dependency on oil. The Russian Stock Market was the worst performer globally this year and had to be shut down multiple times as the index dropped dramatically. The Russian Central Bank has reacted by buying up Roubles and the Ministry of Finance used the Stabilization Fund to invest massively in the Russian market. The linkages between Russia's financial and real economy are still not as much developed as in

The linkages between Russia's financial and real economy are still not as much developed as in western economies.

western economies. But these fluctuations have a price and could hurt the country's growth potential over time. Russian banks and large corporations that had used the opportunity to borrow money in Western

markets at what seemed to be very cheap rates are facing the pinch from the adverse currency movements and quickly rising interest rate margins. Emergency sell-offs, like the sale of a large stake in Canadian automotive supplier Magna International, are one sign of the massive wealth loss some of the largest Russian companies and investors face. The infusion of government capital was driven by the acute crisis, but leaves even more of the Russian economy in public hands, a problem already before the crisis. At the same time, the falling oil prices put additional pressure on the public sector balances. Russia has accumulated reserves to deal with the current crisis but the trajectory is worrying.

Assessment

There is no doubt that the current macroeconomic climate poses real challenges to the Baltic Sea Region. Highly integrated in the global economy, the Region is exposed to the repercussions of the financial market turmoil, volatile commodity prices, and slowdown in many important export markets. The Region also has a number of home-grown problems from the overheating in the Bal-

tic countries, especially Estonia and Latvia, and Iceland, to the political risks affecting the Russian economy and the more traditional business cycle slow-down in the Nordic countries. Whether these challenges, especially from the global financial markets, are already under control, or in the process of becoming even more of a burden on the global economy, remains to be seen.

In an environment of clear challenges and risk of further shocks, it is even more important to keep a balanced view on where the Baltic Sea Region stands relative to its peers in Europe and globally. If the global economy enters a downward spiral into full recession, there is little hope for the Baltic Sea Region to avoid the same fate. But if some sort of normality returns, the outlook for the Region is significantly more benevolent; financial markets have suffered, but there are no signs that the problems that originated in the United States will undermine the broader stability of the financial system in the Baltic Sea Region. Money will be lost, no doubt, but there are little indications that the systemic stability

of the banking system is under threat. There is a risk of the sudden slow-down in the Baltic countries affecting Swedish banks, but even there it seems unlikely that the losses could endanger their solidity. By and large, monetary and fiscal policy in the Region is in a strong position to deal with the challenges ahead. There is room to ease monetary policy if needed, room which has been used in early October. And there is room to use fiscal policy better by using tax reductions to also stimulate the supply side rather than only the demand side, to stabilize expectations and economic activity.

The challenge for the Baltic Sea Region is political as much as economic: are governments, some of them facing elections in the near future, able to hold their course in an environment where jobs will be lost? Domestically, there will be pressure to intervene. And for the Region, there might be pressure for politicians to concentrate on domestic affairs when the pressure is increasing. The Region can emerge stronger after this test, but it will require real political leadership.

- **Baltic Sea Region integration could gain in importance if it is perceived as a tool to overcome the impasse in European integration that has been created by the Irish rejection of the Lisbon Treaty in June 2008**
- **The Baltic Sea Region could be an area for Russia and EU member countries to continue collaboration, even if overall relations are suffering after the Georgia conflict**
- **A rise in protectionism, evident in the failure of the Doha-round and further fuelled by the political reactions to the current crisis, would hit the Baltic Sea Region especially hard**

2. The political climate

Over the last 12 months, a succession of events has changed the political environment in which Baltic Sea Region cooperation is taking place. The most important were the defeat of the European Constitutional Treaty in a referendum in Ireland, and the crisis in the Caucasus between Russia and Georgia. Less important, but also relevant for the Baltic Sea Region, was the final collapse of the Doha trade round during the summer.

European integration

On June 12, 2008, the Irish voters rejected the Lisbon Treaty that was aimed at improving the architecture of the European Union. The treaty was less ambitious than the European constitution that had been voted down by French and Dutch voters in 2005, but remained clearly inspired by the EU's vision of an "ever closer union". Among the main changes proposed was a reduction in the number of EU Commissioners, the creation of the positions of a President of the European Council and a High Representative for Foreign Affairs, more majority voting in the European Council, and a further strengthening of the role of the European Parliament. In the aftermath of the Irish vote, European leaders starting looking for a way to salvage what they could from the more technical changes to the operations of the European institutions that were widely perceived as being insufficiently effective.

For the Baltic Sea Region, the direct implications of the Irish vote seem limited at first sight, especially on the competitiveness agenda that is the focus of the State of the Region Report. Yes, the Swedish Presidency would have been one of the first under the new system, which would have deprived the Swedish Prime Minister from sharing the European Council during the Swedish Presidency in the second half of 2009. But there is no clear sense on how the content of policies relating to competitiveness and other areas of high interest to the Baltic Sea Region would have changed. But this perspective is misleading. The need for effective cross-national collaboration in the Baltic Sea Region is not receding. With the increasing trade, investment, and other linkages across the region, interdependencies are increasing. If the European institutions are unable to deliver, regional collaboration between neighboring countries within the European Union becomes an alternative, not to the level of integration the EU has delivered so far, but to the next steps of integration that the EU is struggling to undertake given its current structure.

There are clear signs that the state of European integration will be an important factor driving the importance of the Baltic Sea Region as a platform for policy making. This is partly the result of what European integration has achieved: with the EU providing a stable platform for overall integration and reliable standards for national business environment quality across all EU member countries, collaboration even between neighbors

at different stages of economic development has become economically more feasible and attractive. But it is also partly the result of the European institutions being hard pressed to deliver on further integration. Integration between neighbors, with more to gain and smaller cultural barriers to overcome, can be an effective tool to make those next steps that seem impossible on the wider EU level. Whatever the relative role of these two factors, they are unlikely to change quickly. This might also be one of the reasons, why the Baltic Sea Region and its historic cousin, Nordic cooperation, are experiencing so much renewed interest within the Region.

The EU Baltic Sea Region strategy, discussed in greater detail in part C.1 of this report, is in some ways a reaction to the current state of European integration. While the central intention is to achieve better coordination across the many EU policy tools used in the Baltic Sea Region (and with the national policies in place), the strategy could become much more. It could become a role model for how collaboration at an intermediate level, between the EU and its member states, can become a key part of the future of the European Union. In fact, only if the strategy plays such a role will the rest of Europe take notice or at least accept this new approach. Closer cooperation of subgroups of countries within the EU has happened before (Euro, Schengen) but the concept of different speeds is still viewed with much suspicion. Only a combination of the Baltic Sea Region explicitly not asking for extra funding, the lack of dominant involvement by any of the large EU member countries, and the leadership of individual politicians at the EU and national level were able to mollify these concerns.

Russia

On August 8, 2008, Georgia announced that it had taken control of Tskhinvali, the capital of the Georgian break-away province of South Ossetia, a region that had de-facto been autonomous since a ceasefire agreement in 1994 led to the deployment of Russian peacekeepers. Russian troops quickly pushed back the Georgian forces and established control of a significant part of Georgia outside the

disputed region. On August 26th, Russia recognized the independence of South Ossetia and Abkhazia, another break-away Georgian region. Concerns have risen in other parts of the former Soviet Union, particularly in the Ukraine, that the more assertive Russian stance could also affect them. A special summit of the European Council on September 1st condemned Russia's intervention and the recognition of the break-away regions in Georgia. It agreed to send a fact finding mission, to nominate a special representative, and to suspend negotiations of a partnership agreement with Russia until Russian troops during the crisis were completely withdrawn. Russia's application to become a member of the WTO also seems in jeopardy, with the U.S. signaling its intention to put the process on ice and Russia downplaying the importance of WTO membership.

For the Baltic Sea Region, tighter economic integration between Russia and the rest of the Region is probably the single largest economic opportunity it faces. While there has been little direct impact on economic relations, the political environment for collaboration between Russia and its neighbors, already complex in the past, has become significantly more challenging. The alarm about Russia's actions in the Caucasus was most severe in the Baltic countries and Poland. A significant share of the Estonian and Latvian population has a Russian background; many still only speak Russian. In Latvia, there are concerns about the influence of political financing from business groups with suspected links to Russia. Lithuania is the transit route for Russian troops to Kaliningrad, the Russian enclave on the Baltic. Poland reacted quickly by the perceived change in Russia's foreign policy approach and after previously faltering negotiations signed a deal with the United States on August 20th about the use of Polish sites in a U.S. missile defense system against the threat of attacks from rogue states in the Middle East and Asia. All these factors provide ample opportunity for problems to occur that could easily translate into a deterioration of economic links between northwestern Russia and the other parts of the Baltic Sea Region.

In addition, the political climate in Russia has hardened. The general mood in the population has become more nationalistic and less interested

in collaboration that can be perceived as compromising Russian positions. And this time around, the view of Russia as the rightful guardian of the interests of the South Ossetians against Georgian aggression either instigated or tacitly accepted by the West is also shared by a significant fraction of the Russian liberals. This radically different view of what has happened makes it harder to regain trust and to agree on collaboration efforts in the future. In addition, the liberal faction in the Russian government had to fight for their influence as hardliners have been quick to take them to account for the implosion of the Russian financial markets.

The state of Russia's relation with the West can lead to three different outcomes for the Baltic Sea Region that both Russia and its northwestern neighbors are part of. Which of these three scenarios will come closest to reality is harder than ever to anticipate.

The most negative outcome would be a fundamental freeze of collaboration projects in the Baltic Sea Region. This is very unlikely to happen, but could be the result of escalating rounds of political signals back and forth. Despite the clear reservations that many Western leaders have about the actions of the Georgian President, there is wide agreement in the EU that Russia has overstepped in its reaction. The temporary suspension of the EU-Russia partnership talks could easily become permanent, if Russia does not want to be seen giving in on the demands about removing troops from the crisis area, and the EU needs to show some resolve in sticking to its demands. On the other hand, the Russians could decide, out of their own conviction or in reaction to public demand, to show their independence by reducing ties unilaterally. In the long-term, such an outcome would be too costly for both sides to be sustained; there are too many ties that benefit both. But in the short-to-medium-term it is a distinct, if not very likely, possibility.

The most likely outcome is a moderate cooling down of relations with a muddling-through at the level of the many projects and efforts that link Russia to the other parts of the Baltic Sea Region. Without a new EU-Russia partnership agreement and a continuation of political risks to the relations, a fundamental improvement in economic ties is hard to imagine. Collaboration would then

go on where it makes clear sense for both sides, but will be focused on individual projects with a more short-term focus. In this scenario, the Baltic Sea Region would essentially follow the path of Europe's general relations to Russia. Such a middle course would keep the political capabilities and objectives of Europe and Russia in an uneasy but still somewhat stable relation.

The most positive outcome would be a use of the Baltic Sea Region as platform to keep Europe and Russia engaged and able to increase the intensity of ties. While political dissonance on the high EU – Russia level is almost inevitable, the Baltic Sea Region could be used as a way to still keep the channels open. The economic sphere, as well as environmental and infrastructure issues, is best placed to provide opportunities for joint projects with mutual benefits that can go on without large political fanfare. The interest in using the Baltic Sea Region in such a way might even rise as the overall relations come under stress; the Russians will see this (or sell this domestically) as a clear sign that the West talks tough but doesn't act, a point Russian politicians were already making. The Europeans will hope that with more ties, Russia will have a stronger incentive to act with greater concern for the reactions of its neighbors, and not as a resurgent power that needs to show its disregard of criticism. As an explicit policy such a strategic use of the Baltic Sea Region is an option but not very likely. To succeed, it would need to remain under the political radar screen – collaborating without too much publicity. And it would require the willingness of politicians in the Region, as well as in Moscow and Brussels, to pursue this path.

WTO

On July 27, 2008, negotiations on further global trade liberalization, called the Doha-round, collapsed in Geneva. The aim of the Doha-round had been explicitly to mobilize trade as a driver of growth for developing economies but ultimately exporters of services and industrial goods on the one hand, and exporters of agricultural products on the other, could not find enough common ground. This set-back came after the talks, launched in November 2001, had already

failed to come to a conclusion at a large ministerial conference in Cancun in September 2003. Many observers now see the opportunities for a large multilateral trade deal as remote. In the meantime, bilateral free trade agreements have proliferated, with the European Union an important player.

For the Baltic Sea Region, the global trade talks seem far away. Most of its trade is with countries that have limited, if any, trade barriers. The exceptions that exist, for example the Russian export tariffs on forest goods that pose a significant challenge for the Finnish pulp and paper industry, or the barriers the Polish food products face in Russia because of supposed health risks, could be addressed in the existing WTO framework (if Russia would become a member). Better intellectual property protection in markets like China and India would help, and lower subsidies for European agricultural products would benefit consumers in the Baltic Sea Region. But they will not have a significant impact on or change the benefits of regional collaboration in the Baltic Sea Region.

The importance of the global trade policy environment for the Baltic Sea Region is more indirect but nevertheless important. As a region of small open economies, it has economically more to lose than others from the resurgence of protectionism. While bilateral trade agreements of the EU can lead to more market opening, these deals tend to be even more vulnerable to the lobbying of narrow interest groups. And the generally more open trade-oriented Baltic Sea countries in the EU have it often found hard to convince their colleagues in Southern Europe. If protectionism rises – a serious concern given the current political mood in many countries – the pressure will increase to make the Baltic Sea Region more attractive relative to other markets by increasing the level of integration. Both for foreign companies and for companies from the Region that compete globally, a more integrated home market will become more important if trade barriers remain high elsewhere.

The concerns about an open global trade and investment regime have grown as governments have taken increasingly dramatic steps to react to the global financial crisis. As governments take

ownership stakes in banks, provide financial support to companies in trouble, and ultimately even invest in domestic companies that could become the target of foreign investors, the context for an open global economy becomes more and more challenging. A successful WTO agreement could have added some safeguards against such a process.

Assessment

Regional integration can never be understood just in terms of economic costs and benefits. The political logic of working together is at least as important. For the Baltic Sea Region, the undercurrents of this political logic have certainly become more complex. But the new situation also provides opportunities.

European integration and the actions and policies of EU institutions have always been a significant driver of Baltic Sea Region collaboration, so an impasse in Brussels is not good news for the Top of Europe. But the search for a new model to drive European integration forward has made regional collaboration among neighboring countries more attractive, not as an alternative to EU integration, but as a complement that can support the broader integration process.

The tensions in the relation between Russia and the West can clearly have a negative impact on the efforts to fully integrate Russia in the joint activities of the other Baltic Sea Region countries. But even if the odds are against it, the Baltic Sea Region could be used by both sides as a bridge to keep open. There are political and economic benefits for both sides in such a scenario but it would involve uncomfortable choices that might not be acceptable.

The danger of protectionism becoming a more important force can only be negative for a region so integrated in the global economy. But maybe it can be a motivation to remove those barriers that still remain within the Baltic Sea Region. A larger home market is more important if protectionism rises and in such a scenario an integrated Baltic Sea Region will be a much more attractive investment proposition than a group of open but small economies.

- The current institutions and platforms for collaboration across the Baltic Sea Region have developed organically over time, not with a view on the challenges of the future
- There is a lot of cross-border activity in the Region and there are encouraging signs that the level of coordination among them is rising
- The current structures provide much potential for collaboration across the Region but more coordination and the better integration of the private sector remain necessary

3. Structure for cross-national cooperation in the Baltic Sea Region

Successful collaboration among neighboring countries does not only depend on selecting the right projects and having the tail-wind of a beneficial macroeconomic and political context. Without an institutional structure that is able to deliver, all of these factors remain potentially without impact. This part of the Report will provide a short overview of the main institutions working on cross-national collaboration in the Baltic Sea Region in areas closely related to competitiveness.

Development of Baltic Sea Region institutions and networks

The current set of institutions that support and bear collaboration across the Baltic Sea Region has grown over time. Understanding the dynamics that have resulted in the situation today is of more than historic interest. Building the right institutions to address the Baltic Sea Region's current challenges requires change. A top-down exercise in designing new organizations from scratch is politically unfeasible and risks destroying the structural capital that has been created over decades. But adjustments to the existing portfolio of organizations, to their activities, and to the way they interact, are clearly needed.

Precedents in the Nordic region The Nordic collaboration has been one of the important pillars that enabled regional collaboration in the Baltic Sea Region to reach the depth it has

today. Nordic collaboration remains important in its own right and is not just a step towards Baltic Sea region integration. But it has provided institutional models that could easily be extended to the broader Region and created a level of experience and trust in cross-national collaboration that inspired many non-Nordic members to pursue regional integration more intensely.

The *Nordic Council* was launched in 1952 as a forum for collaboration between parliamentarians from Denmark, Finland, Iceland, Norway, and Sweden as well as the autonomous territories the Faeroe Islands, Greenland and the Åland Islands.. In 1971, the *Nordic Council of Ministers* was added as a platform for the governments, and equipped with its own secretariat, it became a tool for dialogue and joint activities in a broad range of policy areas. It created a number of specialized institutions like the Nordic Industrial Fund (1973), Nordtest (1973), and the Nordic Investment Bank (1975).

The participation by the Nordic Council of Ministers in joint activities in the Baltic Sea Region has increased during the last decades. In the early 1990s, the Nordic Council of Ministers was the first international institution to create a formal presence in the Baltic countries. In the first few years, support and aid for the Baltic countries was the clear focus. Over time, the Baltic countries became stronger partners and in late 2004 a new framework for Nordic-Baltic cooperation was agreed upon that established the equality of both

sides. In 2005, the Baltic countries also became members, i.e. co-owners, of the Nordic Investment Bank. The Nordic Council of Ministers also created a significant presence in North West Russia, first through an office in St. Petersburg in 1995 and since then with smaller information points in Archangel, Murmansk and Petrozavodsk. Most recently a Nordic office was opened in Kaliningrad in 2006. While Nordic cooperation retains its own rich life within the Baltic Sea Region, the connections it has created internally, with the Baltic countries, and also with the rest of the Region, are a crucial foundation for many joint activities.

Reconnecting the region in the early 1990s

As the political changes of the early 1990s created the opportunity to turn the Baltic Sea again from being a part of the Iron Curtain to be the center of an integrated region, the need to create new collaboration structures was obvious. The central political structure became the *Council of Baltic Sea States CBSS*, created in 1992. It became an important early platform for the formal tri-lateral dialogue between Russia, the countries that had formerly had been part of the Soviet bloc (Poland) or Union (Estonia, Latvia, and Lithuania), and parts of Western Europe. An institution of national governments, it established working groups on areas like the environment, infrastructure, security, etc., that enabled policy dialogue, learning, and, in some areas, joint action. CBSS also became the host for a number of other specialized institutions like BASREC (energy collaboration) and Baltic 21 (sustainable development) and created the platform to launch new organization like VASAB (spatial planning). Other public sector networks or institutions that had at least in part an agenda important for competitiveness are Baltic Islands Network B7 (founded 1991), the Union of Baltic Cities UBC (1991), the Baltic Sea Parliamentary Conference BSPC (1991), and the Baltic Sea States Subregional Co-operation BSSSC (1993).

Outside of the government area, universities started to organize joint programs about the Baltic Sea (Baltic University Program, launched 1991), and in 1993 the Swedish government founded SSE Riga, a new university for the Baltic countries located in Riga with strong ties to the Stockholm School of Economics. The Chambers of Commerce created BCCA, the Baltic Chambers of Commerce Association (1992), as a platform to support the new chambers in the formerly communist countries and push

for a better business environment throughout the region. The Baltic Sea Forum (founded in 1992 as Pro Baltica, renamed in 2003) brought representatives from business, politics, and the public sector together. In 1999 the Baltic Sea Trade Union Network (BASTUN) was established, ultimately growing to a network of 22 trade union confederations representing almost 12 million employees across the Region. Its permanent secretariat has close ties to the Council of Nordic Trade Unions (NFS) and aims to support the development of trade unions. The Baltic Development Forum (BDF), created in 1998 on the initiative of former Danish Minister of Foreign Affairs Uffe Elleman-Jensen, provided a platform to connect the different constituencies of politicians, researchers, and business representatives from the Baltic Sea Region in an annual Summit and other activities.

European institutions in the Baltic Sea Region For many years the Baltic Sea Region had been at the outer border of the European Union with only Germany and Denmark being part of the largely western European grouping. But in 1995 Finland and Sweden joined the EU, followed in 2004 by the Baltic countries and Poland. Norway and Iceland were part of the European economic integration through their membership in the European Economic Area. And Russia signed a number of agreements with the EU that affected the context for collaboration in the Baltic Sea Region.

The vast majority of European Union programs were traditionally directed at either member states or individual regions within countries. Throughout the 1990s, the direct impact of EU policies on regional collaboration was therefore limited. The one exception was the Conference of Peripheral and Maritime Regions (CPMR), a broader program launched in the late 1970s that led to the creation of the *Baltic Sea Commission* (BSC) for the collaboration of sub-national regions around the Baltic Sea in 1996. Since 1997 there has been a succession of *EU Interreg programs* for the Baltic Sea Region that provided funding for regional collaboration projects. The latest of these programs has just been launched for the budget period 2007 – 2013. In 1999, the Finnish government initiated the establishment of the *Northern Dimension* as an integrated EU policy towards the region, including its non-EU members. In 2006, the Northern Dimension was relaunched, this time as an equal partnership between the EU, Russia, Iceland,

and Norway, not an EU policy towards its external partners. Funding from these different programs has supported numerous programs for cross-regional collaboration.

In 2007, the European Commission started work on an EU Baltic Sea Strategy, responding to the initiative of the Baltic Intergroup in the European Parliament and governments in the Baltic Sea Region. Part C.1 of this report provides a more in-depth discussion of this effort that has become a focal point for the wider discussions of how collaboration in the Region should be developed.

Moving towards a new agenda Since 2000, the thematic focus of collaboration in the Baltic Sea Region has shifted increasingly towards projects to support innovation and competitiveness, not only traditional policies to establish market institutions, remove administrative barriers for trade and investment, and strengthen the physical infrastructure. This has led to changing priorities in existing organizations but also to the creation of new initiatives and institutions.

In 2002, a number of capitals and large metropolitan areas from the Baltic Sea Region launched *BaltMet* to collaborate on efforts to increase innovation, strengthen and communicate regional profiles, and build critical infrastructure. The activities of the Nordic Industrial Fund and Nordtest were merged into the *Nordic Innovation Center* in 2004. The new institution launched a range of initiatives to strengthen innovation and competitiveness in the Nordic region that were in part open to participation from other parts of the Region. In 2005, *NordForsk* replaced the Nordic Science Policy Council (FPR) and the Nordic Academy for Advanced Study (NorFa) to strengthen and develop research areas where the Nordic countries hold a strong position. National innovation agencies like Vinnova from Sweden and TEKES from Finland took a leading role in organizing innovation policy collaboration on the Baltic Sea level. The *Nordic Cluster Alliance*, launched in 2004, was one of these efforts and became the foundation for *BSR-InnoNet*, one of four cross-national European projects financed under the EU's Competitiveness and Innovation Program (CIP). In the area of Life Sciences, *ScanBalt* was launched in 2004 to combine the region's capabilities in a stronger network, creating a meta-region of life science clusters around the Region.

Current priorities of main organizations in the Baltic Sea Region

We would like to thank the organizations in the Baltic Sea Region that have provided material for this section. All statements made in this section are, however, the responsibility of the author and do not represent any official positions by the organizations covered.

Organizations in the Baltic Sea Region have their individual action priorities but there is also a clear overall pattern of issues that are tackled from many angles. This section provides an overview of organizations' key activities over the past year as well as the priorities they see for the near future.

The **Nordic Council of Ministers** (NCM) launched a globalization action agenda with 14 concrete initiatives at the Nordic premiers' meeting in 2007 in Punkaharju. Among these initiatives are a Nordic top-level research program in the fields of climate, energy and environment, a high level Nordic Globalization Forum, the reduction of border barriers, Nordic Climate Solutions to promote new environmental- and energy technologies, and a Nordic initiative to support progress in the international climate negotiations. The Icelandic chairmanship in 2009 will put further focus on following up the globalization priorities made by the premiers and the initiatives that have been started as a consequence of these priorities.

Innovation and energy/environment are important on-going NCM action priorities. A large part of the NCM's total annual budget of €120m is allocated to innovation and research related activities. The strategic ambition is to create an integrated Nordic Research and Innovation Area (NORIA). NordForsk, the Nordic Research Board, has a current research portfolio of about 200 projects, involving more than 11,000 researchers. The Nordic Innovation Center organizes its roughly 120 projects around six economic/technological areas (creative industries, environmental technology, micro- and nanotechnology, innovative building, functional food, and food safety) and four cross-cutting themes (innovation policy, technology foresight, venture capital, and borderless region). In higher education, the NCM has recently decided to include the Baltic countries in its Nordplus Higher Education Program that provides funding for students, teachers and administrators that spend longer periods

of time at another institution in the Nordic/Baltic area. The Nordic Environment Finance Corporation (NEFCO) currently supports nearly 300 small and medium-sized projects spread across different sectors primarily water treatment, municipal services, power utilities, waste management, chemicals, agriculture and environmental management.

The **Council of Baltic Sea States** (CBSS) has under the Latvian Presidency in 2007/2008 continued its work in Education and Culture, Energy, Environment, Civil Security and Human Dimension, and Economic Development. A conference in Riga in September 2007 discussed the role of higher education and science for the Region. The EuroFaculty program in Kaliningrad was completed in October 2007 and another CBSS EuroFaculty project launched in the city of Pskov, north-western Russia. Follow-up work to the Reykjavik BASREC Ministerial meeting in October 2005 was focused on promoting renewable energy sources, on developing competitive and free energy markets, and on ensuring an efficient consumption of energy in the Region. Efforts were made to coordinate positions of the Member States towards EU legislation. Environment and sustainable development were addressed within the framework of Baltic 21, which supports a focused set of "Lighthouse Projects" designed to demonstrate sustainable development in action. Economic development efforts focused on policy learning in innovation and cluster creation, on tackling obstacles to trade and investment, and on the work of the SOLVIT centers to remove administrative barriers in the Region. Project Balticness combined cultural events with policy discussions at 11 different locations across the Region.

In June 2008, the heads of governments in the CBSS adopted a declaration that outlined long-term action priorities and key principles for organizational reform. Environment, economic development, energy, education and culture, and civil security and human development will remain the focus of CBSS' work. Organizationally, CBSS will strive to fully coordinate its efforts with the work conducted in other bodies to avoid overlapping mandates. The CBSS Secretariat will increase its project capacity. Temporary expert groups rather than permanent working bodies will be used more widely to increase flexibility and bring in outside expertise.

VASAB's work in 2007/2008 was dominated by the preparation of a long term perspective

(LTP) for the spatial development of the Baltic Sea Region to 2030, an effort backed by the EU Tacis program. The Swedish chairmanship produced a paper on the character of the LTP, its main goals, structure and work schedule in March 2007.

Working groups were established on urban and urban-rural networking, accessibility and transnational development zones, and sea use planning. The working groups will finalize their work in September 2008 by producing final analytical reports, policy messages and action plans. Idea and approach was presented to Russian stakeholders at All-Russian Forum of Strategic Planning Leaders in St. Petersburg in October 2007. Two synthesis workshops were carried out in 2008 to propose a vision of the Region in 2030. Vision 2030, challenges, working themes and first outcomes were discussed at VASAB Annual Conference in Riga in April 2008 as well as with national authorities.

For the near future, the LTP drafting process will continue to dominate VASAB's agenda. The LTP is scheduled to be adopted by a Ministerial Conference in September/October 2009. VASAB will also participate in the discussions of the EU Strategy for the Baltic Sea Region and participate in marine spatial planning activities with other organizations in the Region.

The **Baltic Sea States Subregional Cooperation** (BSSSC) focused its activities for the period 2006 to 2008 on the themes of sustainable development, transport and infrastructure, maritime policy, and civil security, especially human trafficking. Sustainable development and its contribution to meet the threat of climate change was the theme of the 2007 BSSSC Annual Conference in Turku. Based on the conference results, in February 2008 BSSSC took the initiative to establish a platform for organizations in the Baltic Sea Region to discuss and pursue energy and climate issues. In transport and infrastructure, BSSSC plans to use a Interreg program to pursue the work on a transport strategy for the Baltic Sea Region under the leadership of Region Skåne. In maritime policy, BSSSC's efforts launched in 2006 have secured the support of the Baltic Sea Parliamentary Conference (BSPC) and led to a proposal to create a CBSS taskforce on this issue. Under the leadership of Schleswig-Holstein, efforts are under way to organize the maritime clusters in the Region.

The **Union of Baltic Cities** organizes local authorities in the Region and has currently 107 member cities. In UBC has in recent years enhanced its EU work through its own Antenna office in Brussels. Policy priorities have been climate change, urban mobility, the European Integrated Maritime Policy and now the EU Strategy for the Baltic Sea Region. Through its 13 working commissions (including city planning, business, culture, social affairs and health, IT, equality) led by various member cities, UBC works on many collaborative projects, often with financial support from the EU, NCM, National Ministries UBC will during 2009 – 2011 lead a project on sustainable development with participants from all BSR countries as well as BSSSC and Nordregio. This New Bridges project (3,3 M€) will focus on strengthening the quality of life through better urban-rural interaction. UBC is also coordinating or partner in more than ten other projects on topics like cities and ports (New Hansa, SPICES), water management, climate change, energy and transport systems (Bustrip 2,7 M€), urban management systems Managing Urban Europe-25 (2,9 M€), and innovation (BSR InnoReg). A key dimension of UBC work continues to be the training of local and regional authorities in new EU member states.

The **Baltic Metropolises Network** (BaltMet) completed its innovation strategy project in 2007 with the development of the so-called „Archipelago of Innovation”, and is now implementing its action plan. New initiatives for creative industries, transnational cluster activities, and the promotion of science- and knowledge-based entrepreneurship, including access to financing, are to be launched. Efforts to promote the image of the Baltic Sea Region and its metropolises, innovation-friendly procurement processes, and other thematic cooperation initiatives are in development.

BaltMet adopted its action plan for 2008-2010 at the Mayors' meeting in Tallinn in November 2007. The plan underlines previous action priorities, i.e. innovation promotion, regional identity building and marketing, infrastructure and sustainable development, and integration and application of urban expertise. It adds a new focus on the promotion of mobility and information exchange among the member-cities in order to facilitate the diffusion of knowledge among the Region's metropolises. BaltMet has also prepared a document on the EU Baltic Sea Strategy, focusing on its urban dimension.

ScanBalt continued its efforts for creating an integrated platform of researchers, companies, universities, and other regional institutions active in life sciences. Leveraging EU funding, ScanBalt finished a project to train young researchers in research management (“Trayss Prime”), supported the collaboration of SMEs in R&D consortia (“Boost Biosystems”), and started a new effort to enable transnational linkages between SMEs and academia (“Bridge-BSR”). ScanBalt Campus, an effort to create critical mass in research and education in selected scientific areas by combing the capabilities dispersed across the Region, operates in eight different knowledge networks with more under discussion. In March 2008, ScanBalt Academy, a group of leading scientists from the Region advising ScanBalt, held its inaugural conference at the new ScanBalt Academy House in Schwerin. In October 2008, the Nordic-Baltic Expatriate Forum was launched to reconnect researchers, students, and professionals with roots in the region but currently working or studying abroad, with the opportunities in the Baltic Sea Region.

ScanBalt recently approved the new strategy 2008-2011 “Innovation on Top of Europe”. To further enhance the development of ScanBalt BioRegion, the strategy outlines concrete action plans in project incubation and excellence, communication and marketing, and member services and organizational development.

The **Baltic Chamber of Commerce Association** (BCCA) concentrated its policy work in the last year on the upcoming reorganization of the Council of Baltic Sea States and the discussions about the coming EU-strategy of the Baltic Sea Region. It will continue to work with the upcoming EU-strategy during 2009, involving chambers from all states surrounding the Baltic Sea in this discussion. Members of BCCA are since many years also involved in various EU-founded projects to further strengthen the development in the Baltic Sea Region from various perspectives. This year's BCCA Economic Forum arranged by the Chamber of Commerce in Turku on 10th November 2008, will focus on Russia's role in the Baltic Sea economic cooperation.

During the last year, the **Baltic Development Forum** (BDF) focused on labor mobility and talents, energy, and the EU Baltic Sea Strategy. Over the past two years, BDF has focused on the improvement of labor market structures and the creation of a resourceful talent base in the Baltic Sea Region. This

work continued at a number of events throughout the year. Energy and climate change was the theme of a conference hosted jointly with demosEuropa and the Danish Embassy in Warsaw in May 2008; it will also play a central role at the BDF Summit in the Öresund region in December, where an analysis of action steps to improve regional energy cooperation will be presented. The European Commission has given BDF the mandate to create input to the Prosperity/Competitiveness part of the strategy. BDF has played an active role in the policy formulation process by arranging and participating in several seminars, working with partners like Sida's Baltic Sea Unit, the Konrad Adenauer-Stiftung, the Polish Office of the Committee for European Integration, demosEuropa, and the County Administrative Board of Stockholm. The BDF Summit 2008 will be an official part of the EU Strategy process and will host six workshops on the different subjects to be presented in the strategy.

In the near future, BDF will continue to focus on energy and climate issues. Also the EU Baltic Sea Strategy, which has been made one of the main priorities for the Swedish EU Presidency in 2009, will remain an action priority for the year to come. In the coming two years, BDF will actively participate in the Interreg project BaltMet Promo on branding the Region. Russia's integration into the BSR remains also high on the agenda. Issuing the annual "State of the Region Report" continues to be in BDF's focus.

Assessment

In 2007, the Swedish CBSS presidency launched a process to review the role and structure of the CBSS. But the fundamental question is clearly much broader and not limited to CBSS: is the Baltic Sea Region equipped with the right set of institutions as it enters the next stage of its development?

There is a widespread sense in the Baltic Sea Region that there are rather too many institutions already working on joint activities. Or, as has been said: "We do not lack activity, we lack coordination." The discussion of regional institutions and their activities above lends some credibility to this assessment. But there are a number of reasons to think that a consolidation of institutions is not the solution.

First of all, there are signs that the situation is improving. The EU Baltic Sea Region strategy is starting to become the crystallization point for many regional institutions to see their part in the overall agenda and collaborate with partners in pursuing specific themes. If this turns out to be the case, it could be one of the more important achievements of the EU Baltic Sea Region strategy. There are also efforts in specific policy areas, like the platform of a number of Baltic Sea Region institutions on energy and the environment that has been launched on the initiative of the BDF. And there are more examples like it. More needs to happen but the signs are positive.

Second, many of the efforts needed to improve competitiveness have to be grounded in the bottom-up activities of many different institutions and networks. Trying to achieve them in a centralized, top-down structure seems more orderly but is very unlikely to succeed. While better coordination across the institutions in the Baltic Sea Region is undoubtedly needed and some institutions might have outlived their mission, a multitude of organizations will be needed to mobilize all energies in the Region for the joint action agenda.

Third, while there are many institutions, they have mostly developed under a different era. To enable them to tackle the competitiveness challenges of the future, changes will be necessary. Some of these will involve the role that existing institutions play. Many of them have to fundamentally reform their structure in order to stay relevant. The decision to transform CBSS from an institution that negotiates policy consensus across nations to a platform that can manage projects with many different partners – a process that will not be easy – is an interesting pointer in this direction. But other changes might even involve the creation of new institutions. From the review of the existing institutions it is striking to see how organized the public sector is, while the business sector has no strong common Baltic Sea Region voice. BCCA and the Business Advisory Council of the CBSS play a useful role but they cannot fully represent business interests in regional collaboration. Without a clear articulation of these interests, the intention of governments to improve competitiveness lacks a crucial partner. Interestingly this is different in other areas, like the environment, where a number of NGOs are active on the Baltic Sea level to challenge and engage the politicians.

4. Implications for Baltic Sea Region collaboration

The context for cross-national collaboration in the Baltic Sea Region has become significantly more complex and challenging. The macroeconomic situation is worsening, and the Baltic Sea Region is unable to escape the double impact of a domestic business cycle slowdown and an international financial crisis. The outlook is soft with a significant downward risk, should the financial crisis escalate to the point where consumers in the Region dramatically lower their spending. The **political climate** has also taken a clear turn for the worse, with the European integration process in a holding pattern, the relations between Europe and Russia in a post-Georgia impasse, and the world trading regime facing the possible relapse into selective protectionism. The institutional ties in the Region remain strong and vibrant at the grass roots. But even in this area there is consensus that the current structures are not sufficient to meet the needs of the Region in the future.

But every challenge is also an opportunity and this especially true for the Baltic Sea Region. Many of the events that affect the Region also impact its peers; the real task is dealing with the challenges more successfully, not harboring an unrealistic hope to avoid them. As for the macroeconomic turbulences, the Region is clearly better prepared to manage them than other countries, especially

the rest of Europe. But the tendency to focus on domestic affairs in a time of crisis and the increasing heterogeneity of the macroeconomic situation across the Region will seriously test the commitment of political leaders to sustain their support for the Baltic Sea Region agenda. As for the political context, the Region would clearly benefit from a smooth European integration process and tension-free relations with Russia. But, lacking that, the Region could become an interesting testing ground for finding solutions to both challenges which can be of greater benefit. Whether or not this opportunity is more than theoretical depends again on the political leadership in and outside the Region. As for the **institutional structures**, the bottom-up pressure for reform is clearly present and the opportunity for reform exists. What is needed is the will and ingenuity to find a model that is evolutionary enough to keep structures that are widely valued, but also revolutionary enough to change them in a way that meets the new demands the Baltic Sea Region is facing.

Economic and political events beyond the shores of the Baltic Sea Region have created new challenges. But these external events do not determine where the Region will go in the future. The responsibility and choices for the future direction of the Region remains here.

This section of the State of the Region Report tracks the status quo of current competitiveness across the Baltic Sea Region, following up on the assessments done in previous Reports. It collects a set of indicators on performance and competitiveness that together give an indication of the conditions faced by companies located in this Region. Previous Reports provide additional information on individual aspects of the business environment, aspects which have not changed significantly over recent years.



Section B:

Competitiveness of the Baltic Sea Region

Competitiveness remains a concept that is much-debated but not well understood. The concept of competitiveness applied here, building on the work by Professor Michael E. Porter since 1990, defines competitiveness as the level of productivity that companies can achieve in a given location. Productivity is central because it defines the level of prosperity that regions or countries can ultimately sustain independent of their natural resources or other inherited advantages.

Three levels of data are analyzed to assess a country's underlying competitiveness. First, we look at performance in terms of prosperity and

key prosperity drivers, particularly productivity. We also look at intermediate indicators like world export market shares, FDI attraction, or patenting that are both outcomes and drivers of a location's competitiveness. Second, we review the factors that drive the level of productivity companies can reach. We focus on microeconomic foundations of the economy, but also discuss macroeconomic competitiveness as well as the endowments that provide an additional source of prosperity. Third, we discuss performance on the wider range of indicators included in the Lisbon Agenda.

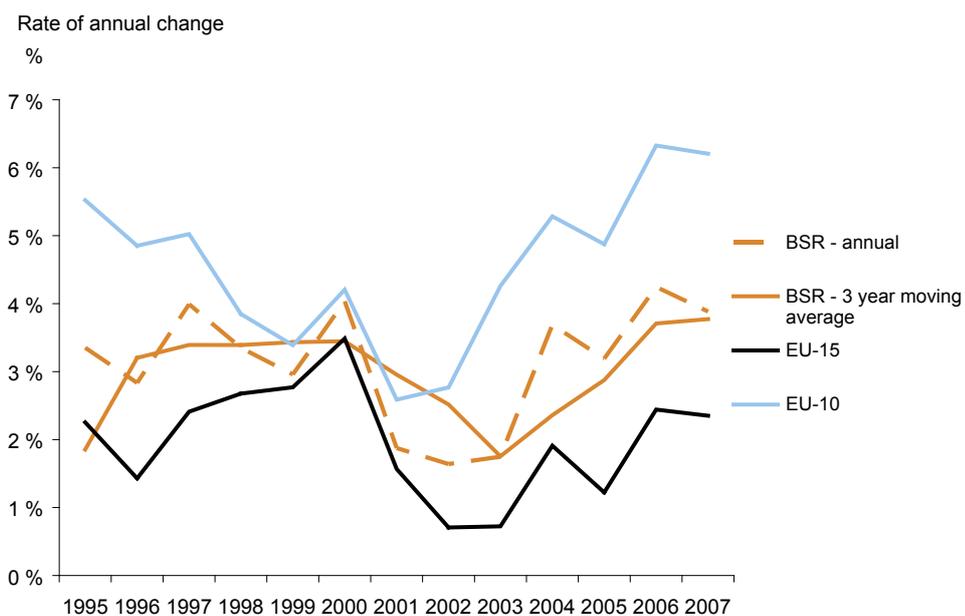
- The Baltic Sea Region has registered solid long-term prosperity growth, but a normal slowdown at the end of a business cycle is no expected to become a sharp contraction with uncertain length
- Balanced strengths on labor productivity and labor mobilization continue to outweigh high domestic price levels; the Region is slowly becoming more similar to peers
- The Region's position on world export markets and capital investment improved but the further fall of relative patenting intensity deserves further attention

1. The economic performance of the Baltic Sea Region

The ultimate test for the quality of business environment conditions and economic policies is the outcomes achieved in terms of economic performance. We continue to track the performance of the Baltic Sea Region relative to key peers, as well as of individual countries across the Region. The key indicator of performance is the level of prosperity achieved, here operationalized as GDP per capita. Prosperity is then further decomposed into its key

drivers, i.e. labor productivity, labor mobilization, and domestic price levels. Additional indicators capture factors that are both outcomes and drivers of competitiveness. Data availability restricts the analysis to 2007. This year the one-year time lag is especially relevant, since the economic climate has deteriorated significantly over the last few months. The impact of these changes will become fully visible in next year's Report.

Figure 4: Prosperity over Time, Country Groups



Source: Conference Board (2008)

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Prosperity

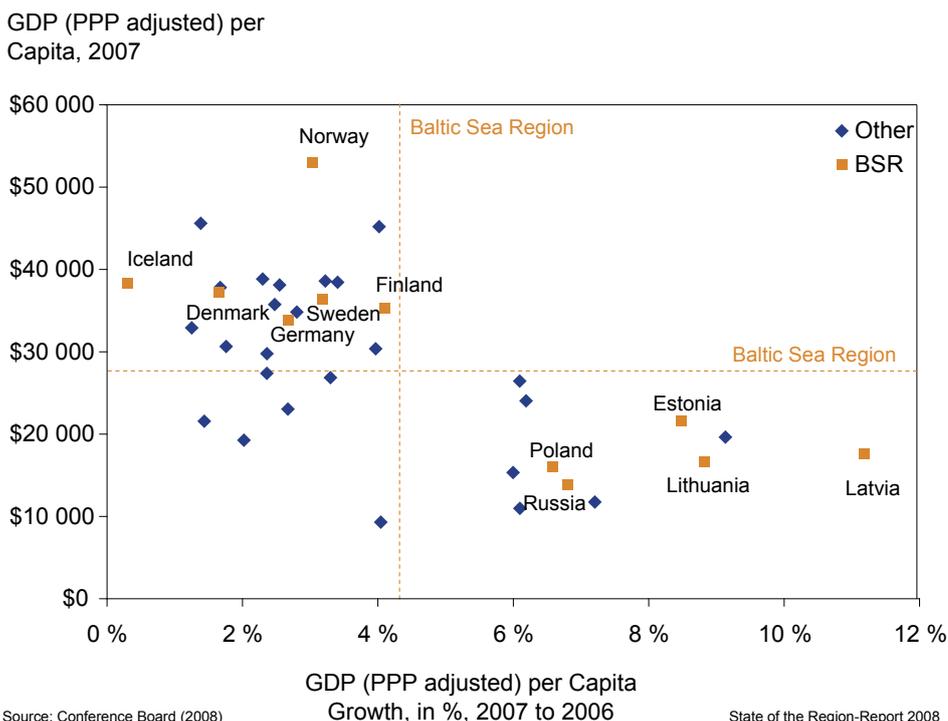
The central measure of prosperity we use is gross domestic product (GDP) per capita, adjusted by purchasing power parity. This measure is comparable across countries and time, and captures the impact of local price levels rather than just production values, a key determinant of the actual standard of living citizens enjoy in a country.

The Baltic Sea Region continues to increase in prosperity at a solid rate. But after the record growth of 2006, the growth rate slowed down

slightly in 2007 to 4.3%. The Region has continued to grow faster than the EU-25, but the growth gap has been shrinking from 2% in 2005 to 1.7% in 2006 and now 1.5% in 2007. The outlook for 2008 points towards a significant further slowdown in annual growth and a high degree of downward risk. With expectations for the EU-25 being even more negative, the Region is likely to continue on its catch-up path to the European average.

The slowdown of growth in 2007 from the record levels of the previous years was not limited

Figure 5: Prosperity Level and Growth, Selected Countries



to the Baltic Sea Region. But the experience of other parts of Europe and the global economy depended very much on their position in the business cycle. The NAFTA region experienced the most dramatic slowdown in 2006, driven by the US economy. But by 2007 it showed signs of bottoming out, with growth rates stabilizing at a level slightly higher than in Europe. Oceania on the other hand saw an acceleration of prosperity growth, driven by huge demand for Australia's natural resources. In Europe both the EU-15 and the EU-10 countries experienced marginal slowdown in growth in 2007. Among the EU-15 countries, Spain and the UK still held up well in 2007 before experiencing a significant deceleration in 2008. Ireland had slowed down already in 2007.

Within the Baltic Sea Region, the three Baltic countries followed by Russia and Poland registered the highest GDP per capita growth in 2007, similar to the previous year. Iceland, Denmark, and Germany came at the bottom of the growth league, with Iceland reaching barely positive prosperity growth. Compared to last year, Norway, Poland, and Lithuania were the only countries that experience an acceleration of growth. Estonia, Iceland, Denmark, and Latvia on the other hand all saw their growth rates drop by more

than 1%. For the Baltic countries, this was clearly a sign of much worse to come as growth rates vaporized in 2008.

Prosperity accounting

In an accounting sense, prosperity is the result of three factors: labor productivity, i.e. how much GDP is generated in an hour of work, labor mobilization, i.e. how many hours of work are performed per capita of the population during the year, and price levels, i.e. how much consumption goods can be bought for one unit of income.

The Baltic Sea Region continues to register solid performance on labor productivity labor mobilization, while it remains a region with relatively high local prices. Over the last decade, it has caught up in terms of labor productivity and lost some of its advantage in terms of labor mobilization relative to the EU average. The labor productivity catch-up of the Baltic Sea Region continued also in 2007 where the region has been starting to again grow its labor mobilization advantage.

In **labor productivity**, measured by GDP per hour worked, the Baltic Sea Region saw its growth rate come down to a still strong 2.4% after the record acceleration in 2006. The Region reduced

Other indicators of prosperity - happiness

GDP per capita is one indicator of prosperity but there is a recognition that other factors, like social and environmental conditions, matter as well. Last year's State of the Region Report discussed the Baltic Sea Region's position on the UNDP Human Development Index, the most established attempt to provide a broader perspective on the quality of life across countries.

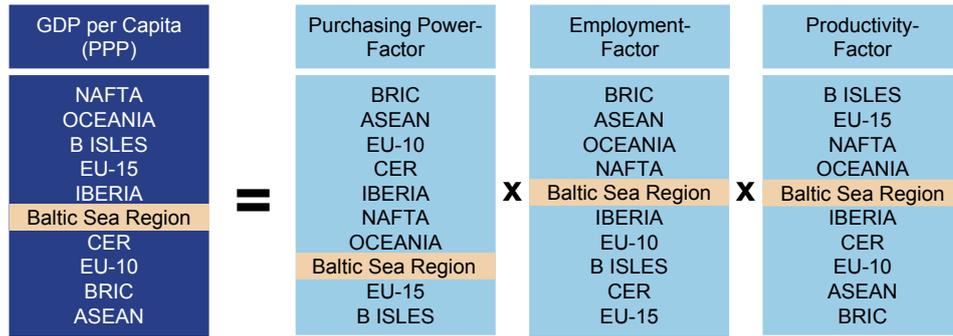
Another topic that has recently captured the interest of researchers is the level of subjective happiness that individuals in a society experience. While economic prosperity is one factor of importance, many other issues can influence whether people feel happy. Researchers at the Erasmus University Rotterdam have collected a large number of empirical surveys on this subject to generate a comparable ranking of countries by the level of happiness that their average

citizens report. The surveys have been conducted over the last few years so they provide more of a general assessment of the mood in these countries over time than a description of how people feel in 2008.

The Baltic Sea Region overall ranks 39th on a population-weighted basis. The differences across the Region are, however, huge. The Nordic countries all rank among the global top 15, with Denmark number 1, Iceland 5th, Finland and Sweden on a shared 6th, and Norway in 9th place. Germany ranks 19th, followed at some distance by Poland as the 55th country on the list. The Baltic countries rank between 71 (Estonia) and 83 (Lithuania). Russia, with almost 20% of the Region's population and thus a huge impact on the overall ranking of the Region, comes 84th, similar to Albania and Angola.

Veenhoven, R., World Database of Happiness, Distributional Findings in Nations, Erasmus University Rotterdam. Available at: www.worlddatabaseofhappiness.eur.nl

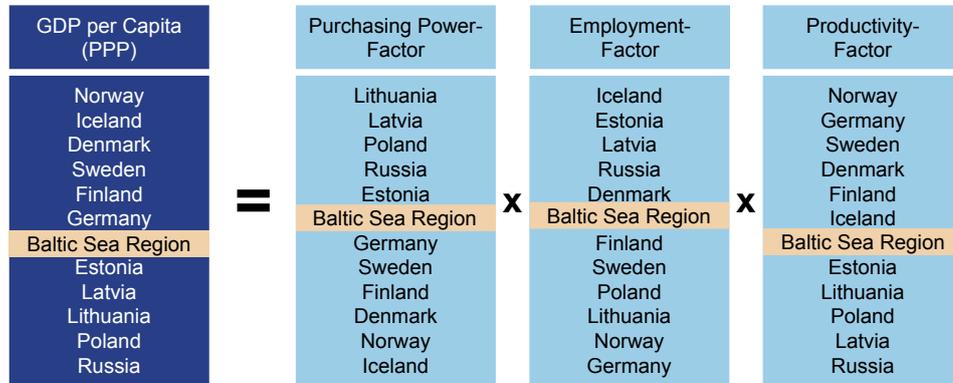
Figure 6: Prosperity Decomposition, Selected Cross-national Regions



Source: Groningen Growth and Development Centre and The Conference Board (2008), authors' calculations

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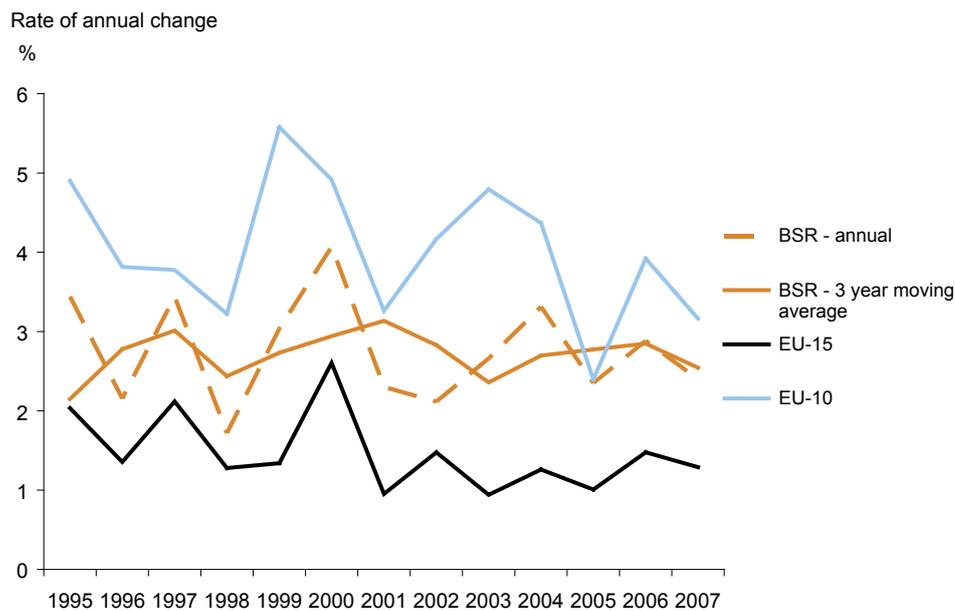
Figure 7: Prosperity Decomposition, Countries in the Baltic Sea Region



Source: Groningen Growth and Development Centre and The Conference Board (2008), authors' calculations

State of the Region-Report 2008

Figure 8: Productivity Growth over Time, GDP per Hour Worked



Source: Conference Board (2008)

State of the Region-Report 2008

the productivity gap to the EU-25 by another percentage point and is now less than 18% behind the European average.

The Central European Region remains behind the Baltic Sea Region on labor productivity and continues to increase labor productivity at a lower rate, despite the slowdown of growth in the Baltic Sea Region. The Baltic Sea Region and the Iberian Peninsula remain neck and neck in terms of labor productivity. The EU-10 countries continue to catch up to the Baltic Sea Region and the EU-15 from a lower level, but their catch-up speed slowed down in 2007. Outside of Europe, labor productivity growth continued to be strong in the emerging economies, especially in Asia. Australia and New Zealand improved labor productivity even faster than last year. In North America, labor productivity growth continued to drop and is now below the level of the EU-25. After companies had increased employment in the growth years by less than historically seen (“jobless growth”), companies in the U.S. now seem more resilient in keeping employment up despite a slowdown of demand.

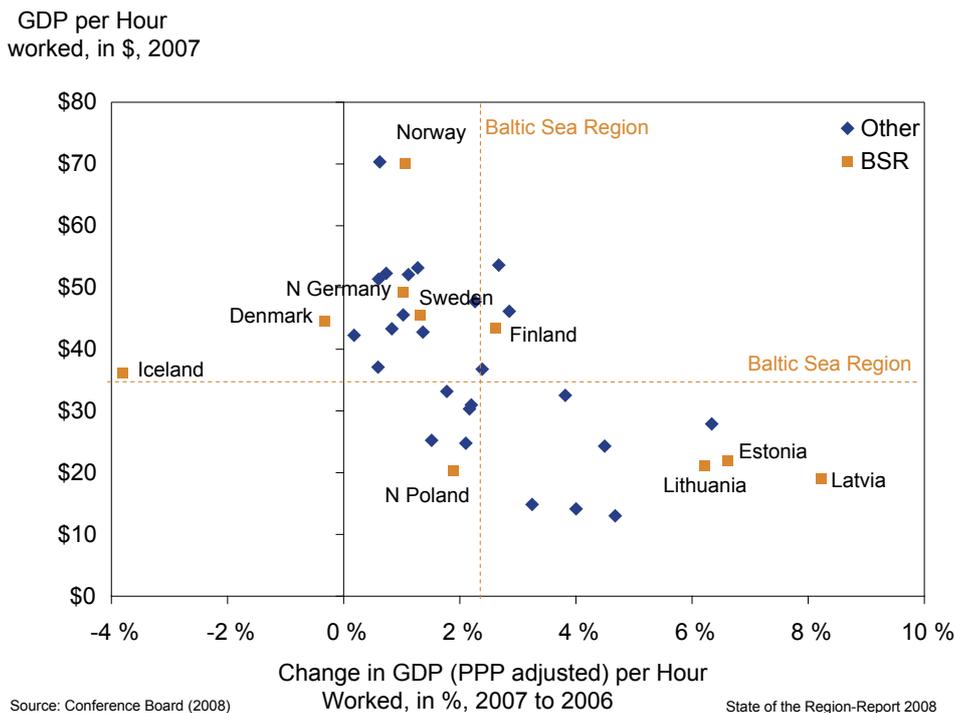
Within the Baltic Sea Region, Norway continues to register the highest level of GDP per hour worked despite only moderate year-to-year growth, still benefiting from the role of the oil

and gas sector in its economy. Germany, Sweden, Denmark, and Finland follow, with only moderate differences between them. Finland registered at 2.6% the highest productivity growth rate in this group, followed by Sweden (1.3%) and Germany (1%). Iceland is at a lower level, partly because of its high level of labor mobilization that also brings in marginally productive employees. In 2007 its labor productivity dropped further after going backwards already in 2006 following years of solid growth. The Baltic countries and Poland come in at around half the productivity level of the Nordic countries. The Baltic countries registered labor productivity growth higher than 5%, while Poland remained at 1.9% below the BSR average. Based on data about labor productivity per employee (hours worked data is not available for Russia), Russia remains at the bottom of the Region’s labor productivity ranking, despite considerable growth in 2007.

In **labor mobilization**, measured by annual hours worked per capita, the Baltic Sea Region saw a further improvement in 2007, driven by employment gains across all countries in the Region. The Region now registers 822 hours worked per capita, compared to 737 in the EU-25 average.

The Central European Region has stabilized its level of labor mobilization at 93% of the Baltic

Figure 9: Productivity Level and Growth, Selected Countries



Sea Region level, compared to 98% ten years ago. The gap has opened up mainly in the years until 2000; more recently the growth of the gap has slowed down significantly. The growth of labor mobilization on the Iberian Peninsula seems to have now flattened out at a level similar to the Baltic Sea Region after dramatic growth over the last decade. The EU-10 countries have now pretty much closed the gap to the Baltic Sea Region in terms of labor mobilization that had opened up in the first half of the 2000s. The gap to the old EU-15 member countries, however, continues to increase, a trend that started about five years ago. Outside of Europe, labor utilization continues to be significantly higher than in the Baltic Sea Region, even in advanced regions like North America, Japan, and Oceania.

Within the Baltic Sea Region, Iceland increased its lead on top of the labor mobilization ranking, still followed by Estonia, Latvia, and Russia. Annual working hours per capita in Iceland are now at 1060 hours, higher than in the previous record-breaking year 2000. Germany remains at the bottom of the labor mobilization ranking, behind Norway. Iceland, followed by Poland and the three Baltic countries increased labor mobilization the most compared to 2006. In fact,

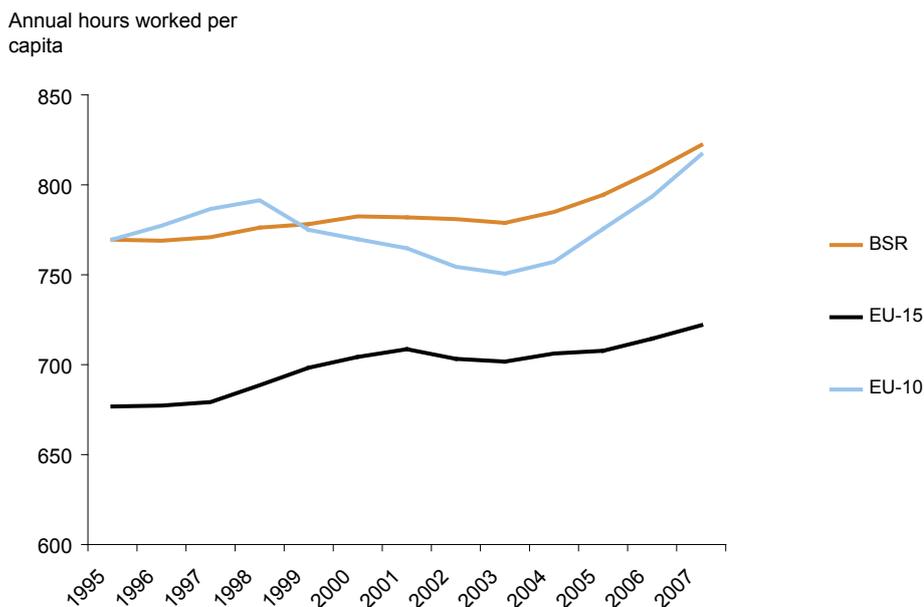
all countries in the Region continued to register increasing working hours per capita in 2007 as a result of solid economic growth.

In **domestic price levels**, measured by price levels relative to the European average, the Baltic Sea Region continues to perform worse than the EU-27 average. This is a considerable drag on the actual standard of living that citizens in the Region can enjoy. High local prices are ultimately a sign of insufficient levels of competition, whether or not this is the result of specific policies or natural conditions, like the small market size of most countries in the Region.

Since 2000, price levels have grown faster in the Baltic Sea Region than across the average of the EU. The high growth and emerging capacity constraints in the Baltic Sea Region have kept this trend intact in 2007.

Within the Baltic Sea Region, Iceland, Norway, and Denmark remain the most expensive countries. Sweden continues to be more expensive than the EU average, but continues its convergence to the average EU price level. Norway and Denmark also saw prices moderate relative to the EU average in 2007, while Iceland faced high levels of inflation. The Baltic countries continue to experience significant price increases, not surprising given their state

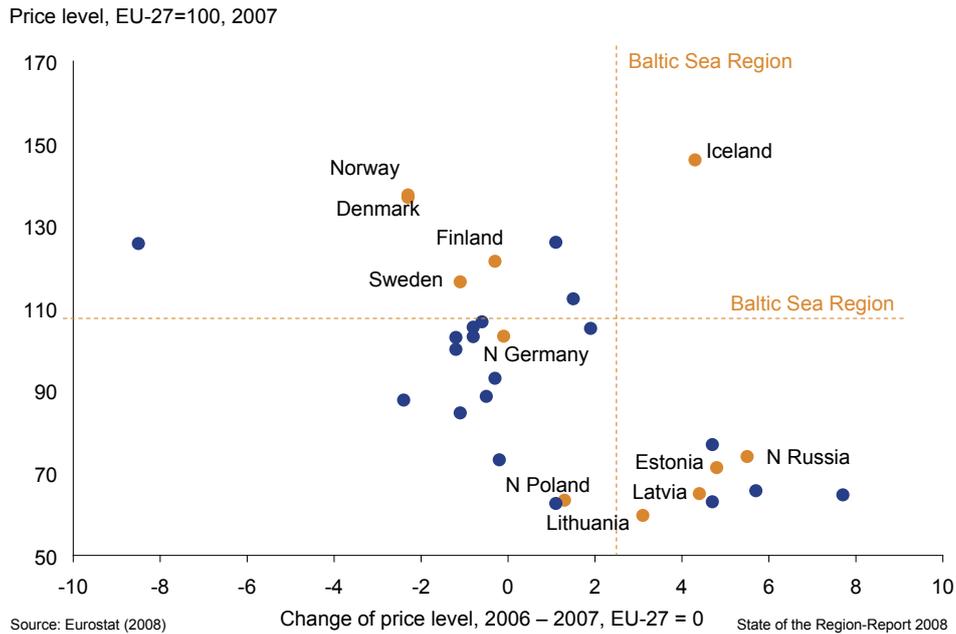
Figure 10: Labor Utilization over Time



Source: EIU (2007)

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Figure 11: Relative Price Changes, European Countries



of economic development. Russia is struggling even more with the impact of higher prices.

Intermediate indicators and enablers of competitiveness

Exports, investments, and patenting are indicators of underlying competitiveness and signal the potential for future prosperity. Targeting them directly can be problematic, for example when inward FDI is the result of generous financial incentives, but they are important indicators of strengths and weaknesses in a country's business environment. Exports, investments, and patenting are also enablers of competitiveness. They are channels through which the business environment can be improved, for example by exposure to global competition on export markets.

The Baltic Sea Region continues to perform slightly weaker on intermediate competitiveness indicators than on prosperity. The changes over the last year have been mixed, with export markets shares improving, foreign direct investment and domestic investment staying steady, and patenting continuing to fall behind.

World export market shares are an important indicator of the ability of companies located in a specific country to successfully compete on

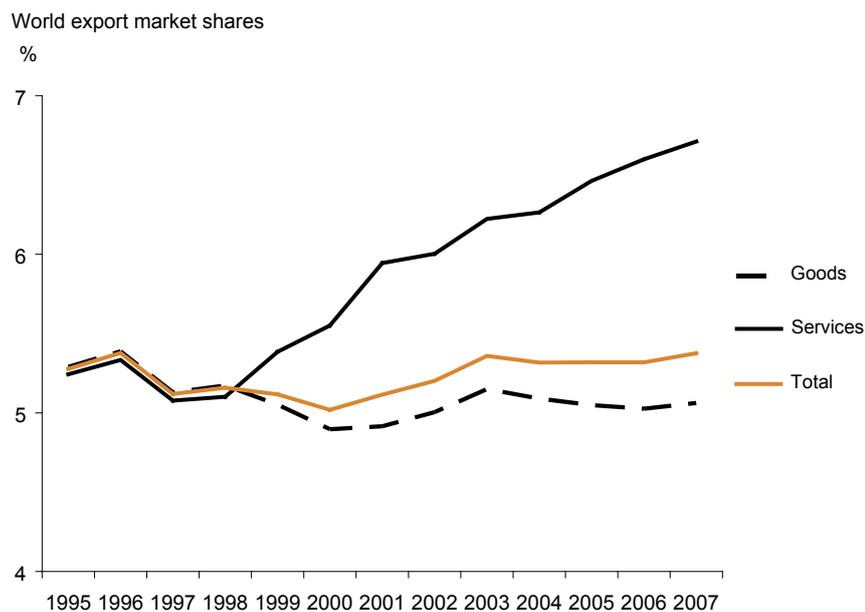
world markets. They are also an indication of companies' exposure to foreign competition on global markets. Such exposure can be an important driver of higher efficiency and can enable learning from operational practices abroad.

In world market export shares, the modest downward trend for the Baltic Sea Region that had started in 2003 came to a halt in 2007. At 5.38% of world exports, the Region's share is back at the level of the mid-1990s, despite the significant gains that especially China has made on world markets in the meantime.

The largest absolute gains in world export market shares over the last year were posted by Germany and Sweden, followed by Poland and Latvia. In relative terms, i.e. compared to the world export market share the country held in 2006, Latvia's position improved by close to 15%, while Iceland gained 9.5% and Poland 8.5%. Denmark and Norway were the only countries that lost position, although especially for Norway these losses were minimal.

The share of services in global trade continued to hover around 19% in 2007, slightly up after dropping for a number of years. The Baltic Sea Region is much more service-oriented, registering 23.7% of its export earnings from services, again up by more than 0.5% in 2007. Further analysis would be useful to better understand the compo-

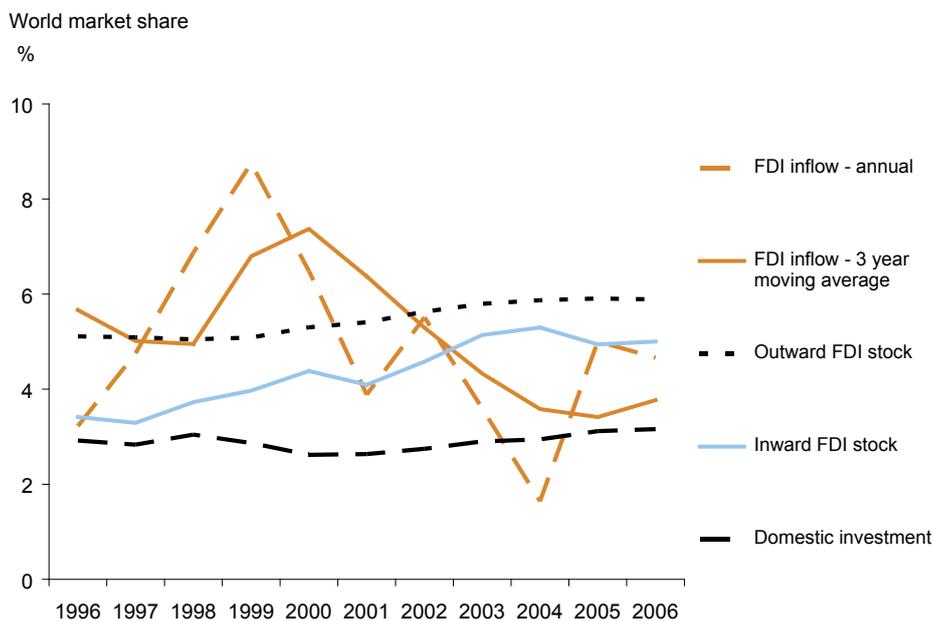
Figure 12: World Export Market Shares, Baltic Sea Region



Source: WTO (2008)

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Figure 13: Investment Activity, Baltic Sea Region



Source: UNCTAD (2008), author's analysis.

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nents and main drivers of the strong service exports from the Region.

Inward foreign direct investment (FDI) is an important indicator of a location's attractiveness for foreign companies. This attraction can be driven by natural resources, the size and growth of the domestic market, or the opportunities of using the

location as a basis for exports. The presence of foreign companies strengthens rivalry on the domestic market, leads to an inflow of knowledge and capital, and creates better linkages to foreign locations.

In 2006, the most recent year for which globally comparable FDI data is available, the Baltic Sea Region saw its share of inward foreign direct

investment flows drop slightly after the strong upward move in 2005. With FDI figures moving strongly year-by-year due to large individual transactions, the three-year moving average provides a better indication of the trends over time. On this measure, the Baltic Sea Region shows stabilization on a moderate level of 3.8% of global FDI inflows, about 15% above the Region's share of global GDP. The Region's share of the global inward FDI stock, driven by the accumulated past investments as well as changes in the value of foreign investors' existing assets, stands at 5.0% of the global stock, a slight improvement compared to last year. In absolute terms, foreign investments in the Region increased by more than 20% to reach a value of \$600bn.

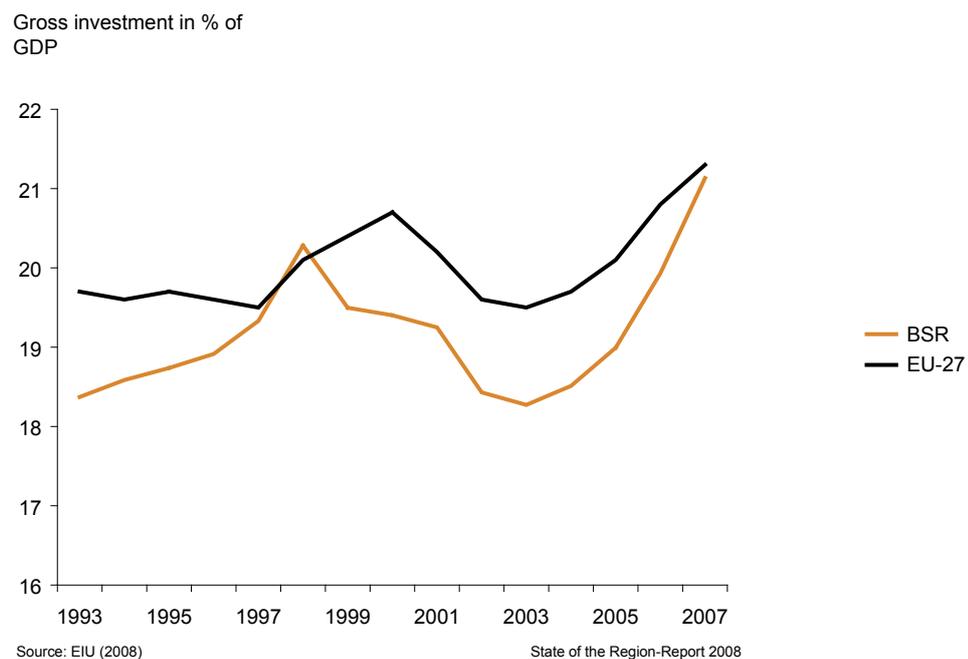
Globally, the EU remains the most important destination of FDI with about 45% of the global inward FDI stock. NAFTA accounts for 20%, a significant fall from previous years. The BRIC countries (Brazil, Russia, India, and China) register between 6% and 12% of global inward FDI, depending on whether Hong Kong is included. This represents a strong increase over the last three years but is still below the BRIC countries' high mark in 1999. A significant share of inward FDI to China is investment by Chinese investors through Hong Kong (Cyprus plays a similar role

for Russian investors) so these figures have to be interpreted with some caution.

Within the Baltic Sea Region, all countries saw the absolute value of the foreign investments they host increase in 2006. Iceland saw the most dramatic increase by 60%, reflecting the value of a large industrial investment now booked as an asset in the country. Latvia (+51%), Lithuania (+31%), and Sweden (+28%) also saw improvements above the level for the Baltic Sea Region (+21%) and the world (+19%). Norway, Germany, and Estonia saw a small deterioration of their global inward FDI market shares in 2006. Over a five year period, Iceland, Estonia, Lithuania, and Russia are the countries that have gained most ground on FDI attraction. Germany and Denmark are the only countries from the Region losing position; for Germany this has been a longer trend while Denmark is still far above the level of foreign FDI the country registered in the 1990s.

Domestic gross fixed capital investment is an important indicator of the attractiveness of a location for all companies, domestic or foreign. It is a signal that companies see business opportunities, today as well as in the future. Capital investment makes a contribution to the capital stock of the economy, one of the drivers of labor productivity. It usually also leads to the use of new technology

Figure 14: Domestic Investment over Time, Baltic Sea Region



or new production processes embedded in the new machines, a further driver of productivity.

In the last two years, the Baltic Sea Region has become significantly stronger in domestic gross fixed capital investment. The investment rate has now increased since 2003 and reached 21% of GDP in 2007, 2.9% more than four years ago and 1.2% more than in 2006. While positive, this pattern is consistent with capacity constraints developing in many parts of the Region at the later stages of a business cycle. The share of the Region in global gross fixed capital investment has increased steadily since 2000 but still remains about 7.5% lower than its share of global GDP.

The increase in domestic investment in the Baltic Sea Region in 2007 was remarkable compared to other regions. In the global economy overall, the investment rate moved up by 0.3% of GDP, only a quarter of the jump seen around the Baltic Sea. NAFTA, already further along in the slowing down of the business cycle, dropped by -0.8% of GDP to an investment share of 16.4%. Across the EU-27 investment rose by 0.5% of GDP to reach 21.3%. The Baltic Sea Region has thus almost reached the average investment level in Europe for the first time since 1998.

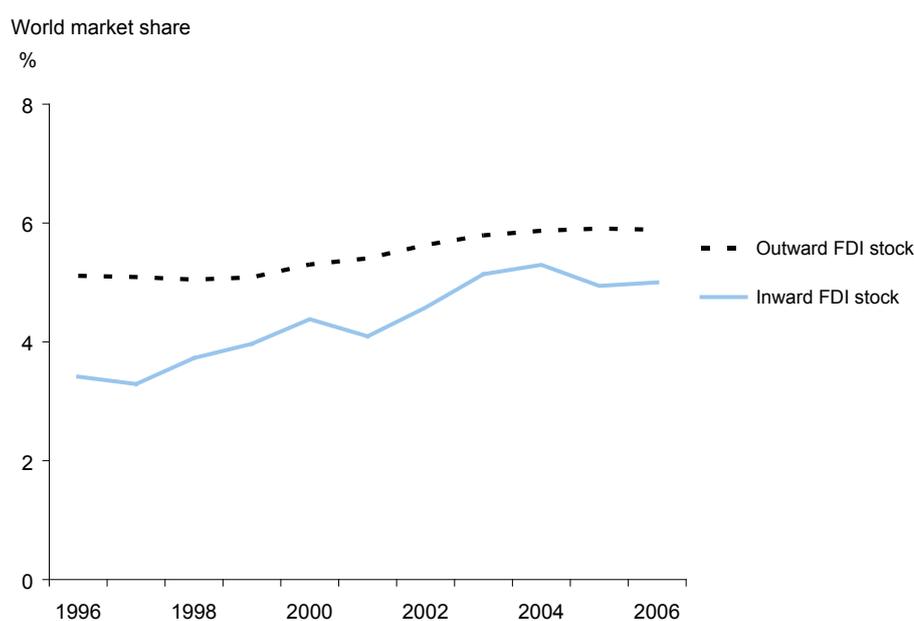
Within the Baltic Sea Region, Latvia, Estonia, Iceland, and Lithuania registered the highest

investment rates in 2007. In Iceland, Estonia, and to a smaller degree also in Latvia, this was despite a significant reduction of investment as a share of GDP compared to 2006. Russia and Poland, followed by Norway and Lithuania, registered the strongest increase in the investment share. Germany and Sweden remain the countries in the Region with the lowest investment share; they also registered the lowest improvement in 2007.

Outward foreign direct investment (FDI) is an important indicator for the ability of local companies to transfer their competitive advantages to foreign locations. In many cases, FDI is a substitute for exports that provides companies with control of a larger part of the value chain. Outward FDI exposes local companies to global competition and provides them with access to knowledge and markets abroad.

In outward foreign direct investment, companies from the Baltic Sea Region continue to play an important role, even though companies from other parts of the world, including emerging economies, have become more active recently. The share of global FDI owned by institutions from the Baltic Sea Region reached 6.0% in 2006, similar to last year but a good deal higher than in the 1990s. It is higher than the Region's global share of inward FDI and of GDP.

Figure 15: FDI Stocks, Baltic Sea Region



Source: UNCTAD (2008), author's analysis.

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Among world regions, the European Union remains the most important source of FDI, controlling about 51% of the global FDI stock. A significant part of these investments are cross-border investments within the European Union. Within Europe, the United Kingdom, Germany, and France all have individually higher outward foreign direct investment stocks than the Baltic Sea Region combined. In 2000, the Region has for the first time surpassed the Netherlands, the fourth largest outward foreign investor in Europe, and the gap has increased again in 2006. The NAFTA countries follow with about 23% of the global FDI stock, gradually losing position over the last few years. The BRIC countries have held their share of global outward FDI roughly stable at 2.7% (or 20% of all outward FDI from developing countries) if Hong Kong is excluded from China.

Within the Baltic Sea Region, 35% of all outward foreign direct investment is owned by Swedish companies, followed by Danish companies with 20%. For both countries as well as for Iceland, this is significantly higher than their share in the Region's and the global GDP. Finland, Germany, and Norway control outward foreign direct investment roughly in line with their share of GDP. The other countries in the Region are far behind on outward FDI, with Estonia and

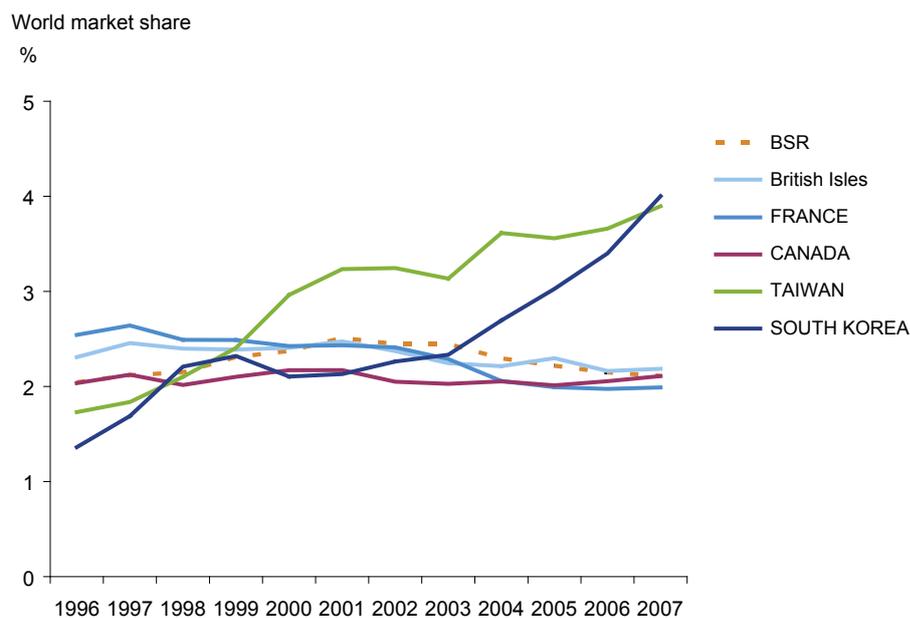
Russia registering the relatively best outward FDI performance in this group.

Patenting is an important indicator of a country's innovative capacity, both from companies and research institutions. We use patents in the United States, because virtually all economically significant inventions are patented there for use in the US market. While innovation occurs in many forms that do not involve patents, most researchers consider patents a useful indicator for innovation more generally. Patenting also contributes to a location's knowledge stock and thus increases the opportunities for local companies to further improve their productivity.

In patenting, the Baltic Sea Region remains to be one of the most important innovation hubs in the global economy. In 2007, the Baltic Sea Region accounted for 4.3% of patents filed in the US from non-US institutions. This puts it 5th in the country ranking, behind Japan, Germany, South Korea, and Taiwan. Relative to the absolute size of their GDP, only Canada, Switzerland, Israel, and Singapore in addition to the four countries above registered higher patent intensity than the Baltic Sea Region. On a per capita basis, the Netherlands, Australia, and Luxembourg join the group of countries ahead of the Baltic Sea Region.

Over the last few years, the Baltic Sea Region has, fallen behind some its international peers

Figure 16: Patent Filings with the USPTO



Source: USPTO (2008), author's analysis.

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in terms of patenting in the U.S. This process continued in 2007. The share of U.S. patents filed by patentors located in the Region dropped by 0.2%, the number of patents per million US-\$ GDP fell from 2.3 to 2.0, and patenting per inhabitants went down by more than 10%. South Korea, Taiwan, China, and India were the countries that gained most ground on U.S.-patenting in 2007, followed by Malaysia and Australia. Japan, Germany, Sweden, Italy, Switzerland, and Belgium lost greater share in absolute terms. The United States also lost ground, both absolute and relative to foreign countries.

Within the Baltic Sea Region, Sweden accounts for 32% of all patents registered in the US last year, followed by Finland (26%), Northern Germany (22%), Denmark (12%), and Norway (7%). Finland registers the highest 2007 patenting intensity, followed by Sweden and Germany. Denmark, Iceland, and Norway are close to the Baltic Sea Region average, while the other countries have very low levels of patenting intensity. In 2007, only Russia, Poland, Norway, and Estonia increased their US patent count and intensity. Sweden experienced the largest drop, followed by Germany and Finland.

Overall assessment

For the Baltic Sea Region, 2007 was a year of transition from high growth to economic slowdown. Prosperity growth continued to be solid but dropped below the record levels of 2006. Despite the slowdown, the Region compares well with its European peers. The Baltic Sea Region continued to benefit from a solid combination of solid productivity levels and high labor mobilization. The cyclical reduction of productivity growth and rise of labor mobilization was largely matched by developments in other parts of Europe.

Productivity for the Nordic countries has continued to grow at high levels, while their already high levels of labor mobilization also increased. With the exception of Finland labor productivity growth has markedly slowed down in 2007 while labor mobilization jumped up relative to the recent past. The Baltic countries continued to increase labor productivity and mobilization at the same high rate as in previous years. Germany and Poland

saw their labor mobilization improve markedly, while productivity growth remained moderate. The Russian data is less reliable but indicated stronger productivity growth than in the past while labor mobilization continued to grow steadily.

Intermediate indicators of competitiveness, often signs of longer-term trends but not short-term cyclical movements, continue to register a more mixed picture. Export positions are up, for the first time in years also for goods exports. Investments, both domestic and foreign, are solid but not overly impressive in global comparison. Knowledge creation remains high but the continued loss of position relative to Asia is a clear concern. Sweden, the Region's traditional leader in patenting intensity, is falling behind.

The economic performance analysis shows, behind the cloud of business cycle volatility, a Region that continues to do well. The Region has achieved a solid position on labor productivity and mobilization, and is a leading global location for trade, investment, and knowledge creation. But there is no reason for complacency. Performance is solid but, compared to global peers, not outstanding. And on some indicators that have long-term consequences, such as investment and patenting, the position is either relatively weak or weakening. The Baltic Sea Region is a Region at the Top of Europe, not (yet) at the Top of the World.

Based on the emerging data, 2008 has been a year of two tales. Until late summer, the Baltic Sea Region continued largely on the course of the recent past. If anything, the impression has been that it was able to deal better than others with the normal business cycle movements. The situation in the Baltic countries was the clear exception, not the more dramatic sign of a general trend. But since the escalation of the financial crisis in the early fall of 2008, the outlook has become significantly more uncertain and negative. For the overall Region, the reduction in growth is likely to be significant, eliminating the positive growth gap that had up built up in recent years over the global average. But compared to Europe, not only the Region's peer group but also its main market, growth rates continue to be significantly higher. On medium-term trends of economic performance, the glass is certainly emptier than before but it remains half full.

- **Natural conditions, i.e. location, size, and natural resources, give the Baltic Sea Region a fair starting position to achieve prosperity, but not a free ride**
- **Strong institutions and solid macroeconomic policy are hallmarks of most parts of the Baltic Sea Region, creating a sound context for firms to achieve high levels of productivity**
- **The Baltic Sea Region is strong on overall microeconomic competitiveness, with different parts of the Region having very heterogeneous patterns of strengths and weaknesses**

2. The foundations of prosperity in the Baltic Sea Region

Prosperity is ultimately driven by the combination of the natural conditions of a country, i.e. its natural resource wealth and location, and the competitiveness that it has created for itself. A country's competitiveness is given by a broad array of factors that determine the level of productivity and innovation that companies located there can reach. This complex mix of factors can be organized in two broad categories. Macroeconomic factors set the general context for firms but do not affect productivity and innovation directly. Microeconomic factors have a direct impact on the productivity with which companies can transform inputs into economic value. This section tracks these different determinants of prosperity, especially dimensions of microeconomic competitiveness, for the Baltic Sea Region relative to key peers, as well as for individual countries across the Baltic Sea.

Competitiveness remains a contested term in the economic policy literature, with different individuals and institutions generating a wide range of definitions and policy advice. For policy makers, this cacophony can be highly confusing. Many of the differences are, however, driven by differences in analytical interests, and are not fundamental disagreements about the underlying economic mechanisms.

In this report, we define competitiveness by the productivity that companies can reach given the set of macroeconomic and microeconomic

conditions faced in a location. Our motivation is to understand the level of prosperity that the Baltic Sea Region can sustain given the current conditions on these dimensions, and to provide input on identifying the action priorities in raising the prosperity potential further. While the current economic climate is discussed in section A.1 and the recent economic performance is reviewed in section B.1, this section looks at the medium-term drivers of the outcomes beyond the short-term vagaries of the business cycle and short-term economic shocks.

As in previous years, the Global Competitiveness Report (GCR), an annual assessment of competitiveness across more than 120 countries published by the World Economic Forum, is an important source of information for our assessment. It is based on statistical data collected from international organizations and on a survey of more than 10,000 business executives around the world. The GCR has for the last few years included two separate rankings, the Global Competitiveness Index (GCI) and the Business Competitiveness Index (BCI). The GCI covered a broad set of endowment, macroeconomic, and microeconomic factors, while the BCI focused on company sophistication and business environment quality. In 2008, only the broader GCI is being published.

In 2009, the Global Competitiveness Report will contain a new index incorporating both GCI

and BCI in a consistent revamped framework. The new framework, outlined already in this year's GCR, will use large elements of the GCI for its measurement of macroeconomic competitiveness and of the BCI for its measurement of microeconomic competitiveness. The reorganization will focus on aligning the GCR more with the policy process, apart from making small adjustments in individual indicators. Endowments, including the measure of market size, will become a control rather than an element of competitiveness; they have an impact on prosperity but cannot be addressed by policy. Macroeconomic and microeconomic competitiveness will be clearly separated; they have a different impact on productivity (macroeconomic works indirectly, and microeconomic directly on company productivity) and are the province of very different policy processes (macroeconomic competitiveness is largely under the control of central govern-

ment, microeconomic competitiveness the result of choices made by many different levels of governments as well as companies, universities, and others). Macroeconomic competitiveness, which includes both the quality of institutions and of macroeconomic policy, will gain in weight; this is the result of a broad review of the estimation approach for the new index. The reorganization of macro- and microeconomic competitiveness and their weights will have a mixed impact on different countries in the Baltic Sea Region. Overall, the Nordic countries are likely to see their position improve in the new ranking while Russia, Poland, Germany, and Latvia will lose. The net effect for the aggregate Baltic Sea Region is very small.

The remainder of this chapter is organized in three parts. First, we provide a short summary of the natural conditions that countries in the Baltic Sea Region face. These factors do not

Alternative definitions of competitiveness - unit labor costs

Many international financial institutions like the IMF use unit labor costs or real exchange rates as their measure of competitiveness. They are interested in getting a sense of a country's changing ability to generate export revenues. If unit labor costs go down, exports become easier and export revenues in domestic currency are likely to increase. For institutions concerned about the external solidity of economies, this is a natural perspective to take.

Unfortunately, there is no easy relationship between the unit labor cost-definition of competitiveness

and prosperity. Lower wages relative to a given level of productivity reduce unit labor costs and thus increase competitiveness. But while they raise exports, at least their short-term impact on prosperity is negative – it is like a collective pay-cut to enable sales at lower prices. The medium-to-long-term impact depends on many other factors.

For policy makers, it is important to reflect on the specific motivations that drive the diverging definitions of competitiveness. The appropriate definition depends on what problem policy needs to address, i.e. the long-term prosperity potential or a short-term external imbalance.

change over time, and have been the topic of previous Reports. Second, we assess the Region's macroeconomic competitiveness. Updated data is available on the institutional capacity of the Region and we also discuss briefly the quality of macroeconomic policy in the Region. Third, we look at indicators of the Region's microeconomic competitiveness. The dimensions covered include different aspects of business environment quality as well as company sophistication.

Natural conditions

Natural conditions include the geographical location, natural resource endowments, and the size and internal geographic profile of countries. A location far away from large markets, with limited access to global trade (often a question of access to sea transport), or in areas with a high propensity of illnesses (for example malaria) or natural disasters has to achieve higher levels of competitiveness to reach the same level of prosperity as a country with more beneficial conditions. Natural resource wealth provides obvious direct benefits to prosperity but it can also hinder development through economic ('Dutch Disease') or institutional (increasing corruption, autocratic political regimes) mechanisms. The size of economies as well as the degree of urbanization can also play a role, although especially for more prosperous economies, the econometric evidence is inconclusive.

The Baltic Sea Region has a *geographic location* that provides a balance of positive and negative influences for prosperity. The Region has a relatively low exposure to natural disasters or illnesses that could threaten to disrupt normal economic transactions or reduce incentives for long term investments. But these advantages are generally shared with other advanced or transition economies. The climate conditions in the north of the Baltic Sea Region generate some additional costs but affect only a small share of the Region's overall population. The Region has ample access to sea trade, although it is not located at any of the major global transit routes for sea transport. It is located at the periphery of the European market, one of the largest markets in the global economy providing many opportuni-

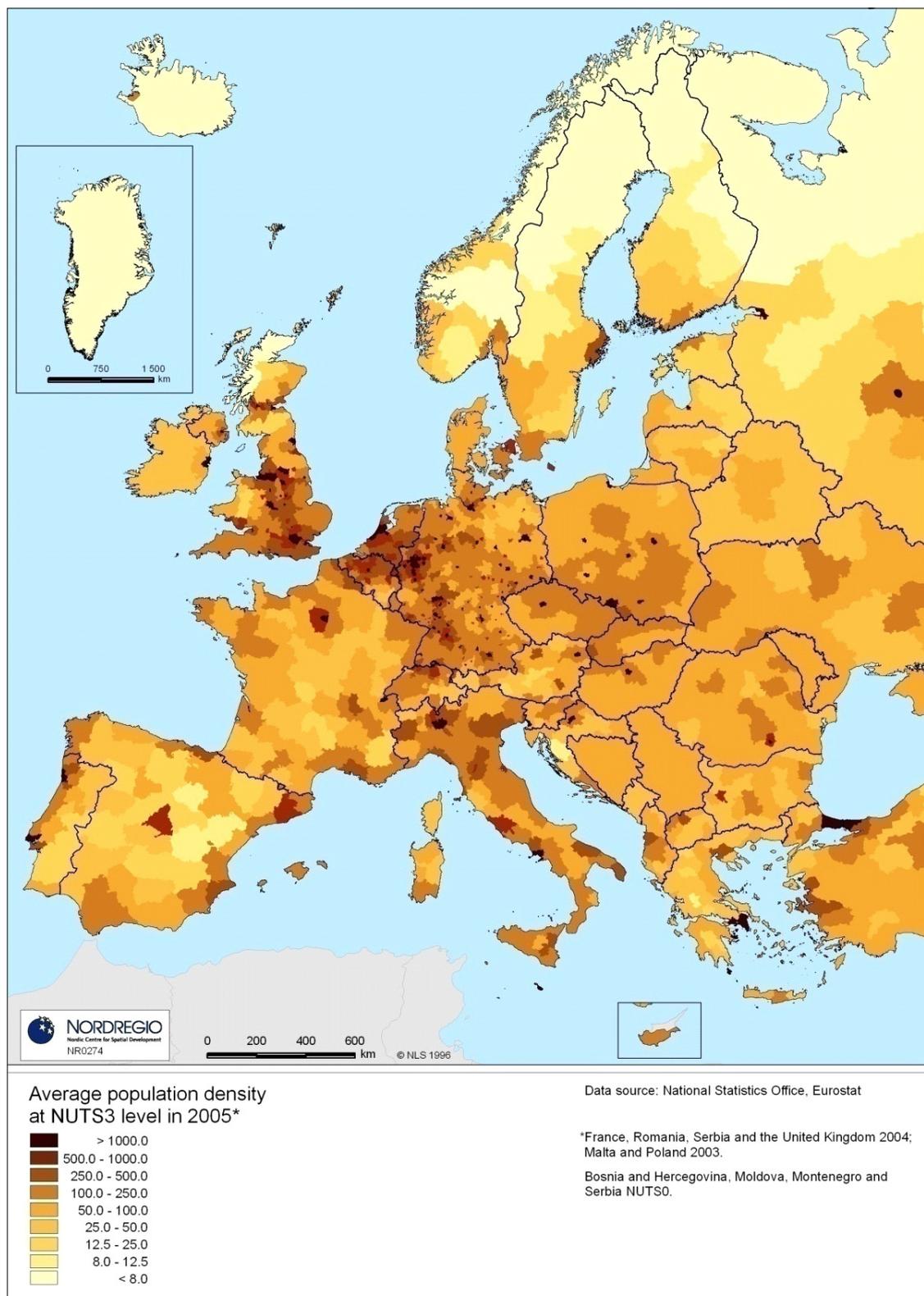
ties for trade and investment. But it is geographically less well placed to serve the markets of Asia, where growth rates have over the last years been much higher than in Europe.

The Baltic Sea Region is home to a number of valuable *natural resources*. For the most part these resources have provided significant prosperity benefits to the countries in the Baltic Sea Region. In Norway, a strong institutional basis and an already well developed economy have limited potential costs from oil and gas wealth, considered to be most susceptible to generating negative indirect effects. In Russia, the balance is clearly not as good: there has been significant success in limiting the potential negative effects of the oil revenues on macroeconomic stability. But there has been no progress on economic diversification. And the concerns about the solidity of government institutions and the political process remain severe, not only in the assessment of outside observers.

The Baltic Sea Region has a moderate *overall size*, comparable to about 60% of the German economy or 90% of the economy of the state of California. The economy of the Region is divided into eleven countries (or parts of countries) with the largest, Sweden, accounting for slightly more than 20% of the Region's aggregate GDP. And, as the map provided by Nordregio indicates, the Region has a relatively low *population density*, with few metropolitan centers of European, let alone global reach. The overall share of the population living in metropolitan regions is comparable to the rest of Europe. Only Finland falls at 59% on this measure, significantly below the value for the rest of the Region. But most of the metropolitan regions around the Baltic Sea are relatively small. The share of the population living in metropolitan regions with at least one million inhabitants is significantly smaller than in the rest of Europe.

Overall the natural conditions have given the Baltic Sea Region a fair starting position but not a free ride. There are no external factors that could impose significantly more costs on the Region which are not borne by other parts of the European or World economy. But the Region also lacks the size or the location on major trade routes that could guarantee the interest of foreign investors, almost independently of its own

Figure 17: Population Density Across European Regions



actions. The Region has been given a chance but also the task, to fight harder than other, larger regions to bring its qualities to the attention of

the global economy. None of these conditions change over time, so this task is a constant for the Region to deal with.

Macroeconomic competitiveness

Macroeconomic factors set the overall context in which companies operate but they do not directly influence the productivity and innovativeness of firms. Macroeconomic policy shapes the general economic climate and the intensity of the business cycle movements over time. The quality of public institutions affects the presence of rule of law, effective and transparent government, and at least basic human necessities. Both macroeconomic policy and public institutions are largely driven by decisions taken at the level of central governments. With a growing consensus on best practices in macroeconomic competitiveness, the challenge of governments is to achieve and sustain these benchmarks against the opposition of interest groups with a narrower agenda.

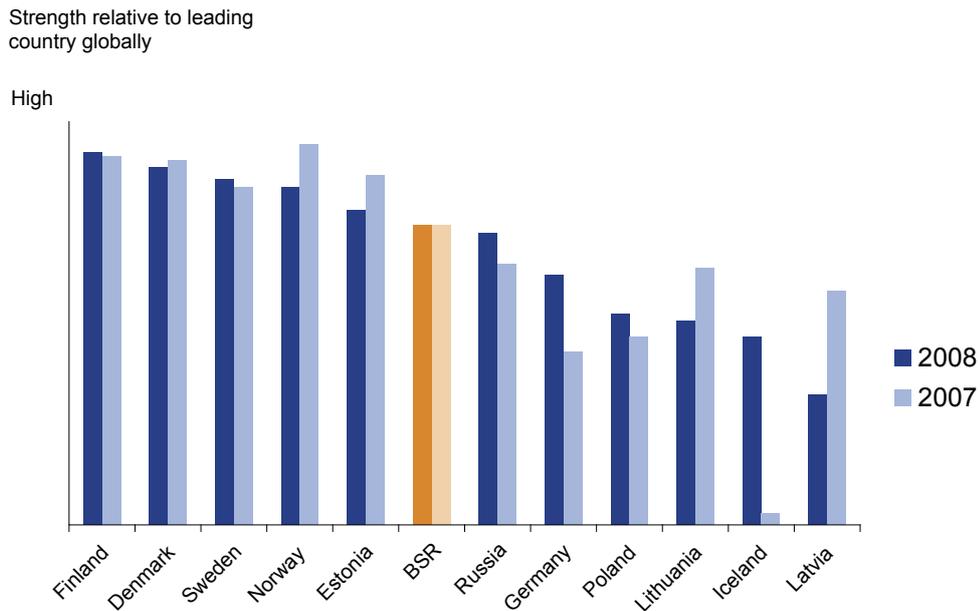
The *quality of macroeconomic policy* in the Baltic Sea Region has been solid over recent years. 2007 has seen no fundamental changes in the Region's position. Changes of policies were driven by reactions to the business cycle, not a revision of the underlying policy stance.

In monetary policy, low levels of inflation are formally a policy objective in all countries of the Baltic Sea Region. But throughout 2007 and much of 2008, inflationary pressure has been

rising, and while the Region overall has kept inflation roughly at the level of the European Union, it has moved beyond the levels targeted by Central Banks around the Baltic Sea. The outlook at the end of 2008 is more sanguine, with a reduction of growth rates likely to reduce inflationary pressure.

There is a significant degree of heterogeneity in macroeconomic conditions across the Region. In the Nordic countries (with the exception of Iceland), Germany, and Poland the level of inflation has remained moderate, despite recent increases. In the Baltic countries and Russia the situation has been different. In the Baltic countries, a combination of a quick deepening of the financial markets, together with what economists call the Balassa-Samuelson effect (local prices rising faster than global prices in reaction to high productivity and wage growth in the export sector), have pushed up inflation. Rates continued to be high despite a sharp drop in economic growth but are now falling. With monetary policy largely neutralized due to the currency peg to the Euro, the Central Banks in the three countries have limited ability to react. In Russia, some of the same mechanisms are at work. In addition, however, the Central Bank has been growing the monetary base in its attempt to fight the upward price on the Rouble – the result of huge capital inflows

Figure 18: Macroeconomic Stability



Source: GCR (2008, 2007), author's analysis.

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from the oil and gas trade – by buying foreign currency. Without appropriate neutralization, this creates the foundation for significant inflationary pressure. The financial crisis has put the foreign exchange situation on its head with the Rouble under pressure and the Central Bank selling US-Dollars. But domestic inflation continues to be high.

In fiscal policy, the Baltic Sea Region has for some time now followed a more conservative policy stance than most of its European peers. The aggregate budget balance for the Region has been positive since 1999, reaching 4.9% of GDP in 2007. For 2008, the surplus is expected to drop somewhat but will most likely remain above 4%. Only Poland and Lithuania had a significant budget deficit in 2007; all other countries registered a balanced or positive balance. As a result, the public debt of the Region has consistently dropped and is now significantly lower than in other parts of Europe. This is not the result of particularly frugal or small government budgets, but rather of a high tax rate relative to GDP across the Region.

The aggregate measure of macroeconomic stability in the World Economic Forum's Global Competitiveness Index ranks the Baltic Sea Region as 27th in the world, unchanged from last

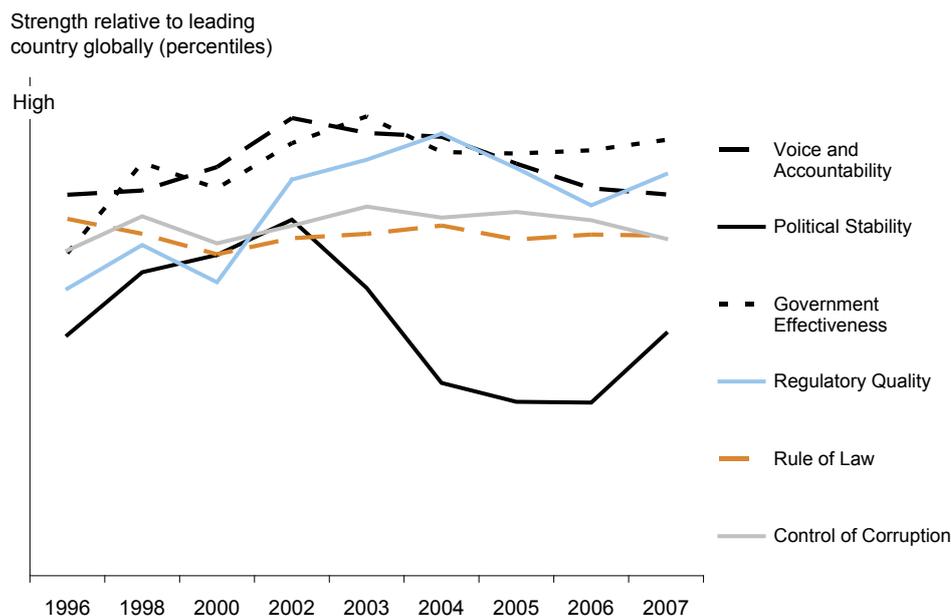
year. The Baltic countries and Norway registered a loss in rank, while Russia, Poland, Germany, and – somewhat surprisingly – Iceland improved their position.

The *quality of public institutions* in the Baltic Sea Region continues to be high. 2007 has seen no dramatic changes in this pattern. The Region also continues to vary heterogeneous. On the one hand, the Nordic countries rank consistently among the global leaders on institutional quality. On the other hand, Russia (and to a much lesser degree Poland and the Baltic countries) register severe institutional weaknesses.

In the World Bank's governance assessment, the Baltic Sea Region continues to rank among the top 20 countries in the world on the control of corruption, government effectiveness, the rule of law, regulatory quality, and voice and accountability. Only on political stability does it rank somewhat lower. In the last year, the ranking on voice and accountability and control of corruption have deteriorated slightly, almost entirely driven by the changes in Russia. On all other indicators the Region has seen its position improve. Especially political stability increased, with positive movements registered across the Region.

All Nordic countries continue to be overall ranked among the 5% best countries on the World

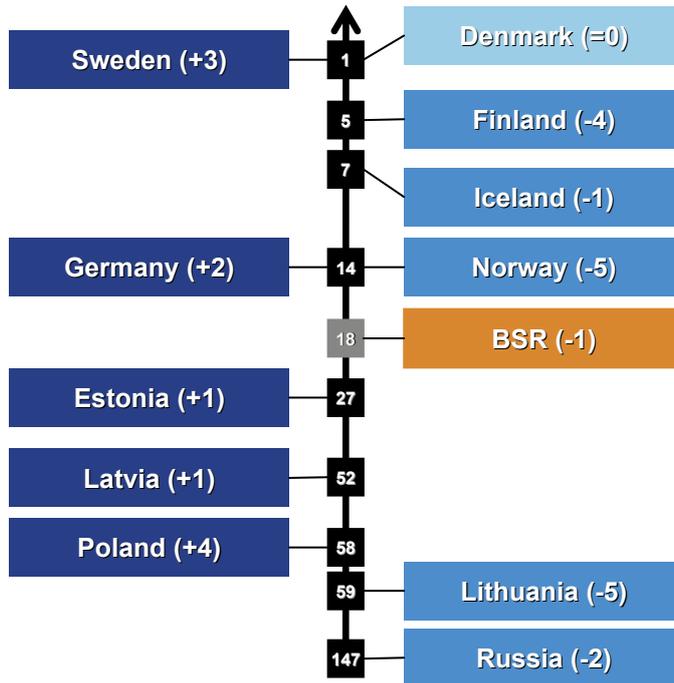
Figure 19: Governance



Source: World Bank (2008), author's analysis.

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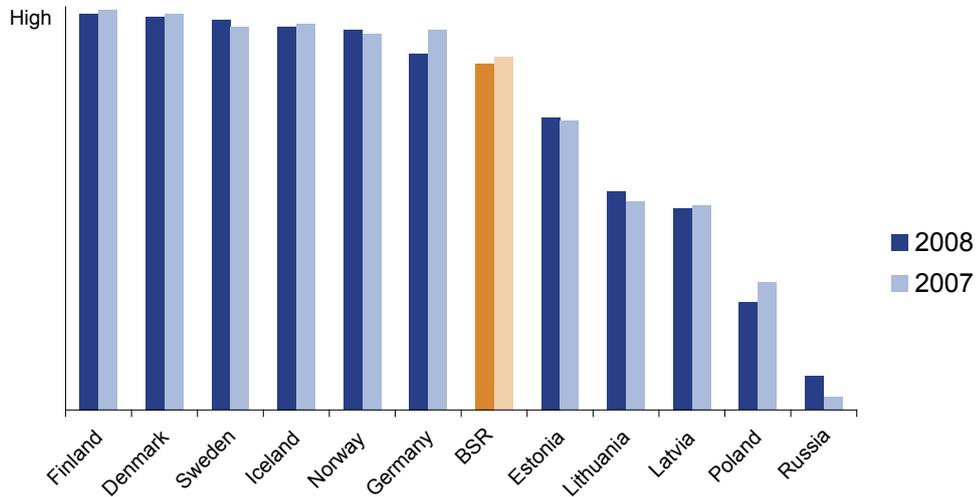
Figure 20: Absence of Corruption



Source: Transparency International (2008), author's analysis. State of the Region-Report 2008

Figure 21: Institutions

Strength relative to leading country globally



Source: GCR (2008, 2007), author's analysis.

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Bank's overall governance measure. Germany has seen some improvements and is now firmly among the top 10% of all countries, a position it gained only the previous year. Estonia is ranked among the top 20%, Latvia and Lithuania among the top

30% of all countries; all with no movements in the last year. Poland comes behind, now just in the top tercile after some improvements. Russia remains far behind but has after a small gain on aggregate now left the bottom quarter of countries.

The strong position of the Baltic Sea Region overall and the Nordic countries in particular also comes through in the most recent more in-depth assessment of corruption levels done by Transparency International in 2008. The Region overall ranks among the top 20 countries in the world, marginally down from last year. Two Nordic countries share the global pole position as the least corrupt countries in the world; Sweden joined Denmark after a gain of three ranks. Norway dropped out of the top ten and now ranks at the same level as Germany (up two) on rank 14. Estonia remains far ahead of the other Baltic countries

and Poland. Lithuania is the only country in this group that lost position relative to 2007. Russia remains far behind; rank 147 means a further drop of two ranks.

The aggregate measure of institutions in the World Economic Forum's Global Competitiveness Index, based largely on survey assessments of private (25%) and public institutions (75%), ranks the Baltic Sea Region as 17th in the world, down two ranks from last year. Germany dropped from 7th to 14th rank. Poland lost 6 ranks and is now 82nd, while Russia made similar gains to stand at rank 110.

Improving local governance to boost growth and competitiveness in the Baltic Sea region

There is clear understanding in the Baltic Sea Region that integration and cooperation can contribute to achieving growth by increasing the density of exchanges within the region. Connecting economic actors through networking and information-sharing makes it possible to enhance business and foreign direct investment opportunities, helping the poorer countries to catch up more quickly and the richer to more easily penetrate a large market. This leads to increased competition which in turn stimulates the creation of business networks, further innovation advances and better strategies.

Yet if good transnational governance frameworks are conducive to promoting a strong regional competitiveness agenda, the potential of the region remains unfulfilled in the absence of effective governance mechanisms at the local and regional levels. National or transnational innovation systems are ineffective if they are not based on sound local innovations systems that are closer to business, higher education institutions and training organisations. Transnational cooperation between firms produces suboptimal results if strong links are not established between local firms to start with. The flow of international talent (which is relatively resource intensive and costly to organise) provides greater added value once human resources are efficiently allocated locally and nationally.

Local governance matters to growth and competitiveness. A number of the main factors of growth and competitiveness are sensitive to local condi-

tions, to the actions of local and regional actors and to situations of interdependence. This is especially true of innovation, of skills, and of entrepreneurship. Three aspects of governance should be addressed to maximise the performance of these drivers of growth: the co-ordination of policy; the adaption of policies to local conditions; and the participation of outside partners (mainly business and civil society) in shaping measures (See OECD, *Local Governance and the Drivers of Growth*, 2003).

On this account, the performance of the Baltic Sea Region is mixed. While the Nordic countries have proved particularly innovative and ambitious in their respective governance agendas over the past 10 years, progress has yet to be made in the Baltic states and Russia.

In the three Baltic states, the process of accession to the EU has had a positive effect on governance by helping to shape the institutions governing employment and economic development. However, labor market policy and vocational training are managed in a top-down manner without much adaptation to local conditions, and the central government holds most of the purse strings for local government. The development of genuine local employment and economic development initiatives is poor in all three countries. The development of social dialogue is weak and corruption remains an important problem. In addition, in Estonia and Latvia there is a clear and urgent need to accelerate territorial reform. In both countries the large number of small municipalities represents a barrier to the creation of effective local employment and economic development initiatives.

Successful local economic, employment and

social development requires an efficient organisation of duties of local government combined with the implementation of local governance mechanisms involving cooperation between public, private and non-governmental sectors in order to pool knowledge, expertise and resources, to share risks and to improve outcomes. To tackle critical challenges, such as the threat of rapid population decline, no single organisation, let alone at the local level, can provide a satisfactory response. In the case of Latvia, the government now recognises the importance of regional strategies in promoting economic development but it is still in the process of developing strong regional institutions which can form a platform for both economic competitiveness and reducing regional disparities.

Governance issues that arise in Russia are similar to those of the Baltic states, though the underlying challenges are different: here the principal issue is the need to diversify the economy and create quality jobs. Regional agencies and other partners in North West Russia take initiatives and design endogenous development strategies to tackle these issues. However, their success is impeded by serious obstacles such as the limited financial independence of regions, the limited development of active labor market policies and the slow progress of local government reforms. The current governance framework, rigid and centralized, is not conducive to the development of local initiatives, let alone the implementation of joined-up solutions to complex issues. Employment services do not have sufficient room for maneuver to pursue strat-

egies that are geared towards the specific problems of their regional labor market (i.e. skills upgrading, integrating immigrants). The weakness and underdevelopment of the local level of government hinders the development of territories and provides obstacles for further reform including that of the provision of public goods. Corruption and the lack of transparency are rampant.

There is therefore a challenging agenda ahead for the governments of the Russian Federation and all three Baltic states. According to the OECD experience the surest way to stimulate strategic planning, co-ordination, adaptation and participation in the field is to: i) provide flexibility in the management of key policies and measures and to ii) strengthen capacities at the local level in order to be able to reinforce the local diagnosis of opportunities and threats, to develop cross-cutting strategies, to organise fund-raising, to achieve successful implementation of measures, to promote innovation, and to undertake evaluation.

Implementing these lessons will be made easier by learning from the experience of the Region itself. The Baltic Sea Region includes some of the industrialized world's most innovative countries with regard to local governance, countries with an impressive track record in pursuing governance objectives through the establishment of different forms of partnership, decentralisation and flexibility in policy management.

Source: Giguère, Sylvain (ed.) (2007), *Baltic Partnerships: Integration, Growth and Local Governance in the Baltic Sea Region*, OECD Publications.

Overall, the Baltic Sea Region is strong on macroeconomic competitiveness. This is especially true for its institutional quality but the Region also registers a solid if not better performance on macroeconomic policy. The general trend over the last year has been stable in both dimensions. The challenge that remains is the significant heterogeneity across the Region. Especially on institutional quality, the gap between the leading Nordic countries and the eastern neighbors is not only large; there is also little evidence of convergence. This is a worry because without institutional improvements there is a limit to how much economic convergence will be possible over time. It also raises concerns about the ability of

the Baltic countries and Russia to deal effectively with the current economic crisis.

Microeconomic competitiveness

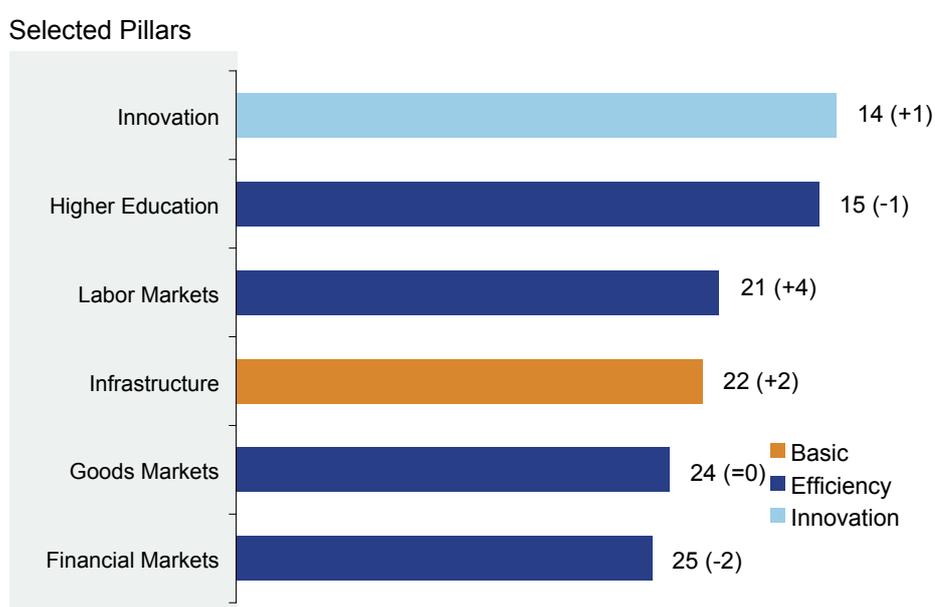
Microeconomic factors have a direct influence the productivity and innovativeness of firms. The quality of the general business environment shapes the productivity of the assets that companies can access as well as the opportunities for their productive use. The strength of local clusters determines the level of positive externalities that companies can nurture. And the sophistication of company strategies and operations directly sets

the economic value that they are able to generate from factor inputs for their customers. The quality of these three dimensions of microeconomic competitiveness is not controlled by any individual institution; it is the outcome of decisions taken independently by many different players in companies, government agencies, universities, and many other institutions. With microeconomic factors too many to address in parallel and priorities too context-dependent to be generic, the

challenge is for coalitions of policy makers to mobilize joint activities on action agendas that target the particular needs of a given location.

The *quality of the business environment* in the Baltic Sea Region remains high. On the overall Global Competitiveness Index (GCI) of the World Economic Forum, the Baltic Sea Region continues to rank as 19th, unchanged from last year.

Figure 22: Global Competitiveness Index 2008, Baltic Sea Region



Source: Global Competitiveness Report (2008), author's analysis.

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Table 1: Global Competitiveness Ranking 2008, Baltic Sea Region Countries

	Overall	Basic	Efficiency	Innovation
Denmark	3 (=)	4 (-3)	3 (+1)	7 (+1)
Sweden	4 (=)	6 (=)	9 (-1)	6 (-1)
Finland	6 (=)	1 (+1)	13 (+1)	5 (+1)
Germany	7 (-2)	7 (+2)	11 (=)	4 (-1)
Norway	15 (+1)	14 (-6)	14 (+1)	18 (=)
Iceland	20 (+3)	11 (+7)	22 (+1)	19 (+1)
Estonia	32 (-5)	30 (-1)	26 (+1)	40 (-5)
Lithuania	44 (-6)	46 (-3)	43 (+1)	49 (-3)
Russia	51 (+7)	56 (+12)	50 (-2)	73 (+4)
Poland	53 (-2)	70 (-6)	41 (+2)	61 (=)
Latvia	54 (-9)	55 (-8)	47 (-5)	84 (-12)

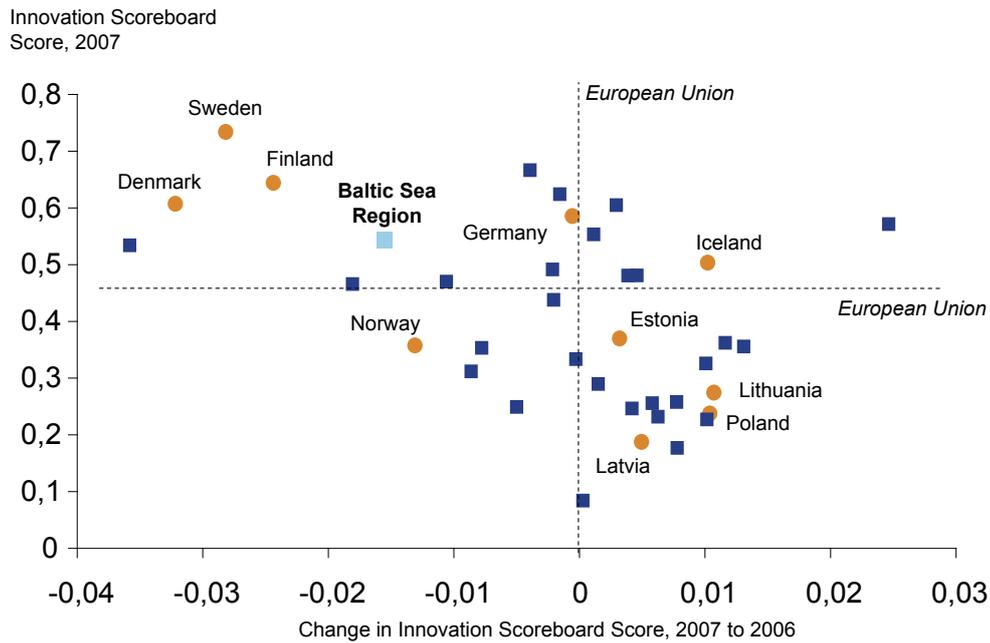
Note: Changes 2008 to 2007 in brackets
Source: World Economic Forum (2008), author's analysis.

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On **factor input conditions**, the Region is particularly strong on the measures of innovation and higher education, areas in which it ranks 14th and 15th respectively in the GCI with little movement since last year. The collaboration between universities and industry gets the highest marks, followed by the assessment of research institutions' quality. The highest ranked universities from the Region are still somewhat

below the global leaders, but a recent ranking registered positive trends, including for the first time an entry for the Region in the global top 50. Concerns remain about the quality of math and science education, an area discussed in more detail in last year's Report, and about the availability of scientists and engineers, a sign of the tight labor market for well educated specialist.

Figure 23: European Innovation Scoreboard



Source: European Innovation Scoreboard (2008), author's analysis. State of the Region-Report 2008

Table 2: Top Universities in the Baltic Sea Region

Global Rank 2008	Global Rank 2007	Institution	Country
48	93=	University of Copenhagen	Denmark
63	71=	Uppsala University	Sweden
81=	114=	University of Aarhus	Denmark
88	106	Lund University	Sweden
91=	100	University of Helsinki	Finland
133=	130=	Technical University of Denmark	Denmark
162=	197=	Chalmers University of Technology	Sweden
173=	192=	KTH, Royal Institute of Technology	Sweden
177=	188=	University of Oslo	Norway

Source: Times Higher Education Supplement (2008), author's analysis. State of the Region-Report 2008

A number of other sources support this finding: A synthetic measure of innovative capacity among OECD member countries puts Sweden, Finland, and Iceland at the top, with Denmark following right behind the United States and Canada. The European Innovation Scoreboard 2007 puts the Baltic Sea Region at the European top; the United Kingdom is the only European country not from the Region that ranks higher than the Regional average on the Summary Innovation Index (SII). However, the Region has lost position relative to the EU average, both last year and over the medium term. The Region is doing well but convergence is gradually eroding its relative advantage.

The ranking of the Baltic Sea Region countries on the relevant indicators on innovation infrastructure provides a similar view. Finland gets the strongest overall ranking in the world on this set of measures and three more Nordic countries are in the global top 10. Norway and Germany are lower but still in the top twenty, followed by Estonia at 24. Russia is ahead of Poland and the other Baltic countries, and much stronger on innovation infrastructure than on many other aspects of competitiveness. Changes over the last

year have been largely modest, with Iceland and Poland making advances while Lithuania fell behind.

The infrastructure is quite strong without being a distinct advantage. The overall rank of 20, a gain of two ranks relative to last year, is in line with the Region's overall rank. In communication infrastructure the Region continues to do best. The World Economic Forum IT Readiness Index ranks the Baltic Sea Region as 21st and two Nordic countries are at the top of the rankings. In the physical infrastructure, railroads and ports get the highest marks, while roads and airport connectivity rank much lower. The solid position on port infrastructure as well as the related public and private services is also reflected in the World Bank's Logistics Performance Index. The Region overall ranks 22nd in the world, and all Nordic countries and Germany are among the global top 20.

The assessment of physical infrastructure at the national level only tells half of the story. For the Region at large, the connections between countries are at least as important. In factor conditions, the quality of these connections in the Baltic Sea Region seems mixed given the evidence

Figure 24: WEF IT Readiness Index



Source: World Economic Forum (2008), author's analysis.

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Figure 25: World Bank Logistics Performance Index



Source: World Bank (2008), author's analysis.

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available. Physical infrastructure ties are good and improving between the Nordic countries and Germany. The Öresund-bridge between Copenhagen and Malmö has already made a significant difference to integration in that part of the Region. On 3 September 2008, the German and Danish transport ministers signed a treaty to build a bridge over the Femern/Fehmarn Belt, which, once completed, could further spur integration between the Nordic countries and Germany. Physical connections between the Nordic and the eastern countries as well as among the eastern countries of the Baltic Sea Region are still significantly weaker. The train and road systems are only weakly integrated. Sea transport lines are well established but capacity for intermodal transport remains an issue.

Financial markets in the Region get a somewhat lower but still respectable assessment, with an overall ranking of 25 (down two relative to last year) in the Global Competitiveness Report. Venture capital activity and the overall sophistication of the financial markets get relatively good grades, while there are concerns about regulatory issues, equity market access, and – in some cases – access to credit.

A number of additional reports provide further details. The World Economic Forum's "Financial Development Report" takes a broad look at the depth of the financial systems in a sample of 52 countries. The Baltic Sea Region ranks 21st, with Germany as the leading location from the Region ranked as the 3rd globally. The Milken Institute's Capital Access Index is more focused on the availability of capital across the 122 countries covered. The Baltic Sea Region ranks 19th, improving somewhat relative to last year. The Global Financial Centers Index ranks the leading 50 cities by their competitiveness in the financial services industry. Four Nordic capitals represent the Baltic Sea Region on this list, but are all in the lower ranks and have lost some position over the last year. Overall, the Region has a generally well developed financial system for its own needs but its financial markets do not play a significant role beyond its borders.

The Region has also become increasingly more integrated as a financial market. Historically, national markets were separated and the limitations this imposed on the financing capabilities for large projects and companies were one of the reasons for the creation of the Nordic Investment Bank (NIB). But now ties are multiple, with NASDAQ

Figure 26: WEF Financial Development Index



Source: World Bank (2008), author's analysis.

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Figure 27: Milken Institute Capital Access Index



Source: Milken Institute (2008), author's analysis.

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OMX the integrated platform for most equity trading in the Region, and many banks operate in more than one country of the Region. The strong presence of Swedish banks in the Baltic countries

and their role in the past credit expansion that has been one of the drivers of the current overheating crisis has recently come under scrutiny (and these banks are under pressure due to the expected

losses from their Baltic operations). But there is little doubt that the Region would be in much worse shape with less integrated financial markets. The integration provides an additional buffer to weather economic risks, be it through the capital

base that Swedish banks operating in the Baltic countries can rely on – a cushion Baltic-only institutions would never have had – or through the cross-country mergers and acquisitions like the ones between Danish and Swedish institu-

Figure 28: Financial Centers Ranking

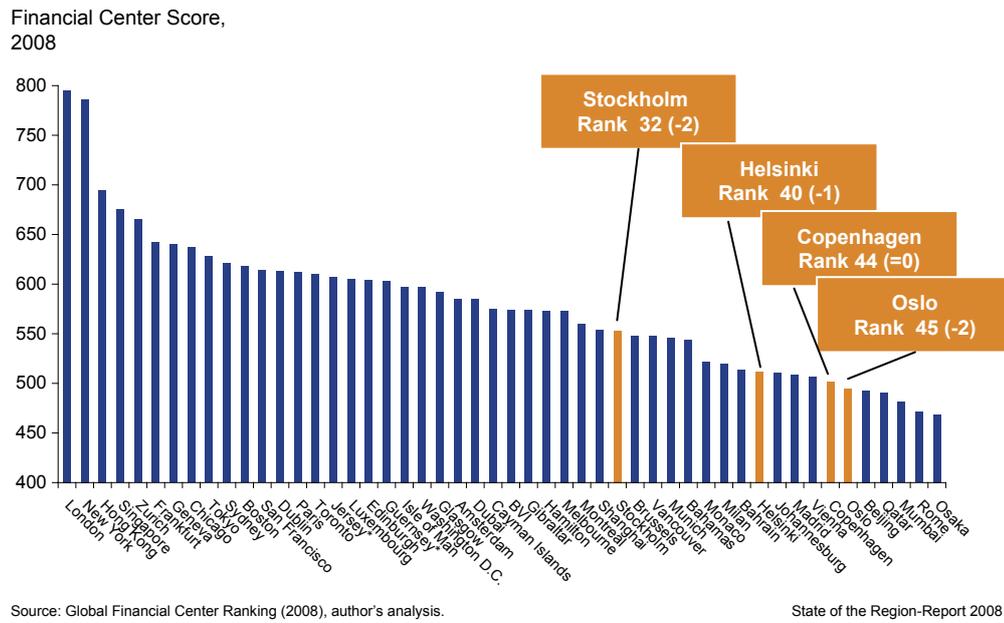


Figure 29: Intellectual Property Rights Index



tions that provide a market solution to the trouble individual banks have gotten into.

On the **context for strategy and competition**, the picture in the Baltic Sea Region is mixed. The Region does get its best marks for rules and regulations designed to keep goods markets open and insure a level playing field for all companies. The assessment of the actual intensity of competition, however, provides a less positive picture. On the negative side is a combination of a significant administrative burden – despite the generally high efficiency of the public sector – a significant role of state-owned companies especially in some countries, strongly regulated labor markets, and weak tax incentives.

A number of reports looking at specific aspects of the competitive environment that companies face confirm this general picture. The International Property Rights Index ranks the Baltic Sea Region 21st among 115 countries on its intellectual property rights assessment. Three countries from the Region are among the global top five. Sweden ranks a good deal lower than on other measures of its institutions and legal system, possibly a reflection of uncertainty about the treatment of IP on the internet. The WEF Enabling Trade Index has five countries from the

Baltic Sea Region in the top ten and ranks the Region overall as 21st in the world. The Region is, at least in large parts, both formally and factually open for engaging in global trade.

Most of the regional trade is governed by the European Economic Area agreements and thus occurs without tariffs and under the rules of the EU Internal Market. The EU's SOLVIT centers operating in the Baltic Sea Region are one attempt to remove the barriers that exist because EU rules are not applied appropriately. However, last year's Report pointed towards the real barriers that companies face in the Baltic Sea Region even if the laws of the Common Market are implemented correctly formally, be it through the different implementation of EU rules, the legacy effects of entrenched market structures, or the impact of different currencies, tax systems, and other policies not governed under the Internal Market.

Following the Partnership and Co-operation Agreement that came into force in 1997, the trade between the EU member countries and Russia in the Region is governed by a so-called most favored nation (MFN)-principle. A new agreement is under discussion and the EU and Russia signed a pre-agreement as part of Russia's WTO application in 2004. Recent trade disputes covered, for

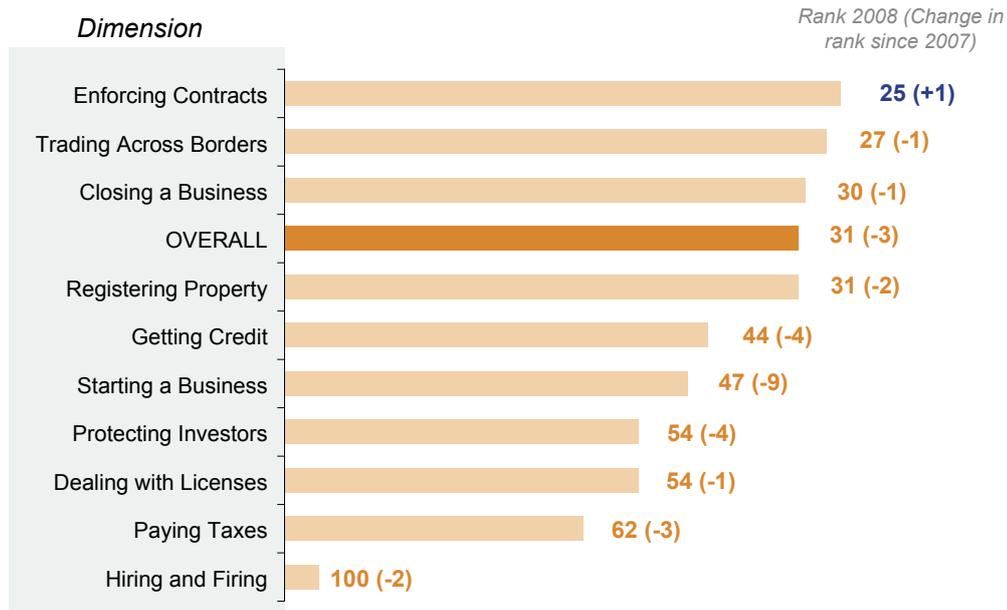
Figure 30: WEF Enabling Trade Index



Source: World Economic Forum (2008), author's analysis.

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Figure 31: Doing Business Ranking, Baltic Sea Region



Source: World Bank – Doing Business (2008), author's analysis.

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example, the Russian decision to increase export tariffs for round wood, which has serious implications for the pulp and paper industry in Finland, Estonia, and Sweden. There were also repeatedly issues in the bilateral trade between Russia and the Baltic countries and Poland that were seen to have political rather than economic reasons.

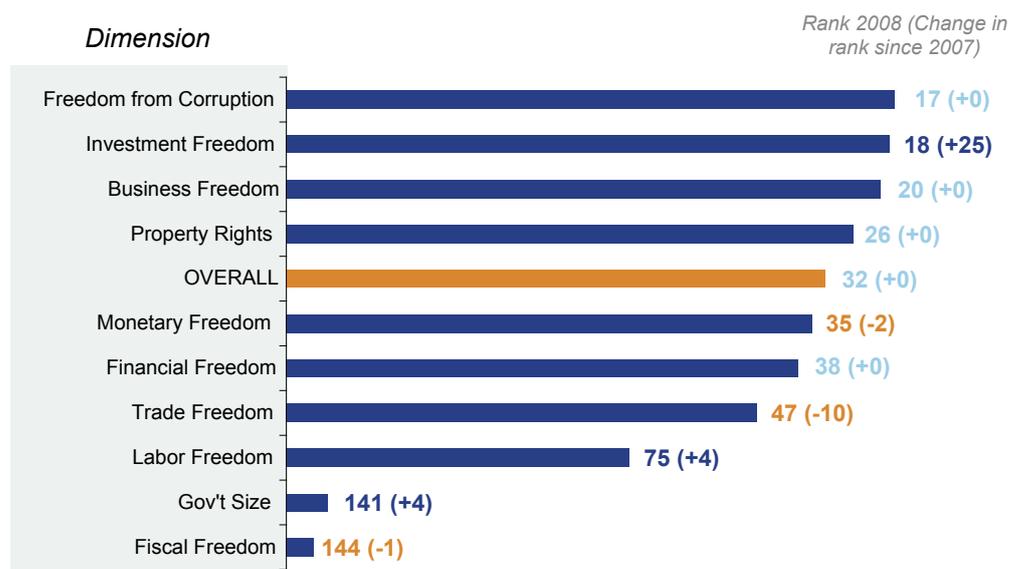
The World Bank Doing Business Index looks at rules and regulations affecting different types of economic activities. The Region ranks 31st on the aggregate measure of Doing Business, losing three ranks compared to 2007. The Region's strengths are in enforcing contracts, trading across border (see above), and closing a business. Its weaknesses are labor market regulations, tax regulations, and a number of other rules and regulations affecting companies, especially SMEs. The Heritage Foundation's Economic Freedom index looks at a different set of indicators but comes to a similar conclusion: the general freedom to run a business is high but the ability to take decisions on the labor market or benefit individually from the company's success is curtailed. An OECD study on the actual impact of the labor market rules comes to a more differentiated picture: the flexibility of labor markets in most parts of the Baltic Sea Region is high, but in some countries this happens in an environment where incumbents on the labor market have significant power.

On related and supporting industries (clusters), an area discussed in detail in previous reports, the Region gets relatively good grades. There is clearly a strong presence of specialized services providers and machinery suppliers in many industries. Collaboration and the awareness of clusters are also at quite high levels, especially in the Nordic countries.

In some clusters, a Baltic Sea Region collaboration between regional clusters across national borders has started to emerge. The area of Life Sciences, with its organizational structure in ScanBalt, is the most visible. But trade patterns indicate that there are also significant linkages between other clusters, for example pulp and paper, furniture, and IT. BSR InnoNet, an effort supported by the European Commission, has just launched pilot projects in four such areas.

On demand conditions, often critical for innovation, the Region does particularly well. Stringent government regulations on consumer protection and environmental qualities are one driver. While they impose short-term costs, such regulations can enable companies to gain a lead in product features or production processes that competitors elsewhere have to adopt later on. But consumer behavior is another driver: markets in the Baltic Sea Region are open to new technologies and trends, and often highly 'fashion'-driven

Figure 32: Economic Freedom Ranking, Baltic Sea Region



Source: Heritage Foundation (2008), author's analysis.

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Table 3: Indicators of Clusters Presence and Policy Baltic Sea Region

Global Rank	BSR	Denmark	Estonia	Finland	Germany	Iceland	Latvia	Lithuania	Norway	Poland	Russia	Sweden
Local supplier quantity	66	13	73	20	2	58	103	29	24	44	87	34
Local supplier quality	44	9	28	12	3	16	67	39	11	50	105	13
Local availability of specialized research and training services	32	5	20	3	7	15	69	62	17	51	71	11
Local availability of process machinery	29	18	42	4	1	50	89	65	23	39	54	11
Presence of clusters	45	8	76	2	11	52	110	98	18	91	99	12
Presence of cluster policies	62	11	61	2	23	49	100	120	19	110	116	31

Source: Global Competitiveness Report (2008), author's analysis.

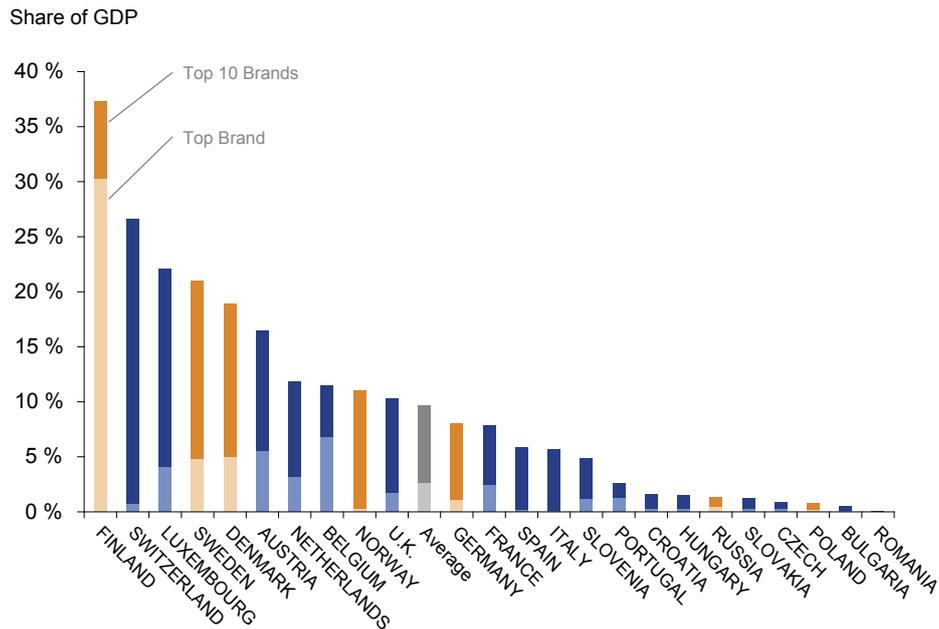
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with a significant premium for brands and short-term innovation.

The *sophistication of companies* in the Baltic Sea Region continues to be a distinct advantage for the Region. On the business sophistication index of the GCR the Region ranks 18, higher than in most dimensions of the business environment. There are also a number of recent studies that have looked at Nordic management and found distinctive features that enable companies from this part of the Region to compete successfully in areas where knowledge-driven, integrative approaches are needed.

A particularly interesting indicator of both the sophistication of companies and of demand in the Baltic Sea Region, especially the Nordic countries, is the role of brands. In Sweden this came to the attention of a large public, when the previously government-owned company that owned the 'Absolut' Vodka brand was sold at a price that was higher than Volvo. The data collected for the Eurobrand index shows that the value of brands in the Nordic countries is higher than in most other parts of Europe. Partly this is a reflection of the Nordic countries' high level of prosperity – brands develop in rich economies – but even relative

Figure 33: Value of Company Brands



Source: Eurobrand (2008), author's analysis.

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to other advanced economies the brand value of Nordic companies is impressive. Individual companies like Nokia in Finland account for a significant share of this value but the phenomenon is clearly broader based.

Within the Baltic Sea Region, **individual countries** face different challenges for upgrading their competitiveness. This heterogeneity exists not only between the Nordic countries and Germany on the one hand and the Baltic countries, Poland, and Russia on the other hand, but also between countries within these two groups. A country-specific analysis of competitiveness is thus crucial to identify appropriate action priorities. Many of the tasks ahead for the countries of the

Region have to be tackled at the national policy level. But joint activities at the level of the Region can play an important role in complementing these efforts. And similar patterns of action priorities provide a clear opportunity for policy learning from countries that share a similar context. The following section discusses the position of individual Baltic Sea Region countries on different metrics of competitiveness.

Denmark ranks highest among Baltic Sea Region countries as the global 3rd in the overall Global Competitiveness Index (GCI), unchanged from last year. In macroeconomic competitiveness, it is particularly strong in institutional factors; Denmark continues to be the world leader

Globalization and competitiveness

The Nordic Council of Ministers has over the last year and a half discussed what demands globalization poses on competitiveness policies in the Nordic region. The Nordic Globalization Barometer focused on two dimensions that gain importance in the overall analysis of competitiveness. First, the ability to attract capital, companies, ideas, and people from abroad is getting increasingly critical. Competing on internal capabilities is no longer sufficient in a global economy. And while the Nordic countries excel in creating capa-

bilities and projecting them on global markets, they do less well in attracting this outside interest. Second, the clarity of a unique strategic position defining the particular value that a country or region plays in the world economy becomes crucial to avoid me-too competition in a global marketplace with a growing number of rivals that their raise their generic qualities. For the Nordic region, the Barometer discussed a number of specific qualities and clusters that constitute the basis for such a strategic position.

Access the Barometer at www.norden.org

on the absence of corruption. The ranking on macroeconomic policy is somewhat lower, dropping to rank 12th from 10th in the previous year. In microeconomic competitiveness, the country ranks among the global top ten in all dimensions measured by the GCI, with only limited changes relative to last year. Other rankings indicate particular strengths in IT and the openness to trade. Somewhat surprisingly given Denmark's shipping tradition, the ranking in the World Bank's Logistical Performance Index is a bit weaker with Denmark ranked 13th overall and outside the top ten for all dimensions of the index. Another area in which Denmark also scores slightly below its strong overall performance is innovation: it ranks 10th overall in the GCI's innovation index and has lost most in position of all Baltic Sea Region countries in the EU Innovation Scoreboard relative to last year. More narrow weaknesses as identified by business leaders include the quality of the education system, the relatively low intensity of local competition, and the high level of taxes and government regulations. The latter is also reflected in the Economic Freedom rankings that have Denmark at the top in all categories except those measuring the size of government and taxes. Highest on the minds of Danish executives is, however, the threat of a recession hitting the economy.

Overall, Denmark competes on an excellent macroeconomic framework combined with balanced strengths across the overall business environment. The challenge is to translate these broad strengths into specific competitive advantages that allow companies to grow and further develop their global positions.

Sweden ranks 4th on the GCI, equal to last year. On macroeconomic competitiveness, its position is similar to Denmark's. On institutional quality, Sweden further gained position across a number of indicators and is now ranked 4th on the institutional pillar of the GCI, 1st on the absence of corruption, and among the top 5% globally on the World Bank governance indicators. The ranking on macroeconomic policy is weaker at 15, but improved two ranks over the last year. In microeconomic competitiveness, Sweden is strongest in higher education and technological readiness; it ranks 2nd globally in the WEF IT Readiness Index. The country is also

the European leader on an overall measure of innovation even though it lost significant position last year. On most financial market indicators, Sweden leads the Baltic Sea Region: Stockholm is the Region's highest ranked financial center, Sweden ranks best on the Capital Access Index, and second best in the WEF Financial Development Index. Furthermore, Sweden ranks strongly on measures of company sophistication, especially modern management approaches. In most other dimensions Sweden ranks in the global top ten. The exceptions are infrastructure, where Sweden ranks 13th, down one from last year, and labor market efficiency, where the country is ranked 26th after a gain of eleven ranks. The most visible weaknesses from the perspective of business leaders are the high level of taxation and the inflexibility of the labor market.

Overall, Sweden competes on an excellent macroeconomic framework and overall strengths across the business environment combined with a specific focus on large globally operating companies, a strong IT orientation, and a regional financial center. The challenge is to sustain the country's lead in technology and skills that is the foundation for Sweden's current prosperity in a changing global innovation environment.

Finland kept last year's 6th rank in the GCI. As its Nordic neighbors its macroeconomic competitiveness is characterized by very strong institutions, strongest in the Region despite some erosion compared to last year. The country also has the strongest macroeconomic policy ranking of the Region, where it ranks 8th globally, a gain of one rank. In microeconomic competitiveness, Finland's profile is more unbalanced than among its Nordic peers. On higher education and many individual indicators of skills, it is the global leader. On innovation and the WEF IT readiness index the country ranks 2nd; the ranking on the European Innovation Scoreboard is only marginally weaker. Finland also gets high marks for the strengths of its clusters and the policies to mobilize them. But in no other GCI dimension does Finland rank among the global top ten. Some dimensions of business regulations are strong, like contract enforcement and closing a business, but on others, especially labor market flexibility, Finland ranks very weak and has even lost further position compared to last year.

Overall, Finland competes on an excellent macroeconomic framework and a strong focus on technology- and innovation-driven activities. The challenge is to address the remaining competitive weaknesses of the Finnish economy outside of its core technology base to increase the economic performance of the broader economy and become less sensitive to sector- or company-specific shocks.

Germany fell two ranks and now comes 7th in the GCI with a profile of strengths and weaknesses quite different from the Nordic countries. On macroeconomic competitiveness, it ranks weaker on institutions with a position on the World Bank governance index only barely in the global top ten, a 14th rank on the absence of corruption as well as on the institutions pillar of the GCI. Germany's macroeconomic policy rank improved dramatically but is still only 40. On microeconomic competitiveness, the country does best in infrastructure, business sophistication, and innovation. A sign of the strengths of German companies is the leading position in the world on the measure of competitive advantages. Germany is also strong on the actual level of local competition, not just on general market openness. It provides excellent logistical conditions and has a well developed financial market. In most other dimensions of business environment quality, the country ranks only around the global top twenty, with an even weaker position on labor market flexibility and taxation. On the ease of starting a business, Germany now ranks 102nd in the world after dropping by 27 ranks.

Overall, Germany competes on a highly efficient and globally oriented business sector that makes the most of a solid macroeconomic framework and a business environment with key strengths but also several weaknesses. The challenge is to limit existing weaknesses and further develop business environment strengths that can support the capabilities of German companies even in the future.

Norway now ranks 15th on the GCI, a small gain compared to last year. Its profile of strengths and weaknesses is less pronounced than in its Nordic peers, and the country's oil and gas deposits provide it with a prosperity windfall. Macroeconomic competitiveness is based on a solid position on institutional strengths, but the

country ranks slightly below its top neighbors. On macroeconomic policy, a traditional Norwegian strength, the country has lost significant position and is now only ranked 17th. Microeconomic competitiveness is mixed. On most indicators related to skills, the nature of business rules and regulations, and the functioning of markets, the country ranks similar to its overall position. The position on business sophistication and innovation is somewhat weaker, on infrastructure markedly weaker. In terms of individual issues, Norway is ranked worst in the Baltic Sea Region, including Russia, on the significant role of state-owned companies in the economy.

Overall, Norway has a sound overall position but also benefits significantly from its natural resource wealth that supports a level of prosperity otherwise unattainable given the country's competitiveness. The challenge will be to move the existing qualities of the Norwegian business environment to the next level.

Iceland gained three ranks to now come 20th in the GCI, almost exactly at the level of the Baltic Sea Region average. On macroeconomic competitiveness, the country matches the pattern of the other Nordic countries with a strong position on institutions. Macroeconomic policy, however, is considerably weaker, even after a huge jump from rank 102 to rank 56. On microeconomic competitiveness, the key strengths are in technological readiness, education, and flexible labor markets. In all other areas, the country ranks around 20th in the world. The key short term challenge that worries business leaders is the threat of recession; Iceland ranks worst of the Baltic Sea Region on this measure.

Overall, Iceland competes on a combination of Nordic institutions and assets with Anglo-American incentives and labor markets. The challenge will be to rebuild the system after the implosion of the financial system that has dragged down many of the internationally-oriented companies and activities with it. Iceland's success over the last few years has more to it than the aggressive internationalization strategy of a few banks and investors. But it will require hard work to resurface these fundamental strengths from the rubble of the financial crisis.

Estonia remains at 32nd place, the best ranked country from the eastern part of the

Baltic Sea Region, despite a drop of five ranks. The country's macroeconomic competitiveness is characterized by stronger macroeconomic policy than institutional quality, contrary to the pattern in the Nordic countries and Germany. On microeconomic competitiveness, technological readiness and higher education and training are the country's key advantages. Estonia is also strong on overall economic freedom and ranks well on business regulations and innovation, an area where it is even stronger than Norway according to the European innovation scoreboard. The key disadvantage remains business sophistication, an area where Estonia even dropped 6 ranks and now stands at 50. The threat of recession and, interestingly, the barriers for hiring foreign labor, are by business leaders in the country perceived as the key challenges facing the Estonian economy.

Overall, Estonia competes on a combination of open markets, the availability of solid skills at low cost, especially in technology, and a clear orientation towards Western markets. The challenge, beyond overcoming the current overheating crisis, is to further develop internal capabilities rather than just exploiting them well.

Lithuania is 44th in the GCI, down six ranks compared to last year. Macroeconomic competitiveness is not a particular strength of the country. The rankings on both institutional quality and macroeconomic policy are weak, but not disastrous. In microeconomic competitiveness the country has a few narrow advantages. Their key strength is a strong position on education. On technology readiness the ranking is also good, but not as strong as for Estonia. In all other areas, Lithuania ranks around 50 globally. Weaknesses are cluster policy and the barriers for hiring foreign labor.

Overall, Lithuania competes on the availability of solid skills at low cost and its geographic position relative to Russia, Poland, and its Baltic neighbors. Being later in the economic cycle now has turned to be a significant advantage relative to Estonia and Latvia, but Lithuania, too, will need to develop competitive strengths rather than just relying on the existing comparative advantages.

Russia moved up seven ranks and stands at 51st on the GCI, now before Poland and Latvia. Improvements were mainly on macroeconomic

competitiveness, where Russia has become much stronger on macroeconomic policy, an area where it now ranks 29th in the world. The recent upsurge in inflation as well as the significant public spending to shore up the ailing Russian stock markets could erode this position in the future, but Russia has clearly made big strides since the Russian crisis a decade ago. Institutional quality, however, remains the biggest weakness of the Russian economy. The GCI ranking on institutions as well as the World Bank governance indicators registered slight improvements over the last year. But corruption increased further and the overall ranking is only slightly ahead of their lowest ranking over recent years. On microeconomic competitiveness, Russia's position continued to deteriorate overall, with mixed performance across different areas. The country's relative strengths continue to be in labor market flexibility and higher education. Infrastructure and innovative capacity also rank well after significant gains over the last year, possibly driven by the increase in government spending on these areas. The most significant weaknesses are in three areas where Russia has also seen a further loss of position. First, financial market sophistication, where the frailty of the system has been brutally exposed over the last few weeks. Second, goods market efficiency, where a combination of government interventions through regulations and state-owned companies restricts the development of effective competition. Russia now ranks 120th on the World Bank Doing Business ranking, down 8, and 127th on business executives assessment of whether there is a level playing field between private and state-owned companies. Russia is also weak on the indexes for logistics performance (World Bank) and enabling trade (WEF), two key indicators for the actual openness of the Russian economy. Third, business sophistication, where Russia now ranks 91st based on the GCI indicators for this area. Despite the dramatic changes in many Russian companies over the last few years, there is a general sense that much more needs to happen for them to reach true global strengths.

Overall, Russia continues to be a resource-wealth driven economy, where solid macroeconomic policy has allowed domestic consumption to become the main driver of economic activity

outside of oil and gas exports. The challenge will be to break this dependency of energy export revenues that hold back real improvements in institutions and the business environments, exposing Russia to high levels of economic and political risk.

Poland dropped two ranks and now stands at 53rd in the GCI. On macroeconomic competitiveness, Poland managed to improve on macroeconomic policy where it now ranks 50th. On institutional quality, however, the country ranks a weak 88th, despite moderate improvements in the absence of corruption and governance as measured by the World Bank. In the EU, only Bulgaria (111) and Romania (89) rank lower, while non-member countries like Croatia (74) and Turkey (80) rank higher. On microeconomic competitiveness, Poland has a few core strengths but continues to struggle with below average performance in many other areas. The key strength is education/workforce skills, an area where Poland's position continued to improve slightly. Business rules and regulations are seen as average but Poland is slowly falling behind on the Doing Business indicator as other countries continue to reform more aggressively. Poland ranks quite well on technological readiness, while it continues to get lower scores for innovative capacity, despite

some gains in the EU Innovation Scoreboard.. Poland is well positioned to adopt leading technology and best practices, but is so far not very active in pushing the frontier of new thinking. Labor market regulations get low marks but the actual flexibility of the market is seen as somewhat better than the laws suggest. Infrastructure is the real worry; Poland's ranking dropped by 16th ranks to 90th. Business executives are clearly concerned with the ability of the current structures to serve the growing Polish economy. Interestingly, the Logistics performance indicator, which also includes services and is much more export orientated, gives Poland a much better assessment.

Overall, Poland competes on both the availability of skilled labor at low costs in close proximity to Western markets, especially Germany, and the potential of a reasonably large domestic market. The challenge for Poland is to now develop competitive strengths rather than just relying on the existing comparative advantages.

Latvia ranks 54th on the GCI this year, a fall by 9 ranks that puts the country at the bottom of the Baltic Sea Region competitiveness league table. The erosion of Latvia's position in rank was largely driven by macroeconomic policy, where the country dropped by 27 ranks, and a more

Russia: A case study on the differences between macroeconomic and microeconomic competitiveness

The Russian economy continues to register high real growth rates on the basis of its significant natural resource wealth. Whether or not the recent upheaval of the financial markets will dent this trend, still remains unclear. But even before these recent events, there has been a fierce debate about the role of economic policy in the performance of the Russian economy over the last few years.

The differentiation between elements of competitiveness and the policy structures they require provides an often overlooked perspective to this debate. Russian policy-making has become more centralized over the last four years, so much almost every observer agrees. Russia has also improved its macroeconomic policy; this is at least a clear majority view. However, Russia has in the eyes of most

analysts, seen its microeconomic competitiveness deteriorate despite a clear increase in policy activity. Some of that activity has increased the role of the government in the economy in a problematic way, but many other initiatives have been much in line with the views of Western observers. Even those efforts, however, have had little effect.

Part of the explanation of this success in macroeconomic policy and failure in microeconomic policy is the policy process. Centralization works well for macroeconomic policy, where decisions are relatively few and clearly the province of central government. Centralization does not work, however, for microeconomic policy, where bottom-up initiative is critical. Unless Russia is able to combine overall stability with more bottom-up decision-making in microeconomic policy, fundamental progress is unlikely to occur.

For more information see: Porter/Ketels, Russian Competitiveness at the Crossroads, Moscow: Center for Strategic Research. Available at www.csr.ru

skeptical assessment of its companies' sophistication and innovative capacity. On macroeconomic competitiveness, Latvia has essentially kept its position on institutional quality where it is slightly weaker than its Baltic neighbors but clearly ahead of Poland and Russia. In macroeconomic policy, however, an area in which Latvia used to rank in the global top 50, the country now has by far the weakest ranking of all Baltic Sea Region countries. With the developments of the last few months not yet included in that data, the outlook for next year is challenging. On microeconomic competitiveness, Latvia ranks relatively best on education, labor market efficiency, and financial market sophistication, followed by technological readiness. The country also gets quite good marks on business regulation, where it remains in the global top 30 despite some slippage, and overall economic freedom. In infrastructure, Latvia stayed on relatively weak 58th rank, with slightly higher rankings on logistical performance (World Bank) and IT readiness (WEF). Key problem areas are company sophistication and innovation, areas in which Latvia now ranks 83rd and 93rd respectively.

Overall, Latvia competes on the availability of skilled labor at low costs and an orientation towards Western markets, similar to Estonia, but without its neighbor's public profile as a new technology hub. The challenge, beyond overcoming the current overheating crisis without suffering damage to its economy and institutions, is to create a more differentiated positioning of the economic value the country provides by developing specific internal capabilities and clusters rather than just exploiting existing comparative advantages.

Overall assessment

The Baltic Sea Region continues to be among the most competitive economies in the world, and there have been few changes in the Region's overall position since the 2007 State of the Region Report. The changes that have occurred were driven more by the increasingly different business cycle situation that the individual countries in the Region were exposed to.

On macroeconomic competitiveness, the Region combines a very strong institutional base with solid macroeconomic policy. However, while this pattern characterizes the Nordic countries that feature large in the aggregate number of the Baltic Sea Region, they do not apply equally well to the rest of the Region. In Germany, macroeconomic policy continues to be weaker, even after recent improvements. In the Baltic countries and Poland, institutional quality tends to be much weaker while the record on macroeconomic policy is mixed. In Russia, macroeconomic policy is solid while institutional quality remains one of the key weaknesses faced by the country.

On microeconomic competitiveness, the Region truly competes as a knowledge-driven economy, with strengths in education, technology, innovative capacity, and business sophistication. But this description again fits best for the Nordic countries with other parts of the Region providing variations of the underlying themes of strong skills. Germany has less of a high-tech bent and an overall weaker education system, but is strong on innovation and especially its business sector. The Baltic countries and Poland largely leverage their comparative advantages from solid skills at relatively low wages in the proximity of Western European markets. Russia has a large and growing domestic market, while it is only starting to attempt leveraging its remaining scientific capabilities.

- **The Baltic Sea Region continues to lead the rest of Europe on the different dimensions of performance laid out in the Lisbon Agenda, even though the gap is slowly getting smaller**
- **Sweden and Norway continue to increase their lead and Lithuania and Poland have managed to make strides in their convergence to the European average**
- **Denmark and Iceland have experienced a significant deterioration of their position, but remain ahead of the European average**

3. The Lisbon Agenda

The Lisbon Agenda, originally launched in 2000, outlines Europe's ambition to become the most competitive region in the world economy. From the outset, the Lisbon Agenda introduced two important new aspects in the European policy debate. It strongly raised the focus on microeconomic foundations of competitiveness, giving much more significant weight to innovation and enterprise policies. And it changed the interaction between the European institutions and the EU member countries, adding a new role for the Commission as a moderator of change at the member country level. The relaunch of the Lisbon Agenda in 2005 reinforced both elements. It created a stronger focus on core microeconomic policies and strengthened the role of the Commission in monitoring progress at the national level.

The European Commission provides a detailed set of indicators covering six different policy areas to track countries' progress on the Lisbon Agenda. We selected the broader categories for these indicators for our calculations. The only indicator we dropped is the regional dispersion of unemployment rates, because it is not available for the many countries in the Baltic Sea Region that are equivalent to NUTS-2 regions.

To aggregate the data, we first normalize the raw data. For each indicator, the value reached by the best country in 1995 (or 1997, depending on data availability) is normalized to 10 and the value reached by the worst country in 1995 to 1. All other values become values between 1 and 10 using a linear transformation. This normalization

does allow for higher than 10/lower than 1 in later years, enabling us to track overall improvements over time. The normalized values are then averaged within each of the six categories. The values for the six categories are then simply summed up to create a Lisbon score for each country and year. Finally, GDP weights are used to create a weighted average for the Baltic Sea Region.

Compared to last year, the Eurostat has re-based some of the indicators, now using the EU-27 instead of the EU-25 as the baseline. In addition to making this adjustment, we have this year also used the last year of data for every indicator, even when that year might be different for different indicators within one category. In cohesion, for example, the latest data for long-term unemployment rates is from 2007 but for the risk-of-poverty rates only from 2006. We report the aggregation of both scores under 2007. The results for previous years are very stable compared to the data published last year despite these adjustments.

The Baltic Sea Region on the Lisbon Agenda

The Baltic Sea Region continues to perform well on the Lisbon Agenda criteria. Its average performance in 2007 would put the Region on rank 5 of all EU member countries, unchanged from the previous year. It retains an aggregate score significantly above the EU-15 countries. The improvement in score for the Baltic Sea Region has been

Table 4: Lisbon Agenda performance, European countries

	Group	Indicator
Outcomes	General Economic Background	<ul style="list-style-type: none"> • GDP per capita • Labor productivity per employee
Business environment quality	Economic Reform	<ul style="list-style-type: none"> • Domestic price levels • Business investment rate
	Employment	<ul style="list-style-type: none"> • Total employment rate • Employment rate of older workers
	Innovation and Research	<ul style="list-style-type: none"> • Youth education attainment level • R&D expenditure as % of GDP
Context	Environment	<ul style="list-style-type: none"> • Change of greenhouse gas emissions • Energy intensity of the economy • Transport intensity of the economy
	Social Cohesion	<ul style="list-style-type: none"> • At risk of poverty after transfers • Long-term unemployment rate

slightly less than for the EU-15 countries - however, for the first time this is the case since we have been tracking the Lisbon performance in this Report.

The Baltic Sea Region continues to perform best on innovation (4), even though its score went down, and employment (5), where it gained three ranks. After a small gap follow social cohesion, environment, and general economic conditions, where the Region ranks between 8 and 10. The worst performance is on economic reform, an area measured through its impact on investment rates

and price levels, where the Region reaches a rank of 21, a gain of four ranks relative to last year.

Relative to last year, the Region lost position in two of its traditional strengths, environment and innovation, while it kept its position in all other categories. These changes are partly the result of the business cycle movements that increased economic activity in many parts of Europe, and partly also a sign that structurally the advantages of the Baltic Sea Region are starting to come under pressure, for example in the area of innovation.

Figure 34: Dimensions of the Lisbon Agenda: Baltic Sea Region

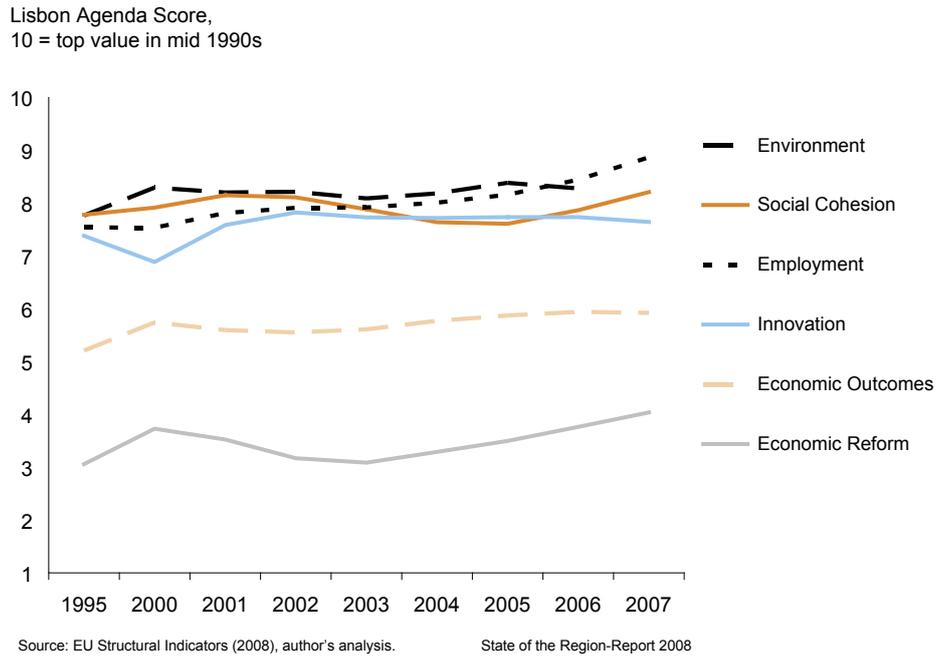
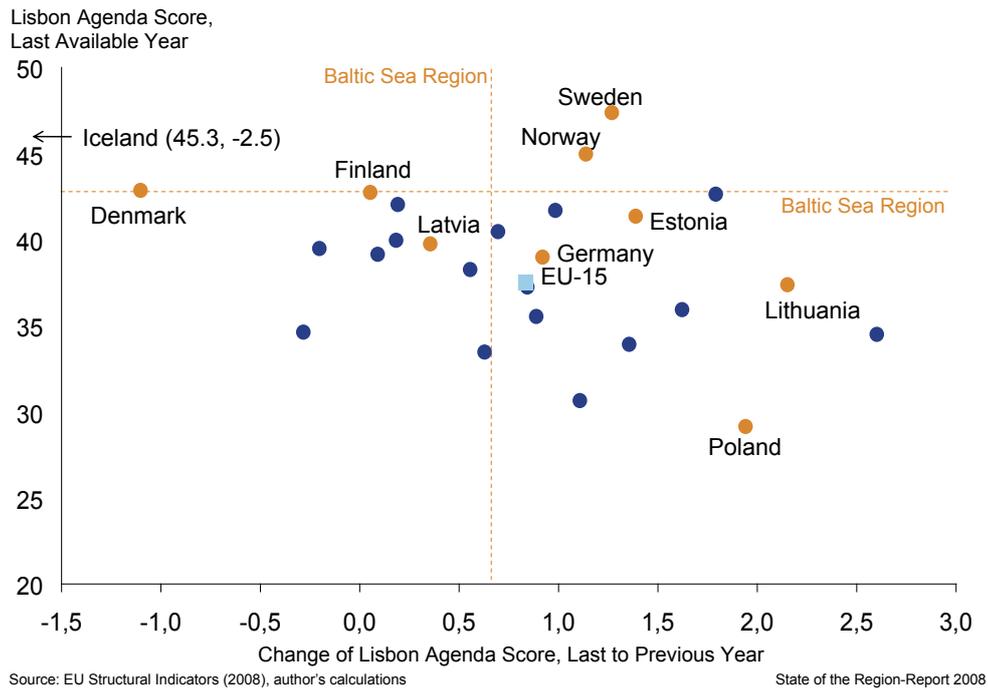


Figure 35: Lisbon Agenda Performance: European Countries



Countries in the Baltic Sea Region on the Lisbon Agenda

While the aggregate figures for the Baltic Sea Region provide an important benchmark, they are not meaningful for providing policy advice. The aggregate is the result of the very divergent posi-

tions that individual countries occupy across the different indicators.

The countries from the Baltic Sea Region continue to dominate the top positions of the Lisbon Agenda ranking. Sweden, Iceland, Norway, and Finland lead the overall ranking, Denmark follows in 6th place directly after Austria. Estonia

(11) remains slightly ahead of Germany (13, +2). Latvia stays roughly unchanged at 15 and Lithuania remains at 20. Poland gains two more ranks, but is at 26 still in the weakest position of the Baltic Sea Region countries.

Sweden gains the leading position on the Lisbon Agenda, in the Baltic Sea Region as well as across Europe. Its main strengths remain innovation (rank 1), cohesion (2), and employment (4) with all ranks unchanged relative to last year. In economic reforms, Sweden's main weakness, it remains 28th among 29 countries with available data. Relative to the previous year Sweden kept its strength and marginally improved its position in areas of weakness. Sweden's largest gain came in the environmental dimension, where it registered a significant improvement in greenhouse gas emissions to gain three ranks.

Iceland dropped to second rank overall, largely because a drop-off in the business investment rate at the end of a large project to build a new aluminum smelter that drove the economic reform ranking to drop ten ranks to 21st. The country remains in the top position on employment and cohesion, and performed relatively well on general economic outcomes. On environment, innovation, and economic reform, the country continued to rank in the second half of all countries.

Norway remained 3rd overall, with strengths in general economic outcomes (rank 2), cohesion (3), and employment (3), all unchanged from last year. The weakness remains economic reform where the country continues to hold the last position in Europe (29). In environment it ranks 20, two up relatively to last year. In innovation, Norway ranks 13th, another gain of one rank, keeping up last year's positive trend.

Finland remains strong on innovation (2) but weak on economic reforms (26) and environment (22). In all other dimensions, it ranks between rank 7 and 10. The country's position has remained highly stable compared to last year.

Denmark dropped two ranks to 6th among the European countries. Strengths continue to be cohesion (4), and employment (5). In innovation, Denmark dropped from 4th to 9th place, largely because of falling youth educational attainment levels. In environment, the drop was from 8th to 14th, largely because a significant increase in greenhouse gas emissions. Economic reform remains a weak-

ness, but Denmark gained another rank, keeping last year's positive trend, to now stand at 23.

Estonia's key strengths are economic reforms (3) and the environment (2). General economic outcomes (24), cohesion (20), and innovation (17) are so far relatively weak. Relative to the previous year, the country registered improvements in innovation, where R&D spending increased significantly.

Germany's relative strengths continue to be the environment (4) and innovation (7), while economic reform (22) remains the largest weakness. Relative to last year, Germany gained position on cohesion, where falling unemployment rates led to a gain of three ranks.

Latvia continues to benefit from high investment rates and moderate prices in the economic reform area but the gap to other countries in these two indicators has decreased significantly compared to last year. The environment remains another strength, but largely reflects the low overall level of economic activity in the country. In employment, innovation, and cohesion Latvia registered small gains on the back of its still fast-growing economy in 2007.

Lithuania follows as the last of the three Baltic countries. Compared to slightly higher ranked Latvia, the country is stronger on innovation but weaker on cohesion, employment, and economic reform. In two of these areas, cohesion and innovation, Lithuania gained modest ground over the last year.

Poland gained slightly on economic reform, driven by higher investment rates. Overall its most positive ranking remains on environment (7), but this is similar to Latvia and more a sign of a lower stage of economic development than environmental strength. On employment it ranks 30, followed by cohesion (29) and general economic outcomes (28), all hardly changed from the previous year.

Overall, the analysis of the countries around the Baltic Sea Region confirms the results of the competitiveness analysis in the previous section. Countries differ quite significantly not only in their overall position but also in terms of their profile of strengths and weaknesses. Policy responses need to be country-specific and cannot follow one blueprint across the Baltic Sea Region. Cooperation across the Baltic Sea Region can be an additional tool to achieve these respective objectives.

Every year, the State of the Region Report takes a more detailed look at selected aspects with relevance for competitiveness and collaboration in the Region. The relations of the Region to the European Union are such an issue and the on-going discussions on the EU Baltic Sea Region strategy make their analysis particularly timely. Energy and environment are other issues that play a significant role in the Region, not the least because of the upcoming climate summit in Copenhagen in 2009.



Section C: Europe, Energy, and the Environment – Key issues for the Baltic Sea Region

The State of the Region Report focuses on the economic issues of how regional collaboration can contribute to the increasing the competitiveness of the Region. But to be competitive, it is not only policies directly associated with economic issues that matter. There are other policies that are relevant as well. This section discusses two such policy areas. The first section looks at the relations between the European Union and the Baltic Sea Region. The European integration process has larger political objectives than contributing to the competitiveness of the EU member countries, even though this is clearly one important goal. But others are important as well and have an impact on actual policies chosen. The second section looks at energy and environment in the Baltic Sea

Region. Stable energy supply and a clean environment are important for the economic success of the Region. But they are clearly objectives in their own right, not just in their contribution to competitiveness.

The ambition of this section is not to provide a comprehensive picture of the issues related to the two topics; that is not possible within the context of this Report and the research that supports it. There are a number of organizations in the Region much better placed to take on this task. Instead, the aim is to provide an initial summary of key relevant facts, organized in a framework that enables and stimulates further analysis and discussions, for people who are not specialists in either of the two fields.

- **The Baltic Sea Region is closely integrated in or with the European Union, but individual countries are heterogeneous in their expectations and political positions towards the European integration process**
- **The European Union has a strong legislative influence and provides significant financial resources, roughly €15 billion annually, to the Baltic Sea Region; both are addressed overwhelmingly at individual countries and not the Region as a whole**
- **The EU Baltic Sea Region Strategy could lead to a step-change in the coordination of local, national, and cross-national policies, even though it provides neither new money nor structures**

1. The Baltic Sea Region and the Europe Union

With the accession of the Baltic countries and Poland to the European Union in 2004 the Baltic Sea became almost entirely surrounded by EU member countries. The European Union's integrated institutional structure and common, far reaching regulatory framework has provided opportunities for a significant increase in ties across the Region. The EU institutions have also become the natural level for many discussions about cross-national collaboration. The Baltic Sea Region is now in the process of defining the role it can play as a region within the EU.

The European integration process has been a central driver of the re-emergence of the Baltic Sea Region as a geography united through multiple personal, economic, and political ties. Section A. 2 of this Report discusses the implications for the Baltic Sea Region of the uncertainties of the next stage of the EU's evolution..

This section discusses the relations of the Baltic Sea Region to the European Union, providing the needed background for developing ideas about ways in which this relation could develop in the future. The first part of the section compares the degree to which countries from the Region have become integrated into the structures of the EU and what positions they take with regard to key policy questions facing the EU. It essentially asks the questions how much the Region has joined the EU structures, and how does the Region try to influence EU decisions. The second part tracks the

use of different EU funds and the implementation of EU regulations by countries in the Region. It asks how the countries from the Region make use of the activities that the EU structures provide. The third part then takes up the on-going discussions on the EU Baltic Sea Region Strategy, an effort that has the potential to not only take the relations of the Baltic Sea Region with the EU onto the next level, but to also contribute to the discussions on the future of EU integration.

Baltic Sea Region countries in the structure of EU institutions

The formal relationship between Baltic Sea Region countries and the European Union is the first step to understand the linkages between the Region and the EU that have developed over the recent past. At the first level is the question of membership, whether, when, and why it was sought. At the second level is the voluntary participation in projects that move beyond the current mandate of the EU, but draw on its structures. At the third level is the position of member countries in discussions with regard to important political questions facing the European Union.

The Baltic – An (almost) inner sea of the EU Of the eleven countries engaged in Baltic Sea Region collaboration, eight are members the European Union, and thus fully integrated in all

activities of the EU, two are members of the European Economic Area and thus fully integrated in the EU's Internal Market, and one has a Partnership and Co-operation Agreement with the EU. All countries are full and equal partners in the Northern Dimension, a platform for collaboration between the EU, Iceland, Norway, and Russia. And groups of countries from the Region are part of other neighborhood platforms such as the Barents Euro-Arctic Council or the Arctic Council.

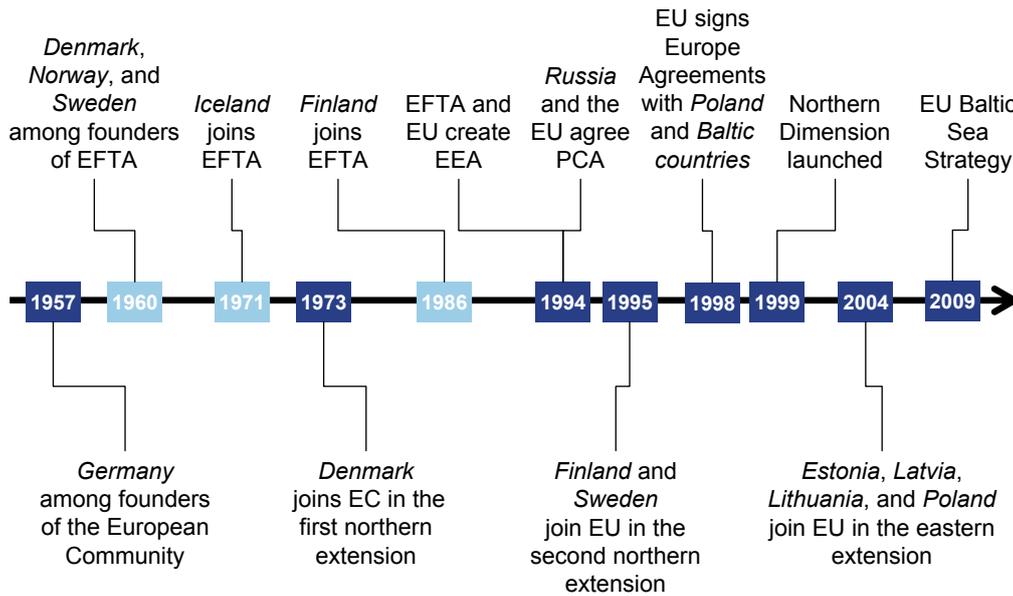
The historic path that turned the Baltic Sea Region from a remote corner of the iron curtain to an (almost) EU Sea was complex, and this complexity matters because it shapes the expectations and aims of the different countries in the Region vis-à-vis the EU. Germany was the only country with a Baltic Sea shoreline that was among the founding members of the European Community, the precursor to the European Union, in 1957. Denmark, Norway and Sweden instead joined the UK and Ireland in creating EFTA in 1960; Iceland joined EFTA about a decade later. Countries which remained outside the groupings were Finland, with its special relationship to the Soviet Union, and Poland and the Baltic countries, which were either locked into the Comecon or the Soviet Union. In 1973 Denmark joined the EC together with the UK and Ireland. Norway had initially submitted an application for EC membership in 1962 and was ready to be admitted together with Denmark. But a referendum in 1972 produced a majority vote against joining the EC. As a first sign of the changes underway, Finland joined EFTA in 1986. But only after the political transformations in the early 1990s did Sweden and Finland join the EU in 1995. Norway again

stayed outside after another referendum in 1994 confirmed the public position against EU accession. Russia signed a Partnership and Cooperation Agreement with the EU in 1994. That same year, Iceland and Norway became more closely integrated in the economic structures of the EU through the European Economic Area (EEA) of the EU and EFTA. Norway even contributed financially to a number of EU policies, to the tune of about €250 million annually. Poland and the Baltic countries signed Europe agreements with the EU and ultimately became EU members in 2004. The Nordic Dimension (ND) was created as a framework for collaboration in 1999 but was initially perceived as an instrument for EU policy towards its neighbors. The second phase of the ND, launched in 2006, changed this and created a platform for collaboration among the EU, Iceland, Norway, and Russia as equal partners.

The different entry dates for EU membership are more than of historic interest; the time of entry affects the countries' expectations of the EU. Germany's position towards the European Union is still shaped by its historical commitment to European integration as a means to make war on the Continent impossible. For Denmark and Sweden, economic considerations have played a much more important role from the start. Finland viewed EU membership as a very visible sign of its reorientation to Europe and the West after the collapse of the Soviet Union. And for the Baltic countries and Poland, membership in the EU and NATO are fundamental elements of their regained freedom and return to Europe.

EU members in the Baltic Sea Region Membership in the European Union

Figure 36: The Baltic Sea Region: Path towards the EU



State of the Region-Report 2008

subjects countries in principle to the same rules and regulations. In the accession process, however, exceptions or transitional rules have regularly been negotiated. Exceptions usually cover issues that are important for an individual new member but less so for the rest of the Europe Union. *Transition rules* cover more central elements of the European agreements. One of the most important was the option for existing member countries to retain some barriers against the free movement of labor from the central and eastern European EU members. In the Baltic Sea Region, Denmark (in the beginning) and Germany (still in place) made use of this rule, while the then Swedish government was defeated in parliament when trying to do the same. Finland had decided from the beginning to directly open its labor market.

Membership in the EU requires countries to transfer some of their sovereignty to European institutions. This fundamental principle is not always fully internalized in the national political debate, especially if a country joined largely with an economic motivation. The decision of the European Court of Justice in the Laval case, a Latvian company that was blocked by Swedish trade unions from working in Sweden under Latvian labor market agreements, exemplifies the problem. Much of the criticism in Sweden was motivated by the assertion that there was a majority in Sweden

for defending the country's labor market rules this way and that therefore the EU had no business to intervene. Anticipating such potential conflicts, some countries have been able to negotiate *opt-outs*, special rules that exempt them from the decisions of EU institutions in areas where they are not willing to cede their sovereignty. Denmark has in 1992 negotiated such opt-outs with regards to its participation in the European Monetary Union, the European Security and Defense Policy, some parts of the agreements on home affairs, and the citizenship of the European Union. These opt-outs were negotiated after the Maastricht treaty which covered the relevant policy areas had been defeated in a referendum in 1992. With the opt-outs in place, a second referendum then supported Danish participation in the treaty. The Danish government had planned to conduct a new referendum in 2008 or 2009 on the removal of the opt-outs but it is currently unclear when and if such a referendum might take place. Poland has in 2007 negotiated an opt-out from the Charter of Fundamental Rights included in the Treaty of Lisbon. The new Polish government is not in favor of the opt-out but has decided to sign the Charter only after the new constitutional treaty has been approved, a process that is currently on hold.

The participation in the *European monetary union*, which includes a common currency as well

as coordination and adherence to specific fiscal policy rules, is the most important step for further integration by some EU members in the economic sphere. In the Baltic Sea Region, Finland and Germany joined the Euro-Zone in the first round in 1999 (the circulation of coins started in 2002). Denmark and Sweden decided for the time being not to join the Euro zone after public referendums in 2000 (Denmark) respectively 2003 (Sweden). Current opinion polls show majority support for the introduction of the Euro in Denmark but not in Sweden. The Danish Prime Minister renewed his aspiration of getting Denmark into the EU through a referendum after the experience during the current financial crisis, where Denmark had to raise its interest rates to defend the currency peg against the Euro. Denmark is part of the European Exchange Rate mechanism (ERM), while Sweden is not. With ERM membership a pre-condition for joining the Euro, Sweden has effectively opted-out from the path towards joining the Euro zone. The Swedish Foreign Minister has recently underlined that despite the current crisis there are currently no plans to hold a referendum about Swedish Euro membership. Estonia, Latvia, and Lithuania are all part of the ERM, a system where they keep their currencies at a fixed parity to the Euro using a currency board or similar mechanisms. The three countries are all interested in joining the Euro-Zone but have been struggling with the entry requirements on inflation. Poland has its currency in free float versus the Euro and is thus outside of the ERM but the Polish government recently announced its intention to get ready for the Euro by 2011. In Iceland, there have been recent discussions about the advantages for the Icelandic Krona, the world's smallest currency area, to join the Euro.

The *Schengen agreement* about the removal of border controls within Europe, in force since 1990, is another important effort with an economic but also an important psychological impact. In the Baltic Sea Region, it builds on the Nordic Passport Union that enables passport-free travel among the Nordic countries since 1952. Initially covering only the EU-15 countries plus Iceland, Norway, and Switzerland (UK and Ireland have opted-out), it has in 2008 been implemented in all EU members (Bulgaria, Cyprus, and Romania will implement the agreement later). For

the first time, it allows travel without a passport between all EU members in the Baltic Sea Region, a powerful signal especially for the population of the more recent EU members in the Region that they are EU citizens with equal rights.

Moving beyond contractual agreements, it is interesting to look at the position of individual countries from the Baltic Sea Region on key policy issues facing the EU. In the economic sphere, this includes questions like the future of the common agricultural policy (CAP) or the service directive. In foreign policy, it touches on issues like the possibility of the Ukraine becoming an EU member or the relations to Russia. In internal issues, the views on the future of the European constitution are important. Overall, there is no denying that positions across the Region on these important policy questions differ. Sweden is among the most outspoken critics of the CAP while Germany has tended to compromise and Poland now is a significant beneficiary. Poland, the Baltic countries, and Sweden voiced the strongest criticism against the Russian actions in Georgia, while Germany was more hesitant in its reaction. Nord Stream, the planned gas pipeline between Russia and Germany through the Baltic Sea, is seen with great reservations by the other countries on the Baltic shores. On the constitution, with public support in Sweden not assured and countries like Poland skeptical, the Irish vote against the treaty (see section A.2) spared the Region from facing its differences more openly.

Overall, there is much common ground due to EU membership and the well developed contractual relations with the non-EU members in the Baltic Sea Region. But it would be dangerous to deny that individual countries in the Region have significantly different motivations and interests when they try to influence the shape and direction of the European Union and its policies. There is no reason why this should make collaboration between the countries in the Baltic Sea Region impossible. But it underlines the need to clearly identify the individual benefits they will derive from such collaboration; a general political commitment to the Region as a political principle may not be sufficient to sustain collaboration. It also suggests that the Baltic Sea Region is unlikely to become a stable, coordinated voting bloc in the European Council.

Baltic Sea Region countries implementing EU policies and programs

The European Union uses regulation as well as spending programs to implement its policies in member countries. The impact that these activities have depends to a large degree on the response and engagement of member countries' institutions, from parliaments that need to translate EU directives into national law to different government agencies that need to implement or need to decide about their participation in EU programs.

Rules and regulations EU legislation, especially as regards the economic development and the integration of European markets, is a key dimension of European policy. At the end of August 2008, the European Commission had adopted a total of 2995 directives for the average EU member country, out of which 1760 were in force. With the exception of Poland, all countries in the Baltic Sea Region were ahead of the European average implementation gap of 22 directives that still had to be translated into national law.

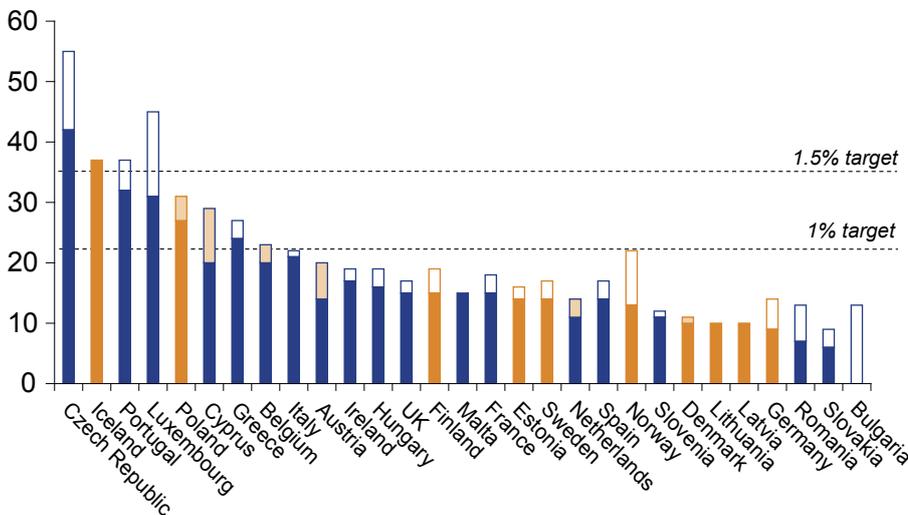
For the Internal Market, the cornerstone of European economic integration, the Commission listed at the end of April 2008 a total of 1687 directives and 820 regulations that member countries of the EEA were legally obliged to transpose into national law. Over the last few years, between

80 and 100 new directives have been added to this list annually. The Baltic Sea Region countries have been among the leaders in getting EU regulations into national law. Denmark and Poland did not quite keep up with the new directives coming in over the last six months, while the rest of the Region managed to reduce the backlog of directives to be transposed. Most of the directives still awaiting implementation relate to financial services. Iceland and Poland are the only countries from the Region that by 2008 have not yet met the goal set in 2001 of having a transposition deficit of less than 1.5% of all directives. All other countries even meet the 1% target, the more ambitious target set by the European Council in 2007.

The number of Internal Market directives differs widely by policy area. Two areas alone, veterinary/plant health issues and motor vehicles, account for 40% of all regulations. Relative to the overall number of directives, the transposition deficit in Europe is highest in areas related to the movement of people, financial services, and social policy. The pattern is similar for the Baltic Sea Region, with these areas registering the highest relative transposition gap. Areas in which Baltic Sea Region countries account for a disproportionately high share of the European transposition deficit are intellectual property rights, consumer protection, environmental regulations, and

Figure 37: Regulations

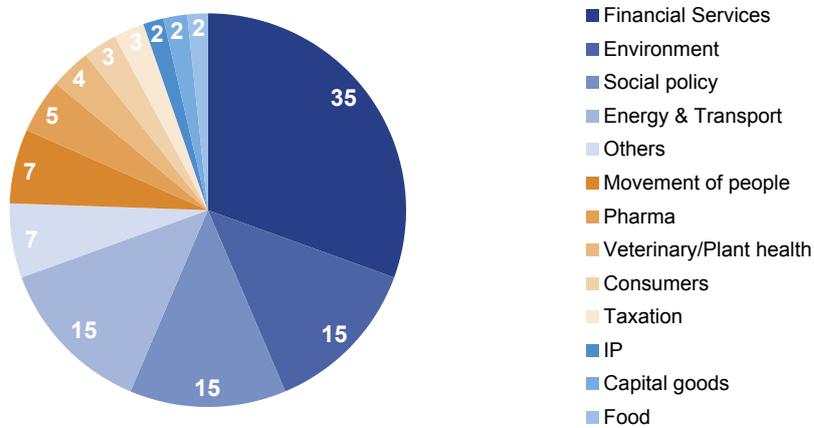
Transposition Deficit of Internal Market Directives, May 2008



Note: Red is increase, white is reduction relative to last year
Source: EU Internal Market Scoreboard (2008), author's calculations

Figure 38: Transposition Deficit by Policy Area: Baltic Sea Region

Transposition Deficit by Number of Directives



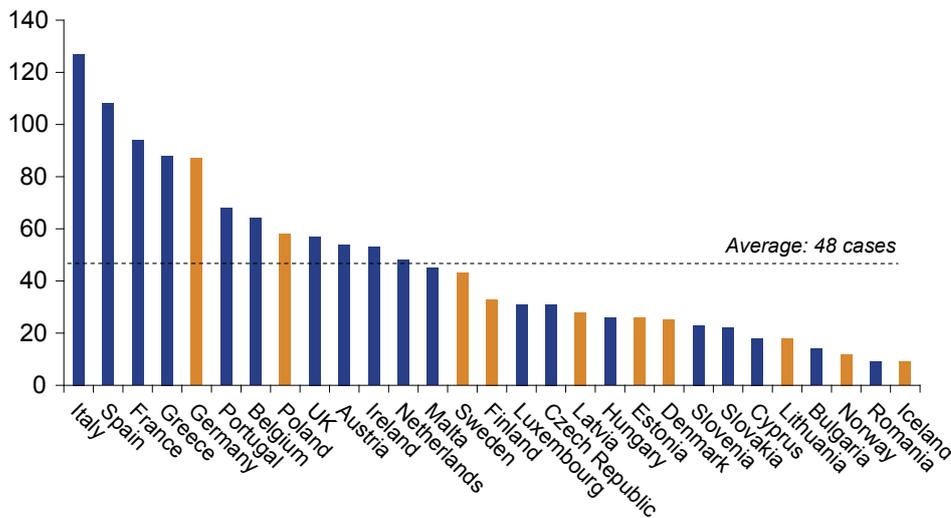
Total number: 115

Source: EU Internal Market Scoreboard (2008), author's calculations

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Figure 39: Implementation of Regulations

Pending Infringement Cases, May 2008



Source: EU Internal Market Scoreboard (2008), author's calculations

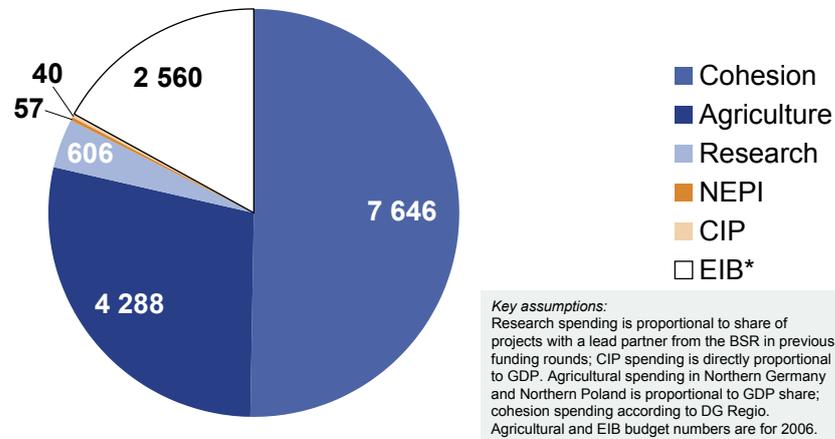
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pharmaceuticals/cosmetics. With the exception of environmental regulations, these are all areas with few directives where one missing transposition has a relatively high impact on the performance indicator.

Successful market integration depends not only on the formal transposition of directives, but also on their correct implementation. By May 2008, the Commission registered a total of

1319 open infringement cases that it had brought against member countries. 339 of these cases were against countries from the Baltic Sea Region. At 42 cases per country, that is slightly less than the European average of 48 open cases and smaller than the Region's share among countries in the EEA. Relative to the European average, countries from the Region tend to react reasonably quickly

Figure 40 Indicative EU Spending in the Baltic Sea Region
2007 Indicative Financial Flows in million Euro



*EIB Budget refers to credit lines and loans, not spending
 Source: EU Commission (2008), author's calculations

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to infringement cases, with Poland among the fastest performers and Finland among the slowest.

The last step in the process is the opportunity for citizens and businesses to appeal to SOLVIT centers against perceived cases of inadequate implementation of the Internal Market rules. About 800 such cases were submitted in 2007 across the entire EEA area. Resolution rates are generally very high, in the Baltic Sea Region as well as across the EEA. But case handling times can be long; in the Region this is particularly a problem in Sweden.

Spending programs The second key dimension of European policy is the spending programs financed through the EU budget. At an overall size of €129 billion in 2008, the EU budget is by a factor of 30 or more smaller than the national budgets of EU member countries but still important in absolute size. The most important spending areas are agricultural policy (40%) and regional policy (or “cohesion”, 36%) while research/innovation and enterprise policy have much smaller budgets (total share of spending for “competitiveness”, 8%). Most of the spending relevant for competitiveness comes directly from the Commission but some of it is also channeled through the European Investment Bank.

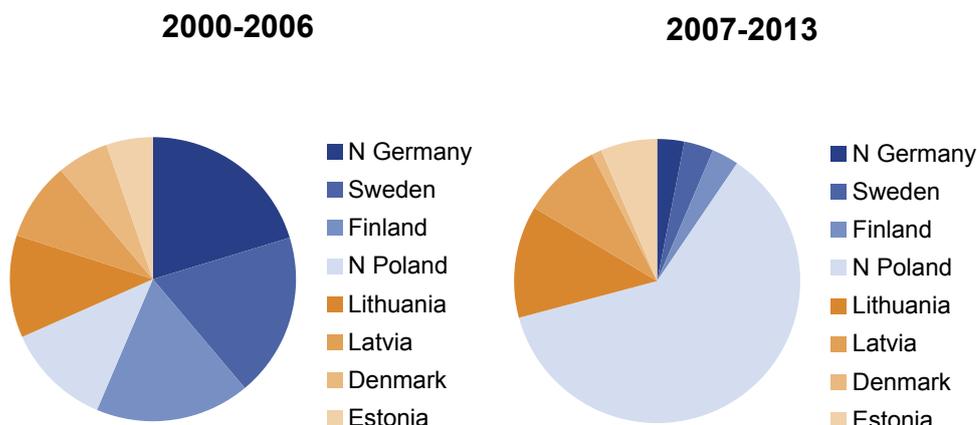
The Baltic Sea Region participates in all EU spending programs. Overall, a rough estimate suggests that the Region will receive an annual inflow of money from EU institutions of about €15

billion, out of which €12.5 billion are in the form of Commission grants and €2.5 billion in the form of EIB (European Investment Bank) loans and credit lines. The Region's share of EU spending is slightly higher than its share of GDP, largely driven by the significant funds going to Poland and the Baltic countries. It receives a higher share of structural funds, slightly more than 10% of the total EU budget for this policy. It makes less use of EIB loans, especially in 2007 when the Region's share in this area was below the average of recent years.

In *cohesion policy*, as the European Commission calls its regional efforts largely targeted at regions with below average prosperity rates, the Baltic Sea Region receives roughly €7.6 billion per year from the budget of the European Commission for the 2007-2013 period. That is more than double the amount the Region received during the 2000-2006 budget period. The Nordic countries and Germany receive about 20% less than before, but the Baltic countries and Poland receive between four times (Latvia) and more than five times (Poland) as much as previously. The actual spending mobilized through these funds is up to twice as high, depending on the co-funding requirements that are higher the more prosperous the region is.

The vast majority of the EU regional policy funding goes directly to eligible regions within member countries, not to cross-border projects.

Figure 41 Cohesion Funds for the Baltic Sea Region



Source: European Commission DG Regio (2008), author's calculations

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For the Baltic Sea Region, this share will increase to 97% during the current budget period compared to 92.5% between 2000 and 2006. Among the cross-national programs supported, the European Commission differentiates between cross-border efforts of direct neighbors, and transnational efforts across larger areas. In the Baltic Sea Region, the Commission supports thirteen cross-border efforts and one transnational Interreg program. For the upcoming period, the cross border efforts will have a total budget of roughly €375m (€54m per year). The Interreg program for the Baltic Sea Region will have a total budget of about €208m (€30m per year) plus €23m from ENPI (see below).

The analysis done by the Technical Secretariat for the Interreg IIIB program provides some insights into the participation of different parts of the Baltic Sea Region in the transnational Interreg program so far, i.e. during the 2000 – 2006 project period. Lead partners for the 129 approved projects came predominantly from Sweden (41), Germany (35), and Finland (26). 50% of these lead partners across all projects were local or regional authorities. In terms of project participants, there is a clear concentration in the Baltic countries, Southern Finland, Skåne, Stockholm, Gotland and the Swedish East Coast, Denmark (although the aggregation across the entire country might bias the result upwards), and Mecklenburg-Vorpommern.

In *agriculture policy*, the Baltic Sea Region received roughly €4 billion per year from the budget of the European Commission in 2006. Denmark is the largest recipient with over €1 billion followed by Sweden, Finland, and Northern Germany. These four countries/regions also top the ranking when looking at per capita inflows – every Dane gets about €212 agricultural funding per year from the EU - but Lithuania moves between Finland and Northern Germany on that measure. Relative to total GDP, Lithuania (0.58% of GDP) and Denmark (0.57%) received most agricultural funding, followed at some distance by Finland (0.44%) and Latvia (0.40%).

In its *neighborhood policy*, the European Union provides funds for the collaboration between EU members and adjacent countries. A total of €1.2 billion has been allocated for all programs under the European Neighborhood and Partnership Instrument (ENPI). More than a third of this funding will benefit the wider Baltic Sea Region. The majority, i.e. €375m between 2007 and 2013 (or €53m per year), has been allocated to seven cross-border programs of the Baltic Sea Region with Russia and Belarus. About 50% of the total goes to an effort between Poland, the Ukraine, and Belarus. The remainder of €23m constitutes ENPI's share in the Baltic Sea Region Interreg program discussed above to finance the participation of partners from Norway, Russia, and Belarus.

Figure 42: EU Baltic Sea Region Program



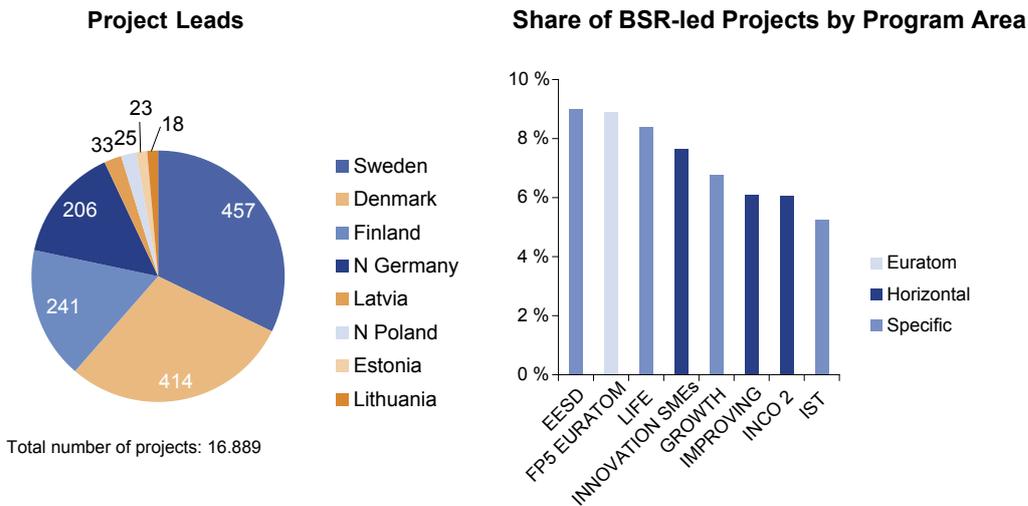
In *research policy*, the Commission organizes its funding through Framework Programs that define specific action areas in which funding can be requested. The current 7th Framework Program will run from 2007 - 2013 and provide a total budget of roughly €50 billion. The latest available comparable data across the Baltic Sea Region covers the 5th Framework Program (1998 – 2002) and provides data on project participation and leads by country.

Institutions from the Baltic Sea Region participated in about 1/3 of all research projects funded under the 5th Framework Program. In 8.4% of all projects the lead partner came from the Baltic Sea Region, almost equivalent to the GDP share of the Region. Sweden and Denmark accounted by far for the largest number of project leads. Institutions from the Region were relatively most active in the specific research programs for “energy, environment, and sustainable development”, “nuclear

energy”, and “quality of life and management of living resources”. Somewhat surprisingly, given the economic specialization of the Region, they were relatively least active in the research program on “user-friendly information society”.

A Finnish analysis of the experience in the 6th Framework Program provides interesting insights into the linkages across countries that emerge in EU-funded research projects. For Life Sciences, Karolinska Institutet in Stockholm is the most frequent partner in projects with Finnish participation, followed by French, British, and German institutions. For IT, Sweden again is the most important partner on a population-weighted basis, followed by Denmark, Estonia, and a host of smaller European countries. In absolute terms, however, partners from Germany, France, Italy, and the UK are much more frequent in the collaboration with Finnish institutions. In other words, in projects financed within the Framework Pro-

Figure 43: The Baltic Sea Region in the 5th Framework Program, 1998–2002



Source: CORDIS (2008), author's calculations

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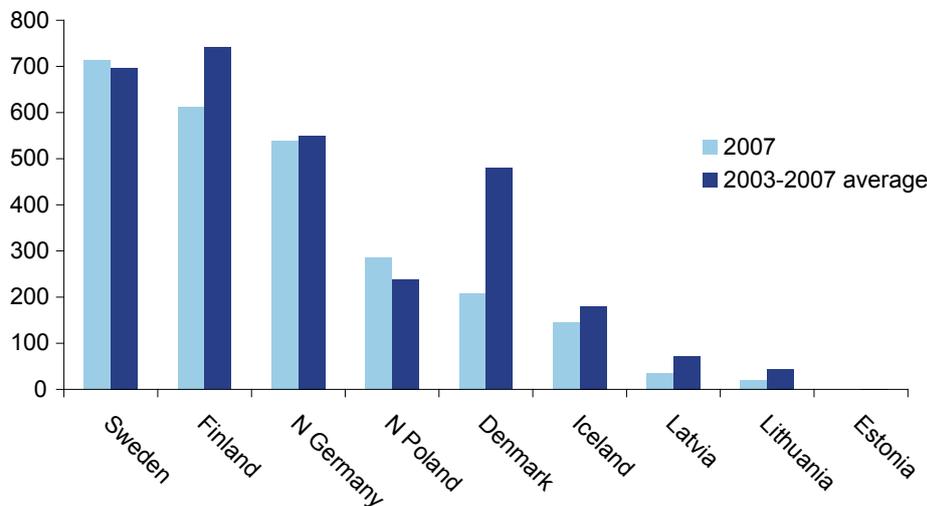
gram there is only a modestly higher propensity to work with partners from the Baltic Sea Region compared to other parts of Europe.

The *European Investment Bank (EIB)* is a financial development bank for Europe that provides direct loans to public institutions or approved corporations, as well as credit lines for financial institutions in member countries to provide loans to companies and other institutions. In 2007, the EIB signed financial contracts for about €41 billion, in line with the average for the 2003 – 2007 period. Individual loans are the bulk of the

financial contracts, although credit lines can be important for some countries.

Institutions from the Baltic Sea Region borrowed about €2.5 billion from the EIB in 2007, slightly below the average of €3 billion over the 2003 – 2007 period. Sweden, Finland, and Northern Germany have been the largest borrowers from the Region over the five year period. Only for Finland is the share of EIB funding much higher than its share in regional GDP. This compares to about €1.8 billion loans that the *Nordic Investment Bank (NIB)*, a similar institution

Figure 44: EIB Financing for the Baltic Sea Region



Source: EIB (2008), author's calculations

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within the Region, has committed to projects in the Nordic or Baltic countries in 2007.

Assessment Overall, the Baltic Sea Region confirms its strong track record on the implementation of EU rules and regulations. While more needs to be done in specific areas, such as financial services, for example financial services, the formal conditions for market integration seem good in the Region. The considerable market segmentation that last year's State of the Region Report identified for the Baltic Sea Region is thus hard to explain by the current type of EU regulations. The regulatory rules and practices that continue to separate markets in the Region seemed to be at a level that goes beyond what the EU traditionally covers.

On the financing side, the Baltic Sea Region is an active participant that makes wide use of the significant resources that the European Union makes available. The profile of overall spending does not match the priorities one would set from a competitiveness perspective; despite some recent adjustments, agricultural spending remains too large relative to other policy areas. But this is a general problem of the EU, not a specific issue for the Baltic Sea Region. The vast majority of EU spending, about 80% of the non-agricultural funds, goes directly to regions within individual member countries. A fraction of overall EU funding is allocated to cross-national programs. Out of these cross-national programs, again a relatively small share is designated for participants in groups of neighboring countries rather than EU-wide networks. This is not necessarily negative but should be a reminder of the significant change in perspective that would be required for the Baltic Sea and other European regions to become central arenas of EU policy action.

The EU Baltic Sea Region strategy

In 2007, the European Council charged the European Commission with the development of a EU Baltic Sea Region strategy. The process currently under way can build on the foundations laid in the Region over previous years. It is grounded in broad consensus on some key principles. And with the upcoming Swedish EU Presidency in the second half of 2009 there is a clear perspective

for the adoption and launch of the strategy. But to achieve success, both within the Region and as a facilitator of broader reforms in the European integration process, a number of important additional factors, which are currently often neglected, need to be acknowledged.

Precedents and motivations The current efforts to design an EU Baltic Sea Region strategy have been developed over several years. The Baltic Development Forum was one of the organizations that had for some time initiated discussions about a Baltic Sea Region strategy; Professor Michael E. Porter called for a Baltic Sea Region agenda already at the 2001 St. Petersburg Summit. Momentum developed when a working group of parliamentarians chaired by MEP Toomas Ilves (Estonia, now President) wrote an "EU Strategy for the Baltic Sea Region" that was presented to European Commission President Barroso in November 2005. A year later, MEP Alexander Stubb (Finland, now Foreign Minister) followed up with a European Parliament report on "a Baltic Sea Strategy for the Northern Dimension". At the same time, discussions in the Baltic Sea Region started to focus more and more on the institutional set-up of the multiple bodies working in the Region. The Swedish CBSS Presidency in 2006/2007 made this question a core element of its agenda, and at the 12th Ministerial Summit in Malmö the CBSS declared both its intention to reform its institutional structure and suggested the development of Baltic Sea Region strategy. These different activities then culminated in the conclusion of the European Council in December 2007 that "*Without prejudice to the integrated maritime policy, the European Council invites the Commission to present an EU strategy for the Baltic Sea region at the latest by June 2009.*"

Principles and process In the discussions between the Commission and different stakeholders from the Baltic Sea Region, a number of key principles for the strategy soon started to emerge. First, the strategy will provide no new money and most likely no new institutional structure. This was partly a price to pay for the support from other EU countries in the European Council and partly a reflection of the view in the Region that neither a lack of money nor structure was the key problem. Second, there is a clear focus on making the strategy a very action-oriented tool, not

a political statement. A key goal was to use the strategy as a tool to improve the effectiveness of existing programs. To that end, the strategy will include a rolling action agenda to guide activities in the Region over time. Third, there is broad consensus on the general action areas, which have culminated in four overall objectives on environment, competitiveness, accessibility, and security. Different countries have slightly different priorities among these four areas, but their overall importance is shared throughout the Region.

While these principles are broadly shared, there are other areas in which there is less agreement or clarity. One issue is the geographic scope of the strategy: while countries like Sweden see the strategy as an EU-internal tool with relations to neighbors handled through the ND or the Neighborhood Policy, countries like Poland or Lithuania put greater weight on involving Belarus and the Ukraine. Another issue is the assignment of responsibilities for the implementation of the strategy. Without new institutions, how the combination of existing cross-national structures and national/regional authorities will address this task is unclear. Agreement exists only on the desire to keep the European Commission engaged, possibly in following-up on the progress in implementation. The Commission can be a neutral project manager that keeps the collaboration process on track and somewhat sheltered from changes in national motivations.

An important element of the EU Baltic Sea strategy is the process in which it is designed. In some respect, it follows the traditional EU process with a Communication to the European Council as the key outcome. But in other respects, it is materially different. The strategy is an experiment in using a much more stakeholder-driven process than usually applied. Two stakeholder summits provide platforms for a general discussion of the Region's expectations and demands towards the strategy. Four roundtables, conducted in cooperation with a leading regional institution in the field, are devoted to each of the four objectives. And a large number of other events provide additional opportunities for the Commission to

learn about the demands and expectations in the Region.

The strategy also requires significant internal coordination across different parts of the European Commission. This is true in other areas as well, for example in relations to countries outside of the EU. But it is not usually applied when looking at a region within the European Union. The coordination, involving DG Enterprise, DG Environment, DG Internal Market, DG Research, DG Relex, DG Maritime Affairs, and potentially others is an untypical task for DG Regio, the part of the Commission that is in charge of the largest financial flows of EU money to the Baltic Sea Region.

Success drivers The EU Baltic Sea strategy has raised high expectations in the Region from the start. To make sure this enthusiasm is trans-

The EU Baltic Sea strategy has raised high expectations in the Region from the start. To make sure this enthusiasm is translated into energy for effective action, it is critical to develop a shared understanding of what is necessary to make the strategy a success.

lated into energy for effective action, it is critical to develop a shared understanding of what is necessary to make the strategy a success. This will not be easy without additional funding and an ambitious set of objectives that goes beyond the scope of the Baltic Sea strategy alone. Six factors are particularly important for the strategy to become a success:

First, the strategy needs to provide focus. This will require choices between many activities that are individually all valuable but which cannot be sustained in parallel given the existing resources and institutional capabilities. Two questions need to be asked about all activities that are included in the action plan: Are they among the most pressing issues facing the Baltic Sea Region at this point in time? And are they best addressed through regional collaboration, rather than independent action on the national or subnational level?

Second, the rolling action plans that will be part of the strategy need to include a few flagship projects. Such projects can communicate to the wider public what the strategy is all about and also set a clear direction for the complementary actions by individual countries and sub-national regions that the strategy aims to inspire. These projects cannot just be efforts already under way; this would turn the strategy into a mere relabeling exercise. But if they are new (or at least activities

that might have been planned in the past but never put into execution), there needs to be funding that has to come either from existing programs or new contributions from the countries in the Region, given the ground rules for the strategy.

Third, the strategy needs to reach beyond the programs controlled by the European Union, especially the limited transnational programs, and explicitly invite countries in the Region to commit national resources. The financial resources from the EU programs are clearly insufficient to achieve the strategy's ambitious goals if the much larger national resources are not mobilized as well. And, as countries like Lithuania have pointed out in their submissions to the Commission, the EU funds for the Region are largely committed to specific programs with set priorities until 2013. With better coordination and integration of policies a key objective of the strategy, national policies need to be included in the policy planning to make a meaningful difference to the current status quo.

Fourth, the strategy needs to move beyond spending programs, especially if they are focused on supporting policy learning or concept development. Some of the most important challenges in competitiveness, but also in the environment, require regulatory changes, including the adjustment or alignment of national rules and administrative practices. This goes beyond the traditional scope of EU policies – the previous analysis indicated that at the level of normal implementation of EU directives, there is no obvious problem but market integration still remains incomplete. And it clearly goes beyond DG Regio's traditional role which is focused on allocating funding.

Fifth, the strategy needs to be supported by a clear implementation structure. The hesitation to create new institutions in the Region is understandable given the large number of structures that already exists. But without a clear allocation of responsibilities for implementing and managing the strategy's action plan, the document is in danger of becoming either a wish list or a reflection of the priorities that already exist. The European Commission can play an important role in track-

Institutions and individuals in the Region need to fully realize that the success of the strategy has much less to do with the work done by the Commission, than with their own willingness to contribute to the process and adjust their own actions.

ing progress and facilitating the strategy process. But it will require the organized engagement of institutions from the Region to have an impact. This does not necessarily require a new institution, but it does require clarity about process and responsibilities. And it requires recognizable leadership to give the strategy process direction and provide trust in the political will to implement its intentions.

Finally, institutions and individuals in the Region need to fully realize that the success of the strategy has much less to do with the work done by the Commission, than with their own willingness to contribute to the process and adjust their own actions. In the given structure, the EU provides a platform for things to happen that are in principle already today under the control of the Region, including the EU funds that are available to the Region. This is an important but also limited role. It creates an opportunity that institutions in the Region need to actively pursue for the strategy to have an impact.

The EU Baltic Sea strategy: A role model for Europe? The Baltic Sea Region likes to think of itself as a role model for the rest of the EU, a competitiveness locomotive that combines high prosperity with social and environmental sustainability at the "Top of Europe". It now has the chance to also become a role model for a new model of integration that could contribute to move the European Union out of the current impasse discussed in section A.2.

The current European integration approach is based on three key elements: a set of rules that is without exception identical for all member countries, a politically motivated budget focused on helping less prosperous EU regions to improve, and a governance structure that concentrates the decision-making power at the center. This approach has been a powerful tool to achieve rapid improvements in regulatory quality and market openness in many EU economies, especially the less advanced new member countries. But there are increasing signs that with the increasing size and heterogeneity of the EU it is losing its effectiveness. Further alignment of

rules to the level necessary for achieving market segmentation is becoming increasingly complicated. The public support for providing funding based on higher political principles instead of tangible returns is shrinking. And the governance structure is overwhelmed with a public in many countries unwilling to accept the migration of sovereignty from the nation to the EU, and with EU institutions trying to understand and meet the different needs and priorities across EU member countries.

The EU Baltic Sea Region is an attempt to create a different model that develops the current approach instead of replacing it. It opens the door for groups of neighboring countries with a higher interest in achieving consensus to deepen integration without creating barriers to the rest of Europe. It is based on a clear focus on achieving direct 'functional' improvements that provide visible benefits for citizens in the countries and regions engaged beyond contributing to some abstract political goals. And it moves towards a bottom-up perspective where each region has to define its priorities and can then draw on EU

tools where the EU can provide them more effectively. The current EU Baltic Sea Region strategy process does not go all the way in implementing this new approach, but it is a definite move in this direction.

If the Baltic Sea Region has a serious ambition to make a contribution to reforming the EU integration process, it will not be enough to make the strategy a success within the Region. It will also need to get buy-in in other parts of Europe that this is an experiment with implications beyond this Region. The go-ahead for the Baltic Sea Region strategy by the European Council should not be misunderstood as such a buy-in. It is more a reflection of the lack of any direct financial or structural consequences that other European countries expected from an effort that otherwise the countries from the Baltic Sea Region clearly wanted. Getting them to adopt this approach for their own regions and the European Union more broadly will be quite a different matter. The earlier the Baltic Sea Region's European partners are made aware of the wider ambitions of the strategy, the better.

- **The Baltic Sea Region has achieved a high level of environmental quality. But while the environment is a clear focus for policy, in areas that require cross-national coordination more needs to be done to achieve effective common action**
- **The Baltic Sea Region has made significant progress in shifting energy supply to sustainable sources but the integration of energy systems across the Region remains insufficient**
- **Environmental technologies and energy efficiency are areas with significant economic potential for companies from the Baltic Sea Region**

2. Environment and energy in the Baltic Sea Region

Environment and energy are among the top issues that concern politicians in the Baltic Sea Region. They are also two areas in which regional collaboration seems crucial. In environmental issues, a healthy Baltic Sea can most obviously only be achieved by working together. In energy, the integration of networks and coordination of policies towards suppliers also requires action at the level of the Region. Energy and the environment are important issues for the competitiveness of the Baltic Sea Region. In particular, energy-efficient and environmental technologies are seen as areas in which companies from the Region can play an important role on global markets. This section of the State of the Region Report collects some basic observations on the state of energy and environment across the Baltic Sea Region. It is not a complete assessment for specialists – there are a number of institutions in the Region that are much better equipped to do this – but rather a targeted look at the evidence from the perspective of competitiveness. The discussion covers three areas. The first section looks at the environmental situation as well as policy efforts on the national and Baltic Sea Region level. The second section covers energy, again providing an overview of the status quo in terms of energy production and use as well as policy. The third section then looks at the economic outcomes in terms of the competitiveness of companies and

institutions in the Region in terms of creating knowledge, employment, and exports in areas related to the environment and energy.

Overall, the section indicates that the Region has many clear achievements in environmental and energy issues, achievements that are already being reflected in the performance of science and business. And the additional policy steps launched only in the past few years promise to provide a further push, even though the international competition in this field will also get much tougher. Many of these promising results are, however, entirely the result of national efforts. Cross-national collaboration, especially collaboration engaging the entire Baltic Sea Region and not just the Nordic countries, has still a long way to go. Institutional platforms exist and policy dialogue and planning has become part of the Region's normality. But the transition from political declarations at the Baltic Sea Region level, and follow-up implementation at the national level, where the necessary resources then have to be allocated, still fails too often. Both the alarming state of the Baltic Sea and the many unresolved issues surrounding a common energy framework for the Region should give pause for reflection.

The state of the environment around the Baltic Sea

The quality of the environment is clearly central to the standard of living that citizens in the Region can enjoy. Many of the policies need to raise environmental outcomes are national, but in a good number of areas collaboration in the Region can play an important role as well. This is particularly true for the Baltic Sea itself, the waters that have given this Region its name. But the environment is also an economic issue, not only a sustainability one. Many companies in the Region have the ambition to be a global leader in environmental quality, making a difference not only for living conditions around the Baltic Sea but also elsewhere. The 2009 Copenhagen Summit on Climate is a globally visible step in this process. And to many outsiders, the Baltic Sea Region is a part of the world associated with clean nature and a sustainable way of living. If the Region is not able to deliver on its environmental goals, it will dent its credibility in other areas as well, both in the eyes of citizens in the Region and of people outside the Region.

The State of the environment in the Baltic Sea Region The quality of the environment is notoriously hard to aggregate into one overall indicator. The Yale Environmental Performance Index (YEPI) provides measurements covering most countries in the world that look at two main areas: indicators of environmental conditions on human health, and indicators of the state of the environmental systems. On the aggregate measure that summarizes the countries' position on these two dimensions of environmental conditions the Baltic Sea Region performs very well. Four

countries from the Region rank among the global top ten, and the Region overall comes 9th among all countries. The Region gets the strongest rankings on fresh water quality (i.e., the availability of drinking water, not the quality of water in lakes or the Baltic Sea), the effects of air quality on humans, the low level of diseases, and the contribution to climate change. Weaknesses are registered in areas related to the intensity of agriculture, fishing, and forest use, as well as the impact of aerial pollution on the environment.

Among individual countries in the Baltic Sea Region, Sweden, Norway, Finland follow right behind top-ranked Switzerland on the global ranking of environmental performance. All of them have balanced strengths on both health and systemic environmental performance. Latvia comes next, ranked 8th, with a significantly better performance on systemic effects (which might also be driven by lower economic activity) than health effects. Denmark ranks the lowest among the north-western countries in the Region, ranking 25th overall, with weak scores on the effects of fishing and (to a lesser degree) agriculture. Russia (28th) follows close behind while Poland is by some margin the lowest ranked country in the Region as 42nd globally. It ranks low on air quality, the effects of fishing, and the emissions driving climate change.

On critical indicator of environmental quality is the emission of greenhouse gases. Looking only at the most recent period between 2000 and 2006, a measure that does not take into account how hard it is to reduce emissions from the level already reached in 2000, the Baltic Sea Region has seen total emissions increase by 3% while total

Figure 45: Environmental Performance Index

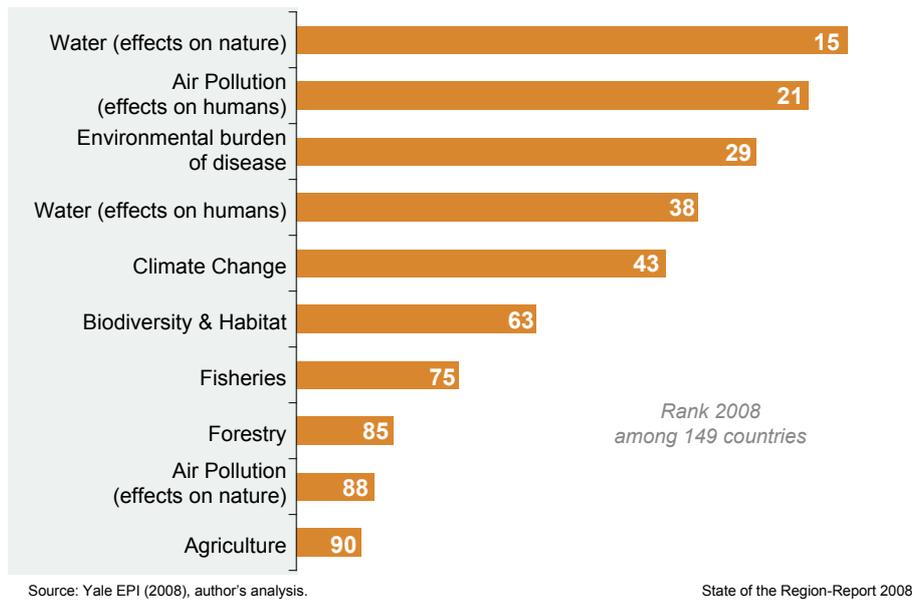
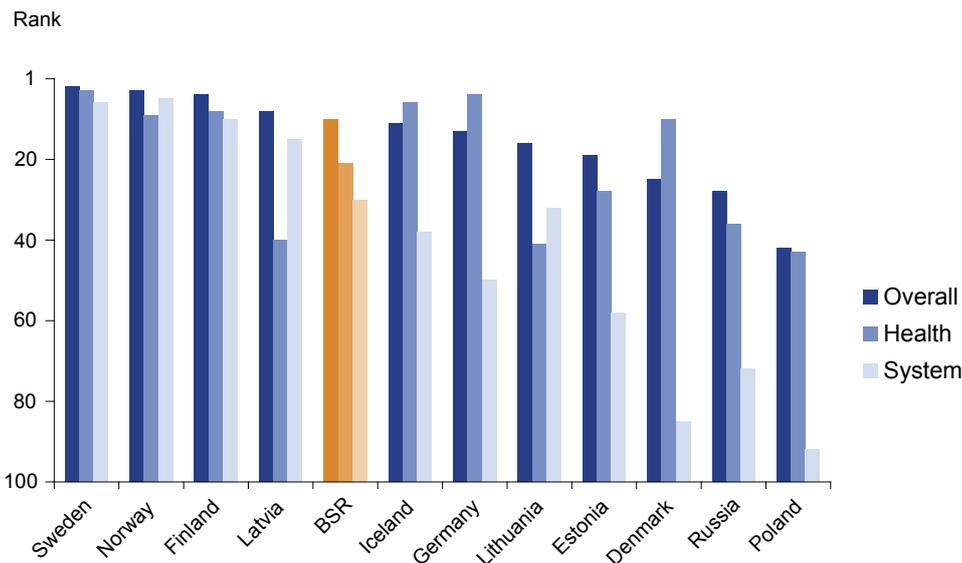


Figure 46: Environmental Performance Indicator

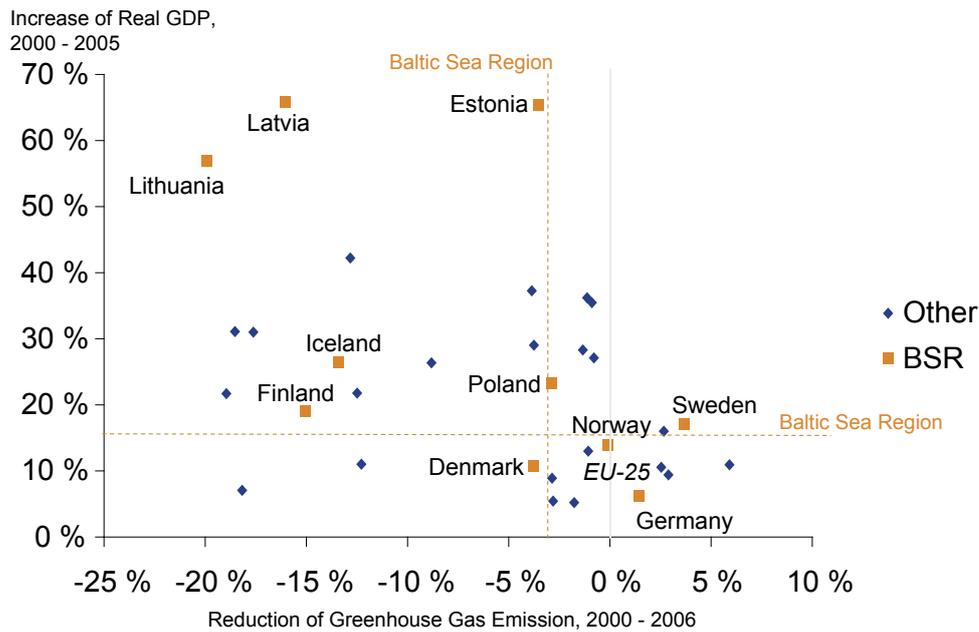


real GDP increased by 15.8%. This is comparable to the EU-25 where both emissions (+1%) and GDP (+13%) grew slightly less. While the relative intensity of greenhouse gas emissions is falling, their absolute level continues to creep up.

The aggregate performance of the Baltic Sea Region over the last few years masks a high level of heterogeneity across the countries. Only Sweden and Germany managed to reduce their overall greenhouse gas emissions. For Sweden, this was

achieved despite quite significant GDP growth, which was lower in Germany. Estonia achieved very high GDP growth despite only moderately higher emissions. Latvia and Lithuania saw emissions go up much more significantly, but are still far below the absolute levels of emissions in the 1990s. Finland saw the most significant increase in emissions relative to GDP growth; it also started out from much higher emission levels than its neighbors in the Baltic countries.

Figure 47: Greenhouse Gas Emissions



Source: Eurostat (2008), author's analysis.

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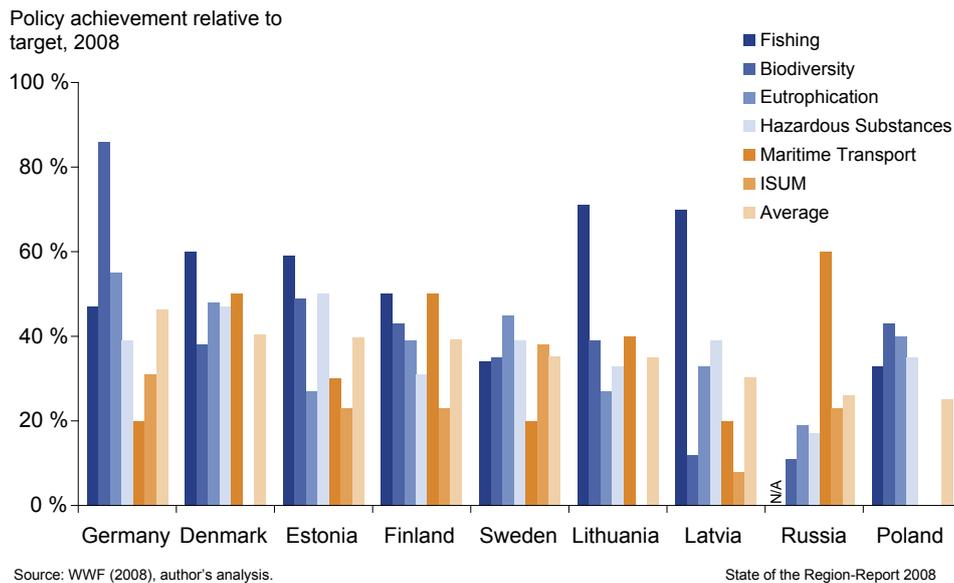
A critical part and symbol of the environmental conditions in the Baltic Sea Region is the state of the Baltic Sea itself. As a relatively shallow sea with only a small connection to the Atlantic Ocean at the Kattegat strait, the Baltic Sea cannot readily break down pollutants in its water. This is one of the reasons why, despite significant reductions in the inflow of pollutants such as heavy metals, nutrients, nitrogen, and phosphorus, the quality of the Baltic Sea remains precarious. Inflows from intensive agriculture, industry, and other activities reach the Baltic Sea either directly or through the rivers in its large catchment area. The intensive maritime traffic, including the growing ferry and cruise ship activity, and fishery activity add to the pressure on the ecology of the Baltic Sea. HELCOM (Helsinki Commission) noted in its recent assessment that in order to achieve “clear water”, one of the main objectives of the HELCOM Baltic Sea Action Plan, phosphorous and nitrogen inputs to the Baltic Sea must be cut by a further 42% and 18%, respectively. This would come on top of the 40% reduction in discharges of the two substances achieved in the past when earlier HELCOM programs were in place. HELCOM has over the last few years received a wider mandate from its signatory countries, and is now able to track water quality also in coastal

areas and rivers of the catchment area, not only the international waters in the Baltic Sea. But as HELCOM noted, “there is still a lot left to do, as many of the Baltic’s environmental problems are proving difficult to solve, and it could take several decades for the marine environment to recover.” The European Commission went even further in its motivation of why the environment is one of the four key priorities for the EU Baltic Sea Strategy and warned that the Baltic Sea “risks rapidly turning into an ecological disaster zone.”

Environmental policy in the Baltic Sea Region The countries in the Baltic Sea Region have in the last few years launched significant policy actions to improve environmental performance across many dimensions. The European Union provides in its review of environmental policies detailed information about key efforts undertaken. A few highlights from 2007 indicate the high level of policy activity.

Denmark launched a new national strategy for sustainable development, generated the Energy Strategy 2025, and presented an Action plan for the promotion of environmental technologies in the 2007 budget. Estonia presented a long-term environmental strategy until 2030, and a short- to medium-term Environmental Action Plan allocating €6.7 billion over the 2007-2013 period.

Figure 48: Environmental Policy for the Baltic Sea



Finland launched a new biodiversity, refined its policies on climate change, and invested in environmental research. Germany launched an Integrated Energy and Climate Program, a National Strategy for Biological Diversity, and provided €1.2 billion for research on sustainable technologies. Latvia allocated a significant share of its structural funds to energy and environmental programs, including €157 million on energy efficiency. Lithuania agreed on a Strategic Action Plan for the Environment and a National Energy Strategy. Norway launched a significant endowment for sponsoring new technologies in the field of energy efficiency. Poland saw some policies delayed during the election but has then geared up to implement a National Environmental Technologies Action Plan. Sweden committed significant resources to activities combating climate change, including €3.3 million for wind energy and a €27 million green car premium for diesels, and operated a Climate Council headed by the Prime Minister. For some years now Sweden has provided strong support for the use of biofuels in cars, leading to the largest share of biofuel-ready cars in Europe.

Environmental policies were among the first areas in which organized platforms for dialogue and collaboration across the Baltic Sea Region were launched, long before competitiveness policies. The Helsinki Convention, founded in 1974 and operational since 1980, and its working body

the Helsinki Commission (HELCOM) are among the oldest cross-national platforms for environmental collaboration in the world. HELCOM is the EU's partner for the environmental aspects of the EU Baltic Sea Strategy and has only recently developed the Baltic Sea Action Plan (BSAP), a comprehensive set of actions to address the environmental challenges in the Baltic Sea. Baltic 21 has since 1996 been active under the umbrella of the CBSS to provide a platform for government as well as academic and civil society groups to tackle environmental issues. The Northern Dimension has from its beginning focused on environmental issues in the Northern Dimension Environmental Partnership (NDEP), among other things through the co-financing of a water treatment plant in St. Petersburg. Sustainability is one of the target areas for the Baltic Sea Region Interreg program. The Nordic Council of Ministers has been active in environmental cooperation for decades: Both the Nordic Council of Ministers and individual Nordic countries played an important role in building up administrative units for environmental policies in the Baltic countries in the 1990s. Its Nordic Environment Finance Corporation (NEFCO), established in 1990, has financed a wide range of environmental projects in Central and Eastern European countries. NEFCO's activities are focused on projects that reduce releases of climate gases, improve the ecological status of the Baltic

Sea, and mitigate release of toxic pollutants. The “Swan” eco-label, an environmental label for consumer products established by the Nordic Council of Ministers in 1989, has recently been named as one of the best environmental labels in a study commissioned by the UK Ministry of the Environment, Food and Rural Affairs. And Nordic institutions play an important role in facilitating research collaboration on environmental themes, for example in the context of the project Nordic Climate Solutions. In addition to the government activities, there is an active NGO sector with regional networks like the Coalition Clean Baltic (CCB) and the local chapters of global institutions like the World Wildlife Fund (WWF).

Policies to improve the quality of the Baltic Sea are an important element in the overall portfolio of environmental efforts in the Region. The WWF has through its Baltic Ecoregion Program assessed the policies of all countries around the Baltic Sea against goals derived from international recommendations and the needs identified to reach the environmental goals for the Baltic Sea. The WWF comes to an overall disappointing assessment, with the Region overall reaching only 35% of the overall benchmark, and even the Region’s best country, Germany, at 45% with less than half the measures in place needed to secure a clean Baltic Sea for the future.

The relatively best marks are given for policies towards fishing while the development of an integrated sea use management policy and a policy to govern maritime trade gets the lowest assessments. Germany gets credit for its efforts on biodiversity in coastal areas, Latvia and Lithuania for their fisheries policies. Russia on maritime transport and Denmark as well as Estonia on fisheries also do relative well, but still reach only slightly about 50% of the policy target defined by the WWF in these areas.

Assessment The Baltic Sea Region is a part of the world where the environment is taken seriously. The overall quality of the environment is good, even though there are challenges owing to intensive agriculture and historical legacies from Communist times where political concern for the environment was slight. Policy action, too, is high, maybe even higher than the level of environmental quality already reached. The activities have at the national level gone far beyond rhetoric and

include a wide mix of research-funding, market incentives, regulation, and communication campaigns. At the Baltic Sea Region level, however, implementation remains a challenge. The Baltic Sea itself continues to be in a precarious state and while there is some action around it, the indications are that what is done is not sufficient. Strong regional platforms are necessary but they are clearly not sufficient to compensate for a lack of follow-up at the national level where most policy instruments are ultimately controlled. The HELCOM Baltic Sea Action Plan outlines what needs to be done; it is now imperative to turn that plan into action and save the Baltic Sea. The EU Baltic Sea Strategy, with HELCOM being the lead partner in the Region on the strategy’s environmental dimension, could provide an important additional political lever to achieve real progress.

The state of energy around the Baltic Sea

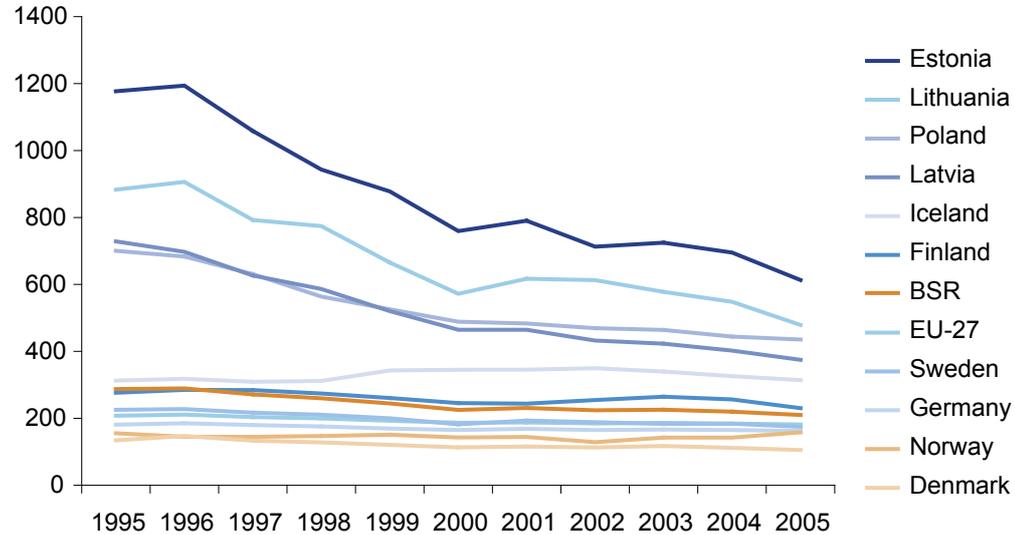
Energy is another key issue of importance for the competitiveness of the Baltic Sea Region. A secure and stable energy supply is crucial for economies to operate successfully. And energy and energy-related technologies and services have become a more and more important element of trade themselves. In both areas much of the activity happens at the national level but cross-national collaboration can make an important difference. Energy is also closely connected to the previous discussion on the environment. Energy efficiency and the reduction of emissions and natural resource consumption in the production of energy are key elements of any environmental strategy, especially where the focus is on climate change.

Energy use and production across the Baltic Sea Region The Baltic Sea Region is a comparably energy-intensive part of the European Union, consuming more energy than its share in European GDP would suggest. The gap has narrowed significantly from a 40% higher rate in 1995, down to 15% in 2006. Higher heating costs due to the Region’s geographical position, a significant presence of energy-intensive industries, and low density of the population with high transportation needs are the strongest drivers.

The Baltic countries and Poland remain the Region’s most energy intensive economies among

Figure 49: Energy Intensity

Total energy consumption by Gross Domestic Product

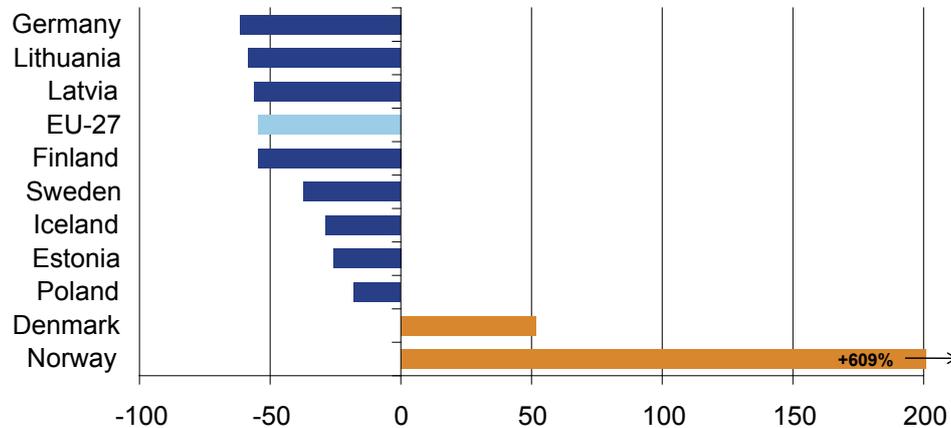


Source: Eurostat (2008), author's calculations

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Figure 50: Energy Dependency EU/EEA Countries

Net energy exports as % of domestic energy consumption, 2005



Source: Eurostat (2008), author's calculations

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the EU members but have increased the efficiency of their energy use by about 50% (Poland: 40%) over the last decade. Iceland, another energy-intensive economy, has stayed at the same level of overall energy efficiency even though highly energy intensive aluminum plants have come on line. Sweden and Denmark have improved their energy efficiency by more than 20% since 1995, bringing Sweden below the EU average and keep-

ing Denmark at around half the average energy use across the Baltic Sea Region.

Many countries around the Baltic Sea Region depend on foreign imports, mostly fossil fuels like oil and gas, for a large share of their total energy needs. Russia, Norway, and to a significantly smaller degree Denmark, are energy exporters; the total amount of their exports would be sufficient to meet all energy needs of the Region. But the other

countries in the Region have to turn to imports for around 50% of their energy needs, from their Baltic Sea Region neighbors and the global markets, a share that is roughly comparable to the EU average. Germany registers the highest import dependency, followed by Lithuania, Latvia, and Finland.

A significant share of total energy use, between 30% and 40% depending on the country, is consumed in the form of electricity. The remaining roughly two-thirds of energy consumption for heating, transportation, and other activities are largely covered by fossil fuel. For electricity production in the Baltic Sea Region, fossil fuels are also still the most important source of electricity, followed by renewable sources and then nuclear energy. This is largely the result of higher fossil fuel use in countries with high energy intensity. If all countries in the Baltic Sea Region would use energy in the same relation to their GDP, renewable sources of energy would already cover the majority of the Region's electricity needs. Countries from the Baltic Sea Region feature among the top ten producers globally for five out of eight categories of renewable energy.

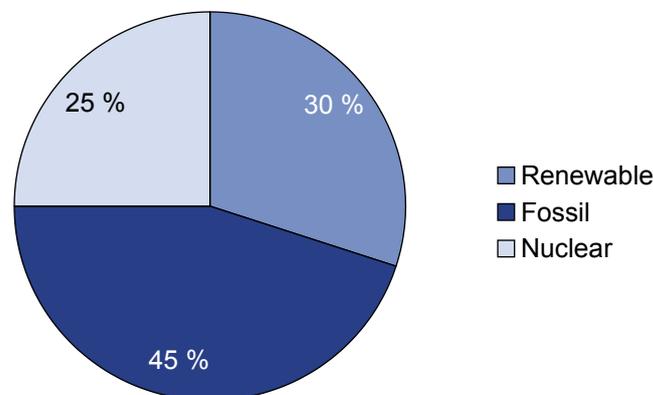
Behind these aggregate figures are huge differences in the energy mix by country. Iceland and Norway are in the enviable position of having ample access to domestic sources of hydroelectric power, Iceland also possessing geothermal energy. Sweden, too, has significant hydroelectric capacity, uses biomass, and a growing but still small

wind energy capacity. Nuclear energy, however, remains the most important generator of electricity in Sweden with a share of close to 50%. Finland derives about 25% of its electricity from nuclear power plants and the same from renewable sources, largely biomass from the pulp and paper industry that is used in combined heat/power generation plants, with the remaining 50% covered through fossil fuel plants. Denmark has a similar share of renewable energy use, but here in the form of wind energy. After a significant increase in the share of renewable energy sources in electricity production since 1996, the last available data for 2006 indicated a drop. Denmark has no nuclear capacity and uses fossil fuel resources for the remainder of its energy needs. Germany uses nuclear energy as Finland, but depends more on fossil fuels. Poland has extensive own coal resources that it uses to meet its electricity needs. Among the three Baltic countries, Lithuania has nuclear capacity that accounts for 70% of its electricity demand. Latvia makes significant use of renewable energy. Estonia depends mostly on fossil fuel. Russia uses nuclear energy and hydroelectric energy for about 15% each of its electricity supply, with the remainder coming from fossil fuel.

Energy policy across the Baltic Sea Region The countries across the Baltic Sea Region share common concerns on the security of energy supply, energy efficiency, and the environmental impact of energy production. In some areas,

Figure 51: Sources of Electricity Production

Baltic Sea Region, 2004/05



Note: Countries weighted by overall energy consumption
Source: Eurostat, IAEA (2008), author's calculations

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there is general agreement on the direction while countries set different policies or choose different instruments. In other areas, there are clear differences about the overall direction of policy.

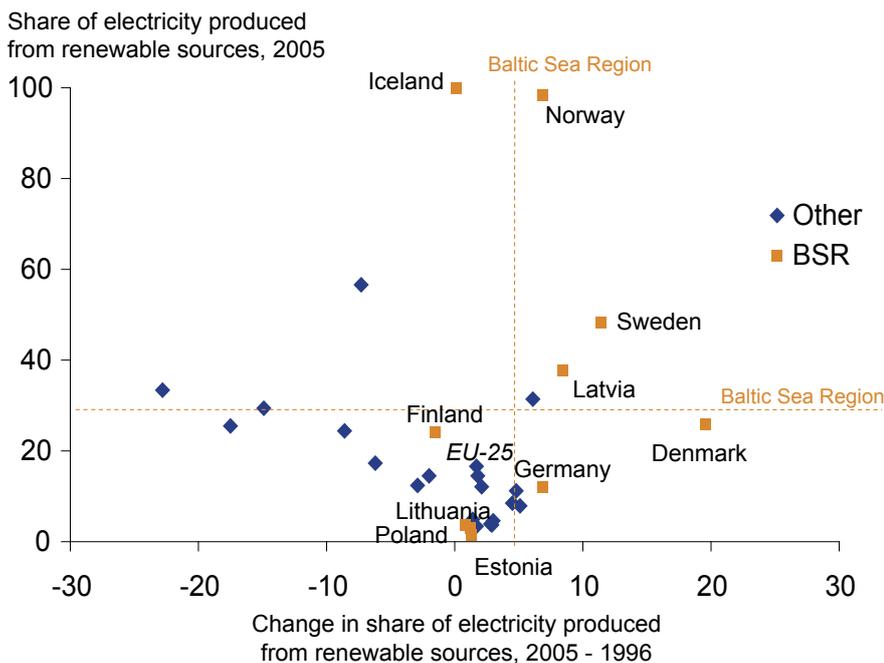
All countries in the Region have over the last few years announced more or less ambitious policies and programs on energy efficiency and energy-related technologies. A 2008 study by NIFU-STEP provides a detailed documentation of the many efforts under way in the Nordic and the Baltic countries. Across the board, governments have designed new energy policies and devoted considerable funding for research on energy-related technologies. The countries are also very active in non-nuclear energy research under the EU framework programs for research collaboration.

One point of contention is the use of nuclear energy. Germany and Sweden have made decisions to decommission their existing nuclear power plants over time without building new ones. These decisions have become more debated recently but stand unchanged. Interestingly, upgrading of existing nuclear capacity has according to Svensk Energi accounted for 25% of all new Swedish electricity production capacity in the recent past. Lithuania has in its accession agreement with the European Union committed

to close its remaining nuclear facility in Ignalina by 2009 which will cut its capacity for electricity generation by more than 2/3s of national demand. A non-binding referendum to renegotiate that agreement in October 2008 did not reach the necessary participation rate to be valid and the European Commission was in any case unwilling to reopen the case. A joint company has been created with Estonian and Lithuanian partners to build a new power plant in Visaginas, but discussions are on-going about details of the project. The new plant will definitely not be operational before 2015. Finland has decided to build up its nuclear energy production capacity with one new plant currently under construction in Olkiluoto and others in the pipeline. Reports in the media suggest that Russia is contemplating a new nuclear facility in the Kaliningrad area but no decisions have been made. With energy produced in nuclear plants flowing freely through the Region's (partly) integrated power grids, and both the environmental costs and benefits of nuclear energy being felt across borders, these differences in positions could become politically problematic for the Region.

Another key issue is the position towards energy suppliers, specifically the dependence on Russian oil and, even more importantly, gas. While oil and coal can be bought on the world market

Figure 53: Renewable Energy



and can be accessed through many ports in the Region, the transport of gas depends largely on a fixed infrastructure of pipelines that ties producers and consumers together without much choice for using alternative suppliers. Liquefied Natural Gas (LNG) is a theoretical alternative but requires significant investments in dedicated infrastructure that currently does not exist. The Baltic Sea Region has on aggregate a solid supply of gas from Norwegian fields as well as from Russia. But because of the infrastructure issues, especially the Baltic countries and Poland are highly dependent on Russian gas already. Nord Stream, the pipeline to be constructed on the sea bed of the Baltic Sea for the transportation of natural gas, would enable Russia to circumvent its Western neighbors to deliver gas directly to its largest customer Germany, increasing its bargaining position towards the countries which host the current land-based pipelines. There are also environmental and security concerns against this project, scheduled to be operational from 2011 at the earliest, especially from Sweden. Poland has recently launched an initiative to set a 30% cap for gas supplies from any individual country to the EU market, with common policies than to be launched in order to make alternatives available. With Russia already moving close to this benchmark, the initiative is clearly not just a theoretical precaution for a distant future scenario.

Countries in the Region also differ significantly in the way that they approach pricing instruments to achieve lower energy use. Denmark, Germany, and Sweden are among the five European countries with the highest overall tax burden on energy. Conversely, Latvia, Estonia, Poland, and Lithuania are among the six EU countries with the lowest tax burden on energy. All four countries had also significant disagreements with the European Commission about the level of permits for CO₂ emissions that could be handed out as part of the EU permit trading system to combat Climate Change. At the meeting of the European Council in October, Poland and the Baltic countries joined their Central European colleagues to

While oil and coal can be bought on the world market and can be accessed through many ports in the Region, the transport of gas depends largely on a fixed infrastructure of pipelines that ties producers and consumers together without much choice for using alternative suppliers.

ask the Western EU member countries to shoulder a larger share of the EU's overall CO₂ reduction target.

The role of the Baltic Sea Region collaboration for energy For some time, energy issues have not been an important topic of discussion in the institutions of the Baltic Sea Region, and have only gained in importance more recently. In 1999, the energy ministers from the Baltic Sea Region created the Baltic Sea Region Energy Co-operation (BASREC), a platform for cooperation that has since been reconfirmed at ministerial meetings in Vilnius (2002) and Reykjavik (2005).

At present, the electricity markets are the area in which actual integration has moved ahead the most, but where the potential for further integration also remains very visible. The Nordic countries have for some time operated a fully integrated electricity grid with NordPool as a common exchange through which about 60% of all electricity is being traded. Overall electricity prices in the Nordic

countries tend to be below the average level in the European Union, not the least because of the access to relatively affordable hydroelectric and nuclear power capacity. More recently, however, the spot prices on NordPool have gone up significantly, outpacing the price increases in the rest of Europe. The German electricity market is interconnected with the Nordic region and linkages have also been created to Poland. There are also linkages through energy companies like Fortum (Finland), Vattenfall (Sweden), and E.ON (Germany) having a significant market presence outside of their home countries. Vattenfall in particular has become very visible in Northern Germany through its nuclear power plants but also its plans to build a new coal-fired electricity plant in Hamburg that has just been approved with significant environmental conditions by the city government.

A considerable interconnection gap continues to exist, however, between the electricity grids of the three Baltic countries and the rest of the EU. Historically integrated into the north-west Russian electricity grid, progress on creating a

common Baltic Sea Region grid has been slow. In December 2006, Estlink, an undersea grid connection between Finland and Estonia was taken into service. While this provides some integration, the capacity is too small to cover the overall electricity needs of the Baltic countries, especially once the Lithuanian nuclear plant has been decommissioned. Another cable between Estonia and Finland with higher capacity has been suggested. A further undersea link between Latvia/Lithuania and Sweden is under discussion but will at the earliest be ready in 2015 and there continues to be debate about many operational details, not the least whether the cable should surface, in either Latvia or Lithuania. The EBRD has recently provided financing for a link between the Polish and Lithuanian electricity links. Without these additional connections, the Baltic countries will after the decommissioning of Ignalina face a structural electricity shortage that could only be met by Russia. Russia, however, is also facing capacity constraints after years of insufficient investment in capacity during a period of solid economic growth and electricity demand.

Assessment As with environment, energy is an area in which countries in the Baltic Sea Region have made significant progress in terms of shifting their supplies to more sustainable sources. However, the achievements so far are still far from sufficient. Despite all progress on energy efficiency, the Region continues to have achieved only a moderate reduction of greenhouse gas emissions. And despite a significant shift to renewable sources of energy, the dependency on imports remains high and is likely to worsen over time. Collaboration at the level of the Region has provided some useful input but much remains to be done, both in the integration of the energy markets and the further development of energy policies.

The competitiveness of the Baltic Sea Region on environmental- and energy-related technologies

With the focus of this Report on competitiveness, this final section looks at the performance of the Baltic Sea Region on the international markets for ideas and products in the field of environment and energy. In some ways, such economic success

is critical evidence to show that the Region can be both sustainable and competitive. While individual policy measures might suggest that there is a short-term conflict between the two objectives, such data would suggest that in the long-term they are consistent and might even be complementary. A clear orientation on environmental and energy issues could be one of the dimensions to distinguish this Region and its products and services globally.

Knowledge creation Patenting data provides an initial sense of the knowledge available in the Baltic Sea Region on environmental technologies. Given the significant spending that countries in the Region have started to allocate to this field of research, it is also an important indicator for the academic capacity that exists to use this funding effectively.

The OECD has looked at patents by technology classes and documented the share of global patenting for three groups of environmental technologies. The Baltic Sea Region has a strong position across all of them, significantly above the already strong overall patenting position of the Region across all technologies. In renewable energy, the Baltic Sea Region is the strongest, accounting for more than 10% of patents filed in the US, Japan, and the EU between 2000 and 2004. Among individual countries, Sweden is strongest across all three categories with a special focus on solid waste. Denmark comes second, driven largely by its strong position on renewable energy patenting, especially wind energy. Germany gets the highest share on patents related to reducing automotive emissions, although the share allocated to Northern Germany most likely belongs to Southern Germany. Finland is strongest on waste management, Norway on renewable energy, most likely associated with hydroelectric energy.

Economic performance Production and export data for energy and environmental products and services provide a sense of the economic importance of these activities in the Baltic Sea Region. Overall statistical comparisons are complex, since there is no broadly agreed upon identification of the relevant industries.

A 2006 study for the European Commission puts the Baltic Sea Region's total production for "eco-industries" at €23.3 billion in 2004. Two-

thirds of the total accounted for by industries is pollution management, i.e. typical end-of-pipe technologies dealing with pollution once it has occurred, with the treatment of solid waste and waste water by far the largest individual industries. The remaining third captures resource management technologies that prevent pollution, for example water supply, recycling, and renewable energy production. The Baltic Sea Region's share of the economic activity in these areas was at the time more than 30% larger than its share of EU-25 GDP. Denmark had a particularly strong position, with a high specialization in both groups of eco-industries.

A 2008 report by Swedish ITPS uses 2006 data to assess the Swedish environmental technology sector, defined somewhat differently than above, with comparative data on Germany and Denmark. Swedish production for that year was reported at close to €10 billion with about 25% of production going to exports. Swedish production has grown by more than 11% annually and the export share has risen from 20% to 27% between 2003 and 2006 according to the study. Exports for Denmark are given as €3.3 billion and for Germany (total country) at €10 billion. The Nordic Council initiated in 2006 a project to facilitate networks for the exports of environmental technology. Their preliminary assessment using a different definition than the Swedish study identi-

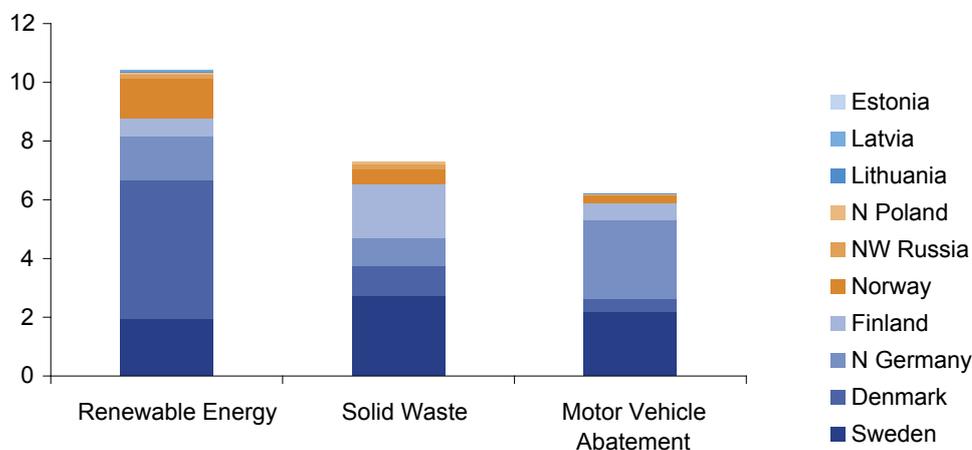
fied Nordic exports in environmental technology of €11.5 billion, with Denmark accounting for about 58% of the total, i.e. a higher figure than in the Swedish study.

The 2008 data collected in the International Cluster Mapping Project at the Institute for Strategy and Competitiveness, Harvard Business School, tracks exports in a cluster category for 'Power and Power Generation Equipment'. The data shows the Baltic Sea Region dramatically improving its global market share in this area from 6.3% in 1997 to 7.7% in 2006. Denmark again registers as the strongest exporter in the Region according to this data, followed by Sweden. Both countries have a significantly higher share of the Region's exports in this cluster than either their GDP or their total exports would suggest. The inclusion of electricity exports might affect these results to some degree but the overall picture is consistent with the other sources. A Danish study from 2007, for example, looks more narrowly at exports of energy-related technologies across the EU-15 countries. It puts the parts of the Baltic Sea Region included above the European average, with Denmark further strengthening its position between 2000 and 2005.

Probably the most well known cluster for environmental technology is the wind energy cluster in Denmark, with a strong cousin in Northern Germany. Driven by beneficial natural

Figure 54: Patenting on Environmental technologies

Share of global patenting by country and technology type, 2000 - 2004



Source: OECD(2007), author's calculations

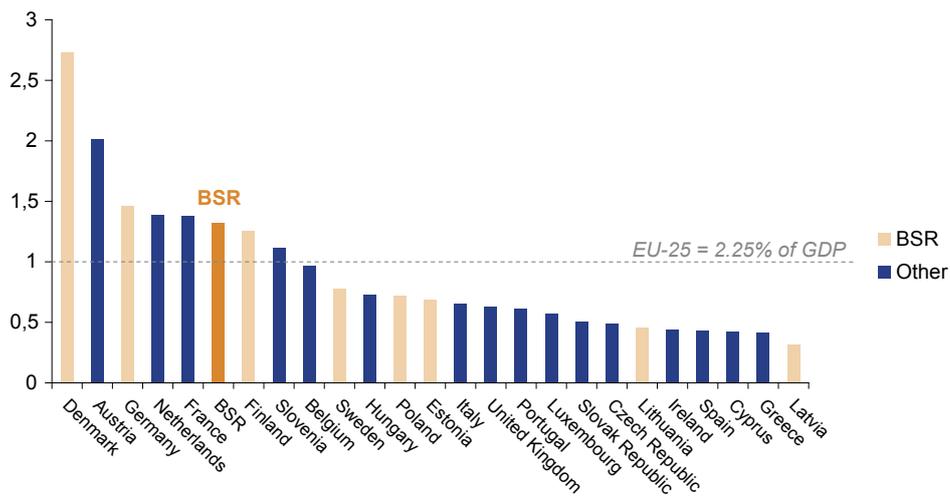
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conditions in the form of frequent winds but more importantly by a generous and stable regulatory framework that has made the use of wind energy commercially attractive, both countries have been able to translate their existing expertise in

manufacturing into a world-leading position in the market for wind energy equipment, especially turbines. Vestas, based in Randers on Jylland, is the world leader in this industry. While a fair number of the companies in the cluster have in

Figure 55: Specialisation in Eco-Industries

Specialization on Eco-Industries by production value, 2004

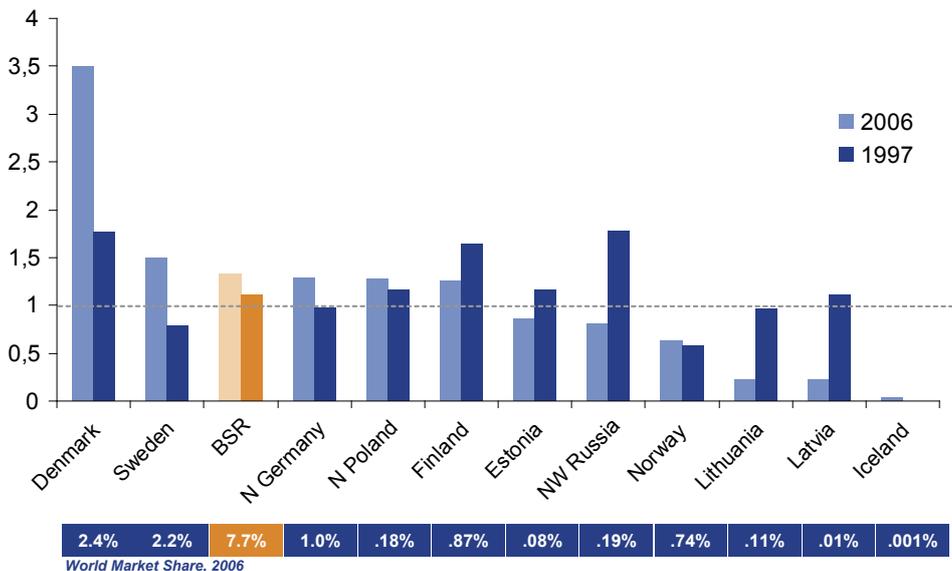


Note: Eco-Industries defined to include 14 sectors in pollution management or prevention/resource management
 Source: European Commission DG Environment (2006), author's calculations

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Figure 56: Exports of Energy-Related Technology

Revealed Comparative Advantage (RCA) in Exports of Electricity and Energy-Equipment



Source: Institute for Strategy and Competitiveness (2008), author's calculations

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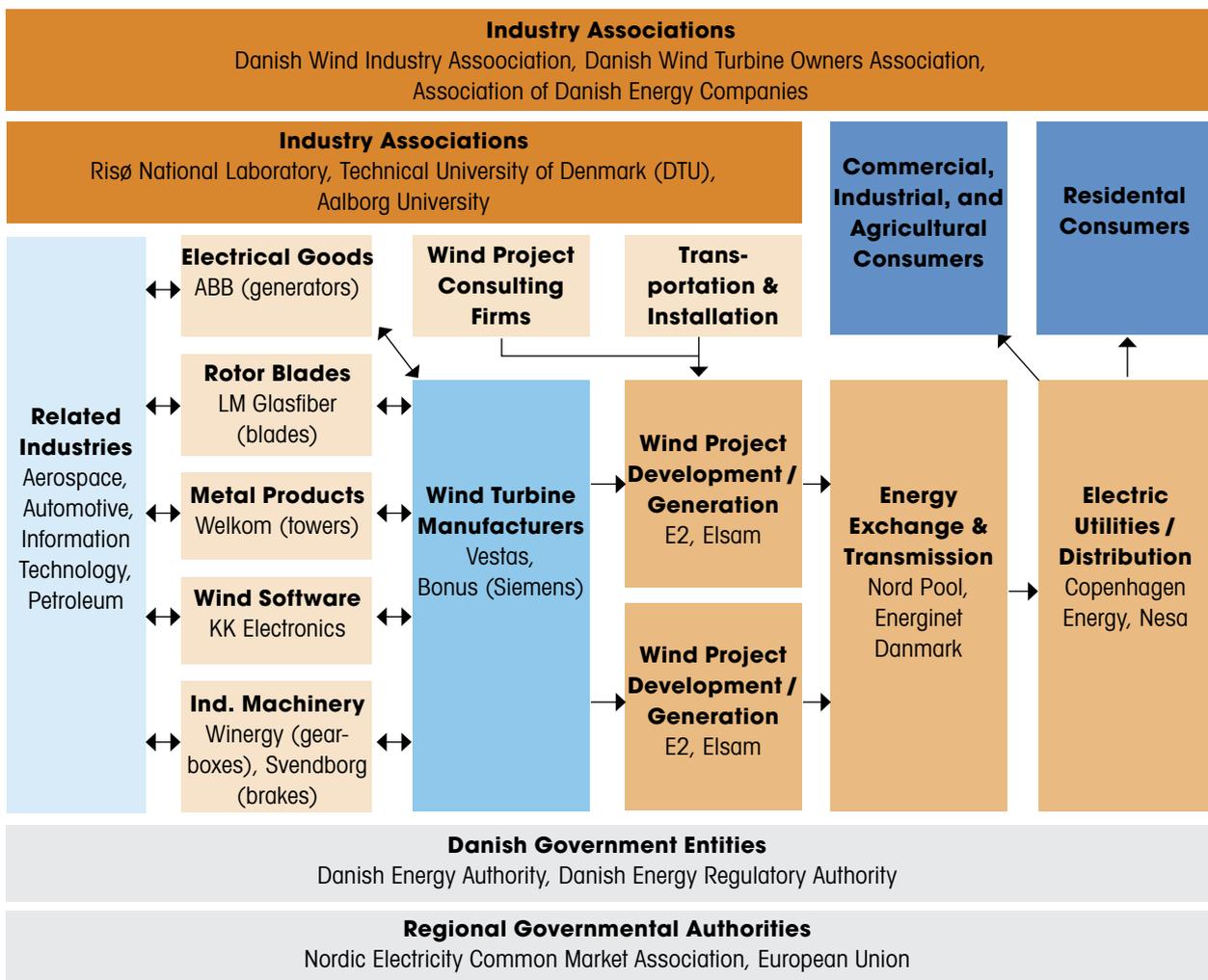
the meantime been acquired by foreign investors, the significant expertise in the Region has kept a lot of economic activity there. A 2005 study by a team of Harvard students captured the depth of related and supporting activities and institutions in this area. The cluster has extended to other parts of the Region, with ABB locating some of its production of wind generators to Estonia. Local Estonian companies like Volta and BLRT Group have announced plans to move into this field as well, targeting smaller turbines less attractive to main producers.

Among the many emerging clusters in the Baltic Sea Region addressing environmental and energy needs, the Icelandic geothermal initiative is an example of a currently small effort that could, however, reach very significant size. Based on the existing geothermal energy sources in Iceland,

there are now several efforts under way in institutions like the Keilir Atlantic Center of Excellence to develop and export the related technology to other markets. Current global capacity for geothermal energy, a fully renewable energy source with no emissions, is only at about 6% of its natural potential. There are also individual companies that have managed to carve out an important position in the markets for renewable energy. One example is Renewable Energy Corporation ASA (REC), based in Hovik, Norway. Established in 1996, REC is the world's largest producer of producer of polysilicon and wafers for photo voltaic (PV) applications like solar panels.

An interesting new initiative has recently been launched by a group of Norwegian and Swedish companies and institutions. The Nordic Climate Cluster aims to look at projects in which col-

Figure 57: The Danish Wind Energy Cluster



Source: Behn/Bhat/Ko/Motzen/Widman (2005)

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laboration within this group can lead to competitive new solutions in energy-efficiency related areas. The “biorefinery of the future”, operating with biomass, is another effort, supported in the Swedish Vinnväxt program among four emerging clusters selected for long-term support.

At the level of individual companies, the Baltic Sea Region is home to a significant number of companies with a strong focus on energy- and environment-related products and services, including one of the world market leaders in the field of wind energy. NIFU-STEP

has in its study identified a long list of companies with a strong R&D profile in different dimensions of this market.

Competing on environmental sustainability Environmental concerns are important across many industries, not only in those that are directly related to managing pollution or generating energy. Environmental features can and are being used by companies to position themselves on the market place. There is little systematic evidence to track trends in environmental positioning by companies across countries, but this might be changing in the near future with the interest in such reporting rising.

The European Union has for a number of years now sponsored a company award related to the environment, highlighting specific achievements in management, products, processes, or cooperation efforts. In the bi-annual awards the Baltic Sea Region achieved two distinctions in 2006 (both for Finnish companies), one in 2002 (a Danish company), and a nomination in 2008 (an Estonian company). Participation in this competition is voluntary so the lack of more visible success could easily be an indication of a lack of interest rather than weak performance.

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The ranking of the global 100 most sustainable companies in the world, one of an increasing number of international efforts to identify companies with a strong environmental profile, has identified companies that are the leaders in their respective industries. In 2008, 13 companies on this list came from the Baltic Sea Region, which five each from Denmark and Sweden and three from Finland. Germany also had five entries but none of the companies is located near the Baltic Sea. Three years earlier, the total number had

been the same but the compensation had been different with seven Swedish, three Danish, two Finnish, and one Norwegian company. Overall, however, the share of companies from the Region among global sustainability leaders is significantly higher than the share of the Region in GDP or general listings of leading companies.

Assessment Countries in the Baltic Seas Region combine high levels of general competitiveness, a strong innovative capacity, manufacturing skill, and a clear policy focus on environmental sustainability and energy efficiency. This combination of supply and demand factors makes the Region a strong platform for companies to develop leading technologies in these areas and for competing with them across a wide range of industries. The evidence suggests that this has already led to significant market success in the field of energy and environmental-technologies. There are also weak indications that a positioning around sustainability is an option for companies from the Region outside of the narrow energy and environment field. While more evidence is needed and the competition will undoubtedly increase, this is a clear area of opportunity for the Baltic Sea Region.

Final observations

There are few periods in the recent past which the economic temperature of the Baltic Sea Region has changed so much over the course of 12 months as has happened in the recent year. Up until the summer, normal medium- and longer-term trends dominated. The Region reached the final stages of the business cycle, with most indicators pointing towards a normal slow-down of growth without any dramatic overheating crisis. Only the Baltic countries, in particular Estonia and Latvia, were in a more precarious state but could hope that the stable economic situation amongst their Baltic Sea Region neighbors could provide some relief. The more longer-term indicators of competitiveness remained mainly strong, although the slow-down in patenting was a cause for worry. Since late summer, the environment has changed dramatically. The macroeconomic climate has worsened considerably. Iceland has been most dramatically affected by the financial crisis, seeing its financial industry collapse, its public finances in jeopardy, and many of its globally active companies up for grabs at fire-sale prices. Russia, too, has seen its financial markets implode but given the huge financial reserves of its government and the lower integration between the financial and the “real” economies, the impact on the country has been more moderate. All other economies in the Region are faced with the direct impact of falling equity markets reducing wealth, much more cautious lending by banks reducing capital availability, nervous consumers cutting back on spending, and faltering export markets reducing the demand for the Region’s goods and services.

Regional cooperation is not a prominent policy arena for the short-term actions governments are now implementing to address the acute challenges brought about by the global crisis. Measures to shore up financial markets are taken by individual countries that coordinate their actions; given their small size, the Baltic Sea Region is largely relegated to follow the lead of the world’s largest economies on these efforts. Measures to provide fiscal stimulus require changes to national spending and taxation plans that governments have traditionally been very unwilling to coordinate explicitly across countries. For all short-term interventions,

the challenge is to achieve impact on bringing the current crisis to a halt while avoiding policies that could hinder longer-term growth.

Regional cooperation plays a much more important role for laying the foundations of medium-term growth once the current crisis has dissipated. Because the Region is characterized by countries and parts of countries that are relatively modest in size, joint action is much more important here than it would be for countries like the UK or France. Market integration, a common space for research and education, and collaboration between clusters are just some of the themes that provide real benefits for people and companies in the Region.

The short- and medium-/long-term economic policy actions are complements, not substitutes. Reassuringly, the emerging position of many governments in the Region seems to be that the current crisis makes measures to shore up sustainable long-term growth more and not less important. The challenge for these efforts might ironically come much more from the private sector, where companies under financial pressure could be less willing to invest time and money into efforts that create benefits only over time. It will require flexibility to find economic policy instruments that remain effective under such complex economic conditions.

Challenging times often lead to a focus on domestic affairs. The process of creating the EU Baltic Sea Strategy has already the positive side-effect of keeping national governments engaged in regional collaboration when there might be a tendency to shift the focus elsewhere. But this will not be enough. To meet the high expectations that have been raised across the Region, many decisions that are crucial to the success of the Strategy process still need to be taken. And these decisions have much less to do with the Commission than is widely perceived; they have to be taken and implemented in the Region.

Challenging economic times also often lead to a lower focus on the environment. In the Baltic Sea Region, however, the momentum seems strong enough to instead see the environment as a crucial area with significant ecological

as well as economic importance, not as luxury. The Region has made significant progress on the environment but much more is needed, especially as regards the Baltic Sea itself. The situation is also promising for exploiting the economic potential of environmental technologies. Many national efforts are under way and regional platforms have been created.

But future success is not assured: the challenge is to move the existing efforts aggressively forward, probably while shifting even more of the activity from national to cross-national efforts, in order to meet the quickly growing competition from other countries and regions with significant innovative capacity and a stronger track record of turning ideas into market success.

The coming year will be a test for the Baltic Sea Region. Collaboration across the Sea that

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connects us has contributed to the past years of strong growth but it has also benefited from these benevolent economic times. The Baltic Sea Region is better placed to deal with the current crisis than

many other groups of countries, at least when the world economy avoids a total collapse. Much of the immediate action will by necessity happen at the national level, with coordination taking

place at the EU or even on a global level. But we need to make sure that the institutional fabric of the Region stays intact and ready to take on a more prominent role once the focus shifts to providing the conditions for future growth. The opportunities are there, not the least through the EU Baltic Sea Strategy process; but there is no doubt that it will require real leadership to seize them.

About the author

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Dr. Christian Ketels is a member of the Harvard Business School faculty at Professor Michael E. Porter's Institute for Strategy and Competitiveness. He holds a PhD (Econ) from the London School of Economics and further degrees from the Kiel Institute for World Economics and Cologne University. He is currently a Senior Research Fellow at the Stockholm School of Economics, and Director of The Competitiveness Institute, a not-for-profit global network of cluster practitioners and researchers. Dr. Ketels has led cluster and competi-

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