

STATE OF THE REGION REPORT™

The Top of Europe – Plowing Ahead in the Shadows
of a Fractured Global Economy

2013



10th Edition

State of the Region Report 2013

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10 years of the State of the Region reports



As in previous years, the 2013 State of the Region Report will be presented at the Baltic Development Forum Summit, taking place in Riga, and give us essential insights into the Region's overall economy, competitiveness and dynamics. The key message in 2013 is that the Region's post-crisis recovery has slowed down significantly. In other words, we need to do better.

This year is however special – we have now published the report for 10 years, given us food for thought and facts about the Baltic Sea Region, for better or worse. Over the years, the reports have tracked the developments of the Region's competitiveness and each year included new aspects and dimensions of this concept.

For Baltic Development Forum, upgrading of the Region's competitiveness is at the heart of our mission and the State of the Region Report has played a very important role in this regard. Essentially, competitiveness describes the overall quality of the region as a place to do business.

In our understanding, it is extremely important that the region's aim is "to do business" because it is a key feature of the Baltic Sea Region that we proceed in a very *pragmatic* manner. We have not defined a clear end-target but most countries, organisations and decision-makers are concerned about making a difference and cooperating where it makes sense. We want and need to see results, outputs and progress, which includes a better way of living – in short, prosperity. As Christian Ketels puts it: the State of the Region Report aims to provide policy makers with data and analysis that support fact-driven policies designed to raise the level of prosperity.

Does that mean that regional cooperation is only about pragmatism, doing business and self-interest? No, it does not tell the whole story. Ever since the fall of the Iron Curtain, support to the regional cooperation has been motivated by the wish to return to normality and to correct the injustices made during the 20th Century. Solidarity with your neighbours is part of the story but to a pragmatic region the everyday motivation is to prosper and "do business".

To our mind, it has to be a guiding star for the EU Strategy for the Baltic Sea Region and for other regional settings to raise prosperity through doing business and upgrading of the competitiveness. The present economic situation in the Region and the wider European context demands us to have a clear focus. It requires facts and data that the State of the Region Report is giving us.

Celebrating 10 years of the report, we are extending a special gratitude to our sponsors who this year again are the European Investment Bank and the Nordic Investment Bank, and to thank Christian Ketels and his colleagues for the many high-quality reports. They have given us a lot of inspiration. This being said, the conclusions are those of the author only and do not necessarily reflect the views of Baltic Development Forum and the sponsors.

We wish everybody a good read!



Hans Brask
Director
Baltic Development Forum

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Introduction

Ten years ago, the State of the Region Report was launched at the Baltic Development Forum's Summit in Hamburg to provide an annual resource to inform the discussions about regional collaboration and competitiveness. Its ambition throughout this time has been to provide facts, a framework for analysis, and commentary that can help decision makers across the Region to make more informed choices. The Report has also become a window into the Region, for companies or investors considering doing business in the Region and for politicians and government officials that want to learn from its experience. It aims to provide a balanced perspective on the strengths and weaknesses of the economies at the 'Top of Europe', not to be a marketing tool.

In 2013, the need for a fact-rich assessment of the Baltic Sea Region is as pertinent as ever. Five years into a difficult crisis, the economic outlook for the Region remains uncertain. This is the case largely due to conditions outside of the Region, particularly in the rest of Europe. The Baltic Sea Region might be doing better than its European peers in the south, but it is still deeply affected by the trajectory of the broader European economy. This key lesson has become increasingly clear as the crisis has morphed from a US into a global financial crisis, then into a European sovereign debt, currency, and financial market crisis. The future prosperity of citizens in the Baltic Sea Region future will depend upon the competitiveness of its economies relative to its European and global economic peers. But it will also be driven by the Region's ability to help the rest of Europe achieve a more sustainable growth path. The Top of Europe remains a part of Europe, for better or worse.

When analysts find the future too complex to predict, they resort to describing different scenarios. These scenarios are then often associated with an experience from the past; while history never exactly repeats itself, especially for financial crises, researchers have argued that the similarities are much stronger than those arguing that 'this time it's different' like to acknowledge (see the book on financial crisis with this title by Carmen Reinhart and Kenneth Rogoff). For Europe, a number of scenarios feature prominently in the background of many current assessments:

- **Japan's lost decade(s).** Following bursting of the Japanese asset price bubble in the late 1980's, the country went into a deep recession from which it even now has not fully recovered. There was a succession of spending programs and, over time, a gradually more lenient monetary policy, but neither was effective in turning the tide.
- **The Baltic tiger redux?** After rapid growth led to overheating based on large capital inflows, the Baltic countries went into a deep recession in 2008. Through so-called 'internal devaluation' with deep fiscal and wage cuts their economies stabilised without abandoning the fixed parities of their currencies to the euro. By 2013, the Baltic economies still show the scars of the downturn, but are clearly on a path of recovery, largely driven by dynamic export growth.
- **Three times 'crisis – devaluation – recovery'.** Following financial market opening and subsequent overheating, the Nordic countries went into crisis in the early 1990s. Devaluation coupled with determined restructuring of the banking system and a host of other re-

forms to increase competitiveness led to a surprisingly swift recovery. The Asian Crisis in the late 1990s followed a similar model with growth successfully restored over time, but the collapse of the banking systems and bankruptcies of many local companies in its wake made the experience much more traumatic. The Argentine Debt Default of 2002 occurred in the midst of riots and political turmoil. Despite the much more messy collapse, the economy recovered even there, but outside of its agricultural sector, the competitiveness of the Argentinean economy remains in question and populism dominates the political system.

None of these scenarios fits perfectly well with Europe's situation today. Europe is, among many other differences, a larger economic space, its common currency a different type of monetary policy structure, and its governance framework with national and supranational institutions unique. Still, the historic precedents feature in the European debate: the optimists point to the Baltics as a sign of hope that domestic reforms can work within the context of existing European institutions. The pessimists argue that staying within the euro structure is likely to lead to a long period of suffering, as in Japan. Alternatively, they see a break-up of the Eurozone, with individual countries experiencing the full range of good, bad, and ugly as in previous crisis – devaluation – recovery episodes. It remains to be seen which path the European economy will take. Whatever happens, the stakes for the Baltic Sea Region are high.

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 is home to 57.3 million people, another 60,000 less than last year. The Nordic countries—together representing 43.5% of the Region's

inhabitants—have continued to gain population at a rate of 50,000 annually. But the decrease elsewhere in the Region, especially in Russia, where the population continues to drop by 0.5% per year, was even stronger. The Region's labour force reached 27.7 million employees in 2011, about 250,000 more than the year prior. As the economies of the Region came out of the crisis, a larger share of the working-age population returned to the workforce. The total size of the workforce remains about 2%, or 600,000, below the peak reached in 2008. Over the last decade, however, the increase of the labour force has been an important factor, with 1.3m more people in the labour force than in 2001.

The Region created in 2011 an annual GDP (PPP adjusted) of around EUR1,320 billion (USD1,790 billion). This new record for the Region is similar to about 11% of the EU-27 economy, or roughly the size of the Italian economy. The Nordic countries account for 60% of the total (3% less when including only the Norwegian mainland economy). Northern Germany accounts for roughly 14.5%, slightly larger than Northwestern Russia's share of 14%. The Baltics contribute close to 7% and Northern Poland the remaining 5%. The slow rebalancing of economic weight towards the Baltics, Poland, and Russia has resurfaced, after the crisis had brought it to a temporary halt.

The Baltic Sea Region thus defined overlaps with a number of administrative groupings: The Council of Baltic Sea States matches most closely the Region but has as an intergovernmental agency no official limitation on the relevant subregions of Germany, Poland, and Russia. The Nordic countries have a long-standing collaboration with an institutional base in the Nordic Council and the Nordic Council of Ministers. In a number of areas the three Baltic countries, which have created some similar structures among themselves, have become an official part of this collaboration. To the north, the Barents Euro-Arctic Council (BEAC) includes a platform for Norway, Sweden, Finland, and NW Russia to collaborate. The Arctic Council stretches out even further, including Denmark (Greenland) and Iceland from the Baltic Sea Region, as well as Canada and the US in addition to the countries represented in the BEAC.

There is no scientific way to determine the precise boundaries of the Baltic Sea Region. We proceed conservatively, including only those regions

that appear closely integrated with other regions around the Baltic Sea. Iceland and Norway are included because they have close relations to many countries around the Baltic Sea and are eager to participate in regional co-operation. Regions in Germany, Poland, and Russia not bordering the Baltic Sea are not included, because their economic ties with the Baltic Sea Region are limited. This makes the definition used here more restrictive than the ones used by other institutions. For comparison, the Report looks – depending on data availability – at the EU-15 (old member countries), the EU-8 (new central European member countries, excluding Bulgaria and Romania), regions within Europe (Iberian Peninsula (Spain, Portugal), British Isles (UK, Ireland), NAFTA (US, Canada, and Mexico), Oceania (Australia, New Zealand), the Asian Tigers (Hong Kong, Singapore, Taiwan, and South Korea), and occasionally the OECD. Where possible, the Danube Region – stretching from southern Germany to the Black Sea – has been included in the comparisons as well.

The structure of the State of the Region Report

Broadly following the structure developed over the last few years, **section A** provides a discussion of the recent trends in competitiveness across the Baltic Sea Region. The first part looks at the current economic climate in the Region, an important influence on the policy environment for long-term competitiveness upgrading. The second part provides competitiveness diagnostics, covering data on economic outcomes, intermediate indicators, and competitiveness fundamentals.

Section B gives an update on the profile of collaboration across the Baltic Sea Region. The first part tracks the activities of the main regional organizations and projects over the last year. The second part looks at the way the EU Baltic Sea Region Strategy has been implemented in specific projects but also more broadly in the broader activities of countries and sub-national regions across the Baltic Sea Region.

Section C looks at two particular dimension of the Baltic Sea Region economy. The first part, with contributions from Alf Vanags, Director of the Baltic International Centre for Economic Policy Studies (BICEPS) in Riga, Latvia, and Petri Rouvinen, Research Director at ETLA, the Research Institute of the Finnish Economy, in Helsinki, Finland, looks at the state of emerging value

chains in the Baltic Sea Region. Value chains have become an important characteristic of the global economy, connecting companies and locations in far-away places in integrated production processes. The recent export growth in the Baltic countries, as well as observations in other countries, suggest that a larger part of these value chains might be locating in the Region, connecting the Baltics and Nordic economics. The two authors look at the key hypotheses and discuss them in view of the data available so far. The second part, written by Torbjörn Becker, Director of the Stockholm Institute of Transition Economics (SITE) at the Stockholm School of Economics in Stockholm, Sweden, looks at the access to capital for small- and medium-sized companies (SMEs) across the Baltic Sea Region. A combination of weaker cash flow in a period of weak aggregate demand and less readily available bank financing in the wake of the financial crisis and ahead of regulatory changes affecting banks has made access to capital again a key concern for companies and policy makers. The author looks at the available evidence to explore ways in which policy might be able to help.

The Report closes with some reflections on the way the Baltic Sea Region has changed since the first State of the Region Report was launched in 2004. Economically, the Region has gone through a cycle of exuberance, crisis, and (slow) recovery. Compared to many of its peers in Europe, that Region has done much better overall – a testament to the generally solid foundation of competitiveness of locations in the Region. However, the outlook remains uncertain, in particular because of the difficulties Europe as a whole is facing. Politically, the EU Baltic Sea Region strategy has laid a solid foundation for co-ordinating cross-border activities. The next steps will now have to look at further integration of the EU Baltic Sea Region strategy with our EU and national policies, in particular the EU structural funds. As well, there are question about how to better engage Russia and how to reach out more effectively to the business community in the Region.

Section A: Competitiveness in times of macroeconomic uncertainty



This section of the State of the Region Report describes the economic performance the Baltic Sea Region has currently achieved and the Region's underling competitiveness driving these outcomes. It provides data and analysis on the current economic climate in the Region and on indicators of competitiveness – from economic outcomes to competitiveness fundamentals.

The State of the Region-Report provides a perspective on the economic health of the economies in the Baltic Sea Region. For policy makers in the Region, it aims to present key data and puts them in structure that supports fact-driven choices about what policy areas to focus on. For business leaders and investors, its ambition is to provide insights into the attractiveness of the Region as a place to do business.

In the short term, demand-side factors tend to be dominant. With the productive capacity of the economy largely given, the level of activity depends on the willingness and ability of consumers, companies, and the public sector to spend and invest. External trade and capital flows influence their decisions through their contribution to overall demand and provision of capital. Demand tends to change relatively quickly and these short term fluctuations in business activity are widely covered in the business press as well as in analyses from financial institutions and government agencies. The State of the Region-Report provides a more narrow perspective on some key trends across the Region on these dimensions.

In the long term, supply-side factors tend to be much more important. They shape the productive capacity of a location. In the words of the conceptual framework that underpins this report, this is what competitiveness measured by the *“the expected level of output per working-age individual given the overall quality of a country as a place to do business”*¹ is all about. The openness to other locations influences locational quality by enabling specialization

and providing competition. Competitiveness tends to change only gradually over time; while some aspects of locational quality can be changed quickly, for example through a change in regulation, many others take longer time periods to change, for example the availability of specific workforce skills or the development of a more effective innovation system. The State of the Region-Report aims to track the different aspects of locational quality to identify which policy areas are priorities across the Region.

Policy makers and business leaders have to deal with the short-term and the long-term simultaneously. For policy makers, the quality of the location is what they ultimately have to change in order to support higher levels of prosperity. But short term fluctuations in business activity can undermine their ability to do so. For business leaders, the quality of the location relative to the cost level for local inputs – labor, supplies, etc. – is what drives the longer-term profitability of a given set of activities. But short term fluctuations in demand and costs can create cash-flow challenges that risk the survival of a company.

Much of the current policy debate is focused on how to balance the needs of the short- and the long-term. In the short-term, many European economies suffer from a demand shortfall. The situation in the Baltic Sea Region is more positive, but even here the levels of unemployment and growth are unsatisfactory. In the long-term, Europe needs to address the existing imbalances in public sector finances, private sector balance sheets, and cross-border trade and current account balances. Here, too, the Baltic Sea Region is in a more positive situation but will be affected by the rebalancing in other countries.

¹ Mercedes Delgado, Christian Ketels, Michael Porter, Scott Stern (2012), *The Determinants of National Competitiveness*, NBER Working Paper No. 18249, NBER: Cambridge, MA.

In the rest of Europe, the argument is between those that focus on what is right in the long-term and those that fear that this will create short-term damage with severe long-term consequences. Most economies in the Baltic Sea Region do not face such a harsh choice – more solid longer-term policies have given them more short-term flexibility. This was already visible during the 2008/09 crisis, and remains true today.

The remainder of section A is organized in three parts: The first part provides an overview of the current economic climate. In the last year, the Baltic Sea Region has experienced a significant slow-down of economic growth. For 2013, growth rates are expected to stabilize at this lower level that, however, remains far ahead of the rest of Europe. A key driver of the slowdown in the Region is the lower momentum of private sector consumption and investment. The positive gap to the rest of Europe continues to be driven by mutually reinforcing strengths on public finances, domestic demand, and labor market conditions. But the Region is not immune from the external drag through lower exports and tight credit market conditions.

The second part tracks the competitiveness of the Baltic Sea Region. It discusses data on economic outcomes, components of economic prosperity as

well as other indicators of economic activity, particularly on trade, investment, and innovation. This data are then put into the context of an assessment of the competitiveness fundamentals across the Region. The outcome indicators for 2012 show the significant headway into which the recovery process has come. The downturn in the rest of Europe is starting to seriously affect the Baltic Sea Region economies, much as was expected last year. Underlying competitiveness remains at the high levels that the Region has achieved already for some time.

The third part summarizes key observations from the analysis, and develops implications for policy. The current economic outcomes are clearly driven by the cyclical impact of conditions outside of the Region, particularly in the rest of Europe. Regional collaboration has a relatively limited role to play to overcome these forces but can increase the robustness of economies in the Region. The data also shows the structural impact of globalization on parts of the Region, especially the Nordic countries. This is a much slower process that has been going on for a while but one that policy makers have to find an answer to. Regional collaboration can provide some of the tools that might be useful to do so.

1. Current economic climate in the Region

Short-term Growth Dynamics

The Baltic Sea Region had until 2008 grown at rates close to the global average, significantly above the level of the North American and the Western European economies. After a dramatic drop of economic activity during the crisis, the Region recovered in 2010 more quickly than peer regions and retained solid growth rates throughout 2011. In 2012, the pace of growth halved to roughly 1.5%, dropping below the level of growth in North America. The Baltic Sea Region was tracking the European slowdown, even if it remained at a higher level of economic dynamism than its European peers. The outlook for 2013 remains muted and many analysts have in the meantime become much more skeptical about the recovery expected for 2014.

Within the Baltic Sea Region, the variation of growth rates dropped further in 2012. While the gap between the fast and slowest growing economy in the Region had in 2009 been 19%-points, it had dropped to 7% in 2011 and less than 5% in 2012. The Baltic countries, which had seen a powerful recovery after the significant crisis in 2009, saw their growth fall to between 3% and 4.5%. Poland and Russia, next in the regional growth tables for

2011, also saw a slow-down to between 2% and 3.5%. Sweden and Germany saw modest growth of around 1%, while Denmark and Finland even reported a contraction. The only country in the Region that saw growth increase was Norway.

Slower growth in the Region as well as the surrounding European economy led to a fall in inflation rates, despite a continuation of highly expansionary monetary policies. Energy prices that stayed at a high but stable level contributed to a slower increase in price levels.

For 2013, most countries in the Region are expected to register a moderate slow-down of growth rates. The only exceptions are Denmark and Finland where for 2013 a recovery to very low positive growth is expected. The gap in growth rates between the fastest and slowest economy in the Region is expected to drop to less than 4%-points in 2013 and close to 2.5%-points in 2014, compared to roughly 9.5%-points over the previous decade. This suggests a dominance of broader business cycle trends across Europe relative to country-specific factors. While the crisis and the immediate recovery were very different experiences throughout the Region, the medium-term growth outlook seems frustratingly muted everywhere.

Economic Growth

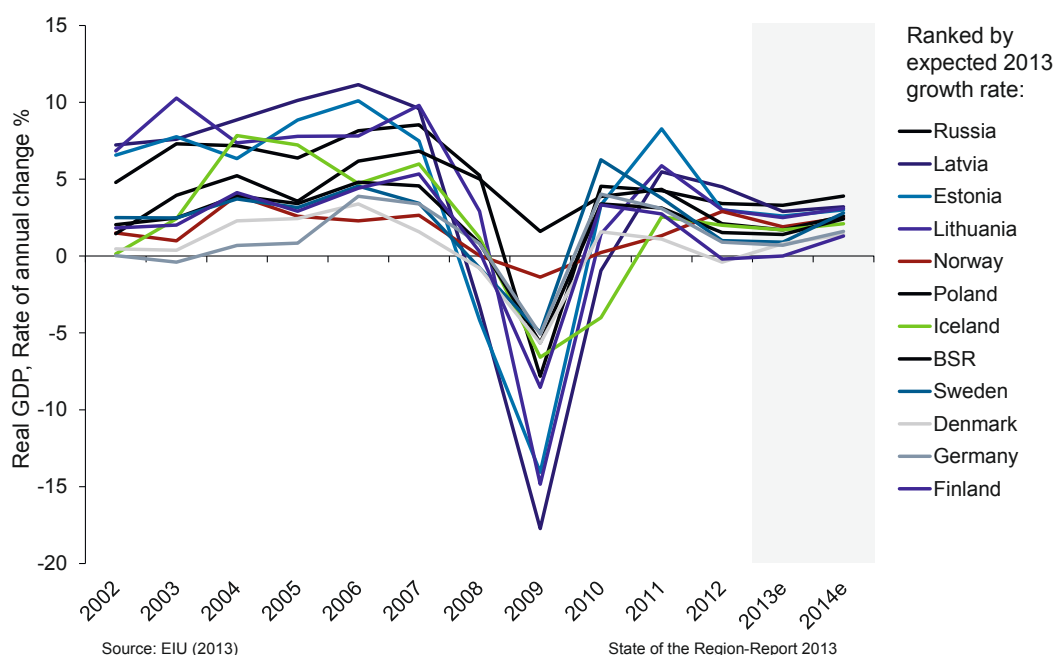
Selected Regions



Source: EIU (2013)

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Economic Growth: Baltic Sea Region countries



Growth in the Baltic Sea Region continues to be more driven by domestic demand than elsewhere in Europe and the OECD. The dynamics of private consumption have stayed remarkably stable over the last three years at an annual growth rate of around 2.3%. For 2013 the outlook is less positive, but still ahead of the EU-27 average where private consumption is expected to drop further in 2013. In the OECD average consumption growth remains positive but has gradually dropped from 2% growth in 2010 to 1% growth expected in 2013. Public consumption growth has been less important but is in the Baltic Sea Region forecasted to grow more noticeably in 2013. In the EU-27, however, austerity programs are likely to reduce government spending in the current year.

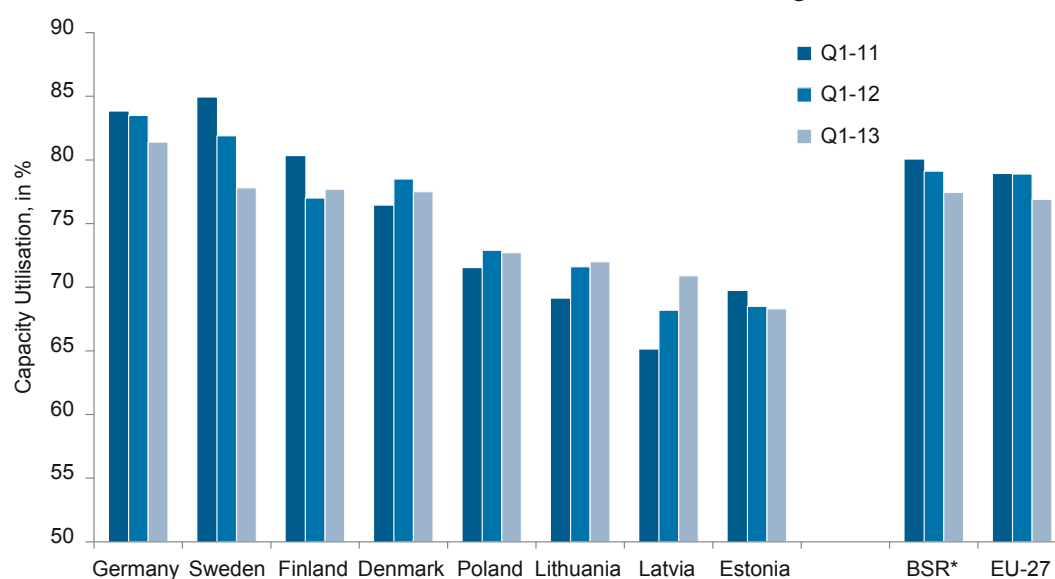
A key driver of the slower pace of Baltic Sea Region growth in 2012 was the fall in private investment, where the growth rate dropped from 8% to 3%. This is a significant drop but compares still favorably to the OECD average where investment growth dropped by more than to half in 2012 to reach 1.5%. A large part of this drop was due to the EU-27, where investments dropped by close to -3% after growing by 1.5% the year before. Investment rates in the US where in the meantime more robust but remain at a lower level as a share of GDP. Some of the slowdown was the normal reaction to the

fast one-off growth the year before. But it is very likely that concerns about the medium-term economic outlook also affected companies' investment decisions.

The weakening investment dynamics are remarkable given the current monetary policy environment. The combination of low nominal interest rates and quantitative easing, i.e. the provision of large amounts of liquidity by Central Banks, that had been introduced as emergency measures in the wake of the 2008 crisis seem to be the new normal. But even the promise of low interest rates for a considerable future has not been enough to drive business investment. Part of this might be the result of a financial system increasing margins and using liquidity to improve balance sheets; a behavior encouraged by regulators. But there are also signs that companies that are not constrained in their access to capital – large companies have been able to tap into bond markets at favorable rates – have been reluctant to invest. This suggests that the main culprit has been the heightened uncertainty about the medium-term economic outlook.

A short-term factor that might have weighed into companies' investment decision is the level capacity utilization in manufacturing. While the picture is heterogeneous across the Region, the overall momentum points downwards in the Nordic

Capacity Utilisation in Manufacturing



* Excluding Iceland, Norway and Russian Federation

Source: EU (2013)

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countries and Germany. Latvia is the only country where the trend has been visibly positive, albeit from a low level.

Trade had recovered strongly in 2010 after the dramatic drop during the crisis. Since then, growth rates have come down, with Baltic Sea Region exports growing more slowly than imports. The dynamics in the OECD and the EU-27 were opposite, driven by the adjustments to current account

deficits in these regions. The Baltic Sea Region continues to register a current account surplus of about 5.5% of GDP, a rate that has remained remarkably stable over the last decade.

Across the Baltic Sea Region, private consumption has in 2012 picked up most in Russia, a trend that has been true for the last few years. In the Baltic countries, Iceland and Norway consumption growth was at 3% or higher. In the rest of the Region

Growth Rates of GDP Components

Selected Regions

	Baltic Sea Region		EU-27		OECD	
	2012	2013e	2012	2013e	2012	2013e
Consumption						
Private	2.29%	1.68%	-0.64%	-0.36%	1.10%	1.00%
Public	0.14%	0.68%	0.11%	-0.21%	0.30%	0.10%
Investment	3.07%	2.29%	-2.83%	-0.75%	1.50%	2.40%
Trade						
Export	1.89%	2.33%	2.13%	2.02%	2.70%	3.00%
Import	2.99%	3.10%	-0.90%	1.01%	1.40%	2.50%

Source: EIU (2013)

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consumption barely increased, with Germany and Poland the laggards at less than 1% consumption growth. For 2013, these two are the only ones that except slight consumption growth while there will be a modest slowdown elsewhere. Government consumption increased most in Estonia and Norway, while was relatively stable in the rest of the Region.

Fixed investment grew at a very high rate of close to 25% in Estonia for the second year in a row. In the rest of the Baltics, growth rates have dropped significantly between 2012 and 2011. Iceland is the other country in the Region with two-digit investment growth in 2012, followed by Norway and Rus-

sia, each at around 6% more. Germany, Finland, and Lithuania registered negative growth; for Finland the outlook for 2013 is also negative.

The slow-down in exports was most pronounced in Estonia and Lithuania, followed by Latvia and Sweden. Only energy exporters Russia and Norway saw their export growth pick up in 2012. Import growth slowed down most in the Baltics, Poland, and Russia. Poland was the country where the combination of further export growth and a reduction of imports drove the strongest improvement in the trade balance.

Back into the fold? Renewed Baltic-Russian Economic Relations.²

The different cyclical positions of the EU and the Russian Federation, combined with the prolonged Eurozone crisis, have led to significant changes in terms of economic relations between the three Baltic republics (Estonia, Latvia and Lithuania), all members of the Soviet Union until the early 1990s, and the Russian Federation.

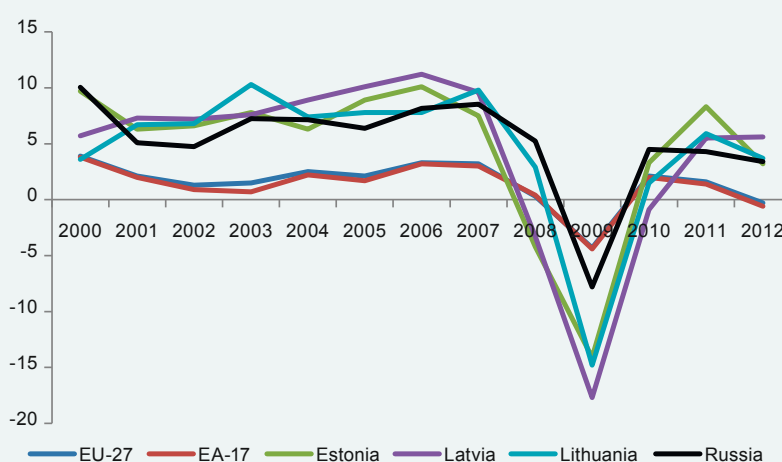
Different Fortunes: GDP trends.

Although the so-called "Great Recession" started in the United States in 2008, by 2010 it had mutated into an economic and sovereign debt crisis centred in the EU, and, more particularly, in the Eurozone.³ This has led to a significant divergence in terms of growth performance between the EU/EA and Russia (see Graph 1 below): since 2008, the average growth differential between the EU and

Russia has been 2 percentage points per annum, and since 2010, almost 3 percentage points.

One of the consequences of this is the increased importance of Russia as an export market for these three Baltic republics, all of which entered the EU in 2004.⁴ Since 2007, the year before the crisis, their combined share of exports for the Russian market increased by a third (from 12.7% to almost 17%, from 26% in Lithuania to almost 40% in Latvia).

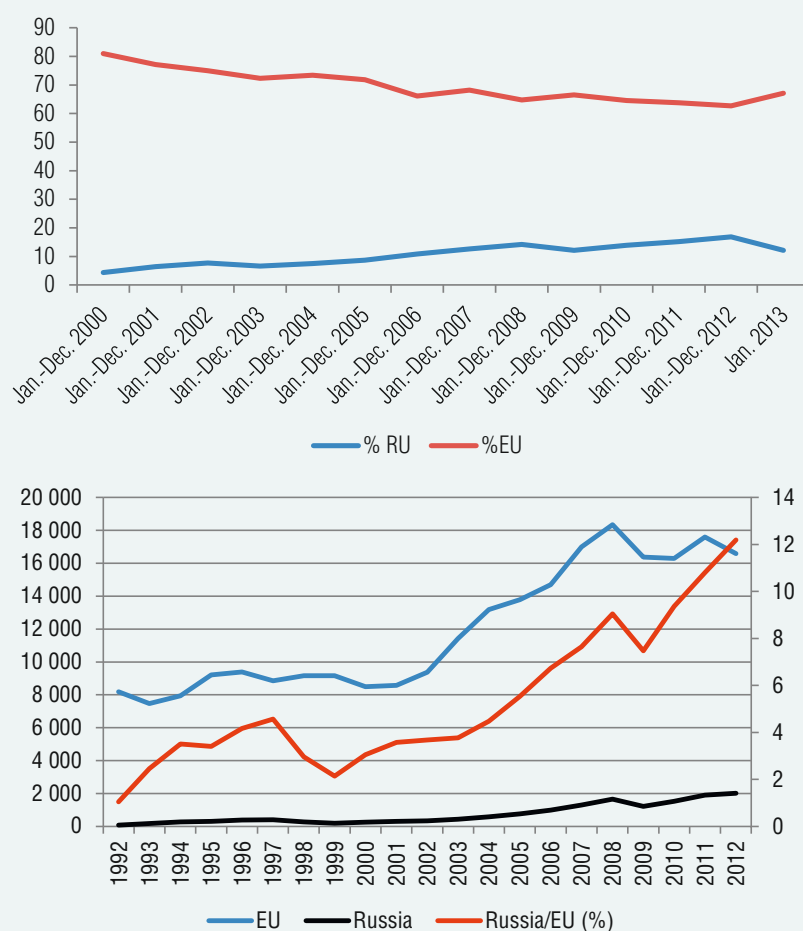
However, it is important to realise that the ongoing crisis only brought into relief a process of economic re-integration that had actually begun as early as with the Russian economic recovery in the aftermath of its 1998 crisis. The EU-Russia growth differential of the pre-crisis period was even higher, at almost 5 percentage points



² By Anna Tsibulina, Lecturer, MGIMO University, Moscow, Russia, and Lúcio Vinhas de Souza, Sovereign Chief Economist, Moody's Investors Service, New York, USA. All usual disclaimers apply.

³ It should be noted that non-Eurozone countries, like the UK (which benefit therefore from the theoretical advantages of a flexible exchange rate), are not performing any better than 'core' Eurozone ones, fiscally or in terms of growth.

⁴ Not only are they members of the EU, but Estonia joined the Eurozone in 2011, and Latvia is expected to follow suit in 2014.



per annum during 2000-2007. Correspondingly, the increase in Russian export market share for the combined three Baltic states since 2000 has been almost 300% (from 4.3% to 16.8%).

In other terms, what one is observing might be a natural renewal of economic linkages to figures that better reflect economic fundamentals, as economic relations with Russia were brought to temporarily low levels by the wrenching economic adjustments observed during the break-up of the Soviet Union and the introduction of market mechanisms. Figure 3 below illustrates that, by showing the sizes of the Russian and EU GDPs from 1992 to 2012: the relative size of Russia's GDP to the EU's grew from 1% to above 12% within this two-decade interval, an almost 1200% increase.

A way to tentatively assess what the optimal level of, say, trade relations (which can be seen as a proxy for overall economic relations) of the Baltic states with the EU and Russia might be is to use a simple 'gravity equation' framework. A 'gravity equation' estimates exports as a function of the sizes of these respective markets

(measured by their GDPs) and of the distances between markets (as a proxy for trade costs) and the Baltic states. This is done using yearly 2000-2012 data, and the results are shown in Table 1 below.

Table 1: Gravity Equation Estimated and Actual Export Shares, EU and Russia.

	Estimated Actual Exports		
	Exports Share (%)	Share (% 2012)	Difference
Russia_Dummy	33.2	16.8	16.4
EU_Dummy	57.7	62.7	-5.0

Source: Estimation by the authors.

The implication of the estimated coefficients is that the simulated share of exports to Russia from the Baltic states as a whole should virtually double, to around a third, while that of the EU should fall, albeit somewhat marginally, to somewhat below 60%.

Of course, such figures are merely indicative, but they provide support for the notion that the ongoing trend of stronger economic relations between the Baltic States and the Russian Federation still has some way to go.

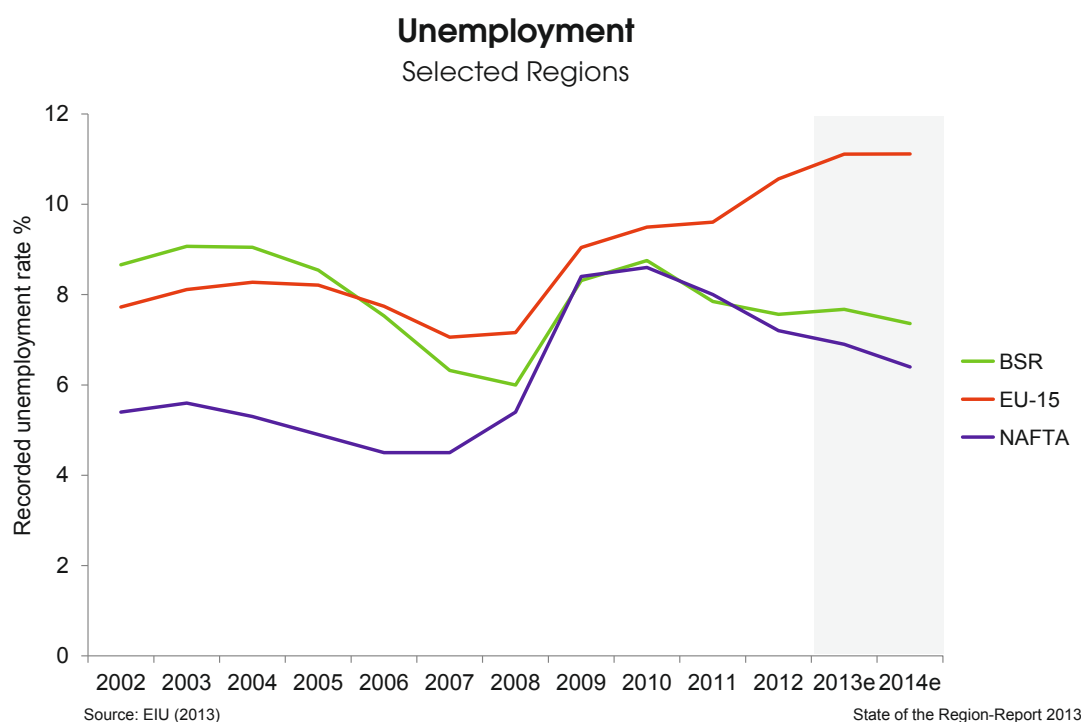
Impact on labor markets and public finances

Unemployment and public debt were two of the key casualties of the global crisis. They remain critical dimensions to track how the Baltic Sea Region has achieved significantly better economic outcomes than the rest of Europe.

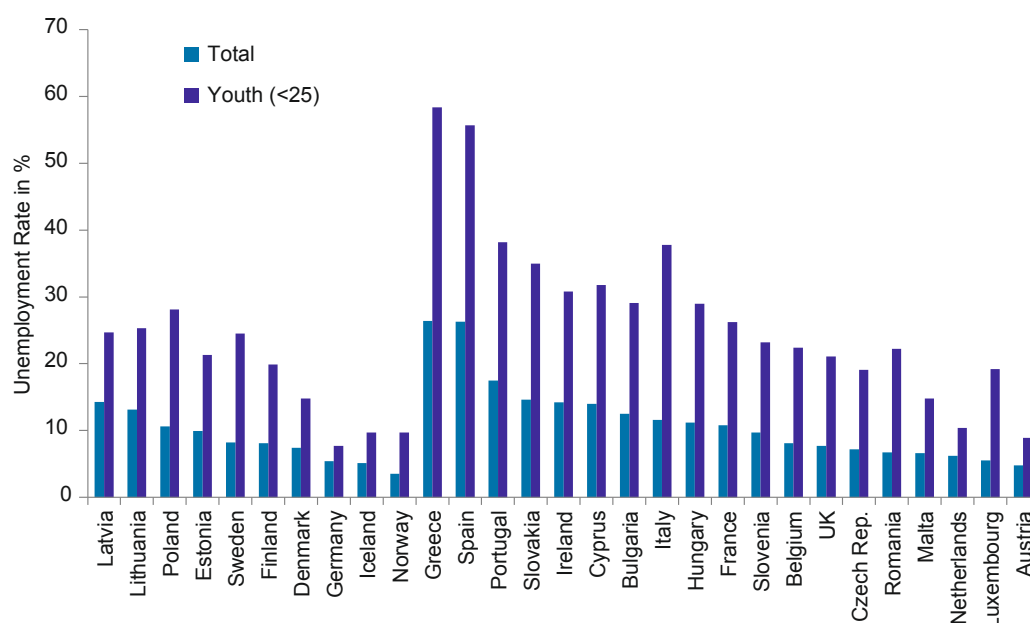
Unemployment, traditionally a significant concern in the Baltic Sea Region, had quickly increased during the global crisis. But while unemployment then continued to increase in the rest of Europe, pushed on by the sovereign debt crisis and austerity programs, it fell back in the Baltic Sea Region. In the Baltic Sea Region unemployment is stabilizing at around 7.5% while it is pushing above 10% in the EU-15 average. Unemployment in North American, historically the region with the lowest unemployment rates, has in 2012 dropped back below the level in the Baltic Sea Region. However, especially in the US there is much concern that the recent drop in unemployment is largely the result of working-age people dropping out of the labor force rather than of genuine job creation.

For individual Baltic Sea Region countries the picture is again quite different. In the Nor-

dic countries, Norway is close to full employment with an unemployment rate of about 3%. Iceland's unemployment has continued to fall, and is now at less than 6%. Denmark's unemployment rate is at close to 6.5% much higher than in the country's historical experience. Sweden and Finland both register unemployment slightly above 7.5%. For Sweden this is relatively high compared to previous years, and only about 0.6%-points lower than during the height of the global crisis. Germany, long a country suffering from high unemployment, has been able to half its unemployment rate from 11% in 2005 to 5.5% in 2012. Poland, another country with persistent labor market problems, has since unemployment move back to almost 13%. This is far below the pre-crisis average but indicates that the structural problems have not been overcome. In the Baltics, unemployment levels have fallen since the crisis, but remain at above 10% close to the EU average. In Latvia, the unemployment rate has even increased in 2012 relative to the year before; this could, however, also be a sign of people re-entering the labor force or deciding against emigration as the economic situation in the country is stabilizing.



Current Unemployment Rates



Source: EIU (2013)

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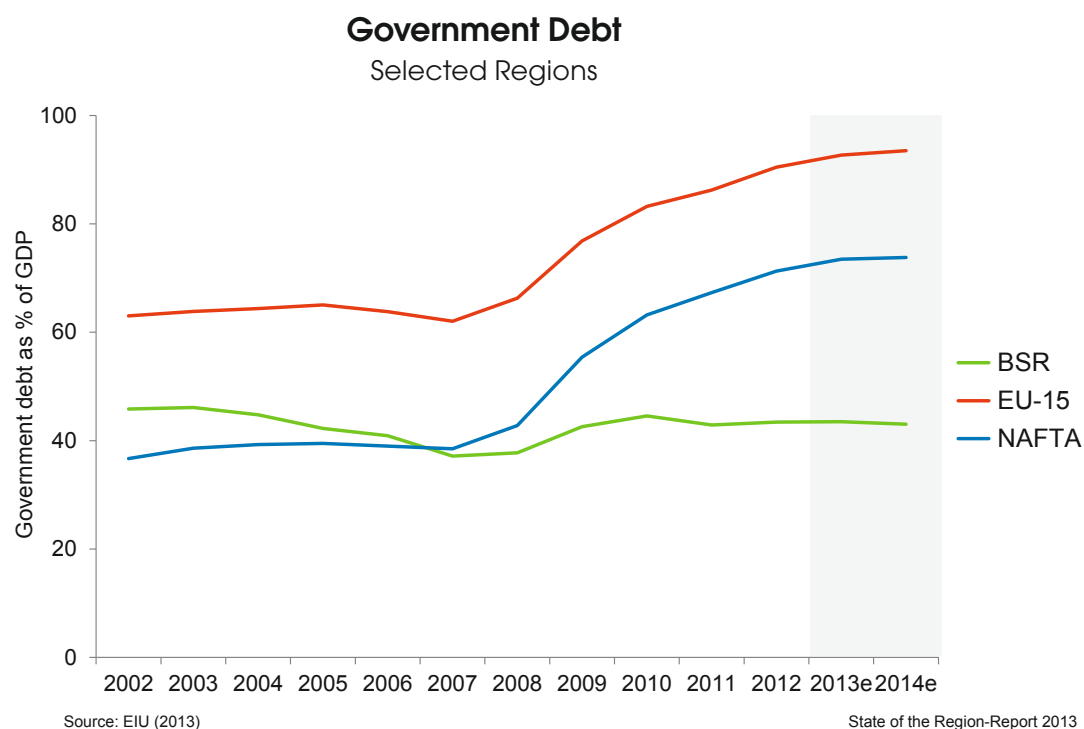
A key challenge in many parts of the Baltic Sea Region is the high level of youth unemployment. In the Poland and the Baltic countries, but also in Sweden and Finland, the youth unemployment rate is above 20%. In Sweden, the unemployment rate for less than 25 year olds is three times as high as for the average of the labor force. In Europe only, only Luxembourg, Romania, and Italy have higher rates of unemployment rate differences across these segments of the labor market. Norway (at much lower absolute levels), Poland, and Finland follow in the Baltic Sea Region with youth unemployment between 2.5 and 2.8 times as high as overall unemployment. While the absolute levels of unemployment are a good below the levels in the Southern European crisis economies, there are many studies that indicate that unemployment in early years has a prolonged effect on an individual's life time career path.

On government deficits and debt, the Baltic Sea Region continues to outperform its peers. Due to the significant surpluses registered by the two natural resource exporters Russia and Norway the Baltic Sea Region again ran an overall budget surplus in 2012. Germany and Sweden had close to balanced budgets, while the rest of the Region reported deficits between -2% and

-3.5% of GDP. Estonia, Denmark, and Finland registered the strongest deterioration of public finances compared to 2011.

Debt levels in the Baltic Sea Region have stabilized since 2011, while they continue to grow in the EU and the NAFTA region. In southern Europe, spending cuts are hard pressed to keep pace with falling tax receipts and rising social security expenditures in the wake of contracting economies. In the US, President and Congress have been unable to reconcile their deep-seated differences on how to bridge the structural gap in the federal budget. Since early 2013 automatic spending cuts are now in place that are widely seen as an insufficient and ineffective answer to the country's fiscal policy challenges.

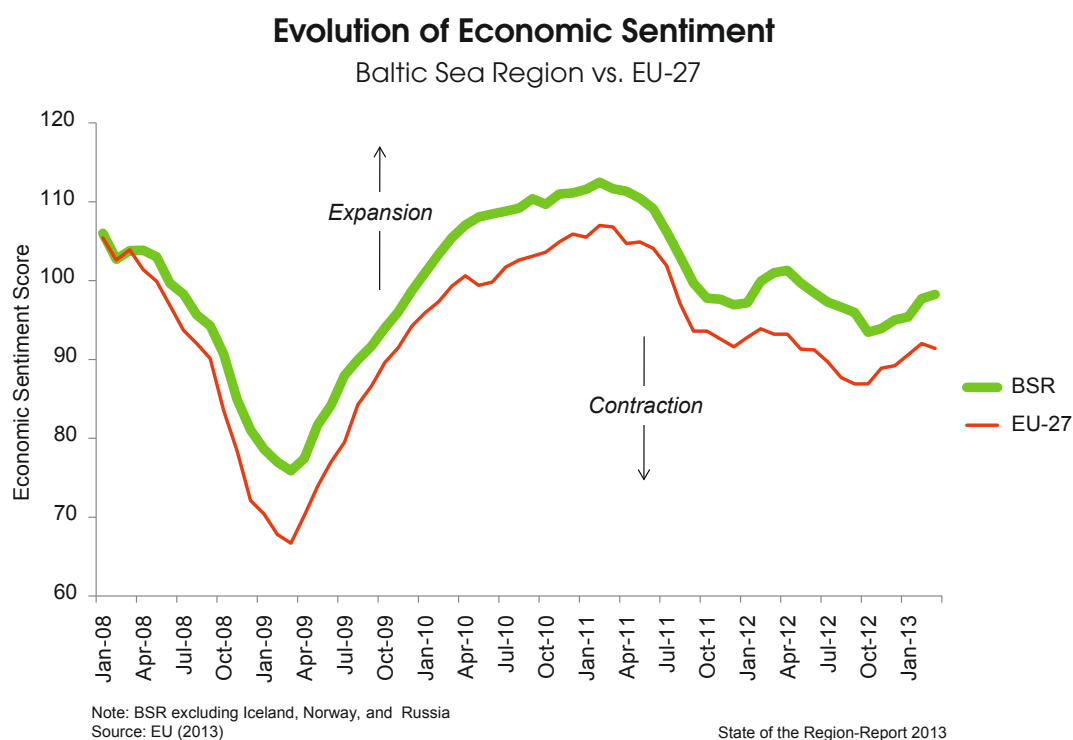
Iceland continues to suffer from the highest public debt level in the Baltic Sea Region, the results of the financial sector collapse in 2008/2009. 2012 was the first year since the crisis in which the country's debt ratio has fallen, a trend that is expected to continue in 2013 and 2014. Germany has at slightly above 80% of GDP the second highest public debt burden in the Region. Since 2010 debt levels have stabilized, and the constitutional balanced budget rule is aiming to enable a gradual reduction of current debt levels. Finland was the



country in the Region where debt levels increased the most in 2012, rising by about 5% to reach 53% of GDP. Estonia, at much lower levels of debt, had the second largest debt increase in 2012, followed by Denmark. For all other countries in the Region debt levels either dropped or remained stable.

Economic sentiment

When the last State of the Region Report was published in the first half of 2012, economic sentiments in the Baltic Sea Region had started to divert from the rest of Europe. Since then, however, the BSR ag-



gregate – calculated based on the survey data from the EU member countries in the Baltic Sea Region – has largely reverted back to following the EU trend. Until the fall of 2012 economic sentiments worsened, both across Europe and the Baltic Sea Region. Only around the end of the year the climate has stabilized and showed then signs of improvement. In March, the last month for which data is available, the Baltic Sea Region has then again seen sentiments improve while they slightly eroded in the EU average. Still, the overall economic sentiment indicator remains below 100 which is the dividing line between expansion and contraction. It is too early to tell which effects the latest turns in the European sovereign debt crisis might have on sentiments. There is also no clear support from regions outside of Europe, with the US recovering at a very slow pace and still being unable to find a solution to its own fiscal policy challenges and many emerging economies having reverted to a slower pace of growth.

Across the Baltic Sea Region, only the Baltic countries register economic sentiments above 100, the level signaling expectations of a continued economic expansion. Lithuania and Latvia are the only countries in the Region where sentiments have improved over the last 12 months. Sentiments are currently the weakest in Poland and Finland. Poland's economic sentiment indicator is even below

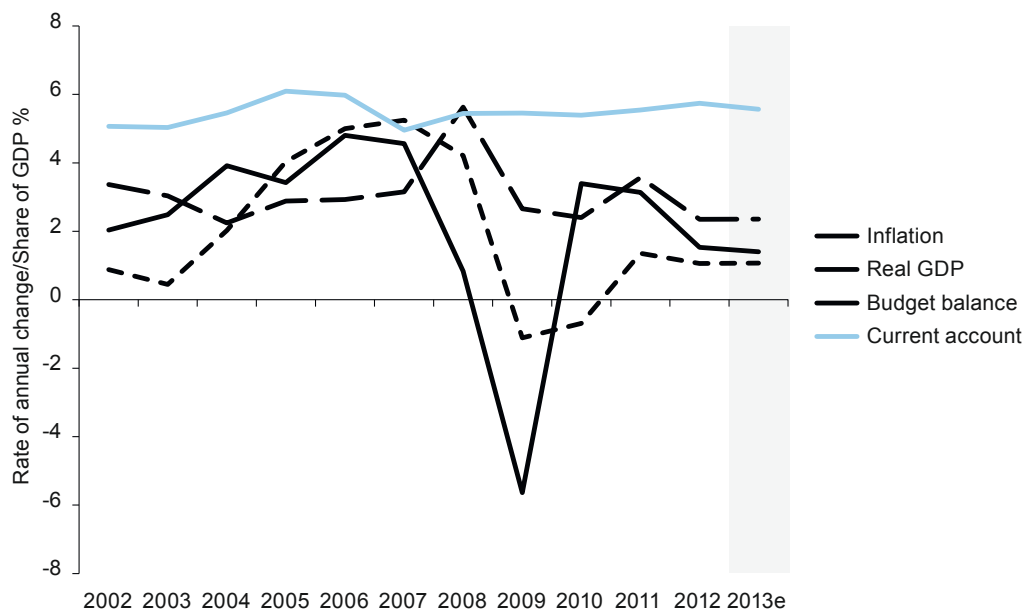
the EU-27 average, the only country in the Baltic Sea Region for which this is the case. Poland, Finland, and Sweden are the countries where sentiments dropped the most since last year's State of the Region Report. Relatively to the highest levels reached following the 2009 crisis, the Baltic countries are now at between 95% and 99% of that level, while the rest of the Region is at about 85% of the post-crisis high, which was reached in late 2010/early 2011.

Assessment

The Baltic Sea Region's post-crisis recovery has in 2012 slowed down significantly. Its performance remained ahead of European peers but regions elsewhere in the world, including North America, have registered stronger performance. Two effects hit the Region: The one-off effects of the post-crisis recovery were starting to wear off. And the increasing weakness of the European economy is leaving its mark.

Business investment has been particularly hit by these two factors. Low nominal interest rates as the result of a continuation of the highly unusual monetary policies that are starting to become the new normal have not been able to overcome the reluctance of companies to invest. Banks have used

Key Economic Indicators: Baltic Sea Region



Source: EIU (2013)

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much of the additional liquidity provided by Central Banks to improve their balance sheets rather than increasing lending. And those companies that had sufficient capital have kept their investments low. Private consumption, a much larger part of GDP, has still hold up well but is forecasted to slow down as well in 2013. Here financial market conditions have been important, keeping home owners' payments at moderate levels. More important, however, have been the relatively successful measures to keep unemployment at moderate levels relative to other parts of Europe.

Overall, the Baltic Sea Region remains in a significantly better position than the rest of Europe. Despite the challenges that affect the Region, it has been able to benefit from the positive repercussions between solid fiscal policies, more stable domestic demand, and lower unemployment. At the heart were more solid government finances: In the Nordics they were the result of reforms implemented in the wake of their own crisis in the 1990s. In the Baltics they were the result of low initial levels of debt – they did not assume any of the debt incurred by the Soviet Union – but also of stringent budget control, especially in Estonia. Poland's debt has been creeping up over time but stabilized below the 60% level often seen as a benchmark for sustainable debt. Germany's debt is much larger but financial markets have so far seen the strength of its econo-

my and its new balanced budget constitutional rule as sufficient to manage the debt dynamics. Norway and Russia are both special cases due to their larger revenues from natural resource exports. Stronger fiscal positions have allowed governments in most parts of the Region to react more forcefully to the 2008 crisis, and they have helped stabilized expectations about future economic trends. This has kept domestic demand at robust levels, easing the pressure on labor markets and ultimately also reducing the burden on public budgets from lower tax receipts and higher social security spending. The Baltics are a special case, but have in their austerity efforts benefits from the stronger export demand that their neighbors in the Region provided.

Despite these stabilizing domestic dynamics, the Baltic Sea Region is clearly not immune to the sluggish economy in the rest of Europe. Weaker export demand from what is naturally the largest trading partner of the Baltic Sea Region is one factor. For the countries outside the Euro-Zone, rising exchange rates add to the impact on their export industries. Financial market linkages are also present. Changes in financial market regulations and the uncertainty on financial markets are driving banks to reduce their risk exposure, also in the Baltic Sea Region. This reduces access to capital for business investment, even if the impact is much less dramatic than in the southern parts of Europe.

2. Foundations of sustainable prosperity: Competitiveness of the Baltic Sea Region

The State of the Region Report aims to provide policy makers in the Region with data and analysis that support fact-driven policies designed to raise the level of prosperity that the Region can sustain in the medium term. It also aims to provide investors and analysts looking at the Region with key metrics to understand its economic potential.

Economic research over the last few years has emphasized two important insights into the differences of prosperity and medium-term growth trends across countries: First, many factors influence these ultimate economic outcomes. Much prior research had focused on identifying which factors matter most ‘on average’, i.e. across time and locations. But there is an increasing realization in the academic research community that the findings from this work have led to misguided policy action. In particular, they have fueled a narrow focus on single policies, whether openness, education, property rights, anti-corruption, or institutional quality. In practice, however, successful policy reforms tend to require an integrated set of changes to unlock economic dynamism.

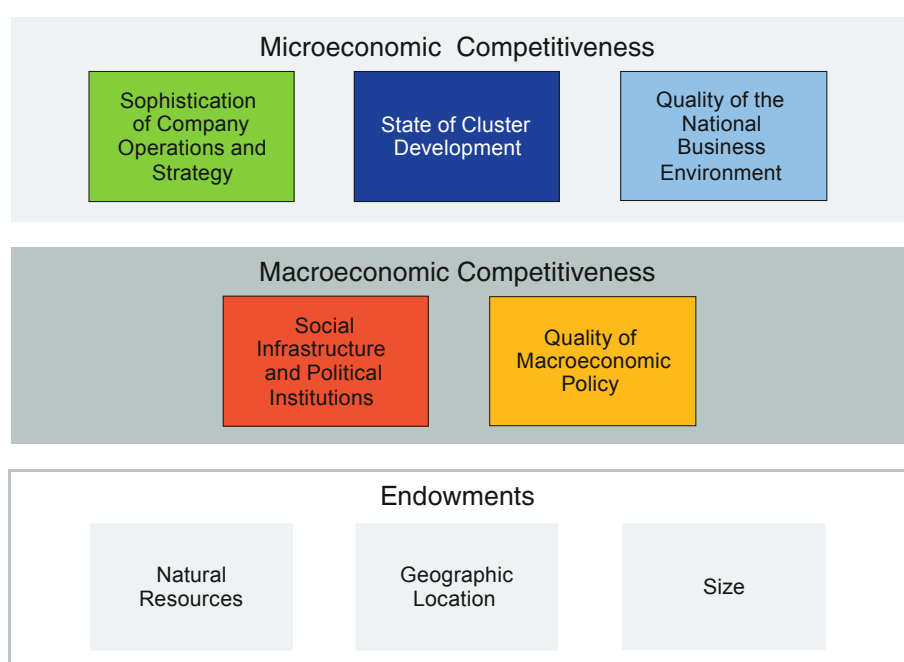
Second, the relative importance of the factors that matter depend on location-specific circumstances.

Much prior research had focused on generating generic ‘recipes’ that could be applied anywhere. But here, too, there is an increasing realization that the focus on general benchmarks, whether through the ‘Washington consensus’ in its different variations or the EU’s integrated policy guidelines, is problematic: their advantage is that they avoid extended political negotiations about what to do; their disadvantage is that they subscribe solutions that are not fully appropriate for any given situation.

These two insights have led to a renewed interest in data sets that cover that specific situation in individual countries along a broad range of indicators. The intention is to capture all factors that might matter, and to provide insights into their specific role in a given context. The State of the Region-Report draws on a number of these data sets to measure the competitiveness of the Region. Competitiveness is a summary term to describe the overall quality of the Baltic Sea Region as a place to do business given the many factors that matter. The figure below provides an overview of the main categories of relevant factors.

Data on competitiveness fundamentals is only one of the sources of information available to ana-

Competitiveness Fundamentals



lyze the quality of a location for business and draw implications for policy: *Prosperity outcomes* give a sense of how competitiveness is reflected in the standard of living, the ultimate objective of economic policy. *Intermediate indicators* are analytical indicators that track the translation of competitiveness through economic activity and structural patterns into ultimate prosperity outcomes. *Competitiveness fundamentals* are then the root causes of these higher level outcomes and indicators observed, and are the level at which economic policy can most effectively intervene. Becomes the relationships between individual fundamentals, indicators, and outcomes are multifaceted and complex, an integrated view of all three layers provides more robust insights, then overreliance on one individual dimension of data. . As in previous years, the State of the Region Report provides data and analysis at all three levels to support the competitiveness diagnostics for the Baltic Sea Region:

The final step of the competitiveness diagnostics is the explicit analysis of linkages across the three different levels to identify action priorities. Such an analysis needs to connect specific prosperity outcomes to unique patterns of intermediate economic activity and particular dimensions of competitiveness fundamentals. While a full-scale diagnostics along these lines is beyond the scope of this Report, the data and analysis provided enable policy makers across the Region to get a better understanding of the action priorities for improving competitiveness through collaborative action at the

Baltic Sea Region level. And it gives investors and analysts much deeper insights into the opportunities that exist in the Region.

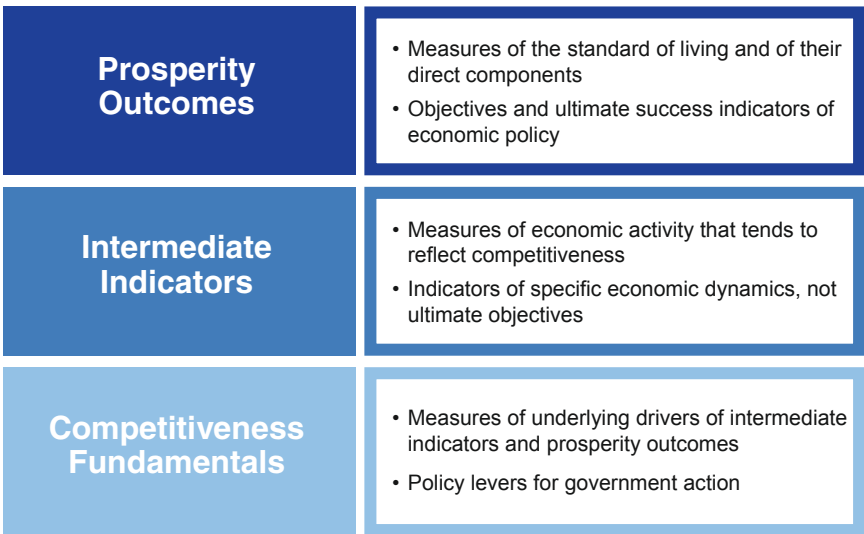
2.1 Prosperity outcomes

The central measure of prosperity we use is gross domestic product (GDP) per capita, adjusted by purchasing power parity. Additional insights into the drivers of prosperity can be derived from a decomposition that separates the impact of labor productivity and labor mobilization on overall GDP per capita.

Prosperity

The Baltic Sea Region remains one of the more prosperous regions in Europe. Its GDP per Capita (PPP adjusted) level reaches 94% of the EU-27 average, compared to just above 87% in 2005 and 83% in 2000. The dynamics in comparison to the EU-15, the more prosperous economies in the European Union, are roughly similar; the Region’s prosperity level is now at 85% of this group. Heterogeneity across the Region remains large: The Nordic countries and Germany are among the most prosperous countries in Europe and globally. The Baltic countries, Poland, and Russia register at the lower range of the EU, with Latvia as the poorest country in the EU apart from Bulgaria and Romania reaching a prosperity level similar to Chile, Malaysia, and Mexico.

The Three Layers of Competitiveness Assessment



Accounting for oil and gas in Norwegian and Russian GDP measures

Overall GDP measures the total output of an economy, and provides in this respect an important indicator of both total productivity (labor productivity times labor mobilization) and prosperity. Large oil and gas sectors, however, complicate the interpretation of this data. From a production/productivity perspective, the sale of oil and gas represents the exchange of an asset, i.e. natural resources, into capital, not the production of anything that didn't exist before. This exchange is not free; it is capital intensive. But it employs only a very small share of the labor force, so that measures of average labor productivity are huge affected by the presence of a large natural resource extracting sector. From an income/prosperity perspective, many countries, including Norway and Russia, put a share of their natural resource export revenues into a fund. This reflects that nature of natural resources exports as an asset swap rather than the generation of wealth. It also means that this part of GDP is not available for current consumption. Both of these factors suggest that one has to be careful in the treatment of oil and gas activities

in GDP when making cross-country comparisons.

For this Report, we have decided to adjust the total GDP (PPP adjusted) for both Norway and Russia to have more comparable data on prosperity and labor productivity. In Norway, there is both data on the share of the oil and gas sector in GDP and a distinction between the mainland economy and total economy. We use the mainland economy data, which accounts for about 80% of total GDP and adjusted the data in the Conference Board's main Total Economy Database accordingly. For Russia, the adjustment is more difficult. Direct revenues from oil and gas were around 10% of GDP. But there has been an ongoing discussion that the official numbers of the oil and gas share in GDP might be underestimating their true importance, because companies in the sector shift a lot of their profits to related service providers in other sectors. We adjust the total GDP data in the Conference Board's main Total Economy Database by a conservative 15%. For both countries, we keep the adjustment fixed over time; growth rates reported are thus unaffected.

The Region's prosperity growth rate has slowed down to 1.7% in 2012, after reaching more than 3% in the previous two years. This slowdown has, however, been less pronounced than in the rest of Europe, where growth dropped by 1.8%-points (EU-15) and 2.2%-points (EU-8) respectively. Among European regions, the Iberian Peninsula has now registered five years of prosperity decrease; it has lost close to 8% of GDP per capita during this period, and 2012 was the year with the second largest drop at -2.2%. The Danube region had the largest growth slowdown in 2012, dropping -2.1%-points to register a prosperity growth rate of 0.5%. The group of countries most affected by the European sovereign debt crisis (Portugal, Ireland, Greece, and Spain) had the largest prosperity contraction in 2012 with -2.6%; they have lost 10% of their prosperity level since 2007.

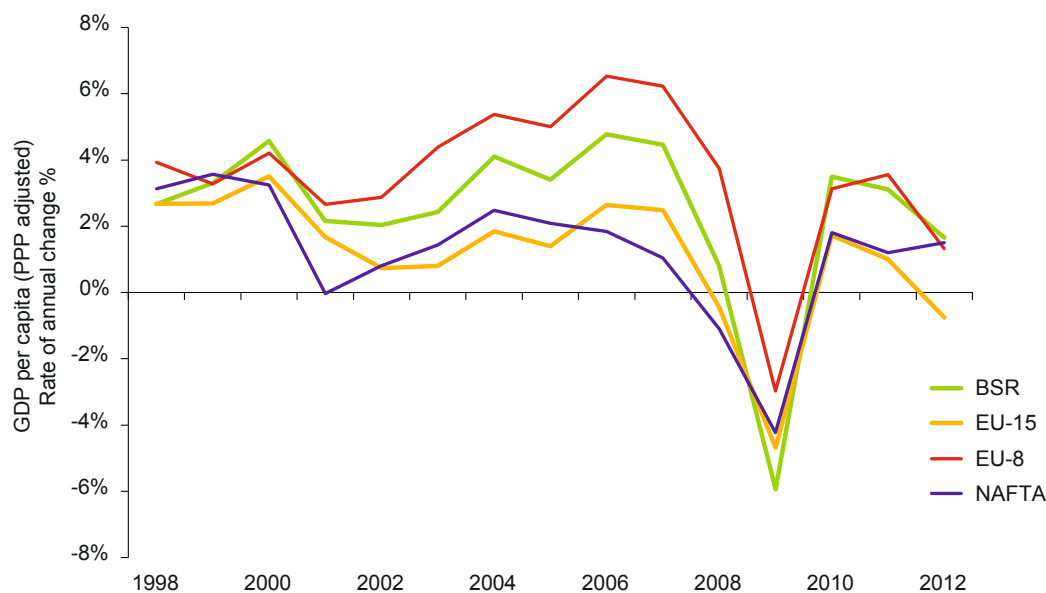
In the rest of the world the picture was heterogeneous, with growth picking up in Oceania, the ASEAN region, and North America while slowing down in the Asian tiger economies, Latin America, and among the BRICS countries. Prosperity growth levels were still highest in the BRICS at 5.4%; there prosperity is now at roughly 25% of

the Baltic Sea Region level. The Asian tigers (Singapore, Taiwan, South Korea, and Hong Kong), which had a prosperity level equal to the Baltic Sea Region fifteen years ago, are now about 20% ahead in GDP per capita terms.

The data for the Baltic Sea Region shows a continuation of the catch-up to average EU level that has been visible over the last 15 years. Over the entire period, the Baltic Sea Region has reduced the GDP per capita level by close to 1% every year. Unsurprisingly, the catch-up rate has been highest for the Baltic countries and Poland, where it has reached close to 1.5% on average, despite the deep crisis that hit the Baltics in 2009. But even the Nordics, already ahead of EU-27 prosperity levels, gained close to 0.5% on their European peers. And Germany, which had seen its relative performance deteriorate until 2005 has since then regained almost all of the relative prosperity loss incurred in the previous decade. As was discussed in last year's Report, this data suggests not only that the Baltic Sea Region has created the conditions for catch-up, but that its leading economies are also on a higher growth path than

Prosperity over Time

Selected Regions



Source: Conference Board (2013)

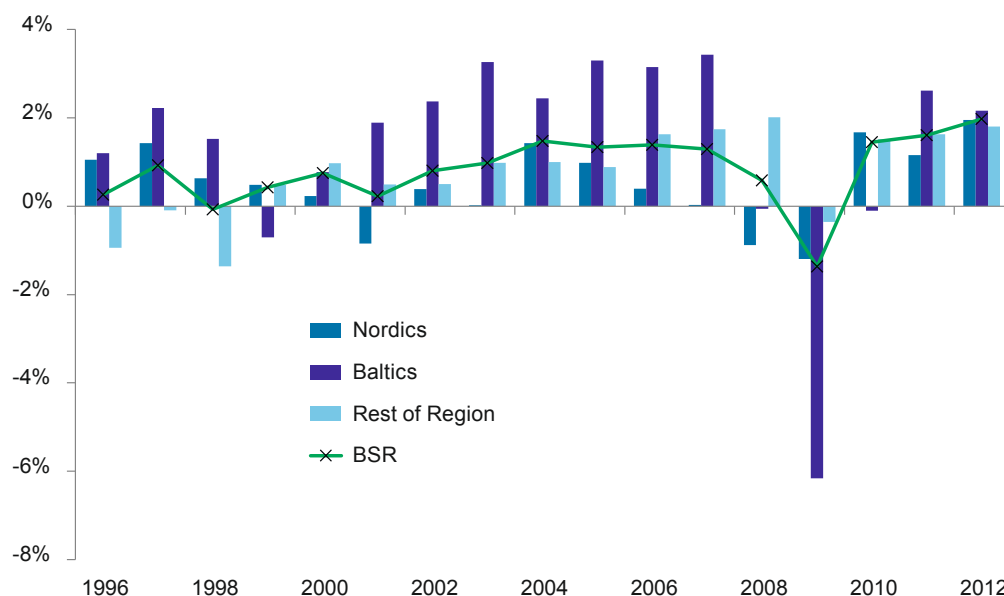
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their European peers. Whether the same is true for the Baltics and Poland remains to be seen. But since their prosperity is only at 50% resp. 65% of the EU-27 level at the moment, the traditional catch-up mechanisms will be sufficient to drive robust growth for quite some time.

Within the Baltic Sea Region, Norway, Iceland, and Sweden register the highest prosperity levels, followed by Germany, Denmark, and Finland. Poland and Estonia lead the group of lower prosperity countries in the Region, followed by Lithuania, and finally at similar levels Latvia and

Baltic Sea Region Prosperity Catch-Up

Annual Change of GDP per Capita (PPP adj) relative to EU-27

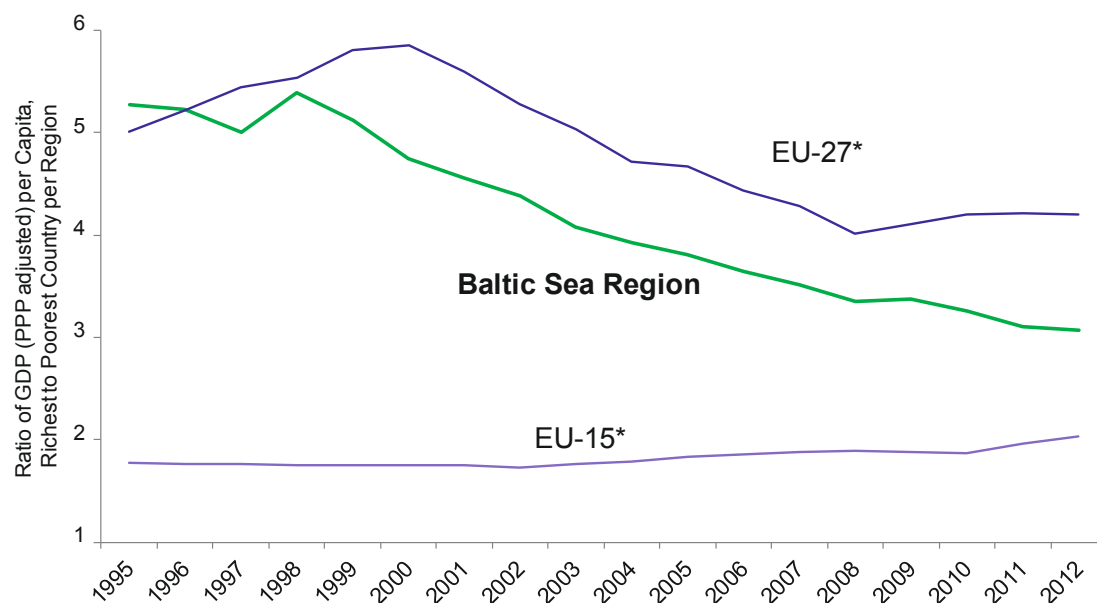


Note: Norway and Russia levels adjusted for natural resource sector; Luxembourg excluded
Source: Conference Board (2013)

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Prosperity Dispersion Within Cross-National Regions

1995-2012



Note: Norway and Russia levels adjusted for natural resource sector; Luxembourg excluded
Source: Conference Board (2013)

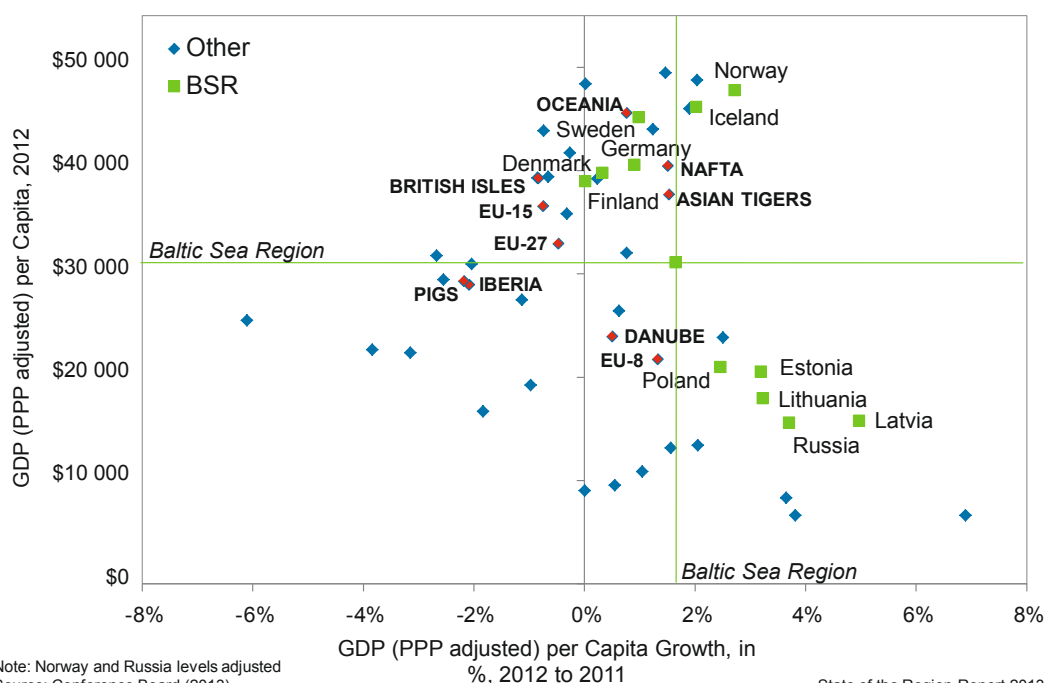
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Russia. Prosperity dispersion across the Region remains significant. But the overall pattern of catch-up continues to reduce prosperity differences. Before 2000, prosperity levels in the richest country in the Region, Norway, were more than five times as high as in the poorest country, Latvia. This ratio

has constantly dropped and is now down to slightly more than three times. These dynamics are different from the rest of Europe. Among the EU-15, a group of relatively homogenous Western European countries, the ratio of richest to poorest countries has increased to two by 2012. Among the broader

Prosperity Level and Growth

Selected Countries



Note: Norway and Russia levels adjusted
Source: Conference Board (2013)

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group of the EU-27 it remains at 4.2. Historically this level of prosperity dispersion is still nothing unusual. But the convergence under way among EU countries since 2000 remains more permanently disrupted since the 2008 crisis.

In terms of the growth rate of GDP per capita, the Baltic countries remained on top in the Baltic Sea Region. Growth rates did, however, drop significantly, leaving Latvia as the country with the fastest prosperity growth at 5%. Latvia's prosperity levels remains about 10% below its 2007 high mark. Lithuania (95% of the 2008 maximum) and Estonia (98% of 2007) have already regained more of the ground lost during the recession. Russia, Norway, Poland, and Iceland registered prosperity growth between 2% and 3.5%. For Norway and Iceland these were historically high rates, while Poland and Russia had reached higher growth in previous years. Sweden, Germany, Denmark, and Finland registered between 0% and 1% prosperity growth, a clear deterioration compared to the solid growth in 2011.

Last year's State of the Region Report discussed additional perspectives on inequality and life satisfaction that give further insights in the quality of life across the Baltic Sea Region. We reproduce the inequality data below; no new data has become available since last year. While economic activity as measured by GDP per capita is important, there

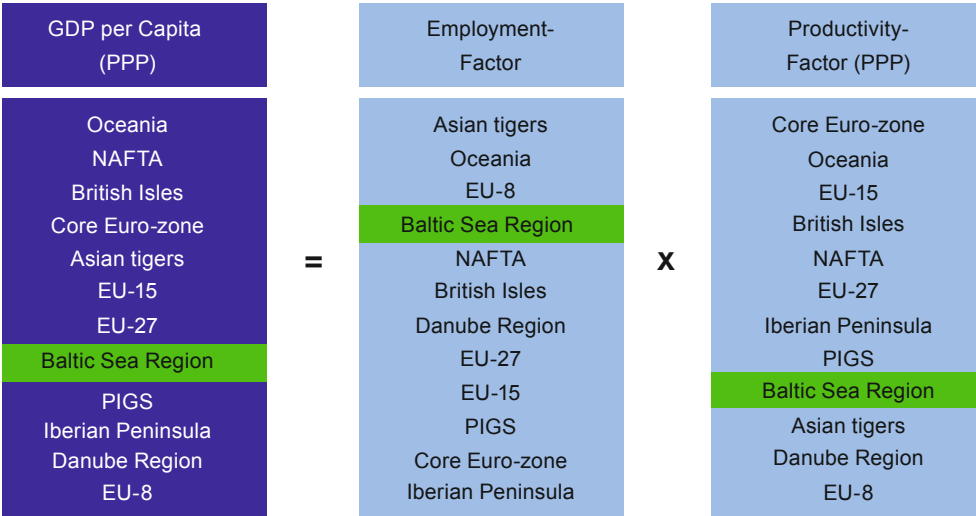
are many non-income related factors that matter as well. Overall, it turns out that across the Baltic Sea Region these other data sources confirm rather than qualify the relative ranking of countries based on GDP per capita. More prosperous countries in the Region also tend to have lower inequality and higher life satisfaction. If anything, the inclusion of these two measures suggests that the differences in the quality of life across the Baltic Sea Region are larger than a pure GDP analysis would suggest.

Prosperity accounting

Prosperity can be mathematically decomposed in labor productivity and labor mobilization. In this Report, we operationalize these concepts through GDP per hour worked (PPP adjusted) and hours worked per capita. The data on hours worked is not very reliable, especially for Russia and the Asian countries, but gives a directionally interesting perspective.

Compared to other regions, especially in Europe, the Baltic Sea Region continues to do better on labor mobilization than on labor productivity. Oceania remains to be the only peer region that outperforms the Baltic Sea Region on both dimensions; the Danube region is again the only one to perform worse on both. The EU-8 continues to lag significantly behind on labor productivity, but has

Prosperity Decomposition
Selected Cross-national Regions in 2012



Note: Working hours for Russia are estimated
Source: Groningen Growth and Development Centre and The Conference Board (2013), authors' calculations

Prosperity Decomposition

Baltic Sea Region Countries in 2012



Note: Working hours for Russia are estimated
Source: Groningen Growth and Development Centre and The Conference Board (2013),
authors' calculations

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again move slightly ahead of the Baltic Sea Region on labor mobilization. All other regions are strong in one but weaker in the other dimension.

Within the Baltic Sea Region, Germany and Russia continue to report the most diverse performance across the two components of prosperity. Germany ranks second in the Region on productivity while it does worst on labor mobilization. For Russia the pattern is exactly the opposite (with less

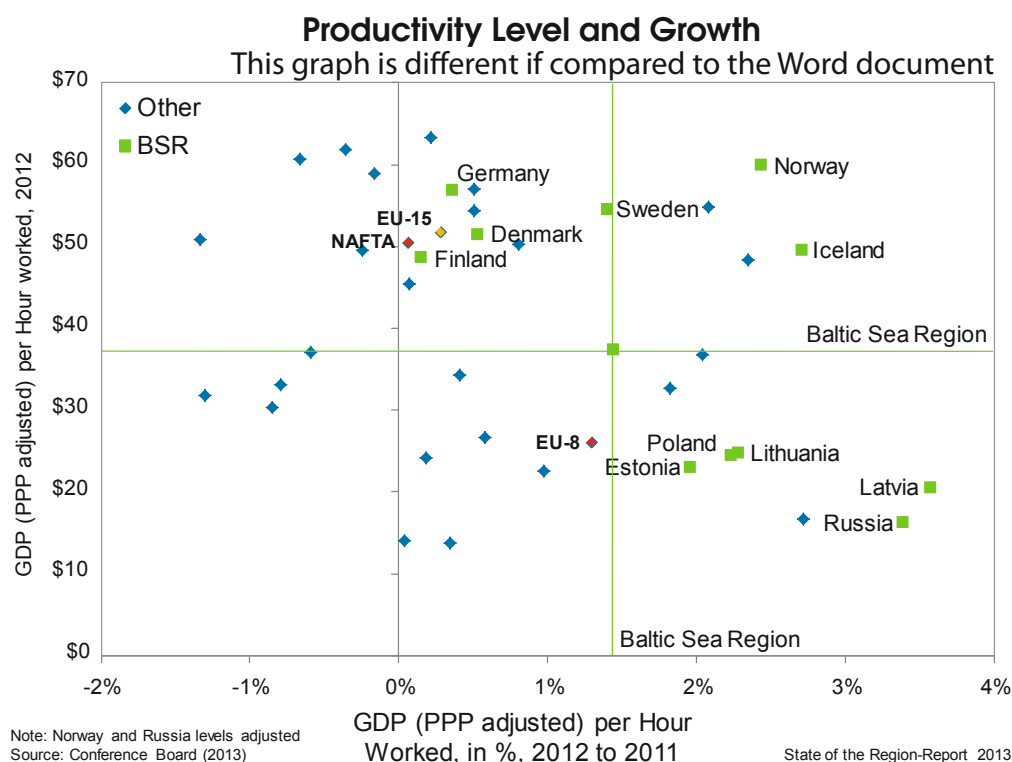
reliable data on hours worked). The Nordic countries combine equally strong productivity with a much more solid labor mobilization record. The Baltic countries and Poland rank all relatively low on labor productivity. Estonia and Poland have reached more robust labor mobilization which drives their higher overall performance.

Labor productivity across the Baltic Sea Region, measured by GDP (PPP adjusted) per hour

Labour Productivity Growth over Time

GDP (PPP-adjusted) per hour worked





worked, increased by 1.4% in 2012, a significant slowdown relative to last year. Within Europe the Iberian Peninsula performed best at 2.1%, while regions in rest of Europe grew more productivity more slowly at rates between 0.3% and 1.6%. Among international peers performance varied between 0.1% in North America and 2.1% in Oceania.

Within the Baltic Sea Region, Norway continues to register the highest level of labor productivity, measured by GDP per hour worked. The country's 2.4% productivity growth in 2012 was the highest for a decade (Norwegian and Russian productivity and productivity growth data is biased by the large oil sector). In terms of long-term trends in productivity growth Norway still ranks lowest in the Baltic Sea Region. Germany, the country with the Region's second highest productivity level, registered at 0.4% the lowest annual productivity growth among its Baltic Sea Region peers. Within the EU-27, the UK and Greece performed much worse with a productivity decrease of more than 1%. The Baltics, Poland, Russia, and Iceland all registered solid 2012 productivity growth, despite slower growth rates than last year (Estonia, which had negative productivity growth in 2011, was the exception). Denmark and Finland both registered disappointing productivity growth at 0.5% and 0.1% respectively. For both countries this was a further deterioration compared to 2011

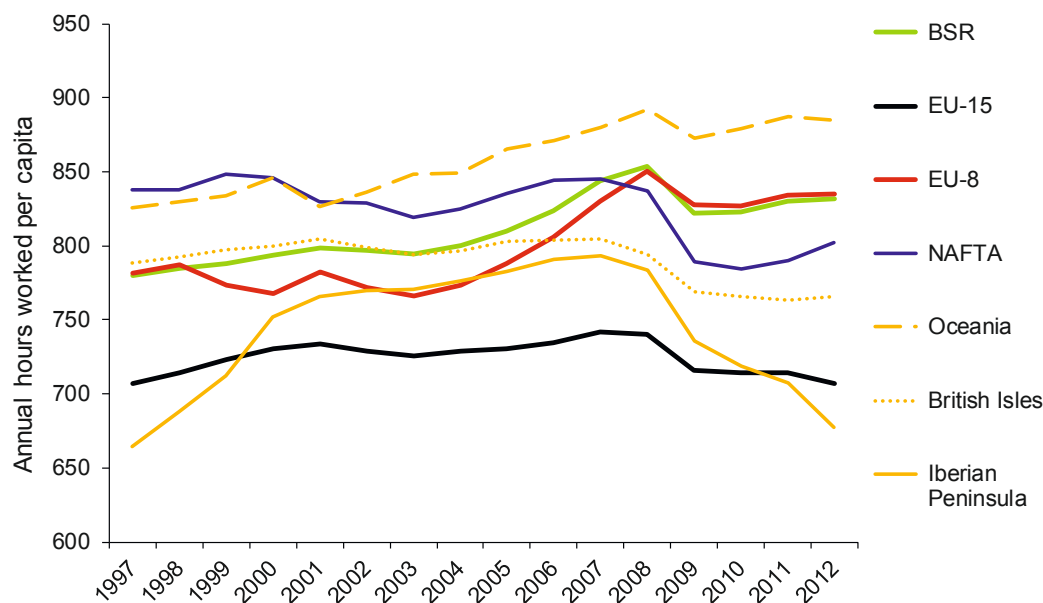
and is below their average for the decade (0.7% and 1.3%). Across the Region, only Iceland and Norway registered 2012 productivity growth ahead of their average productivity growth rate over the previous ten years.

Labor mobilization in the Baltic Sea Region, measured by annual hours worked per capita, has essentially been flat in 2012. The Region continues to rank second on hours worked per capita among the European regions tracked, closely behind the EU-8 Central European countries. Changes in labor mobilization were generally low in 2012, with the exception of the Iberian Peninsula where they dropped by 30 hours, or almost 5%. Outside of Europe the increase in labor mobilization in the NAFTA area signals the slow recovery underway in North America. The net effect of positive job creation and a lower share of the working age population actively searching for a job has, however, been modest compared to previous recoveries.

Within the Baltic Sea Region, labor mobilization levels had before the 2008 crisis clustered in three clearly distinguishable groups: The Iceland, Estonia, and Latvia with labor mobilization rates around 1000 hours per capita and year, Germany with low rates at 650, and the rest close to 800. Since then, labor mobilization levels have started to be distributed much more equally in a range between 700

Labour Utilization over Time

Selected Regions



Note: Russia data estimated at 2000 hours per employee and year
Source: Groningen Growth and Development Centre and The Conference Board (2013), authors' calculations

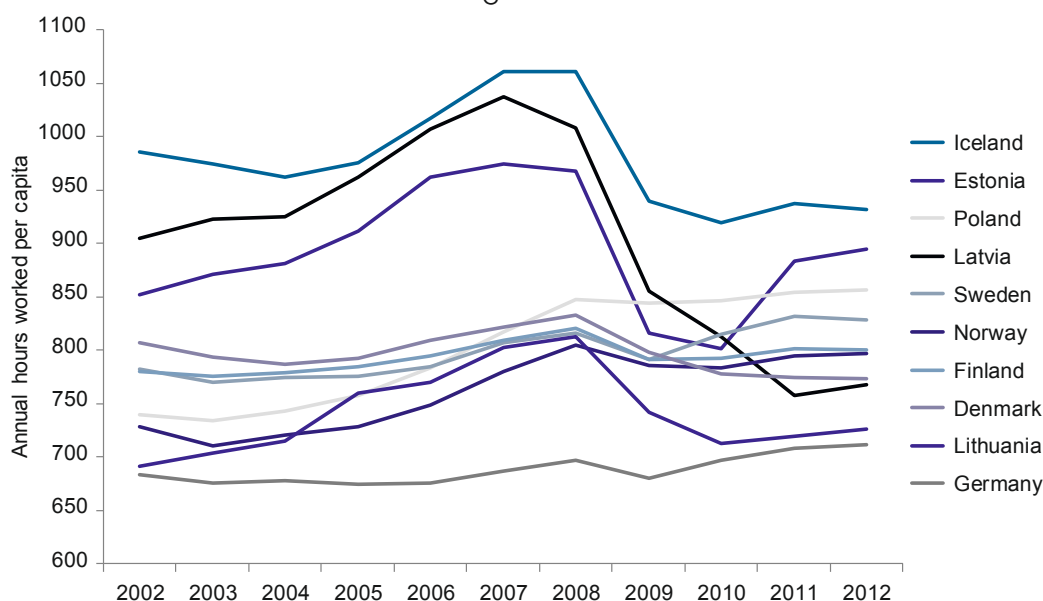
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and 900. There were relatively limited changes in 2012, largely confined to the Baltic countries which all gained about 1% labor mobilization. Sweden, Poland, and Germany are now at their highest level of labor mobilization since 1995; Russia, Norway, and Finland are close. For Latvia, labor mobilization is conversely only at 73% of the 2007 level; the crisis

has left a deep mark, despite the recovery in terms of GDP. The other countries, i.e. the rest of the Baltics, Denmark, and Iceland, are at around 90% of their historical top levels. This is broadly similar to (at the lower end) the group of European countries most severely hit by the sovereign debt crisis-countries and (at the higher end) the NAFTA countries.

Labour Utilization over Time

Baltic Sea Region Countries



Source: Groningen Growth and Development Centre and The Conference Board (2013)

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Assessment

The Baltic Sea Region's prosperity growth has in 2012 slowed down significantly. Its performance remained ahead of European peers but regions elsewhere in the world, including North America, have registered stronger performance.

In the short-run, the lower demand growth has to be accommodated on the supply side. So far, slower labor productivity growth has been the key mechanism to do so. Labor utilization has still remained stable, a key factor in this still more favorable labor market performance of the Baltic Sea Region compared to its European peers. While the labor productivity performance has been muted everywhere, the North American labor market showed small signs of improvement while Southern Europe suffered from a significant deterioration in labor market conditions.

Whether the current trends in the Region are sustainable depends on the length of the GDP growth slowdown and the development of wages. As long as companies continue to report solid profits, they can deal with a temporary weakening in productivity growth. If, however, demand drops more permanently and wage costs start to increase, a stronger labor reaction is likely.

In the longer-run, the dynamics of productive capacity growth will play a stronger role. Here the data now suggests that the Baltic Sea Region remains on a robust catch-up path. The Region is consistently growing faster than its key European peers that in many ways represent the most natural comparison group. This pattern is true for the Baltic countries, suggesting that the overheating crisis of 2008 was a deep downturn but not a sign of a fundamentally flawed growth model. But it is also true for the most advanced parts of the Baltic Sea Region, suggesting that they are on a consistently higher growth path than their European peers.

The crisis had increased the high level of economic heterogeneity that characterizes the Baltic Sea Region. Different countries had been affected in highly different ways, and differed in their ability to react. The recovery partly reflected these differences, with those hit the hardest bouncing back the strongest. But the slowdown in growth in 2012 was much more evenly felt across the Region. All countries were affected by the weaker overall conditions in the European economy, and one-off effects from the post-crisis adjustment lost in importance.

2.2 Intermediate indicators of economic activity

Prosperity is created, when competitiveness fundamentals give rise to economic activities that ultimately result in wealth. This section includes an analysis of five groups of intermediate indicators of economic activity to gain insights into the underlying competitiveness of the location. Due to the earlier data of this year's Baltic Development Forum Summit, most of the international data sets covering these indicators have not yet been updated. We focus on capturing key data from the existing data, including the recent data on exports and investments that was not available for last year's Report.

Trade

The Baltic Sea Region is dominated by small open economies with relatively high level of trade intensity (the ratio of exports and import values relative to GDP). Total trade is expected to reach 89.5% of GDP in 2013, virtually equivalent to the historical high mark reached in 2008.

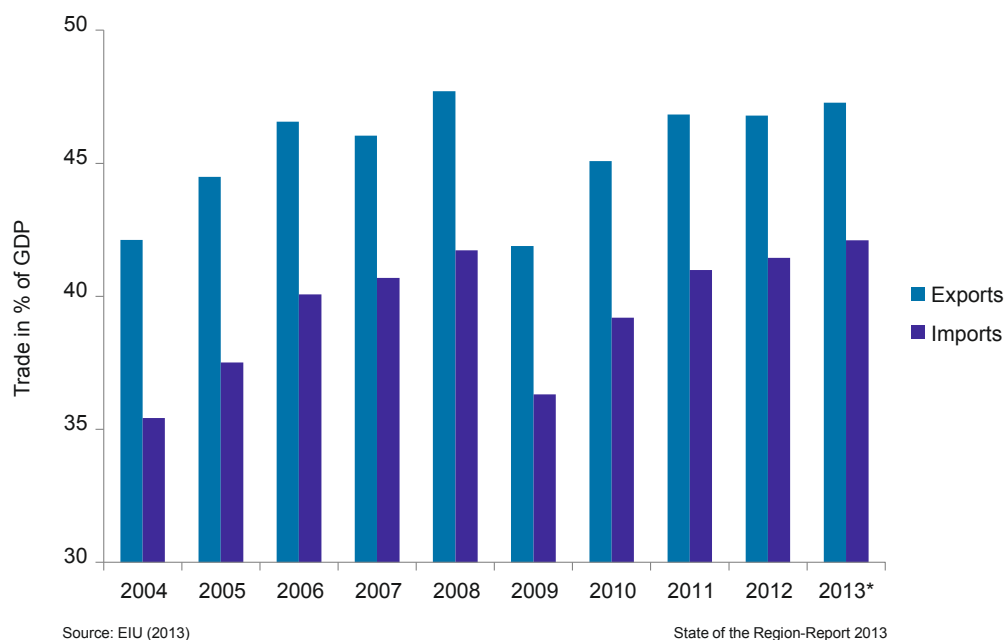
The total value of exports from the Region in 2012 (including cross-border trade within the

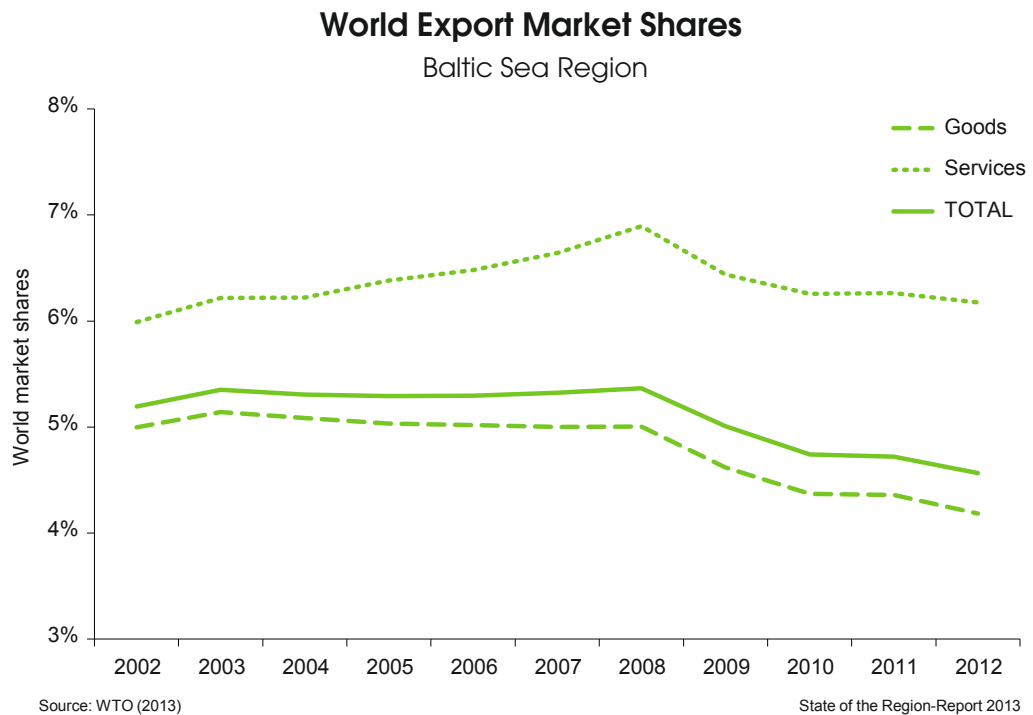
Region) reached slightly more than \$1trn. This is about \$30bn or 2.8% less than in 2011, a drop that is equivalent to more than the entire annual exports from Estonia. Exports have thus been one of the clearest indicators of the 2009 crisis (when exports dropped by 25%), the subsequent recovery in 2010 and 2012 (with +13% and +17% export growth respectively), and now the renewed slowdown in economic dynamism.

The Baltic Sea Region has in 2012 continued to lose global market share. The speed of market share loss has picked up, but has not reached the pace of the 2009/2010 crisis years. While these latest trade figures are consistent with a structural loss of market position by the Baltic Sea Region, it is very likely to also be affected by the temporary impact of the slowdown in Europe, still by far the largest market of the Baltic Sea Region.

The Region continues to do better on services, where export values have been slightly growing. The Baltic Sea Region is more oriented towards service exports than both the EU-27 and the world economy overall. But even for the Baltic Sea Region goods trade continues to be about three times as large in terms of overall value, despite the lower exports in 2012.

Trade Intensity of the Baltic Sea Region





In terms of individual countries across the Baltic Sea Region, Lithuania and Latvia where the only economies in addition to the oil and gas exporters Russia and Norway that registered growing exports in 2012. For Lithuania the growth was at 6%, for Latvia at 5.3% - for both a far

cry below the 33% export growth registered in 2011. Finland saw its growth contract by 8%; the country had already registered the lowest export growth in the Region in 2010 and 2011. Denmark, Germany, and Sweden registered exports between 4% and 5% below the previous year.



Last year's change have further reinforced the trends of the last decade, where the most developed countries in the Baltic Sea Region have continuously lost market share. This was a process that started at around 2003/2004, when the global economy regained its footing following the IT/Telecom bubble at the beginning of the decade.

Most exports from the Baltic Sea Region continue to be destined for markets nearby, as is the case in most economies around the world. The share of intra-Baltic Sea Region (BSR) trade has stayed at roughly 19% of exports relatively stable over the last decade. The Baltic countries, Estonia and Latvia in particular, rely heavily on trade with other countries in the Region, a pattern that has even increased in recent years. Roughly 70% of all exports go to markets in Europe, a share that has slightly dropped over the last decade. Iceland and Poland rely most on European markets with traditionally more than 80% of their exports going to EU member countries. Russia has due to its geography and focus on oil exports the lowest share of its exports going to the EU; but even for Russia the share of EU member countries in its overall exports is above 50%. This large role of Europe in the Baltic Sea Region's trade is a key transmission channel through which the current

European economic crisis affects the Baltic Sea Region,

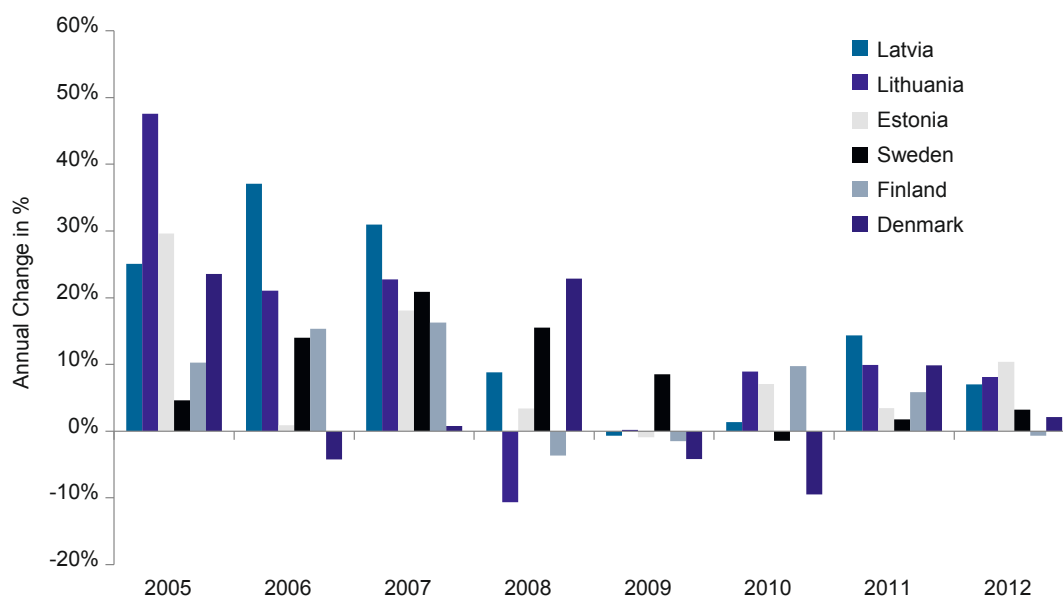
Foreign Direct Investment

Foreign direct investment (FDI) continues to be an important way through which the Baltic Sea Region participates in the global economy. The international FDI databases, maintained by UNCTAD, have not been updated to include 2012 data. The available data suggests, however, that the global trend has been strongly negative, with overall FDI inflows dropping by close to 20% and in Europe by around 35%.

In the Baltic Sea Region, Denmark, Germany, and Poland saw FDI inflows drop by around 80%, while for Sweden the reduction was more in line with the EU-wide trends. The value of inward investment stocks has in the meantime developed more positively in individual countries within the Baltic Sea Region, but even here the trend was less encouraging than in 2011. The improvement in the inward FDI stock is likely to be a reflection of the stronger growth of Baltic Sea economies driving stronger profits in these affiliates of foreign companies in the Region.

Change in Inward FDI Position

Selected BSR Countries



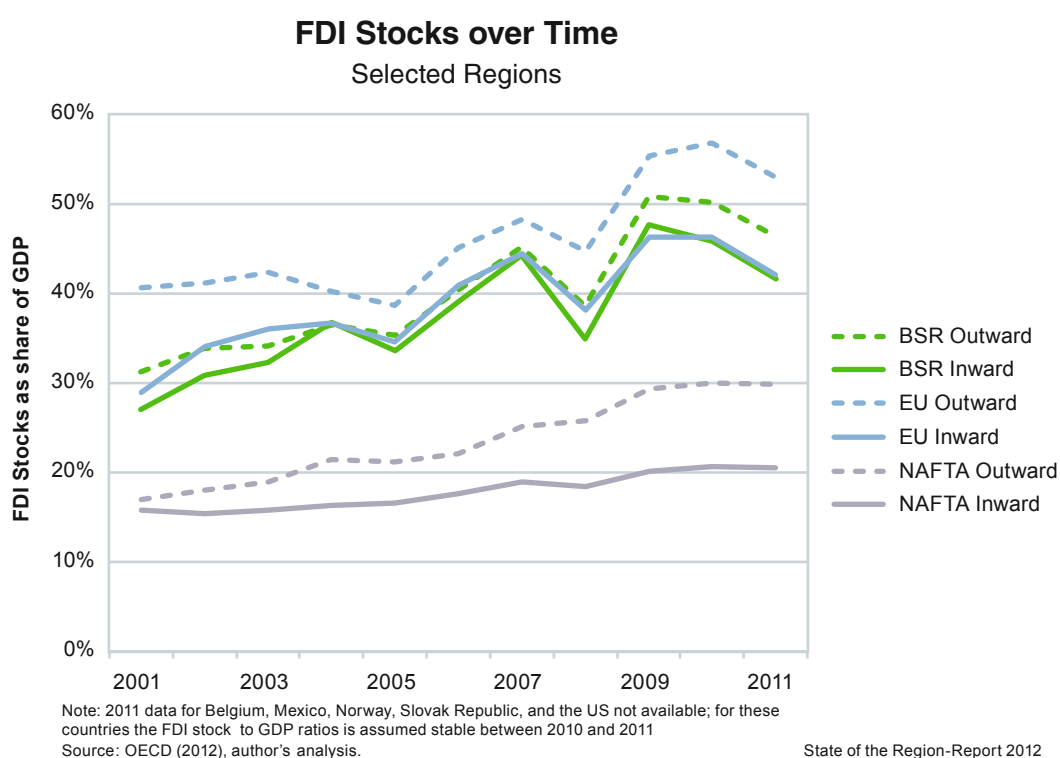
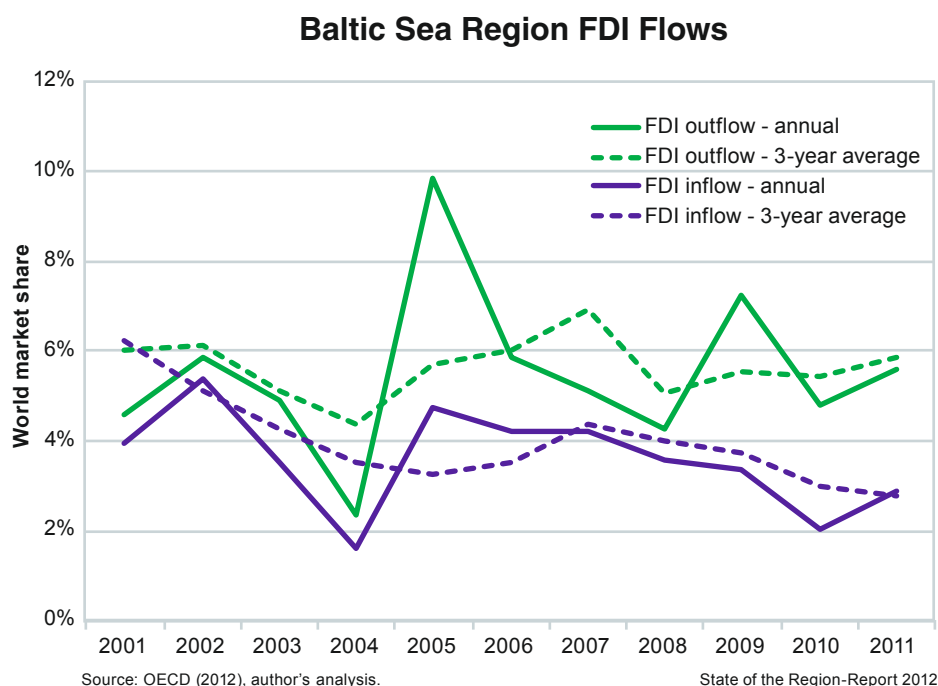
Source: National Central Banks (2013)

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The data up to 2011 indicated the strong FDI intensity of Baltic Sea Region countries. It also indicated that while the Region's position as an investor abroad remains strong, its relative attraction for foreign investors is slowly receding. This gap is not as strong as for the EU or for NAFTA overall, but it is getting increasingly visible. Compared to these large regions, the Baltic Sea includes more econo-

mies on a catch-up path that should capture larger FDI inflows.

Among Baltic Sea Region countries, there are three groups of countries with distinct patterns of FDI activity: Poland and the three Baltic countries remain largely active as destinations for inward FDI. In Iceland, Norway, Russia, and Sweden inward and outward FDI are roughly balanced. Den-



mark, Finland, and Germany have foreign FDI stakes that are significantly larger than the inward FDI that they have attracted.

Domestic Investment

Upgrading of the capital stock remains an important way to improve productivity. Higher capital intensity is one important factor, the changes in technology and operational practices driven by new equipment are another. The share of capital investments tends to be high when countries still have a relatively modest capital stock, but have created conditions in their economies where the profitability of adding new equipment is high.

The Baltic Sea Region rate has for many years had an investment rate below the level of the EU-15. Since 2006, however, the Region's investment rate has surpassed its advanced European peers, if initially only by a small margin. The gap increased already in 2011 and has now opened up even more in 2012. The outlook for 2013 suggests that this trend will continue, based both on rising investment intensity in the Baltic Sea Region and falling investments in the EU-15. In both regions investment growth is actually falling, but in the Baltic Sea Region less so than overall GDP. The Baltic Sea

Region follows more closely the North American trends, albeit at a higher level.

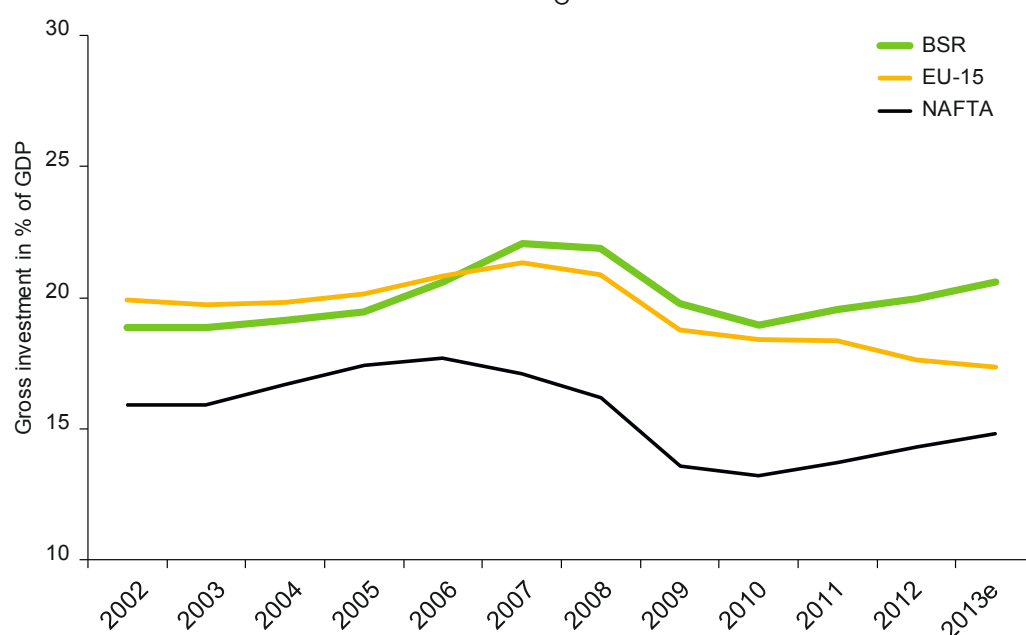
Among Baltic Sea Region countries, Estonia registered the highest increase in investment rates in 2012. Estonia has at 27% the highest share of investment in GDP in the Region, slightly ahead of Russia, Latvia, and Norway. In the Baltic countries, Iceland, and Denmark the investment rate remains significantly below its average over the last ten years.

Innovation

Creating new products, services, and ways to provide them to consumers is critical for future value generation, increasingly so as countries become more prosperous and move to the global knowledge frontier. Innovation on which productivity growth is based stretches from academic invention to new patents and, ultimately, new types of business activity. While many of the indicators used to track innovation are biased towards academic research, they still contribute to the understanding of the competitiveness profile of a location. The EU's Innovation Union Scoreboard provides a broad range of data on innovation outcomes. While the data comes with a time-lag (depending on the indicator the latest data now available is from between 2008

Domestic Investment over Time

Selected Regions

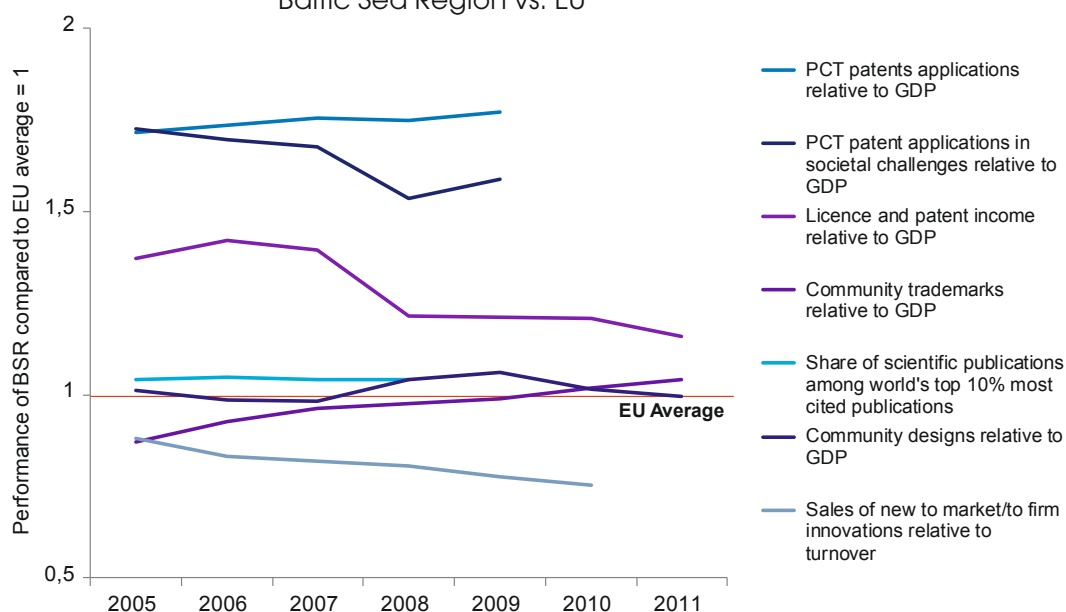


Source: EIU (2013)

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Innovation Outcomes

Baltic Sea Region vs. EU



Source: IUS (2013), author's analysis

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and 2011), the time series indicates that the outcome patterns are highly stable over time.

The Baltic Sea Region (excluding Russia, which is not covered by this source) excels in patenting intensity, which is strong both relative to population size and to the size of the economy. This is the case for patenting in general but also for patents in areas related to what the EU calls 'societal challenges', here largely issues related to energy efficiency and the environment. It also ranks very high on scientific pub-

lications with co-authors from other countries (not shown on the graph); a reflection of the outward orientation but also the small size of the countries in the Region. On license income the Region does outperform peer countries, but the advantage has been eroding over time. In most other dimensions of innovation performance, here measured in terms of the use of trademarks and designs relative to GDP and the quality of scientific publications, the Baltic Sea Region matches the EU average. In the sales share of

Entrepreneurship in the Nordic countries

Entrepreneurship, especially high growth entrepreneurship by so-called 'gazelles', is an important feature of dynamic economies and as innovation rates a leading indicator of future economic performance. Internationally comparative data on high-growth entrepreneurship is hard to get but a recent study provides interesting insights into the current situation in the Nordic countries. The Nordic countries have particularly accessible firm level statistics that enable such analysis.

On most indicators tracked in the study, the Nordic country does on average as well or slightly better as the OECD average. But there are significant country-specific differences: Norway and Denmark have more than 20% higher entry rates of companies (new companies relative to the stock of existing companies) relative to their international peers, while Finland only registers half as

many new entrants. Norway, followed by Sweden, also outperforms the OECD average on the share of gazelles, measured as companies with employment growth of at least 20% annually over a set period, while here Iceland ranks far lower. Finland doesn't rank high on the share of Gazelles among new entrants, but has the highest share of Gazelles to reach at least 50 employees by the end of the measurement period. In total, Gazelles created about 45,000 jobs between 2006 and 2009 – equivalent to about 15% of total the net job creation in the Nordic countries during this period.

For more background see: Glenda Napier, Petri Rouvinen, Dan Johansson, Thorvald Finnbjörnsson, Espen Solberg, Katrine Pedersen (2012), The Nordic Growth Entrepreneurship Review 2012, Nordic Council: Copenhagen,

innovations, it even underperforms. Except for patenting, the trend has been slightly downward across the indicators captured by this analysis.

Across the Baltic Sea Region countries, the Nordic EU members and Germany rank above the EU average on almost all of the indicators. Finland has below EU average community designs; Sweden a smaller share of sales from innovations; and Germany has smaller license incomes. Norway and Iceland come close on many of these indicators, with lower positions in the indicators closer to market activities. Estonia performs exceptionally strong on patenting and quite high on trademarks, but not in other areas. Last year's Report discussed the isolation of Estonia's science-based industries from the rest of its economy. Latvia, Lithuania, and Poland rank below the EU average on all indicators, with stronger positions on those indicators that are closer to market activity.

Structural composition

Two years ago the State of the Region Report took for the first time a closer look at the structural composition of economies in the Region. The Region is home to a significant manufacturing sector, which drives strong exports in many products from metal manufacturing industries, the automotive industry, and production technology. The Region also has a significant position in biopharmaceuticals and communication technologies, often associated with high levels of R&D, as well as in forest products and some food processing sectors, often associated with low levels of R&D. Not surprisingly given the geographic nature of the Region, transportation and logistics plays a significant role in many of its parts. On all of these dimensions, the differences across the Region are significant.

Re-industrialization and New Industrial Policy

The debate about specialization patterns has taken a significant turn in the wake of the global economic crisis. In the years prior to the crisis, there was a wide consensus that low- and medium-tech industries were increasingly a burden on the economies in which they operated. Germany, for example, ranked consistently low in these types of assessments because of its large 'medium-tech' automotive industry. During the crisis, all sectors struggled as world trade collapsed. But since then it has become apparent that locations with a significant industrial base find it easier to recover.

The European Commission has through an updated communication on industrial policy in October 2012 set the objective of having industry to account for 20% of European GDP by 2020. In order to achieve this goal, the Commission proposes investments in six technology areas of importance for wide swaths of industry, improvements in regulations to enable market access and reduce bureaucracy for entrepreneurs, measures to enhance access to capital, and programs to provide relevant workforce skills. Individual countries, like France, have made announcements on reindustrialization. In the US, too, reindustrialization is high on the political agenda. There, the large scale production of shale gas has, through its impact on energy prices, created a powerful economic driver for the resurgence of energy-intensive industries.

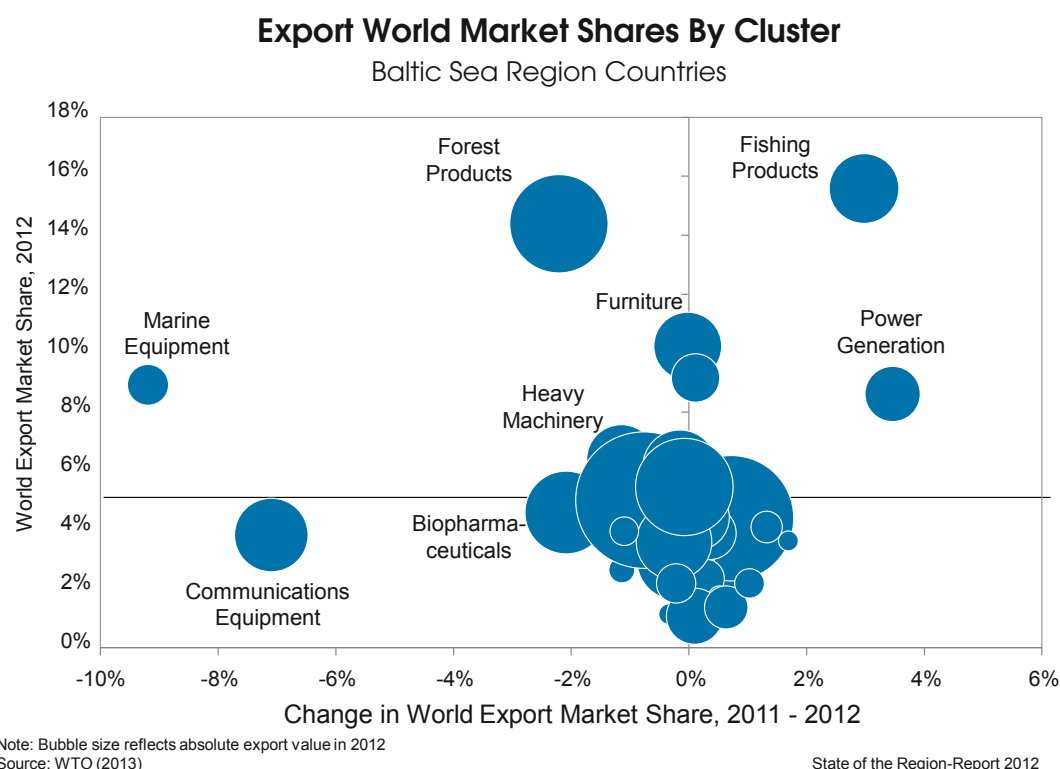
However, although there are a few high-profile cases, like Google's decision to produce a new piece of technology in the US rather than in China, there is at least so far no evidence of larger scale change across the economy beyond the cyclical recovery following the recent crisis. In the academic literature, too, there has been a renewed interest in industrial policy (e.g., Rodrik, 2004; Aghion et. 2011), but these new arguments in favor of government efforts have also triggered strong arguments against.

In the Baltic Sea Region, there has so far been much less active focus on developing industry. A significant number of economies in the Region already have an industry-share above the EU average, and Germany and Lithuania already reach the 20% share set out in the EU's 2020 strategy (the other countries with above average industry shares are Poland, Finland, Estonia, and Sweden).

See: European Commission (2012), *A Stronger European Industry for Growth and Economic Recovery*, COM(2012) 582 final, Brussels.

Philippe Aghion, Julian Boulanger, and Elie Cohen (2011), *Rethinking Industrial Policy*, bruegel policy brief 2011/4, Brussels.

Dani Rodrik (2004), *Industrial Policy for the Twenty-First Century*, Working Paper Series rwp04-047, Harvard University, John F. Kennedy School of Government: Cambridge.



In terms of its exports, the Baltic Sea Region remains dominated by relatively traditional industries. Outside of oil and gas, the Region has its strongest world market positions in fishing and forest products. In areas like biopharmaceuticals and communications equipment it is a significant exporter, but has lost position over time. This is also true for marine equipment, a cluster category in which the Region used to be very strong. In some other cluster categories, like heavy machinery, production technology, and automotive, the Region has meaningful exports and broadly kept its existing market position but is not overly specialized relative to peers.

Assessment

The current pattern of the Baltic Sea Region's performance on intermediate indicators of economic activity reflects a combination of longer-term structural trends and shorter-term cyclical factors.

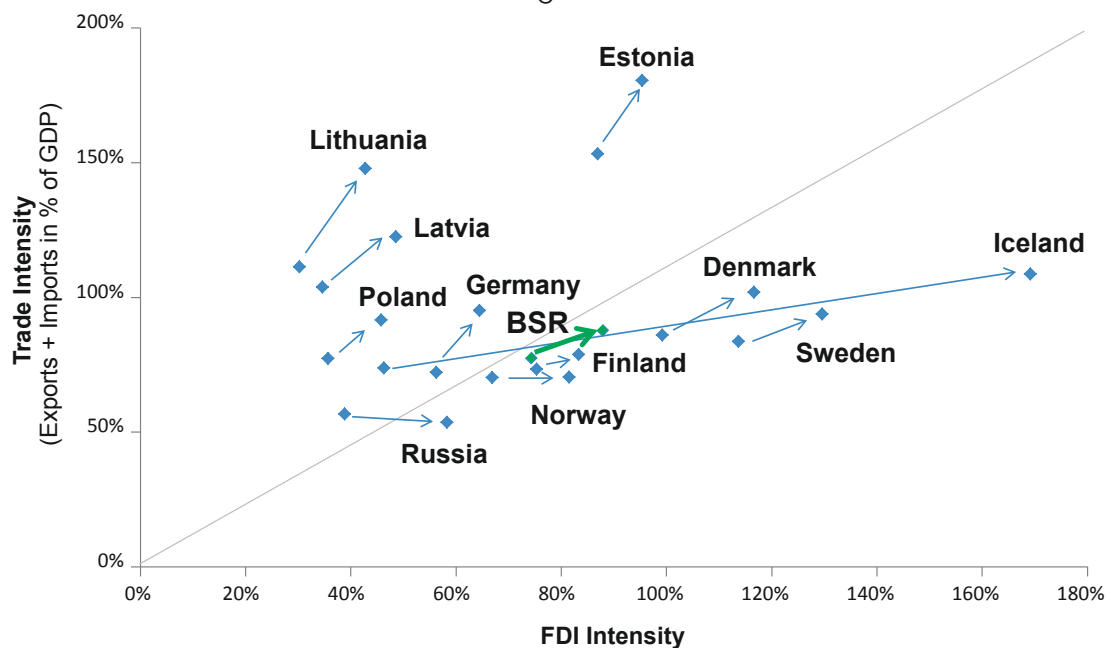
The longer-term trends for the Baltic Sea Region point towards structural changes that will test the capabilities of the Region. Globalization leads to increasing internationalization of economies. This is especially true in a region like the Baltic Sea, which

consists predominantly of small, open economies. Internationalization can take different forms: it can happen to exports, and it can happen to foreign direct investment. Companies decided which of these modes are most profitable in a certain context. Locations are affected through the impact this has on jobs and wages. If world markets are growing faster than markets at home (which is true for all advanced economies, including the Baltic Sea Region), it is likely that a more FDI-driven internationalization model might exert stronger pressure on domestic labor markets.

In the Baltic Sea Region there is an increasing dichotomy in the modes of internationalization that individual countries take. The Nordic countries and Russia are getting increasingly FDI driven, while for the rest of the Region trade is at least as important and often more dynamically growing instrument of internationalization. This is visible for the 2004 – 2011 period, with the data for the years prior and after (where only trade data is consistently available) showing an even stronger difference. In 2012 and 2013, Germany, Poland, and the Baltics have seen their trade intensity grow significantly more than the Nordics and Russia. Between 2000 and 2004, the Nordics (plus Poland

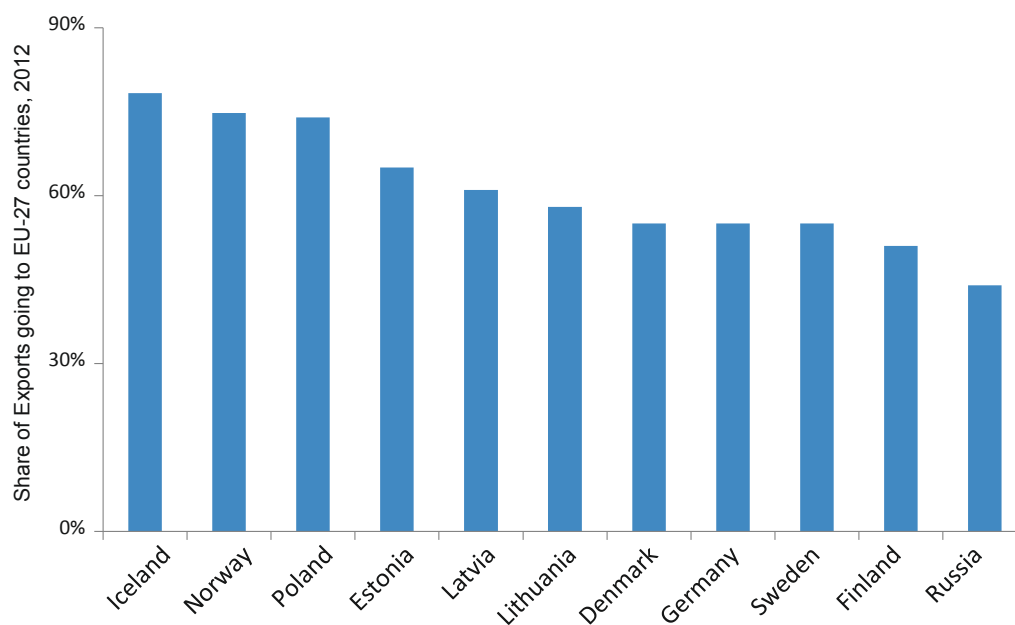
Modes of Internationalization

Baltic Sea Region Countries, 2004 - 2011



Reliance on the EU-27 Market

Baltic Sea Region Countries



Source: Eurostat (2013), EC (2013)

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and Estonia) saw their FDI intensity grow much faster than the rest of the Region.

This data pattern is consistent with the Baltics and Poland operating as increasingly internationalized economies with a significant attractiveness of export platform activities. It is consistent with Germany using outsourcing and the pull of its large home market to continue to support a large export-oriented, highly internationalized economy. It is consistent with Nordic economies that are competitive as a home base for globally active companies, but see their attractiveness in global value chains slowly erode to a smaller set of activities around research and market testing. And it is consistent with a Russian economy that creates capital for investment but sees trade hampered by trade barriers and low attractiveness as a location for business. Whether these hypotheses are accurate reflections of reality remains to be tested further. But they are reasonable enough for its implications to be seriously analyzed by policy makers throughout the Region.

The shorter-term trends are driven by the European crisis. In trade, it affects exports to what are the main markets for all Baltic Sea Region countries. The Baltics, which sell mostly to each other and to the rest of the Baltic Sea Region, are the least affected. Natural resource exporters Norway and Russia also follow different dynamics, even though for Norway in particular Europe is by far the dominant market. For the rest of the Region the slow-down in the other parts of Europe have a significant impact. There is a direct effect from the lost sales to these markets. And there is an indirect effect on companies' and consumers' sentiment about economic prospects that further reduces economic activity.

Overall, the Baltic Sea Region continues to do better than many of its European peers. But the challenges in managing the structural changes in the global economy are already visible. And the impact of the short-term downturn that has much of the rest of Europe in its grip is becoming increasingly visible in short term economic activity levels in the Region.

2.3 Competitiveness fundamentals

Prosperity outcomes and the economic activity measured by intermediate indicators are ultimately driven by the competitiveness fundamentals in an economy. The complex mix of fundamentals can be organized in two broad categories: macroeconomic and microeconomic factors. Macroeconomic factors set the general context for firms but do not affect productivity and innovation directly. This group includes both the quality of social and political institutions and the quality of macroeconomic policy. Microeconomic factors have a direct impact on the productivity with which companies can transform inputs into economic value. This group includes the quality of the business environment, the presence and dynamism of clusters, and the sophistication of companies.

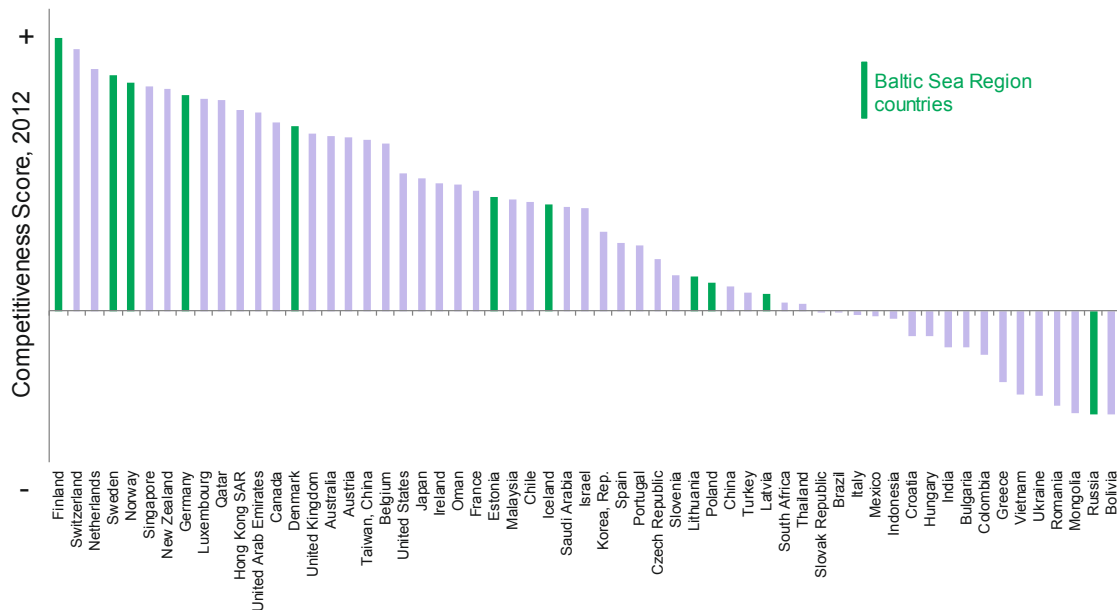
Overview

The Baltic Sea Region remains a highly competitive part of the European and global economy. Finland, Sweden, and Norway all rank among the top five countries according to the WEF Global Executive Opinion Survey data.⁵ Germany comes close behind within the top, followed by Denmark ranked twelve. Estonia (25th) and Iceland (28th) broadly kept their position, which puts them close to economies like France, Chile, and Malaysia. Lithuania (46th) has surpassed Poland (47th) and Latvia (51), but the differences between these three are small. They all rank at a level of economies like Slovenia, China, Turkey, and South Africa. Russia continues to come in last in the Region, now ranked 99th globally, with an overall level of competitiveness between Kenya and Bolivia.

Relative to their level of prosperity, Finland, Sweden, Germany, and Estonia register high levels of overall competitiveness. This suggests a potential for growth but also the existence of structural barriers that keep these countries from realizing higher levels of prosperity. For Denmark, Poland, Lithuania, and Latvia competitiveness and prosperity are broadly balanced – but at different levels of prosperity. Russia and to a much smaller degree also Norway have their natural resource wealth to

5 The latest available data has been collected in the first half of 2012. We use the country-averages for that year and for the aggregation the method outlined in Delgado, Mercedes, Christian Ketels, Michael Porter, Scott Stern (2012), The Determinants of National Competitiveness, NBER Working Paper.

Overall Competitiveness 2012 Selected Countries



Source: Unpublished data from the Global Competitiveness Report (2012), author's analysis.

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sustain prosperity levels above what their underlying competitiveness could support.

In the top group, Finland, Norway, and Germany saw their positions improve relative to 2011. For Finland, this is the first time since 2006 that the country regains the leading global position. The improvements in a number of areas of traditional strengths, like the quality of the political process and demand sophistication, were moderate. But they are remarkable for a country in which the globally most well-known company is going through a period of dramatic downsizing. Norway has made real headway in some areas of microeconomic competitiveness, in particular innovative capacity and the context for strategy and rivalry. It is the first time that the country's microeconomic competitiveness ranks among the global top ten. This is particularly impressive given the negative impact of resource wealth on competitiveness in many other countries. Germany benefited from further improvements in the assessment of the sophistication of its companies but also gradual improvements in a number of dimensions of business environment quality.

Sweden lost slightly, Denmark more significantly. Sweden's position eroded gradually on many dimensions of business environment quality. For Denmark, this is the first time the country is not

ranked among the ten most competitive countries in the world since 2001, the first year for which comparable data is available. Following the change in government in late 2001, Danish executives have become highly critical with the quality of the policy making process, and about some areas of microeconomic competitiveness in which government influence is particularly direct, like taxation and government procurement.

In the upper middle group, Estonia continues to benefit from its robust macroeconomic policies as well as limited bureaucracy, strong communications infrastructure, and open markets. In macroeconomic policies the country is on its way back to its strong pre-crisis position, but has still some ground to regain. Iceland's main strength continues to be its social infrastructure and political institutions, despite the deterioration in the assessment of the political system that the crisis brought about. The country's communication infrastructure keeps its high marks, and the financial market infrastructure is slowly regaining some ground.

In the lower middle group, Lithuania's gains are largely driven by the recovery of its macroeconomic policies. There are also improvements in some dimensions of microeconomic competitiveness, especially company sophistication and activities related to the collaboration between firms, academia, but

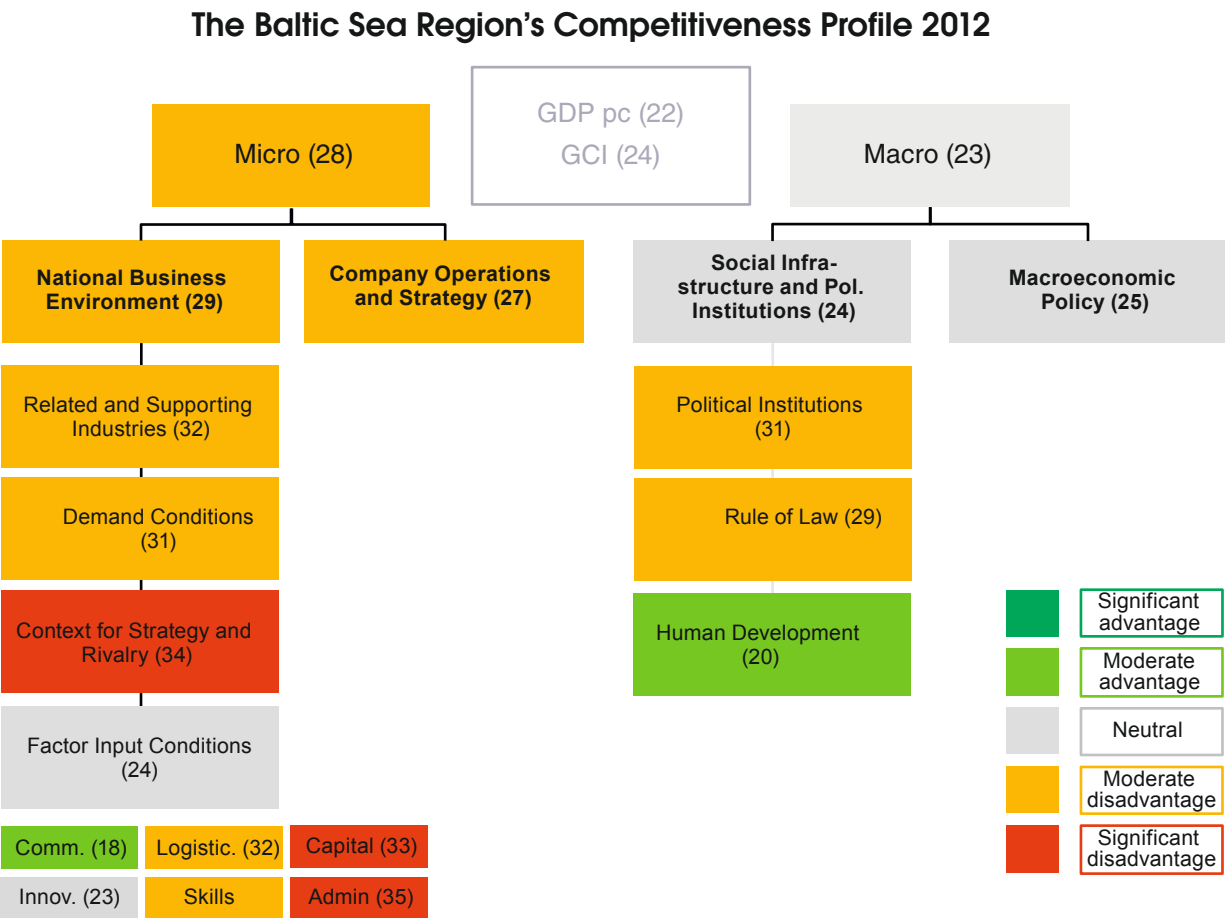
also the labor market partners. Poland has roughly kept its position, with limited gains in microeconomic competitiveness undone by a small deterioration in macroeconomic competitiveness. Latvia has continued the improvements in macroeconomic policy and otherwise stabilized the gains made last year in other dimensions of competitiveness.

For Russia, 2012 brought some improvements in competitiveness, but not enough to compensate for the significant drop in the year before. The most significant normalization – on a still very low level – was registered in the assessment of the political institutions. Russia reaches relatively similar rankings across all dimensions of competitiveness, with somewhat lower positions in areas of microeconomic competitiveness.

The Region has on the aggregate level retained its relatively balanced portfolio of strengths and weaknesses. Basic health and education is the only area in which the Region significantly improved its position. More significant problems are the context for strategy and rivalry and some dimensions of

factor input conditions. Looking at more narrow dimensions of competitiveness, more important differences emerge. Particular strengths are the innovative capacity of firms, high internet penetration, a larger degree of tertiary enrollment, and low nominal tariff rates. Among the weaknesses are a number of factors shaping the context for strategy and rivalry, including taxation, business regulation, barriers to trade and invest, and labor market rules. Other challenges are the soundness of banks, the quantity of available suppliers, and the quality of road infrastructure.

This overall profile hides the important differences that exist across countries in the Region. Finland, the most competitive economy globally, has strengths across the board. Sweden and Norway as well as, at a lower level, Estonia, Poland, Latvia, and Russia are all strongest on macroeconomic policy, followed by institutional factors and then the aggregate of microeconomic fundamentals. Denmark shows a similar pattern, but with institutional factors ranked lowest. Germany and



Source: Unpublished data from the Global Competitiveness Report (2013), author's analysis.

Lithuania register the opposite pattern, with distinct relative advantages in microeconomic competitiveness, followed by social infrastructure and political institutions, and macroeconomic policies with a significant gap.

Macroeconomic competitiveness: Institutions

The Baltic Sea Region gets traditionally solid marks on the quality of its institutional structures, a position that has been confirmed in the data for 2012. It ranks strongest on the basic health and educational services that public institutions provide. The rankings on the rule of law and on political institutions are somewhat lower but continue to put the Region in the upper 25% of all countries for which data is available.

Many indicators of institutional quality change only slowly over time, especially those related to human development. Political institutions are the area where perceptions are most volatile. This is also the area where there has been a slightly more negative view on the performance of the Baltic Sea Region, with the deterioration in 2012 confirming a similar trend from previous years. In the other areas the average performance of the Region has stayed virtually unchanged.

Within the Region, there continues to be huge heterogeneity in terms of institutional quality. While the Nordic countries remain global leaders in this area, Denmark has seen a significant deterioration in its ranking in 2012. This drop is strongly driven by a lower assessment of the quality of the political institutions, but also those dimensions of the rule of law where short term policy choices have a direct impact. The survey respondents clearly took a negative view on the initial months of the new Danish government that had come into office just a few months before. Over time such strong reactions often moderate, so it will be interesting to see how Danish business leaders view the situation in 2013. Finland and Sweden switched positions, both with very moderate changes that are within the normal variance of survey results. Norway pushed to a position just ahead of Sweden, registering modest improvements in all three components of social infrastructure and political institutions. Germany follows, with a significantly more positive view of political institutions. This is quite remarkable given the strains that the EURO-crisis puts on the German political system. Quite clearly, German voters remain overall satisfied with the way their institutional structures deal with these challenges. Iceland's position remains almost unchanged. The relatively poor ranking on political institutions re-

Social Infrastructure and Political Institutions

Ranking of Baltic Sea Region Countries, 2012

	Finland	Norway	Sweden	Germany	Denmark	Iceland
SIPI	1	5	6	10	13	15
Political institutions	1	6	5	12	16	29
Rule of law	1	6	9	12	15	14
Human development	4	10	9	7	13	5

	BSR	Estonia	Lithuania	Poland	Latvia	Russia
SIPI	24	28	47	48	49	99
Political institutions	31	27	70	67	69	125
Rule of law	29	26	49	47	50	121
Human development	20	34	41	45	46	63

Source: Unpublished data from the Global Competitiveness Report (2012), author's analysis.

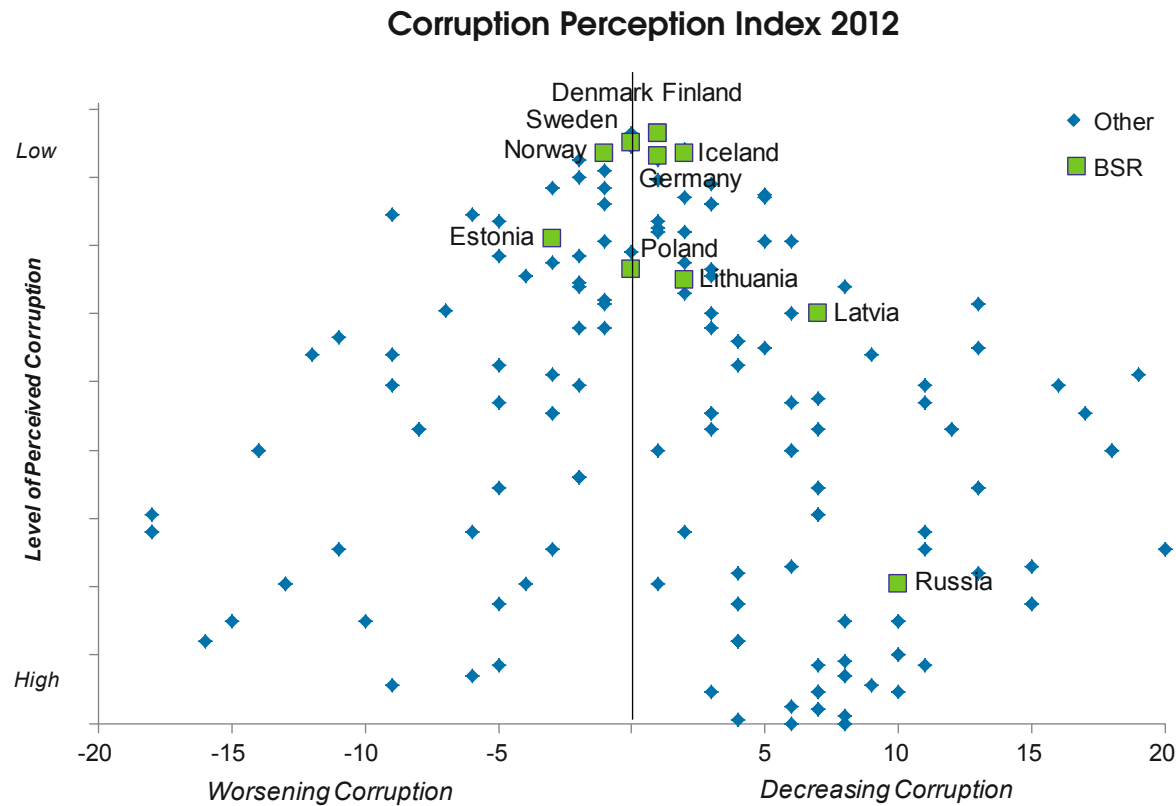
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mains a result of the deep frustrations generated by the financial crisis in the country, for which the political class was seen to carry significant responsibility. Recent national elections saw dramatic losses for the left-leaning alliance that took over after the crises. A return of the coalition that governed between 1991 and 2007 now seems to be the most likely outcome. Estonia continues to lead the group of the Eastern European countries, still with some distance towards the other Baltic countries and Poland. All four countries have seen a clear deterioration in the views about the quality of their political institutions. While the differences will differ from country to country, they indicate the difficult political tests that they all face in the current economic environment. Russia, too, has seen its ranking on political institutions fall, while it gained some position in the rule of law and human development. Last year's strong drop on political institutions, likely to be influenced by the switch in positions between President Putin and Prime Minister

Medvedev, has led to continued frustration about the state of the political system.

An important indicator of institutional quality is the presence of corruption. The pattern revealed in the WEF executive opinion survey data is reflected here as well: Nordic countries and here also Germany among the global leaders, the rest of the Region more heterogeneous with Russia lagging far behind. Russia made some further progress in 2012, possibly reflecting the stronger stance that the political leadership is taking in some high profile cases of corruption even among top officials. Latvia, too, made some gains after having lost some positions in 2011. For most of the other countries in the Region, the changes were small.

In Sweden, the discussion about Swedish companies using bribery abroad to gain business gained visibility in the case of partly government-owned TeliaSonera. While companies from the Nordics generally have strict policies against bribery, the case raised questions about their actual behavior in countries where corruption is widespread.



Source: Corruption Perception Index (2012) State of the Region-Report 2013

Macroeconomic competitiveness: Macroeconomic policy

The Baltic Sea Region's solid overall macroeconomic policy has been one of the key assets it was able to build on in its robust response to the global economic crisis. It is now put to another test as the difficult economic situation in the rest of Europe again raised the question as to whether governments should use fiscal policy to respond. Monetary policy is already at historically lenient levels, and is likely to stay at this level for some time.

Underlying monetary policy regimes differ significantly across the Region. Germany, Finland, and Estonia are part of the Euro-Zone, where the European Central Bank (ECB) sets monetary policy based on an inflation rate target of "below, but close to, 2% over the medium term." Denmark, Latvia, and Lithuania set monetary policy to keep the exchange rate to the Euro stable, essentially shadowing ECB policy. Latvia has in March 2013 officially asked to join the Euro Zone by 2014. The government is firmly committed to this goal, while the public has become skeptical and the opposition is pushing for a referendum. Denmark and Lithu-

ania remain officially committed to join the Euro-Zone at some point, with Lithuania targeting a 2015 entry. Iceland, Poland, Norway, Sweden, and Russia follow different versions of inflation targeting, using slightly different targets and inflation measures. In Iceland there are strong voices that argue for joining the Euro-zone in conjunction with the application to become a member of the European Union. But while some view this as the appropriate response to the financial crisis Iceland experienced in 2009, others are more skeptical about this solution. In Poland the Prime Minister has confirmed his intention to join the Euro-zone. But an eventual referendum is facing an increasingly skeptical Polish public.

Inflation rates across the Region edged downwards throughout 2012 as the economic climate deteriorated. For 2013 the forecast is in most countries for stable or slightly lower inflation rates, largely driven by the expected weak dynamism in economic activity. In Denmark and Latvia, interest rates were lowered in the summer of 2012, following the move by the European Central Bank. When the market pressure on the Euro seemed to be receding in early 2013, the Danish

Macroeconomic Policy Indicators

2012

	Denmark	Estonia	Finland	Germany	Iceland	Latvia	Lithuania	Norway	Poland	Russia	Sweden
Fiscal Policy											
Government budget balance (in % of GDP)	-3.60	-2.40	-1.90	0.10	-3.20	-2.60	-3.60	13.40	-1.80	0.00	0.00
Government debt (in % of GDP)	48.00	7.90	53.90	81.50	125.10	43.10	36.00	32.30	53.70	7.80	38.90
Monetary Policy											
Inflation (annual change in %)	2.40	3.90	3.20	2.13	5.20	2.40	3.00	0.60	3.60	5.07	0.90

	BSR	EU-27	NAFTA
Fiscal Policy			
Government budget balance (in % of GDP)	1.06	-3.91	-6.40
Government debt (in % of GDP)	43.42	85.97	71.30
Monetary Policy			
Inflation (annual change in %)	2.35	2.62	2.30

Source: EIU (2013), author's calculations

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Central Bank raised rates somewhat to defend the stable exchange rate between the Danish Crown and the Euro. In Sweden, the Monetary Policy Committee remains deeply divided. One group argues for a more restrictive monetary policy to counteract a buildup of private sector debt and housing prices. The other calls for a more lenient interest rate policy to revive sluggish growth and address the relatively high level of unemployment. Riksbanken did reduce interest rates in December 2012 as the economic outlook was becoming more negative. In its April meeting it then kept rates stable but signaled that interest rates are likely to remain at a low rate for a longer period to come. Poland lowered its interest rate in March 2013 as the concerns about a slowdown in the economy were rising. In Russia, the President of the Central Bank left office after a long period in which he had gained a reputation for anti-inflationary policies. With the former Minister of Economic Development Nabiullina now taking his position, there are speculations as to whether Russia might adopt a more growth-oriented monetary policy under her leadership.

A key challenge for monetary policy is the balance between growth, inflation, and the danger of speculative bubbles as the result of an unsustainable debt buildup. A recent analysis of the European Commission suggests that the Baltic Sea Region needs to keep an eye on the debt dynamics in the private sector.⁶ Denmark and Sweden stand out with private sector debt levels above 200% of GDP. Germany and Latvia also come high on some of the specific debt measures used by the Commission. In terms of the sustainability to service the debt, the analyses single out Denmark, Estonia, and Latvia are singled out as the most problematic cases, followed by Finland and Sweden.

On fiscal policy, the position of the Baltic Sea Region remains overall solid with average public sector deficits and debt levels moderate compared to other countries. Most countries in the Region have a formal fiscal policy framework to guide medium-term policy planning and anchor expectations about the course of fiscal policy. The majority of the Nordic and Baltic countries have a target for the average public sector deficit over

a business cycle, ranging from -0.5% of GDP in Denmark to +1% in Sweden. Norway aims for a deficit in its budget before returns from its oil fund of no more than 4% of GDP. Russia has a target for spending related to the revenues from oil exports. Germany has a constitutional ban for public sector deficit that will come in place first at the federal and then the regional level over the coming years. Poland has set itself an upper limit for public sector debt at 60% of GDP. It also has a short-term target for expenditure growth to be below CPI + 1%.

Denmark followed a more expansionary fiscal policy in 2012 to regain growth momentum, largely using a change in the early-retirement system to achieve a one-off push to private sector spending. The budget deficit increased to more than 3.5% and the government is now trying to achieve a lower deficit for 2013. Sweden has seen its public sector surplus fall in 2012, and the discussions surrounding the recent spring budget indicate that the government is considering the need for more expansionary measures should the economic outlook deteriorate. Finland had a deficit of close to 2% in 2012 and has introduced a number of tax increases that came into effect in 2013 to reduce the fiscal shortfall. Lithuania has reduced its deficit somewhat in 2012 and is targeting a 2.5% deficit in 2013. Latvia, too, improved its fiscal balance and is now aiming for a deficit of 1.3% of GDP in the current year. The government saw enough fiscal room to reduce a number of tax rates, reversing some of the tax increases that had been implemented during the crisis. Estonia had a deficit in 2012 after a surplus the previous year and is now targeting a smaller deficit for 2013. Russia's budget remains balanced due to the significant oil revenues; with these, the government budget deficit would stand at -10% of GDP.

Microeconomic competitiveness

The Baltic Sea Region benefits traditionally from its balanced position with solid levels of company sophistication and business environment quality, with particular strengths in a number of factor input conditions. The latest data, collected largely in the first half of 2012, confirms this view.

⁶ Carlos Cuerdo, Inês Drumond, Julia Lendvai, Peter Pontuch and Rafal Raciborski (2013), *Indebtedness, Deleveraging Dynamics and Macroeconomic Adjustment*, Economic Papers 477, European Commission: Brussels

Physical infrastructure
(Logistical, Energy, Communication)

Physical infrastructure, both for transport and communication, remains overall solid across the Baltic Sea Region, despite some further slight slip-page in 2012. The position is somewhat weaker for logistical infrastructure, where there is also significantly more heterogeneity across the Region. The Region's transportation infrastructure gets particularly high grades for its ports and railroads. Executives in the Region have a positive view of railroads, despite the absence of high-speed trains and the remaining weaknesses of the rail system in the Baltics. Road infrastructure continues to be ranked somewhat lower, largely because of weaker rankings for Norway, Poland, and Russia. Last year's State of the Region-Report provided a more detailed discussion of the physical infrastructure.

Denmark was the only country in the Region that saw across the board deteriorations in the assessment of its transportation infrastructure compared to last year. Largely this is a reflection of the generally more critical view that Danish executives

have taken towards the quality of their country's competitiveness. The Baltic countries, especially Latvia, have seen the strongest overall improvement. Particularly air transport infrastructure has received higher marks; an encouragement to Latvian policy makers that had to intervene when Air Baltic, the largest carrier in the Baltics, got into financial trouble. Poland received a boost on the perceived quality of its road system. While still seen as a weakness, this could signal that the significant investments under way in the country to upgrade the road infrastructure are starting to make a meaningful difference.

The World Bank's Logistical Performance Index is based on a survey of international freight forwards and other sources. The data on the Region confirms an overall solid position but also a deterioration of the Region's position versus global peers. The Region ranks best on logistical competence and customs procedures, with somewhat weaker scores on infrastructure and, surprisingly, competence on international shipments. Strikingly, Denmark ranks significantly better in the World Bank assessment, and also registers a much

Physical Infrastructure

Baltic Sea Region Countries

Indicator	EE	LV	LT	DK	FI	IS	NO	SE	GE	PO	RU
Logistical infrastructure	44	43	33	20	5	24	36	19	7	81	83
Quality of roads	60	97	35	26	9	36	80	24	10	108	134
Quality of railroads	39	33	17	30	5	92	44	24	6	79	34
Quality of port infrastructure	19	42	26	21	6	7	24	11	9	105	89
Quality of air transport infrastructure	68	37	71	29	10	9	14	28	7	99	102
Quality of electricity supply	60	51	43	9	18	3	12	15	31	46	81
Quality of domestic transport network: business	32	39	26	16	3	24	59	19	4	72	84
ICT infrastructure	17	42	32	13	11	3	8	7	10	48	46
Internet access in schools	3	25	20	24	2	1	9	16	42	61	71
Mobile phone subscribers per 100 population	24	80	13	36	8	71	50	46	27	31	5
Percentage of households with computer	30	43	47	6	12	1	2	5	9	33	51
Internet users per 100 population	23	32	39	6	7	1	2	4	12	40	57
Telephone lines per 100 population	34	51	55	20	64	6	24	14	2	71	40

Note: Numbers in red and green indicate a change of ten ranks or more down resp. up since 2011.
Source: Unpublished data from the Global Competitiveness Report (2013), author's analysis.

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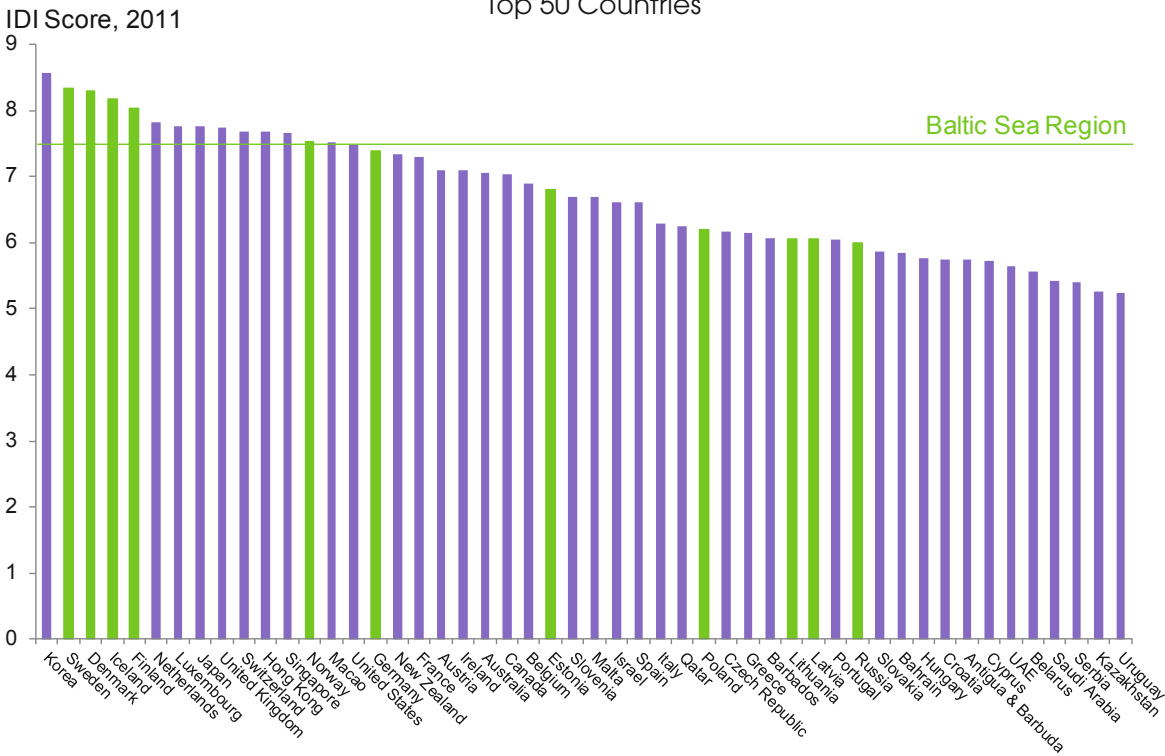
World Bank Logistical Performance Index 2012



Source: World Bank (2013), author's analysis. State of the Region-Report 2013

ICT Development Index

Top 50 Countries



Source: ITU (2013) State of the Region Report 2013

more positive trend. This is likely to be driven by the early date at which the World Bank collected its data, but might also be driven by the different focus of their study, which puts transportation infrastructure in the context of relevant administrative procedures and specialized services offered by logistical companies.

The information and communication infrastructure is well developed across the Region, and continues to rank high internationally. There is also a large degree of regional integration, with the leading Nordic operators active across most parts of the Region. While there is variation in terms of the access and usage of ICT infrastructure as measured by, for example, the ITU's ICT Development Index, the differences across countries in the Region are smaller than in other areas.

Energy has been a topic of previous State of the Region-Reports and a recent report by the Pan-European Institute provides a detailed documentation of the most recent trends (Paulina Wilk, Cross-border energy infrastructure in the Baltic Sea Region, 7/2012, PEI: Turku). The report shows a growing level of interconnectedness between the different parts of the Region, with additional linkages having been created recently or currently under discussion, especially between the Nordics and the Baltics but also Poland and Lithuania. Overall, the quality of electricity supply in the Region continues to receive a solid score. Germany saw its position erode, possibly due to increasing concerns whether

the decision to abandon nuclear energy will have negative effects on energy prices on the reliability of supply. In the fall of 2012, the Lithuanian public voted against a plan to replace the decommissioned Ingalina nuclear plant.

Skills and education

There is a wide recognition that a highly skilled labor force is critical for the economic future of the Baltic Sea Region, and that high skill levels have been an important foundation for the solid economic performance of the Region so far. But the survey data from business executives reflects clear concerns about whether the Region remains ahead of its global peers on this dimension. While the overall educational system is viewed as quiet solid, there are concerns about both math and science education and about management training at universities in the Region. The data on educational performance, discussed in more detail last year, shows that while the Region includes some of the countries that rank highest globally, it also has other countries that struggle, at least in relation to their level of economic performance. Finland remains ranked very high, consistent with the data on educational attainment discussed in more detail in last year's Report.⁷ Germany, one of the countries with such challenges, showed an encouraging improvement in the assessment of

Skills and Education

Baltic Sea Region Countries

Indicator	EE	LV	LT	DK	FI	IS	NO	SE	GE	PO	RU
Skills and education	42	73	35	31	3	20	28	17	30	58	67
Quality of math and science education	21	62	16	49	2	22	43	33	20	70	50
Quality of management schools	48	72	54	28	6	24	16	12	22	84	107
Availability of scientists and engineers	71	123	54	32	1	19	39	5	22	56	97
Tertiary enrolment	26	34	16	13	3	15	14	17	55	20	12

Note: Numbers in red and green indicate a change of ten ranks or more down resp. up since 2011.
Source: Unpublished data from the Global Competitiveness Report (2013), author's analysis.

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⁷ "Finnish Lessons", by Pasi Sahlberg, provides a detailed account of the choices made in the Finnish educational system for those who want to learn more.

business leaders. Whether these better rankings reflect a fundamental improvement, or just a temporary blimp, remains to be seen.

Innovation infrastructure

The quality of the innovation infrastructure across the Baltic Sea Region continues to be high; there are only marginal changes in the most recent data published in the European Innovation Scoreboard compared to previous years. The Region scores on average relatively balanced across the different dimensions of the innovation system. This suggests that the challenge is not primarily related to an inability in translating scientific research into marketable products and services, as is sometimes assumed. On linkages between the academic and the private sector and also on firm investments the region does, in fact, do quite well.

There are more challenges in the quality of the research conducted, and in the ability to attract economic activities related to the exploitation of new ideas in the Region.

Across the Baltic Sea Region, the heterogeneity in terms of innovative capacity remains high. The Nordic countries and Germany all rank high, despite some marginal loss of position in individual indicators. Sweden ranks among the top ten countries in Europe on all dimensions; Denmark has lost some position in the assessment of human resources. The Baltic countries and Poland lack behind. Estonia provides a good financing environment and strong linkages between companies and the related research activities; Lithuania ranks also relatively well on human resources and financing but less so on linkages. Russia, not covered in this database, remains to have legacy assets in its scientific system, but struggles to connect them to its company base.

Innovation in the Baltic Sea Region

BSR Rank among European countries

Enablers	Firm Activities	Outputs
Human resources New doctorate graduates per 1000 population aged 25-34 (±0) 9 Percentage population aged 30-34 having completed tertiary education (±2) 13 Percentage youth aged 20-24 having attained at least upper secondary level education (±1) 21 Open, excellent and attractive research system International scientific co-publications per million population (±0) 12 Scientific publications among top 10% most cited publications worldwide (±0) 14 Non-EU doctorate students as % of all doctorate students (-1) 10 Finance and support Public R&D expenditures (% of GDP) (+0) 6 Venture capital (% of GDP) (-3) 8	Firm investments Business R&D expenditures (% of GDP) (±0) 6 Non-R&D innovation expenditures (% of turnover) (+6) 14 Linkages & entrepreneurship SMEs innovating in-house (% of SMEs) (-1) 11 Innovative SMEs collaborating with others (% of SMEs) (-2) 12 Public-private co-publications per million population (-1) 9 Intellectual assets PCT patents applications per billion GDP (±0) 6 PCT patent applications in societal challenges per billion GDP (+1) 5 Community trademarks per billion GDP (+2) 13 Community designs per billion GDP (+2) 8	Innovators SMEs introducing product or process innovations (% of SMEs) (+2) 10 SMEs introducing product or process innovations (% of SMEs) (+1) 12 Economic effects Employment in knowledge-intensive activities (% of workforce) (±0) 16 Contribution of medium and high-tech exports to trade balance (-1) 25 Knowledge-intensive services exports (% of total service exports) (±0) 10 New-to-market and new-to-firm sales (% of turnover) (+3) 17 Licence and patent revenues from abroad (% of GDP) (+2) 8

Note: Coloring indicates relative strengths and weaknesses; numbers in brackets are changes relative to last available year

Source: Innovation Union Scoreboard (2013), author's analysis.

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Ranking of Baltic Sea Region Countries

	Human resources	Research systems	Finance and support	Firm investments	Linkages & entrepreneurship	Intellectual assets
Sweden	1	7	2	3	5	5
Denmark	14	4	6	7	3	2
Finland	3	13	3	5	10	6
Germany	13	12	10	4	8	3
Iceland	30	6	1	2	1	15
Estonia	18	21	4	6	14	13
Norway	9	2	12	30	16	19
Poland	19	31	20	18	32	24
Lithuania	11	27	13	14	27	28
Latvia	24	34	21	32	31	20

Source: Innovation Union Scoreboard (2013), author's analysis.

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Innovation, Incentives, and the 'Cuddly' Nordic model

The Nordic model has found many admirers over the last few decades, seeming to provide a combination of high levels of economic success with a high level of social cohesion and equality. A recent paper aims to provide a theoretical model that aims to explain how this combination is possible, but also how it depends on the presence of another country, i.e. the U.S., with much more cut-throat incentives that deliver economic performance but also inequality. The paper has gained some interest in Nordic policy circles.

The model argues that new ideas can be obtained in two different ways: Either through the acts of innovators domestically, or through participating in innovations abroad through international knowledge-spillovers. The domestic propensity to innovate is a function of the incentives, with high incentives, i.e. high rewards for those that develop a valuable new idea, delivering higher rates of innovation. The equilibrium in this model has the interesting property that it creates an innovation leader, i.e. the U.S., that has high innovation and high inequality, and innovation followers, i.e. the Nordic countries, that have lower domestic innovation but also low inequality.

Importantly, the innovation followers can grow at the same rate as the innovation leader, because they benefit from the knowledge externalities the innovation leader generates. Furthermore, the innovation leader might enjoy lower levels of social welfare (because of inequality) than its peers with 'cuddly' incentives but will decide to keep its cut-throat incentives because abandoning them would leave both itself and all other countries worse off.

The paper makes an interesting contribution to the debate about different economic models and the interdependencies among them. But it has also some features that upon closer examination Nordic policy makers might not like: It puts the Nordic countries into the position of a free-rider on the U.S. innovation system. And it argues that all efforts to achieve excellence in the Nordic innovation system(s) are in vain; innovation policy should instead focus squarely on achieving maximum absorption from the innovation activities going on in the U.S.

For more background see: *Daron Acemoglu, James A. Robinson, Thierry Verdier (2012), Can't we all be more like Scandinavians? Asymmetric growth and institutions in an interdependent world, NBER Working Paper No. 18441, Boston.*

Financial Markets

The overall ranking on financial market infrastructure for the Baltic Sea Region identifies this as an area of slight disadvantage. Key weaknesses are concerns about the soundness of banks in parts of the Region, and some weaknesses in the regulatory environment. Relative to last year there are few significantly challenges; only in the area of venture capital availability did the Region register a drop of seven ranks. A key overall issue remains the discussion about the access to capital, especially for SMEs. The lenient monetary policy should provide ample capital, and support economic activity in the Region. But the deleveraging following the financial crisis and the changes in banking regulation are working in the opposite direction. Much of the capital made available by Central Banks has been used to repair banks' balance sheets. And the low interest rates have benefited home owners and large companies with access to bond markets, but have done little for SMEs in need of new bank financing.

Stockholm remains the Region's financial capital. Copenhagen, Oslo, and Helsinki follow at a distance, with a largely national role. A key issue remains the nature of regulation of the financial market industry. At the European level there are discussions about a banking union that will give a central regulator significant powers. Countries like

Sweden are skeptical, seeing no benefits in subordinating their functioning regulatory system to a European system with much less insights into the local context. Part of the context for this discussion is the large size of the Swedish banking industry relative to the size of its economy. Another country that has recently attracted the attention of European policy makers is Latvia. A large share of its deposits is owned by foreigners, especially Russians and citizens of other countries in the Commonwealth of Independent States (CIS). In Brussels this has created fears about a scenario like in Cyprus, even though the Latvian authorities point out that their banks are much better capitalized and their banking supervision more transparent and robust.

Administrative efficiency

The efficiency of the public administration and the bureaucratic burden imposed through rules and regulation remains overall a slight disadvantage for the Baltic Sea Region. Business executives complain especially about the administrative burden associated with government regulation and the time required to start a new business. The procedures for taking taxes, however, were assessed much more positively. Changes relative to last year were minimal.

Financial Market Infrastructure

Baltic Sea Region Countries

Indicator	EE	LV	LT	DK	FI	IS	NO	SE	GE	PO	RU
Financial market infrastructure	39	64	80	29	4	65	8	6	24	49	113
Venture capital availability	36	56	76	94	11	60	6	4	32	90	79
Regulation of securities exchanges	43	70	49	23	2	54	10	16	26	30	112
Domestic credit to private sector	40	41	58	2	32	29	38	14	28	56	68
Ease of access to loans	63	94	101	62	5	69	12	6	38	90	75
Financial market sophistication	36	62	71	25	11	96	12	19	17	50	101
Financing through local equity market	61	105	73	59	8	75	9	12	22	57	100
Protection of minority shareholders' interests	64	86	89	39	1	50	5	9	20	79	131
Getting Credit Legal rights index (WB)	41	1	87	11	27	41	63	27	41	11	112
Soundness of banks	35	99	94	90	6	128	8	23	73	58	127

Note: Numbers in red and green indicate a change of ten ranks or more down resp. up since 2011.
Source: Unpublished data from the Global Competitiveness Report (2013), author's analysis.

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Doing Business in the Baltic Sea Region

	Overall	Starting a Business	Dealing with Construction Permits	Getting Electricity	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Resolving Insolvency
Denmark	5	33	8	14	6	23	32	13	4	34	10
Norway	6	43	23	14	7	70	25	19	21	4	3
Finland	11	49	34	21	24	40	70	23	6	9	5
Sweden	13	54	25	9	35	40	32	38	8	27	22
Iceland	14	45	40	1	9	40	49	41	82	3	11
Germany	20	106	14	2	81	23	100	72	13	5	19
Estonia	21	47	35	52	14	40	70	50	7	31	72
Latvia	25	59	113	83	31	4	70	52	16	24	33
Lithuania	27	107	48	75	5	53	70	60	24	14	40
Poland	55	124	161	137	62	4	49	114	50	56	37
Russia	112	101	178	184	46	104	117	64	162	11	53

Source: World Bank (2013)

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Differences on administrative infrastructure remain large across the Region. Finland and Estonia top the ranking, followed by Sweden, Iceland, and Norway. As in other dimensions, Denmark has also here lost significant position and now comes behind this leading group; whether this remains the case over time remains to be seen. Germany and Latvia follow at around the Regional average; for Germany this represents a significant improvement. Poland and then Russia remain far behind. After a significant deterioration in the Polish score and clear improvements in the Russian score the two countries are now only six ranks apart.

The efficiency of the public administration and the bureaucratic burden imposed through rules and regulation remains overall a slight disadvantage for the Baltic Sea Region. Business executives complain especially about the administrative burden associated with government regulation and the time required to start a new business. The procedures for taking taxes, however, were assessed much more positively. Changes relative to last year were minimal.

The World Bank's Doing Business index provides additional perspective on the quality of administrative infrastructure across the Region. The

Doing Business data, not yet updated in 2013, broadly confirms the assessments based on the WE survey. For Denmark, however, it shows the significantly more positive position prior to the recent change in opinion.

Competition

Most markets in the Baltic Sea Region are open but also relatively small. Formal trade barriers in the Baltic Sea Region are low. The EU's internal market covers most of the Baltic Sea Region, including most of the trade with the EFTA members Iceland and Norway. The WEF data shows that rivalry remains somewhat lower than openness; most likely a result of the modest country size that limits the incentives for foreign companies to enter the Region. Overall the intensity of local competition has been perceived as increasing in 2012, driven by the Baltics, Germany, and Denmark and Finland, countries where stagnant demand might have driven companies to compete more vigorously. Norway and Germany were the two countries with the strongest improvement in the context for strategy and rivalry overall.

Competition: Rivalry and Openness

Baltic Sea Region Countries

Indicator	EE	LV	LT	DK	FI	IS	NO	SE	GE	PO	RU
COMPOSITE RANK	22	44	49	23	11	62	15	12	14	42	126
Rivalry											
Low market disruption from state-owned enterprises	62	49	75	32	6	21	22	10	5	37	130
Effectiveness of antitrust policy	34	79	102	11	4	43	10	7	13	74	115
(Low) Extent of market dominance (by business groups)	57	52	87	8	22	89	11	20	1	17	93
Intensity of local competition	22	52	41	25	54	84	31	27	6	28	117
Openness											
(Low) Tariff rate	7	7	7	7	7	6	5	7	7	7	72
Prevalence of foreign ownership	11	47	86	43	16	134	36	38	34	69	129
Prevalence of trade barriers	14	27	23	30	6	74	59	21	33	81	113
Quality of FDI rules	19	84	111	79	32	135	67	41	56	102	126

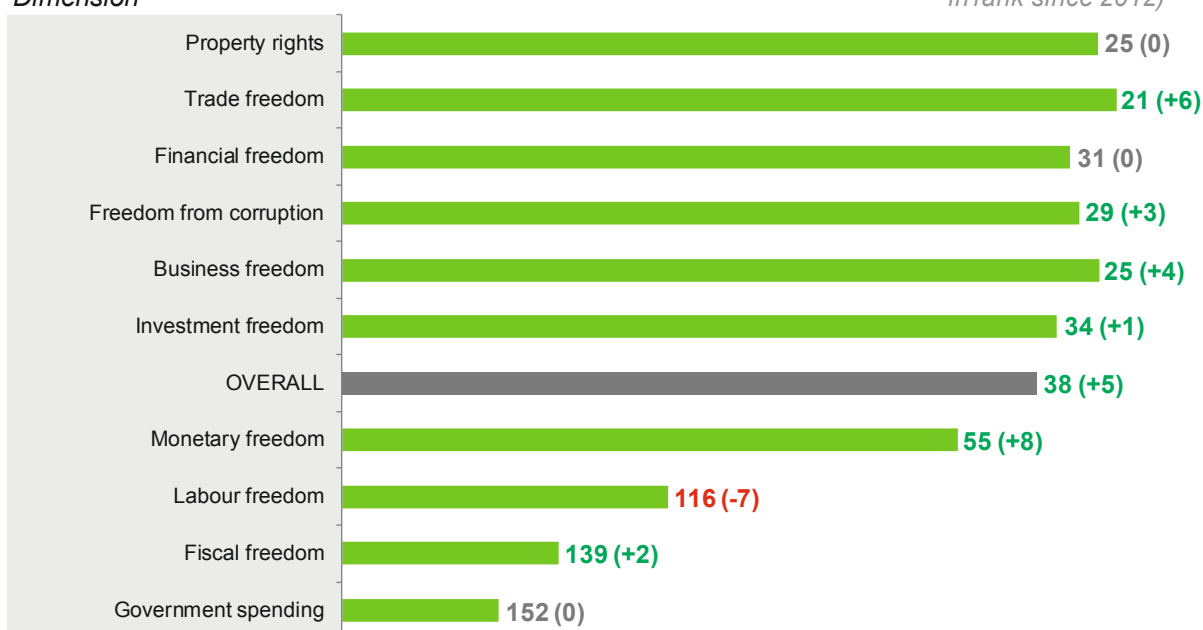
Note: Numbers in red and green indicate a change of ten ranks or more down resp. up since 2011.
Source: Unpublished data from the Global Competitiveness Report (2013), author's analysis.

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Economic Freedom in the Baltic Sea Region

Dimension

Rank 2013 (Change in rank since 2012)



Source: Heritage Foundation (2013), author's analysis.

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The Heritage Foundation's Economic Freedom index gives a broad but also clearly ideologically-driven perspective on the ability of the private sector to compete freely on the markets of the Baltic Sea Region. The Baltic Sea Region rank on their index continues to be somewhat below its position on other dimensions of competitiveness, largely driven by the larger role of the government in the Nordic economies. But in 2012 there was a slight improvement in most categories of economic freedom measured.

Labor Markets

Labor markets in the Baltic Sea Region have highly heterogeneous structures that are not well captured by some of the international assessments that rank them as highly inflexible. Especially in the Nordic countries and in Germany labor unions remain much more powerful than in many other OECD countries. However, the relations between these labor unions and the employers tend to be much better than elsewhere. Labor unions have fully acknowledged the realities of small open economies, where the negotiations about wages always happen within the context of global competition.

The combination of solid company profits and a period of very limited wage growth have, however, increased the focus on achieving more meaningful wage hikes. In Germany, there has also been a clear shift towards the introduction of minimum wages in a number of sectors, a policy that was highly criticized in the past.

Governments in the Nordics and – following the labor market reforms in the early 2000s – also in Germany have made more use of so-called active labor market policies, a set of instruments advocated by the OECD. This has led to highly different patterns of labor market reaction to the crisis. In Germany many companies held on to their staff, making use of public programs that allowed them to use working hours with some of the costs covered by the social security system. In the Nordics companies had to face more of the costs, and reacted more strongly by reducing staff numbers. There are also significant differences across countries in the Region in terms of the regulations applying to labor market entrants versus those applying to workers within unemployment employment contracts. These differences are widely seen as a key driver of the huge differences in youth unemployment across the Region discussed in earlier sections of this Report.

Labor Markets: Regulation and Incentives

Baltic Sea Region Countries

Indicator	EE	LV	LT	DK	FI	IS	NO	SE	GE	PO	RU
Regulation											
Cooperation in labor-employer relations	30	72	62	3	14	11	5	9	15	84	115
Pay and productivity	11	28	21	44	57	67	78	75	41	35	56
Incentives											
(Low) Distortive effect of taxes and subsidies on competition	28	43	95	66	15	61	48	24	71	56	123
(Low) Impact of taxation on incentives to work and invest	21	114	124	126	85	106	60	103	61	81	113

Note: Numbers in red and green indicate a change of ten ranks or more down resp. up since 2011.
Source: Unpublished data from the Global Competitiveness Report (2013), author's analysis.

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Sophistication of Demand

Baltic Sea Region Countries

Indicator	EE	LV	LT	DK	FI	IS	NO	SE	GE	PO	RU
Demand sophistication	28	67	50	32	2	25	10	8	9	79	106
Stringency of environmental regulations	23	52	32	7	2	19	10	8	1	35	102
Presence of demanding regulatory standards	32	101	64	59	3	14	21	13	33	96	118
Buyer sophistication	106	98	97	53	3	44	11	10	7	87	59
Government success in ICT promotion	11	52	35	31	6	20	10	14	21	105	108
Laws relating to ICT	4	57	43	18	2	31	11	12	19	87	102
Government procurement of advanced technology products	51	99	102	78	16	39	19	10	15	96	117

Note: Numbers in red and green indicate a change of ten ranks or more down resp. up since 2011.
Source: Unpublished data from the Global Competitiveness Report (2013), author's analysis.

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Demand Sophistication

Demand conditions, in particular the sophistication of demand, are a critical driver of innovation. The Baltic Sea Region continues to rank high on buyer sophistication and the stringency of environmental and consumer regulation. While environmental regulations continue to be seen as tough, in many countries in the Region the quality of other regulations has been perceived to fall. In Poland, Estonia, Latvia, and Denmark this led to a drop of around 40 ranks; in Germany it was about 20 ranks.

Cluster presence

Research over the last decade has provided robust statistical evidence that the presence of clusters, i.e. regional agglomerations of companies and other institutions in industries connected through different types of linkages and spill-overs, are associated with higher levels of overall regional economic performance.

Last year's Report the presence of regional clusters across the Baltic Sea Region in comparison to the Region's overall position in Europe. With roughly 50 regional clusters that meet some bench-

mark criteria for size and specialization the Region is somewhat underrepresented among the list of leading European clusters. At least partly this is likely to be driven by the Region's fragmentation into a number of relatively smaller economies. Germany, the largest economy with parts in the Baltic Sea Region, ranks highest globally on the overall measure of related and supporting industries, while especially the Nordics rank far below their ranks in other dimensions of competitiveness.

In terms of the indicators tracked on clusters, the evidence is mixed. The state of cluster development has been seen to have deteriorated in a number of countries. But on a number of the dimensions that are usually associated with dynamic clusters, the picture is seen as broadly stable or even improving.

The Baltic Sea Region has over the last few years become home to a wide-range of cluster efforts receiving government support of some kind. This adaption of cluster-based policies has often been driven by individual agencies or subnational regions that saw potential in this policy instrument, even when there remained significant skepticism in other parts of the government system, especially in Ministries of Finance. Many of these programs have grown out of existing policies for innovation, regional development, or SME support.

Related and Supporting Industries

Baltic Sea Region Countries

Indicator	EE	LV	LT	DK	FI	IS	NO	SE	GE	PO	RU
Related and supporting industries	40	79	55	20	13	33	14	15	1	60	115
Local availability of specialized research and training services	43	78	45	23	8	29	12	9	2	32	80
Availability of latest technologies	37	51	35	27	1	6	7	2	11	95	128
Local supplier quality	36	54	42	16	6	32	11	12	2	46	118
State of cluster development	82	104	112	33	15	41	12	18	3	92	119
Extent of collaboration in clusters	30	83	46	18	3	22	11	12	4	76	103
Local supplier quantity	61	113	52	32	85	111	46	48	2	25	115

Note: Numbers in red and green indicate a change of ten ranks or more down resp. up since 2011.
Source: Unpublished data from the Global Competitiveness Report (2013), author's analysis.

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COUNTRY	PROGRAM
Denmark	Innovation Networks Denmark
Estonia	Cluster Development Program
Finland	OSKE – Centres of Expertise Program
	SHOK – Strategic Centres for Science, Technology and Innovation
Germany	Competence Networks Germany
	Zentrales Innovationsprogramm Mittelstand – Netzwerkprojekte (ZIM NEMO)
	Spitzencluster Program
Iceland	Regional Growth Agreements (Vaxtarsamningur)
	Strategic Research Program for Centres of Excellence and Research Clusters
Latvia	Cluster Program
Lithuania	InnoCluster LT
Norway	Norwegian Centres of Expertise (NCE)
	ARENA
Poland	Polish Cluster Support
Sweden	Vinnvaext

Where these funds are important, EU structural funds have often played a significant role in financing these efforts.

Denmark has just announced a new cluster policy, integrated into its overall innovation strategy published in 2012. Norway is planning to launch the launch of a new cluster program, with the details currently being discussed. A major Finnish program with significant cluster-aspects is

coming to an end, and the authorities have not yet announced what will follow.

At the Baltic Sea Region level, both private-sector driven efforts like Scanbalt and public-sector driven efforts like StarDurst have a strong cluster focus; both are profiled in Part B of this Report. A new Baltic Sea Cluster Development Center (BSCDC) has in late April been launched on the Danish island of Bornholm.

The Baltic Sea Cluster Development Center

Opening conference of the Baltic Sea Cluster Development Centre

On 25 April the Baltic Sea Cluster Development Centre (BSCDC) officially opened its doors as a knowledge and business hub for cluster development leaders and other cluster practitioners in the Baltic Sea Region. The opening of BSCDC took place in connection to a cluster development seminar on 24-25 April on the island of Bornholm.

Cluster development leaders from the following regions have contributed to the establishment of the BSCDC: The regions of Pommerskie and Warmia-Mazury in **Poland**; Kaliningrad region and St. Petersburg in **Russia**; the region of Southwest **Finland** and Turku; the Pärnu county in **Estonia**; the Jurmala district in **Latvia**; the region of Klaipeda in **Lithuania**; the Oresound Region and Malmö, **Sweden**, and the Greater Copenhagen Region and Bornholm, **Denmark** – and many more, reflecting the nature of BSCDC: The BSCDC is an open platform and a platform that flexible enough to respond to differences in demand for knowledge building and learning on good cluster management practices – and to, through cluster-to-cluster linkages, inspire and accelerate business-to-business cooperation and trade in the Baltic Sea Region.

BSCDC will organize conferences, conduct research, and focus in particular on matchmaking and mentoring to:

1. Address the challenge that while the cluster development approach may conceptually be rather easy to comprehend “How to actually and practically go about it” is often far more challenging. The reason for this is that clusters and cluster initiatives does not fit in neatly into any one particular policy but rather should be expressed through a number of



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policies. Also, effective cluster development and cluster management requires hard and soft cross-disciplinary skills. The complexity is skills requirement; absence of formal cluster education; and need for learning-by-doing provides a strong argument for pooling – and communicating – cluster development skills and good transferable practices from across the Baltic Sea.

2. Through cluster-to-cluster cooperation fertilize internationalisation of in particular SME's and start-up tourism cluster companies. The rationale is that because of clusters geographic concentration, cluster stakeholders – including regional and local authorities and institutions – are close to the companies operating in “their” cluster. As a result, cluster development organisations are well positioned to address specific internationalisation challenges and opportunities of “their” cluster companies, in fact often more so than national trade promotion organisations. In practice the BSCDC will utilize the linkages and bridges appearing through cooperation on cluster management as gateways for business-to-business cooperation in the Baltic Sea Region.
3. Facilitate networking and cooperation also *across* different kind of clusters (branches/sectors) in the Baltic Sea Region. The rationale for this cross-cluster-fertilization effort is that there is increasingly strong evidence that cross-cluster cooperation play a particularly important role for technology development, innovation and creativity. However, there is a shortfall in knowledge and systematic approaches



for how effectively to facilitate such cross cluster cross sector cooperation. The BSCDC will through its network build knowledge in this area and inspire its partners to replicate/adapt successful practices.

As of 1 May 2013 Lars Albæk will head the BSCDC Secretariat on Bornholm with support from Cluster Coordinator, Hanne Nisbeth and International Cluster Advisor, Thomas Winther.

Company Sophistication

Prosperity is ultimately created in companies. While the business environment conditions discussed above define the context in which companies operate, this is where the value creation happens. And while this process occurs on its own in the market, it does not always happen quickly or without detours. Creating competitive companies takes time, often more time than reforming the business environment once the right type of political choices have been made.

Company sophistication has especially in the Nordics and Germany for some time been a key pillar of the countries' competitive strengths;

Germany, Finland, and Sweden make up three of the top five countries globally on the quality of company operations and strategy. The Baltic Sea Region has in 2012 overall strengthened its position on this set of indicators. But the developments are mixed, with Norway, Lithuania, and Germany gaining position while Denmark and Estonia saw some slippage. The key strengths are in operational practices, and this is also the area where on average the clearest gains were registered. Internationalization remains a key challenge for companies from the Baltics, Poland, and Russia, while it is a key strength of especially German and Finnish companies.

Company operations and strategy

Indicator	EE	LV	LT	DK	FI	IS	NO	SE	GE	PO	RU
Company operations and strategy	40	68	39	11	3	25	13	5	2	66	110
<i>Strategy and operational effectiveness</i>	44	69	39	13	4	25	18	5	3	64	115
Firm-level technology absorption	36	81	48	19	5	1	9	2	17	108	137
Company spending on R&D	45	79	70	12	5	31	19	6	3	90	74
Nature of competitive advantage	75	69	45	7	4	46	23	11	3	93	117
Value chain breadth	75	80	38	17	8	36	39	5	1	52	119
Capacity for innovation	31	64	41	14	3	19	12	5	4	59	66
Production process sophistication	48	68	44	17	4	20	11	8	2	45	104
Extent of marketing	56	71	37	25	16	22	10	9	4	41	98
Degree of customer orientation	37	47	32	7	31	23	29	6	12	42	125
<i>Organizational practices</i>	35	54	43	3	1	24	8	6	12	63	94
Extent of staff training	46	52	68	16	2	20	9	10	5	71	82
Willingness to delegate authority	34	71	57	1	5	9	3	2	13	75	99
Extent of incentive compensation	38	69	24	18	10	74	58	30	8	55	75
Reliance on professional management	31	45	50	9	1	21	4	11	17	80	104
<i>Internationalization of firms</i>	68	90	48	21	8	14	16	15	4	77	122
Prevalence of foreign technology licensing	60	96	56	29	2	31	7	17	11	88	122
Control of international distribution	81	88	34	19	18	8	31	21	3	78	115

Source: Unpublished data from the Global Competitiveness Report (2012), author's analysis.

Business Culture and Values in the Baltic States

By Maija Kale, Director of the Centre for Sustainable Business, Stockholm School of Economics in Riga

Recent research by the Centre for Sustainable Business at SSE Riga, covering entrepreneurs in all three Baltic States, captures 'portraits' of businesspeople in the Baltic States and tries to capture their understanding of 'sustainability' in the region. 'Sustainability', as a buzzword, has experienced a broad re-awakening after the economic and financial crisis in 2008. Nevertheless, its all-inclusive framework pushes the question: 'What is meant by sustainability in a region in which tax avoidance, corruption, and a shadow economy are "socially acceptable norms"?'.

Research indicates that reputation, to a large extent, could be the driving force behind the sustainability paradigm in the Baltic region, since a majority of the respondents (58%) held the opinion that a large percentage of the entrepreneurs from the Baltic States pay great importance to a company's reputation. Meanwhile, just 1/3 of respondents held the opinion that a majority of entrepreneurs in their countries observe the principles of sustainable development, but 20% are confident that the principles of sustainable development are observed by only a few entrepreneurs. Results in each separate Baltic country do not differ widely. They do, however, differ according to sector: 'The most vulnerable, in terms of sustainable business practices, is the construction industry.'

While 'sustainable business practices' could mean anything from environmental consciousness, to improvement of industry standards, to testing the extent to which entrepreneurs in the Baltic States are investing in employee training, the results show that a total of 37% of the entrepreneurs in the Baltic States stated that, in the previous year, they had invested financial resources in employee training activities regarding sustainable development. The percentage of enterprises that have made such investments is similar in all three Baltic countries. The fact that financial resources have been invested in employee training activities for sustainable development was more often stated by representatives of the service and industrial sectors, as well as by representatives of big companies, but less frequently by those working in the trade sector and in small companies.

When analysing other forms of 'sustainable business behaviour', the research illustrated that Latvian entrepreneurs

have co-operated with local authorities on matters of business development, donated money to charity, sponsored the arts, cultural, or sporting activities, and collaborated with scientific and research institutions, considerably less often than entrepreneurs in the Baltic States in general. Lithuanian entrepreneurs have provided health insurance coverage to employees, invested financial resources in employee professional development, and co-operated with local authorities on matters of business development, more frequently than others in the Baltic region. Entrepreneurs from Estonia have co-operated with national authorities on matters of business development, more frequently in comparison to other Baltic countries.

While 'tracing sustainability' reveals a rather similar level of moderate or weak engagement in the topic across the Baltic States, it is not possible to state that entrepreneurs from the Baltic States are very similar in their general business values and practices. More similarities from the evaluation results and opinions can be seen between the entrepreneurs from Lithuania and Latvia, while entrepreneurs in Estonia often have very different values and practices in comparison with other Baltic countries. Overall, it was clear that various negative business practices are rarely admitted to by entrepreneurs working in Estonia, but more frequently – in Latvia and Lithuania. Entrepreneurs in Latvia, more frequently than representatives of other countries, stated that a majority of entrepreneurs pay 'salaries in envelopes' and that their daily activities do not match what has been announced to the public. Lithuanian entrepreneurs, more frequently than entrepreneurs in other countries, admitted that in their country a majority of entrepreneurs give bribes and gifts. From all the negative business practices surveyed in the questionnaire, Estonian entrepreneurs mentioned giving bribes/gifts, paying 'salaries in envelopes' and cheating on taxes considerably less, in comparison to Latvian and Lithuanian entrepreneurs.

The research poses the question of how to tackle sustainability-related issues in complex business environments in which shadow economies and bribery prevail. It is clear that a 'sustainable business practice' could first be viewed as a rules-based business in a well-functioning business environment.

See the full report at <http://www.sseriga.edu/en/centres/centre-for-sustainable-business/research-series/>

Assessment

The competitiveness of the Baltic Sea Region remains solid and largely unchanged compared to previous years. The economic outcomes, in particular the level of prosperity reached, are well supported by current competitiveness fundamentals. Company sophistication, communication infrastructure, innovation infrastructure, and human development stick out as advantages, while the degree of actual market rivalry, the level of administrative efficiency, and some other dimensions of factor input conditions remain relative disadvantages.

The Region continues to be characterized by significant differences in business environment conditions, driving the equally high differences in economic performance discussed earlier in this Report. The survey-driven competitiveness data captures short-term changes in perceptions as well as long-term changes in underlying business environment quality. For Denmark, it seems likely that the significant drop in 2012 was driven by short term changes in the sentiments of business executives. The worsening of scores was visible across many individual indicators, which suggests that survey respondents took a generally more skeptical view towards Denmark as a place to do business. Whether the 2012 data signals a more fundamental re-evaluation of Denmark's competitiveness remains to be seen. A normalization of scores in 2013 seems at least likely, but the negative view of business leaders can have a real negative impact on business activity and, ultimately, activities that strengthen competitiveness.

Germany and Russia have registered the strongest positive change in their competitiveness rank in 2012. For Germany, positive sentiments due to the better economic performance than in many other EURO-zone countries might have played a role; the country's ranks increased in all categories based on survey data, while they deteriorated slightly for the macroeconomic policy indicators driven by statistical data. For Russia, a normalization after the deterioration during the crisis might play a role in explaining the recent improvements. But there is also a sense from the data that while there is criticism of the functioning of the political system there are perceived improvements in the functioning of the administration.

Finland and Norway are the other countries in the Region that have seen improvements in competitiveness rankings, but for them in a positive direction. For Finland this is a remarkable achievement given Nokia's painful restructuring process that leads to many job losses and has clear implications for R&D and exports. The current crisis is a real test as to whether Finland has over the last few years been able to create an attractive business environment beyond Nokia. The 2012 data gives reason for some guarded optimism. Norway has continued its rise in the competitiveness rankings. While the country clearly benefits from its oil and gas reserves, there are not many examples of locations that have managed to create a competitive business environment when having access to large revenues from natural resource wealth. Norwegian executives might be too generous in their views, driven by the benevolent economic climate in the country. But even if the improvements in competitiveness are not as high as suggested by the survey responses, they are still a significant achievement.

In the other countries in the Region, the changes have been more modest. Sweden has lost some momentum; the weakening economic situation as well as discussions about the country's future economic course might be taking their toll. Iceland is on its slow but sustained path to recovery, with improvements especially visible in the financial markets. But the views towards the political system remain negative, with no change in trend visible.

The Baltic countries have stabilized their position; they have made up some of the losses sustained during the crisis but clearly not all. Poland is seeing its position under pressure. While there are improvements in some areas, like parts of the physical infrastructure, the overall assessment has gotten slightly more negative. It is becoming clear that Poland's more robust performance during the crisis was not the result of high competitiveness, but of other factors (large local market, large catch-up potential, proximity to Germany) that are not sufficient to draw future growth.

3. Summary

During 2012 the European crisis has started to fully arrive in the Baltic Sea Region. The outlook for 2013 is now fragile, and most governments are preparing themselves for a prolonged period of slower growth. The key driver of these developments is the European sovereign debt crisis, and the impact it has on demand as well as financial market conditions. Another factor was the slowing down of the one-off growth effects as the Region was recovering from the 2009 global crisis. The initial effect in 2012 was largely on investments; company became significantly more reluctant to expand capacity. For 2013, however, consumption will also be affected, especially if the labor market effects of the slowdown are becoming more visible.

This time around, the external shock has been felt relatively symmetrically across the Region. All countries are dependent on European market conditions, and country-specific factors have played less of a role. With no quick recovery in sight for the European economy, the weak external demand is likely to weigh on Baltic Sea Region growth prospects for some time. While the still much healthier economic situation within the countries of the Region relative to the rest of Europe will help, it is unlikely to be able to drive much more than a stabilization of growth rates at a modest level.

Apart from these cyclical factors, the Report also highlights how the dynamics of globalization are continuing to shape the Baltic Sea Region. Two different modes of internationalization seem to be emerging. Germany, Poland, and the Baltics are strongly export-driven, engaging in global value chains at different stages (Part C of this Report discuss the latest trends in this direction some more). The Nordics are more FDI-driven, attracting knowledge-seeking investment but otherwise engaging in international value chains through activities located abroad but owned from the Nordics. Both models are emerging to the specific conditions in the different parts of the Region - part given by nature, part by government policy. While both can support high levels of prosperity, they create different types of challenges for economic policy.

The underlying competitiveness of the Region remains strong, with no dramatic changes rela-

tive to previous years. Where there are changes, they are largely driven by short-term changes in economic conditions and sentiment. In Denmark, for example, the perceptions of business leaders have become more skeptical across the board once the new government took office and some of its measures created public opposition. In Finland, the assessment has been much more positive despite the challenges facing Nokia and a number of tax increases implemented in early 2013. Sweden has marginally lost position, whether due to the combination of short- and long-term economic challenges or some fatigue with the center-right government coalition preparing for its second re-election campaign remains to be seen. Germany has further strengthened its position, with the solid economic performance clearly having a positive impact. Iceland has stabilized but the scares that the meltdown of the financial system has left remain clearly visible, especially in the views of the political system. The Baltics and Poland remain in a relatively solid position that is in line with their current level of prosperity. But to achieve a higher growth rate they will need to additional answers for upgrading their competitiveness. Russia is entering a difficult phase: the growth drivers of recent years – rising oil prices, ample spare capacity, and stable macroeconomic policy – are either gone or no longer sufficient to secure growth. New growth dynamics have to come from competitiveness upgrading, and while there are some small improvements visible, the concerns about the ability of the political system to deliver change seem to be growing.

What does all this imply for collaboration on competitiveness upgrading across the Baltic Sea Region? Last year's Report suggested that attention should focus on three categories of activities:

- *Activities with significant cross-border externalities*; this includes areas like market integration, large scale investments in transportation and science infrastructure, and networks of clusters. Successful action requires the coordination of activities at the level of the Region.
- *Knowledge exchange and common learning*; this includes areas like education policy, labor market policy, administrative reforms, anti-cor-

ruption measures, and innovation policy. Here successful action needs to be driven by country-specific circumstances. But the cultural proximity of neighboring countries makes the experience across the Region an important source of knowledge and ideas.

- *Shared knowledge infrastructure*; the countries in the Baltic Sea Region are all exposed to the same changes in the global economy. And they all face the need to devise fact-driven economic strategies that focus their policy actions on developing distinct competitive advantages for their country. A common competitiveness observatory and an exchange on how to organize policy design and implementation in this context could be an important area for collaboration across the Region.

All three areas remain highly relevant now. Cross-border externalities remain high and while some efforts are underway for coordinated action, more could be done. This will require the coordination of national policies, not just a focus on common positions towards regional efforts supported by the EU. Common learning does take place but here, too, there is room for more. Many of the existing linkages are bilateral or connected to the EU. The Nordic Globalization initiative provided a good example for how a common knowledge infrastructure to track and discuss competitiveness issues in the Region could look like.

Think small - insights from the small advanced economy experience

By David Skilling

Many of the Baltic Sea Region (BSR) economies have done well over a sustained period of time. And relative to many other European countries, the BSR economies are recovering more effectively from the crisis. Economic growth rates look better, fiscal balances are moving in the right direction, and the economies seem to be well-regarded by financial markets and other third parties. The Baltics are held up by many as a role model in fiscal consolidation, and the Nordic model rated a recent cover story in the Economist.

However, as previous State of the Region reports (as well as third party commentary from the OECD and others) remind us, there are a range of medium-term, structural challenges that need to be addressed by economies in the region. Sluggish productivity growth, an aging population and associated long-term fiscal pressures, and declining international market share in key sectors are just a few of the issues that have been identified.

And so the relatively strong performance of the region should not lead to complacency. Governments in the region should be focused on absolute performance, and ensuring that their economies are delivering the best economic and social outcomes possible. In terms of how best to do this, much can be learned from the policy debates and experiences from other economies in the region given the many similarities of these economies.

But one of the salient characteristics of many economies in the BSR region is that they are small. This matters. Small economies are not simply scaled-down versions of large economies, and policy settings that are appropriate in large countries may not be appropriate for small countries. And so in addition to learning from others in the region, the experience of other small advanced economies can provide useful policy guidance in terms of how to respond to the emerging challenges and opportunities.

I define small advanced economies as the IMF advanced economies with populations of less than 10 million. Of the 34 IMF advanced economies, 18 are small on this definition, including countries such as New Zealand, Singapore, Israel, and Hong Kong, as well as many European economies. Despite the differences between these countries, they share much in common.

For one thing, small advanced economies have performed well over the past few decades on a range of outcome measures. Growth rates have been relatively strong, with the small advanced economy group holding their share of global GDP constant over the past few decades while most of the larger advanced economies have lost share. And many small advanced economies have responded effectively to the crisis.

The specific ways in which these small economies have generated this strong performance vary. Across the small economy group, we observe a variety of policy approaches (on tax, regulation, industry policy, and so on). But there are some important underlying commonalities. Small advanced economies share an acute exposure to the global economy, with much larger internationally-exposed shares of their national economy. They have been major beneficiaries of globalisation, but need to be thoughtful in terms of how to manage the risks and exposures that global exposure generates.

Indeed, successful small economies tend to operate in a more deliberate, purposeful manner in terms of aligning policies to position themselves appropriately in the global economy. The way in which small advanced economies around the world are interpreting the international environment and are responding to it is a potential source of insight for BSR economies.

Many small advanced economies see the emergence of a more challenging international environment, which complicates the task of responding to the various challenges that they face. Competitive intensity is increasing; the international economic and political environment is becoming more turbulent, which is a particular issue for small, open economies; and the global environment is becoming more complex for small countries with a weakening of multilateral institutions and the growth of big power politics (what President Barroso calls 'a world of giants').

In order to sustain their success, small economies need to pursue an even more serious, deliberate approach to their positioning in the global economy. Indeed, many small economies are thinking through how best to respond to these emerging realities. The current international small economy debate and experience suggests three areas that are likely to be relevant to economies in the BSR.

- *Competitive strategy.* Successful small countries have tended to make investment in human capital and innovation a core part of their economic strategy. This needs to continue and intensify, given the increased competitive intensity in the global economy (including from emerging markets). Small economies need to form a clear view as to the source of the next generation of growth – on what basis can they compete – and to invest behind it. Structured conversations are underway in many small economies to develop such a perspective, informed by a view of changing global dynamics and current strengths. Given that small economies are likely to only have a handful of activities in which they are world-class, getting this judgment correct is of significant importance.
- *Risk management.* Small economies need to be very thoughtful about managing global risk exposures because of their higher degree of openness as well as by their relative lack of diversification. The recent experience of the crisis, and the expectation of greater turbulence in the future, has increased the strategic importance that many small countries place on economic risk management. Small economies are thinking hard about issues such as fiscal consolidation to strengthen their balance sheets, managing their current account to reduce their international exposure, debating how to manage exchange rate risk, as well as considering broader exposures (such as the risk profile of their economic structure). There is a view across many small economies that the best competitive strategy can be undone if there is not a structured approach to risk and resilience.
- *International market strategy.* The returns from export markets, and from outward investment activities, are a major driver of overall economic performance for small economies. This is an area of increasing policy attention. In the context of a lack of progress at the WTO, small economies have been in the vanguard of signing FTAs to ensure ongoing market access to important, high growth markets. This is a particular issue for economies outside the EU. More broadly, small economies are trying to balance the need for greater regional integration (to bulk up and to manage risks) with a desire to maintain the policy autonomy that supports agility. And

small economies are increasingly thoughtful about their international market profile, both deliberately rotating their export market presence towards high growth markets as well as managing the risks of high exposures to particular markets.

Many of these small economy policy debates seem to me to be relevant in the BSR, with many similar issues on the table in the region. For this reason, a more systematic approach to capturing these small country insights, and developing a deeper understanding of peers outside the immediate region, would add significant value.

This could involve a deliberate program of policy and outcome benchmarking BSR economies against other small advanced economies, as well as structured qualitative analysis to understand the policy approach and experience of these small economies. Developing relationships with policy-makers and thinkers in other small countries is likely to be valuable. Indeed, increasingly, small economies are finding it useful to talk to each other about the many issues that they have in common.

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Section B: Collaboration in the Baltic Sea Region



This section of the State of the Region Report describes the patterns of regional collaboration across the Baltic Sea Region. Following the tradition of past Reports, it profiles the activities and current plans of key regional organizations and networks. It then comments on the further evolution of the EU Baltic Sea Region Strategy Process, including information on the progress made in some of the flagship projects.

Europe is in a difficult process of finding a new balance on how to collaborate. For many, a sustainable solution to the current crisis requires a new look at Europe's institutional architecture, especially in the areas of macroeconomic policy what role should the European institutions play versus the national level? And how can individual countries get an appropriate reflection of their positions in the policies of EU institutions? These questions have been on the European agenda since the integration process started five decades ago. But they have received more intense recognition during the current crisis which is perceived to have tilted power from nations to EU institutions, in particular the ECB and the European Council, and within the latter towards the representatives of the strongest economies, in particular Germany. The European integration project is under pressure but it is also firmly on its rails, despite the crisis.

The Baltic Sea Region is no integrated entity in the context of the current dynamics within the European Union. Not all countries are members of the EU, and not all of the EU members are part of the Euro-Zone. Those that are tend to support the German position, together with Austria and the Netherlands, but are much less visible in the public debate. The Baltics remain firmly on course to the Euro-Zone, with Estonia already there and Latvia soon to be joining. But the Polish public has become much more skeptical, and there is no support for Euro accession in Sweden either. Many of the Nordics and Baltics also have strong sympathies for the UK, which seems to be drifting away from the

EU mainstream. All of this makes it hard for the Baltic Sea Region to take a common position in the debates about Europe's future architecture, despite the principal consensus on the type of policies that should be pursued..

Within the Baltic Sea Region, collaboration does in the meantime continue with remarkable ease. The focus is on activities to upgrade the microeconomic foundations of competitiveness and addressing common environmental challenges, all areas where collaboration provides direct benefits to all participants. The coordination among different activities is further increasing, with the EU Baltic Sea Region Strategy as a natural organizing factor. A key challenge is now to ensure that the future EU budget for the upcoming program period does open programs like the EU structural funds for joint activities in the Region.

This part of the 2013 Report gives an update on the state of collaboration on competitiveness upgrading across the Baltic Sea Region. The first section provides an overview of activities that have been pursued by regional organizations over the last few months. The second section tracks the evolution of the EU Baltic Sea Region strategy process. The third section then profiles the activities of the leading public sector international financial institutions (IFIs) in the Baltic Sea Region. This part of the Report is heavily based on the contributions made by the organizations, networks, and projects described – we would like to thank them for their willingness to describe their activities in this context.

1 Regional networks and initiatives

This section provides an overview on the activities that have been pursued by key regional organizations over the last year through individual and collaborative initiatives. It is based on material provided by the organizations.

1.1 Governmental organizations



The **Council of the Baltic Sea States** (CBSS; www.cbss.org) was created in 1992. The CBSS provides an intergovernmental platform for regional co-operation between the eleven

countries of the Baltic Sea Region as well as the European Commission. It works through network and project based activities and aims to boost the competitive edge of the region. The five priority areas for the organization are; environment and sustainability, economic development, energy, education and culture, and civil security and the human dimension.

The Russian Federation holds the *CBSS Presidency* for 2012-2013. One of the key characteristics of the Presidency was the principle of continuity. The main focus was placed on modernization and innovation, especially clusters of growth and the establishment of a Public-Private Partnership (PPP) network.

The Russian Federation hosted several high-level sessions beginning with the 21st Baltic Sea Parliamentary Conference, 26-28 August, St. Petersburg and followed by the 5th CBSS Conference of Ministers of Transport, December 5, Moscow. Saint Petersburg held the Baltic Sea Week between 19 - 23 March, involving a series of events which was followed by The Conference of the Heads of the Baltic Sea States on environmental protection (Baltic Sea Summit) which took place in St. Petersburg, April 5-6, 2013. The conference was held within the Year of the Environment in Russia and the Russian Federation Presidency of the Council of Baltic Sea States (CBSS). A high-level segment for Prime Ministers of CBSS Member States took place presided over by Prime Minister Medvedev

on the 5th of April. A Business and Financial Communities of the Baltic Sea States Forum was held on the 6th of April. The Russian Presidency culminates with the 18th Ministerial Session, June 5-6, Kaliningrad, back to back with the CBSS Modernization Programme (SEBA) and a Conference entitled Creativity and Cooperation, June 7-8, Kaliningrad, Russian Federation.

One of the newest avenues for the Council has been the continued development of the *Pilot Financial Initiative (PFI)* and its correspondent Memorandum of Understanding which was signed during the 9th Baltic Sea States Heads of Government Summit in Stralsund, May 2012 in the presence of Igor Shuvalov, First Deputy Prime Minister of the Russian Federation. The subsequent signing of the agreement between the banks - the German KfW Bankengruppe and the Russian Vneshekonombank (VEB) on long-term financing for small and medium-sized enterprises (SME) in the field of modernization and innovation took place in Moscow at the Hotel Baltschug Kempinski on 16th November. The signing was in the course of the Russian-German Interstate Summit Consultations and was designed to build on the Memorandum. The signing was in the presence of German Vice Chancellor Philipp Rösler and reinforced the continuation between the German and Russian Presidencies of the CBSS on the matter of innovation and investment,

In the first phase KfW intends to provide Vneshekonombank with long-term loans, for on-lending to projects approved by the Steering Committee consisting of representatives of the PFI Partners. It is envisaged that the Initiative will be extended to other financial institutions from the CBSS region who wish to join the PFI as well. A \$110 million dollar money transfer agreement was signed for the purpose of financing projects in the Kaliningrad Region and the regions of St. Petersburg (Leningrad), Novgorod, Pskov as well as in the City of Saint Petersburg. The financing will focus on sustainable development and modernization in the field of municipal and regional infrastructure, energy efficiency, ecology, climate protection and comprehensive development. This was the first agreement rolled out in the frame of Pilot Financial

Initiative (PFI) under the umbrella of the Council of the Baltic Sea States (CBSS). The signing ceremony of the credit agreement for the first project under the Pilot Financial Initiative (PFI) was signed in mid-December in the presence of the Committee of Senior Officials and Observer States representatives. Vnesheconombank and KfW Bankengruppe entered into this Credit Agreement under the Program of the Council of the Baltic Sea States (CBSS) on 12 December, 2012. The Credit Agreement on extending local currency counter value of 65 million US dollars by KfW to Vnesheconombank is aimed to support an essential modernization of the urban solid waste system in the City of St. Petersburg. In the framework of this public-private partnership project modern waste sorting and recycling facilities will be installed, thus increasing waste treatment efficiency and overall waste treatment quality. The investment payoff will result in a significant decrease of climate and environmental stress, which will lead to sustainably improved living conditions for the population of St. Petersburg.

PFI is a first step to an open financial platform, which is intended to attract financial partners and financial resources for projects in the geographic area of the CBSS. Meetings between the parties of financial institutions in the region are ongoing and further inclusion was stressed recently by Prime Minister Medvedev in his speech in April. The financing program of Vnesheconombank is implemented by means of providing the wide net of bank-partners in the North West of Russia with financial resources through MSP Bank, a daughter company of Vnesheconombank which focus on the support of the existing business projects prioritizing the modernization of manufacturing and innovations. In line with these efforts CBSS also organized an international conference *Fostering Small and Medium Enterprises (SMEs) in the Baltic Sea Region: Financing, Public Private Partnership, Innovations*, which took place in Kaliningrad on November 22. Its objective was to focus attention of small and medium business, financial institutions and authorities on long-term financing and support to SMEs in the sphere of modernization and innovation in the Baltic Sea region.

Additionally to the PFI the CBSS has developed the *CBSS Project Support Facility*. The CBSS Project Support Facility (PSF) which was also created at the 9th Baltic Sea States Summit in

Stralsund, Germany, on 30 – 31 May 2012. The planned timeframe of the facility is 5 March 2013 until 2015, with a continuous open call for applications. The main purpose of the CBSS Project Support Facility is to co-finance the development and implementation of Baltic Sea macro-regional cooperation projects, to support cooperation in a flexible way, and to pave the way for larger regional cooperation projects in the future, funded by much bigger funds existing in the region which would in turn bring added value for the Baltic Sea region, show impact in regional cooperation and foster long-term partnerships. The PSF in brief:

- The projects should be transnational in character and aim to have a sustainable outcome
- The maximum amount of co-financing granted is 50 000 euros
- The project proposals may be initiated by a variety of legal entities of CBSS Member States, as well as CBSS Expert Groups and CBSS Networks

One of the major developments that have had an impact on the structure and operations of the CBSS is the *EU Strategy for the Baltic Sea Region*. The CBSS and its various expert groups and network bodies are increasingly utilized as facilitators of cooperation among EU and non-EU Member States for some of the strategy's actions - notably in the fields of sustainable development, economic development, and civil security and crime. On 22 February 2013, European Commission disseminated the reviewed Action Plan of the EU Strategy for the Baltic Sea Region EUSBSR.

Since the revision, the CBSS Secretariat is even more involved in the European Union Strategy for the Baltic Sea Region with formal roles as Priority Area Coordinator for PA Secure jointly with Sweden tackling emergency preparedness from an all hazard approach. PA Secure is a new priority area dealing with land-based civil protection matters and was formulated on the basis of the work done within flagship project 14.3 as well as based on recommendations from the EU Member State civil protection authorities operating in the Baltic Sea region. It is also joint Horizontal Action Leader with the Turku Process for HA Neighbours, where the flagship project Balticlab is one of the actions aimed at young emerging talents in the creative industries - this action is jointly undertaken with

the Swedish Institute. The CBSS Secretariat is also responsible for HA Sustainable and Bio-economy with the Nordic Council of Ministers dealing with the Bio-economy area. Under PA Crime the

Task Force against Trafficking in Human Beings (TF-THB) is continuing with its current flagship ADSTRINGO which focuses on trafficking for labor exploitation.

Balticlab Network – Young Entrepreneurs around the Baltic Sea



Recently, there have been many discussions about the need to support and utilise young entrepreneurs and those involved in creative industries as an important export driver and reviver of national branding and growth in the countries of the Baltic Sea Region.

Balticlab is a new concept created by the CBSS and the SI to address what we recognised as a relative lack of networks bringing young talented entrepreneurs and creative industries from the region together, but also provide them with a platform for working together more concretely on a regional level. The aim of Balticlab Project Development Programme this spring is thus to create a link between individuals with potential to drive change and innovation and the policy-making / policy-enacting community engaged in Baltic Sea Region territorial co-operation.

A group of 19 individuals from the Balticlab Network of 67 participants, formed during a networking weekend in December 2012, have been invited to form working groups to develop project prototypes that link their personal interests with the need to foster integration in the region. The programme participants, who come from Lithuania, Poland, Russia and Sweden, will meet and work during the interlinked programme modules in Malmö in



April, Nida in May and Kaliningrad in June 2013. The participants will be provided with the tools, coaching and perspectives needed to manage macro-regional cross-border collaborations in areas related to their own interests, but with a link to the themes addressed by the European Union Strategy for the Baltic Sea Region (EUSBSR) and the South Eastern Baltic Area Modernisation Partnership (SEBA) initiative. These may include contemporary culture, media, fostering entrepreneurship, innovation, cyber-crime, tourism and people-to-people contacts. Balticlab is a flagship project of the EUSBSR under Horizontal Action Neighbours. See www.balticlab-online.eu for more information.



norden

The **Nordic Council of Ministers** (NCM; www.norden.org) is the platform for inter-governmental cooperation between the Nordic countries. NCM has a broad range of activities within 11 different Ministerial Councils. Traditionally, the areas of Education & Research, Culture, and Innovation cover over half of the total budget of about 1 000 million Danish kronor yearly (approx. 130 million Euros). Over the last few years, collaboration on competitiveness, green growth and welfare issues has become even more in focus.

Since the Prime Ministers identified Globalization in 2007 as a new priority, totally 22 initiatives have been implemented and most of them are completed. These initiatives were intended to develop the Nordic model, increase competitiveness, and to promote the Region as a pioneer in tackling globalization. In October 2011 the Nordic prime ministers commissioned the ministerial councils to develop a number of tangible areas in which the Nordic countries can work together to generate Green Growth and Prosperity. The prime ministers' proposal priorities Nordic test centers for green solutions; education, training and research

for green growth; flexible consumption of electricity; green-technology norms and standards; green procurement in the public sector; techniques and methods for waste treatment; the integration of environmental and climate considerations into development aid, and funding for green investment and companies. These projects have been developed and started up during 2012 or 2013.

In 2013 a special budget for prioritized initiatives has been introduced under the Ministers of Nordic Cooperation. The priority-budget contains a chairmanship-part, in order to increase the chairmanships possibility to launch new initiatives, and a part for new, big prioritized initiatives. In 2013 the Swedish chairmanship will prioritize the areas of; Youth unemployment, Quality if working-place learning, Competitiveness of the Nordic Mining Industry and Black carbon emissions. During 2013 the main other initiatives in the priority-budget are Green Growth and Prosperity, Sustainable Nordic Welfare, Climate friendly building, and Culture and Creativity.

While the NCM focuses on collaboration among the Nordic countries, it works very actively with its neighbors in the Baltic Sea Region. The cooperation with Estonia, Latvia and Lithuania and with North-west Russia take place in areas of common Nordic-Baltic respectively Nordic-Russian interest. Education, research and innovation are important areas in the Nordic-Baltic cooperation. Together with Russia NCM in 2012 launched a new joint effort in the field of education and research. NCM is strongly committed to the Northern Dimension and contributes actively to the implementation of the Action Plan for the EU Baltic Sea Strategy. The Northern Dimension and the EU Baltic Sea Strategy are integrated in the policy of NCM for cooperation with its neighbors in the Baltic Sea Region. In addition, the NCM's cooperation with Poland and Germany is being developed.

The NCM has taken the lead in a horizontal action on bioeconomy as well as in several flagship projects of the EU Baltic Sea Region strategy. In addition the NCM strives to keep the strategy high on the political agenda of the region. Among the flagship projects led by NCM are cooperation in the areas of forestry, plant genetic resources, veterinary contingency planning and culture and creative industries. A flagship project in the field of infrastructure for the free movement of knowledge

(the fifth freedom) is being prepared. In addition, NCM plays an active role in involving Russian partners in the projects, for instance in a project on BSR City Branding. It is our ambition that the Nordic region and the Baltic Sea Region as a whole will benefit from this work.



VASAB is an intergovernmental co-operation providing a ministerial platform and expert network for 11 Baltic Sea Region countries to coordinate

spatial planning and development - the EU countries Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden as well as Norway, Russia and Belarus. It is guided by the conference of ministers and steered by the Committee on Spatial Planning and Development of the Baltic Sea Region where German regions adjacent to the Baltic Sea and Russian North West regions and city of St. Petersburg are also represented. Chairmanship of VASAB follows the pattern of CBSS: Russia is the current chairing country and from 1 July 2013 chairmanship will be transferred to Finland. More information can be found at www.vasab.org

The last VASAB 7th Ministerial Conference on 16 October 2009 has endorsed the new VASAB Long Term Perspective for the Territorial Development of the Baltic Sea Region (LTP) that includes a number of actions. The LTP covers policies for which the transnational cooperation in spatial planning may contribute substantially. These policies include urban networking and urban-rural cooperation, internal and external accessibility as well as maritime spatial planning and management. The recent VASAB activities are concentrated towards overcoming of the important challenges specified by LTP and implementation of LTP in order to ensure the commonly agreed goal - achieve territorial cohesion perspective in the Baltic Sea Region by 2030, i.e. the region is a well-integrated and coherent macro-region, and it has overcome the socio-economic development divides between its individual parts and turned the global challenges into assets.

Being aware of the increased use of coastal and maritime areas, need for application of maritime spatial planning is being encouraged by VASAB already since Ministerial Conference of 2001. The concept and methodologies of MSP have been de-

veloped by several pilot projects, like *BaltCoast* and *Plancoast*. In 2010, a Joint Working Group on maritime spatial planning was established with HELCOM and it is operating as a regional platform to promote long-term sustainable management and planning for the whole Baltic Sea in the cross-border context. The HELCOM-VASAB MSP WG has elaborated and adopted Baltic Sea Broad-scale Maritime Spatial Planning Principles that serves as guidelines for development of maritime spatial plans across the Baltic Sea.

Consequently, VASAB also contributes to the implementation of the EU Strategy for the Baltic Sea Region (EUSBSR) and its Action Plan. In collaboration with HELCOM, VASAB is a Horizontal Action leader for the HA “Spatial planning”, i.e., encouraging the use of maritime and land-based spatial planning in all Member states around the Baltic Sea and develop a common approach for cross-border cooperation. A Flagship project of the Horizontal Action *PartiSEApate* – Multi-level Governance in MSP (Maritime Spatial Planning) throughout the Baltic Sea Region is being carried out. The project idea has raised from the *BaltSeaPlan* project and its main goal is to develop a pan-Baltic approach to marine topics that have a spatial dimension that go beyond the national borders (i.e. nature protection areas, grid connections, shipping lanes) and thus to create a transnational framework for multi-level governance in MSP. Project will develop a concept for an institutional framework for MSP and governance model for coherent planning of cross-border issues (including transnational consultation, MSP data exchange network), which will provide input to policy decisions taken at the ministerial level in the BSR countries. VASAB is involved in the project as one of the project partners. The project builds on the results of existing network, the HELCOM-VASAB MSP WG, and the completed Baltic projects: *PlanBothnia*, *BaltSeaPlan*, *PlanCoast*, *East-WestWindow* and *BaltCoast* where VASAB played a substantial role. Altogether 11 partners from almost all BSR countries have joined the project. A lead partner is Maritime Institute in Gdańsk, Poland. The HELCOM-VASAB MSP WG has assumed the role of Project Advisory Group. The project received co-financing from the EU Baltic Sea Region Programme 2007–2013, its duration is from June 2012 until September 2014. Relevant results of the project will be presented at VASAB Ministerial Conference in 2014.

VASAB has also contributed to the discussion of the territorial cohesion concept in the European Union. With the aim to facilitate measuring of territorial cohesion within the Baltic Sea Region, VASAB has initiated also the ESPON 2013 Programme project – “BSR-TeMo - Territorial Monitoring for the Baltic Sea Region”. This project shall support evidence informed territorial development and cohesion in the Baltic Sea Region by developing an indicator based monitoring system. This monitoring system shall comprehend a policy dimension, related to the promotion of territorial cohesion in the Baltic Sea Region, and a methodological dimension aimed at developing a tool (indicator based) for monitoring the territorial development in the Baltic Sea Region. This will contribute to increased knowledge and understanding of territorial cohesion processes in the BSR and at the same time allow for a comparison and benchmarking with other European regions and macro-regions. It will also support the contribution of the BSR to smart, sustainable and inclusive growth in Europe as mentioned in the EU2020 Strategy (http://www.espon.eu/main/Menu_Projects/Menu_ScientificPlatform/bsr-temo.html). The project involves seven partners with a Lead Partner Nordregio - Nordic Center for Spatial Development, Sweden and runs from February 2012 to January 2014.

The specific trait of VASAB is active involvement of non-EU partners in discussing regionally important topics. For example, VASAB together with Ministry of Regional Development of Russia, Committee for External Relations of Saint Petersburg and International Centre for Social and Economic Research - Leontief Centre organized a Round Table “Integrated Development of Rural and Urban Areas: Experience of the Baltic Sea Region” during the XI Annual Forum of Strategic Planning Leaders in St. Petersburg, 22-23 October 2012.



The **Baltic Sea States Sub regional Co-operation (BSSSC)** is a political network for regional authorities in the Baltic Sea Region. The BSSSC

co-operates closely with other Baltic Sea and European organizations in order to promote the common interests of the regions around the Baltic Sea towards national authorities, EU institutions

and others. In 2013-2014 the chairmanship of the BSSSC is held by the Helsinki-Uusimaa Region, Finland. The EU Strategy for the Baltic Sea Region (EUSBSR), entrepreneurship and innovation will be cross cutting themes that will be addressed during the chairmanship.

The EUBSR has since its establishment guided the actions of the BSSSC and its regions and the BSSSC has been an active player in the development and implementation of the strategy. Several events like the European Commission's consultation on the EUSBSR in 2008 and the first Annual Forum of the EUSBSR in 2010 have been organized back-to-back with the BSSSC Annual Conferences, and the opportunities have been used to promote and lobby for a regional view on the EUSBSR. The key messages of the BSSSC statements concerning the Strategy have been included in the Joint position on the implementation of the EU Strategy for the Baltic Sea Region adopted by the Baltic Sea States Subregional Cooperation, B7 Baltic Islands Network, Baltic Development Forum, CPMR Baltic Sea Commission, Euroregion Baltic and Union of the Baltic Cities in April 2012.

Co-operation with other Baltic Sea organizations has traditionally been very important for the BSSSC. In addition to the Joint position on the implementation of the EU Strategy for the Baltic Sea Region, the renewal of the Declaration of common interest by the Committee of the Regions (CoR), B7, UBC, Euroregion Baltic (ERB) and Euroregion Pomerania was signed in 2012. While the regional council of Helsinki-Uusimaa also holds the secretariat of the CPMR Baltic Sea Commission, the secretariats of the two organizations will be combined during 2013-2014.

During the Helsinki-Uusimaa chairmanship six policy areas will be highlighted by the BSSSC. The policy area work will be done in different working groups, which the chairmanship will support and develop. Focus will be laid on:

- maritime policy (e.g. maritime spatial planning and maritime safety)
- energy and climate issues (e.g. renewable energy sources)
- youth affairs (e.g. youth entrepreneurship and youth unemployment)
- Northern and Arctic Dimension (e.g. the Barents and the Norwegian Sea issues and the North-East Passage as a transport corridor)
- cohesion policy (e.g. preparations of the future programming period and establishing a platform for exchanging experiences on cohesion policy implementation in the regions)
- transport and infrastructure issues (e.g. improving connectivity, strengthening accessibility and promoting the transport corridors of the BSR).

The BSSSC Annual Conference, the organization's main forum for exchange of ideas and interests, will be held in Helsinki the 17th-18th of October 2013, where the 20th anniversary of the organization also will be celebrated.



The **Union of the Baltic Cities** (UBC; www.ubc.net) is the leading organisation of cities and local authorities in the Baltic Sea Region. It was founded in Gdansk in 1991, and is one of the first pan-Baltic

organisations born after the cold war. UBC counts among its members big cities such as St. Petersburg, Tallinn, Riga, Vilnius, Helsinki, Malmö and others, but also many middle-sized and smaller towns. It has altogether more than 100 fee-paying members, including Russian and Norwegian cities. The bi-annual Congress of UBC (1-4 October, 2013 in Mariehamn, Åland Islands) elects an Executive Board, comprising of the President, three Vice-Presidents and one member city from each country. The Board meets normally three times a year. The General Secretariat is hosted by the City of Gdansk in Poland.

UBC has two main goals: to promote, through co-operation and exchange, the sustainable development and prosperity of its members and their inhabitants, as well as to ensure that the interests of the Baltic Sea Region are listened to in the capitals and in Brussels. The member cities co-operate on a wide range of political, economic, social, cultural, and environmental issues. UBC promotes the exchange of know-how and experiences between the cities through seminars, courses, and publications. Its many projects are carried out through thirteen thematic Commissions. They are hosted by different member cities, thus engaging them in practical activities of the UBC.

The EU Strategy for the Baltic Sea Region has provided a very useful framework for regional co-operation, and the concept of multi-level governance can significantly boost joint efforts. UBC has defined participation in the EUSBSR implementation as its priority, and is in many ways involved in it.

UBC has also trimmed its own organisational structures and political culture in order to respond to the new possibilities and challenges. It has started to implement its Communication and Marketing Strategy. A new Commission on Local Safety has been created, to promote co-operation and exchange between cities in land-based threats and hazards. UBC has co-operated closely with many BSR organisations, especially the Baltic Development Forum and BaltMet.



The **Baltic Metropoles Network** (BaltMet; www.baltmet.org) represents ten capitals and large metropolitan cities from around the Baltic Sea Region. The main goal of the network is to promote innovativeness and competitiveness of the Baltic Sea Region by engaging cities, as well as academic and business partners, in close co-operation. In 2013-2014, the Chair of the Network is the City of Helsinki. The chairmanship is comprised of three cities: Helsinki (current chair), Berlin (future chair) and Warsaw (past chair).

Baltic Metropoles Network (BaltMet) was established in 2002, during the Danish EU presidency. The Copenhagen Resolution set the agenda of co-operation of Baltic metropolises: the request for EU enlargement, the engagement of North-Western Russia and the enhanced co-operation of Baltic metropolises in terms of brain circulation, upgrading higher education in the region, cluster interchange, integration and new infrastructure.

In the past ten years, Baltic Metropoles Network has made major efforts in striving for these goals. The commitment of Baltic metropolises to contribute to the overall competitiveness of the Region is crucial, as the role of cities as key drivers for growth has become more and more important over the past decade.

In 2012, the main agenda of BaltMet acknowledged the need for:

- further investment in the European macro-regional strategies, especially in the European Union Strategy for the Baltic Sea Region (EUSBSR);
- transnational co-operation frameworks with Russian partners
- long-term implementation of the common goals agreed upon in previous position papers and resolutions.

Baltic Metropoles Network is strongly committed to taking action to support the implementation of the EUSBSR, together with all administrative levels of general public powers and other organisations and networks in the Baltic Sea Region, such as Council of Baltic Sea States (CBSS), the Baltic Sea States Subregional Co-operation (BSSSC), the Baltic Sea Commission of the Conference of Peripheral Maritime Regions (CPMR) and the Union of Baltic Cities (UBC), thus enhancing the multi-level governance structures in the region.

BaltMet acts together with BDF as the horizontal action leader of HA Promo, responsible for the pooled promotional collaborations both outside and inside the region. The role of HA Promo is to collect information and communicate about various branding and regional identity building actions and to boost cross-sectoral branding co-operation in the EU Strategy for the BSR.

The EU Strategy for the Baltic Sea Region provides a framework for co-ordination and collaboration, but also a long-term perspective for BSR branding and identity building efforts. This framework needs to be filled with content and projects, and it is up to the different pan-Baltic, national, regional and local actors to do this across the various priority areas in a co-ordinated, inclusive and collaborative manner.

Major metropolises of the region have a long-term interest in mainstreaming the structures and processes of the EUSBSR and to contribute to the focused target-setting of the revised EUSBSR Action Plan.

BaltMet invites partner cities and other stakeholders of the EU Strategy for the Danube Region (EUSDR) to co-operate with their counterparts within the EUSBSR in order to support the continued development of the macro-regional strategies in Europe and the involvement of non-EU

countries in this co-operation. BaltMet emphasises the importance of Northern Dimension and of having Russia as a partner in the transnational co-operation programmes of the European Union with respect to the next EU programme period 2014-2020.

BaltMet strongly supports efforts to implement transnational and cross-border infrastructural projects in the EUSBSR, and calls for financial means targeted at developing the missing links in the BSR transport corridors, such as in Rail Baltica, in Via Baltica and in the Fehmarn Belt. Here, special emphasis has to be on safeguarding the balanced development of corridors on both sides of the Baltic Sea Region. Mayors of the Network with Cities along the BSR transport corridors commit them to the implementation of vitally important supporting investments in the cities, such as logistics centres, intermodal freight terminals and combined passenger transport terminals.

BaltMet regards the clean Baltic Sea as an issue of great importance for the citizens of the Region and therefore encourages all cities and passenger harbors to build adequate port reception facilities in order to receive sewage waters from passenger ships operating in the Baltic Sea Area. 'Adequate facilities' should be defined in common understanding with ports, authorities responsible for treatment of wastewater, vessel owners and environmental authorities. Cities shall make it possible for received wastewater to be purified in treatment plants.

BaltMet recognises the need to facilitate internationalisation of fast growing, innovative small- and medium-sized enterprises (SME) all over the Baltic Sea Region, with the support of leading science parks and clusters of the Region, and by advocating for the removal of barriers to the functioning of the internal market. Metropolises commit their respective cities to the further development and wider use of support instruments, like innovative public procurement, advisory and marketing support schemes and actions, as well as financial instruments, in order to develop a supportive environment for innovative and creative small- and medium-sized enterprises. BaltMet also supports sustainable labour mobility and talent retention in the Baltic Sea Region.

Two major projects are currently running, those being the Rail Baltica Growth Corridor

(RBGC) and One BSR. The RBGC Project creates a co-operation and transport service platform that observes the needs of both the transport sector and customers in line with green growth corridor principles. RBGC brings benefits for cities and regions, transport sector and citizens by improving the competitiveness and economic potential of the Region. Project partnership consists of 21 Partners, representing cities, regional authorities, and research institutes, as well as e.g. ministries and national railways as associated organisations. RBGC is linked to the wider concept of Rail Baltica – a railway that will connect the Eastern Baltic Sea Region from north to south, branching from St. Petersburg, Helsinki, Tallinn, Riga, Kaunas and Warsaw to Berlin. The Region gains new economic potential as the major business hubs will be connected with North-West Russia and the EU core.

ONE BSR Project functions as an umbrella project and calls together actors who market themselves as part of the Baltic Sea Region. In the absence of a strong common brand, the project aims to search for common commercial and cultural characteristics with a concrete 'hands-on' approach, pointing out these characteristics as the 'elements of the Baltic Sea Region brand'. With the budget of EUR3 million, and in co-operation with 17 partners and many associated ones, the project enhances the marketing of the Baltic Sea Region both outside and inside of the region.



Euroregion Baltic

Euroregion Baltic (ERB) is a platform for cross-border co-operation of eight regions from Denmark, Lithuania, Poland, Russia and Sweden in the southeast of the Baltic Sea Region. The ERB was the first Euroregion to have formally included a partner from the Russian Federation.

ERB initiates joint activities contributing to the development of the whole Baltic Sea Region and with particular attention to the South Baltic area. The significance of the cooperation has been reflected by joint political initiatives resulting, among others, in the attraction of funds to support the cooperation area, implemented strategic projects based on the ERB Joint Development Pro-

gramme, and improved intercultural dialogue benefiting the integration processes in Europe.

ERB stakeholders believe that added value of their cooperation is reflected in by the two factors: ERB is a tool to tackle common challenges observed by its members, as well as a strengthened political leverage in the cross-border cooperation of the Baltic Sea Region. Joint activities carefully designed in the rolling biannual action plans, are streamlined into the three strategic focus areas: lobbying activities, strategic actions, and exchange initiatives.



In 2012 ERB stakeholders have concentrated their actions around the following four commonly faced challenges: facilitating the cooperation of actors dealing with labour mobility, cooperation around water issues, fostering B2B cooperation with focus on clusters, innovation and SME internationalisation, as well as supporting youth cooperation within ERB Youth Board. Their lobbying effort has been largely centred around the South Baltic Cross-Border Cooperation Programme.

On 13th June 2012 ERB gathered its members in Nexø, Bornholm for the 3rd Annual Forum entitled: "Cooperating to meet common challenges in the Baltic Sea Region". Around 60 participants from the national, regional and local levels around the Baltic Sea region congregated to gather new knowledge about the current situation concerning labour markets, and in particular unemployment among the youngest of our citizens, prevailing in the EU, Baltic Sea Region and ERB member regions. The regional representatives heard some of the best examples of efforts made jointly by different actors in the Baltic Sea Region in order to counter-act the worsening conditions on our la-

bour markets. They also discussed the possible role of Euroregion Baltic to take in the future so that employability and youth employment could be improved in the ERB cooperation area. As a result, ERB Task Force was established with the clear mandate to develop a basis for a stronger cooperation on labour market issues within ERB, with a focus on improving the labour force mobility and to combat youth unemployment. In autumn 2012 ERB became a formal observer at the Baltic Sea Labour Forum, platform promoting social dialogue and tripartite structures and cooperation as a crucial element of sustainable economic growth and social development in the Baltic Sea Region.

On 25th February 2013 ERB organised a seminar on labour market in South-East Baltic Sea Region gathering politicians – members of ERB Executive Board and experts – members of the Labour Market Task Force and representatives of employment services in the ERB cooperation area. The participants of the seminar adopted a resolution which indicates main actions for ERB. These are: an improvement of the labour force mobility and combat against youth unemployment. ERB Labour Mobility Task Force presented statistics concerning labour market in ERB member regions and analysis of regional development strategies regarding to aims of the employment policy. They also discussed the youth unemployment package recently launched by the European Commission as well as the financial instruments available through the Swedish Institute. Moreover, they proposed to facilitate networking in ERB by establishment of EURES regional teams that would exchange information, do research, make analysis of labour market and support employers and job-seekers. Finally, ERB will continue to participate in international social dialogue thanks to its membership in Baltic Sea Labour Forum and act as a facilitator of cooperation between projects implemented on its area.

ERB Water Core Group has acted as an experts' body in the implementation of the MOMENT project which has now been running over three years and the project is currently in its final stage. The core of the project has been the establishment and tests of seven Water Users Partnerships (WUPs) in Lithuania, Russia (Kaliningrad Oblast), Poland and Sweden. WUPs have meant a new approach of water management through

strong local stakeholder involvement. The WUP method has its strength in engaging stakeholders where action is required, i.e. on the local level, so that local knowledge can guide and determine what measures are needed for the specific location and its unique features. Regardless which measure is to be implemented it has proven that without local knowledge and commitment the success rate of accomplishing well-functioning measures becomes much more challenging.

The MOMENT project has built strong relationships with several important Baltic actors, including the EUSBSR coordinators of the priority area NUTRI. This has resulted in that the European Commission, following a proposal from the MOMENT project, has written in "Water Users Partnerships" in the EUSBSR Action Plan. It is said that this is a strategically interesting measure, worthy of support. It opens thus a possibility to obtain the status of a so-called flagship project. The Helsinki Commission, HELCOM, has expressed itself in favour of what they call the "MOMENT approach", which refers to the work of Water Users Partnerships as a method of river basin water management. Furthermore, Ramboll Management carried out a comprehensive independent evaluation of the MOMENT project with focus on its Water Users Partnerships. In the conclusions, Ramboll expresses a firm belief that Water Users Partnerships can be spread to other areas around the Baltic Sea and work as a successful model of managing water through local participation.

A meeting with the Europe Enterprise Network representatives and business support organisations from the cooperation area was held on 9th February 2012 in Älmhult (södra Småland). Although interest was identified for closer links between the actors, no source of financial assistance were available at that time. The contacts initiated in February were followed by the visit from Business Link Greater Copenhagen to Warmia and Mazury (Poland) in May 2012. These visits were based on two important foundations: 1. closer links between companies and business support institutions will contribute to economic development of Bornholm and Warmia and Mazury, and 2. creation of practical dimension of economic cooperation between these regions has to become a model of diverse cooperation of partners in Euroregion Baltic. A similar visit was later organized to Kaliningrad (Russia)

at the beginning of June, including contact with the CBSS and SEBA project. These contacts were followed up during the Forum of Partner Regions in Kaliningrad and with the leader of the EUSBSR Priority Area Tourism. Currently, the initiative is being shaped into a Baltic Sea Cluster Development Centre which will help to grow the competitiveness of regional economies and their key industries/clusters, as well as to support companies - in particular SMEs and start-ups - in accessing new business partners and markets in the Baltic Sea Region. In the coming months, ERB will continue cooperation with Business Link Greater Copenhagen and other relevant actors in order to work towards the establishment of an exchange platform of good practices for cluster development managers in the South Baltic Area and Baltic Sea Region, as well as towards facilitating joint projects in order to improve SME internationalisation, innovation and exports. A preliminary project proposal to apply to the Seed Money Facility under the EU Strategy to develop the concept of the Baltic Sea Cluster Development Centre is under preparation.

In 2012 ERB members continued to support youth in their cooperative activities by financing the participation of regional youth representatives in the work of ERB Youth Board, ERB task forces on labour mobility and EU cohesion policy, and ERB Water Core Group. In order to strengthen the youth cooperation within ERB a project was developed jointly with Kumulus (EVS hosting organisation in Kalmar) on the one hand, and Europe Direct Bornholm and Association Elbląg Europa (sending organisations) on the other, and successfully submitted to the European Voluntary Service at the end of last year. The volunteer has currently begun work, making sure tight links will be maintained with the young people involved in the work of ERB Youth Board coming from Denmark, Lithuania, Poland, Russia and Sweden. In this cooperation platform, the volunteer will work on youth unemployment issues and help to strengthen the cooperation between the youth in the involved regions.

In its lobbying efforts ERB actively promotes a greater role of the European Territorial Cooperation within the EU Cohesion Policy, advocating for the equal importance of cross-border cooperation along maritime borders to that along land borders. ERB was a key actor in the establishment of the South Bal-

tic Cross-Border Cooperation Programme in 2007 and since then has actively participated in its implementation, both as a partner in projects co-financed by the Programme, and as a member in the Steering, Monitoring and Joint Programming Committees. ERB supports the continuation of the South Baltic Cross-Border Cooperation Programme in the new financial perspective, including all the ERB member regions (with all NUTS 3 level regions involved in the current programme). ERB has been arguing that the inclusion of the whole ERB area will reinforce the strategic programming and effectiveness of the programme, and hereby strengthen the performance and added value of the projects to be implemented. Taking part in the current discussions on the future of the Programme, ERB stresses the need for an open dialogue involving local and regional actors in order to define a specific profile of the programme. Such a profile should address well the most urgent joint challenges within the programme area and be enforced by carefully selected thematic priorities with a strong and clear focus. As a result of discussions and careful considerations of the regional challenges, ERB partners believe these thematic priorities should include: protecting the marine environment of the Baltic Sea, promoting resource efficiency, as well as enhancing the competitiveness of small and medium enterprises.

SI. Swedish Institute

The **Swedish Institute** (SI) is a public agency that promotes interest and confidence in Sweden around the world. Through strategic communication and the creation of lasting and active relations with people, organisations and businesses in other countries, SI seeks to increase Sweden's contribution to international cooperation and development.

SI puts a lot of emphasis on the Baltic Sea Region and the goal is to develop partnerships and relationships that contribute to a positive and sustainable development of the entire region – environmentally, economically and socially. A key part of this work lies in supporting the implementation of the EU Strategy for the Baltic Sea Region, as well as in developing relations with EU's eastern neighbours. SI creates opportunities for cooperation by making it easier for organisations and individuals to collaborate across borders.

In order to promote development in the Baltic Sea region SI provides financial support to initiate, strengthen and support action-oriented collaborations and partnerships for cross-border projects. In 2012 aid in the amount of SEK 33 million (€ 4 million) were granted 12 different three-year projects with established partnerships in the prioritized areas of health, environment, energy, regional development and innovation. This is the first year for this type of project funds which will be evaluated annually.

SI has long provided seed funding to help initiate projects. In 2012 SI granted funding of no more than SEK 440 000 (€ 53 000) to 52 projects. Funding is granted to, for example, establish new networks or expand and strengthen existing networks, prepare an application for EU funding or conduct a feasibility study in areas relevant to the Baltic Sea Strategy and the region. A survey conducted in 2012 indicated that 74 per cent of seed funding recipients have gained new information relating to the EU Strategy for the Baltic Sea Region, and 89 per cent feel that their participation has provided them with new skills and tools that can be used in international cooperation.

Another form of financial support is the third-country component which involves Russia and EU's eastern neighbours (the Eastern Partnership countries) in on-going EU collaborations otherwise open only to EU member states. The relations and cooperation between the countries in the region are expected to expand and deepen as cooperation with Russia and Eastern Partnership countries are tied more closely to the on-going EU cooperation.

SI also arranges a series of leadership programmes in order to create long-term relationships and build lasting, active networks between young and potential future leaders. We have developed a layered project management training that is applicable to the thematic areas of the Strategy for the Baltic Sea Region. The crises management programme is designated a flagship project.

BalticLab is a leadership programme and a flagship project of the Horizontal Action Neighbours within the EU Strategy for the Baltic Sea Region. The Swedish Institute operates the programme in partnership with the Council of Baltic Sea States (CBSS) in the framework of the South-eastern Baltic Area Modernization programme (SEBA).

SI is open to additional strategic partnerships in the region and welcomes the increased interaction and planning with other stakeholders in the region. By providing financial support for cooperation projects, leadership training, and partnerships with strategic players and events, SI promotes inte-

gration between the countries of the Baltic Sea region. Through counselling, information drives and active participation in strategic EU projects such as InnoHeat and the two flagship projects 14.3 and ONE BSR – SI contributes to a strong and coherent Baltic Sea Region.

The BSR StarDust project



BSR Stars, a group of projects managed by Vinnova, the Swedish Innovation Agency, aims to speed up innovation in the Baltic Sea Region using transnational cooperation to create strengthened competitiveness and sustainable growth. Linkages between universities, clusters and innovative companies are developed through projects and new opportunities for financing transnational cooperation.

Some major steps for BSR Stars have been taken in 2012-2013, when launching two joint calls: BONUS Innovation Call and the BSR Innovation Express call. A lot of time and effort have been required to create these financing opportunities for transnational cooperation supporting the EU Strategy for the Baltic Sea region. BSR Stars has identified a need for a pre-study facility and flexible financing possibilities for the projects and networks working in the region.

One new project joined the BSR Stars umbrella programme during 2012: *BSR Food Cluster Network*. It helps small and medium-sized food producing companies in their international activities and efforts. The network is built up with partners in Finland, Germany, Poland, Estonia, Latvia, Lithuania, Sweden and Denmark.

The five sub-projects within StarDust, a BSR Stars project part-financed by the ERDF Baltic Sea Region (BSR) Programme, is proceeding their work preparing strategic action plans focusing on their long term strategy: *Mobile Vikings* have started to write Business Roaming Agreements between all the partners opening up for companies and clusters in the network to use each other's offices and networks, creating a global network facilitating the access to new markets. In Skåne a new open innovation platform have opened for companies and students from the entire region. The inspiration comes from one of the

Mobile Viking's partners Hermia and the award-winning Demola concept started up in Tampere, Finland.

Comfort in Living are planning for a big innovation camp in Copenhagen in July 2013 bringing together Polish wood technology specialists, Danish design companies, Swedish furniture entrepreneurs and Latvian design students. The aim of the camp is to develop prototypes, products and services that improve the quality of life for elderly people in their homes, specifically in their kitchens.

Active for Life has had a number of local and international matchmaking workshops targeted to companies working with business concepts aiming to maintain and improve the quality of life of the ageing population. Active for Life supports the companies in creating innovative, globally competitive and effective transnational service models and business concepts.

The national maritime clusters involved in *MarChain* have divided the project in different focus areas, for instance green corridors and light weight ships. The overall aim is to use hardening regulations on maritime transport to find new sustainable solutions and business opportunities.

Clean Water combines competences of BSR countries' innovation milieus, clusters and SME-networks around water protection (wastewater treatment, hazardous chemical substitution). During the last year the cooperation platform has been strengthened and the cooperation with the Russian company Vodocanal has increased opening up for more extensive business exchange.

Stardust has strengthened its partnership by attracting new partners and financiers: the partners received more than 8 MEUR as add-on investment, 15 research institutions and six new cluster and business development organization joined as associated partners since last year.

1.2 Non-governmental and public-private organizations



ScanBalt® fmba (www.scanbalt.org) promotes the development of ScanBalt BioRegion as a globally competitive health and bio economy. ScanBalt is a not for profit member driven association of clusters, networks, companies, research institutions, hospitals, public

authorities and other organizations. ScanBalt provides support and service to the members; promote public-private collaborations and partnerships and strengthen ScanBalt BioRegion as an open innovation market in order to enhance innovation, employment and economic growth. It assists to educate train and attract talent and facilitate the mobility of people and ideas.

ScanBalt's strategy for 2012 – 2015 "ScanBalt BioRegion: Smart Growth, Sustainable Development and Specialization on Top of Europe towards EU 2020" defines three focus areas to promote the development of the ScanBalt BioRegion as a globally competitive health and bio economy:

- EU BSR Strategy and EU2020
- Visibility and Internationalization
- Member Services and Organizational Development towards triple helix 3.0 and cluster excellence

Each focus area is supported by actions lines, which are revised according to needs and opportunities. The strategy intends to further strengthen support and service to the members; enhance decentralization, regional involvement and specialization and strengthen ScanBalt BioRegion as a lever to implement the EU Baltic Sea Region strategy and EU2020 objectives.

ScanBalt Business www.scanbaltbusiness.com was launched May 2013, leveraging financial support from the European Union. ScanBalt Business assists clients to build awareness and visibility in the Baltic Sea Region and globally. This is done by applying various platforms and tools supporting ScanBalt Business to accomplish the task including ScanBalt News (nearly 20.000 subscribers), www.scanbalt.org and the ScanBalt BioRegion network existing since 2001. Individualized solutions can be designed and negotiated upon demand. Some features of ScanBalt Business:

- Each day a company portrait highlighted
- Product and company news in ScanBalt News (nearly 20.000 subscribers) and on www.scanbalt.org
- Portraits in ScanBalt News and on www.scanbalt.org
- CEO interviews and industry opinions in ScanBalt News and on www.scanbalt.org
- Portraits distributed in the ScanBalt BioRegion network
- Invitations to present at ScanBalt press study tours
- Individualized solutions upon agreement
- ScanBalt Business promoted at events, conferences, fairs etc
- Supports ScanBalt BioRegion to be a globally competitive health and bio economy

Health Economy provides an opportunity to make BSR a global front-runner. In October 2009, the ScanBalt Health Region (SBHR)¹ became a flagship project within the EU Baltic Sea Region strategy. Its mission is to promote health of the citizens, reduce costs of the health care systems and strengthen health economy in BSR

A serious challenge facing BSR health economy is related to clinical trials. Clinical trials are an indispensable part of clinical research, which in turn, is essential to develop medicinal products and improve medical treatment. Without clinical trials there would be no new medicines, no further development of existing medicines and no evidence-based treatments with medicines. The research associated with pharmaceutical development conducted by the pharmaceutical industry is worth 27.4 billion € in Europe. A substantial part of the industry revenue is spent on research and development and clinical trials stand for more than half of drug development costs. In EU approximately 60 % of the clinical trials are sponsored by the pharmaceutical industry and 40 % by other stakeholders such as academia.

However, clinical research activities are today increasingly located outside Europe. According to the EU Commission the number of clinical trial applications has decreased by 25 % from 2007 to 2011 while the costs and bureaucracy have increased. The same decreasing trend is seen in the BSR with the exception of academic trials in

¹ www.scanbalt.org/projects/scanbalt+health+region

Denmark. The problems related to recruitment of sufficient number of subjects has been identified as one of the reasons for the decrease in clinical trial activities. It is difficult for BSR countries to compete alone with e.g. populations in Asia. Collaboration between BSR countries could substantially increase the competitiveness of the region in a global context.

ScanBalt has in 2012 and 2013 put focus on the critical issue of clinical trials via a number of articles, sessions and discussions. In early 2013 it is being further explored in a dialogue between private and public stakeholders which concrete initiatives are necessary in order to complement existing trans-national efforts in order to maintain and attract clinical research and trials in BSR.

SBHR has launched the project “Baltic Sea Health Region - Business acceleration support and training bridging innovative SMEs and health care organisations to strengthen BSR Health Economy” (acronym “BSHR HealthPort”). BSHR HealthPort is focused on the following challenges of the Health Economy:

- Insufficient exploitation of ideas from health care researchers and practitioners.
- Procurement practices that limits access of SMEs to the BSR health care market.
- Insufficient innovation competencies of health care providers and SMEs and cultural differences across the Baltic Sea Region.

The BSHR HealthPort, coordinated by ScanBalt, is co-funded by the Baltic Sea Region programme 2007-2013 and encompasses 9 partners together with 15 associated partners. A HealthPort Innovation Competition is launched to boost the commercial utilization of ideas arising from the clinical environment and healthcare research. Awards were granted to the winning ideas at the 10th ScanBalt Forum in September 2011 and at the 11th ScanBalt Forum 2012. The award winners are now receiving tailor made support in order to prepare them for entrance on the market. A key delivery of BSHR HealthPort is a health economy innovation agenda for ScanBalt Health Region which will promote an innovation system for health economy and introduce a self-sustainable business support and service model to be implemented by ScanBalt.

Baltic Amber “Baltic Alliance against Multi-Resistant Bacteria” is related to the HICARE

project based in the North German state of Mecklenburg-Vorpommern. Baltic Amber promotes exchanges and cooperation's to more effectively combat the spread of multi-resistant bacteria on a transnational level. The approach rests upon the understanding that multi-resistant bacteria do not stop at country borders. They rather present a serious danger to health care systems worldwide. With this approach, Baltic Amber is one of the grass root projects piloting the comprehensive intention of a Baltic Sea region-wide health initiative.²

Another project working within the SBHR umbrella is Eco4Life. Partners from Szczecin in Poland, Klaipeda in Lithuania and Greifswald in Germany as well as the associated partners promote the regional potential and bundle their strengths to create a strong and competitive South Baltic Region by mobilizing cross border cooperation in science and business (www.eco4life.info/). Promoting Green Hospitals and setting up a Baltic Diabetes Cluster are among the key issues in Eco4Life.

ScanBalt is partner in the project “Submariner” having the task to ensure that a stable network is available after the project financed by the Baltic Sea programme 2007 – 2013 has been finalized. The project evaluates and leverages new technologies and knowledge about the use of marine ecosystems in and environmentally friendly and economically attractive way for the Baltic Sea Region to become a model region for sustainable sea management. Submariner is coordinated by the Marine Institute of Gdansk.³ Submariner in 2013 became a flagship in the EUBSR strategy, priority area 7 “Innovation”. The key role for the flagship is to implement the recommendations from a road map released by the project “Submariner”.

In order to strengthen ScanBalt BioRegion ScanBalt liaison offices in 2012 became a formal part of the ScanBalt organisation. The liaison offices are currently the Healthy Ageing Networks of Northern Netherlands (HANNN), Biobaltica in Gdansk, Tartu Biotechnology and Biopeople in Denmark. The role of the liaison offices is to strengthen direct regional involvement and outcome, promote decentralization and target specific thematic issues.

² www.hicare.de/hosting/bcv/website_en.nsf/urlnames/hicare_index?OpenDocument&nav=hicare_index

³ www.submariner-project.eu/

The 11th ScanBalt Forum 2012, 20 to 23 November in Tampere, was organized by the Baltic Institute of Finland and Tampere University of Technology, Department of Biomedical Engineering and BioMediTech. The 12th ScanBalt Forum 2013, 16 to 18 October in Gdansk is being organised by the Intercollegiate Faculty of Biotechnology University of Gdańsk - Medical University of Gdańsk, ScanBalt, Innovation Synergy and PRO SCIENCE Poland Ltd. See more at <http://www.bioinnovation.pl/en/home.html>



BCCA the **Baltic Sea Chambers of Commerce Association** (BCCA) is an organization of 50 Chambers of Commerce across the Baltic Sea Region. Since 2002 the Presidency and General Secretariat of the BCCA has been with the Chamber of Commerce and Industry of Southern Sweden in Malmö. Its main task is to give the business community of the region a common voice.

In 2012 a project focusing on a new digital agenda of the BSR was developed in collaboration with the BDF and was presented at the BDF Summit in Copenhagen. Some of the ideas, notably about open data, has been pursued during 2013. The issue of educational renewal has also been addressed. A better focus on quality and integrated university systems has been the key elements in this context.



sustainable growth · innovation · competitiveness

The **Baltic Development Forum** (BDF; www.bdforum.org) is an independent networking organisation for business, governments, regional organisations, academia, and the media to discuss and collaborate on issues of regional importance. BDF has members from large companies, major cities, institutional investors and business associations in the Baltic Sea Region. Over the years BDF has proved its vital role as a meeting platform between top politicians and private sector representatives, most notably occurring during the annual Summits. In addition, throughout the

year, conferences and smaller seminars are organised in order to get a close and private exchange of views on important developments and topics in the region. Baltic Development Forum is chaired by Hans Skov Christensen, former CEO of Danish Industri. The Baltic Development Forum Honorary and Advisory Boards consist of high-level political dignitaries and prominent business executives representing the entire Baltic Sea Region. BDF's mission is to promote the Baltic Sea Region as an integrated, prosperous and internationally growth competitive region and act as a facilitator for achievement of that goal.

BDF is under 2012/2013 contributing to regional collaboration across the Baltic Sea Region in a number of ways: The EU co-financed transport project intends to demonstrate how multi-level governance models, tools and approaches can contribute to a better alignment of transport policies in the BSR. This is expected to increase commitment of public and private stakeholders to achieving greener and more efficient transport in the Baltic Sea Region, in line with the objectives of the EUSBSR. BDF's role is to facilitate the policy dialogue among stakeholders.

BDF as editor-in-chief launched the NewsWave online platform www.newswave.eu under the umbrella of the EU-financed ONE BSR (WP6), emphasizing independent journalistic news on all levels – to the citizens, policy-makers, business, stakeholders, experts and the creative community of the region. The overall objective of the website is to improve information exchange and cross-border communication between the countries of the region, especially the countries that form part of the EU's macro-region in the BSR. The main aim in 2013 is to get the website fully developed and known throughout the region.

The 15th Baltic Development Forum (BDF) Summit "New Realities – New Opportunities" will take place in Riga on 29-30 May (www.bsr2013.eu). The main focus of this year's event will be on competitiveness, investment and business development and the role of the Baltic States in improving the Baltic Sea Region's overall competitiveness and growth opportunities. To become smarter and greener, public-private partnerships are essential. By improving framework conditions, these partnerships' can for instance help to focus and optimize sustainable infrastructure investment, which is key to kick-starting wider economic growth in the Re-

gion, benefitting the European economy at large. BDF is working closely together with the Latvian Government as co-hosts of the Summit, which coincides with the Latvian Presidency of the Baltic Council of Ministers, and a meeting of the three Baltic Prime Ministers will open the event. Together with our Latvian partners and business organizations from the whole Baltic Sea area, private companies, investment promotion agencies, BDF will organize seminars and a matchmaking event (Baltic Business Arena - BBA) that will present the new realities and opportunities in the Baltic region. BBA is a flagship project within the EU Strategy for the BSR. Topics such as the increase of cross-national cooperation and flows of investment in areas of infrastructure, energy, innovation, research and development, and IT solutions on a regional level will be discussed.

The Baltic Sea Award was established in 2007. Last year in Copenhagen, the Award was given to Prof. Lars Börjesson, Chalmers University of Technology, Gothenburg who initiated the process that has led to the formation of European Spallation Source Centre in Lund, Sweden. The award had been sponsored by Confederation of Danish Industry. This summer it is awarded for the 7th consecutive year. The event takes place at the BDF Gala dinner on 29th of May during the 15th Baltic Development Forum Summit, which this year is being held in Riga, Latvia. The Baltic Sea Award is assigned to individuals or organizations that have fulfilled one or several of the following criteria:

- Made an extraordinary contribution to Baltic Sea Region development
- Played a leading role or been a role model in the region's economic development
- Strengthened economic cooperation between the countries in the region
- Developed new business concepts and research programs
- Capitalized on competitive advantages in the region in a new and innovative way
- Made a contribution to the improvement of the regional challenges within climate, energy and environment
- Linked innovators and local universities in the trade and industry
- Concretely supported existing and growing regional clusters
- Attracted and stimulated regional driving forces

BDF is increasingly being recognized as one of the best think-tanks in the world in the field of regional economic development. This position is further being established and improved during 2013 with the new edition of the Political State of the Region Report, which is built upon the contributions and recommendations from the Baltic Sea Region Think-tank Deep Water representing a wide network of academics from all parts of the Baltic Sea Region. The idea is to complement this State of Region Report with a political dimension. A third report of the research network will be presented at the Summit in Riga. Prof. Bernd Henningsen, Humboldt will head the work and Tobias Etzold, Stiftung Wissenschaft und Politik, will be editor of the report which will have app. 15 articles including a country chapter of the 12 countries in the Region. Nordic Council of Ministers is co-financing the report. The Konrad Adenauer-Stiftung will through its Riga office help financing a meeting of the researchers (the Deep Water research network) in Riga.

BDF will produce a report on regional identity as part of its formal role as Horizontal Action Leader of the EUSBSR. Thereby, BDF follow up on the report "On Identity – No Identity" that was presented in 2011. Prof. Bernd Henningsen will be BDF's academic advisor and he will identify the co-writers of the report.

BDF is diversifying its structure in terms of establishing a Competitiveness Council and smaller advisory groups of which the Advisory Group on the Digital Agenda is a first of its kind. The aim of the BSR Competitiveness Council is to be agenda setting as regards to regional and European economic growth. The Competitiveness Council should improve the ability to articulate and launch initiatives/proposals for economic growth and improved competitiveness. The Council will consist of top CEOs from the private sector, influential politicians, distinguished economists and researchers from the region.

A Digital Agenda Action Plan for the Baltic Sea Region had been presented and discussed at the 14th BDF Summit/EC's 3rd Annual Forum in Copenhagen June 2012. It had given direct inputs to the Danish EU Presidency and the European Commission on the further development of a Digital Single Market in Europe, confirming that the BSR has the potential to take a leading role in

the deepening of a European Single Market. The Digital Agenda is one of the flagship initiatives of the EU 2020 strategy to create growth and jobs in Europe. One of the top priorities in the strategy is the creation of a digital single market, whereby barriers between Member States in the digital area are reduced or removed. BDF intends to follow up on the “Priorities towards a Digital Single Market in the BSR” report from June 2012. BDF will enhance an already established connection with the European Commission about how the BDF initiative can be aligned with EU initiatives such as the Connecting Europe Facility (CEF) and EU Digital Agenda. Furthermore engage in joint activities and conferences with BDFs members and partners, such as Microsoft, Stockholm City, Danish Ministry of Business & Growth, Swedish Tilvaxtverket etc. BDF will focus on the Nordic/Baltic strength positions within ICT and how we can inspire the rest of Europe in bringing out the economic potential of the sector.

BDF will convene 2-3 meetings on the BSR Investment Promotion Agencies (IPA) throughout 2013 in order to find common interests and shared priorities in their work of attracting more investments to the region. BSR IPAs initiative under the ONE BSR project will strive to strengthen the perception of the BSR as a coherent region, attractive to foreign investors. BSR IPAs enables active and interested public-sector organisations to meet regularly to discuss cooperation opportunities and ultimately attract more investments which will lead to higher competitiveness and prosperity in the region.

BDF maintains and develops close links to Russian partners in the Baltic Sea Region. In December 2011 the European Commission approved BDF of an energy efficiency project in Kaliningrad entitled Rensol. The project began in early 2012 and is included in the framework of the Northern Dimension Environmental Partnership. BDF will lead the implementation of activities aimed at identification of best available financial practices and for reaching the best results we will try to mobilize our relevant network – international financial institutions, private banks and companies – and together outline recommendations. The project is finalizing its 1st phase and a report on Nordic solutions to improve energy efficiency in buildings as well as adaptation of the solutions to the local context in Kaliningrad, will be soon published. Lappeenranta University of Tech-

nology in close cooperation with partners in Kaliningrad studied the concrete pilot cases and the report will provide a good overview of what is the situation, what can be done and under what conditions.



SUOMEN ITÄMERI-INSTITUUTTI
THE BALTIC INSTITUTE OF FINLAND

The **Baltic Institute of Finland** (BIF; www.baltic.org) is a leading collaborative body for the Baltic Sea Region in Finland. Since its launch in 1994, the institute has promoted co-operation in the Baltic Sea Region and contributed actively to the international network of collaborators in the region. BIF promotes collaboration projects in the Baltic Sea Region and facilitates the participation of Finnish organisations. The Baltic Institute of Finland is a network-based organisation, and its principal focus is on planning and co-ordinating tangible collaborative projects and maintaining an extensive network of collaborators in the Baltic Sea Region.

In 2012, BIF was involved in 18 collaborative projects in the Baltic Sea Region and organized dozens of events in the Baltic Sea Region and Brussels. As in previous years, BIF focused on innovation and economic co-operation in its projects.

BIF has been involved in the EU Baltic Sea Region Strategy process since 2005. BIF is strongly involved in the implementation of the strategy and its flagship projects. It is leading one flagship project (BSR InnoShip), and in 2012 it was also involved in three innovation- and SME development-related flagships: BSR Stars, BSR QUICK and Baltic Supply. The EUSBSR flagship projects have provided a stronger policy framework, better EU-level dissemination channels, and better co-ordination between different actions and stakeholders.

A BIF-lead EUSBSR Priority Area 4 (clean shipping) flagship “BSR InnoShip - Baltic Sea co-operation for reducing ship and port emissions through knowledge and innovation-based competitiveness” combines environmental and economic aspects. It aims to decrease atmospheric emissions of shipping and port operations. Leading maritime stakeholders from all BSR countries are represented among the project’s 19 partners and 24 associated partners. The EUR3.6 million project is funded by

the EU Baltic Sea Region Programme 2007-2013 and will be implemented in 2010-2013.

BSR InnoShip aims to find innovative solutions and incentives in implementing the sulphur directive revision. Without these solutions, shipping, as well as economies around the Baltic Sea that depend on shipping, could face very high costs after the directive enters into force on 1 January 2015.

In 2012, an interactive platform, Clean Shipping Currents, was developed in BSR InnoShip. Clean Shipping Currents serves as a rapid public-private information-sharing platform around the Baltic Sea Region and acts as a compendium of knowledge, receiving material from major scholarly institutions and the private sector in the Baltic Sea Region. In 2012, other BSR InnoShip activities included cost efficiency estimations of abatement techniques and of international ship emission regulations, projections of emissions of shipping, and a ship emission measurement field campaign carried out in St. Petersburg ports. Furthermore, various clean shipping events have been organized in different locations in the Baltic Sea Region. The BSR InnoShip solutions have been also promoted in connection with various major BSR events, including BDF Summit, as well as through the political processes of HELCOM.

In the EUSBSR Priority Area 4, BIF is also in charge of a European Commission-funded project "Strengthening stakeholder engagement, dissemination and coordination of joint activities in the EU Strategy for the Baltic Sea Region Priority Area 4." The idea is to support the ongoing actions in the Priority Area 4 in their common goal to make the Baltic Sea Region a model area for clean shipping. In 2012, various stakeholder events were organised, including a workshop on no-special-fee systems for ship-generated wastes in the Baltic Sea area in Copenhagen on 5 November 2012.

BIF contributes to European-wide promotion of the EUSBSR and dissemination of BSR best practices on innovation policies and instruments by partnering in three EU INTERREG IVC programme projects. The INNOVAge project (2012-2014), led by Marche Regional Authority, Italy, aims to help older people live independently for longer in their own homes by increasing their autonomy and by emerging of new 'technological supply chains' associated with new developments, like independent living and eco-innovation, with a

valuable contribution to minimise the environmental impact of elderly daily life activities.

The project "TRES - Towards Regional specialisation for Smart growth spirit" is led by Fundación TECNALIA Research & Innovation, Spain. TRES aims to mobilise the innovation potential and capacity of regions towards smart growth. TRES will also foster a clearer understanding of the role regions have to play in EU2020 and to better face new opportunities by creating collaboratively and pushing clusters for change. TRES brings together a good representation of the EU's diverse innovation geography and multiple ways of addressing the innovation challenges and paradigms.

The third project, "SMART EUROPE - Smart strategies to create innovation-based jobs in regions of Europe", is led by Province of Flevoland, Netherlands. In SMART EUROPE, project partners from 11 European countries will exchange policies and instruments for identifying and supporting the main regional economic actors that can generate job opportunities in the innovation-based sectors of their economy. Both 36-month projects will be implemented in 2012-2014.

On the national level, BIF, together with a Finnish management consulting firm MDI Ltd., consulted southern Finnish regions in their BSR-focused smart specialisation strategy processes during the year 2012.

One of the key 2012 BIF activities contributing to the EUSBSR was the hosting of the 11th ScanBalt Forum in Tampere, Finland on 20-23 November 2012. From all over the ScanBalt BioRegion, over 120 people gathered in Tampere Hall to discuss the current state and future prospects of health and life sciences in the region, and to gain fresh contacts and perspectives. The ScanBalt Forum in Tampere was particularly interested in opening the ScanBalt community up to new opportunities in the growing Russian health and life science field.



The **Pan-European Institute** (PEI), founded in 1987, is an academic research center at Turku School of Economics, University of Turku, Finland. PEI analyses the economic development in

the Baltic Sea region countries, the Arctic region and Eastern Europe, with a particular focus on Russia, Belarus and Ukraine.

PEI's research activities have recently concentrated on issues such as maritime cluster, FDI, regional development, innovation, and energy in the Baltic Sea region. The PEI staff has frequently acted as experts for both Finnish and foreign institutions, such as the Prime Minister's Office, several Finnish ministries and the Parliament of Finland, the European Commission, the European Parliament, and the United Nations.

Since 2004, PEI has published Baltic Rim Economies (BRE) review, which focuses on the development of the Baltic Sea region. Over 1000 leading experts, including EU commissioners, ministers, members of parliaments, CEOs of leading corporations, academics, and researchers, have contributed an article to the review (www.utu.fi/pei).

PEI also provides some half dozen courses in English at Turku School of Economics under the subject heading of international business. The courses are particularly related to the Baltic Sea region and Russia, such as "Business in the Baltic Sea Region", "The Development of EU-Russian Economic Relations", and "Investment Opportunities in Eastern Europe".

In 2012, PEI celebrated its 25th Anniversary by organizing a high-level seminar "The Baltic Sea region 2025" at Turku School of Economics, Turku, Finland. The seminar dealt with the Baltic Sea region's future challenges and opportunities in the fields of security, economy and environment, and gathered together policy-makers, corporate decision-makers and representatives of the Academia of over 10 different countries.



Centrum Balticum (<http://www.centrumbalticum.org/en/>) is Finland's premier think tank on the Baltic Sea region. The Centre was established by the City of Turku together with four other Finnish cities, three universities based in Turku, and the Regional Council of Southwest Finland in 2007. Centrum Balticum together with the main Finnish research institutes and researchers specializing in the Baltic Sea region form a national network,

in which the Centre disseminates information and organizes events related to the region.

In 2012, Centrum Balticum opened interactive webpages and a databank in order to help the dissemination of the Baltic Sea region-related information in Finland and abroad. This year Centrum Balticum has begun to publish a new Baltic Sea Policy Briefing Series. The Baltic Sea Policy Briefing is an international forum for experts, who want to view events, studies, developments and future trends from the Baltic Sea Region standpoint. The Centre publishes also a weekly Baltic Sea region column, called *Pullopsti*, in Finnish. Currently, several thousand Finns interested in the Baltic Sea region affairs receive these columns written by the top professionals in their fields. Moreover, the Centre has recently started to sponsor the Baltic Rim Economies review, which is distributed to 80 different countries.

Centrum Balticum organizes annually the Baltic Sea Forum, which gathers hundreds of Finland's leading experts on the Baltic Sea region. In 2013, the Baltic Sea Forum is arranged for a sixth time, and this year the forum focuses on Russia and new challenges in the Baltic Sea Region. In addition to the national forum, the Centre organizes smaller events, such as luncheon seminars with the ambassadors of the Baltic Sea region states as well as other countries and the Baltic Sea region brainstorms with the Finnish researchers and media.

The Centre participates in international projects as a coordinator, a disseminator of information and an organizer of events. At the moment, for instance, Centrum Balticum co-ordinates on the behalf of the City of Turku the Baltic Sea Challenge initiative, which is a collaborative environmental effort with the City of Helsinki. The Centre is also a partner in an international consortium SmartComp, which develops the competitiveness of the region in general and shipbuilding in particular. The Centre supports the activities of its sister organization, the Protection Fund for the Archipelago Sea. Centrum Balticum also contributes to the Turku Process, a process aiming at bringing Russia's Baltic regions into closer interaction with the EU's Baltic Sea region policy.

2 The EU Baltic Sea Region Strategy

In this section, the European Commission provides an update on recent developments within the context of the EU Strategy for the Baltic Sea Region (EUSBSR) and a number of the key project clusters supported through the EU's Interreg Program for the Baltic Sea Region are profiled.

2.1 EUSBSR – EU Commission Update



Responding to the request of the General Affairs Council in its Conclusions (November 2011) 'to review the **EU Strategy for the Baltic Sea Region** (EUSBSR) by early 2012', the Commission published a Communication on the EUSBSR in March 2012. The Communication 1) specified three overall and mutually reinforcing objectives for the Strategy: 'Save the Sea', 'Connect the Region' and 'Increase Prosperity', 2) provided concrete proposals for the setting of measurable indicators and targets for each objective, 3) clarified the roles and responsibilities of the main stakeholders of the Strategy. In June 2012, the General Affairs Council endorsed the revised EUSBSR as presented in the Commission's Communication (March 2012) leading to changes in the Strategy and its Action Plan.

Aiming to reflect the new focus of the Strategy (introduction of three objectives, targets and indicators at Strategy level), the EUSBSR Action Plan has been reviewed at the second half of 2012 and adopted at the end of February 2013. The revised Action Plan comprises 17 priority areas and 5 horizontal actions, about 100 flagship projects and 40 potential flagship projects. The main changes in the Action Plan are the following ones:

- the structure of the Action Plan has been modified from four pillars to three objectives – 'Save the Sea', 'Connect the Region', and 'Increase Prosperity';
- targets and indicators have been introduced at Strategy level, as well as priority area and horizontal action level in coherence with and complement those targets and indicators fixed

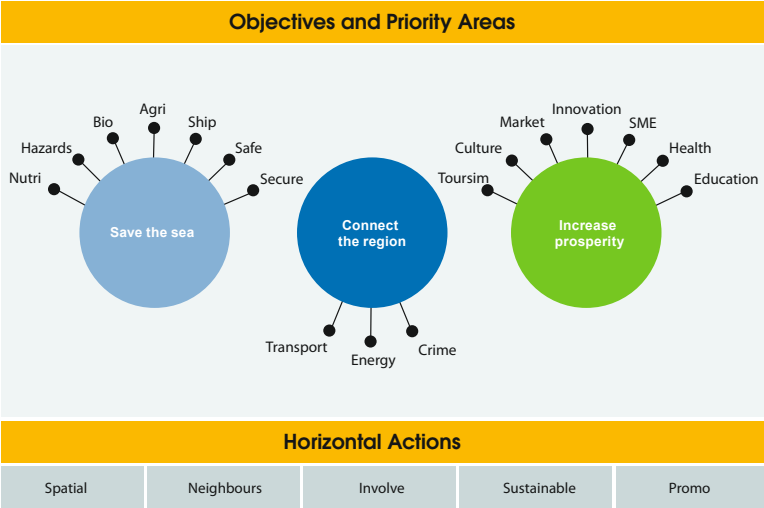
at Strategy level; however, the work on setting targets and indicators at priority area and horizontal action level will be continued in 2013;

- the roles and responsibilities of the main implementing stakeholders (Commission, national contact points, priority area coordinators, horizontal action leaders, etc.) have been clearly defined;
- some rearrangements of priority areas and horizontal actions have been made. The updated Action Plan includes a new priority area 'Culture' and the former sub-priority areas 'Education', 'Tourism' and 'Health' became fully-fledged priority areas;
- the number of horizontal actions was decreased to five focusing on spatial planning, multi-level governance, cooperation with neighbouring non-EU countries, branding and regional identity, as well as on sustainable development and bio-economy;
- the revised Strategy and its Action Plan (the new objectives, targets and indicators) are fully in line with and contribute to the objectives of the Europe 2020 Strategy;
- the involvement of regions, as well as regional and pan-regional organizations have been strengthened: several regions, for example, Region Västerbotten and Kalmar, City of Turku (Finland) and regional and pan-regional organizations such as the Baltic Metropolises Network, the Baltic Development Forum, the Nordic Council of Ministers, the Council of Baltic Sea States Secretariat, the Baltic Sea NGO Network, the Visions and Strategies around the Baltic Sea (VASAB) and the Helsinki Commission (HELCOM) have been appointed priority area coordinators or horizontal action leaders.

In order to facilitate the implementation of the EUSBSR and support the preparation of projects addressing challenges listed in the EUSBSR Action Plan, the EUSBSR Seed Money Facility became operational in February 2013. The facility focuses on the preparation phase of project applications contributing to the three objectives of the Strategy. The preparation phase funded by the Facility covers the planning of the 'main project' activities and the

budget, as well as investigation of potential future funding sources. It also enables networking activities aimed at building strategic partnerships and exchange with the responsible priority area co-ordinators and horizontal action leaders of the EUSBSR Action Plan. If the main project focuses on investments, the Facility can also support preparation of pre-investment studies. Approximately EUR1.3 million has been allocated to the Facility. Investitions-Bank Schleswig-Holstein, which is also the managing authority of the Baltic Sea Region programme for 2007–2013, was appointed to manage it.

The updated EU Baltic Sea Region Strategy



Responding to the request of the General Affairs Council in its Conclusions (April 2011) ‘clarify the concept of macro-regional strategies, to evaluate their value added and submit the outcomes to the Council and the European Parliament by June 2013’, currently the Commission is undertaking an evaluation on the added value of macro-regional strategies. An evaluation of two existing macro-regional strategies –the EUSBSR and the EU Strategy for the Danube Region (EUSDR) – aims to provide information on their effects to date and an important input in developing the further macro-regional strategies. The results of evaluation will be published in the Commission’s Communication by the end of June 2013.

In assessing the added-value of macro-regional strategies the results of the survey of the key stake-

holders of the EUSBSR and the EUSDR, as well as independent assessments of external experts from the environment; innovation and competitiveness; spatial planning; and governance perspectives and other relevant material (implementing reports, academic literature and etc.) have been used.

The assessment of macro-regional strategies reveals several key important aspects: 1) the need of prioritization and concentration on several truly macro-regional issues which require cooperative actions and cannot be satisfactorily addressed by any country acting alone. 2) The need to embed the priorities of macro-regional strategies in all relevant existing national, regional and EU policy frameworks and funding sources (not limited only to the Cohesion Policy programs, especially European territorial cooperation) to ensure that a macro-regional strategy is a ‘living’ strategy that brings benefit to the people living in specific geographical area. Now, when preparation phase for the next (2014–2020) programming period is taking place, is the right moment from the beginning to ensure that the priorities of macro-regional strategies would be taken into account in designing the relevant EU, regional, national programmes. 3) Long-term high-level political commitment towards the macro-regional strategies and its translation into concrete actions is crucial in ensuring the success of macro-regional strategy. Also the strategy should be more run by Member States / regions concerned, rather than Commission.

It is worth noting that the Commission is putting a lot of efforts to embed the EUSBSR in the relevant future (2014–2020) policy frameworks at EU, national and regional levels. Several meetings involving key stakeholders of the EUSBSR, managing authorities on embedding of the EUSBSR into future (2014–2020) programs, with specific focus on country-specific ones, have been organized in Arlanda (Sweden) on 11 January, 2013 and Espoo (Finland) on 11 April 2013. This is especially crucial at the current stage (drafting process of programs), as the objectives and priorities of the EUSBSR, contrary to the current (2007–2013) programming period, could be taken into account from the beginning of the design phase.

2.2 Impressions from the EU Interreg program

The Interreg program is the traditional EU funding instrument to support cross-border projects. The projects supported have recently been organized in four project clusters to enhance coherence and enable a better alignment of the project work with the EU Strategy for the Baltic Sea Region. These project clusters focus on Innovation for SMEs, the environment, transport, and energy efficiency. The first three of these clusters are profiled in this section.



Innovative companies are the key for a competitive Baltic Sea Region. In particular small and medium-sized enterprises (SMEs) are the backbone and the driving force of the social and economic development of the area. Over 99% of all enterprises in the region are SMEs, providing up to 70% of all jobs. Between 2002 and 2010 about 85% of net new jobs were created by small and medium sized enterprises, most patents registered by this group, establishing it the most significant growth driver. However, due to relative high tax and social costs in the Baltic Sea Region, the local companies cannot compete with other countries in terms of prices, but only with high quality products and services. To stay competitive on the global market versus low labour cost countries like China, the regional enterprises must create products and services of high quality and exploit their full innovation potential.

To share best practices, learn from previous projects and identify the future needs, the Baltic Sea Region Program initiated the cluster “**Innovation in SMEs**” in September 2012 bringing together 15 partners from 11 countries, representing 10 innovation projects that are or have been co-financed by the European Union within the framework of INTERREG IVB. Almost all of these projects are also Flagship Projects of the EU Strategy for the Baltic Sea Region (Priority Area 7, 8 and 12).



Hanse-Parlament

The cluster is coordinated by the **Hanse-Parlament**, an organization of 50 Chambers of Crafts, Commerce and Industry established 1994 with the common objective to promote the

small and medium sized enterprises in the Baltic Sea region.

The projects represented in the cluster have a total participation of 195 project partners and range from projects supporting the financing of innovations, strengthening the cooperation between SMEs and other innovation stakeholders like universities and research institutes to investing in the innovation in the long run, by improving qualifications and educational systems. The ten projects of the cluster are:

- **BSHR HealthPort**⁴, coordinated by ScanBalt, brings together innovative SMEs and health care organisations to strengthen the Health Economy and fight the bottlenecks in health care innovations. This sector is not only a cost for society but also as a driver of a competitive and knowledge based health economy. Tackled are the insufficient exploitation of ideas from health care researchers and practitioners and procurement practices that limits access of SMEs to the health care market.
- **Baltic Supply**⁵, a project led by the Bremen Ministry of Economic Affairs, Labour and Ports, aimed at strengthening the supply economy. This project was unique since a sister project was implemented at the same time for the North Sea Region, North Sea Supply Connect. Both projects joined forces to set up a European Business Support Network⁶, that offers support to SMEs offline and online. The online platform, that is also linked to the Enterprise Europe Network is still growing and active after project end, hosted and administrated by the Hanse-Parlament.
- **BSR QUICK**⁷, coordinated by the Hanse-Parlament with 40 formal partners and 42 associated partners one of the biggest projects, bridges the so far missing institutional link between the academic world and SMEs by establishing the Baltic Sea Academy at the very beginning of the project in 2010. This unique network of 15 universities and polytechnics realizes tangible R&D solutions and transfer of innovation and create trainings and study curricula specified to the needs of SMEs in the region. Already during the project concrete invest-

⁴ www.scanbalt.org

⁵ www.balticsupply.eu

⁶ www.eubizz.net

⁷ www.bsr-quick.eu

ment plans and R&D solutions for more than 680 SMEs were realized, training courses and study courses developed and put into action. The **Baltic Sea Academy** is cooperating very closely with the Hanse Parliament, building a powerful innovation platform between SMEs representatives like chambers and universities for the benefit of the companies in the region.

- **BONITA**⁸, led by the University of Bremen, aimed at bridging the knowledge gaps between universities, laboratories, industrial actors and policy makers. The project has a focus on the scientific technology transfer. The ISO/IEC15504 standard based model innoSPICE as a result of the project provides the base to improve the processes of organizations working in the field of innovation, knowledge- and technology transfer.
- **JOSEFIN**⁹, represented by Teknikdalen, identified lack of access to suitable finance as a main barrier to internationalization for innovative SMEs from the Baltic Sea Region. The goal of the project was to promote innovation and internationalization in SMEs by facilitating better access to finance. The project was based on two main pillars; the individual coaching of SMEs and the provision of financial support.
- **BSRStars**¹⁰, coordinated by Vinnova, brings together different stakeholders from the Baltic Sea Region and started to promote SMEs in five areas. The overall objective is it to find new answers for societal challenges that the people around the Baltic Sea are facing. Increasing water pollution and an ageing population are just two examples of those. One of them is can be considered a good example for smart specialization is “Comfort in Living”, linking Polish wood technology with Danish design and Swedish furniture entrepreneurs. The project develops products and services that improve the quality of life for elderly people in their homes, and has developed a strategic action plan until 2020.
- **IBINET**¹¹, represented by Riga Planning Authority, enhancing the cooperation of business incubators in the region. Now more than seven business incubators and technology centres

from Latvia, Sweden, Poland, Germany, Norway and Belarus cooperate and communicate on regular basis using the created Internet platform. The network helps business incubators to offer business support services based on best practice examples in the region.

- **QUICK IGA**¹², led by the Hanse-Parlament, identified the lack of available personnel as one of the hindrances for innovation growth. Also studies have shown, that a higher diversity of work force positively influences the innovation climate in a company. Thus the project is supporting the reintegration of elderly employees in companies and promoting a higher rate of female employees and female entrepreneurship. The project implements a north-south transfer, learning from Nordic countries that have for example a much higher percentage of female employees than for example Poland.
- **BSRInnoReg**¹³, led by the Baltic Institute, improved strategic know-how of business development organisations operating outside metropolitan areas. The project helps business development organisations to develop their business and innovation support services for small and medium-sized enterprises. The project brought local and regional decision-makers together to discuss global economic challenges and agree on an Innovation Policy Memorandum
- **BASIC**¹⁴, represented by Technopol, build a “Baltic Sea Archipelago of Innovation”. The objective is to create a seamless working environment for fast growth innovative companies, embedded in a reliable network of leading Science Parks and clusters. Emphasis is given to identify, select, train and coach SME-gazelles; to provide them harmonized access to markets and to connect them for access to finance for internationalization and growth. During the project a Market access guide for SMEs was compiled with market access information about all BSR countries..
- During the run of the cluster, two projects that support high-tech innovations in SMEs joined: **PlasTep**¹⁵, focused on objective to push plasma based cleaning technologies of atmospheric air

8 www.bonita-project.eu

9 www.josefin-org.eu

10 www.bsrstars.se/stardust/

11 www.ibi-net.eu

12 www.quick-iga.eu

13 www.baltic.org/bsrinnoreg

14 www.basic-net.eu

15 www.plastep.eu/

and water treatment to a visible practical application and **ScienceLinks**¹⁶, a network between leading research facilities of photon and neutron sources and their users.

The cluster is not oriented at the past only, but also elaborating the future needs when it comes to boost the innovative capacities in SMEs around the Baltic Sea Region. For this purpose a survey has been conducted in spring 2013 that is currently in the evaluation process. The future recommendations will be published in autumn 2013 (www.bsr-innovation.eu). Besides a comprehensive printed publication, a summarized policy paper will be introduced to political stakeholders.

First interesting findings indicate that there is a very high interest not only in innovations concerning products, but also soft or organizational innovations seem of particular importance for companies in the Baltic Sea Region. Again it seems, that the countries south of the Baltic sea, like Germany, Poland or Lithuania are interested to learn more about how Nordic countries, like Norway or Sweden, boost entrepreneurship and also use the innovation potential of every employee by allowing different working climates. Remarkable is also that the lack of qualified personnel seems to be a major barrier for innovation growth in companies, asking for improved qualification and education systems.



Baltic Impulse is an environmental project cluster financed by the Baltic Sea Region Programme 2007-2013 and operational between September 2012 and September 2013. There are

15 partners in the cluster, and they represent their involvement in the projects Baltic Compass, Baltic Deal, Baltic Manure, BERAS Implementation, COHIBA, PURE, PRESTO, SMOCS or Waterpraxis. The partnership for saving the Baltic Sea Waters consists of fifteen partners coordinated by the Baltic Sea Action Group, Finland (Baltic Compass). Other members are SYKE, Finnish Environment Institute (Baltic Compass, COHIBA, Waterpraxis, Baltic Manure, Beras Implementation); Århus University/ENVIS, Denmark (Waterpraxis); HELCOM (PURE, Baltic Compass, COHIBA);

Agro Business Park, Denmark (Baltic Manure, Baltic Compass); Baltic Environmental Forum Lithuania (Baltic Compass, COHIBA); JTI – Swedish Institute of Agricultural and Environmental Engineering (Baltic Compass); Knowledge Centre for Agriculture, Denmark (Baltic Deal); MTT - Agri-Food Finland (Baltic Manure, Baltic Compass, Beras Implementation); Södertälje Municipality, Sweden (Beras Implementation); Tallinn University of Technology, Estonia (Baltic Compass, COHIBA); Technical University of Hamburg, Germany (SMOCS); Technical University of Lodz, Poland (Waterpraxis); Union of the Baltic Cities, Finland (PURE, Presto); and the University of Rostock, Germany (Baltic Manure).

Upon initiative of the programme, the partners – all concerned with the quality of the Baltic Sea waters – have formed a cluster to satisfy the need for more visibility for individual project results and to ensure closer cooperation as the problems and also their solutions are intertwined. Baltic Impulse aims to gather the existing projects results, find synergies between them and highlight the bridging elements and themes between the project fields. Baltic Impulse organises workshops in order to collect and exchange experiences from the partnership. A synthesis report will be produced based on the workshop outputs. The main theme of the report is Sustainable Resource Management.

Examples of the region wide projects are (http://www.helcom.fi/projects/en_GB/projects/):

- Baltic Compass includes a list of prioritized agri-environmental measures and a survey of their usage and the mapping of erosion and phosphorus vulnerable areas
- Baltic Deal develops guidelines for watershed based advisory methods – “bottom up processes”, and enables the sharing of information about the best and most effective environmental practices
- Baltic Manure generates a united database of unprocessed and processed manures, soils (P supply) and manure-based energy potentials, and develops recommendations for environmentally sound manure management technology chains
- BERAS Implementation develops a concept and demo farms for Ecological Recycling Agriculture

¹⁶ <http://www.science-link.eu/>

- COHIBA aims to develop cost-effective water quality monitoring practices
- PURE and PRESTO are about transnational investments to reduce nutrient load to the Baltic Sea, the enhancement of phosphorus removal at selected municipal wastewater treatment plants, and better handling of sewage sludge through recovering nutrients
- SMOCS focuses on a participatory approach for guideline comprising knowledge and practice regarding the handling alternatives for dredged sediments.
- Waterpraxis creates institutional arrangements for implementation of Water Framework Directive and the effect for integrated water management.



The thematic cluster of transport projects under the Baltic Sea Region Programme has its origin in the umbrella cooperation (www.transportcluster.eu). As early as in 2009 the three transnational projects: TransBaltic, EWTC II (East West Transport Corridor II) and Scandria signed a letter of understanding to cooperate and to coordinate thematic activities.

TransBaltic was endorsed by the BSR Programme authorities as a strategic project on account of, inter alia, a distinct macroregional dimension of activities. For that reason, it was felt that TransBaltic might provide support to the two other (corridor) projects by setting a macroregional context of their investigations in the specific (southern) part of the Baltic Sea Region, with such aspects as: global trends in transport patterns, implications of the revised EU transport policy for sustainable growth in the BSR, relations with the EU neighbouring countries etc.

Also, TransBaltic was expected to generalise results of EWTC II and Scandria as possible macroregional solutions addressing specific transport development challenges and policy trends. Further, TransBaltic offered to arrange a forum for EWTC II, Scandria and other corridor projects from various parts of the BSR to discuss findings with public and private stakeholders and thereby receive guidance for further work.

The green corridor concept, promoted by the European Commission in the EU Strategy for the Baltic Sea Region and in the EU Freight Transport Logistics Action Plan, became a particular area of interest for the cooperating projects. In late 2009 they drew agreement on joint green transport corridor activities with the Swedish government (Ministry of Enterprise, Energy and Communications) as the latter, pursuant to the Commission guidance, took an initiative to facilitate the establishing of 'green transport corridors for freight' in the Baltic Sea Region. The purpose of the agreement was to specify the division of labour and harmonisation measures in tackling the concept in the forthcoming years.

Through several open workshops and seminars on scaling the green corridors concept and applying it in practice, the cooperation group extended to, altogether, cover about 12-14 transnational and cross-border projects representing the Baltic Sea, North Sea and Central Europe programme areas, the Commission (DG MOVE, DG REGIO), coordinators of Priority Area Transport in the EU Strategy for the Baltic Sea Region, secretariat of the Northern Dimension Partnership on Transport and Logistics and – from time to time – international financing institutions (e.g. EIB, NIB).

This so called umbrella, animated by TransBaltic, became an informal meeting place to share experience on investigating and testing transport greening solutions, plan joint events to disseminate work results, and develop joint standpoints on EU transport and regional policies. In effect, the umbrella cooperation helped develop a Macroregional Transport Action Plan – a strategic document with policy actions aimed to create better interfaces between the national transport networks and make the sustainable multimodal transport system in the Baltic Sea Region more resilient to future trends and challenges (www.transbaltic.eu).

Importantly, the umbrella cooperation has raised awareness of the participating projects that the target groups identified by each of them individually are in fact shared and that certain policy-related aspects may be addressed with a 'stronger voice' when doing so in unity. This allied approach induced by the umbrella cooperation has been perceived a notable catalyser of policy changes at the upper governance tiers. These have resulted in: (1) incorporation of the green corridor concept in the

TEN-T guidelines, and (2) fostering of a network of green transport corridors (instead of loose corridors) as a flagship and desired aim in the Priority Area Transport in the EU Strategy for the Baltic Sea Region.

The bottom-up formed umbrella cooperation won acknowledgment of the BSR Programme authorities and – upon completion of the three founding projects (TransBaltic, EWTC II and Scandria) in late 2012 – received an invitation to set up a formal thematic cluster for the one-year period. The cluster – operating on the programme grant – is established by eight leading organisations of the former umbrella projects (TransBaltic, EWTC II, Scandria, Rail Baltica Growth Corridor, BSR InnoShip, Amber Coast Logistics, Baltic.AirCargo. Net and Bothnian Green Logistics Corridor). In addition to the formal partnership, several other projects take part in the cluster meetings and contribute to the thematic work. The cluster continues the umbrella cooperation formula. It aspires to strengthen complementarities and synergies of individual results, provide a joint and harmonised contribution to the EU Baltic Sea Strategy and the EU transport and cohesion policies, and to promote a corridor approach in strategic transport planning in the BSR at the EU, macroregional, national and regional levels. Thereby, the cluster ensures better visibility of the BSR Programme to a broader public and the wider practical application of the programme outcomes.

The cluster features certain bundled activities, like: cooperation platform, green corridor benchmarks, dialogue with policy stakeholders, financial mechanisms for investments in BSR transport and logistics; and input to the next programming period. Discussion papers, reports and interfacing sessions (e.g. think-tanks) are meant to map the individual findings in the thematic areas, compile them and process towards joint solutions.

The component of green corridor benchmarks features so called blueprints - in other words: generalised solutions for the green corridors, which stem from the market needs, are customised to the transport and logistics specificity of the BSR, and are beneficial for the sustainable regional development in the BSR. They will be prepared based on individual deliverables (such as: Green Corridor Manual, business cases for the green transport, Travel Planner, common service model for logistics centres, information broker system, guideline and management plan for regional logistics integration etc.), enriched with questionnaire results and communicated to the policy and business groups.

The cluster cooperation has reached the mid-term stage and will be concluded in September 2013. Its preliminary results in the context of transport greening policies will be presented at the policy conference held in Brussels on 4 June 2013.

3 International Financial Institutions in the Baltic Sea Region

3.1 Nordic Investment Bank

The Nordic Investment Bank (NIB) is a regional multilateral financial institution in the Baltic Sea Region with eight member countries: Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden. The main part of NIB's lending is targeted at the bank's member countries, as well as at the neighbouring area, with annual commitments in support of investments in the Region on the level of EUR1.8-2.4 billion over the last three years

Approved	2010	2011	2012
Denmark	137	271	229
Estonia	39	0	65
Finland	658	460	271
Latvia	21	14	20
Lithuania	20	21	87
Poland	74	130	0
Sweden	642	283	1109
Iceland	0	51	0
Norway	120	545	553
Russia	150	68	110
TOTAL	1861	1843	2444

NIB provides long-term complementary financing, based on sound banking principles, to projects that strengthen competitiveness and enhance the environment. All project proposals are evaluated against the mandate outlined in the bank's strategy, announced in 2006. Only those that obtain a high enough mandate rating are accepted for further consideration.

High mandate fulfilment is, in NIB's experience, achieved particularly well in certain sectors of the economy, namely environment, energy, transport, logistics and communications, and innovation. In addition, the bank also lends to projects in the manufacturing and service sectors. NIB defines loans to projects with significant direct or indirect positive environmental impacts as environmental loans, regardless of the industrial sector in which they occur. In net terms, environment-related lending accounted for 32% of agreed-upon loans in 2012. The Bank

also provides loans to local banks as intermediaries for on-lending to small- and medium-sized companies, or to finance investments in smaller-scale projects, such as local renewable energy.

In 2012, the infrastructure and telecom sector was the largest recipient, receiving one third of the new loans, directed towards road construction, railways, ports, broadband and mobile phone networks. Over time, the largest sector of activity for NIB is energy.

Security of supply and environmental sustainability are key challenges for the energy sector in the Baltic Sea Region. Enhanced integration of regional energy transmission in electricity and gas is a necessity for an effective market, and this requires investments in interconnectors, pipelines and distribution systems. A further increase of the share of renewable energy is also dependent on improved regional transmission capacity. NIB is participating in a number of priority projects, among others in the context of the Baltic Energy Market Interconnection Plan.

The implementation and development of renewable energy systems and technologies is also a priority area for NIB. The most important renewable energy sources with regard to their energy potential are hydropower (mainly focusing on increased efficiency in existing plants), biomass (usually with a combined heat and power output), wind power (both land-based and off shore) and geothermal power.

In the area of climate change, since 2008 NIB has been operating a special lending programme: the Climate Change, Energy Efficiency, and Renewable Energy facility (CLEERE). In 2012 the programme, which had been increased several times, reached full utilization at EUR4 billion for projects addressing climate change mitigation and adaptation, primarily in the energy sector, but also in industry and transports.

NIB takes part in regional co-operation fora with the aim of supporting the implementation of priority projects. The key issue from the financing perspective is to be able to identify bankable investment components. As experience shows, the

process from the strategy level to concrete implementation is frequently complicated. At best, strategies and policies provide clear guidance and help to set priorities, which in turn create a good basis for investment decisions and resource mobilisation, but this requires a targeted effort.

The EU Strategy for the Baltic Sea Region has established a framework for this co-operation, laying down priority areas and identifying flagship projects. The revised priorities set out by the Strategy, with its strong emphasis on the fields of environment, energy and transport, correlate well with the aims of NIB, providing a good basis for the bank to be involved in supporting the implementation of the strategy. NIB is co-operating closely with EIB and other partners in this respect.

In the wider regional context, the Northern Dimension, based on an equal partnership between the European Union, Iceland, Norway and Russia, creates an important platform for co-operation. In particular, the specific partnerships established under the Northern Dimension provide a framework for concrete activities. NIB plays an active role in the Northern Dimension Environmental Partnership (NDEP), which is co-ordinating the financing of environmental projects with cross-border effects in the Baltic Sea Region, the Barents region and Northwest Russia, with projects benefitting from grants from the NDEP support fund. In addition to Russia, Belarus has recently been approved as a country of operations for the NDEP, and the first emission reduction projects with EBRD and NIB as lead institutions have been agreed to.

The most recent partnership is the Northern Dimension Partnership on Transport and Logistics (NDPTL). Its purpose is to facilitate co-operation on and implementation of regionally important transport infrastructure and logistics projects, with a focus on removing bottlenecks from relevant corridors. Implementation of such projects is expected to benefit from close collaboration with the IFIs, including in relation to PPPs that can provide an effective mechanism for harnessing private sector competence and funding capacity in support investments.

NIB supports the work of HELCOM in implementing the Baltic Sea Action Plan (BSAP), which has been included as one of the priorities in the EU Strategy for the Baltic Sea Region. The aim of the plan is to restore the ecological health of the Baltic marine environment by 2021. NIB has set aside

EUR500 million in a special Baltic Sea Environment Financing Facility (BASE) to provide loans supplementing the financing through national budgets and EU structural and cohesion funds, in order to finance measures that reduce pollution. Two thirds of this envelope has so far been allocated.

To support the preparation of BSAP-related projects, NIB and the Nordic Environment Finance Corporation (NEFCO) took the initiative to establish a special trust fund, the “BSAP Fund”, which was set up in 2009 with donor contributions, initially from Sweden and Finland, amounting to some EUR11 million. The purpose of the fund, managed jointly by NIB and NEFCO, is to assist, through grants for technical assistance, the development of bankable projects that support the implementation of the BSAP. This first phase of the has been fully committed and several projects are currently in implementation.

3.2 European Investment Bank

The European Investment Bank’s lending volumes in the Baltic Sea Region increased significantly in 2008-2009 as the EIB responded to the financial crisis. In 2010 and in 2011 the lending volume fell corresponding to the pre-crisis level. In 2012 the lending was back at the same level as before the crisis. The aggregate lending volume in the region over the five past years amounts to EUR 47.4bn. The total volume of approved loans in 2012 to the BSR was EUR 7.8bn (EUR 8.9bn in 2011).

The single most dominating country is Poland, which received almost 48% of the EIB loans granted in the Baltic Sea Region in this period, followed by Sweden 15% and the concerned Bundesländer in Germany 13%. The most significant sector in Poland in terms of volume is the transport sector which received 56% of the EIB loans to Poland. The remaining part was evenly distributed among other sectors. In the other Baltic Sea Region countries, i.e. in the three Nordic countries Denmark, Finland and Sweden, the most dominant sector is the industry. The EIB’s lending objectives support the activities in the region in line with the three objectives of the EU Strategy for the Baltic Sea Region, namely to save the sea, to connect the region, and to increase prosperity.

EIB lending in the Region 2008-2012

Signatures	2008	2009	2010	2011	2012
EU					
Denmark	379.5	421.7	387.0	155.0	224.2
Estonia	87.0	841.5	75.0	183.0	122.4
Finland	710.0	1 145.0	1 000.8	1 403.2	544.2
Germany ⁽¹⁾	1 620.0	1 615.0	1 249.0	746.0	1 055.4
Latvia	860.0	285.0	100.0	36.0	100.0
Lithuania	10.0	1 169.0	47.0	10.5	3.2
Poland	2 837.0	4 783.9	5 563.9	5 279.1	4 440.4
Sweden	1 311.4	1 135.0	2 607.8	707.6	1 131.6
Candidate Countries					
Iceland	0	170.0	0	70.0	0
EFTA					
Norway	0	0	50.0	100.0	204.2
Eastern Europe					
Russia	0	132.5	250.0	100.0	0
Total	7 814.9	11 698.6	11 330.5	8 790.4	7 825.6

⁽¹⁾ In the German Bundesländer included in the Baltic Sea Region: Berlin, Brandenburg, Hamburg, Mecklenburg-Western Pomerania and Schleswig-Holstein.

Most of the EIB-financed projects in the region support the EU Strategy for the BSR, many projects being classified as flagship projects or projects directly supporting the EU's key objectives of the Strategy.

An important part of the EUSBSR is the re-orientation of existing EU funded programmes in the region to make them support the strategy. The EIB co-financing of EU funded programmes has been a vehicle in promoting a number of important investments in this fast growing region. The EIB has approved a number of projects or programmes that are fully or partly co-financed with EU Structural Funds. For the 2007-2013 programming period, EIB has up to date approved 15 Structural Programme Loans (SPLs) with a total amount of EUR 5.7bn in the BSR. As the EIB on average finances on average 13% of the total project cost in the case of SPL, the EIB financing supports a total investment cost of EUR 44bn in the region, which is a major contribution to growth and employment in the BSR. Public investments included in these programmes have been essential to counter-act the economic and financial crises. In a period with a weakened private sector, the investments in public infrastructure have created new employment and spurred competitiveness in the region.

In the 2007-2013 programming period the key objectives of the European Fund for Regional Development (ERDF), the European Social Fund (ESF) and the Cohesion Fund are to contribute to

(1) convergence, (2) regional competitiveness and employment, and (3) European regional cooperation in the EU.

The rationale of the convergence objective is to promote growth-enhancing conditions and factors leading to real convergence for the least developed Member States and regions. Those regions eligible for such support are in EU terminology referred to as "convergence regions". In the Baltic Sea Region, Estonia, Latvia, Lithuania, Poland and two German Bundesländer (Mecklenburg-Western Pomerania and the Northeast part Brandenburg, the NUTs region Brandenburg-Nordost) are defined as convergence regions. Outside the convergence regions, the regional competitiveness and employment objective aims to strengthen competitiveness, attract investment and boost employment. Development programmes help regions to anticipate and encourage economic change through innovation and promote the knowledge society, entrepreneurship, environmental protection and improved accessibility. More and better jobs are being supported by adapting the workforce and by investing in human resources.

In the EU Member States of the Baltic Sea Region, the EIB also provides financing to small and medium-sized enterprises (SMEs) through credit lines extended to local financial intermediaries. The EIB funds are on-lent by these intermediaries to eligible SMEs to help cover their capital expenditure and working capital requirements.

Table. EU Funds co-financing in the Baltic Sea Region and EIB support

2007-2013 programming period					
Country	Name of operation	Project cost EUR m	Approved EIB loans EUR m	Signed EUR m	EIB loan's share of total project cost (%)
Approved programmes					
Estonia	EU Funds Co-Financing 2007-2013 (EST)	4 331	550	550	13%
Latvia	EU Funds Co-Financing 2007-2013 (LV)	5 834	750	750	13%
Lithuania	EU Funds Co-Financing 2007-2013 (LT)	9 564	1 132	1 132	12%
Poland	EU Funds Co-Financing 2007-2013 (PL)	20 855	2 130	2 000	10%
Poland	Mazovia Regional Infrastructure*	400	180	176	45%
Poland	Poznan Municipal Infrastructure*	209	81	81	39%
Poland	Poznan Municipal Infrastructure III*	333	145	145	44%
Poland	Gdansk Municipal Infrastructure II*	368	145	145	39%
Poland	Kraków Urban Infrastructure*	214	96	29	45%
Poland	Lodz Regional Infrastructure*	323	106	106	33%
Poland	Lodz Municipal Roads*	240	71	70	30%
Poland	Lublin Municipal Infrastructure*	386	126	126	33%
Poland	Malopolska Regional Infrastructure*	318	38	38	12%
Poland	Rzeszow Municipal Infrastructure*	231	69	69	30%
Poland	Szczecin Municipal Infrastructure III*	185	75	75	41%
Poland	Szczecin Municipal Infrastructure IV*	126	58	58	46%
Poland	Toruń Municipal Infrastructure*	189	67	19	35%
Poland	Zachodniopomorskie Regional Framework*	284	84	84	30%
Total approved projects		44 390	5 903	5 378	13%

* Partly co-financed with the Structural Funds regional and municipal investment framework operation.

In a communication from the European Commission in 2012 the new overall objectives of the EU Strategy for the Baltic Sea Region have been reformulated, and each objective has been accompanied by indicators and targets: to save the sea, to connect the region, and to increase prosperity. These three objectives match closely with most of the priorities given to the EIB by the 27 EU Member States. As the Bank's mandate is to support EU policy, the EIB has a special responsibility to contribute to the success of the EU Strategy for the Baltic Sea Region. It does so by supporting the implementation of the Baltic Sea Strategy in various ways, such as by financing wastewater treatment plants in places that were classified by the Helsinki Commission as hot spots, that is point sources of massive pollution. Within the framework of the Northern Dimension Environmental Partnership, the Bank has co-financed several high-priority projects to clean up pollution in the St Petersburg region.

The EIB has likewise financed infrastructure to integrate parts of the Nordic-Baltic area into a larger Baltic Sea Region. EIB loans have gone to bridges, tunnels, port facilities and railway links. Improved and safer energy production and ener-

gy transmission lines have also been high on the agenda. The EIB has also supported a large number of research, development and innovation projects in the Baltic Sea Region. In some countries of the region RDI has become one of the most important sectors for EIB financing. All these factors brought together pave the way for a green growth in the region. The Bank's firm objective - while contributing to the implementation of the EU Strategy for the region - is to remain the single most active multilateral financing institution in the area and one of the leading lenders to flagship projects.

A number of special initiatives are of particular relevance in the context of the Baltic Sea Strategy. These are the JASPERS (Joint Assistance to Support Projects in European Regions) programme, the JESSICA (Joint European Support for Sustainable Investment in City Areas) initiative, the JEREMIE (Joint European Resources for Small and Medium-sized Enterprises) initiative, and the activities of EPEC (the European PPP Expertise Centre). The European Investment Fund, EIF, the risk-financing arm of the EIB Group, is active in the Baltic Sea Region by providing equity instruments, SME guarantees and financial engineering products for SMEs.

JASPERS (Joint Assistance to Support Projects in European Regions) is a partnership between the European Commission (DG Regional Policy), the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD) and KfW Bankengruppe (KfW). JASPERS supports the implementation of cohesion policy in the programming period 2007-2013 by providing the twelve countries that joined the EU between 2004 and 2007 with specialist expertise for the preparation of projects to be submitted for grant financing from the Structural and Cohesion Funds. Approximately EUR 354bn is available in grants for the budgetary period 2007-2013. JASPERS activities in the Baltic Sea Region concern the three Baltic States and Poland. Under the Baltic Sea Strategy, JASPERS is willing to provide support in preparing flagship projects to be co-financed with EU funds, at the request of a Member State and if agreed by DG Regio. JASPERS has over 25 staff members in the EIB Office in Warsaw working in the Baltic Sea Region's new Member States, in addition to those working in the Vienna and Bucharest external offices and at headquarters in Luxembourg, for a total of over 100 staff members. As at 31.12.2012 the three Baltic States and Poland had submitted a total of 120 applications to the EC with the preparation support of JASPERS.

JESSICA is an initiative developed by the European Commission and the European Investment Bank, in collaboration with the Council of Europe Development Bank (CEB). Member States are given the option of using some of their EU grant funding, their so-called Structural Funds for the 2007-2013 operational programmes, to make repayable investments in projects forming part of an integrated plan for sustainable urban development. With JESSICA the EIB has two roles in the Baltic Sea Region. First, it assists Member States and national authorities upon request through evaluation studies with assessing the potential for loans, guarantees and equity for urban development and preparing the framework for the implementation of JESSICA. Secondly, it acts as the JESSICA Holding Fund, to channel Structural Funds into Urban Development Funds (UDFs) on behalf of national authorities in support of urban projects. Currently in the Baltic Sea Region, the EIB is acting as JESSICA Holding Fund in Lithuania (EUR 227m) as well as for 5 Holding Funds in Poland:

Mazovia (PLN 160m), Pomerania (PLN 236m), Silesia (PLN 250m), West Pomerania (PLN 149m) and Wielkopolska (PLN 313m). By year-end 2012, UDFs operating under the above EIB Holding Funds had signed agreements with close to 100 projects supporting sustainable urban transformation in the Baltic Sea Region. This has so far included energy efficiency improvements as well as the creation and redevelopment of public spaces and the support of transport, tourism, leisure, business incubation, office, educational, medical and cultural facilities.

The JEREMIE initiative offers EU Member States, through their national or regional Managing Authorities, the opportunity to use part of their EU Structural Funds allocations to finance small and medium-sized enterprises by means of equity, loans or guarantees, through a revolving Holding Funds, which acts as an umbrella fund. This initiative was developed by the European Commission and the European Investment Fund, which is part of the EIB Group. The European Investment Fund (EIF) has successfully implemented JEREMIE activities in both Latvia and Lithuania which has involved investing over EUR 250m into the SME financing through selected financial intermediaries. In addition, EIF has launched a EUR 100m Fund of Funds programme under the name of the 'Baltic Innovation Fund' in full partnership with the national agencies of LGA (Latvia), INVEGA (Lithuania) and KredEx (Estonia). These two types of investment initiative have contributed to a significant improvement in the private equity and venture capital market development process across the Baltic States. In addition, as a result of regional and national Evaluation Studies conducted by the EIF in Poland, the local authorities are proceeding to implement six different JEREMIE Holding Funds, at present without further EIF involvement.

EPEC, the European PPP Expertise Centre is a joint initiative of the European Investment Bank, the European Commission and European Union Member States and Candidate Countries. It works to strengthen the capacity of its public sector members to enter into public-private partnership (PPP) transactions. It offers a platform for PPP task forces in EU member and candidate countries to share experience and expertise, analysis and best practice relating to PPP transactions. Public authorities in Denmark, Finland, Latvia, Lithuania, Poland and

Germany are EPEC members. They actively support EPEC activities and their interest focuses on the following areas of EPEC work programme: PPP investment planning and project preparation, combining EU funds and PPPs, the accounting and statistical treatment of PPPs, and PPPs for trans-European networks and energy efficiency.

ELENA – European Local ENergy Assistance - is part of the EIB's broader effort to support the EU's climate and energy policy objectives. This joint EIB-European Commission initiative helps local and regional authorities to prepare energy efficiency or renewable energy projects by providing funds for technical assistance. In the Baltic Sea Region two projects have been signed up to date for a total amount of EUR 5.5 million. One contract has been signed with City of Malmö concerning new tramway lines in Malmö, Helsingborg and Lund, supporting a total investment of EUR 421m. The second contract is signed with Region Zealand in Denmark concerning investments in energy efficiency and renewable energy, supporting total investment cost of EUR 62m.

NER300 is so called because it is funded from the sale of 300 million emission allowances from

the New Entrants Reserve (NER) set up for the third phase of the EU Emissions Trading System (ETS). The funds from the sales are to be distributed to projects selected through two rounds of calls for proposals, covering 200 and 100 million allowances respectively. NER300 is one of the world's largest funding programmes for innovative low-carbon energy demonstration projects. The programme acts as a catalyst for the demonstration of environmentally safe carbon capture and storage (CCS) and innovative renewable energy sources (RES) technologies on a commercial scale within the European Union. The sale of emission allowances is administered by the European Investment Bank. In the Baltic Sea Region the Commission has proposed five schemes for awards to date, three in Sweden, one in Finland and one in Poland, for a total amount of EUR 225m.

RSFF – Risk Sharing Finance Facility, is an innovative investment based facility established by the Commission and the EIB that creates additional financing capacity in support of eligible RDI activities. In the period 2010 to 2012 EIB has contributed EUR 814m for 12 projects under RSFF in the Baltic Sea region.

Examples of project loans recently approved by EIB

Lahti Waste-To -Energy-Plant, Finland

High energy demand during long winters and tough environmental standards pose severe challenges for the city of Lahti's energy company. That is why it is building one of the world's most modern plants for converting waste into heat and electricity, with the support of the EIB.

Surrounded by vast forests, the city of Lahti shares an inland climate with eastern Finland's picturesque and sparsely populated thousand lakes region. Cold winters with abundant snowfall make the area a prime location for winter sports.

At the same time, Lahti is a modern, prosperous city with a population of 100 000 situated an hour's journey from the Greater Helsinki region. A centre for renewable energy research, Energon, forms the core of a strong environmental cluster. It is thus no surprise that municipal-owned Lahti Energy aims to provide a reliable supply of energy while continuously reducing emissions. What is more unusual is that, since the late 1990s, Lahti Energy has become an international centre of excellence in

combined heat and power (CHP) technology. Conventional thermal plants release excess heat from the power-generating process into rivers, lakes or the atmosphere. The CHP process works differently. It makes productive use of the heat by pumping it into district heating networks, which are common in the Nordic countries.

On a bright September day, Lahti Energy took a further step in CHP technology and launched the world's most advanced waste-driven CHP facility. "Finland is a world leader in CHP technology. About a third of all electricity is produced in such plants compared with 10 percent or less in Europe as a whole. And the city of Lahti is at the forefront," Finnish state radio announced on the occasion.



Using waste from businesses and households in Lahti and Helsinki as fuel, the new facility will process 250 000 tons annually, generating 90 megawatts of heat and 50 megawatts of power. This is considerably more than in existing plants thanks to a new process of gasification and incineration at high temperatures and high steam pressure. The EIB is financing close to half the investment (EUR 75m) with the remainder being provided by the Nordic Investment Bank, the Finnish government and Lahti Energy.

"This is the world's first energy-from-waste power station to operate with gasification technology," said Lahti Energy's managing director Janne Savelainen, adding that it will curb emissions by partially replacing a coal-fired plant and sharply reduce landfill disposal in the region. "The amount of waste needs to be reduced and recycling and reutilisation of material needs to be maximised. From the materials left over, it is in everyone's interest to separate that part which can be burnt and use it as efficiently as possible in energy production, just like Lahti Energy does," Savelainen said.

The Lahti project, which was completed in 2012, is contributing to the Europe 2020 goals for smart sustainable and inclusive growth by supporting energy efficiency, waste reduction, cuts in CO2 emissions, R&D and innovation.

Tvärbanan Solna, Sweden

EIB provided EUR 323m to Stockholm County Council for the project, which consists of a 6.8 km extension of the Tvärbanan light rail between Alvik and Solna in the Stockholm metropolitan area, the upgrading of the existing light rail line (13.2 km) and the construction of a new depot at Ulvsunda to replace the existing one, and the acquisition of new rolling stock in order to satisfy the planned increase in capacity. The project is located in Stockholm County, the most populated county in Sweden with 26 municipalities and around 2 million inhabitants in 2011, thus representing more than 20% of the country's total population. Public transport is widely used in Stockholm, accounting for 70% of the total number of journeys in 2010.

The Regional Development Plan for the County of Stockholm (RUFs) 2010 constitutes the basis for development of Stockholm County in the midterm (year 2030) and long term (year 2050) horizons. The plan's shared vision for the county is to become Europe's most attractive metropolitan region. The RUFs 2010 forecasts that the county's population will increase to 2.4 million inhabitants by 2030 and to around 3 million by 2050. One of

the main strategies defined by the RUFs 2010 in order to promote a sustainable growth is the development of an attractive, high-capacity, efficient public transport system that is accessible to all, building on the existing resources in order to eliminate capacity shortcomings and improve service quality.

The Tvärbanan light rail was inaugurated in January 2000 to provide an orbital, rapid transport connection linking the radial commuter train and underground lines running through the city centre. Initially it ran between Gullmarsplan and Liljeholmen and was later extended to Alvik (autumn 2000) and to Sickla Udde (August 2002). The number of passengers carried by the Tvärbanan light rail has been steadily increasing in the past years to the current 50 000 passengers/day, reflecting the strong demand for the line.

The project area, despite being densely populated, still presents development opportunities, especially in Solna, which has been at the top of the fastest growing Swedish municipalities in the past years. The Comprehensive Plan for Current and Future Solna 2006-2025 foresees the development of new housing, office and commercial areas, including Solna Business Park and Solna Centrum, which will be connected through the new Tvärbanan light rail extension to Solna. The extension will also link the existing commuter and underground stations in the area.

The new Solna branch, together with the expected demand increase and future plans to develop further extensions of the Tvärbanan light rail, make the upgrade of the existing Tvärbanan necessary in order to provide the adequate capacity and speed and allow for a more efficient operation of the extended line.



PKP Polskie Linie Kolejowe SA, Poland

The European Investment Bank (EIB) has provided two loans amounting to EUR 165 million to the Polish Railway Company PKP:

- EUR 100 million to finance the upgrading of 58 km of railways and signalling enhancement on a 42 km section between Warsaw and Lodz;
- EUR 65 million to support the modernisation of a 32 km-long section of the E59 railway line connecting Wrocław and Poznań.



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The loan of EUR 100 million will finance the modernisation of 58 km of twin track line between Warszawa Zachodnia and Miedniewice to the speed of 160 km/h, and installation of signalling equipment on a 42 km section of the already improved line between Miedniewice and Łódź Widzew. The upgrading of the line between Miedniewice and Łódź Widzew to the speed of 160 km/h was already accomplished in 2008. The loan of EUR 65 million will contribute to the upgrading of a 32 km-long section of the twin track railway line from Poznań to Czepin in the South-West of Poland, which is part of the E59 European Rail Corridor connecting Malmö in Sweden with Ostrava in the Czech Republic through Poland via Szczecin, Poznań, Wrocław and Chalupki. The modernised line will make it possible to use trains operating at a maximum speed of 160 km/h. This section forms the second part of the planned modernisation of the 164 km of the E59 between Wrocław and Poznań, which is expected to be completed by 2016.

The EIB funds will help to upgrade the railway lines along the key transport corridors in Poland, contributing to an increase of transport safety and speed and improving the environment by promoting environmentally friendly modes of transport. The current loans are a continuation of the EIB's successful cooperation with PKP Polskie Linie Kolejowe S.A. Including the current loans, the Bank has provided loans to PLK totalling EUR 1.4 billion to finance railway modernisation projects across Poland.

Technopolis Science Parks II, Finland and Estonia

Technopolis Science Parks II (Finland, Estonia), amounting to EUR 70 m, is a cross-border project concerning the design and construction of premises for high-tech companies, universities and research institutes in existing and new Technopolis Science Parks in Finland and Estonia. The project supports the ability of SMEs to benefit from

research also envisaged in the forthcoming Agendas of Europe 2020 as well as Horizon 2020.

Finland scores very high on many international rankings relating to competitiveness generally, as a result of strong performance in R&D, innovation and the education system. Finland's innovation performance continues to be very strong: Finland, alongside Sweden, Denmark and Germany make up the European "leading group", scoring well above the EU average. This success story is partly a result of the Finnish national innovation system, developed early, relative to other OECD countries and based on the (so-called) "triple helix" of university, industry and government. Centres of Expertise (CoEs) are at the core of the country's regional development and regional innovation system strategies. CoEs are designed to develop regional innovation systems, capitalising on local assets and know-how and promoting collaborative public-private projects; to do so, CoEs mostly use science parks as their operational platforms. Currently, there are 31 science parks existing operating in Finland, hosting in total some 2,200 companies and organisations.

With some 600,000 floor square meters of premises for leasing, occupied by 1,300 companies and other entities, Technopolis is Finland's largest company that specialises in providing operating environments for high-tech companies and is one of the largest technology centre operators in Europe. It currently operates a nationwide network of science parks in Espoo, Vantaa, Jyväskylä, Lappeenranta, Oulu, Tampere and Kuopio. The tenant mix in the science parks is diversified including established larger Finnish corporates as well as private high-tech companies, small start-ups and universities thus allowing and stimulating interaction and flow of knowledge amongst them. The expansion into Estonia (through a joint venture in which Technopolis has a 51% stake) and Russia (St. Petersburg) is part of the promoter's growth strategy aiming at increasing the company's geographical coverage and diversifying its customer base, both through acquisitions and expansion of existing operations. It is expected that it would also result in faster, better and more cost-efficient internationalisation processes for the small technology based firms.



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4 Summary

The Baltic Sea Region continues to benefit from an exceptionally strong network of projects and institutions that span the Region. The possible benefits from taking such a macro-regional approach, i.e. moving beyond the traditional bilateral collaboration between individual neighbors, is becoming evident in the evaluation that the European Commission is currently conducting.

The EU Strategy for the Baltic Sea Region, which reached the end of its first phase in 2012, has been a critical element in enhancing the coordination among the many efforts under way, and in orienting them towards a clear set of objectives relevant for the Region. The awareness of the need for collaboration has clearly increased; many of the challenges that exist in this part of Europe can only be achieved together. And especially the EU-funded Interreg program for the Baltic Sea has received a clear framework for making decisions in line with the needs of the Region and the activities of other entities.

The review of the EU Strategy has also made clear where progress is still limited. Truly new policy initiatives driven by the regional effort are few. The impact on policies that do not have a direct focus on Baltic Sea Region collaboration remains limited. And the engagement of the private sector is still low; the argument for why Baltic Sea Region collaboration should be something companies in the Region should worry about has so far not been made successfully.

The revised strategy and action plan put forward by the European Commission in 2012 and developed further in collaboration between the Commission and the national representatives in the High-Level Group will drive some changes in the way the strategy process proceeds. There have also been some adjustments in the action plan structure, reframing one of the objective areas to become a cross-cutting activity and adding a few activity areas to one of the three overall objectives. There will be a number of operational targets that can be used to measure the success of the Strategy in a more transparent way.

The revised strategy provides a solid platform to address some of the weaknesses identified. But it

does not yet provide the solution to some of the key challenges that Region is facing:

- Clear, measurable objectives are an important instrument to better manage the Strategy and to help communicate the benefits to political and private sector leaders, two constituencies that have to be won or re-won to enable the strategy to achieve its full impact. But these objectives should be derived from a systematic, regular analysis of the Region and its strategic priorities. The factual foundation created in such a process can then inform the selection of activities as well as provide the background for an assessment of the strategy's impact. The political nature of the action plan process might be one of the reasons for the limited private sector involvement.
- While the EU Strategy has helped to better structure the existing Interreg program, its full impact rests on making it an integral part of other EU and national policies. With the EU budget period soon starting, it is critical to making sure that the relevant programs, in particular the Structural Funds and the Horizon 2020 activities, can be aligned with the EU Baltic Sea Region strategy. That requires including the relevant language into the national operational programs currently developed for the structural funds, and it requires making sure that the operational regulations for other programs allow for a meta-regional perspective.
- Integration is not only a matter of operational alignment; it also requires a systematic approach for how policy goals are related to each other. The Europe 2020 strategy provides an overall framework, the new Smart Specialization Strategy is an example of a European strategy in a particular policy field, the national reform programs set out the activities of individual member countries, etc. With the responsibility for these different strategies and for the implementation of the Baltic Sea Region strategy often in different hands, more structure for aligning them would be helpful.
- While the EU Strategy for the Baltic Sea Region is primarily focused on the EU member

countries in the Region, the scope for collaboration clearly involves the neighbors as well. The collaboration with Russia always stands in the overall context of the political relations between Russia and the EU. The practical experience, for example in the Russian CBSS Presidency, shows how joint activities in the Region can work if it is based on a shared understanding of the objectives. And CBSS has, as this Report shows, taking a very active role in the EU Baltic Sea Region strategy action plan. But with the many institutions active in this field, CBSS, the Northern Dimension, and a range of fora focusing on the Arctic, it will be important to create a better understanding for how these different mechanisms can work effectively together.

An underlying issue for the Region is how to create an institutional architecture that can mobilize the

full power of the existing structures for collaboration in the Region, and focus them on the issues most critical for its future competitiveness. This might not require new institutions, but it requires the existing coordination mechanisms to be more visibly empowered. They need to be able to not only organize the activities directly focused on regional collaboration, but be able to achieve coordination across other policy areas as well. Some steps in this direction have been made, especially at the national level in some countries in the Region. Interesting new ideas have also been discussed at recent meetings of the National Contact Points, Priority Area Co-ordinators and Horizontal Action Leaders, i.e. the 'extended management team' of the EU Strategy for the Baltic Sea Region. The Region needs to build on these examples to create a structure that allows fact-driven policies on regional issues, well integrated with other activities at the EU and national level.

Section C: Special Topics – Access to Capital, Regional Value Chains, and Exports



Access to capital: Issues facing Small- and Medium-Sized Companies in the Baltic Sea Region

By Torbjörn Becker, Director of the Stockholm Institute of Transition Economics at the Stockholm School of Economics

Introduction

Small and medium-sized enterprises (SMEs) are the focus of many growth- and job creation-focused policy discussions today, and the growth potential and access to financing of SMEs has been the topic of many academic papers. In the past, much of this discussion centred on development strategies for countries in catch-up phases of economic development, while more developed countries often focused on larger-scale industrial projects to promote growth and employment. However, over the past few decades, more developed countries have shifted their focus to SMEs and entrepreneurship more generally. In 2005, the EU published its *Modern SME policy for Growth and Employment* in connection with the midterm review of the Lisbon agenda and followed up with a *Small Business Act for Europe* (SBA) in 2008, where it is stated that:

“Our capacity to build on the growth and innovation potential of small and medium-sized enterprises (SMEs) will therefore be decisive for the future prosperity of the EU.”

In the SBA, the EU also states the goal of creating a “world-class environment for SMEs”. This should be achieved by cutting red tape and creating a business-friendly environment for SMEs, where access to finance is highlighted as one potential problem

area for SMEs that should be addressed. In the area of access to finance, the EU stresses developing markets for risk capital, micro-credit and mezzanine finance as well as improving the payment culture in Europe to reduce insolvencies resulting from late payments of invoices. The EU has also made substantial amounts of funding available to support SMEs through the CIP, the Cohesion Policy and the Agricultural fund. It also highlights the role of the EIB to work in this area and channel EU funds to SMEs.

The EU’s policy on SMEs and access to finance was outlined as the global financial crisis hit firms, banks and households across the world, including the EU and the Baltic Sea Region (BSR). The recovery has been uneven, and financial institutions have struggled in many countries. Against this backdrop, this chapter will look at SMEs and their access to finance in the BSR and contrast this with the situation in the rest of Europe. The first part of the chapter provides some basic numbers on SMEs in the Region, before looking more closely at how SMEs themselves assess their situation with regard to access to finance and related issues. The report then looks at how the state of access to finance in different countries is related to other economic factors, and discusses some more general issues on SME access to finance that have been analysed in the (policy-oriented) academic literature. Based on this overview of data and theories related to SMEs and their access to finance, the chapter ends with a discussion of policy implications.

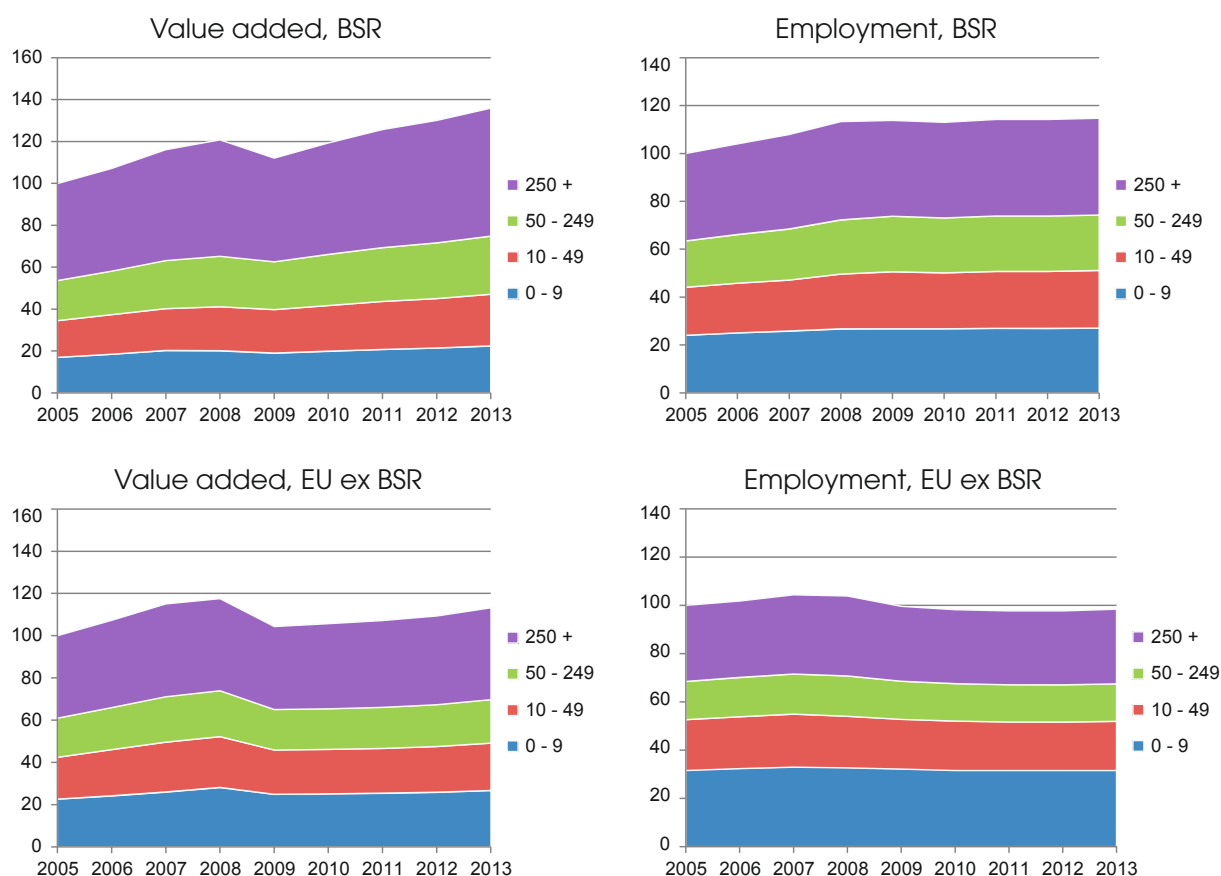
SMEs in the BSR and the EU

The overwhelming majority of companies in the BSR and the EU (99%) fall into the SME category, as defined by the EU: an independent company with fewer than 250 employees, less than EUR50 million in turnover, and a balance sheet of less than EUR43 million. Within the group of SMEs, ‘micro-enterprises’ have fewer than 10 employees,

‘small enterprises’ have 10-49 and ‘medium-sized enterprises’ have 50-249 employees.

The focus on SMEs comes from an interest in boosting growth and employment, so the first question is to what extent SMEs have contributed to growth (as measured here by value added) and employment in recent years (covering the crisis period), in comparison with large companies of over 250 employees.

Figure 1. Value added and employment in SMEs and large companies, BSR* vs. EU ex BSR (Indices with 2005=100)



Source: EU Annual report on SMEs, author's calculations

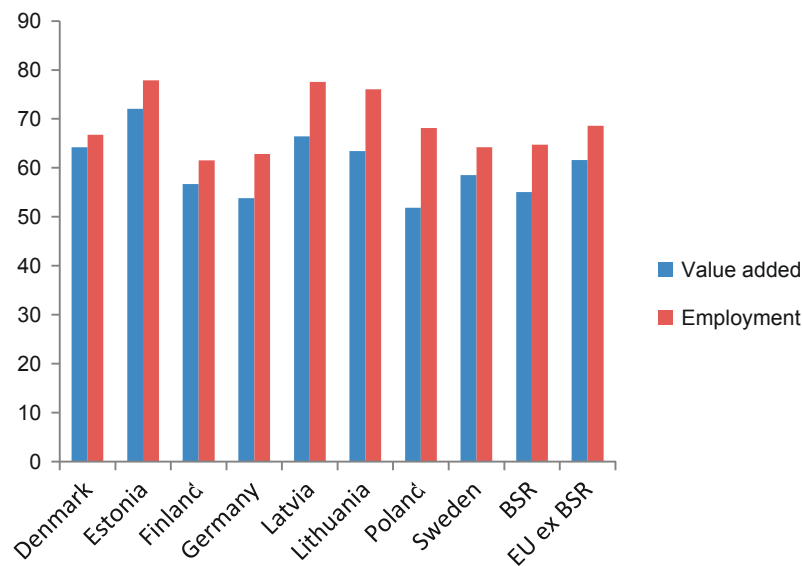
* Note: The BSR figures do not include Norway, Iceland and Russia due to data limitations. Indices are based on the sum of value added and employment, respectively, in all countries for each region.

The figures confirm that SMEs are hugely important for both value added and employment throughout the entire EU, including the BSR. SMEs accounted for around 55% of value added and 65% of employment of all companies in the BSR, compared to 62 and 68% in the EU excluding the BSR countries. This translates into over 26 million people employed by SMEs in the BSR and over 61 million in the rest of the EU. It can also be noted that larger companies generally generate more value added per employee, which could be

due to being more capital intensive and/or more profitable.

The strength of the BSR relative to the rest of the EU is also evident in these figures. In terms of value added, the BSR is expected to have experienced a cumulative growth of 35% between 2005 and 2013, despite the 2009 dip. Over the same time period, employment has grown by a more modest 15%, which still amounts to over 1.5% annually. The corresponding numbers for the rest of the EU are 13% and -2%, respectively, for value added and

Figure 2. Value added and employment shares of SMEs in the BSR*



Source: EU Annual report on SMEs, author's calculations

* Note: The BSR figures do not include Norway, Iceland and Russia due to data limitations.

employment growth. In other words, the SMEs in the BSR have been significantly more successful in contributing to growth and employment than their peers in the rest of the EU.

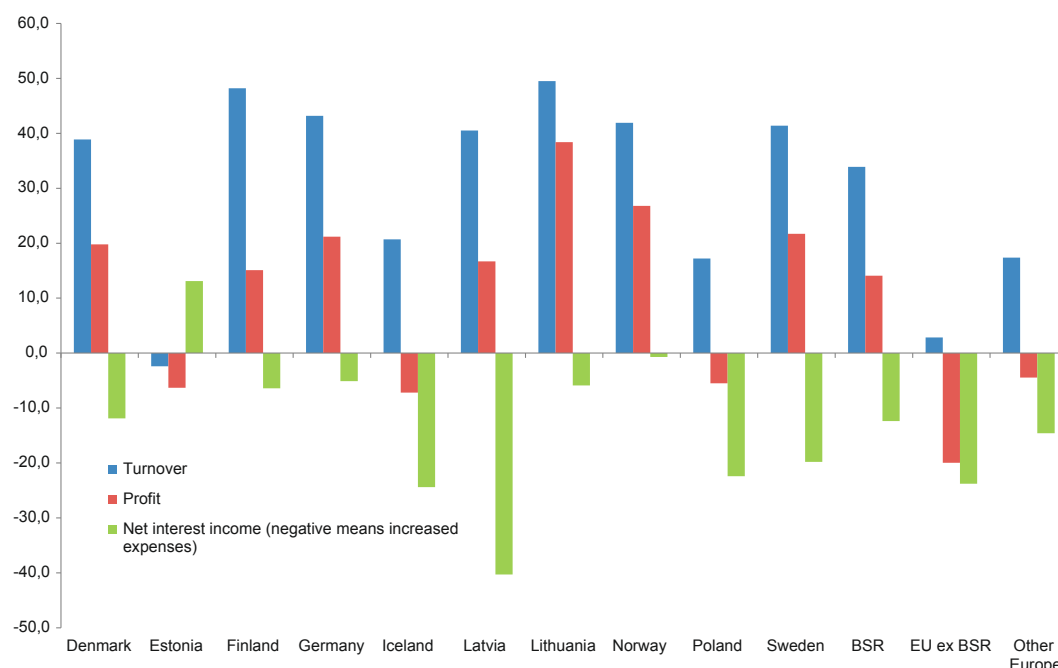
The growth rates for small and medium-sized enterprises have been higher than for micro-enterprises and large companies in the BSR. This middle range has experienced value added growth of over 40% and employment growth of close to 20%, while micro-enterprises and large companies have experienced around 30% value added growth and 10% employment growth over the same time period. In the rest of the EU, it is micro-enterprises that have had faster value added growth, at 17% compared to the average of 11% in companies in the other size groups.

The importance of SMEs varies somewhat across the countries in the BSR, with Estonia being the country with the highest SME shares of value added (78%) and employment (72%) in the region. However, all of the BSR countries included here have value added shares of over 50% and employment shares of over 60% for SMEs. Overall, SMEs account for a somewhat lower share of value added and employment gains in the BSR compared with the rest of the EU, but SMEs are clearly still very important in all the BSR countries and their future success a crucially important policy issue for growth and employment in the region.

SMEs' access to finance in the BSR

In the discussion of strategies to promote growth and employment among SMEs, access to finance, or rather lack thereof, is regularly argued to be an important constraint that requires policy action. To study the financing situation of SMEs in the BSR, we use the most recent and comprehensive dataset that is available today, the Survey on the Access to Finance of Small and Medium-sized Enterprises (SAFE), which is a joint data collection initiative, started in 2008, between the ECB and the European Commission. The full survey is conducted in 38 countries, and in addition to the 27 European Union countries, other countries of the European Free Trade Association (EFTA) or participating in the Entrepreneurship and Innovation Programme (EIP) are also included in the survey. The survey was conducted from June to July 2009, and again from August to October 2011. The survey size varies between countries, and among the BSR countries the sample size goes from 100 in Estonia to 1,000 firms in Germany. The focus here is on the most recent 2011 data. Later in this chapter, the limitations of these data and proposals for additional data collection will be discussed, but currently this is the best data set available to address the issue of financing of SMEs in the BSR and the EU more generally.

**Figure 3. Net increase of key company indicators last 6 months
(Share of SMEs indicating increase minus SMEs reporting a decrease)**



Source: SAFE 2011 and author's calculations

* Note: The BSR figures do not include Russia due to data limitations. "Other Europe" includes Albania, Croatia, Israel, Liechtenstein, Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Switzerland, and Turkey. Regional averages are an unweighted average of shares in each country.

SMEs in all of the countries in the BSR except Estonia had seen an improvement in turnover and profits, but increasing interest expenses, in the 6 month period preceding the survey. We can only speculate about to what extent the situation in Estonia was connected to the adoption of the Euro at the time, but being the only country where SMEs saw their interest expenses reduced, this could have been a contributing factor. Compared with the rest of the EU and other European countries, all of the indicators were significantly better on average for SMEs in the BSR. However, financing became more expensive for SMEs in all regions, including the BSR, and the more general question is really to what extent financing is a problem for SMEs.

When SMEs were asked what the most pressing issue was for their company, access to finance came in third place on average for SMEs in the BSR, with around 15% of SMEs reporting this to be the most pressing issue. This is similar to the situation in the rest of the EU, whereas other European countries have more difficulties with financing, and the issue ranks second for SMEs there. In two of the BSR countries, Estonia and Iceland, access to finance is ranked as the most pressing issue facing firms, with almost 30% of companies hav-

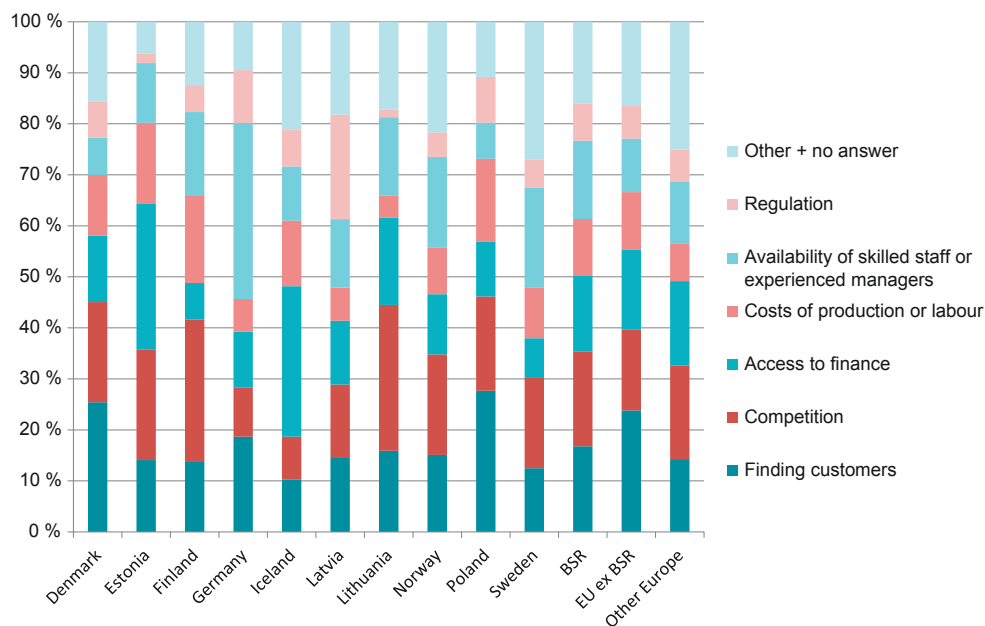
ing problems with access to finance. At the other end of the spectrum, Finnish and Swedish SMEs are least worried about access to finance with less than 8% reporting that this was the most pressing problem facing them.

The other most pressing issues facing companies in the BSR are competition and finding customers. While competition can be a very serious issue for individual SMEs, it is far from clear that this is a problem for the economy as a whole; competition is something that is encouraged in market economies and an important driving force for growth and employment. However, if competition mainly comes from companies in other countries, it becomes a more difficult policy issue for the BSR, and is another important issue to study. Problems with finding customers can possibly also be linked to competition, but also to a general lack of demand. This is another important issue for policy makers to consider and relates to the heated discussion of austerity versus stimulus by governments, which features prominently in the economic policy debate today. This section focuses on the issue of financing, but later in this chapter, the links between financing and the more general economic situation will be discussed.

We will now look closer at the sources SMEs use to finance themselves. The first step is to see if internal or external funding sources dominate the picture. Strikingly, only 3% of SMEs across the BSR manage to finance themselves exclusively with internal funds when they needed funding; in Ger-

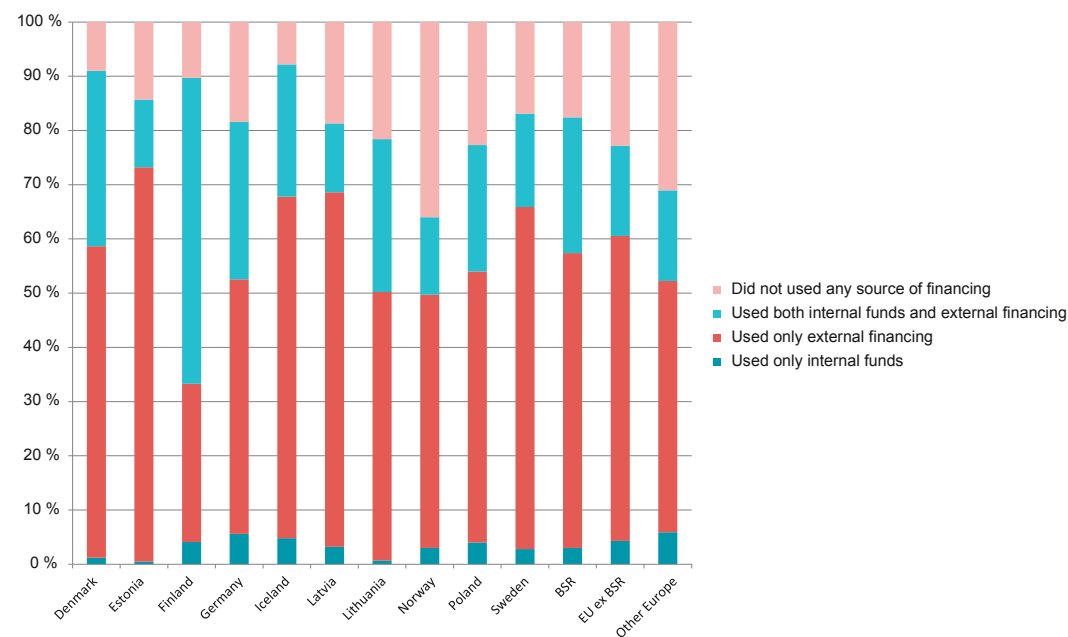
many, this peaks at 5% while in Estonia, almost no SMEs managed without external funding. In contrast, an average 60% of SMEs rely exclusively on external funding and another 20% use a mixture of external and internal funding. The remaining SMEs (less than 20%) did not use any financing in

Figure 4. What is the currently the most pressing problem your firm is facing?



Source: SAFE 2011 and author's calculations

Figure 5. Use of internal and/or external funding during the last six months



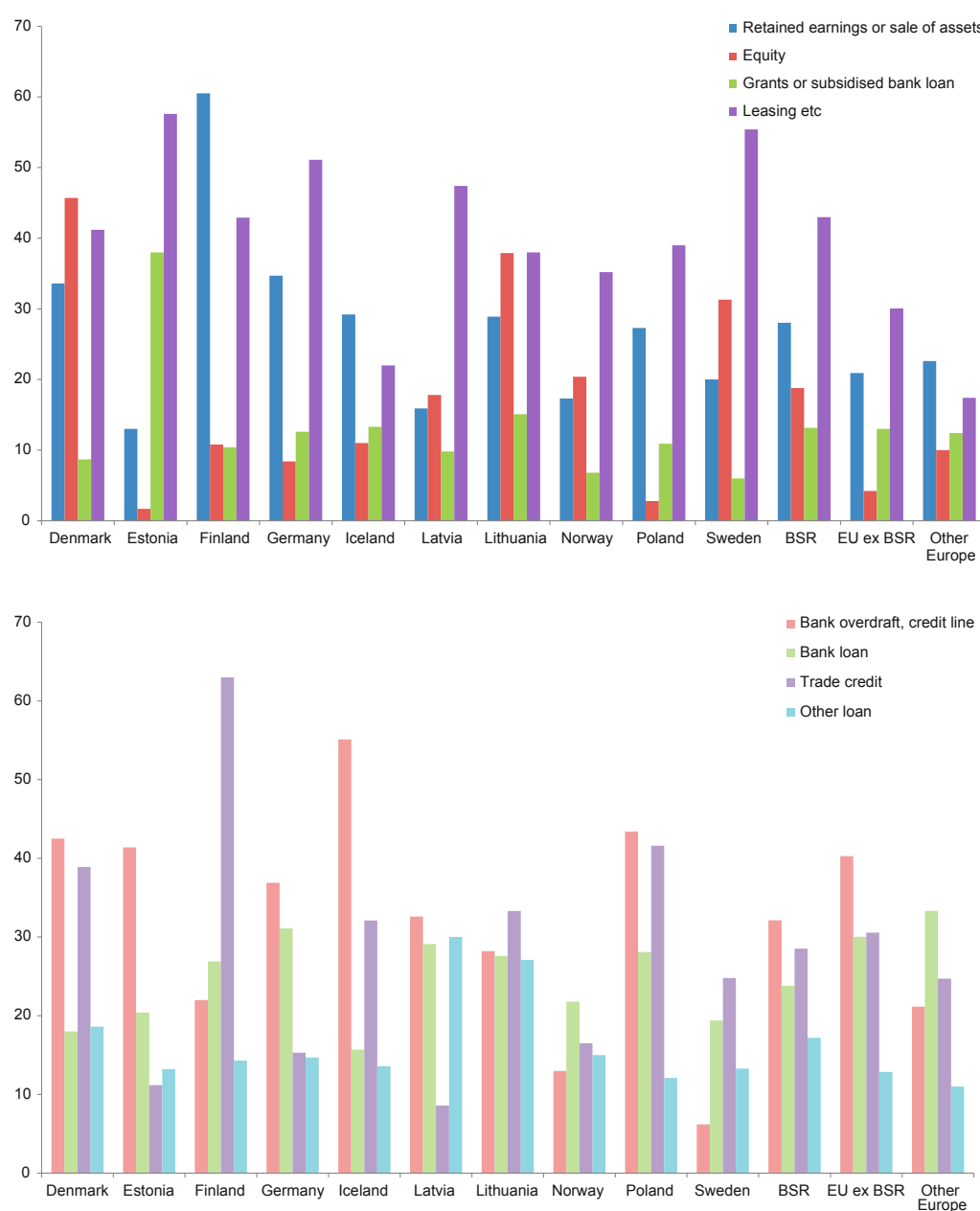
Source: SAFE 2011 and author's calculations

the period in question. The message here is that a majority of SMEs did need some type of funding, and very few could manage this with solely internal funds. In other words, access to external financing is indeed very important for SMEs. However, this in itself does not mean that external funding was problematic during this period, but suggests that access to finance is an important issue for SMEs.

The 28% average use of retained earnings or sale of assets in the BSR SMEs in the more detailed breakdown of funding sources correspond to the above numbers on internal funding. Over 60% of

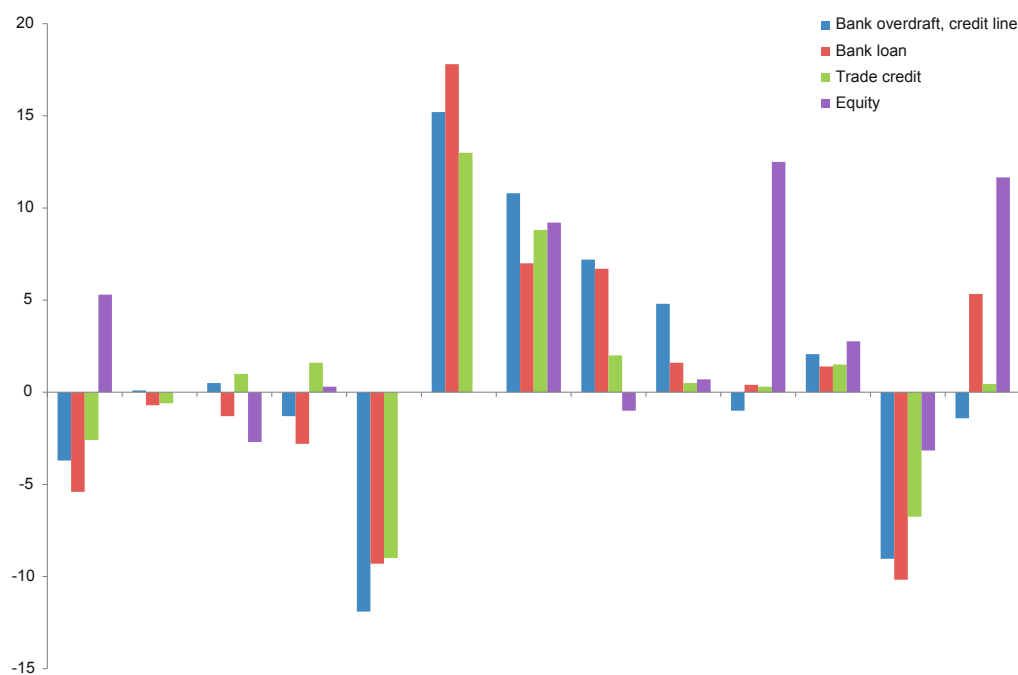
Finnish SMEs used this as a funding source, while only around 15% of Estonian, Latvian and Norwegian SMEs did. There is also a significant use of equity funding in many BSR countries, but also great variation around the 20% average. In Denmark, close to half of the SMEs raised equity capital, compared to only 2-3% in Estonia and Poland, and less than 10% in Germany. This may reflect how developed local equity markets are but could also reflect the financial strength of existing owners, who are able to put in extra equity capital when needed.

Figure 6. Use of different financing sources during the last six months



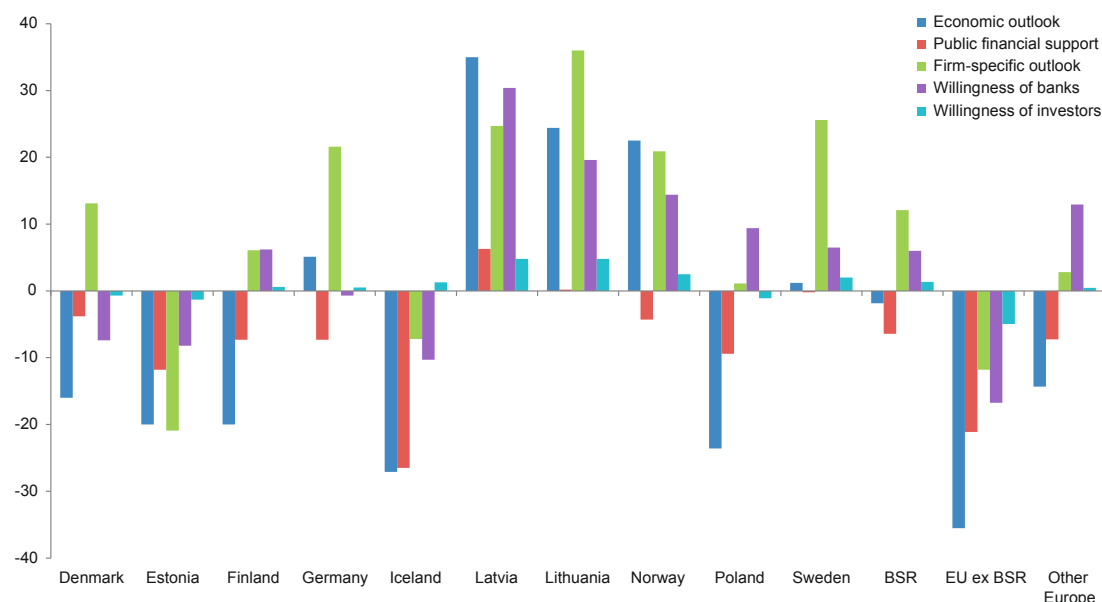
Source: SAFE 2011 and author's calculations

Figure 7. Net increase in availability of different types of financing over the past six months



Source: SAFE 2011 and author's calculations

Figure 8. Change over the past six months in factors that affect availability of financing



Source: SAFE 2011 and author's calculations

Leasing, hire-purchases and factoring has been the most frequently used funding category in the BSR, with more than 40% of SMEs using these methods across the Region. To what extent this popularity reflects efficient markets for these services, a lack of supply of regular bank lending, tax or regulatory factors, a desire for collateralised lend-

ing, or some other factor is hard to know. Icelandic SMEs use this source less than other countries in the BSR, at 22%, while Estonian SMEs are the most frequent users of this funding source, at 58%. In the rest of the EU and in other European countries, this funding source is less frequently used, at 30 and 17% respectively. Grants and subsidised

bank loans account for a minor share of funding for SMEs in most BSR countries, except for Estonia, where almost 40% of firms have access to this funding source compared to the average of just above 10% in the BSR as a whole.

On the more regular debt financing side, SMEs across the BSR use bank overdrafts and credit lines, and trade credit most frequently, with both funding sources used by around 30% of firms. The use of trade credit seems to be strongly correlated with use of retained earnings, which may suggest that where companies are relatively cash-rich, they can also afford to offer financing to their customers. Bank loans are slightly less frequent, with 24% of firms reporting having used this in the same period. This is less frequent than in the rest of the EU and non-EU European countries, where over 30% of SMEs used bank loans.

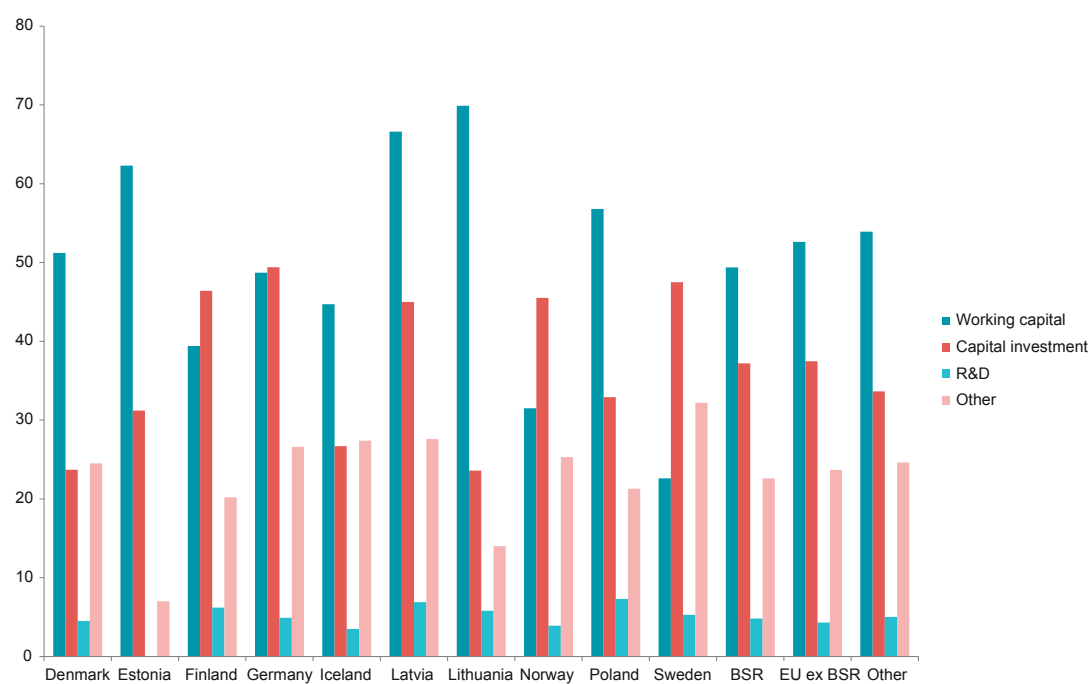
In this period, there was relatively little change in funding availability in the BSR on average, but the average hides a worsening in Iceland and improvements in Latvia and Lithuania. In the rest of the EU, funding availability declined for all types of funding. This picture is strongly correlated with changes in all of the factors that are thought to affect the availability of financing, ranging from the overall economic outlook to banks' willingness to lend. These factors are also in and of themselves

highly correlated, so that in a country where one factor is negative, the others also tend to be negative, and vice versa. The overall picture in the BSR is relatively neutral, whereas the rest of the EU is facing difficulties on all fronts, according to the surveyed SMEs.

In around half of the cases, SMEs in the BSR (and other regions) took loans because they needed working capital, while around 40% borrowed to finance capital investments like buildings, equipment and vehicles. In less than 5% of firms were loans used to finance research and development and innovation. The 'other' category includes promotion, training, acquisitions and unspecified uses. Overall, it seems that many SMEs used debt financing more to survive and support existing operations than to invest in future products and services. Alternatively, SMEs only do R&D when they have their internal funds to spend on this.

This somewhat gloomy picture on the use of loans should be complemented by the fact that over 50% of SMEs in the BSR did not take any loans in the past two years. The next 20% of SMEs took relatively small loans, of less than EUR100,000, while EUR1,000,000 loans were taken by only 5% of SMEs. Around 80% of the loans came from banks, whereas families and micro-finance institutions accounted for the remaining 20% on average.

Figure 9. Reasons for taking last loan



Source: SAFE 2011 and author's calculations

Figure 10. Application success, bank loans

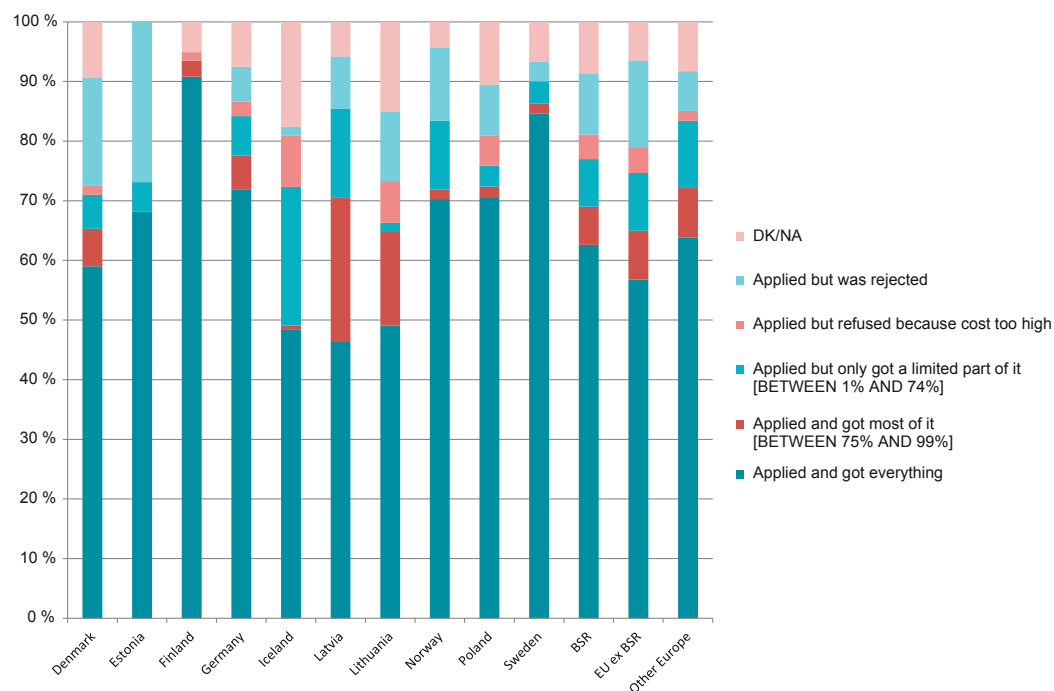
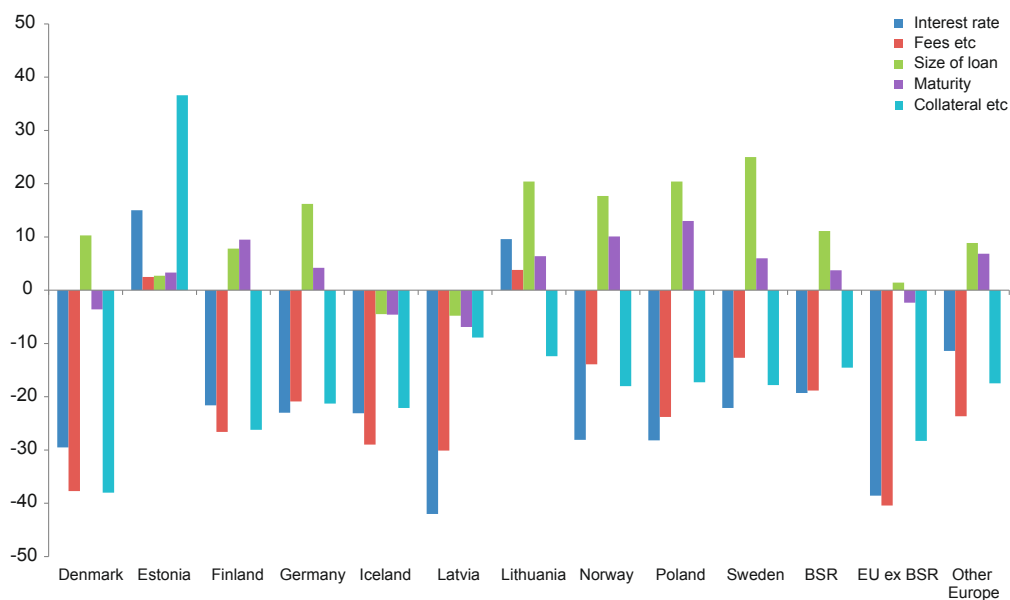


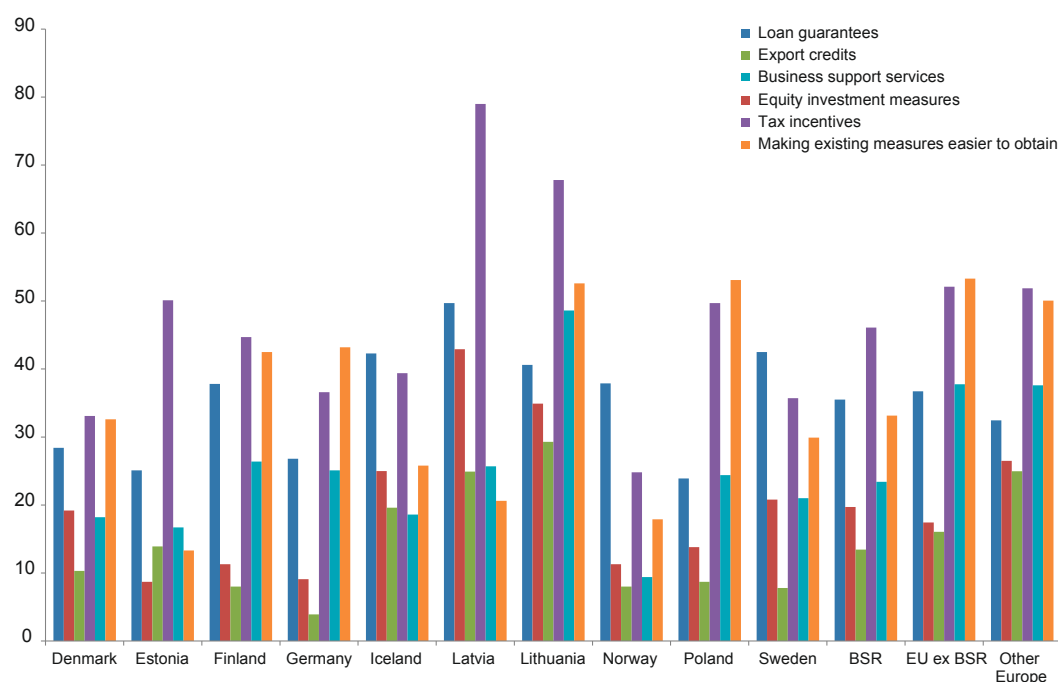
Figure 11. Net change in the past six months of conditions of bank financing (rescaled so negative is worsening for all indicators)



Latvia stands out somewhat in that both families and micro-finance institutions were more important, and together accounted for around 45% of

loans. Overall though, lending to SMEs mainly comes from banks in the region.

Figure 12. Importance of various policy measures for future financing
(Share of companies answering 8-10 on a scale of 1 to 10)



When SMEs went to banks to ask for loans, 65% got the loan they asked for in the BSR. In Iceland, Latvia and Lithuania, countries that were more severely hit in the crisis, this number is lower, at around 50%. However, in Latvia and Lithuania, an additional 15-25% of the SMEs got most of the loan they asked for. In the end, only around 10% of loan applications were straight out rejected and an additional 5% of SMEs did not take the loan they applied for because they considered the cost to be too high. In total, around 15% did not get a loan from the bank in the BSR. This is more or less the same share of SMEs that reported that access to finance was the firm's most pressing issue earlier.

Before we take the above numbers as evidence that the financing situation looks reasonable for a large majority of SMEs in the region, it is useful to look at the conditions that are attached to the loans that were accepted. The conditions include the interest rate, other fees associated with the loan, as well as other conditions, like collateral requirements, maturity and size of the loans. On average, interest rates and fees worsened, as did collateral requirement, while maturity and loan size improved. This picture is relatively consistent across countries in the BSR and the EU, although

the increase in interest rates and fees were substantially larger in the EU.

In order to improve financing opportunities in the future, almost half of the SMEs in the BSR would like to see policy makers introduce more tax incentives. In Latvia, 80% of SMEs think this is a good policy measure, whereas only 25% of Norwegian SMEs think that it is important to improve access to finance in the future. The second most important issue is loan guarantees, which is an issue mentioned by over one third of the SMEs in the BSR. This is similar to the share of SMEs in the region that think that existing measures should be made easier to access, in contrast to introducing new measures.

Correlates of access to finance for SMEs

The above section has provided a relatively detailed description of various aspects of SMEs' access to finance. However, to discuss policy implications, it is useful to also look at other economic variables that are correlated with SMEs' access to finance. For example, the crisis and its macroeconomic aftermath are likely correlated with how SMEs in different

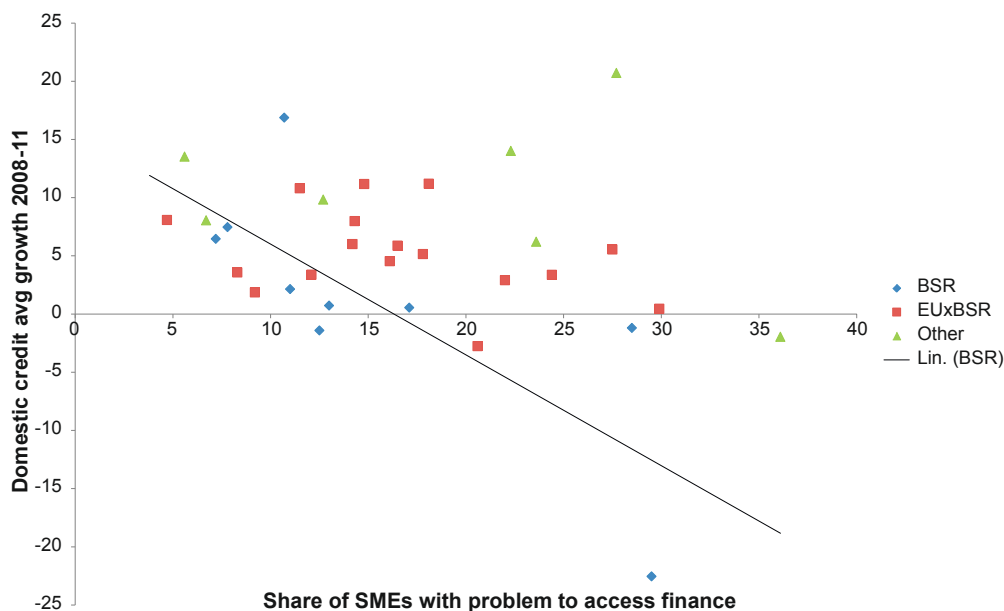
countries and regions can finance themselves. This could possibly be viewed as cyclical factors to the extent the crisis can be handled by regular macro-economic counter-cyclical policies. However, there are also more long-term structural issues, such as institutions and regulations, that affect credit markets more generally and thus SMEs' access to finance. This short section will make no attempt to make a full scientific account of all possible factors that correlate with SMEs' access to finance, but rather show some interesting correlations that are useful for the policy discussion.

The first correlation to investigate is between the share of SMEs that report that access to finance is a major problem, and the countries' domestic credit growth since the start of the crisis in 2008. The linear trend computed for BSR countries indicates a strong negative correlation between the variables, which means that in countries with low or negative credit growth, SMEs have a harder time accessing funding than in countries with more rapid credit growth. Compared to other regions, the BSR has had somewhat lower credit growth and less of a problem with

access to finance for SMEs. Most of the non-BSR countries on the chart are above the BSR regression line, which means that their problems with access to finance are associated with somewhat higher growth rates in domestic credit than is the case in the BSR. Nevertheless, economy-wide credit growth is important for SMEs' access to finance, both in the BSR and in other regions.

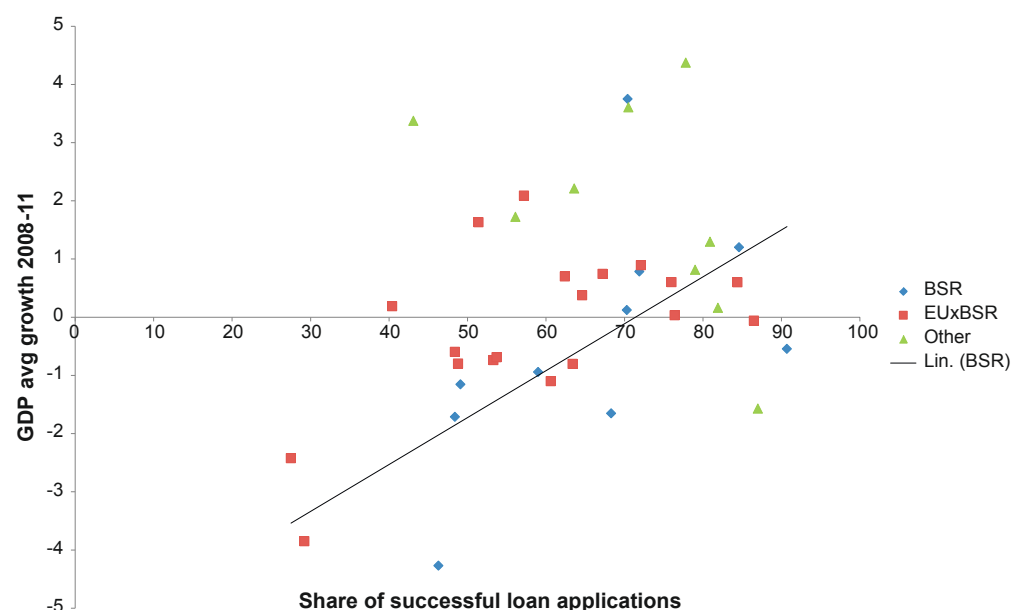
The general economic outlook was ranked above as an important issue for SMEs' access to finance and finding customers (which is likely related to overall economic conditions) was the most pressing issue facing SMEs in most BSR countries. The strong positive correlation between average GDP growth rates and the shares of successful loan applications in the data therefore comes as no surprise. Again, it seems that BSR countries are relatively well off compared to other regions in that they have better success with loan applications for a given growth rate, compared with other EU and non-EU countries in Europe. Still, being in a faster growing economy improves the chances of getting a loan in all regions.

Figure 13. Domestic credit growth vs. SMEs' access to finance



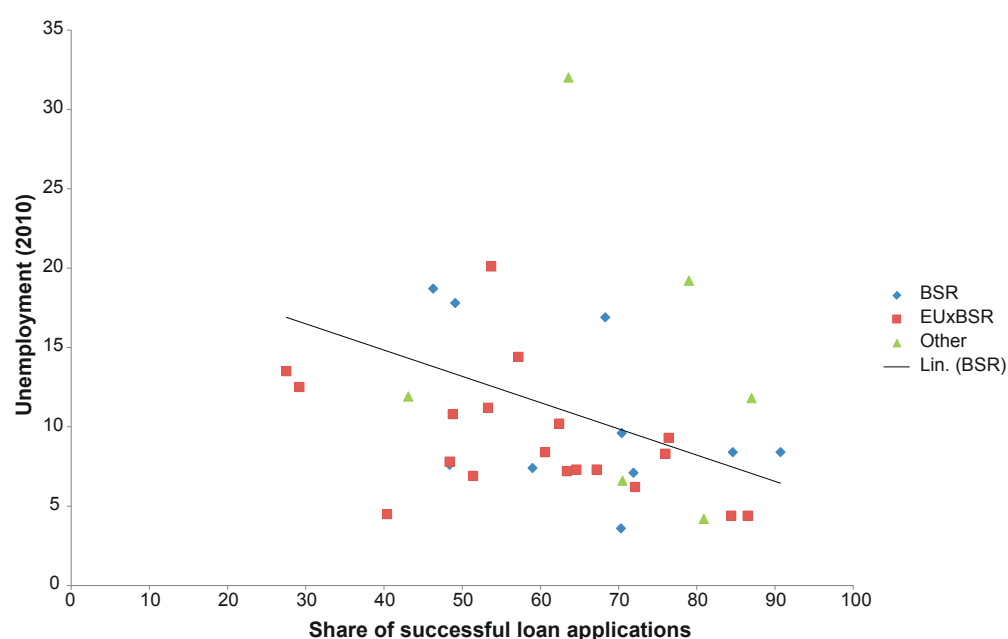
Source: SAFE 2011, IMF, and author's calculations

Figure 14. GDP growth vs. successful loan applications



Source: SAFE 2011, IMF, and author's calculations

Figure 15. Unemployment vs. successful loan applications



Source: SAFE 2011, IMF, and author's calculations

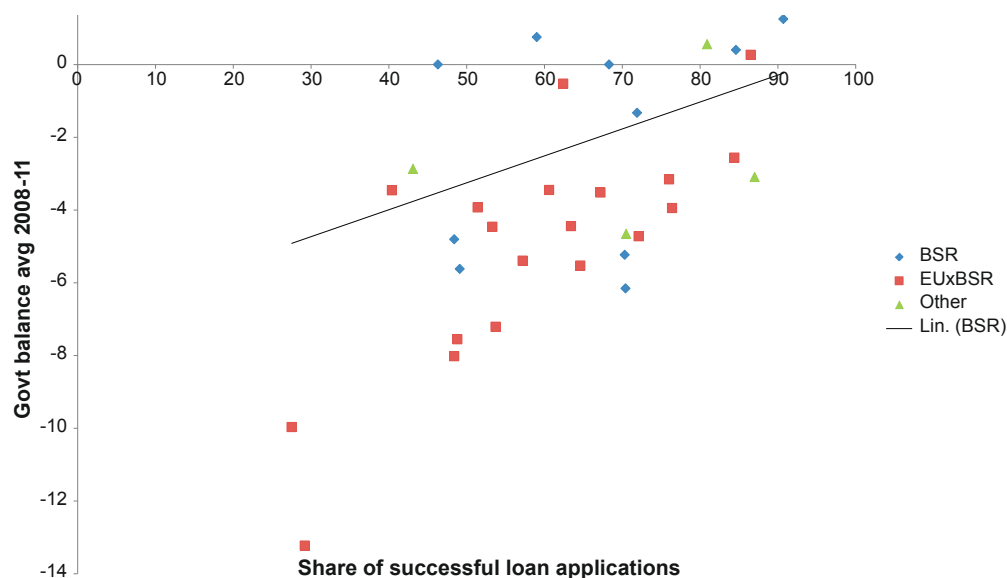
The link to economic activity and demand in the economy is also illustrated by the correlation with unemployment. The regression line indicates that, on average, the share of successful loan applications goes from around 90% in countries where unemployment is 7% to a mere 30% as un-

employment goes beyond 15%. Although the BSR is doing better than the rest of the EU according to many indicators, unemployment is not an area where the BSR can claim great success, with several countries still having double-digit unemployment numbers.

The issue of how governments' financial situation affects the private sector is the subject of much academic work and features prominently in the policy debate. The scatter plot reveals that there is a strong positive correlation between the governments' balances and the share of successful loan applications in all regions. This implies that where the government is running a large structural defi-

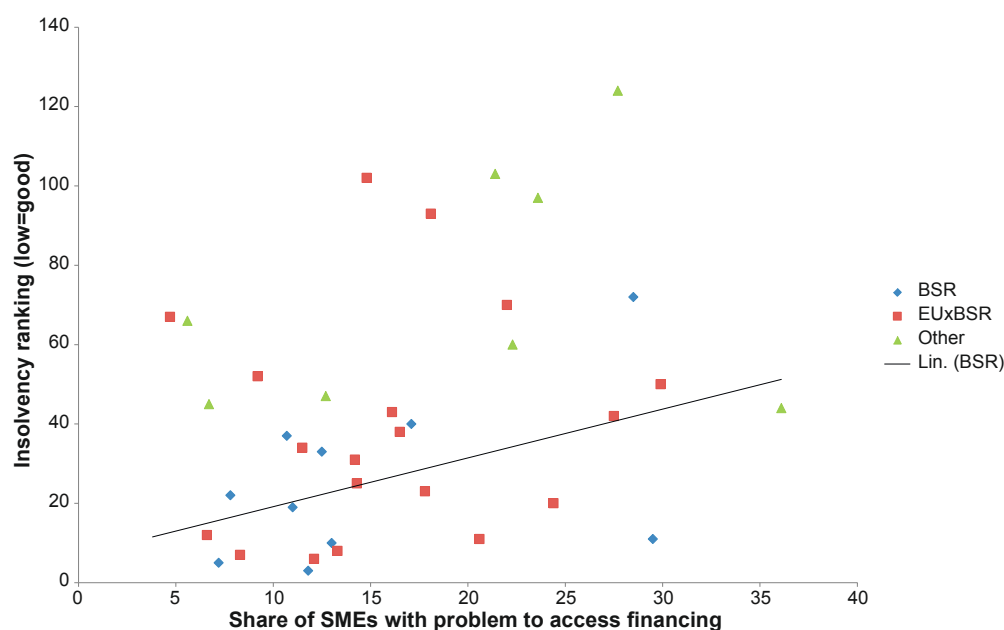
cit that needs to be financed, SMEs have a lower success rate when applying for loans. This is obviously a correlation, and not necessarily a causation between government deficits and reduced funding for SMEs. It may well be the case that both variables are affected by a macroeconomic slump that puts pressure on government finances at the same time as SMEs are doing worse and becoming less

Figure 16. Central government structural balance vs. successful loan applications



Source: SAFE 2011, IMF, and author's calculations

Figure 17. Insolvency procedures vs. access to finance



Source: SAFE 2011, World Bank, and author's calculations

creditworthy. Nevertheless, it is another signal that access to funding for SMEs is linked to the more general macroeconomic picture in most countries across the region and elsewhere in Europe.

Not only macroeconomic factors correlate with financial conditions facing SMEs in the region. Institutional and regulatory factors also contribute to how banks and financial markets operate. This is illustrated here by the correlation between SMEs that have problems with access to finance and how countries rank in terms of efficient insolvency procedures, as measured by the Cost of Doing Business indicator on insolvency, which is produced by the World Bank group. In the countries with poor institutions and regulations to deal with insolvencies, access to finance is a problem for a larger share of SMEs than in countries with good institutions.

Another important structural factor is how well-developed local capital markets are, since this could impact SMEs' access to finance. This is an issue that has received a lot of attention in emerging market countries. In these countries a large share of foreign financing has been seen as potentially risky since it exposes countries to the risk of sudden stops of international capital flows that can have serious real economic consequences. In the EU it is a bit less clear what the relevant 'domestic' capital market is, since there is free movement of capital

and many countries use the Euro or have fixed exchange rates to the Euro. Related to this is also to what extent the banks are foreign-owned since this may affect many aspects of the banking sector including efficiency, funding availability, and the desire to develop other parts of the domestic financial system.

To illustrate how some of the domestic market indicators correlate with SMEs' problems with access to finance, the figures below show correlations with the share of foreign banks in domestic markets as well as the sizes of domestic bond and equity markets. Here, the regression lines are based on all observations, not only those of the BSR countries, since the data set is more limited. This limitation of the data also implies that the correlations are not as robust as in the previous scatterplots.

The first figure shows how the share of foreign banks in the domestic banking market correlates with the share of SMEs that think that access to finance is the most pressing problem they face. The positive correlation implies that a larger share of foreign owned banks is associated with a higher share of SMEs that have problems accessing financing. Although this is not necessarily a causal relationship, it corresponds to the notion that foreign banks prioritised their home markets in the aftermath of the crisis. At the same time, we have seen in the previous figures that access to funding

Figure 18. Share of foreign banks in domestic banking systems vs. access to finance

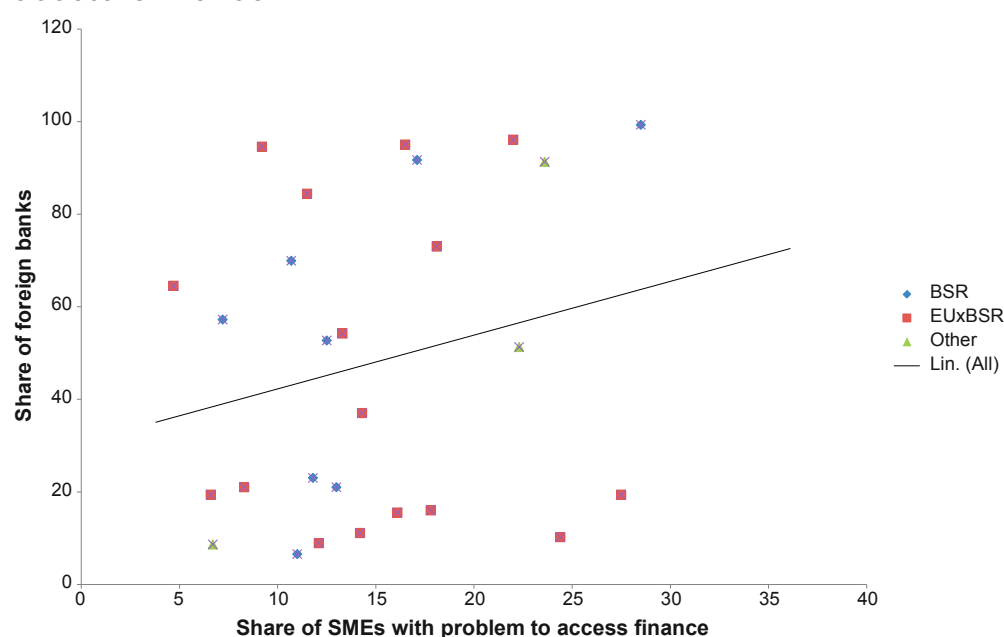
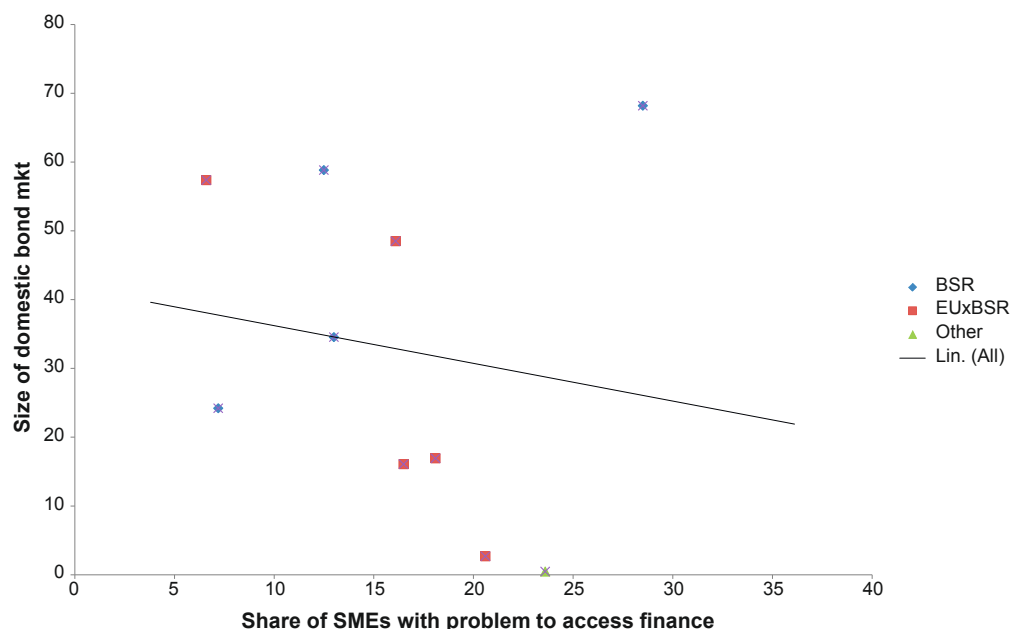


Figure 19. Size of domestic capital markets vs. access to finance



Source: SAFE 2011, IMF, and author's calculations

is also related to the general macro economic situation and to the extent that foreign banks just happen to have a more significant presence in countries that are hit harder by the crisis for other reasons, this could give rise to a spurious correlation. Nevertheless, there is at least weak support for the notion that banks cut lending more in its foreign markets than in their home markets.

The next two charts illustrate how developing local capital markets may help with access to financing in general. Although the correlations between the size of domestic equity and bond markets with problems accessing financing are relatively weak, they have the expected negative orientation. This means that in countries with larger domestic bond and equity markets, fewer SMEs report problems with access to finance. It is hard to draw any specific conclusions for the BSR since the data are insufficient, but it seems that, in general, there may be a positive effect on access to finance for SMEs from developing local bond and equity markets. The mechanism behind this could be both direct and indirect in the sense that it is not clear if SMEs themselves use domestic capital markets, but if larger companies do while reducing their bank lending, this may lead to increased availability of bank financing for SMEs if banks' lending is constrained due to their own capital or funding situation.

The BSR SME funding picture in perspective

Measuring credit constraints

The chapter has focused on what can be learnt about SMEs' access to finance in the BSR from the extensive 2011 SAFE survey. Although the SAFE survey data is the most comprehensive available, it does have some significant limitations that need to be pointed out before we move on the policy conclusions. First of all, the data for the BSR countries are only available for two years, 2009 and 2011. This obviously limits any studies of how the financing situation has changed over a longer time period. The other significant concern is that data on SMEs in the regular financial market statistics that national authorities and international organizations publish is limited. For example, domestic credit is not broken down, so it is impossible to see what share goes to SMEs in a consistent way across time and countries. In other words, we are not able to say if or how credit to SMEs has actually changed over time and across countries. There are of course also limitations with outcome or supply side data on finance because it only shows outcomes and does not provide the detailed understanding of, for example, when SMEs applied but were denied

credit. Nevertheless, not having the possibility to examine the overall outcome data is a serious limitation. There are many variables that researchers would like to have data on to better understand the financial situation of SMEs, and Udell presented an extensive data wish list at his keynote speech at the ECB workshop on “Access to finance of SMEs: what can we learn from survey data” in 2011.

There have been studies that try to disentangle supply and demand factors that determine the amount of financing that actually goes to SMEs for EU countries other than the BSR countries that we look at here. The main result from this work is that the demand for credit is driven by macro factors such as GDP growth while supply is affected by financial variables such as sovereign spreads.¹ For the BSR countries and the other European countries, we also saw that there is a strong correlation between GDP growth and SMEs access to finance.

In general, it is difficult to know if supply or demand are constraining factors when we look at outcome data, but at the same time, it is important to know where the constraints are to be able to say credibly if there is a credit crunch that warrants government actions. There have been a few studies that try to identify credit crunches and one strategy is to look at negative shocks to banks’ credit supply that cannot be explained by the quality of borrowers or banks’ opportunity cost of providing risky loan. This has been done for Germany, where the authors found little support for the idea that there is a credit crunch in this crisis, with one explanation being that the absence of a credit crunch was the result of public sector equity support to the financial sector.²

Measuring credit crunches in a convincing way requires that there be good data on borrowers, including their default rates. However, default rates and non-performing loans broken down on firms of different sizes are not available in an easily accessible and consistent format across countries. Without this type of information, it is hard to know how, for example, increased bank lending to SMEs would affect financial stability. Perhaps it is rational for banks to constrain some SMEs’ access to finance because they are a poor credit risk and would not

fulfil their loan commitments. Survey data that is based on SMEs’ perceived constraints does not take into account if rationing is rational, in the sense of banks only providing loans to projects with positive risk-adjusted returns. There is research that suggests that credit constraints are indeed correlated with financial indicators, which would indicate that survey-reported credit constraints could be rational from the lender’s perspective. When policies are designed, we need to know more about how default rates differ between companies of different size. For example, Basel II regulations gave special treatment to retail and SME loans due to a presumed smaller exposure to systemic risk. However, in an empirical paper based on Swedish data, this is shown to not be the case. Instead, loans to SMEs were more risky than loans to larger companies.³

Related policy papers and reports

The OECD has recently published an extensive report on SMEs’ access to finance, where the three Nordic BSR countries are included in the data and analysis. One interesting aspect of this report is that it includes data on the share of bank loans that go to SMEs. However, the definition of SMEs loans differ across countries and the data also show substantial variation across different OECD countries between 2008-2010 that is a bit hard to understand. For the three BSR countries included in the report, SMEs accounted for 92% of loans in Sweden, 9% in Denmark, and 20% in Finland in 2009. The share for Sweden looks implausibly large and is not consistent with a recent paper that found that large firms dominate banks’ portfolios in Sweden.⁴ SME loan growth also varied substantially; in 2008 SME loan growth was 7.2% and -13.7% in Sweden and Denmark respectively, while in 2010, SME credit in Denmark grew by 23% in contrast with a fall of 22% in Finland.

The loan conditions in terms of interest rate levels and spreads were also very different between the three Nordic BSR countries, where Danish SMEs saw only a modest decline in interest rates

1 Sarah Holton, Martina Lawless, and Fergal McCann, 2011, “Firm Access to Finance in the European Crisis”, mimeo Central Bank of Ireland.

2 Horst Rottmann and Timo Wollmershäuser, 2011, “A Micro Data Approach to the Identification of Credit Crunches”, mimeo, Ifo Institute for Economic Research.

3 Tor Jacobson, Jesper Lindé and Kasper Roszbach, 2005, “Credit Risk versus Capital Requirements under Basel II: Are SME Loans and Retail Credit Really Different?”, Sverige Riksbank Working Paper No. 162.

4 Leonard I. Nakamura and Kasper Roszbach, 2010, “Credit ratings and bank monitoring ability”, Philadelphia Fed Working paper No. 10-21.

during the crisis, partly due to a large increase in spreads, while in Finland and Sweden, interest rates were reduced much more and spread increases were relatively modest. However, it is not clear that the interest rate development in Denmark was a sign of something being wrong with bank lending, since during this period, there was a rapid increase in bankruptcies that was not seen in the other two countries.

The EIB has also recently published a paper that looks at the financing situation of SMEs.⁵ The paper looks at issues such as lending standards and loan conditions. Overall, the data indicate that lending standards for SMEs and larger companies tend to move in tandem over longer time periods, even if quarter-by-quarter tightening can differ. In the most recent period covered by the data, the third quarter of 2012, SMEs experienced less of a credit tightening than larger companies, while loans with longer maturity experienced a greater tightening than short-term loans. Overall, the changes in credit standards between 2010 and 2012 were largely explained by expectations regarding the general economic outlook, and industry- and firm-specific factors. Again, this seems consistent with the correlation between GDP growth and access to funding that we documented earlier.

Although lending standards have tended to follow in tandem between SMEs and larger companies, the interest rate spreads between small and large loans can be substantial, and was, according to ECB data, in the range of 200-250 basis points in 2012. This was a significant increase from the 150 bps spreads seen in 2010. Also, interest rates and maturities vary greatly between countries in Europe, which again is likely connected to the general economic situation in the respective countries.

There has also been a significant shift in the source of venture capital since 2009, with government agencies now dominating in the area of VC funding. Providing capital to potential growth-enhancing firms is clearly seen as an important policy in many places. The eventual impact and cost efficiency of these government initiatives is not yet clear, and will likely be an interesting area for future research.

⁵ Helmut Kraemer-Eis, Frank Lang, Salome Gvetadze, 2012, "European Small Business Finance Outlook", EIB Working Paper 2012/16.

Some insights from the academic literature

There is a vast literature on banking, financial development, and SMEs as separate research areas, as well as their intersections. This short section will highlight a few findings that can help us better understand the financing situation for SMEs in the BSR, and also guide the policy discussion below.

The SAFE data set does not allow us to investigate how firm characteristics relate to SMEs funding themselves with internal and external funds, respectively. Understanding this may be useful when trying to target public support programmes. From the finance literature, the pecking order theory of capital structure suggests that firms with more available internal funds use less external funding, which means that leverage declines when profits increase. In a study of SMEs in Eastern Europe, this theory was supported and it was further concluded that older and larger firms used less external funding on average. This suggests that the availability of external funding is particularly important for small and young firms.⁶ This result is also related to the result, in a paper from the ECB, where the authors studied SMEs in the crisis and concluded that small and young firms suffered more when credit standards were tightened.⁷

Many academic studies support the view that SMEs have less access to formal funding sources, and that this may hamper their growth prospects. It is also generally agreed that financial and institutional development would be useful to alleviate growth constraints faced by SMEs. However, financial development can to some extent be linked to bank size, and a greater share of foreign banks, and this is sometimes viewed as problematic for SMEs if we think that they are more dependent on relationship banking that is more often associated with smaller local banks. Research has shown that, at the beginning of the 20th century, a variety of local financial institutions emerged in response to a need among SMEs to find financing. They were not very sophisticated intermediaries but were able to gather information and savings locally that could be used to extend loans to SMEs that were too

⁶ Mateev, M., Poutziouris, P., & Ivanov, K., 2013, "On the determinants of SME capital structure in Central and Eastern Europe: A dynamic panel analysis", *Research in International Business and Finance*, 27(1), 28–51.

⁷ Artola, Concha; Genre, Veronique, 2011, "Euro area SMEs under financial constraints: Belief or reality?", CESifo working paper: Monetary Policy and International Finance, No. 3650.

small or young to get funding from larger banks.⁸ This type of result supported what, for some time, was the consensus view that SMEs would suffer in countries that lacked small local financial institutions. However, more recent studies challenge the conventional wisdom that large and foreign banks do not cater to SMEs. They rather suggest that large and foreign banks also view SMEs as core customers and manage to provide them with funding and services through the use of new technologies and risk management systems.⁹

Several papers have focused on lending techniques, rather than on institutions that provide loans. One observation is that the use of different lending techniques varies greatly between countries and is likely a result of differences in institutional and regulatory conditions. Given that different lending techniques are more or less well suited to SMEs, this also means that the availability of credit for companies of different sizes is affected.¹⁰ As we have seen above for the BSR, leasing and factoring is a major funding source for SMEs. According to some researchers, leasing and factoring, as well as better credit information systems that contribute to a more competitive banking sector, can also help improve the funding situation for SMEs.¹¹

When banks and financial markets in general are seen as failing to deliver the loans and financial services demanded by SMEs, many governments have introduced programmes to support SMEs. However, the success of different government initiatives to provide financial support to SMEs is still not well understood. One recent paper that makes a contribution in this regard looked at a French program that provided upfront subsidisation of loans to SMEs and concluded that it worked well in alleviating credit constraints without raising default rates. SMEs that benefitted from this programme were, on average, able to generate returns well above market interest rates. This is in contrast with some findings regarding programmes that offer guarantees (instead of upfront subsidisation), where default rates increased significantly. The pa-

per argues that this important difference can be a result of the incentives created by guarantee programmes, where government support is only provided when firms fail. This could affect screening and monitoring by banks, which in turn leads to increased defaults.¹²

Summary and Policy conclusions

SMEs play a very important role in the BSR and the EU more generally when it comes to creating value added and employment, with more than 26 million people employed by SMEs in the BSR alone. The focus on SMEs and removing obstacles that impede their growth in the region is therefore not surprising. Restricted access to finance has been identified as one key area among policy makers. A close look at the data on access to finance among SMEs in the region showed that the situation varies substantially along several important dimensions among the BSR countries, and between the BSR and the EU more generally. The overall picture is that a large majority of SMEs do have access to financing and that banks play a key role in providing the funding. However, access to finance still ranks as the third most pressing issue facing SMEs in the region; loan conditions have worsened for many firms and spreads on small loans have increased. Also, alternative sources of funding based on different lending technologies than traditional bank loans play a very important role when it comes to funding SMEs.

In terms of more concrete policy advice, the first issue that should be addressed is the availability of data on SMEs' financial situation. These data should at a minimum include the shares of domestic credit that go to SMEs, and better data linking access to finance to firm-specific financial indicators to judge if credit constraints are justifiable on business grounds or constitute a market failure. The ultimate wish list for improving the available data is considerable, but this would be a useful start.

It is also clear that access to finance for SMEs is closely linked to the macroeconomic situation, including the state of government finances and borrowing needs, as well as institutional and regu-

8 Cull, Robert, et al., 2006, "Historical financing of small-and medium-size enterprises." *Journal of Banking & Finance* 30.11 (2006): 3017-3042.

9 De la Torre, Augusto, María Soledad Martínez Pería, and Sergio L. Schmukler, 2010, "Bank involvement with SMEs: beyond relationship lending." *Journal of Banking & Finance* 34.9, 2280-2293.

10 Berger, Allen N., and Gregory F. Udell., 2006, "A more complete conceptual framework for SME finance." *Journal of Banking & Finance* 30.11, 2945-2966.

11 Beck, Thorsten, and Asli Demirgüç-Kunt, 2006, "Small and medium-size enterprises: Access to finance as a growth constraint." *Journal of Banking & Finance* 30.11, 2931-2943.

12 Bach, Laurent, 2012, "Are Small Businesses Worthy of Financial Aid? Evidence From a French Targeted Credit Program.", mimeo, Stockholm School of Economics.

latory factors that impact the functioning of financial markets. Given the diversity of the countries along these dimensions, the policy recommendations in this area clearly cannot be one-size-fits-all, but require detailed analysis of the country-specific circumstances.

However, one key macro indicator that directly affects access to finance for SMEs is overall credit growth, which is linked to the aforementioned factors but also to the health of the banking system. In countries with undercapitalised banks, access to finance will be limited across the board and in such an environment, small and young firms are likely to suffer disproportionately. Improving their access to finance will therefore crucially depend on efforts to restore the level of capital in the banking system.

Developing domestic financial markets could be important in some countries, not only because SMEs could fund themselves there, but to provide larger companies an alternative to bank funding and thus make banks more inclined to cater to SMEs. Identifying alternative lending techniques and removing obstacles to creating such alternatives should also be part of strategies to improve access to finance for SMEs. For example, leasing and factoring is a major funding source for SMEs today, and innovations that contribute to alterna-

tive sustainable funding sources that address institutional weaknesses and the specific circumstance facing young and small SMEs (such as lack of collateral and credit history) should be encouraged.

When it comes to more specific government or EU programmes to support credit to SMEs, it is important to identify if the lack of SME funding is a demand or supply problem, and to what extent perceived supply constraints are rational from a business risk perspective. Providing more loans to SMEs that are not sustainable in the long run is not in the interest of countries, even if it may be in the interest of individual business owners or financial institutions. It is also important to consider the incentive effects different support programmes have for borrowers and lenders; for example, guarantee programmes may look tempting from a fiscal policy perspective, since there is no upfront financing required, however, the fact that support is only provided when projects or SMEs fail may distort incentives and lead to worse outcomes than without these programmes. Instead, upfront financial support in terms of subsidised loans and equity capital injections in financial institutions seems to have worked relatively well in alleviating credit constraints and generating good returns on invested capital.

The Rise of Baltic Sea Value Chains – a bicycle producer's world tour

Matias Kalm, Mika Pajarinen, Petri Rouvinen & Timo Seppälä

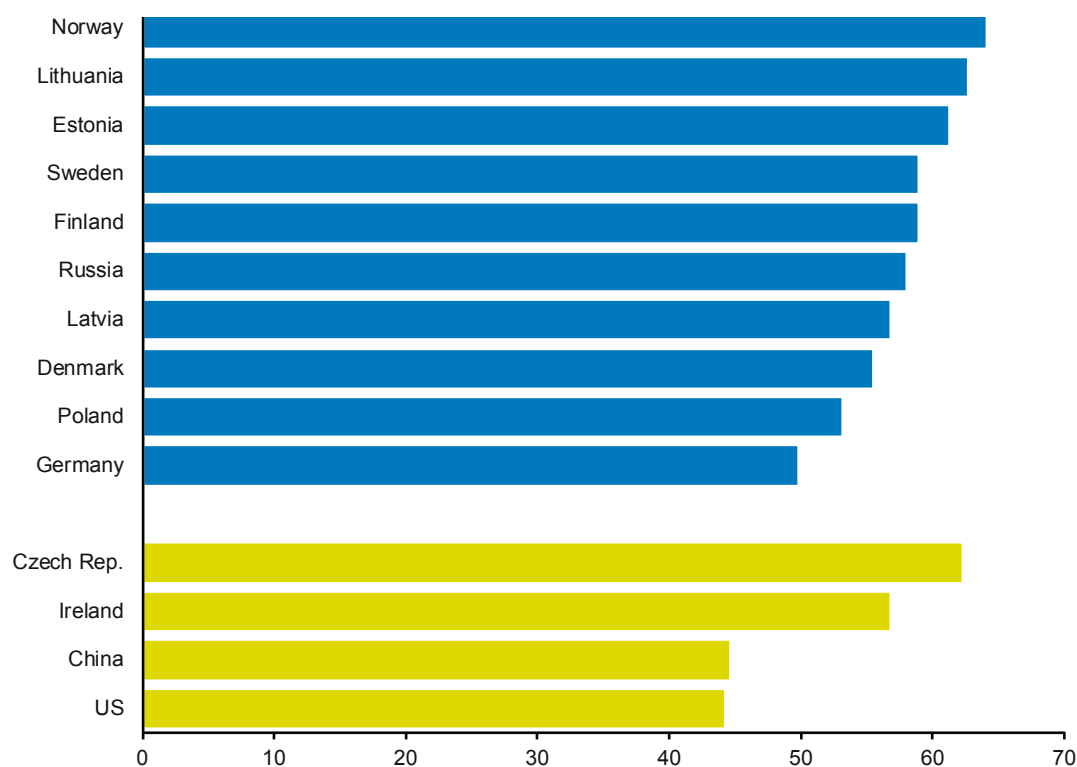
Introduction

Worldwide liberalisation and deregulation took place between the mid-1980s and mid-1990s. This, complemented with continuous improvements in digital technologies and logistics, brought about geographically dispersed *Global Value Chains (GVCs)* in the 1990s (manufacturing) and in the 2000s (services). Armed with four decades of data, Johnson and Noguera (2012) observe the growing prevalence of GVCs, and, in particular, of those GVCs operating within geographic regions. Kenney (2012) notes that “there is a regionalization dynamic at work”, in which, for example, the Baltic and eastern European countries increasingly specialise in serving western European and Russian markets.

The initial motivation for outsourcing and offshoring was labour cost arbitrage, *i.e.*, shifting (manual) labour tasks from higher- to lower-wage countries. Locational factors – such as the availability of certain skills and proximity to end markets – later grew in importance.

GVCs are surprisingly common. Today, over 50% of global trade in goods and over 70% of services trade are related to intermediate inputs (OECD, 2012). Intra- and inter-firm GVCs involving multinational enterprises account for as much as 80% of global trade (UNCTAD, 2013). The OECD (2012) notes that, “while most studies on GVCs have focused on Asia, Europe shows a comparable if not higher level of participation in GVCs.” The considerable changes elsewhere seem minor, when compared to the drastic and continuing changes the Baltic Sea Region has seen in recent decades. Nakamura *et al.* (2012) highlight the

Figure 1: The GVC participation index (the higher the value, the more deeply a country is engaged in global value chains).



Source: OECD (2012), on the basis of the December 2012 release of the OECD ICIO database. The values are from 2008.

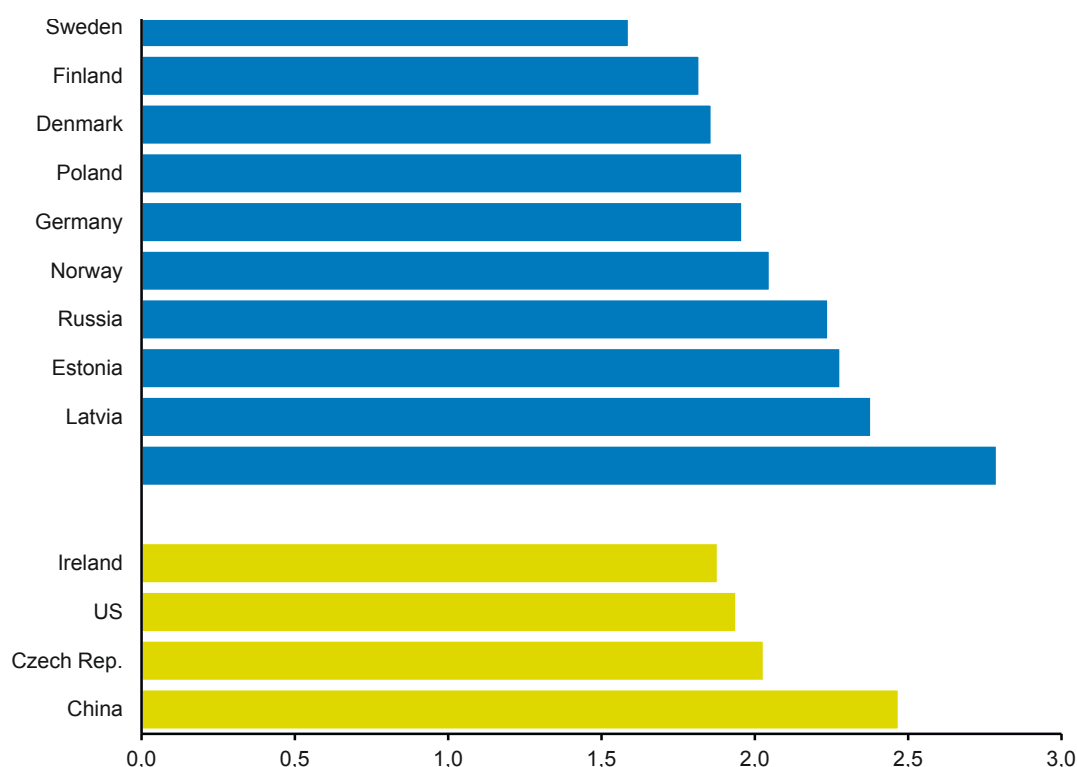
importance of EU enlargement and note that foreign direct investment (FDI) tends to be bilateral in the Baltic Sea Region. For instance, over 60% of foreign-owned companies in Estonia originated from other countries in the Baltic Sea Region; nearly 40% were Finnish or Swedish and nearly 10% were Latvian or Lithuanian (in 2011 according to *Eesti Statistika*). In a recent survey by the *Confederation of Finnish Industries* (EK, a survey conducted in November 2011), Russia, Estonia, and Sweden were considered to be the three most prominent targets for further international expansion. In addition to FDI, cross-country integration takes other forms: for example, some 16,000 Estonians work in Finland (in 2010 according to *Statistics Finland*).

The OECD and the WTO have made substantial progress in measuring international trade in value-added terms,¹ and the *GVC participation index* has been calculated on the basis of this work

(OECD, 2012).² This index measures the extent to which a country is engaged in global value chains; the higher the value, the more deeply a country is engaged. As Figure 1 indicates, both the Baltic states and their Nordic neighbours are deeply (and reasonably evenly) engaged in GVCs. The figures for China and the US – which are included in Figure 1 for purposes of comparison – suggest that larger economies have a tendency to be less engaged in GVCs because of the scale and scope of their domestic markets.

The OECD (2012) also calculates a *distance to final demand* across six industries. The lower the value, the closer a country is to the final use of the industry's output(s). Thus, a higher value indicates that a country is more upstream in the value chain, *i.e.*, it is more likely to provide intermediate goods and services for the later stages of value chains that are located in other countries.

Figure 2: Distance to final demand in the electronics industry (the lower the value, the closer the country is to final use).



Source: OECD (2012), on the basis of the December 2012 release of the OECD ICIO database. The values are from 2008.

1 See, e.g., OECD-WTO Database on Trade in Value Added. First estimates: 16 January 2013. The standard practice of measuring trade in gross value terms makes little sense in the era of GVCs.

2 The *GVC participation index* is a percentage share defined as the value of *foreign inputs* and *domestically-produced inputs used in third country exports* relative to the country's *gross exports*.

Figure 2 shows a country's distance to final demand in the electronics industry. The distance is shortest for the three Nordic countries and longest for the three Baltic states. Thus, as a broad generalisation for the electronics industry, the Baltic States provide intermediate goods and services to their Nordic neighbours, which then interact with the ultimate customers/users.

Tiits and Kalvet (2012) consider in detail how the division of labour between Baltic and Nordic countries has played out in the telecommunications equipment industry.³ They note that the Baltic States have had a considerable role, although *Ericsson* and *Nokia* have been the region's locomotives. In 2000, nearly 30% of Estonia's total exports consisted of telecommunications equipment; since that time, this percentage has dropped to under 5% because of changes in corporate strategies and market conditions.⁴

In the era of GVCs, however, exports are an impartial measurement of global engagement. Tiits and Kalvet note that, "Today, *Ericsson Estonia* provides telephony and data communications systems planning, integration and maintenance services to various clients." With respect to *Ericsson's* innovative activity, these authors acknowledge the continuing central role of its Swedish home base but also note the gradual build-up of Baltic competencies: "... some middleware solutions have been developed for *Ericsson* mobile telephone networks in Estonia." The bankrupt outsourcing company *Elcoteq* had significant 2G and 3G telecommunications equipment manufacturing in Estonia.⁵ The facility continues to operate, although it is now owned by *Ericsson*. Tiits and Kalvet (2012) conclude, "... it is still obvious that *Ericsson's* contribution to Estonia's foreign trade is massive."

The production of electronics is exceptionally modular; the high price to weight ratios of both inputs and outputs make rapid transportation by air economically viable. However, is the electronics industry a special case with respect to the unbundling of value chains? In this paper, we suggest that

the answer is 'yes' to a certain extent, which often makes value chains outside the electronics industry regional rather than global in nature, as the bicycle case below illustrates.

The Journey of a Bicycle from Finland to Asia and then back to the Baltic Sea Region

The design of a bicycle has changed little since the 1890s (Galvin & Morkel, 2001). How bicycles are manufactured, however, has changed drastically in recent decades. Vertical integration of manufacturing has nearly disappeared. Today, brand holders and main contractors can purchase each component, and sub-assembly is undertaken in intensely competitive global markets.

We analyze a women's bicycle produced by a 100-year-old Finnish family-owned company, *Helkama Velox*. In 2007, *Helkama Velox* offshore outsourced the production of the model in question by moving production from Finland to Cambodia. In 2008, the company ordered samples from a potential Vietnamese outsourcing partner; in 2009, it transferred production to an Indonesian partner. Because of rising costs in Asia, *Helkama Velox* began to explore alternatives. In 2012, it contracted with a Lithuanian company and is likely to maintain its production in the Baltic Sea Region for the foreseeable future. The bicycle's trip around the world is illustrated in Figure 3.

Figure 4 illustrates the framework of our analysis. We consider the same bicycle by the same company delivered to a Finnish retailer for final sale through the company's distribution centre in Hanko, Finland. The only factor we alter in our analysis is the bicycle's assembly location, *i.e.*, whether it is Finland, Lithuania, or Indonesia.

We study in detail the value chain that enables a consumer to be able to purchase a *Helkama Velox* bicycle at a retailer in Finland. We determine the value added by actors, functions, and geographies separately for all direct and indirect tangible and intangible inputs (including capital expenses and the contributions of supporting functions, such as top management). In principle, we do not stop with *Helkama Velox's* first-tier vendors and suppliers; instead, we follow tangible inputs to the point when raw materials were extracted from the earth's crust,

³ Tiits and Kalvet (2012) also study the case of *Skype*, which is not discussed here; the authors note therein (with legitimate pride), "... *Skype's* success is strongly a result of Estonia's engineering talent."

⁴ *Ericsson* and particularly *Nokia* were hurt by the entry into the mobile market of the *iPhone* (*Apple*) in January 2007 and later by devices based on the *Android* platform (*Google*). New competitors, such as *Huawei* from China, have further intensified competition in network equipment. In the 2000s, electronics assembly shifted towards Asia.

⁵ *Elcoteq* filed for bankruptcy protection in Luxembourg on October 6th, 2011. Ultimately, it was unable to compete with *Foxconn* and others.

Figure 3: How a Helkama Velox bicycle went to Asia and returned to the Baltic Sea Region (points indicate assembly locations).



Source: Kalm and Seppälä (2012).

Figure 4: The framework of our bicycle case analysis.



Source: Kalm and Seppälä (2012).

and we follow intangible inputs all the way to the generation of original ideas and concepts.

Our initial analysis in this spirit concerned a *Nokia N95* smartphone (Ali-Yrkkö, Rouvinen, Seppälä, & Ylä-Anttila, 2011), which Nokia assembled in Beijing, China and in Salo, Finland. For this smartphone, we concluded that assembly location had little effect on the value captured by Finland, the country in which *Nokia* is headquartered. Assembly cost was identical in the two locations and amounted to approximately 2% of the pre-tax final purchase price; other aspects of the value chain remained largely intact regardless of assembly location.

In the manufacture of a bicycle, the assembly cost varies considerably and affects other stages in the value chain. In Lithuania and Indonesia, assembly accounted for only 2% of the total value added to the product (Figure 1). However, in higher-cost Finland, the cost of assembly amounted to 16% of the total value added.

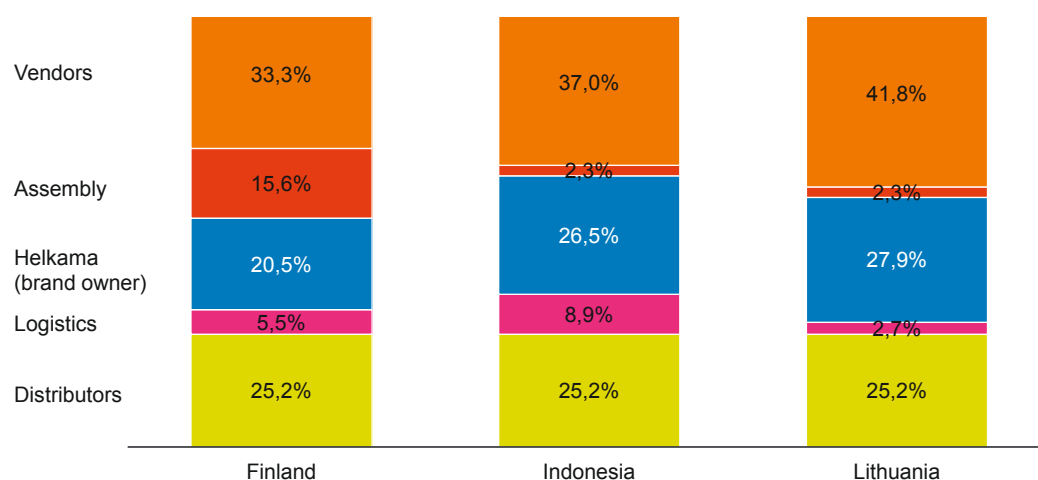
Focusing on final assembly alone is, however, an excessively narrow perspective on manufacturing. Outside vendors (including both first- and higher-tier suppliers, but excluding the assembly partner in this case) account for one-third of the value added in Finland, nearly 40% in Indonesia and over 40% in Lithuania. Furthermore, logistics absorbs 9% of the value added when the

product is assembled in Indonesia but only 3% when it is assembled in Lithuania.⁶ The value added (excluding assembly) of the brand holder and co-ordinator *Helkama Velox* is highest when the bicycle is assembled in Lithuania and lowest when it is assembled in Finland; however, the difference between 28% and 20% is not nearly as drastic as the difference in the direct assembly cost suggests.⁷

With respect to the geography of value added to the product, Finland captured two-thirds of the value added when final assembly was in Finland (Figure 6). Moreover, Finland continued to capture as much as 58% of *Made in Lithuania* or *Made in Indonesia* bicycles. Finland's share remains significant because of *Helkama*'s role as brand owner and because of local distributors' significant contribution (one-fourth), regardless of the country of origin. In Figure 6, the value captured by EU countries other than Finland jumps considerably more than Lithuania's share for assembly because, as opposed to electronics, *Helkama Velox*'s outsourcing partner uses local and regional sources for inputs.

In manufacturing a bicycle, offshoring to Asia did not offer cost savings and also introduced new demand and financial risks. With assembly in Lithuania, *Helkama Velox* gained both flexibility and profitability.

Figure 5: Value-added percentages by participant and function for a bicycle across three assembly locations.

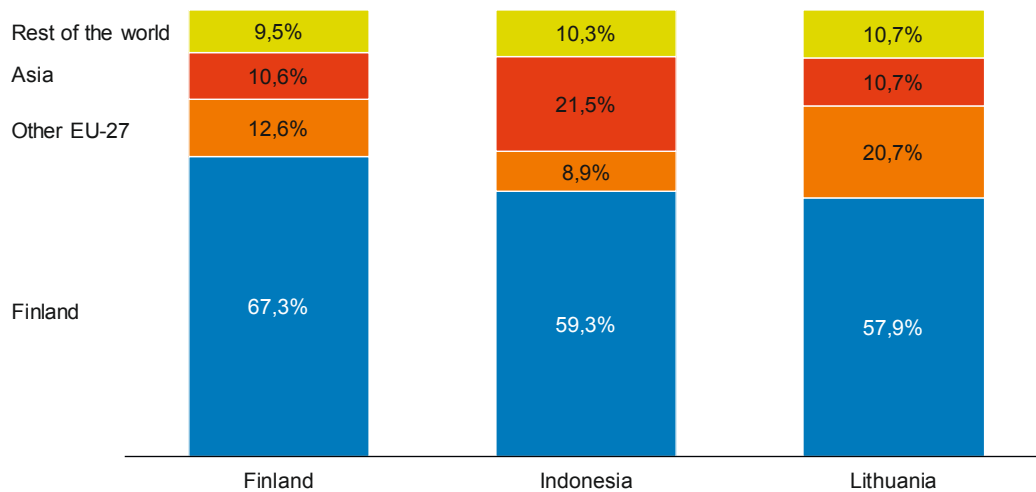


Source: Kalm and Seppälä (2012).

⁶ With Lithuanian assembly, the shipment cost is included in the contract price.

⁷ Furthermore, this calculation ignores any additional co-ordination costs associated with outsourcing.

Figure 6: Value-added percentages by country/region for a bicycle across three assembly locations.



Source: Kalm and Seppälä (2012).

As the bicycle case study shows, the co-ordinator often captures a large share of the overall value added, which is attributable to intangible assets, such as the brand. As with virtually all consumer goods (and sometimes also with business-to-business goods), the share of wholesale and retail distributors is also substantial. As far as the geography of value added is concerned, this case also draws attention to the roles of local higher-tier subcontractors (the first-tier subcontractor is *Helkama Velox's* Lithuanian outsourcing partner).

Our bicycle has travelled far in only six years. The voyage was assisted by the modular and standard nature of the product. Many other processes and products, including those of all ten business-to-business investment goods we have also studied (see below), are more complex and often benefit from the tacit knowledge of the individuals involved. Additionally, although these processes move geographically, they move less frequently and over shorter distances. Nevertheless, it is the basic nature of GVCs – perhaps unintentionally – to introduce new domains of competition as previously integrated value chains are dismantled. This requires continuously upgrading national competencies and dynamic labour markets, in addition to intense ‘creative destruction’ among local businesses, to enable the resources released to find new uses in due time.

Additional cases

Besides the above illustrative example of a bicycle's value chain, we have conducted forty cases considering the consequences of geographically dispersed production (Ali-Yrkkö, 2013; Ali-Yrkkö & Rouvinen, 2013). Below a few remarks on some of the remaining cases.

In the case of a *Nokia N95* smartphone (Ali-Yrkkö, Rouvinen, Seppälä, & Ylä-Anttila, 2011), value added is largely detached from the assembly location. Services internal to the multinational corporation, returns on intellectual property rights, and other intangible aspects of the global value chain largely determined, where value added was created and captured.

Our smartphone case study provides insights for a point in time. Seppälä and Ali-Yrkkö (2013) consider three similar feature phones across time (the *Nokia 3310* in 2000, the *Nokia 1100* in 2003, and the *Nokia 1200* in 2007). Their analysis shows the rapid decline in price of a given feature set and the gradual shift of tasks towards developing countries. This shift concerns not only physical components and assembly but also design and other intangible aspects. For instance, the *Nokia 3310* was designed end-to-end in Denmark and Finland. The *Nokia 1200* was designed in China, although Denmark still assumed responsibility for the hardware and software platforms. Over

time, China's role increased substantially from being just an assembly location.

In addition to mobile phones, we consider four other consumer electronics products (the company and its products cannot be named due to confidentiality), which reveal the significant role of transfer pricing. The parent company in Finland owned the brand and relevant patents but the vast majority of the profits were captured by the company's sales units in other countries. Consequently only 5–17% of the total value was captured in Finland. However, the company had misinterpreted OECD (2010) transfer pricing guidelines. Because the parent company carried most of the risks and owned all relevant intellectual property, the parent company should have captured any excess profits. When we recalculated the geographical breakdown of value added using more appropriate transfer prices, the value-added share of the home country increased to 42–66% (with direct implications for, *e.g.*, measured national GDP).

In addition to the bicycle, we have analyzed a dozen other electrical, mechanical, and precision engineering products, primarily targeting global business-to-business markets. Ten of these cases involved assembly both in Finland and in a lower-cost location, typically China (but in a few cases, the location was elsewhere, *e.g.*, in Eastern Europe). As the assembly location moved offshore, Finland's share of value added declined by between 11 and 49 percentage points. Thus, unlike in the smartphone case, off-shoring had a considerable negative impact on Finland. This is explained by three factors. *First*, unlike in electronics, a large fraction of outside sourcing took place near the assembly location. This was also true for some supporting service functions. For example, in some cases the firms employed local sales and marketing staff and performed location-specific R&D due to, *e.g.*, national idiosyncrasies in building codes. Furthermore, assembly and other functions, particularly R&D, were in some cases interrelated: the final refinements in the product design were made interactively on the factory floor. *Second*, the role of intellectual property (IP) varied. While some products or their production processes were patented, others did not embody formal IP rights. *Third*, the location of the profit center varied. According to international treaties, the firm's risk-carrying unit should

be its *profit-and-loss center*, and the remaining units should generate a going market profit. Some firms (incorrectly) used their assembly units as profit centers. In these cases, re-locating assembly also meant re-locating profits. More appropriately, some firms used their headquarters or parent companies as profit-and-loss centers. In these cases, the parent company typically owned most intellectual assets and bore most of the risks. In these cases, re-locating assembly had less impact on the home country.

In addition to the engineering product cases and *Nokia's* phones, we have analyzed foodstuffs and textile products. A chocolate bar and a bag of rye bread were among the eight analyzed foodstuffs. These cases highlight the considerable role of wholesalers and retailers, capturing on average 38% of the total value added, which is approximately the same as the brand owner's share. In the case of the four textile products, a brand owner had outsourced production to a contract manufacturer that captured 7% of the total value added. Wholesalers and retailers captured half of the value added, and the brand holder captured one-third of it.

Our remaining cases in our analysis were one-offs. In the case of a piece of two-by-four inch sawn timber, 100% of the value added was created and captured in Finland. Had the tree trunks been imported from Russia, a common practice in the early 2000s, Finland's share would have declined to 55%. Our cases also included other wood-based products. The analyses of these products revealed that the value added in physical activities – including raw material supplies and processes towards the final product – varied between 56% and 67%, whereas the value added in the remaining, more intangible activities varied between 33% and 44%. The value capture in forest-based products is driven by raw materials and related processing to an exceptional degree.

Whitevector is a social media monitoring and research company headquartered in Finland. It has minor equipment and rent expenses, and its sales are almost equal to its value added, virtually all of which is captured in Finland. Another analyzed service case concerned a translation and localization service. Although the company in question employed freelance translators located outside Finland, the home country's share of value added exceeded two-thirds.

Conclusions

The Economist (2013) observes that "... offshoring in its traditional sense, in search of cheaper labour anywhere on the globe is maturing, tailing off and to some extent being reversed. Multinationals will certainly not become any less global as a result, but they will distribute their activities more evenly and selectively around the world, taking heed of a far broader range of variables than labour costs alone." This shift to a more carefully considered 'smart sourcing' is potentially good news for the Baltic Sea Region.⁸

Global value chains (GVCs) depend on the exact real-time co-ordination of their operations, which means that speed, flexibility, and reliability are of utmost importance. Simultaneously, ever-intensifying competition maintains continuous pressure on costs. Korinek and Sourdin (2011) estimate that each additional day of delay caused by border procedures reduces trade by approximately 4%. Furthermore, quality problems are easily magnified by geographic dispersion, because these problems may only be noticed in the next stage of the value chain (which may be substantially later), and re-delivery times are longer than with co-location.

Change in geographical dispersion is one development, but the nature of both manufacturing and services is also changing. A substantial portion of the manufacturing function in today's business environment typically involves service tasks; in higher-cost geographies, pure manufacturing with no embedded intangible or service is becoming rare. Services, which were previously thought to be doomed to slow productivity growth, are increasingly traded. In fact, the distinction between manufacturing and service products is rapidly becoming meaningless.

With advances in robotics and new technologies – such as 3D printing – manufacturing depends less on low-skilled labour, *i.e.*, the type of labour that has traditionally been the core advantage of large emerging economies.⁹ Niche produc-

tion and customer-specific tailoring, both of which emphasise intangible elements (such as brands) are growing. Software and other aspects of ICT (such as sensors) are more likely to be embedded in products, and there is greater focus on product life cycles and after-sales service. Finally, consumers have shown a keen and growing interest in environmental and social sustainability (such as appropriate working conditions). All-in-all it can be said that manufacturing is becoming more complex and moving away from cheap replication and low-skilled labour.

Our forty case studies (Ali-Yrkkö, 2013; Ali-Yrkkö & Rouvinen, 2013) suggest there are three ways to capture 'over-sized' wages and profits in GVCs. *First*, it pays to be the orchestrator and/or brand owner of a value chain. All forms of intellectual property rights (IPRs) appear to earn good returns. It should be noted, however, that IPRs are also costly, risky, and time consuming to nurture and/or acquire. *Second*, controlling the interface to the immediate customer and the ultimate user creates negotiating power, which is evidenced in how monetary rewards are distributed. On the other hand, these activities can require substantial capital, for example maintaining a chain of retail locations. *Third*, in several cases, we are able to identify so-called 'gate-keepers' that earn well; such entities may provide a key input or control a crucial raw material, for example. In terms of job assignments, these three areas translate to high-level service tasks that are typically considered to have a supporting role (such as finance) and to the creation and management of intangible assets (such as R&D and legal functions).

Compared to outsourcing and offshoring to Asia, the Baltic Sea Region enjoys several advantages; all of the countries in the region have relatively well-functioning legal systems and contract enforceability, both tangible and intellectual property rights are well-protected and respected, currency regimes are stable, and there is cultural similarity among the countries in the region.

Near-shoring in the Baltic Sea Region also offers the benefits of reasonable transportation costs and short delays. Our case studies suggest that inventory-carrying and logistics costs, in addition to time delays, make a significant difference in global value chains. In manufacturing, these costs are often greater than the direct cost of final

⁸ *The Economist* (2013) also compiles a revealing statistic about the future tendencies in outsourcing that is based on studies by three consultancies. Although approximately one-fourth of multinationals are planning to move activities to a low-cost country and another one-fourth are moving activities between low-cost countries, another one-fourth are either returning to or moving between high-cost countries. The remaining companies are presumably staying in their current locations.

⁹ Furthermore, wages in coastal China have been growing at a rate of over 10% a year for quite some time.

Why Baltic value chains might be on the rise

- Costs and risks of global, as opposed to regional, value chains are rising.
- Physical production is changing in ways that reduces the relative importance of cheap manual labor.
- Both goods and services offering are increasingly in complexity and gaining intangible dimensions, both of which strengthen interconnections within value chains that are assisted by geographical proximity.
- The handicaps of emerging countries are becoming more obvious. By flip side the economic, cultural, legal, and political strengths of the Baltic Region have become more appreciated.
- The discussion on offshoring and outsourcing is moving from mantras to smart sourcing, i.e., to more careful consideration of locations other than China and India.
- Environmental issues of global value chains, such as emissions related to logistics, are no longer ignored, which reduces China's attractive as the world factory.

assembly that earns the “Made in” label. In Baltic value chains, shipping times are measured in days – or in hours (*e.g.*, Helsinki–Tallinn) – instead of the weeks and months that deliveries from Asia might require. Because demand conditions can change rapidly, lengthy delivery times are also a business risk.

Time is also important in setting up a foreign operation. Referring primarily to the BRIC countries, McKinsey (Manyika *et al.*, 2012) notes that “it can take seven to ten years for even the most successful multinationals to break even in new emerging markets”, which makes entry both costly and risky. Making a cross-border entry into the Baltic Sea Region would presumably take approximately half that time.

GVCs lead to deepening specialisations across economic actors, which increases overall well-being, in principle. However, it remains unclear how these improvements are distributed. The desire of all countries, individuals, and organisations is to shift to higher value-added activities in GVCs and to create higher GDP per capita, wages, and profits.¹⁰ National policies that support this endeavour include the following: extensive investment in education and social well-being that is designed to incentivise the population to seek new economic opportunities, fostering intense competition (and creative destruction) among businesses and organisations within the country; a keen focus on developing infrastructure and other indirect conditions that support businesses and citizens in their day-to-

day activities; and sensible and efficient regulation and taxation.

Should the Baltic Sea countries seek more intra-region interaction, related policies must be aligned. As Agafonov and Bitinas (2010) state, this has not always been the case: “Legislation risks in Baltic have increased due to quite often changes of terms and rules. In particular, changes of state regulations and laws, tax levels and transportation rules bring about additional costs...”

Multinational enterprises seek out cost advantages and other benefits of geographical dispersion but simultaneously desire the operational flexibility and resilience that accompany proximity. The Baltic Sea Region may potentially offer the ‘sweet spot’ in this balancing act; the area has not yet exploited all of the opportunities that regional value chains offer, although co-operation might substantially help the region’s businesses and countries to succeed in global competition.

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Latvia's exports: the real 'success story'

Alf Vanags

Introduction

A notable feature of the recovery from the recession in the Baltic states has been the strong performance of exports. This is illustrated in Table 1, which shows the developments of EU member state exports from their pre-recession peak, and also from the low point experienced in 2009.

While in nearly all EU countries, exports have recovered from the low point of 2009, the Baltic states are the leaders, with export growth since the low point of the recession between 86% and 93%. More significant is the strength of export growth from the pre-recession peak. Here, Latvia is the clear leader with exports in 2012 up by 51% as compared with its pre-recession peak (which, for Latvia, and for most countries, was reached in 2008).

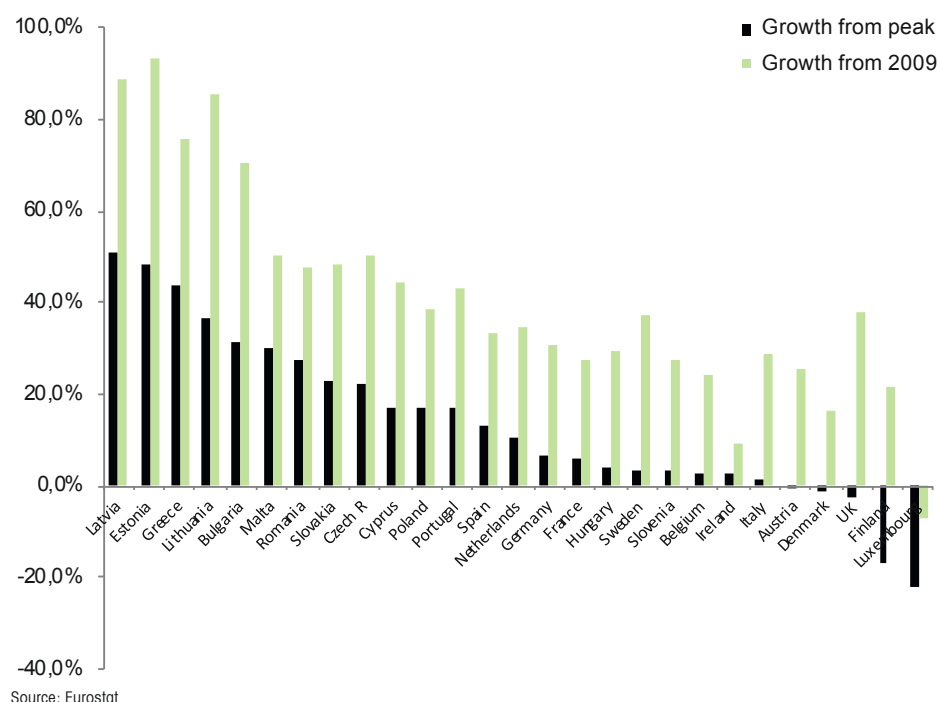
With 30% export growth between 2009 and 2010, by the end of 2010 Latvia had surpassed its previous absolute record export level, and with fur-

ther growth of 30% in 2011 and 16% in 2012 has continued to post new record levels. This has mostly been growth in export volumes, but unit export values also grew by 8-9% in 2010 and 2011, and by 3% in 2012. In contrast, most EU economies' export growth since the previous peak has been more modest¹ and some countries (e.g. Denmark, UK, Ireland and Luxembourg) have not yet recovered their pre-recession export levels.

Therefore, the Baltic states really do stand out – and, arguably, this represents the real 'success story' of the Latvian economy.

This is even more the case because it is not just a 'bounce back' from the recession. Table 2 shows that the exceptional growth of Latvia's export volumes predates the recession. Thus, while export growth accelerated after 2009, with export volume growing 67% and taking export volume to a level more than 4 times greater than in 2000, in 2008, export volume was already 2.75 times the level in 2000, representing the third highest growth in the EU, after Lithuania and Slovakia, over 2000-2008.

Table 1: Export growth in EU27



¹ Other notable and interesting strong export performers include Greece, Bulgaria and Romania.

Table 1: Development of export volumes EU27, 2000 =100

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Belgium	119.9	124.0	129.7	136.4	133.7	118.9	129.0	133.9	134.1
Bulgaria	149.2	166.5	183.6	198.0	213.0	183.2	220.9	266.4	268.4
Czech R	160.6	175.4	204.7	235.7	250.5	210.3	248.7	272.9	280.1
Denmark	110.7	117.2	122.4	126.8	128.4	114.2	118.0	121.4	120.5
Germany	120.5	127.6	139.8	148.9	148.3	121.6	140.1	149.3	150.7
Estonia	141.9	178.9	216.6	215.2	217.1	179.5	224.7	284.8	295.1
Ireland	109.9	110.1	106.3	109.6	105.2	104.7	106.0	107.5	106.9
Greece	102.5	115.1	127.8	129.8	129.3	116.9	121.5	155.3	178.4
Spain	113.4	114.6	120.2	125.8	125.9	112.0	125.0	135.6	136.5
France	99.8	99.5	100.8	100.8	99.6	84.7	93.1	95.5	96.2
Italy	103.1	104.2	110.1	115.7	111.6	90.6	100.3	104.8	105.8
Cyprus	188.3	284.0	244.1	228.5	228.1	222.9	242.5	282.3	295.9
Latvia	156.3	200.9	225.5	252.1	275.2	245.7	295.0	361.4	410.6
Lithuania	194.1	234.2	258.2	269.0	316.4	270.5	320.9	365.7	398.2
Luxembourg	156.7	183.5	216.3	198.5	213.0	203.7	187.1	186.3	179.2
Hungary	150.7	169.3	201.2	232.0	241.0	200.4	226.2	241.9	242.8
Malta	87.0	86.8	93.7	102.4	91.6	75.2	92.3	97.0	104.1
Netherlands	118.9	130.7	141.0	148.0	152.9	135.9	150.9	151.5	157.6
Austria	129.7	132.8	138.4	146.8	147.0	120.0	138.1	146.3	148.1
Poland	165.6	188.6	222.2	247.8	267.2	241.8	278.2	298.5	312.9
Portugal	107.7	116.2	127.1	133.8	132.6	112.6	121.3	137.0	149.1
Romania	156.9	172.3	188.6	215.0	232.0	213.9	254.8	282.0	278.4
Slovenia	132.5	150.0	173.4	198.7	203.9	171.9	193.3	207.8	207.6
Slovakia	159.6	172.6	221.5	280.7	312.3	270.9	322.4	360.7	400.1
Finland	106.9	106.5	118.0	118.6	119.0	87.9	93.9	95.1	95.1
Sweden	108.4	112.3	119.9	123.5	122.7	98.6	114.2	121.5	118.8
UK	90.4	95.5	103.4	91.6	89.5	75.0	83.7	89.7	85.1

Source: Eurostat

Developments in the theory and empirics of international trade provide a basis for a deeper understanding of the mechanics of international trade and its growth, as compared with the classical comparative advantage approach, which explains only the direction and commodity composition of trade. For example, detailed decomposition of trade into products and markets enables analysis of diversification of products and markets, and of the relative importance of new products and new markets in generating export growth, as compared to the intensification of export of existing products to existing markets.

Another development has been the recognition and analysis of the role of 'fragmentation' in the international production process, whereby both production and services have been increasingly distributed over different locations. This phenomenon has come to be known as the development of global value chains (GVCs), and is regarded as one of the

explanations for global international trade growing faster than GDP. The importance of GVCs is reflected in the growth of interest in empirically distinguishing between a country's total trade (exports) and the share that generates domestic value added. The challenge of mapping GVCs has been taken up by a number of international researchers, and Box 1 in UNCTAD (2013) provides a summary of five important initiatives, including the UNCTAD Eora data base, the OECD/WTO Inter Country Input Output model (ICIO) and the EU's World Input Output Database (WIOD).

The GVC phenomenon also provides a link between a country's trade and the Foreign Direct Investment it attracts.

This chapter aims to assess what light these approaches can shed on interpreting the development of Latvia's export performance. The first section examines the evidence on diversification and the extensive/intensive margin, the second section

examines the statistical evidence on Latvian participation in GVCs, and a third section reports on some recent export-oriented FDI case studies.

The diversification of exports: extensive and intensive export margins

Considerable recent attention has been focused on export diversification and on the role of extensive and intensive margins in the growth of exports for different groups of countries. The schematic decomposition of export growth into extensive and intensive margins is illustrated in Figure 2. Thus, the ‘intensive margin’ is associated with higher or more intensive exports of existing export products to existing export destinations. On the other hand, the ‘extensive margin’ captures the emergence of new export products and new export destinations. The extensive margin can be further thought of in terms of ‘product diversification’, which is made up of the sum of new products to new destinations and new products to old destinations and ‘geographical diversification’ which consists of the sum of new products to new destinations and old products to new destinations (see Amurgo-Pacheco and Pierola, (2008)).

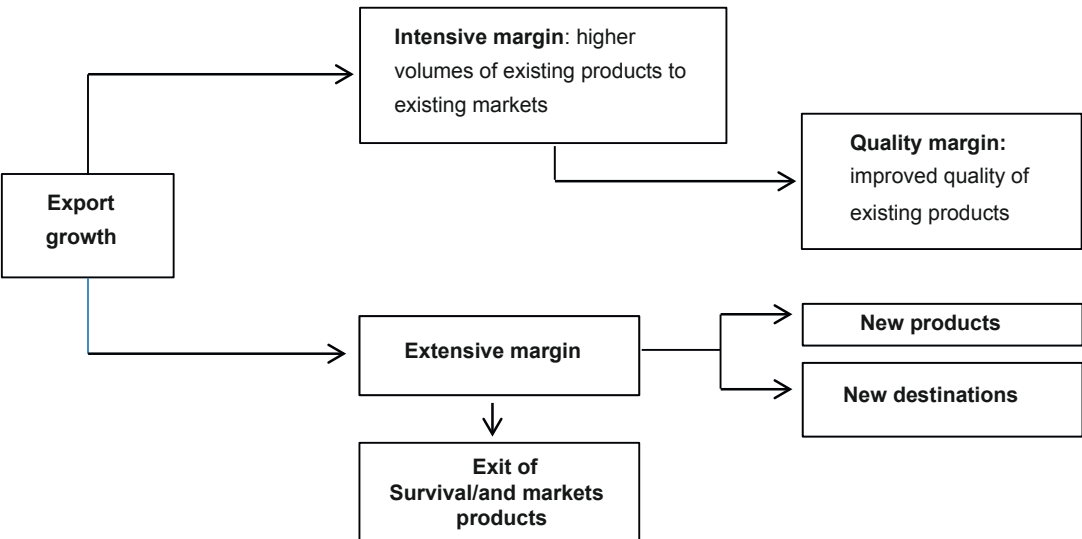
This definitional picture is complicated by the presence of a quality margin, i.e. higher quality can increase exports at the intensive margin without sacrificing price or even at higher export prices. On the extensive margin, there is an issue of sustainability of new export relationships. According to Besedes and Prusa (2007), disaggregated export data show that most export relationships are very short lived – they show that “for some countries about 7 of 10 new export relationships fail within two years; by comparison, more successful exporters experience failure at about half that rate” (p.1.)

How does Latvian evidence on the development of markets and diversification look? At the most aggregate level, we do not observe much action. Figure 3 shows developments of the share of the top five export groups in 2011 over a period starting in 2006.

It is apparent that, despite some loss of share for wood products, there is rather modest movement in either the absolute shares or the relative positions of these top five products², especially since 2008³.

As a first glance at a deeper analysis, it is of interest to look at the development in the diversification of Latvian exports, as measured by the Herfindahl index of concentration⁴. Figure 4 illustrates this:

Figure 2: Decomposition of export growth into extensive and intensive margins



Source: Adapted from Reis and Taglioni (2013)

2 These product groups correspond to the Roman numeral codes of the Combined Nomenclature: food products correspond to I-IV, chemicals are group VI, wood products correspond to IX and X, metals to XV and machinery to XVI.
3 Textiles, not shown in Figure 3, have declined from a share of about 8% in 2006 to just 4% in 2011.
4 The Herfindahl index is a standard measure of concentration and is defined here as the sum of the squared export shares of all commodity groups at the three digit level of the SITC (Standard International Trade Classification). A high value of the index indicates a high degree of concentration, and lower values represent less concentration or, alternatively, more diversification.

Figure 3: Share of top five export categories: Latvia 2006-11

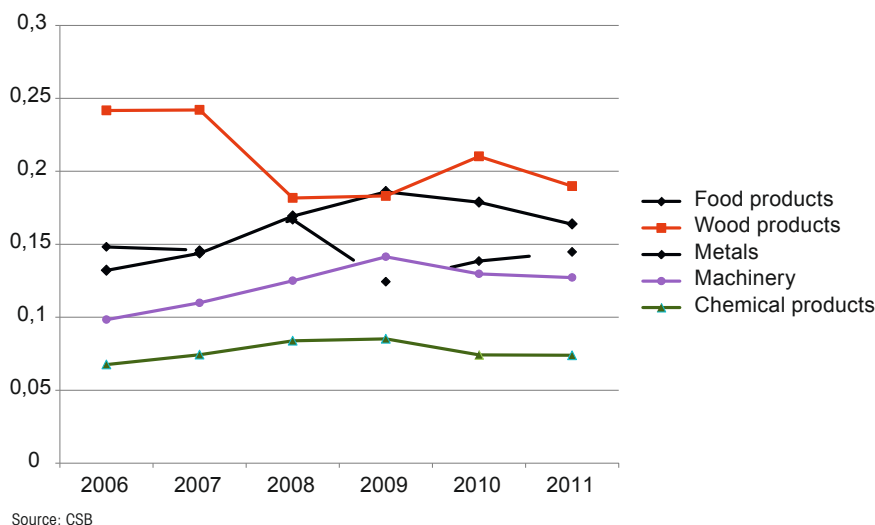
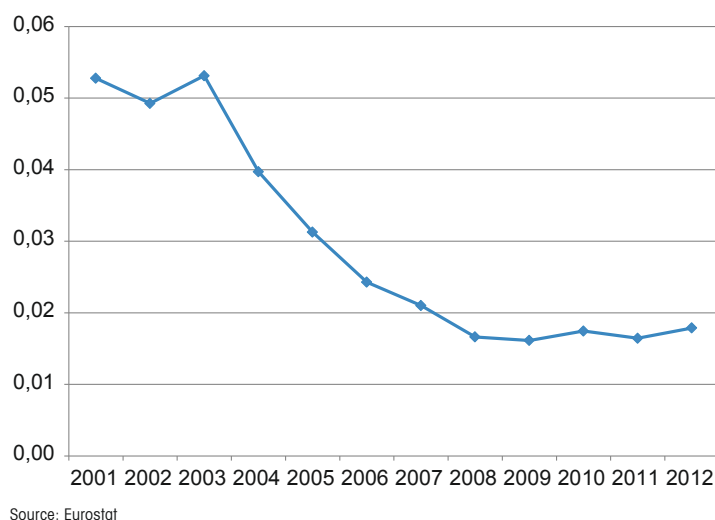


Figure 4: The Herfindahl index of Latvian export concentration (SITC-3digit level)



The data show a quite dramatic diversification of Latvian exports from 2004 to 2008, with the Herfindahl index of concentration falling from more than 0.5 to less than 0.2. Since 2008, there has been a flattening out of the index. Thus, the diversification process as measured by the Herfindahl index pre-dates the crisis and the recovery. The current level of concentration of Latvian exports is less than CEE countries in general, and at about the same level as that of Denmark.

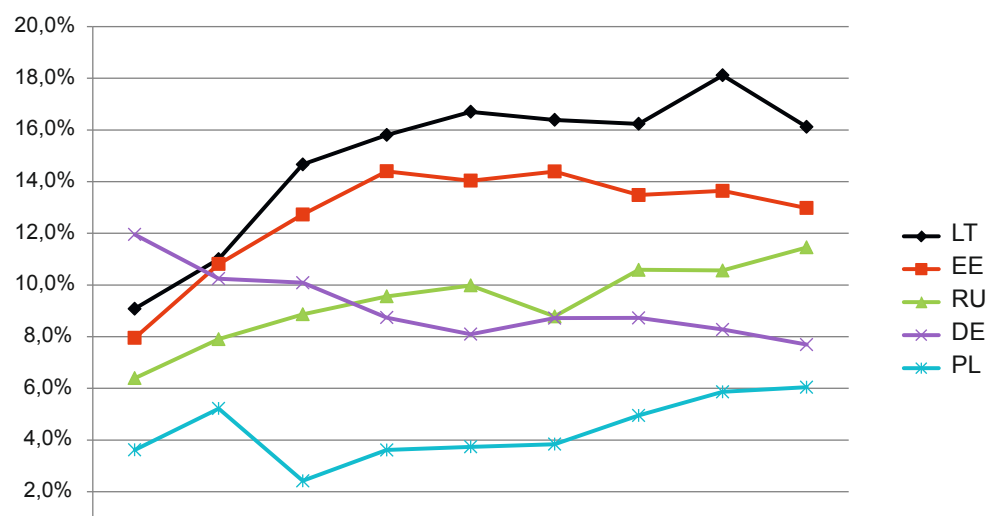
Export destinations offer another perspective. Figure 5 shows the development of export shares by

destination country since EU accession. The main things to note are:

- the rapid emergence of Lithuania and Estonia as Latvia's top export partners after EU accession in 2004;
- the decline of the German market;
- the recent strong growth of both Russia and Poland as export destinations.

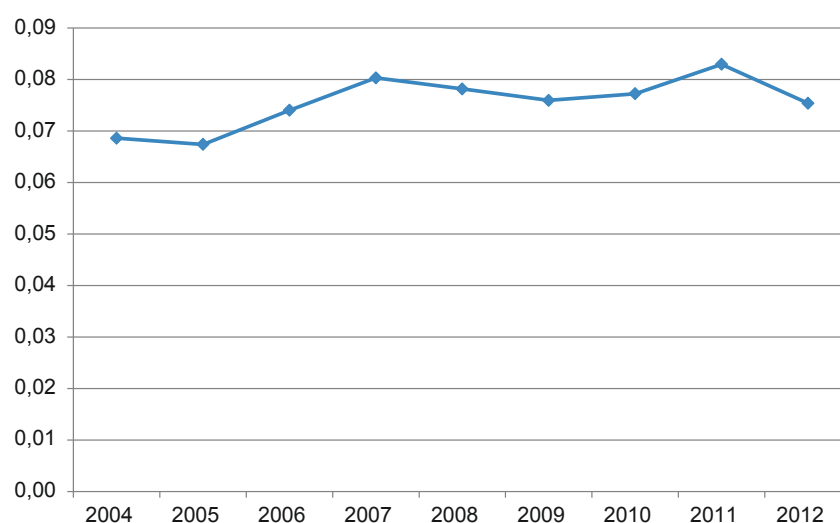
All of this reflects diversification away from 'old EU', i.e. the EU 15, which in 2004 was the destination for 54% of Latvia's exports, but today receives about one third.

Figure 5: Latvia's main export destinations by export share%



Source: CSB

Figure 6: Herfindahl index by Latvian export destinations



Source: CSB

The Herfindahl index for Latvia's export destinations offers an alternative perspective on diversification, and the development of this indicator is shown in Figure 6. Here, no clear trend is discernible and the intuition of this is not entirely clear, especially in light of the rapid growth of new export destinations reported later in this section.

There is a limit to what can be concluded at the levels of aggregation considered so far, i.e. at the

2 or 3 or 4 digit commodity classification level. A detailed and highly informative study of Latvia's export competitiveness in terms of diversification and at both the intensive and extensive margins has recently been published by Benkovskis (2012). Benkovskis employs data at the six-digit HS⁵ level

5 Harmonised System. This is the commodity classification used in the United Nations Commodity Trade Statistics Database (Comtrade).

Table 2: Development of export markets and products 1999-2010

	1999	2003	2004	2005	2006	2007	2008	2009	2010
Markets	8,959	11,686	13,412	18,968	20,472	20,827	21,033	22,593	24,905
Products	2,638	2,854	3,065	3,377	3,490	3,416	3,462	3,562	3,610
Destinations per product	3.4	4.1	4.4	5.6	5.9	6.1	6.1	6.3	6.9

Source: Benkovskis 2012

for the period between 1999 and 2010⁶. Table 2 shows the development over time of the number of export markets, which is defined as the number of countries where at least one Latvian product is imported, and the number of exported products.

These figures are very striking. Over the whole period, both the number of markets and the number of products increased strongly, especially after EU accession, since when the number of markets has increased by 86% and the number of products per market has grown by 57% (from 4.4 to 6.9). Thus, in terms of the classification described in Figure 2, Latvian export growth has certainly occurred at the extensive margin – Latvian exporters have been successful in bringing new products to international markets, and in finding new markets in which to sell both traditional and new products.

However, although informative and suggestive, the ‘raw’ figures reported in Table 2 do not by themselves permit a comparison of the relative importance of the intensive and extensive margins in Latvian export performance. In order to make such an assessment, Benkovskis has performed a decomposition of changes in Latvia’s market share in export markets⁷ into three components: the contribution of the intensive margin, the contribution of the extensive margin and the effect of shifts in demand.

Overall, the Benkovskis analysis concludes that while the share of Latvia’s exports in world markets almost doubled between 1999 and 2010, which implies an almost doubled competitiveness, most of this has been at the intensive margin, i.e. in the exports of traditional goods to traditional markets, while growth at the extensive margin, i.e. growth in market shares of new products or new markets, was just under 25% over the period⁸, although most of

this effect (about 20%) is geographical, i.e. sale of existing products to a new destination, while the share of new products was about 5%. At the same time, the third component of the decomposition has had a negative impact, i.e. the share of Latvia’s traditional markets in world trade has fallen, and this has contributed to a more than 15% reduction in Latvia’s share in world markets. Almost all of this effect is geographical: the share of Latvia’s traditional export destinations in the structure of world demand has declined. As Benkovskis points out, “important partners like Germany, Sweden and UK did not increase their imports as fast as developing countries of Asia”.

The decomposition into intensive, extensive and demand structure can also be done at the level of individual product groups. This analysis reveals that all of Latvia’s most important product groups increased their share in world markets over 1999-2010, with the market share of ‘vehicles and other transport equipment’ improving by a factor of more than ten, while the Latvian market share in ‘machinery and mechanical appliances’ increased by a factor of more than five, and for food products by a factor of more than four. For these products the Benkovskis decomposition shows that “both intensive and extensive margins [have been] important. Latvia’s producers of machinery, vehicles and food were able to increase diversification of their sales (mainly expanding the geographical dimension without losing product diversification, although exporters of vehicles were also able to increase their set of products by almost 15%) and at the same time to enhance their presence at the traditional markets. A similar development, although not as rapid, was observed for base metals” (Benkovskis (2012) p. 12).

On the other hand, for both wood products and chemical products Benkovskis concludes that

⁶ This generates a database of 379,768 potential markets for Latvia’s export products – that is 5,132 individual products times 74 importing destination countries.

⁷ Benkovskis interprets the share of Latvian exports in the world market as an indicator of Latvian competitiveness.

⁸ The method of decomposition has something of a bias against extensive growth: an export to a new market is classified as belonging to the extensive margin in the first

year of appearance; if it survives further, it is reclassified into the intensive margin. However, this is fairly standard.

“[a] different strategy was used by exporters. The wood sector is the only important export sector with almost unchanged diversification over the last 12 years. The lack of geographical and product expansion was compensated by a more intensive presence of Latvia in traditional markets for wood products. The same strategy was used by exporters of chemical products: changes in the extensive margin were small (albeit positive), while competitiveness was improved by growing presence in traditional markets” (p.12).

Price/non-price competitiveness

Benkovskis offers an interesting analysis of the role of non-price factors in the evolution of Latvia's export competitiveness. Some commentators on Latvia's recent export performance have attributed the strong performance at least in part to the price competitiveness achieved through the now famous 'internal devaluation'. Benkovskis argues that the standard approaches, which are based on real effective exchange rate indicators, are flawed because these indicators contain elements that do not correspond to, or appear directly in, export prices and as a consequence have overstated the loss of competitiveness observed up to the crisis and also during the recovery afterwards. Using a 'relative export price index' based on disaggregated trade data, he suggests that the maximum loss of price competitiveness for Latvian exports (observed in 2008) was just 15% (as compared with the level observed in 1999) and correspondingly the improvement in price competitiveness observed in 2009 and 2010 was also modest⁹. Benkovskis notes that the differences between approaches can be accounted for by factors such as changes in VAT and excise taxes (which do not appear in export prices) and changes in profit margins over the cycle and, perhaps most importantly, by “structural differences between Latvia and its rivals, which are not captured by aggregated indices. A slower increase of disaggregated relative export price might show that losses of price competitiveness were much less pronounced in the main exporting sectors of Latvia” (p.18). This, of course, is consistent with the idea that as a small

trader in the world economy, Latvia is effectively a 'price-taker' in many export markets.

In order to capture the non-price effect, Benkovskis decomposes the relative export price index into components that include a quality or taste component¹⁰. This component captures relative quality and taste, e.g. variety, and it turns out that the gain in competitiveness generated by these factors outweighs the loss of price competitiveness. Thus, the combined competitiveness index (relative export prices adjusted for non-price factors) improved by nearly 10% between 1999 and 2010, and almost half of the improvement has occurred since 2008.

The product and geographical dimensions of the changes in non-price competitiveness are interesting: all of Latvia's top five export products except 'vehicles' have posted gains in non-price competitiveness, with 'prepared foodstuffs' being the leader – showing a three-fold gain in non-price competitiveness. Machinery, wood products and chemicals have also achieved non-price competitiveness gains of 63%, 27% and 30%, respectively.

Geographically, the biggest non-price competitiveness gains have been observed in the Russian market (by more than 100%) and Estonia, Lithuania and Sweden (about 20%), whereas important markets where non-price factors have deteriorated are Poland (by 14%) and Germany (by 4%). The improvement in the Russian market is, of course, linked to the improvement in the quality of foodstuffs, for which Russia is a major market.

The Benkovskis results on non-price factors are interesting because they point to a much bigger impact of quality (and taste) on the competitiveness of Latvian products than suggested by conventional indirect indicators of export quality, such as the technical sophistication of Latvian exports.

Global value chains

Although the so-called fragmentation of production processes is not a new phenomenon, it is widely believed that as a result of technological progress, increased access to resources and markets, as well as trade policy reforms, world trade and production have in the last two decades become increasingly

⁹ This compares with, say, a 70% loss of competitiveness calculated on the basis of a unit labour cost-based real effective exchange rate and a subsequent recovery of around half of this. Consumer price-based real effective exchange rate variations are slightly lower but larger than in the relative export price index.

¹⁰ This is based on an approach to measuring unobserved quality or taste developed by Hummels and Klenow (2005).

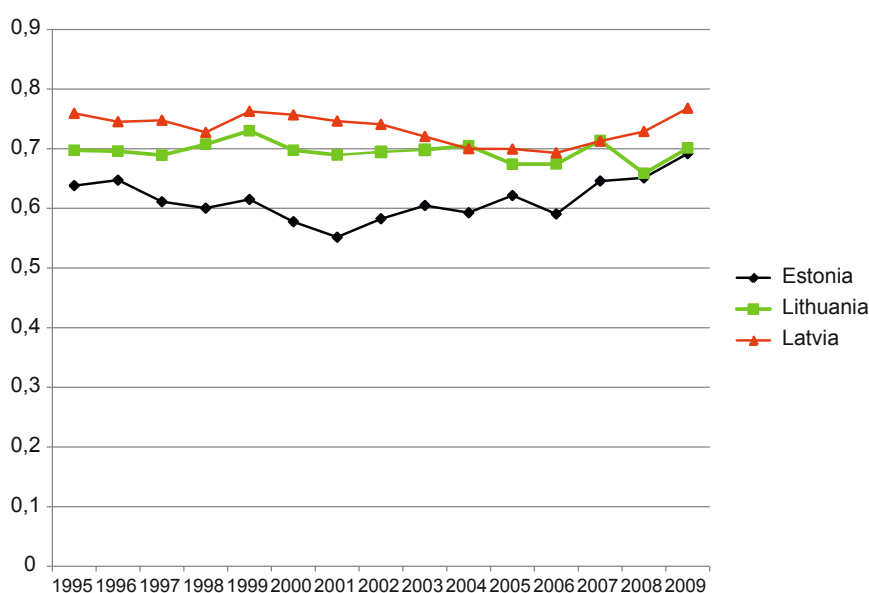
structured through global value chains (GVCs) in which the geographical dispersion of individual components in the chain is based on the comparative advantages of locations in tasks, rather than in products or final goods as such. A particularly important factor in these developments has been the cost of doing business internationally. Thus, research by Pham and Martin (2007) concludes that the cost of doing business has a “strong and significant impact on the extensive margin”.

The result is that, according to OECD (2012), “[t]oday, more than half of world manufactured imports are intermediate goods (primary goods, parts and components, and semi-finished products), and more than 70% of world services imports are intermediate services” (p.4). Or, according to UNCTAD (2013), “GVCs account for some 80% of global trade”

The OECD “Mapping global value chains” (OECD 2012) defines a value chain as “the full range of activities that firms and workers do to bring a product from its conception to its end use and beyond. Typically, a value chain includes the following activities: design, production, marketing, distribution and support to the final consumer. These activities can be performed within the same firm or divided among different firms.” (p.7) Moreover, these activities are increasingly spread across different countries.

The specialisation of countries in tasks or businesses, rather than products, represents a challenge to the interpretation of traditional trade data both from a descriptive point of view and a normative one. Thus, the question arises of how much domestic value added is contained in a country’s gross exports, and how much is in fact value added created elsewhere, i.e. imported and then ‘re-exported’. The first item represents what is usually termed ‘domestic value added’ (DVA) exports, and the second as ‘foreign value added’ (FVA) exports. Considerable recent effort has gone into measuring this decomposition for different sets of countries. Unfortunately, most of the publicly available databases do not include Latvia. However, Rudolfs Bems from the IMF is a leading researcher in this area and he has made some estimates for the Baltic states, which he has made available for this report. Figure 7 shows the development in DVA since the mid-1990s: Latvia consistently has the highest DVA, at around 75%, with a dip to just below 70% during the first years of EU accession. Estonia has had the lowest DVA, at around 60% or less, but increasing to nearly 70% by 2009. These figures put Latvia at about the same level of DVA as Italy (73%) or Switzerland (71%), below Russia (91%) or the US (89%), but much higher than Netherlands (47%) or Belgium (42%).¹¹

Figure 7: Domestic value added share in gross exports, Baltic states



Source: personal communication from Rudolfs Bems

¹¹ See UNCTAD (2013), Figure 7.

There is no particular normative significance to these figures – thus, larger countries tend to have a higher DVA – and the welfare implications of value added trade require further analysis.

However, the value added trade is an input to the so-called ‘GVC participation rate’. This is defined as the sum of foreign value added (FVA) and the value added supplied to other countries’ exports as a share of gross exports. According to UNCTAD (2013), this indicator is useful because it measures “the extent to which a country’s exports are integrated in international production networks and it is thus helpful in exploring the trade-investment nexus. This variable corrects the limitation of the previous indicators in which countries at the beginning of the value chain (e.g. exporters of raw materials) have a low foreign value added content of exports by definition. It gives a more complete picture of the involvement of countries in GVCs, both upstream and downstream” (Box 2, p.5).

OECD (2012) offers some calculations of GVC participation rates for a selection of countries in 2008. For Latvia, this indicator took on a value of about 57% in 2008, which is less than for Lithuania (just over 60%) or Estonia (also just over 60%). This is broadly consistent with the DVA evidence in Figure 7. Globally, countries with high GVC rates (over 70%) are Taiwan, Singapore and Malaysia. In Europe, Luxembourg, with a GVC participation rate of nearly 80%, stands out, but otherwise the highest participation rates are observed in the Slovak republic, Norway, Hungary, Belgium, the Czech Republic and Estonia (with rates between about 66% and just over 60%). Clearly, GVCs are less prevalent in Europe than in Asia.

Latvian case studies

Latvian companies participate in international supply chains in a variety of ways. For example “Avoti SWF” is a major Latvian furniture manufacturer, which now produces mainly for the global retail sales network of IKEA. “Argos”, a leading UK retailer, outsources the production of plastic chairs to Latvia, a switch from China, which is no longer regarded as sufficiently cheap. Food retailers “Tesco” in the UK and “Coop” in the Netherlands are increasingly importing a variety of food products

from Latvia, including such very Latvian products as ‘griķi’ (buckwheat).

Here we offer four case studies of successful export-oriented FDI. These are not meant to be comprehensive or even representative, but should be interpreted as illustrative examples of foreign companies that have set up operations in Latvia that are integrated in their global operations.

Bucher Schörling

This represents an FDI in the vehicle components sector in Latvia. Bucher Schörling Baltic Ltd is a subsidiary of Bucher Group, a Swiss-based global manufacturer of state-of-the-art machinery and equipment used for a variety of purposes, such as harvesting, producing and packaging healthy foods, keeping cities clean and safe and hydraulic systems for high-performance machinery. With approximately 7900 employees worldwide, Bucher Group generated over EUR1.6 billion in sales in 2010.

The Latvian-based company manufactures components and spare parts for road sweepers and 100% of the output is exported. The final product is made in Switzerland and sold in countries such as Russia, Germany, France, Italy, Spain and Ukraine. Spare parts produced in Latvia are sent directly to dealers in Russia, Germany, France, Italy, Spain, Ukraine, etc. Some of the inputs needed for production in Latvia are bought from Latvian suppliers, and others are imported from Germany, UK, Switzerland, Sweden, Italy, France, Austria, Poland, etc.

Bucher Schörling Baltic Ltd. started operations in Latvia in 2004. In addition to manufacturing vehicle components, it manages Schörling’s Eastern sourcing network. In 2011, Bucher Schörling Baltic invested EUR5 million—including co-financing from the EU Structural Funds—to open a second factory in Ventspils, the port city in Western Latvia. This brought the total number of employees in Latvia to over 100.

Niklaus Huser, chairman of the board of Bucher Schörling Baltic, has commented: “Availability of qualified welders and mechanics is one of the most essential requirements for us, and we have made investments in training employees, especially as we expand our operations here. Our decision in

choosing Ventspils as our site was based on several considerations, including good overall entrepreneurial conditions; outstanding support from the Free Port of Ventspils Authority and the local municipality; a lower levels of salaries compared to the Riga region; benefits from the free economic zone; a harbour with frequent ferry traffic to and from Germany; and proximity to the Russian market.” The company is considering further expansion in Latvia, given that the existing factory is operating at high levels of efficiency.

Brabantia:

The Dutch company Brabantia is Europe’s leading supplier of innovative household products, with exports to over 80 countries and a revenue of EUR93 million in 2010.

The company opened its first production plant in Latvia in 2008, renovating a brownfield site, and by 2011 it had moved its production of laundry dryers and ironing boards to Latvia, employing approximately 75 people.

The company exports 100% of its output, mainly to the UK, Belgium and the Netherlands. Some of the inputs needed for production are sourced in Latvia, while others are imported from Lithuania, Belgium, Italy, Finland, Poland, China, Slovakia, Sweden, and Germany

A strong tradition in metalworking was a major factor in choosing Latvia as a location for a production facility. Other factors included Latvia’s membership of the EU, its Euro-pegged currency, and its business-friendly environment. Other positive factors include fast reaction to changes in demand by customers in the EU, lower inventory, a talented workforce, low employee turnover and a salary/productivity balance that is competitive with Asian workers.

Marcel van de Velde, Brabantia’s Production Director in Latvia, has also acknowledged the support and the professional assistance from LIAA, the Latvian Investment and Development Agency.

AKG Group

The AKG Group is a worldwide manufacturer of coolers and heat exchangers for a broad range of

industrial equipment and consumer appliances. The company has almost 3,000 employees in 12 production facilities around the world, producing over 2.5 million units each year.

Its Latvian subsidiary, AKG Thermotechnik Lettland, established its initial Latvian production facility in Jelgava in 2005 and focuses on the production of aluminium heat exchangers. With revenues of approximately EUR26 million in 2011, the Latvian facility employs almost 200 people. Jelgava has a developed metalworking sector and a long tradition in automobile manufacturing, as well as a low-cost industrial park with good infrastructure. 100% of AKG output is exported, with more than half of its sales being in Germany. In 2012, the company received the ‘Made for Germany’ prize, awarded by the German-Baltic Chamber of Commerce.

“The factory in Latvia has the lowest production expenses of all AKG’s factories in Europe,” notes Dr. Gerhard Ritzmann. “Our low costs have enabled Jelgava to produce radiators even for buyers in Asia, where local factories did not have the capacity to fulfil all incoming orders.” AKG Thermotechnik Lettland plans to build a second factory in Jelgava by 2014 to double its current capacity. The plan is to invest EUR5 million for the second factory, creating 150-200 new workplaces.

Ferroplan

Ferroplan is the leading Finnish manufacturer of conveyor solutions designed for handling piece goods and bulk cargo, for a wide range of industries and materials including environmental products, metal, logistics and storage, packing and wood. The company prides itself on innovation in design and production of conveyor systems, as well as efficient, reliable and safe products. With 60 employees in Finland and Latvia, the company had revenues of EUR7 million in 2011 and serves its global customers in a variety of industrial sectors.

The company opened its component manufacturing unit in Jelgava, SIA Ferroplan, in 2005, specializing in welding, folding, plasma cutting and machining of different kinds of metal products with pallet dispensers, conveyors and conveyor components like rollers, metal frames and adjust-

able feet being important outputs. Most of SIA Ferroplan products are exported.

In evaluating expansion opportunities in the Baltic states, Ferroplan selected Latvia as its investment base because of its central location, the availability of a skilled workforce, and long-term cost advantage. In late 2011, the unit in Latvia initiated a major development programme to enable the production of more advanced products in Latvia.

“We are very satisfied with the investment incentives we received from the Latvian state and European Union,” says Mr. Pentti Patosalmi, managing director of Ferroplan. “Together with our investment here, our aim is to grow in Latvia and have 15-20 employees there in a few years’ time.”

Concluding remarks

Latvian export performance is an unequivocal success story. However, the underlying causes are heterogeneous. The case study evidence points to the importance of export-oriented FDI in some of the sectors that have experienced the strongest growth of competitiveness, as measured by growth of market share, e.g. ‘vehicles’ or ‘machinery and mechanical appliances’. It is interesting that FDI has been attracted to the historical locations of skills and that some of the investments have been supported by structural funds.

The growth in the number of markets has been impressive, though in some cases hard to understand, e.g. in recent years Algeria has emerged as a destination for as much as over 2% of Latvian exports – mainly steel and grains.

The importance of non-price competitiveness is not something that has been extensively documented until recently.

In terms of participation in global value chains, Latvia appears to be about average in a European context.

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Final observations



The Baltic Sea Region likes to think about itself as the 'Top of Europe'. It is, indeed, the 'Top'; its economic performance relative to other European regions is once again strong, as it has been in many previous years. But it is also 'European' in its exposure to the crisis that many of the economies of the continent find themselves in; over the past year, this crisis has affecting the Baltic Sea Region much more than before.

2012 was a mixed year for the economies of the Baltic Sea Region. Growth slowed down significantly, as the crisis in some other parts of Europe started to weigh fully on the economies in the Region. The outlook for 2013 is now fragile, and most governments are preparing themselves for a prolonged period of slower growth. With investment demand already subdued since last year, growth dynamics will now depend strongly on trends in domestic consumption.

The external shock has been felt relatively symmetrically across the Region. All countries are dependent on European market conditions, and country-specific factors have played less of a role. With no quick recovery in sight for the European economy, the weak external demand is likely to limit Baltic Sea Region growth prospects for some time. While the Region still benefits from much more healthy domestic conditions than many other parts of Europe, this unlikely to be able to drive much more than a stabilisation of growth rates at a modest level.

Apart from these cyclical factors, the Report also highlights how the dynamics of globalisation are continuing to shape the Baltic Sea Region. Two different modes of internationalisation seem to be emerging: Germany, Poland, and the Baltics are

strongly export-driven, engaging in global value chains at different stages. The Nordics are more FDI-driven, attracting knowledge-seeking investment but otherwise engaging in international value chains through activities located abroad but owned by companies located in the Nordics. Both models are emerging according to the specific conditions present in the different parts of the Region – in part given by nature, in part by government policy. While both can support high levels of prosperity, they create different types of challenges for economic policy.

The underlying competitiveness of the Region remains strong, with no dramatic changes relative to previous years. Where there are changes, they are largely driven by short-term changes in economic conditions and sentiment. In Denmark, for example, the perspectives of business leaders have become more sceptical across the board, as some of the new government's measures created public opposition. In Finland, the assessment has been much more positive, despite the challenges facing Nokia and a number of tax increases implemented in early 2013.

The Baltic Sea Region continues to benefit from an exceptionally strong network of projects and institutions that span the Region. The EU Strategy for the Baltic Sea Region has been a critical element in enhancing the co-ordination among the many efforts under way, and in orienting them towards a clear set of objectives relevant for the Region. However, the recent review of the EU Strategy has also made clear where progress is still limited. Truly new policy initiatives driven by the regional effort are few. The impact on policies that do not have a direct focus on Baltic Sea Region collaboration re-

mains limited. Additionally, the engagement of the private sector is still low; the argument for why Baltic Sea Region collaboration should be something companies in the Region should worry about has so far not been made successfully.

The revised strategy and action plan recently adopted provides a solid platform to address some of the weaknesses identified. That said, it does not yet provide the solution to some of the key challenges that Region faces:

- The measurable objectives now identified should be derived from a systematic, regular analysis of the Region and its strategic priorities. The political nature of the action plan process might be one of the reasons for the limited private sector involvement.
- The objectives and activities of the EU Strategy for the Baltic Sea Region need to be integrated into the operational programmes of the broader set of relevant EU policies, in particular the Structural Funds and the Horizon 2020 activities. This is a critical pre-condition for increasing the reach of the strategy beyond core regional efforts, and for aligning activities within national governments related to the different EU policies.
- With the EU Strategy for the Baltic Sea Region established is a solid foundation, it is now possible to more actively engage neighbours and create a more systematic relation with related institutions, like the CBSS, the Northern Dimension, and a range of fora focusing on the Arctic.
- Most importantly, the Region needs an institutional architecture that can mobilise the full power of the existing structures for collaboration in the Region, and focus them on the issues most critical for its future competitiveness. This might not require new institutions, but it requires that existing co-ordination mechanisms be more visibly empowered.

With the future path highly uncertain, it is useful to remember that over the last decade, too, events have played out quickly and, sometimes, unexpectedly. Economically, the Baltic Sea Region has gone through a full cycle. In 2004, the economies of the region had just left the aftermath of the bursting IT/Telecom bubble behind. Growth was rapid and – with the exception of Germany

and Russia – all parts of the Region were outperforming their European peers. While the Region suffered more than others during the global downturn of 2008, it has proven more successful in regaining growth. For the Baltic countries, this happened through a roller-coaster of rapid growth, deep recession, and robust recovery. For the Nordic countries, active government policy in response to the crisis played a large role. In Germany, a strong industrial base and a flexible response by government and labour market partners were the underpinnings its economic resilience in the face of the global downturn.

In terms of competitiveness, many of the foundations for the relatively strong performance of the following decade had already been laid in 2004. A central achievement of governments in the Region was to stay the course, despite the difficult circumstances that they found themselves in after 2008. In the Nordic countries, the key choices had been made in the aftermath of their crisis in the early 1990s. The famous Nordic welfare model had been reformed, not abandoned. As well, the Nordic countries made determined steps to embrace globalisation and leave the old model of relatively closed markets and repeated devaluations behind. In the Baltic countries and Poland, the process of transformation followed by EU accession put them on the path to robust catch-up growth. The small Baltic economies opened up the most, and ended up suffering from the overheating that was fuelled by massive capital inflows. Germany was finally getting around to implementing some overdue reforms. Although it was still criticized for its reliance on ‘traditional’ industrial strengths, its companies were rapidly restructuring to take advantage of globalisation. Russia had still not fully recovered from its 1998 crisis, but was starting to benefit from the macroeconomic stabilisation policies that had been put into place in its wake.

Maybe the most dramatic changes in the Baltic Sea Region over this past decade have occurred in the way that the Region collaborates. In 2004, the Baltics and Poland had just become EU members, and the nature of the economic policy dialogue was still dominated by the West providing help to the East. Since then, collaboration has increasingly focused on integration as an instrument to upgrade the competitiveness of the entire region. The differences in the stage of economic develop-

ment across the region remain large, but integration can provide mutual benefits. This year's Report looks at regional value chains as one element of this process. A key test of this new relationship came during the recent crisis in Latvia, when the government turned to international partners to get financial support. Its neighbours in the Region, the Nordic countries, as well as Estonia, reacted most swiftly and provided backstop financing. These funds were eventually not needed, but were a critical sign of support at the time. Nordic banks had made significant profits in the Baltics during the period of fast growth. Despite much public discussion about their role, they stayed on and helped to provide these countries with a functioning banking system throughout the crisis.

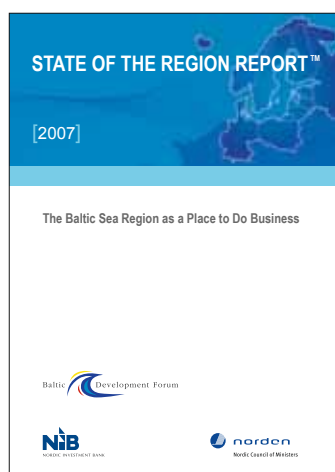
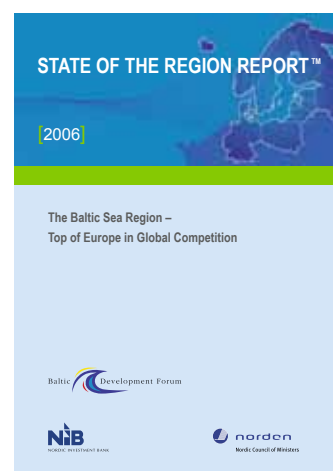
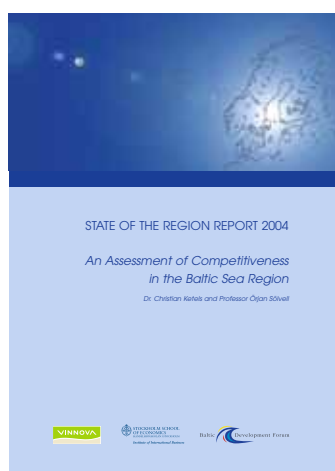
Many of the existing networks and structures for collaboration across the Baltic Sea Region had been designed in the early 1990s, with a focus on enabling the peaceful reorientation of the former Communist countries towards the west. As the focus of collaboration shifted more towards competitiveness upgrading, the appropriateness of the existing institutional framework was put to the test. Over the last few years, especially since the end of 2007, when the European Council followed the initiative of a number of Baltic Sea Region countries and EU parliamentarians to request an EU Baltic Sea Region strategy, a new architecture has started to emerge. Although formal institutions remain largely untouched, the EU Baltic Sea Region strategy process has led to a significant alignment of activities within the context of an integrated action plan. Instead of changing institutions, the strategy has changed what these institutions do.

The Baltic Sea Region – the 'Top of Europe' as it has been started to be called in this Report – has achieved much over the last decade. New challenges are now ahead. First, the Region has to weather the difficult context of a Europe integration project in crisis, economically as well as politically. The Region clearly has a large stake in the outcome of this crisis. What can it do to increase the odds of a positive resolution? How can it prepare itself for whatever outcome materialises?

Second, the countries in the Region face new competitiveness challenges as they continue their economic development process. What do the Nordic countries and Germany need to do to retain their position near the top of global competitiveness and prosperity rankings? How can the Baltics and Poland reach the next stage of their development? What is Russia's position beyond an economy built on oil and gas? Crucially, how can regional collaboration help countries in the Region to find answers to these questions?

Third, the Region has to rethink its collaboration model. What steps are needed to increase the reach of the EU Baltic Sea Region Strategy beyond activities with a clear cross-border character? How can the non-EU members that are part of the Region be more actively integrated into the model that has been created through the EU Baltic Sea Region process? Is it sufficient to 'repurpose' existing institutions, or does the Region need a modernisation of structures to better engage other countries and reach out to new constituencies, especially in the private sector?

'10 years of the State of the Region Report'



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