

2016

STATE OF THE REGION REPORT™

The Top of Europe –
Doing Well Today, Feeling
Worried about Tomorrow

Christian Ketels
Helge J. Pedersen



sustainable growth
innovation
competitiveness



Baltic
Development Forum

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BALTIC DEVELOPMENT FORUM STATE OF THE REGION REPORT 2016

As in previous years, we are pleased to present the BDF State of the Region Report. It will serve as basis for the discussions on the economic performance and wellbeing of the Baltic Sea Region at the 18th Baltic Development Forum Summit under the heading 'Exploring Potential'.

The State of the Region Report provides a snapshot of the region's economic strengths and weaknesses as well as insight into the opportunities and risks facing the countries in the Baltic Sea Region. As the title of this year's report *The Top of Europe – Doing Well Today, Feeling Worried about Tomorrow* suggests, the Baltic Sea region is still doing very well in many aspects of economic performance. The region is thus well placed to maintain its current position as a leader in innovation and competitiveness, continuing to exploit the potential delivered by new trends and opportunities in the global economy. However, there are also many risks, economic and political, facing the region, as well as worries over such issues as the permanently lower levels of economic growth and productivity, the significant loss of world export market shares, and the erosion of the region's share of foreign direct investments. Therefore this year, the report takes a closer look at the region's clusters and Smart Specialisation Strategies in order to analyse how well placed the Baltic Sea region is to tap into the growth potential in new emerging industries and sectors.

This 13th edition of the State of the Region Report is published together with the fifth Political State of the Region Report and the second State of the Digital Region report, also published by BDF for the 18th BDF Summit and the 7th Strategy Forum of the EU Strategy for the Baltic Sea Region.

The three reports together provide stakeholders across the region and beyond with updated and comprehensive knowledge of current developments in the Baltic Sea Region. It is our aim to inspire decision makers in business and different levels of local, regional and national authorities to further strengthen regional cooperation in order to exploit the region's economic potential and maintain its position on the top of Europe.

Our sincere thanks and appreciation to the authors of the State of the Region Report, Christian Ketels and Helge J. Pedersen, for their comprehensive and inspiring analysis of how the Baltic Sea Region is performing in Europe and in the global economy.

The report has been made possible thanks to support from the Nordic Council of Ministers, the European Investment Bank, and Dr. Ernst Wehtje's Foundation. Needless to say, the views expressed in the report do not necessarily reflect the views of the sponsors.

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EXECUTIVE SUMMARY

THE BALTIC SEA REGION IN 2016

Shivering while the sun is (still?) shining. This is an apt summary of the state of the Baltic Sea Region (BSR) in 2016.

Many economic indicators are up, and while parts of the region continue to struggle with their country-specific challenges, the overall situation is generally stable.

The region is comfortably in the leading ranks of many international assessments of prosperity and competitiveness, and remains the 'Top of Europe' in more than a geographic sense.

But decision makers across the region are nervous; Can the lenient monetary policy of today sufficient to also sustain growth tomorrow? And what will happen if the next cyclical downturn hits? Investors seems nervous too; investment rates are flat despite the low financing costs, and Foreign Direct Investment (FDI) inflows are relatively weak.

The Brexit vote has made an already complex political context even more challenging. While the short-term economic impact is small, the effect it will have on the future of European collaboration will be of significant relevance to the Baltic Sea Region.

As in previous years, the 2016 State of the Region Report provides data and analysis to help decision makers in the Region and observers from the outside navigate this difficult environment. Helge Pedersen, Chief Economist of NORDEA, discusses the current economic outlook for the Region. Christian Ketels, Faculty Member at Harvard Business School and Lead Author of the Report since its inception, tracks the Region's competitiveness in terms of prosperity outcomes, trade and investment performance, and competitiveness fundamentals. He is joined in the last section by Jens Sörvik and Lina Stanionyte from the European Commission's Joint Research Center, as they take a look at the region's cluster portfolio and Smart Specialisation Strategies.

CURRENT ECONOMIC CLIMATE AND OUTLOOK

The Baltic Sea Region remains overall in a fragile recovery driven primarily by domestic demand. The baseline scenario for the Baltic Sea Region is a rather stable growth throughout 2016 and 2017 of close to 1.7%, with risks tilted to the downside.

Private consumption is the key driver of economic growth across the Baltic Sea Region, supported by the extremely low interest rate in all countries. The low interest rates have also driven sharp increases in house prices in a number of countries in the region. Public consumption over the last year has grown in response to the inflow of asylum seekers and refugees, especially in Germany and the Nordic countries. It is now expected to grow significantly less. Investment has recovered after the contraction the year before, but remains low compared to the pre-crisis period. This is noteworthy in view of the low interest rates – companies continue to be reluctant about taking bets on the future, even when refinancing costs are historically low.

External trade is not contributing much to the economic dynamism of the region. Global trade continues to perform poorly, which disproportionately affects a region of small-open economies. The Brexit referendum has, so far, only incurred small direct effects: the trade exposure of the Region to the UK is at less than three per cent per cent of exports modest.

The relatively solid overall economic climate has left its mark on labour markets and public finances. Unemployment rates are moving downwards, but parts of the region continue to struggle with high youth unemployment rates. The comparatively low levels of public debt provide governments in the Region with policy options in case of a downturn.

COMPETITIVENESS OF THE BALTIC SEA REGION

Prosperity growth across the Baltic Sea Region continues at around 1.1% per year, similar to North America and the EU-28, but markedly down from the pre-crisis area. Both productivity and labour mobilisation drive prosperity growth, and both are down post-crisis. Labour mobilisation growth across the Baltic Sea Region has been especially weak in 2016 compared to peer regions. Beyond economic measures, the region continues to perform strongly on Social Progress, a measure of non-economic factors that drive the quality of life.

Within the region there continues to be significant heterogeneity. Convergence, i.e. a reduction in the gap between the richest and poorest parts of the Region, continues even if at a lower rate. There is also evidence that within-country differences are growing, a trend also visible in other regions of the world. Differences exist not only in terms of overall prosperity, but also in the way productivity, labour market conditions, and labour relations contribute to prosperity.

The performance of the Baltic Sea Region on international markets for exports and FDI was disappointing in 2015. For trade, the region underperformed against the, already exceptionally weak, trajectory of world trade, seeing its global world export market share drop by 0.25 per cent. For inward FDI, it saw both inward flows and the value of inward FDI stocks drop not only relative to a growing world market, but also relative to more dynamic trends in the EU overall.

On fundamental drivers of competitiveness, the region continues to do well. The Global Competitiveness Report again includes three countries from region among the global top ten, with two more following closely behind. Countries from the region ranked lower have in general been able to reduce the gap to the top performers, both on overall competitiveness and on more narrow measures, such as the World Bank's Doing Business ranking.

This year's Report takes a closer look at drivers of innovation performance. Here too, the region is doing well, especially in comparison to its European peers. But the Baltic Sea Region continues to do better on innovation enablers and form activities, than on economic outcomes. And on

measures of linkages and entrepreneurship it has diverged negatively from the EU average; surprising, given the strong policy attention devoted to this area. The region's high level of firm level research and development activity is reliant on a small number of core firms. The university system across the Baltic Sea Region is solid, but lacks institutions among the very top globally across broader areas of research.

CLUSTERS AND SMART SPECIALISATION

The Baltic Sea Region benefits from a relatively strong concentration of economic activities in clusters that have reached critical mass. A core number of regions, in particular the leading metropolitan regions, account for 50 % of all employment in such clusters across the region. Compared to the rest of Europe, the region is strong in two types of clusters: one group, including forestry, furniture, fishing, and water transportation, draws on the region's natural assets. There are also more narrow positions in oil and gas and metal mining that fall into this category. The other group, including the small music category as well as communication equipment and services and marketing services, builds on the region's advanced skills, especially in its metropolitan centers. The latter are also the regions that seem well placed to enter newly emerging sectors and industries. The different types of cluster categories have all their own distinct geographical footprint across the region, showing a clear position to benefit from collaboration along regional value chains.

As part of the European Union's New Regional Policy, regions across Europe have designed so-called Smart Specialisation Strategies (RIS 3). This year's State of the Region Report includes a first assessment of these strategies across the Baltic Sea Region, that will drive the dispersion of structural funds for the 2014-2020 programme period. Health, energy, information and communications technology (ICT), and industrial modernisation are the priorities most frequently indicated by regions around the Baltic Sea.

Small to medium (SME) business development, including support for entrepreneurship and incubation, is at 3.6 % of all spending the activity regions around the Baltic Sea focus relatively most on

compared to the EU average. The vast majority of the regional policy funds are allocated to national/regional programmes. The Interreg Programme finances cross-border measures, and has become the main funding instrument that directly aligns with the EU Strategy for the Baltic Sea Region.

LOOKING AHEAD

The future of the Baltic Sea Region depends on the interplay of policies pursued within the region, and what type of European and global economic and political environment they will face. For policy makers, this suggests a need to look at three different levels for action.

First, domestically it is critical for economic policy to both manage the economic conditions of today and to prepare for a possible slowing down of the economy in the future.

Second, given the region's huge reliance on especially the European economic and political context, they need to actively engage in the process of defining the Europe that will emerge post-Brexit. Whether that is already happening sufficiently beyond the staking out of short-term national interests is at least unclear.

Third, the opportunities and necessity to enable growth by pursuing higher levels of economic integration with neighbours in a macro region like the Baltic Sea might be increasing in the years to come. Here the region should leverage the many relationships, organisational platforms and instruments that have been created in recent years.

Regional collaboration is no panacea but it can play a supporting role in these efforts. While it is unlikely that the regional level is going to emerge as a central platform for common action, it can do a lot to enhance the quality of choices that policy makers across the region are going to take. And that in itself is a benefit that counts.

INTRODUCTION

Shivering while the sun is (still?) shining. Maybe that summarizes how many people across the Baltic Sea Region feel as they are enjoying an unusually pleasant autumn. The sun is shining across the region, not overly but clearly visible: many economic indicators are up, and while parts of the region continue to struggle with their country-specific challenges, the overall situation has improved for many of them compared to previous years. The region is comfortably in the leading ranks of many international assessments of prosperity and competitiveness, and remains the 'Top of Europe' in more than a geographic sense. Especially in longer-term comparisons the region has had a good stretch, and managed to come out of the recent global and European crisis in comparably good shape.

But talk to many decision makers in politics and business across the region about what lies ahead, and you hear a significantly more nervous assessment. There is anxiety about the sustainability of the economic course we are on. Lenient monetary policy is supporting growth in many parts of the region and across Europe more broadly. But will that be enough going forward? And what will happen if the next cyclical downturn hits?

Lower global productivity growth trends and concerns about the dynamism of global trade do not bode well. Investors seem nervous; investment rates are flat despite the low financing costs, and FDI inflows are relatively weak. And the political context is not helping either: The Brexit vote has shaken Europe, raising questions about the future nature and direction of European integration. Can we find a way to continue to engage within the European Union to address the challenges we are facing? And how is the loss of one of the more economically liberal and politically less 'centralist' voices in Europe going to affect the discourse in European institutions? The EU member countries across the Baltic Sea Region have to assess their options in this new landscape, finding roles for themselves as well as for cooperation in the region. That they have to make these choices while facing a challenging relationship with Russia – and often difficult domestic political conditions as discussed in last year's State of the Region Report – does not make things easier.

As in the past, the 2016 State of the Region Report aims to provide decision makers across the region and those from the outside interested in its performance, with data and analysis to lead an informed discussion. It does not offer any simple solutions – there are none. However, it hopes to provide a sense of the assets and capabilities that this region can bring to bear as it aims to not only manage the difficult waters ahead, but influence the course of things to come. The challenges ahead are not created in the region, and they are to a large degree also not unique to the region. How countries will manage to address them is important not only for the people around the Baltic Sea, but will also be studied in other parts of Europe and beyond that see this region as an important role model for sustainable prosperity, competitiveness, and collaboration.

THE BALTIC SEA REGION – A (SMALL) MACRO-REGION AT THE TOP OF EUROPE

For our analysis, we define the Baltic Sea Region (BSR) – 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, Warmińsko-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).

The Baltic Sea Region as defined here is a so-called 'macro region': a cross-border grouping of countries and subnational regions. While this definition of the Region is informed by economic data, it is ultimately a political choice to define the boundaries of a Region where collaboration is meaningful. Macro regions have become a new level of policy dialogue in different parts of the world, particularly in Europe, because they combine two features: they include countries and regions that are through their proximity the most natural partners for trade and investment, and

often also compete together for a position in global value chains. And they are through their cultural and political affinity areas in which policy learning and collaboration for competitiveness upgrading is most likely to be effective.

On a global scale, the Baltic Sea Region is a small, prosperous macro-region, largely characterised by the small open economies that make up its Nordic and Baltic core. It is home to close to 60 million people. In population size this puts the Region somewhere between Italy and the UK. About 45 % of the Region's inhabitants live in the Nordics, a share that has been steadily increasing over time as the Nordic countries gained population. The Baltics are home to 10% of the region's population, and the remaining population live in the parts of Germany, Poland, and Russia bordering the Baltic Sea.

All of these latter countries and regions have seen their population numbers slowly decrease, a trend that is likely to continue given the current patterns of demography. In 2015, the region generated an annual Gross Domestic Product (GDP), based on current prices and exchange rates, of close to €2,000 billion, representing 13.5% of the EU-28 economy. The Nordic countries dominate with about 56% of the total, followed by Northern Germany and North-western Russia at roughly 15% each, the Baltics at 8% and Northern Poland with the remaining 6%. Prosperity levels differ significantly across the region, despite the catch-up of the Baltics, Poland, and Russia over recent years. The Nordic countries and Germany register GDP per capita levels well ahead of the European Union average, while the region overall falls somewhere between the performance of the EU-27 and the EU-15.

A DIFFICULT CONTEXT: THE NEW NORMAL OF LOW GROWTH, INTEREST RATES, AND INFLATION; A NEW EUROPE WITHOUT THE UK

As a small, open macro region, the Baltic Sea Region's performance is highly exposed to the economic environment in Europe and the broader global economy.

Within the region, political dynamics at the national level as well as the structures for regional collaboration affect how much joint action for competitiveness is likely to occur.

In 2015, the Baltic Sea Region has experienced a slight acceleration of prosperity growth. Overall it remains on the positive but lower growth path that has been characteristic of the post-crisis period. This last year has seen no dramatic changes in economic context. Instead, global trends continue to feed through to the region. There is little economic pull from either the European or global economy. Growth rates among the major trading partners of the region are stable; they do not provide enough momentum to accelerate growth in the Baltic Sea Region on their own. Low interest rates are supporting demand but have failed to trigger a significant increase in business investment. They also raise the danger of real estate bubbles in some markets, and largely remove monetary policy as an instrument to deal with new economic shocks.

Apart from these existing factors there are also some more deep-seated concerns about the future of the global economy that have implications for the Baltic Sea Region.

First, productivity growth rates are down in many advanced economies. Several hypotheses are being discussed, but there is no real consensus yet as to what is been driving this slow-down and would could be done about it. Some argue that the past decades of strong productivity growth were an exception, and that we are now returning to a more normal, lower pace of change. Others see a growing heterogeneity among leading firms that continue to push productivity growth, and many others that fail to keep up the pace. Less intense rivalry on some markets could also play a role. It could also be an issue of economic composition, as job creation is increasingly occurring in lower productivity service sectors. Whatever the explanation, the consequences for prosperity and economic growth are significant.

Second, trade is not expanding at the same rate as before and the political headwind against further liberalisation, including in Europe against the Comprehensive

Economic and Trade Agreement (CETA) and Transatlantic Trade and Investment Partnership (TTIP), is significant. If this is indeed a structural shift in the global economy, it would have serious repercussions for a region of small open economies such as the Baltic Sea Region. In relative terms it might make regional integration more attractive, especially given the still large heterogeneity within the region that can be leveraged. But in absolute terms it is clearly a worry and a potential reduction of the economic opportunities for this region.

How these broader economic trends in the global economy affect the Baltic Sea Region will to a significant degree depend on the political response they trigger, both in the region itself and in the EU. The UK referendum in favour of leaving the EU has dramatically raised the concerns about the context in which these decisions will be taken. The biggest question is how EU institutions and decision making architectures will change in response to the Brexit vote. All options seem to be on the table, from a push towards significantly more integration, to a re-nationalisation of many policy responsibilities. Although almost everyone sees a need to change, there is no consensus on the direction to take. And if pressed for specific details, many find it hard to identify what should be done differently.

Once the institutional architecture for the EU has been agreed, the real discussion about the political choices to be made will have to begin. And here many countries in the Baltic Sea Region are concerned that a UK exit from the EU will deprive them of a key ally, both in arguing for open markets and liberal policies, and against the push towards an 'ever closer Union' as traditionally pursued by the main continental European countries. Germany is somewhere in the middle, instinctively more market-oriented and concerned about having to bankroll new EU-led initiatives, but also historically a core driver of European integration and increasingly in a critical leadership position to achieve a common view on where Europe should go in the future.

What role the Baltic Sea Region might play in this context as a platform for coordination and collaboration remains to be seen. Countries from the region could aim to

form a more integrated block within the EU. But it is unclear whether or not there is sufficient consensus within the region to do so. The current political climate within the region and in many of its countries does not bode well for any ambitious initiative to materialise; last year's State of the Region Report provided a discussion of these issues. At the same time there are many established structures and collaborative efforts within the region that are widely seen as valuable. The EU Strategy for the Baltic Sea Region has institutionalised this web of relationships, and all discussions are focused on how to make it more effective, and better at leveraging the opportunities it creates.

THE 2016 STATE OF THE REGION REPORT: TAKING THE TEMPERATURE OF THE REGION'S ECONOMY, ASSESSING ITS FUNDAMENTAL COMPETITIVENESS

The 2016 State of the Region Report continues to focus on delivering a compact analysis of the Region's economic performance and underlying competitiveness. Helge J. Pedersen, Chief Economist of NORDEA group, discusses the current economic climate across the Region, and gives his view on the trends that are likely to shape the Region's economy in the short- to medium-term. Christian Ketels, member of the Harvard Business School faculty and Lead Author of the State of the Region-Report over the last couple of years, then assesses the Region's economic competitiveness, i.e. the factors that are driving underlying trends in performance over the medium- to long-term. Together with Jens Sörvik and Lina Stanionyte from the European Commission, he then also examines the region's current cluster portfolio and the Smart Specialisation Strategies that aim to upgrade the region's industrial composition.

ECONOMIC OUTLOOK

The Baltic Sea Region in 2016
Current economic climate and outlook
Competitiveness of the Baltic Sea Region
Clusters and Smart Specialisation
Looking Ahead



ECONOMIC OUTLOOK

The Baltic Sea Region remains in a fragile recovery, driven primarily by domestic demand which is supported by extremely lenient monetary policy. Most of the countries are small, open economies heavily dependent on global trade, making them vulnerable to changes in the international economic and political environment. And recent years' slow global growth – not least in global trade – poses new challenges to the region. Furthermore, mutual sanctions

by the EU and Russia have led to lower intra-regional trade, and Russia is still struggling with a significant decline in economic activity due to the dramatic fall in oil prices in recent years. The recession in Russia has especially affected the neighbouring Baltic countries and Finland. However, all of them are now recovering. Low oil prices have also meant that after many years of high growth, Norway has been hit by a marked slowdown however this has largely been countered by a very expansionary economic policy line.

TABLE 1

BALTIC SEA REGION, REAL ANNUAL GROWTH RATES UNLESS OTHERWISE NOTED

	2011	2012	2013	2014	2015	2016E	2017E
Private consumption	2.2	1.7	1.5	1.5	2.0	1.9	1.8
Government consumption	0.3	1.0	0.8	1.4	1.4	2.1	1.4
Gross fixed capital formation	7.1	2.5	0.9	2.6	-0.3	2.4	2.6
Exports	5.3	2.0	0.8	2.7	3.0	1.1	2.8
Imports	7.8	2.1	2.1	3.3	1.6	2.0	3.1
GDP	2.2	0.9	0.7	1.6	1.9	1.7	1.6
Inflation, % y/y	2.8	2.2	2.0	1.6	1.6	1.7	2.0
Unemployment, %	6.4	6.1	6.0	5.9	6.1	6.0	5.8
Government budget balance, % of GDP	2.6	2.6	2.2	2.0	0.4	0.7	0.6
Current account balance, % of GDP	5.9	5.9	5.8	6.6	6.0	4.6	4.7

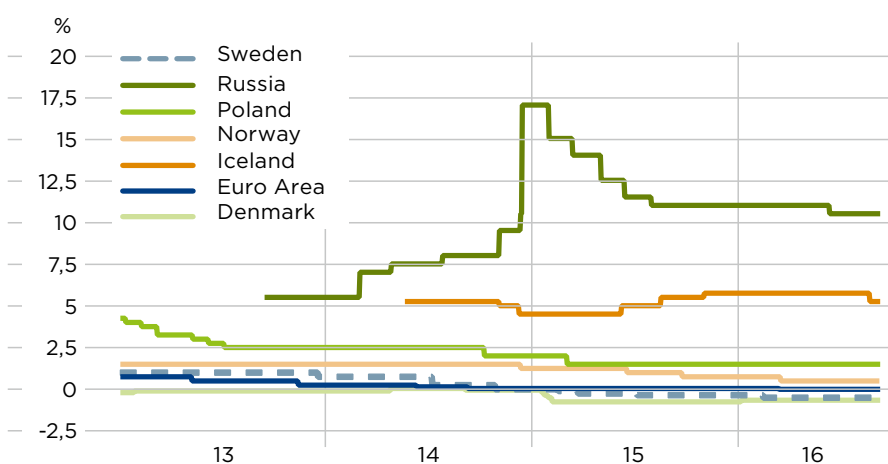
Source: Nordea Markets

Conversely, growth has been solid in Germany, Poland and Sweden, and Denmark seems to be heading towards a self-sustaining economic recovery after a number of lean years. The Icelandic economy is also growing strongly again, thanks to strong private consumption growth and a boom in tourism.

The baseline scenario for the Baltic Sea Region is rather stable growth of close to 1.7% throughout 2016 and 2017. The risks remain tilted to the downside due to the uncertainty related to the external environment, for instance the increasingly important Chinese economy, the unresolved conflict between Russia and Ukraine, the situation in the Middle East and the potential negative setbacks from Brexit.

FIGURE 1

MONETARY POLICY RATES



Source: Nordea Markets and Macrobond

DOMESTIC DEMAND DRIVES ECONOMIC GROWTH

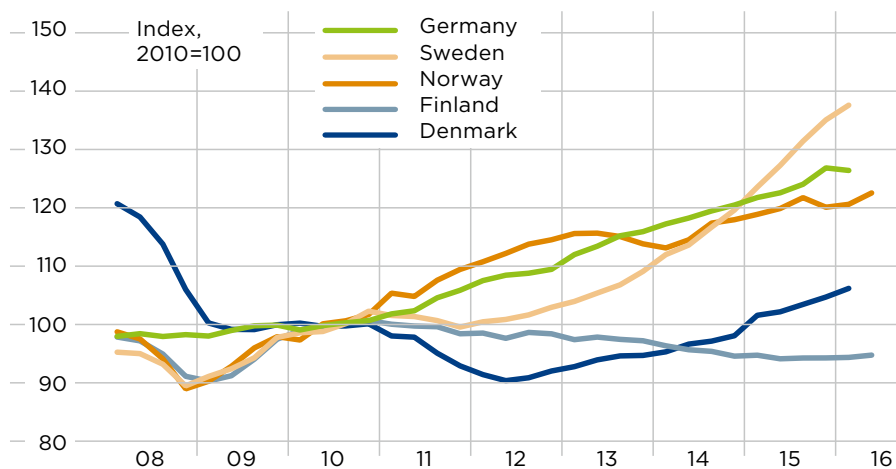
Over the past years, growth in the Baltic Sea Region has to a large extent been driven by domestic demand, not least consumption. Private consumption rose by 2% in 2015 and is expected to grow by around 1.9% this year and next (Table 1). Current growth rates are held in check by a large setback in Russia's private consumption, stemming partly from high inflation and resulting real wage reductions, whereas most of the other countries in the region will experience significantly higher growth rates. The Baltic countries are particularly expected to experience strong growth in private consumption, along with Iceland and Poland. Private consumption is also supported by the extremely low interest rate level in all countries in the region

(Figure 1), which has given rise to sharp increases in house prices in a number of countries in the region (Figure 2 a, b).

PUBLIC CONSUMPTION is expected to grow by 2.1% this year and 1.4% in 2017. In 2015 and 2016, public expenditure was affected by the large influx of migrants and asylum seekers (Table 2). However, because the large majority of the refugees have applied for asylum in Germany and the Nordics, which all have healthy public finances, this is not regarded as a major risk to public finances, although it is causing a lot of political turmoil. Furthermore, the refugee influx is likely to be limited in the coming years due to new regulations in both Germany and the Nordic region, in the same way that the EU agreement with Turkey has put an effective end to the migrant flow into Europe via the so-called western Balkan route. On the other hand, increased population growth and increased public spending could have a positive effect on the economies' long-term growth potential if a successful integration into the local labour markets takes place.

FIGURE 2A

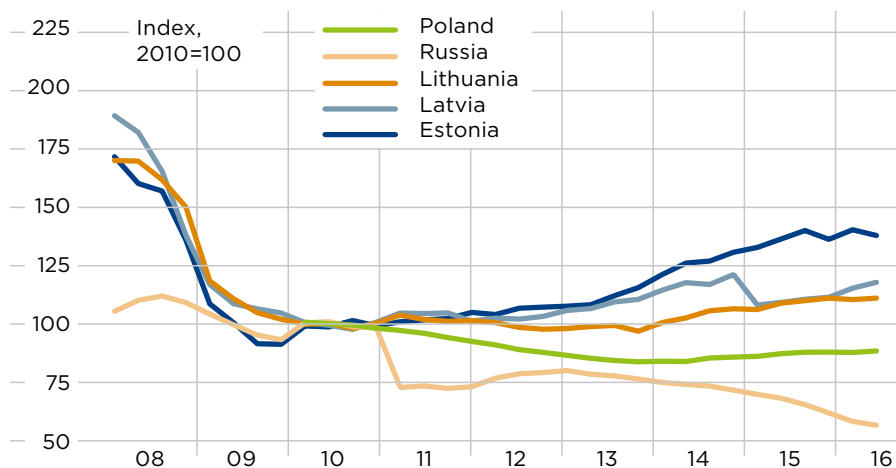
REAL HOUSE PRICES IN THE NORDICS AND GERMANY



Source: Nordea Markets and Macrobond

FIGURE 2B

REAL HOUSE PRICES IN REST OF BSR



Source: Nordea Markets and Macrobond

TABLE 2

ASYLUM SEEKERS, NO OF PERSONS

	2012	2013	2014	2015	Population	2015: %- of population
Germany (until 1990 former territory of the FRG)	77,485	126,705	202,645	476,510	82,162,000	0.58
Sweden	43,855	54,270	81,180	162,450	9,851,017	1.65
Finland	3,095	3,210	3,620	32,345	5,487,308	0.59
Norway	9,675	11,930	11,415	31,110	5,213,985	0.60
Denmark	6,045	7,170	14,680	20,935	5,707,251	0.37
Poland	10,750	15,240	8,020	12,190	37,967,209	0.03
Iceland	115	125	170	345	332,529	0.10
Latvia	205	195	375	330	1,968,957	0.02
Lithuania	645	400	440	315	2,888,558	0.01
Estonia	75	95	155	230	1,315,944	0.02

Source: Eurostat

WEAK CAPITAL FORMATION GROWTH

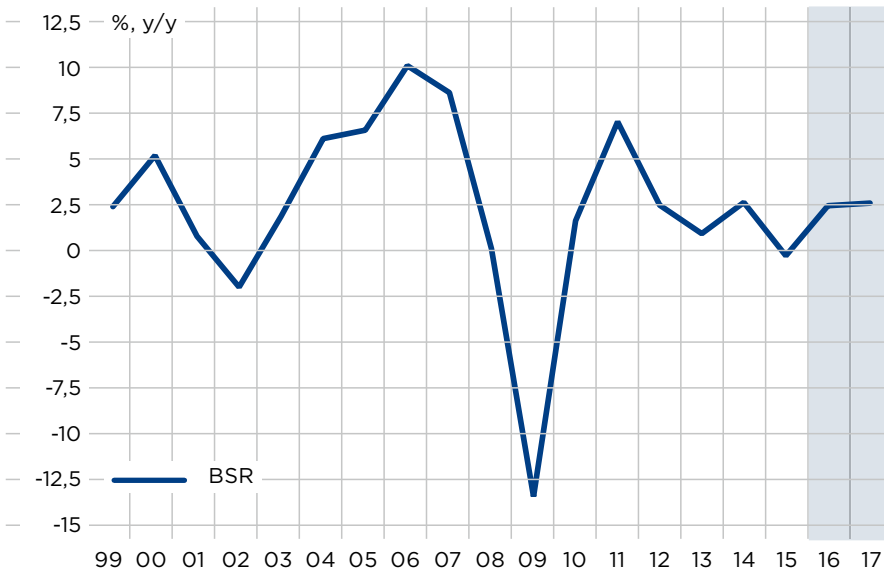
Fixed investment has been the weak spot in many countries over the past few years. This also holds true for the Baltic Sea Region. Due to a large drop in investments in Russia and Norway, growth was negative in 2015. However, in light of increased capacity utilisation and political initiatives, such as the EU investment plan for Europe, fixed investment activity is expected to pick up to around 2.5% during this year and next.

Concerns about the medium-term economic outlook are very likely to have affected companies' investment decisions as the investment dynamics are exceptionally weak given the current extremely lenient monetary policy environment with sub-zero rates in many countries. The UK's decision to leave the EU might also affect investment activities negatively.

It is also possible that the weak investment activity should be attributed to structural factors such as demographic trends and the service sector's rapidly increasing importance to the economy, as capital intensity is significantly lower in this part of the economy than in manufacturing. If so, it is important that the area's growth potential is promoted through structural reforms to raise productivity growth sufficiently to compensate for the demographic decline in the growth potential.

FIGURE 3

REAL FIXED BUSINESS INVESTMENT

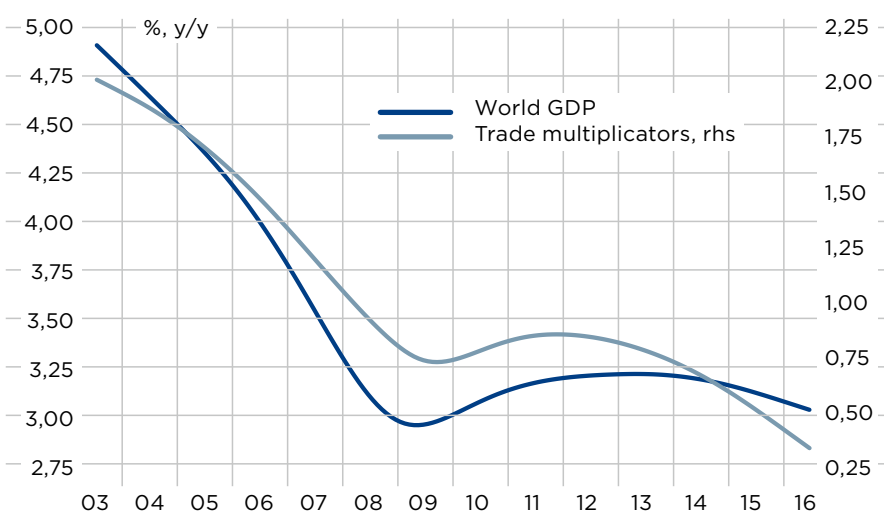


Note: forecasts in shaded area

Source: Nordea Markets and Macrobond

FIGURE 4

TREND IN GLOBAL GROWTH AND TRADE



Source: Nordea Markets and Macrobond

SMALL, OPEN ECONOMIES DEPEND ON TRADE

Many countries in the Baltic Sea region are small, open economies which by their nature are highly dependent on foreign trade. The structural slowdown in global growth and the trade multiplier¹ (Figure 4) is therefore hitting the region hard, just as the reciprocal sanctions by the EU and Russia. On the back of this, exports are expected to grow by a very modest 1.1% this year, while imports will increase by 2.0%. Next year trade is expected to show stronger growth due to an expected international recovery led by Emerging Markets.

The Baltic Sea Region continues to post a current account surplus of 4-6% of GDP;

¹ The trade multiplier is a ratio measuring the annual growth rate in global trade to the annual growth rate in global GDP.

a rate that has remained remarkably stable over the past decade. Not least the Scandinavian countries and Germany are running huge current account surpluses – a factor which, combined with solid public finances, has been of great significance to their status as safe havens in the financial markets.

BREXIT WILL HAVE AN IMPACT ON THE REGIONS' EXPORT PERFORMANCE

The outlook for the region is adversely affected by the UK's decision to exit the EU. The sharp depreciation of the pound sterling and an expected mild recession over the next years will negatively impact exports to the UK from the Baltic Sea Region. Norway is the largest exporter to the UK, however, most of its exports are oil related and unlikely to be affected by reduced economic activity. The rest of the BSR's exports to the UK is between 2% and 3% of GDP, while Russia, Finland and Estonia export less than 1.5% of GDP to the UK (Figure 5). Overall, the direct impact of Brexit on the BSR will most likely be relatively modest, but indirect effects such as reduced growth in the rest of the EU might affect the BSR negatively.

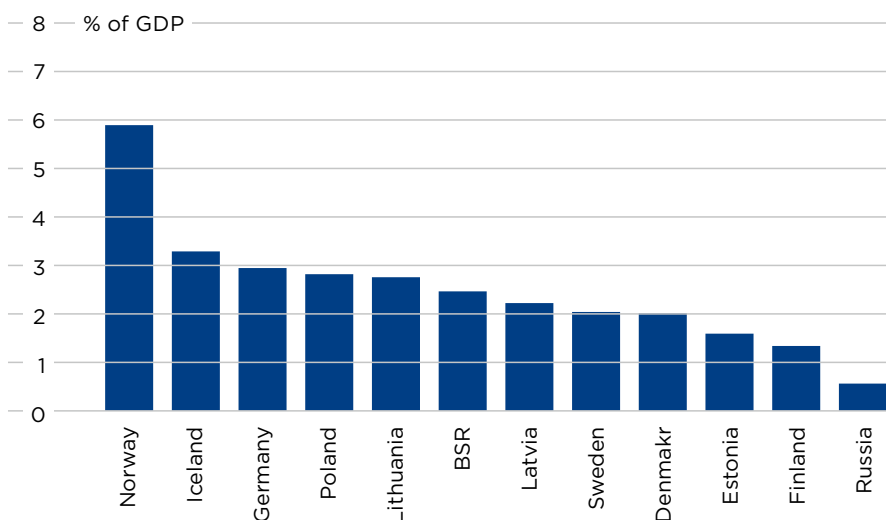
LABOUR MARKETS AND PUBLIC FINANCES

Unemployment, traditionally a major concern in the Baltic Sea Region, increased quickly during the Great Recession. But while unemployment continued to increase across the rest of Europe, pushed up by the sovereign debt crisis and austerity programmes, it fell back relatively quickly in the Baltic Sea Region and has stabilised at around 6%, while it is still close to 9% in the EU.

As regards the individual countries in the Baltic Sea Region, performance varies significantly. The lowest unemployment rates are found in Iceland, Germany and Norway where less than 5% of the labour force was out of work by end-2015. However, while unemployment rates have been declining continuously in Iceland and Germany over the past years, the labour market has deteriorated seriously in Norway over the past year as a consequence of the dramatic fall in the oil price.

FIGURE 5

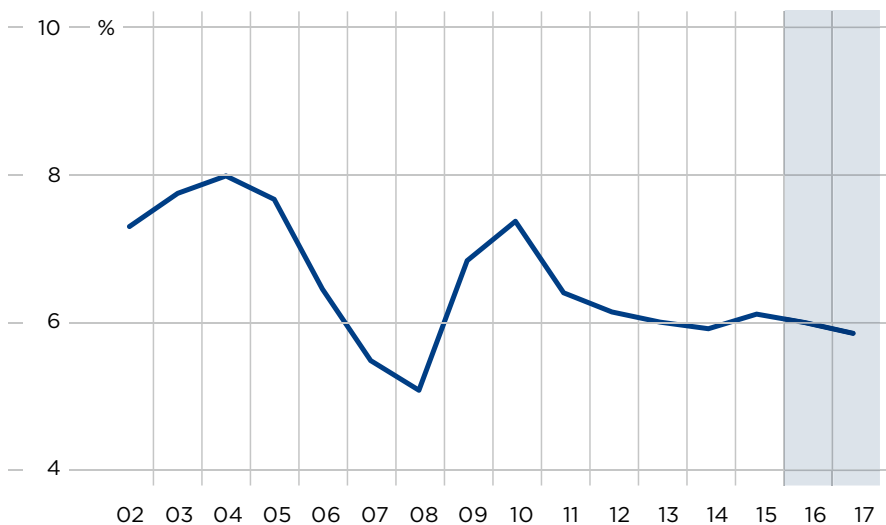
EXPORTS TO UK, SHARE OF GDP



Source: Nordea Markets and Macrobond

FIGURE 6

UNEMPLOYMENT RATE, %



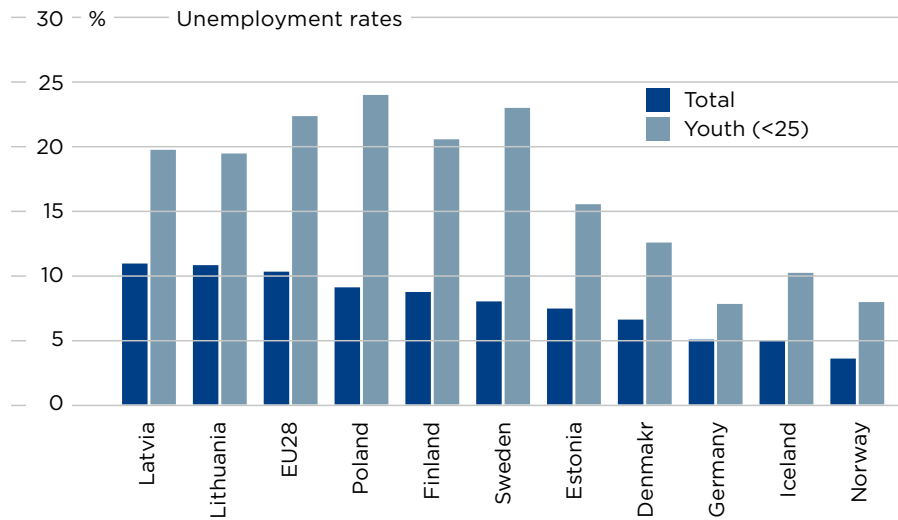
Source: Nordea Markets and Macrobond

The highest rates are found in Latvia and Finland, where unemployment hovers around 10%. This indicates structural problems and that these countries are neighbouring crisis-stricken Russia.

A key challenge in many parts of the Baltic Sea Region is the high level of youth unemployment (Figure 7). In Finland, Poland, Sweden, Latvia and Lithuania, youth unemployment rates are above or close to 20%, whereas Germany and Iceland are the best-performing countries in the region with youth unemployment below 10%. In Sweden, the youth unemployment rate is around three times as high as the labour force average. In Europe, only a handful of countries have wider unemployment rate differences across these segments of the labour market. In the Baltic Sea Region, Poland, Norway (at much lower absolute levels), Estonia and Finland follow with youth unemployment rates that are two to two and a half times as high as overall unemployment.

FIGURE 7

UNEMPLOYMENT RATES - YOUTH AND TOTAL, per cent of labour force



Source: Nordea Markets and Macrobond

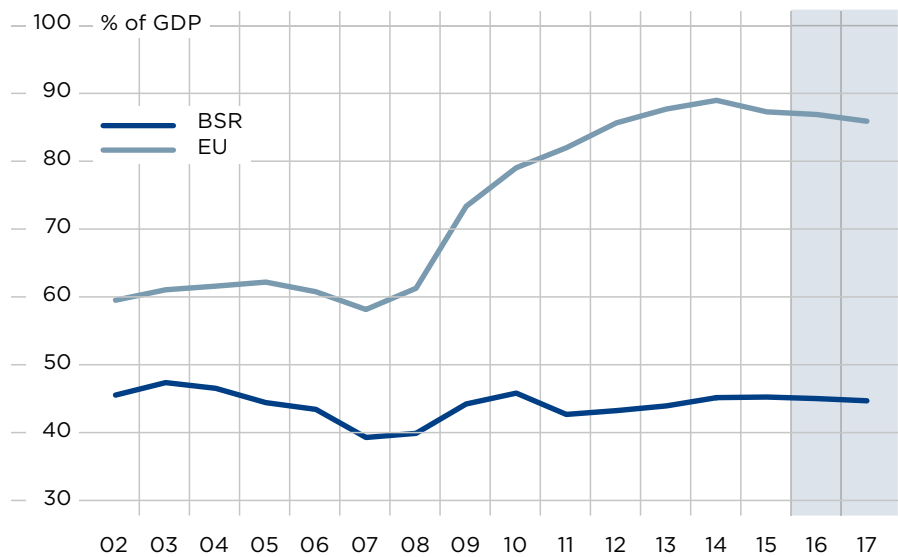
STRONG FISCAL POSITION

In spite of a significant weakening due to the dramatic drop in oil prices, Norway managed to keep a solid surplus on the government budget balance in 2015 of more than 5% of GDP. This helped the Baltic Sea Region to once again run an overall budget surplus in 2015 of 0.5% of GDP. Also Estonia, Germany and Iceland ran budget surpluses in 2015, whereas Finland and Russia ran relatively large deficits of around 3.5% of GDP.

Germany is facing the largest public debt in the region. The gross debt to GDP ratio stood at more than 70% of GDP in 2015. Since 2010, German debt levels have stabilised and the constitutional balanced budget rule aims at a gradual reduction of current debt levels. Finland saw debt levels increase the most in 2015, rising by about 3% points to 62% of GDP. All other EU countries in the region are facing debt to GDP levels comfortably within the EU's 60% threshold.

FIGURE 8

PUBLIC DEBT IN BSR AND EU



Source: Nordea Markets and Macrobond

The Baltic Sea Region is actually one of the best performing regions in the world when it comes to economic governance. It's therefore no wonder that Germany, Denmark, Norway and Sweden belong to the small group of nine countries in the world that have been assigned AAA ratings by the three large rating agencies Moody's, Standard & Poor's and Fitch.

Strong public finances are therefore helping to ensure that the overall economic outlook for the region remains solid amid the difficulties it is facing due to the weak international economy, not least the poor trade performance globally, since it helps to keep interest rates as low as possible and supports the domestically driven upswing in the region.

COMPETITIVENESS OF THE BALTIC SEA REGION

Prosperity across the Baltic Sea Region in 2016
The Baltic Sea Region in the Global Economy:
Trade and investment
The Foundations of Baltic Sea Region:
Measures of Underlying Competitiveness



COMPETITIVENESS OF THE BALTIC SEA REGION

What is the level of prosperity that the Baltic Sea Region can sustain for its citizens given its attractiveness as a place to do business? This is the key question that our analysis of competitiveness across the region puts into focus. While the previous section discussed the short-term movements of the economy that are often cyclically driven, we are here concerned with the underlying trends that drive prosperity outcomes over the medium- to long-term.

In line with previous editions of this Report, we measure competitiveness through indicators at three different levels.

First, *prosperity outcomes* give a sense of how competitiveness is reflected in the standard of living; the ultimate objective of economic policy. Second, indicators of *economic activity* track the translation of competitiveness into ultimate prosperity outcomes, with short term changes often significantly affected by cyclical factors. And third, *competitiveness fundamentals* are the root causes of these higher level outcomes and observed indicators, and are the level at which economic policy can most effectively intervene.

Because the relationships between individual fundamentals, indicators, and outcomes are multifaceted and complex, an integrated view of all three layers provides more robust insights than overreliance on one individual dimension of data. In addition, the *structural profile* of the region – capturing natural conditions that policy makers have to take for given – also has an impact on outcomes and competitiveness dynamics.

HOW TO MEASURE COMPETITIVENESS?

Outcomes
(Directly Related to Prosperity)

- Ultimate policy objectives

Economic Activity
(Channels from Root Causes to Prosperity)

- Faster moving symptoms of economic channels from fundamentals to outcomes

Fundamental Competitiveness
(Root Causes of Prosperity)

- Slower moving underlying factors that have to change to impact outcomes

Structural Profile
(Nature or Legacy Factors Affecting Outcomes)

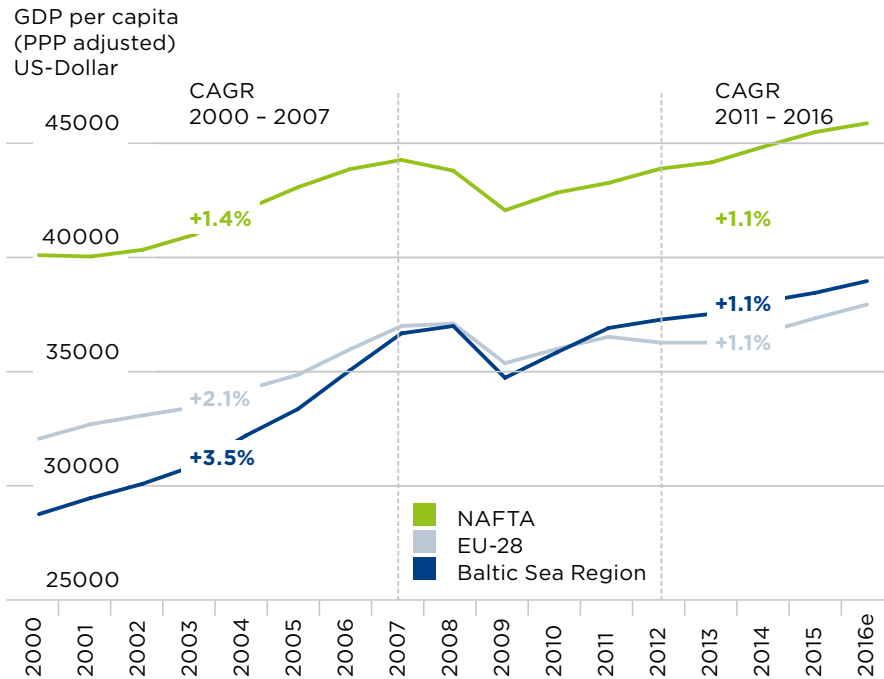
- Factors that are given in the medium-term and affect how fundamentals drive outcomes

We focus in this Report on aggregated data for the entire region as well as on national data. The main reason is our desire to profile overall patterns of competitiveness in this part of the world, and to provide policy makers with a focus on the entire macro-region factual support for the decisions they face.

However, both firms and policy makers need to be aware of the significant heterogeneity across the region. Standards of living differ widely, as do the conditions under which companies operate. These differences are most pronounced between the Nordics/Germany on the one hand and the Baltics/Poland/Russia on the other. But even within these groups the differences are significant, even more so in the more detailed profile of economic activity and competitiveness fundamentals than on headline GDP outcomes. Previous editions of this Report have also shown that subnational regions within countries differ significantly on all of these dimensions.

FIGURE 9

PRE- AND POST-CRISIS PROSPERITY TRAJECTORIES



PROSPERITY ACROSS THE BALTIC SEA REGION IN 2016

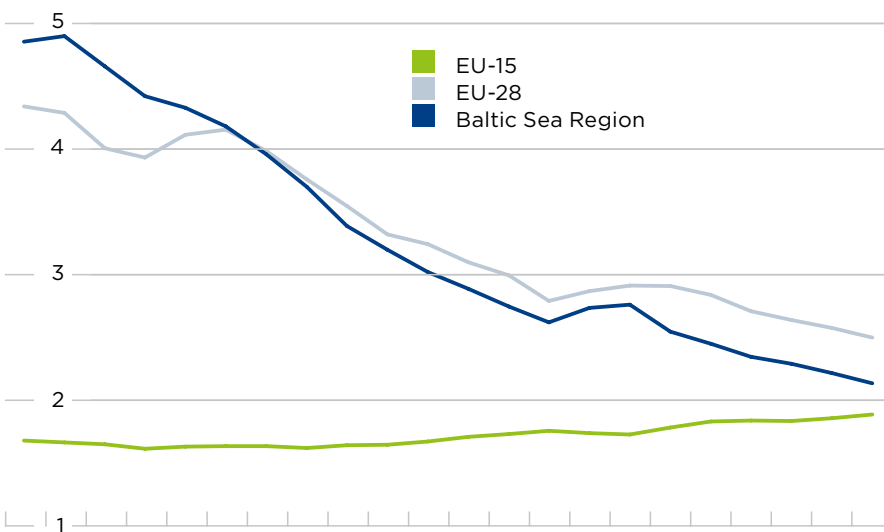
Average prosperity, measured by GDP per capita (adjusted for purchasing power), in the Baltic Sea Region is high in international comparison and continues to grow at a solid rate. By 2012, the region had already surpassed its pre-crisis prosperity level – a feat that the NAFTA region achieved only in 2013 and the EU-27 last year. The Baltic Sea Region experienced a stronger post-crisis recovery but then settled on a more modest growth path at virtually the same rate as the NAFTA economies. The EU was facing a longer period of turmoil, related to the sovereign debt crisis in Southern Europe, but since 2012 has also achieved stable growth. Remarkably, these three regions now see prosperity growing at virtually the same rate of about 1.1% per annum.

For Europe, and for the Baltic Sea Region in particular, this is a significantly lower rate of prosperity growth than in the pre-crisis era. It also implies that there is currently no catch-up to the still more prosperous NAFTA economies. A closer look at the data reveals that this slow-down in growth has affected both richer and poorer parts of the region. Catch-up within Europe and the Baltic Sea Region has remained intact, both lost significantly in speed. This is in some ways a more dramatic development for the Baltic Sea Region, where catch-up had been exceptionally stronger before. Between 2000 and 2008, the ratio in prosperity levels between the richest and poorest country dropped by 0.20% per year in the Baltic Sea Region and by 0.17% in the EU-28. This rate of catch-up has now dropped to 0.08% for both². This is still a very respectable rate of convergence compared to other regions, even if it does not keep up with the pre-crisis period.

FIGURE 10

PROSPERITY DISPERSION WITHIN CROSS-NATIONAL REGIONS, 1995 - 2016

Ratio of GDP (PPP adjusted) per Capita, Richest to Poorest Country per Region

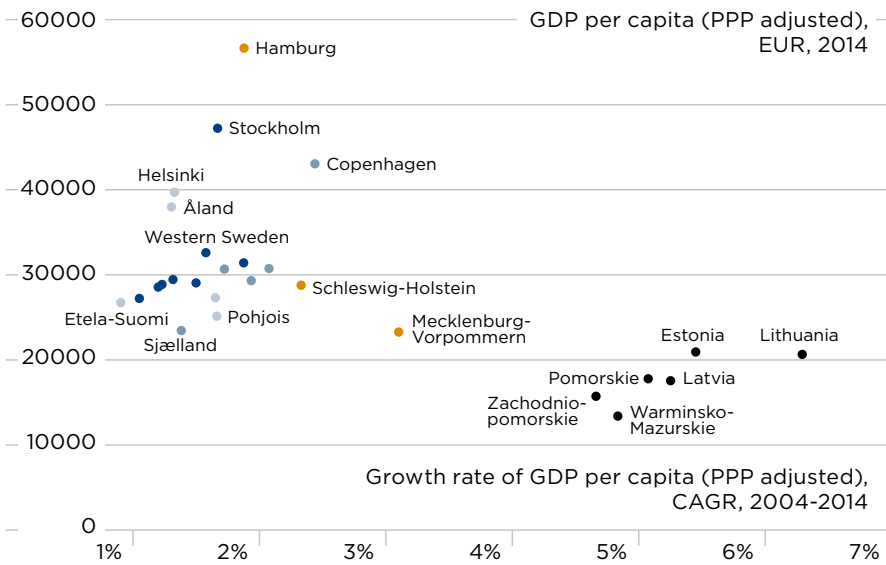


Note: Norway and Russia levels adjusted for natural resource sector; Luxembourg excluded, Ireland adjusted to GNP per capita
Source: Conference Board (2016)

² A .2 drop in this ratio implies that the gap is reduced by 20% of the prosperity level of the poorest country.

FIGURE 11

PROSPERITY OVER TIME NUTS 2 Regions in the Baltic Sea Region



Source: Eurostat (2016)

The two exceptions to the general pattern are Finland and Russia. Over the last five years, Finland has registered the weakest prosperity growth rate across the entire region, despite a prosperity level that is behind its advanced peers. Russia's prosperity growth rate over this period has been only at the rate of the most prosperous countries in the region, despite being at only half the prosperity level of these countries.

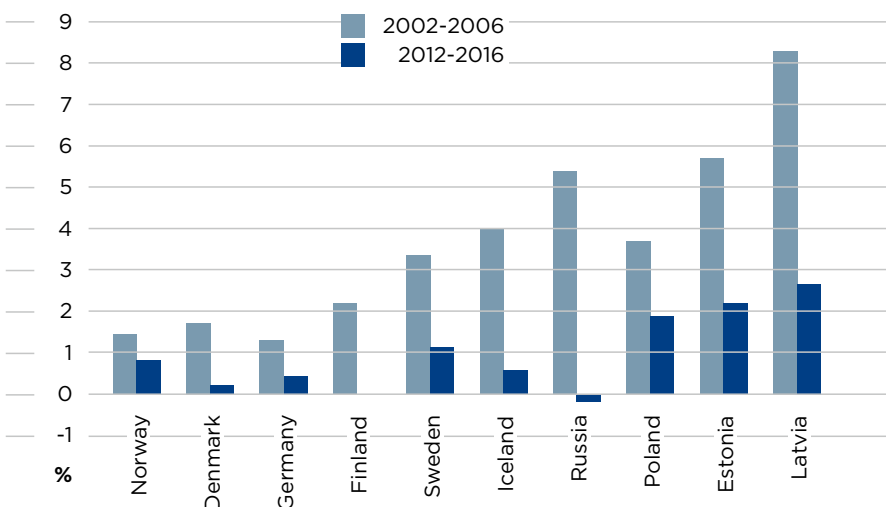
While convergence has been strong across countries in the Baltic Sea Region, prosperity differences across subnational regions within countries have tended to be sustained or even grown. Especially dominant metropolitan regions have tended to grow strongly, while less densely populated and more remote regions have often fallen behind. Convergence of less prosperous regions is not automatic; it depends on the specific set of benefits that a location offers to companies. Previous editions of the State of the Region Report have shown that there are indeed significant differences in business environment conditions across subnational regions.

This differences in prosperity levels are even more accentuated if taking into account that the larger metro areas have experienced significantly higher population growth during this period. The Baltic Sea Region is, in fact, quite highly urbanized despite its large geographic size relative to overall population: Hamburg, Stockholm, Copenhagen, and Helsinki alone account for close to 40% of the total GDP generated in their countries' regions in the Baltic Sea Region.

FIGURE 12

LABOUR PRODUCTIVITY GROWTH

GDP per Hour Worked,
Rate of annual change



Source: Groningen Growth and Development Centre and The Conference Board (2016), authors' calculations

What factors drive the changes in prosperity growth rates? A decomposition of prosperity outcomes into labour productivity and labour mobilisation, its two components, provides a closer perspective.

LABOUR PRODUCTIVITY GROWTH

has flattened since the crisis, and this is a trend that has continued over the last year. While the Baltic Sea Region registered around 2.75% annual productivity growth in the five years prior to 2006, this measure has now dropped to less than 1%. Six countries in the region are expected to report slowing labour productivity growth in 2016. Germany, Finland, Denmark, and Norway all have less than 1% annual productivity growth. Russia's overall labour productivity has now stabilized after a significant drop last year, but has remained flat over the last five years.

The slowdown in productivity is a global challenge, especially for advanced economies. One important new observation that has come to the forefront recently, is the increasing heterogeneity across firms. While globally leading firms continue to innovate and increase productivity at a high rate, it seems that an increasingly large share of other firms does not keep pace. The challenge is not so much innovation at the global productivity frontier but diffusion³. A key transmission mechanism is investment, especially investment in so-called knowledge-based capital. Here the data does show low growth post-crisis despite the low financing costs. Another aspect is the shift of economies towards lower value-added service sectors.

The other component driving improvements in prosperity is **LABOUR MOBILISATION GROWTH**, capturing changes across areas like demographics, unemployment, and working hours. Here too, the data shows a clear flattening. In the decade prior to the crisis the Baltic Sea Region had added almost 10% hours per capita, outperforming all other macro-regions in our sample. Following the sharp adjustment during the crisis, labour mobilisation has recovered only gradually, and the Region remains below its pre-crisis level of labour mobilisation. For 2016, the region is projected to report essentially flat hours per capita, below most other advanced macro regions we are tracking.

While labour mobilisation is 'bounded above', i.e. there is an upper level beyond which it cannot grow (and as an economy is approaching this level, further growth is likely to get harder), labour productivity is not limited in this way. This gives labour productivity a critical role for long-term growth.

In the short term, however, labour mobilisation has proven to be faster to change. And it is important not only at the aggregate level as a contributor to overall prosperity, but also at an individual level where work is an important contributor to inclusion in society even at low levels of pay and productivity. Therefore the slowdowns of both productivity and of mobilisation are issues that policymakers across the region should be concerned about.

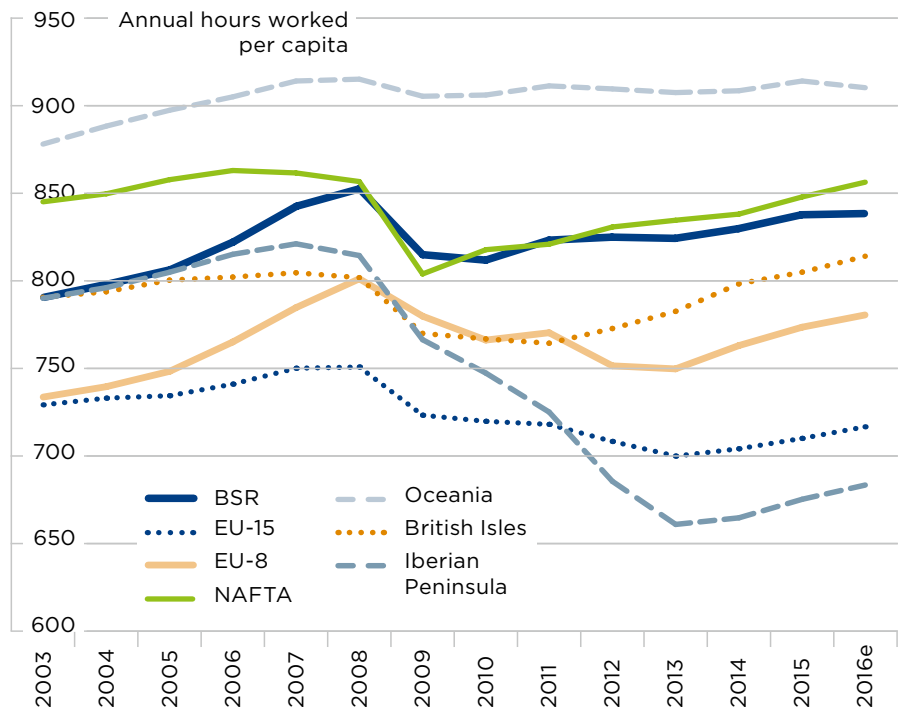
Labour mobilisation and productivity differ significantly across the Baltic Sea Region. To understand the systematic patterns in these differences it turns out that it is useful to further differentiate labour mobilisation by the effect of labour markets and demographics, captured by the share of employees in the population, and the effect of labour relations, captured by the number of hours worked per employee. More prosperous countries tend to achieve high levels of productivity as well as engaging a large share of their population in the labour market, while they exert fewer hours of work per employee.

The Baltic Sea Region achieves its strong overall performance through a quite balanced performance across all three elements of prosperity. Its performance differs from the EU-28 in particular in the mobilisation factor; it has labour market institutions that have for a much larger share of the population opened ways into employment. The EU-15, a more

³ Find more research on this from the OECD at <http://www.oecd.org/eco/the-future-of-productivity.htm>, also covering some of the larger Baltic Sea Region countries.

FIGURE 13

LABOUR MOBILISATION OVER TIME Selected Regions



Source: Groningen Growth and Development Centre and The Conference Board (2015), authors' calculations

FIGURE 14

PROSPERITY DECOMPOSITION

Baltic Sea Region Countries and Global Regions in 2016

GDP per Capita (PPP)	• Demographics • Labor Market Mobilization-Factor	• Labor Relations Intensity-Factor	• Skill, Capital • TFP Productivity-Factor
Norway	Iceland	Poland	Norway
Sweden	Germany	Russia	Germany
Germany	Norway	Latvia	Denmark
Denmark	Denmark	Iceland	Sweden
Iceland	Russia	Lithuania	EU-15
NAFTA	Sweden	Estonia	Finland
Finland	Baltic Sea Region	NAFTA	NAFTA
EU-15	Estonia	EU-8	EU-28
Baltic Sea Region	Lithuania	Baltic Sea Region	Baltic Sea Region
EU-28	NAFTA	Finland	Iceland
Estonia	EU-15	EU-28	Lithuania
Lithuania	Latvia	Sweden	Estonia
Poland	Finland	EU-15	EU-10
Russia	EU-28	Denmark	Poland
EU-11	EU-11	Norway	Latvia
Latvia	Poland	Germany	Russia

Note: Working hours for some countries are estimated
Source: Groningen Growth and Development Centre and The Conference Board (2016), authors' calculations

homogenous group of prosperous Western European countries, achieves a prosperity level that is slightly higher than in the Baltic Sea Region as the result of higher productivity, while it is behind on both aspects of labour mobilisation.

Looking more closely at individual countries in the Baltic Sea Region, Norway, Denmark, and Sweden all combine high productivity with high labour market mobilisation but low labour intensity. Germany falls into the same pattern but with even more extreme differences across these three dimensions. Poland, and to a lesser degree also Latvia and Finland, combine low mobilisation of people into the labour force with long working hours for those that do have a job. Russia registers high levels of mobilisation on both accounts, but also the lowest productivity levels across the Baltic Sea Region. This data is indicative of large difference in labour market institutions, as well as different challenges across countries for raising prosperity levels.

Average GDP per capita is increasingly being challenged as a comprehensive measure of the quality of life. This is particularly relevant for the Baltic Sea Region, as it is often perceived to offer an attractive combination of economic prosperity and other factors that matter for the actual living conditions of the population.

The Social Progress Index, an annual assessment of countries' performance on a range of outcomes beyond GDP, is one example of a new range of tools that aims to enhance our understanding of the standard of living. It provides an overall score, a break-down along key pillars and individual components of social progress, and identifies countries' relative strength and weakness compared to their most relevant peers.⁴

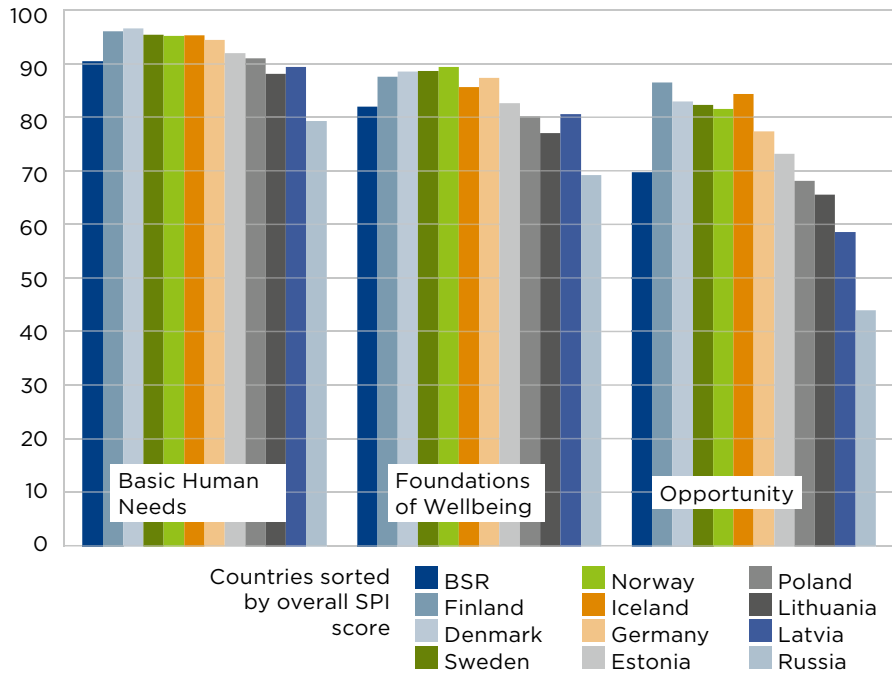
The Baltic Sea Region continues to perform very high on the Social Progress Index. Five countries from the region are among the global top ten, and the average absolute performance of the region has increased relative to last year. Finland, Denmark, and Estonia register particularly high levels of social progress relative to their respective GDP per capita levels. The first two as well as Lithuania have seen the strongest improvements relative to last year.

⁴ Find more background at <http://www.socialprogressimperative.org/>.

FIGURE 15

SOCIAL PROGRESS INDEX Baltic Sea Region Countries, 2016

SPI Score
(100 = theoretical best)



Note: BSR scores are calculated as population-weighted sum of regional scores
Source: Social Progress Index (2016)

The analysis of social progress across all European 'NUTS 2'-regions⁵ done together with the European Commission shows even more clearly the leading role of the Baltic Sea Region in Europe on social progress. While the Baltics and Polish regions lag behind the average of the Baltic Sea Region, they lead versus most of their peers in Central and Eastern Europe. And the Nordics are clearly leading the way relative to other parts of Western Europe.

The index distinguishes between three separate pillars: basic human needs such as shelter, safety, and basic medical care; foundations of wellbeing like environmental quality and access to information and education; and opportunities related to personal rights, advanced skills, and tolerance. While most countries in Europe and the Baltic Sea Region have achieved solid performance on the first two pillars there remains quite significant variation on the last one. This gap has increased, and is the core reason why especially Russia but to a lesser degree also Latvia lag behind their Baltic Sea Region neighbours.

THE BALTIC SEA REGION IN THE GLOBAL ECONOMY: TRADE AND INVESTMENT

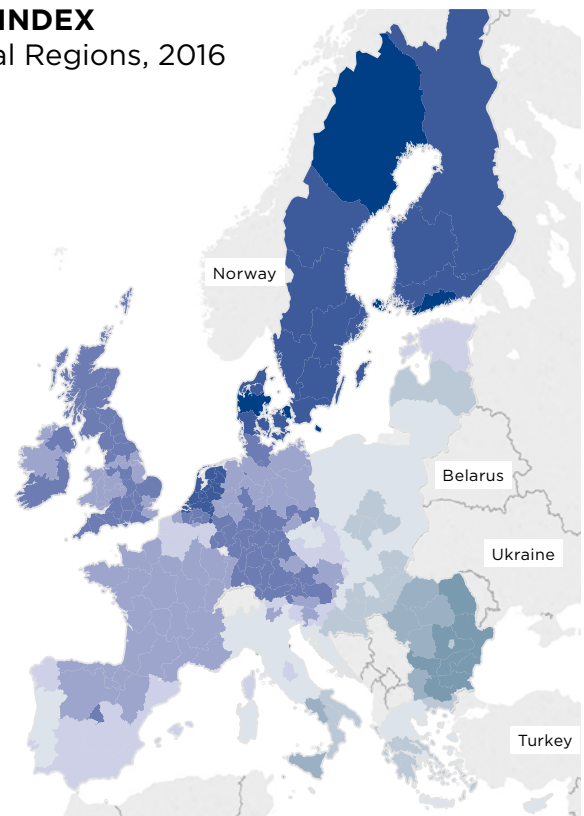
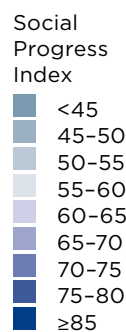
As a macro-region dominated by small open economies, the Baltic Sea Region is especially reliant on its position in the global economy. The dramatic growth of world trade in the period prior to the global crisis created significant opportunities for the region.

The environment for global trade seems to have fundamentally changed in the post-crisis era. A gradually slowing Chinese economy, changes on world energy markets, and the relatively sluggish recovery in North America and particularly Europe have left their mark on global trade. The last saw a dramatic drop in the value of trade by almost 12%. The Baltic Sea Region was even harder hit, seeing exports drop by 17%. This stands out

⁵ More background is available at http://ec.europa.eu/regional_policy/en/information/maps/social_progress

FIGURE 16

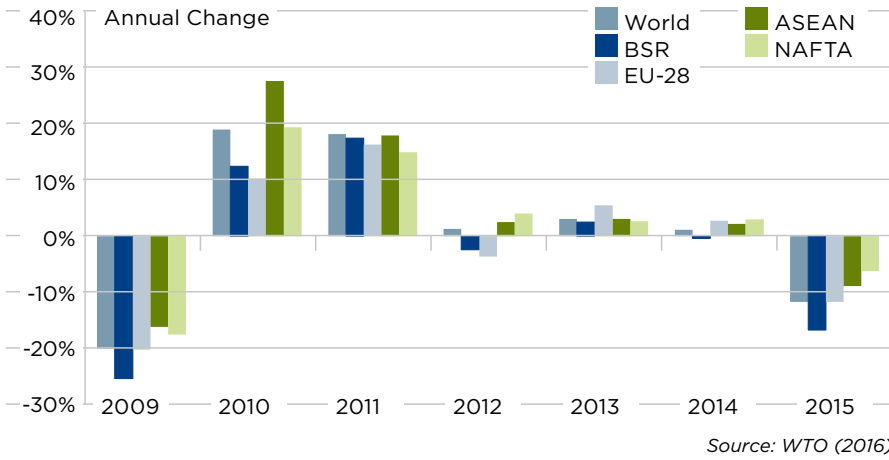
SOCIAL PROGRESS INDEX European Subnational Regions, 2016



Source: European Commission - Social Progress Index (2016)

FIGURE 17

TRADE DYNAMICS. Annual Growth of Export Value

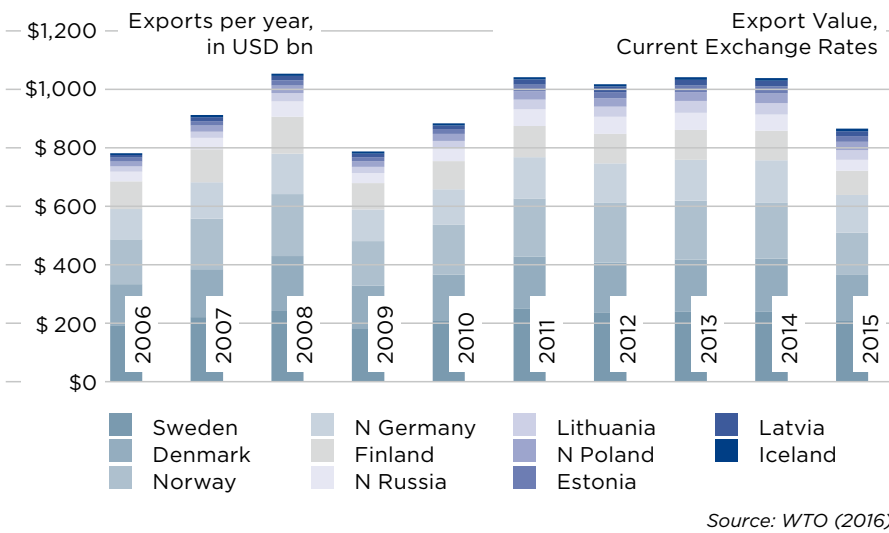


relative to other world regions like the EU-28, NAFTA, and ASEAN which saw trade drop only at about the global rate or less.

The drop in oil prices is part of the explanation for the performance of the Baltic Sea Region: Norway and Russia saw the value of their exports drop by 25% and 30% respectively. But the Baltic countries and Finland also saw a drop of more than 15%, and the other large exporters Sweden, Germany, and Denmark registered reductions between 10% and 15%. The total value of exports is now only slightly ahead the crisis year of 2009, and below the 2007 level.

FIGURE 18

TOTAL EXPORT VALUE OVER TIME. Baltic Sea Region

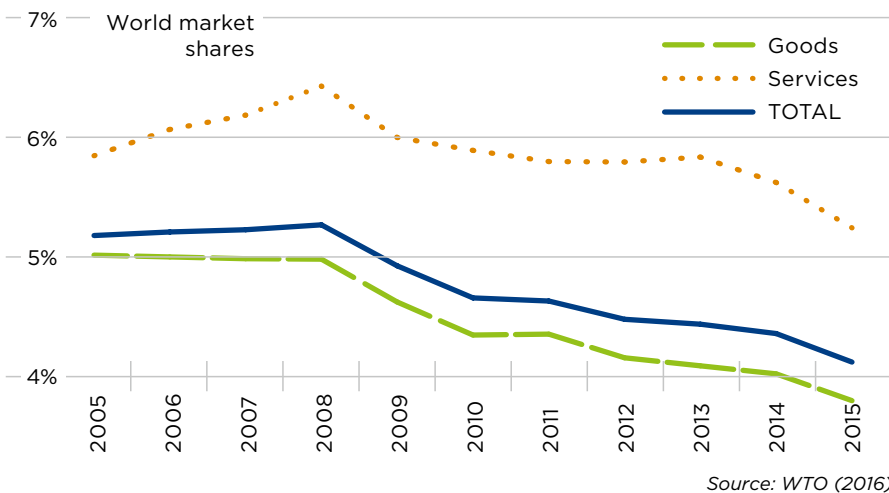


These changes in absolute trade value result in a continued market share erosion for the Baltic Sea Region among global exporters. 2015 saw the largest drop in market share for the region since the crisis years 2009 and 2010. Clearly the oil price drop is an important factor. But most other countries in the region also saw market share losses. Only Germany, Poland, and – at a very low absolute level – Iceland, managed to gain market share last year. And the last two years the region also lost market share faster in services, a growing part of global trade, than in goods.

Exports dynamics are driven both by the geographical markets served, and the product and service areas in which firms from specific countries are active. We have for the first time this year calculated an 'Export Pull' indicator for the Baltic Sea Region and its countries. This indicator tracks the trade-weighted real growth rate in the export markets served, thus providing an indication of the opportunities for growing exports given a country's existing footprint on foreign markets. Across all countries and years this indicator does show the expected relationship to export growth, however there are clearly also other factors like sectoral composition at work.

FIGURE 19

WORLD EXPORT MARKET SHARES
Baltic Sea Region, 2005-2015



For the Baltic Sea Region overall this export pull tracker has recovered from the low levels in 2012/13 and is now stable, also in the projection for 2016. Germany has over the years had the most favourable international market environment, arguably because of its wide exposure to emerging markets. Russia and Norway also have a favourable export market mix,

but are due to their focus on energy exports less able to exploit these opportunities. Denmark and Norway also benefited from the robust recent growth in Sweden, one of their top export markets. The Baltics and Poland are conversely facing structurally more difficult conditions with their strong exposure to low-growth Europe as well as Russia and the Commonwealth of Independent States (CIS). Their export growth has to be earned by taking market shares from other exporters or domestic companies in their target markets.

The recent drop in Baltic Sea Region exports is hard to reconcile with the growth on export markets. Growth in these markets was in 2015 similar to the previous years, even though the heterogeneity in market conditions faced by individual countries across the Baltic Sea Region has increased. At the same time the market environment in 2012 and 2013 was more difficult while exports did hold up relatively well. Structural factors such as sectoral specialisation patterns, as well as shifts in serving foreign markets through foreign direct investment (FDI) or selling/licensing of knowledge instead of exports might explain the difference.

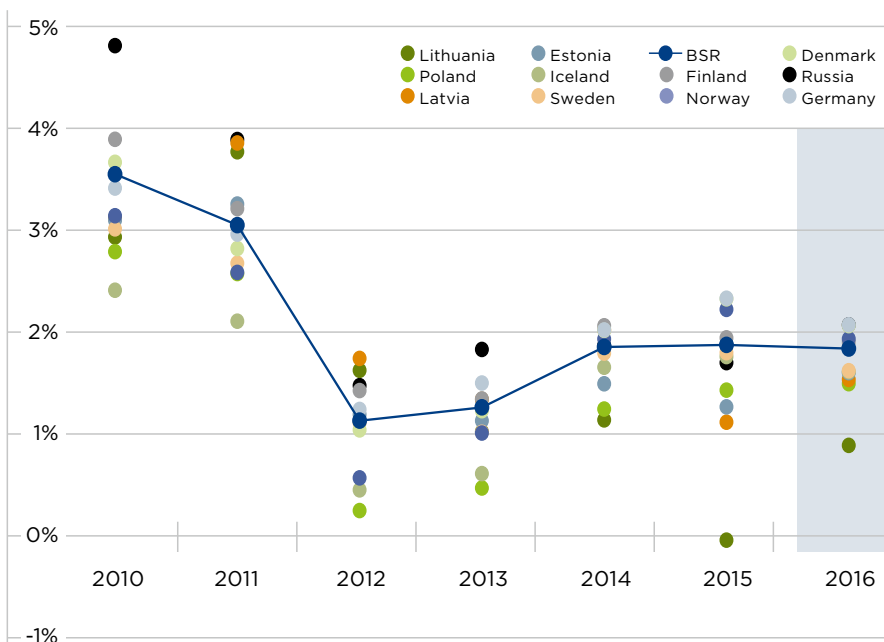
Many large firms in particular have shifted from an export-focused internationalisation strategy to one that relies heavily on FDI as well. Previous years' State of the Region Reports have documented how this shift from trade to FDI has been evident especially for the Nordic countries. FDI flows are highly cyclical: global FDI activity reached a peak in 2007 after almost tripling over the previous five years, collapsed during the crisis, and then recovered somewhat. In 2015, FDI flows increased by 30% compared to the previous year, reaching the second highest annual flow on record at about 85% of the 2007 level.

For the Baltic Sea Region, the developments were not quite as dynamic. While outflows did increase by more than 10%, inflows dropped by almost a third. Here the one-off effect of the Microsoft acquisition of Nokia's mobile phone business is a key driving factor. While in 2014 this made Finland the largest recipient of FDI inflows, that top spot went back to Sweden in 2015. Among them these two countries account again for more than two thirds of all FDI inflows into the Baltic Sea Region. Sweden registered more of a tripling of FDI inflows in 2015 against 2014. The only two other countries registering a year-to-year increase in inflows were Germany

FIGURE 20

EXPORT PULL INDICATOR

Trade Weighted Real Growth Rate in Export Markets

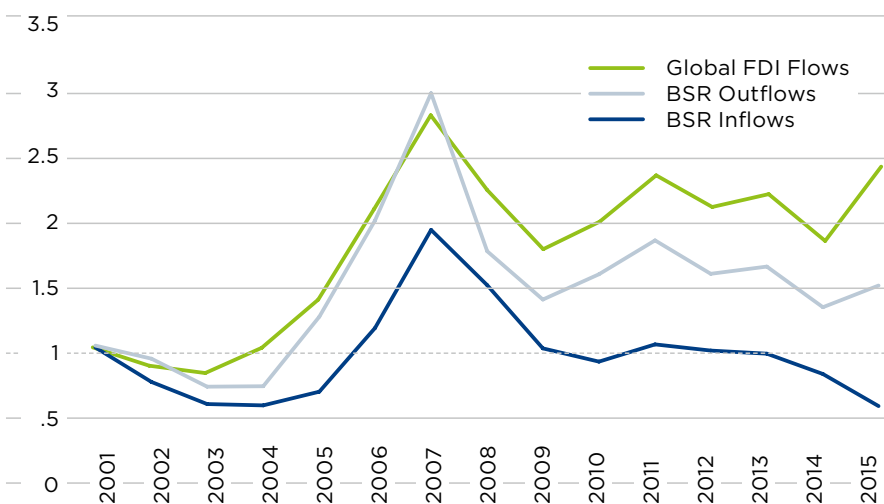


Source: WTO (2016), Conference Board (2016), author's calculations

FIGURE 21

GLOBAL FDI FLOWS OVER TIME

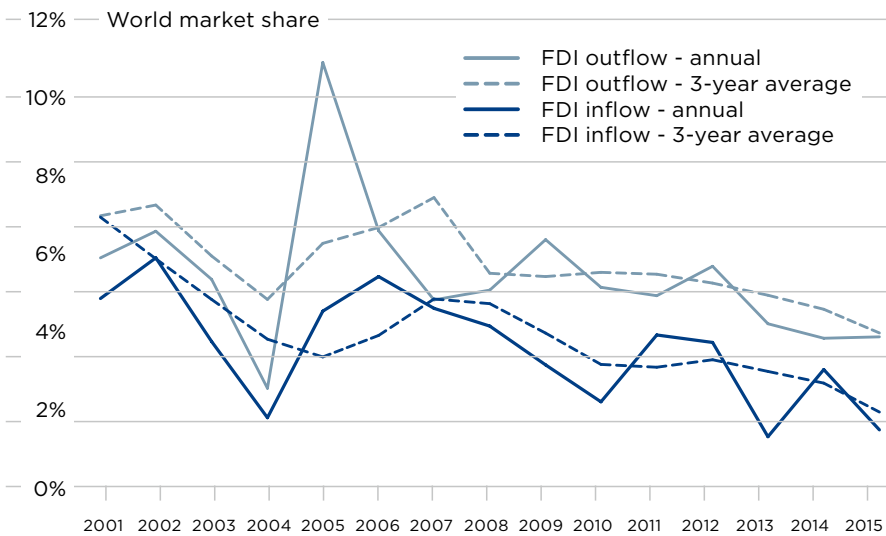
Current Prices and Exchange Rates, 2001 = 1



Source: UNCTAD (2015; 2016), author's analysis.

FIGURE 22

BALTIC SEA REGION FDI FLOWS



Source: UNCTAD (2016), author's analysis

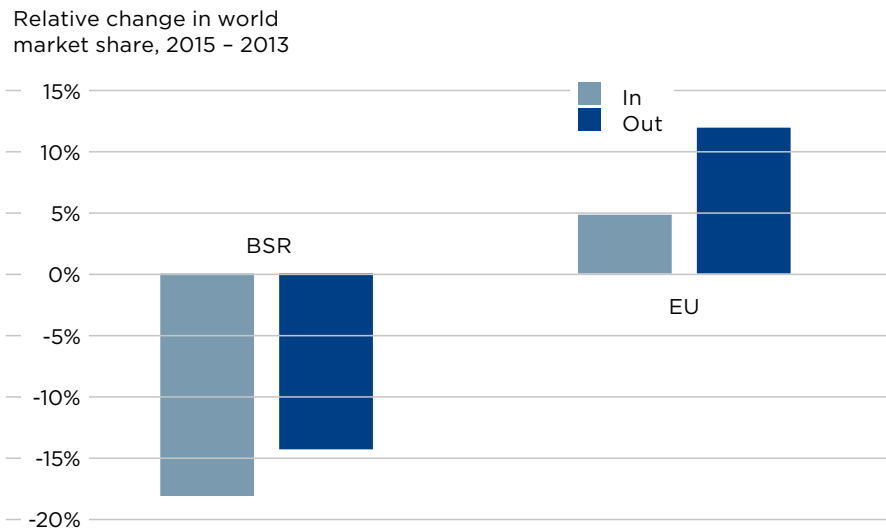
and (just) Latvia; all other countries saw sometimes dramatic reductions. The single biggest driver of falling inflows across the Baltic Sea Region was Norway which saw sizeable inflows in 2014 turn to significant repatriation of assets from foreign investors.

The drop in absolute inflows is reflected in a significant erosion of the Baltic Sea Region's share in the global market for FDI inflows. In 2015 the Region attracted 1.5% of all global FDI inflows; the three-year moving average now stands at close to 2%. This compares to 4.5% immediately before the crisis, and even higher shares at the start of the millennium. The drop in outward FDI, not as dramatic but also clearly visible, puts at least in doubt the hypothesis that the fall in export market share is compensated by a stronger focus on FDI as a mode of internationalisation. And falling inward FDI raises questions about the Baltic Sea Region's attractiveness as a place to do business, especially in terms of using the region as a platform to serve larger markets elsewhere.

FIGURE 23

FDI STOCKS OVER TIME

Changes in World Market Share, 2015-2013



Source: UNCTAD (2016), author's analysis.

The slowly eroding relative attractiveness of the Baltic Sea Region as a destination for FDI is also visible in the data on FDI stocks. Both absolute values and market shares have dropped for inward and outward FDI. Surprisingly, the experience of the Baltic Sea Region over the last three years has been diverging from the EU-28: While the EU has since its share in both global inward and outward FDI stocks grow (a large amount of which is among EU member countries), the Baltic Sea Region has lost almost a fifth of its world market share during this period.

Differences across countries within the Baltic Sea Region are again significant. Sweden accounts for 63% of the fall in inward FDI stock over the last two years, Norway follows with 27%. Since they both had positive inflows over this period, the changing inward FDI stock is driven by adjustments made to the valuation of existing ownership stakes foreigners have in the two countries. At least part of this will be driven by movements in the exchange rate, reflecting a relative devaluation of local currencies against the USD. Denmark, Finland, and Germany, parts of the Euro-Zone or with their currency tied to it, have in the meantime seen small increases in the value of their inward FDI stock.

THE FOUNDATIONS OF BALTIC SEA REGION: MEASURES OF UNDERLYING COMPETITIVENESS

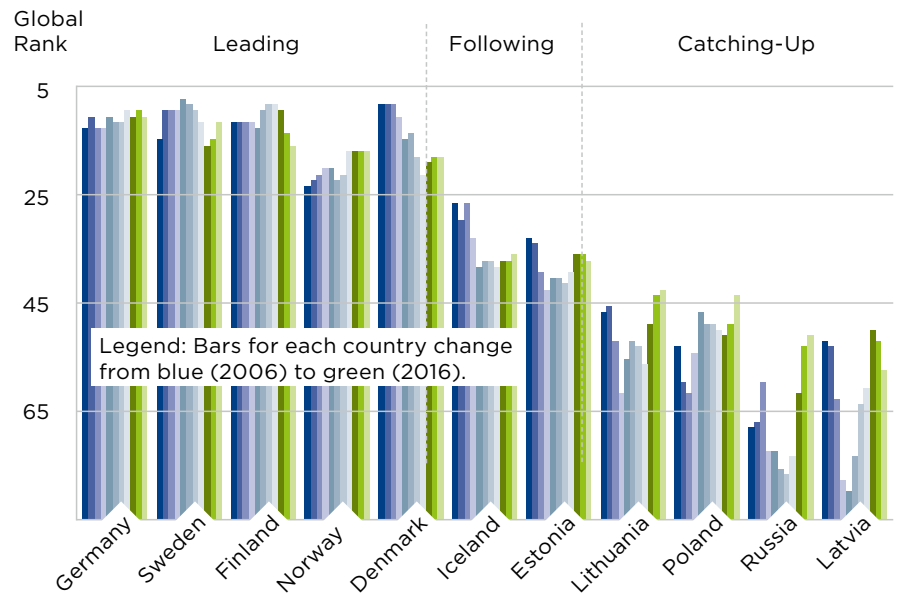
Underlying competitiveness, the aspects of business environment quality, cluster presence, and firm sophistication that together determine the level of prosperity that a location can sustain, is a concept that is inherently difficult to capture. It includes a wide range of factors that often interact in systemic ways to influence productivity and prosperity. Competitiveness rankings that aggregate these factors in often simplistic and somewhat arbitrary way, can provide two types of insights. They can capture the relative quality of a location as a place to do business versus other locations. And they can help understand whether the balance between prosperity and wages and competitiveness fundamentals has shifted, potentially signalling imbalances that can threaten the sustainability of prosperity or signal growth opportunities.

The Baltic Sea Region countries continue to rank high in the Global Competitiveness Report, the most widely used ranking of national competitiveness. In the 2016 ranking, Germany has kept the top spot in the region, ranking fifth globally. Finland has continued to lose ground and is now ranked tenth. This puts it behind Sweden, which has climbed back to the sixth rank it occupied three years ago. Norway and Denmark are just outside of the global top ten, keeping their ranking from last year. Iceland, ranked 27th, has surpassed Estonia at 30th and Poland (36th) and Lithuania (35th) are now virtually tied after Poland continued to improve its position. Russia moved up slightly to 43rd while Latvia (49th) the lowest ranked county in the Baltic Sea Region. Overall, these rankings suggest that the region is well placed to compete successfully in the global economy. It also does not signal major issues in terms of the sustainability of current levels of prosperity.

A closer look at the components of the overall index shows the Baltic Sea Region has particular strengths in higher education and training and innovation. Over the last decade the absolute score for the region has improved in technological readiness while it weakened somewhat in financial market development. Looking at individual countries, Denmark has seen the absolute assessment go up in innovation and health and primary education

FIGURE 24

GLOBAL COMPETITIVENESS RANKINGS OVER TIME Baltic Sea Region Countries, 2006-2016



Source: World Economic Forum (2016)

FIGURE 25

GLOBAL COMPETITIVENESS RANKINGS OVER TIME Baltic Sea Region Profile, Score by Pillar



Score is GDP-weighted average of country scores; Rank after elimination of BSR countries
Source: World Economic Forum (2016), author's calculations

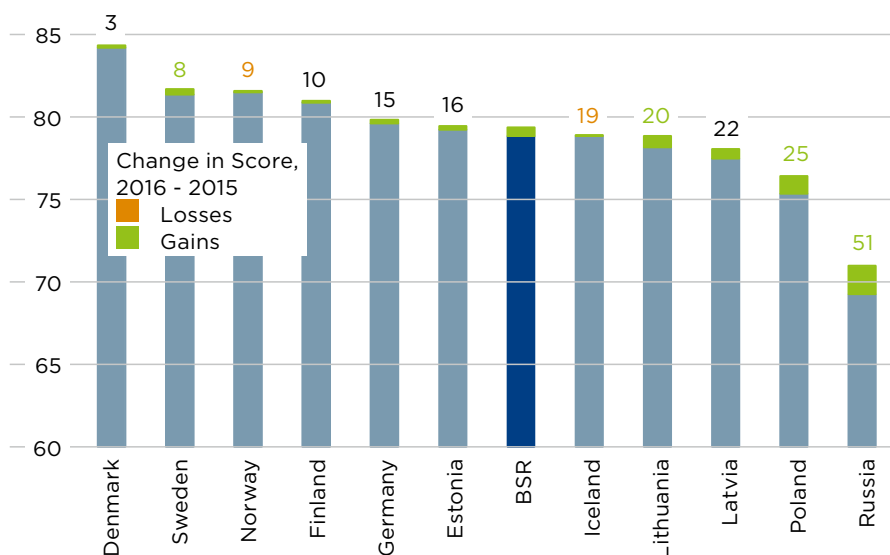
FIGURE 26

DOING BUSINESS ACROSS THE BALTIC SEA REGION

Country Performance, 2016

Performance relative to global frontier

Source: Doing Business (2016)



since 2007, while it has lost ground on goods and labour market efficiency. For Finland there were some improvements in technological readiness but a weakening of the macroeconomic environment. Germany too, gained on technological readiness but also on macroeconomic conditions, while it got lower scores on financial markets and infrastructure. Iceland improved on macro but lost on financial markets. Latvia and Lithuania improved both on technological readiness, to a lesser degree also on infrastructure. Poland improved strongly on both these dimensions. Russia showed a similar pattern but saw macroeconomic conditions worsen. While there are some common threads, the data reflects the highly location- and context-specific priorities individual countries face in improving their competitiveness.

One important aspect of competitiveness across the region is the cost of government rules and regulations that companies face. While Baltic Sea Region countries rank slightly lower on this measure than on

TABLE 3

BSR INNOVATION SCOREBOARD 2016. Performance Overview

ENABLERS	BSR		
	average	maximum	minimum
Human resources			
1.1.1 New doctorate graduates per capita	2.5	3.2 DK	0.6 PL
1.1.2 Population completed tertiary education, %	46.1	51.6 NO	31.8 DE
1.1.3 Youth with upper secondary level education, %	83.4	91.3 LT	61.4 IS
Open, excellent and attractive research systems			
1.2.1 International scientific co-publications per capita	1373.8	2497.7 IS	221.0 LV
1.2.2 Scientific publications among top 10% most cited, %	10.8	13.3 DK	5.0 PL
1.2.3 Non-EU doctorate students, %	16.8	33.5 NO	1.3 PL
Finance and support			
1.3.1 Public R&D expenditure, % of GDP	0.9	1.1 DK	0.5 LV
1.3.2 Venture capital, % of GDP	0.1	0.1 FI	0.0 PL
FIRM ACTIVITIES			
Firm investments			
2.1.1 Business R&D expenditure, % of GDP	1.6	2.1 SE	0.3 LV
2.1.2 Non-R&D innovation expenditure, % of sales	0.8	1.6 EE	0.2 NO
Linkages & entrepreneurship			
2.2.1 SMEs innovating in-house, %	29.4	38.6 DE	10.1 PL
2.2.2 Innovative SMEs collaborating with others, %	11.8	17.5 IS	3.9 PL
2.2.3 Public-private co-publications per capita	75.5	187.3 IS	0.5 LV
Intellectual Assets			
2.3.1 PCT patent applications per GDP	5.5	8.2 FI	0.5 PL
2.3.2 PCT patent applications in societal challenges pr GDP	1.3	2.1 DK	0.1 LT
2.3.3 Community trademarks per GDP	6.5	12.5 IS	1.5 NO
2.3.4 Community designs per GDP	4.8	8.0 DK	0.4 NO
OUTPUTS			
Innovators			
3.1.1 SMEs introducing product or process innovations, %	33.8	54.2 IS	13.1 PL
3.1.2 SMEs introducing marketing/organisational innovations, %	36.5	46.2 DE	14.2 PL
3.1.3 Employment in fast-growing enterprises, %	18.9	21.0 DE	11.6 LT
Economic effects			
3.2.1 Employment in knowledge-intensive activities, %	15.4	18.2 IS	8.8 LT
3.2.2 Medium and high tech product exports, % of good exports	46.6	67.4 DE	11.5 IS
3.2.3 Knowledge-intensive services exports, % of service exports	62.8	75.8 NO	18.3 LT
3.2.4 Sales of new to market and new to firm innovations, % of sales	10.0	22.1 DK	5.2 NO
3.2.5 Licence and patent revenues from abroad, % of GDP	0.8	1.6 SE	0.0 LV

Source: European Innovation Scoreboard (2016)

overall competitiveness, their position is overall solid. The countries lagging most behind have over the last year continued to make up ground. The highest differences within the region remain in areas related to the handling of permitting and receiving public services, such as construction permits, trading across borders, getting electricity, and resolving insolvency.

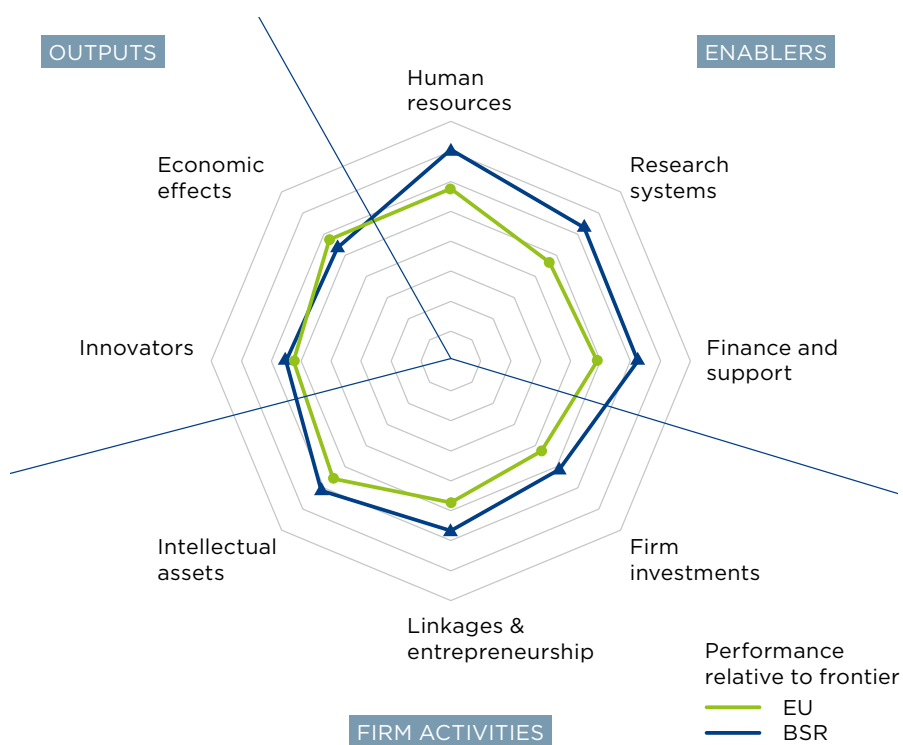
As a prosperous region, the Baltic Sea countries have to offer an environment that supports innovation and entrepreneurship. In this year's State of the Region Report we are taking a closer look at the results of the European Innovation Scoreboard, looking both at the most recent data and the changes over the last five years. The Baltic Sea Region countries continue to do well in this assessment, with the region's average score about 10% above the EU average. This compares to an advantage of about 16% five years; there has been catch-up by other European countries.

The pattern of relative strengths and weaknesses for the Baltic Sea Region in comparison to the EU average has remained relatively stable over the last five years. The biggest advantages exist in the 'enablers', specifically in measures relating to the research system. Another strong advantage remains the category 'linkages and entrepreneurship', even though here the advantage has been significantly reduced over the last few years. Overall the key challenges for the region remains to translate strong enabling conditions and firms' competing on innovation into larger outcomes in terms of innovation and economic impact.

Looking at individual countries, Sweden remains the leader in the EU and the Baltic Sea Region. But the gap towards the overall leader Switzerland has increased and Denmark – as the second best EU and Baltic Sea Region country – essentially tied the Swedish score. Sweden has over time lost position on public investments into research and development (R&D), more recently also on measures associated with linkages among SMEs and with research agencies. Denmark's position has over time especially improved on human resources and the economic effects of innovation. Germany, which has seen its position erode somewhat, suffered from weakening public and venture investment into R&D. However, it remains only country in the region that is relatively stronger on innovation outputs than inputs. Estonia remains ahead of its Baltic peers and Poland,

FIGURE 27

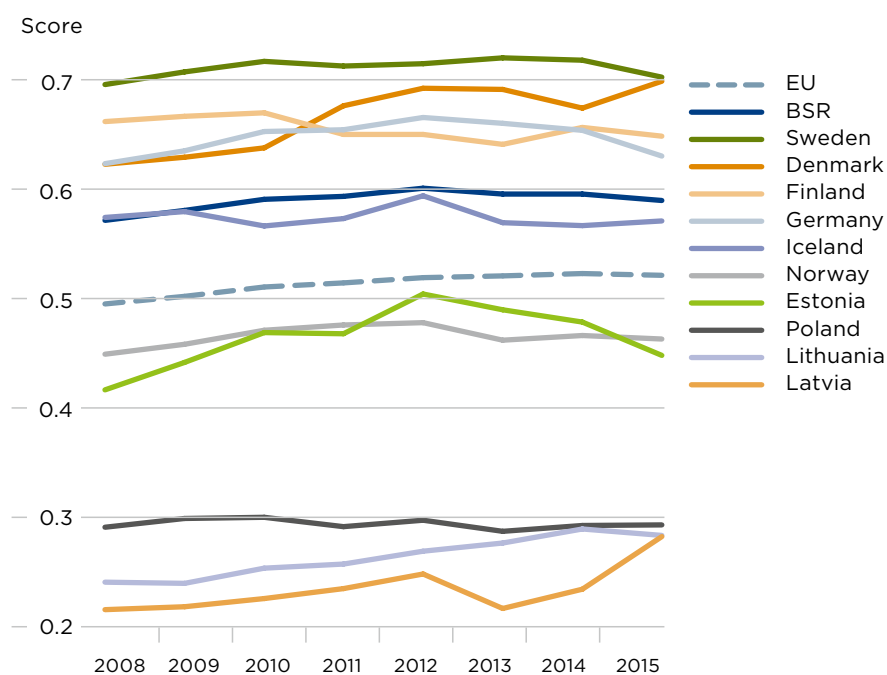
INNOVATION SCOREBOARD 2016 Performance Profile of the Baltic Sea Region



Source: European Innovation Scoreboard (2016), author's calculations

FIGURE 28

INNOVATION SCOREBOARD 2016 Performance of Baltic Sea Region Countries over Time

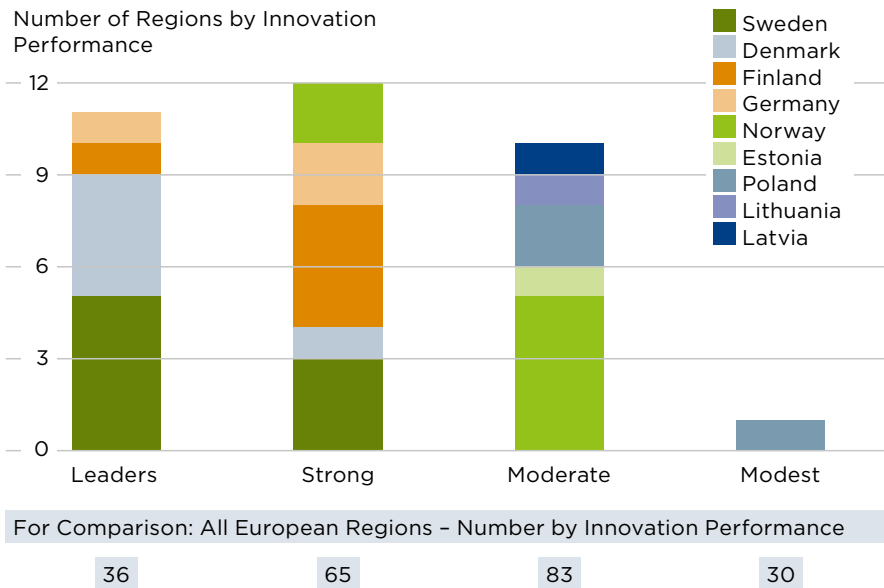


Source: European Innovation Scoreboard (2016), author's calculations

FIGURE 29

INNOVATION PERFORMANCE 2016

Regions around the Baltic Sea



Source: European Regional Innovation Scoreboard (2016)

but is falling being on firm investments and linkages. Latvia is conversely starting to catch up with more private and public investment into innovation activities.

A particular structural concern that continues to affect the region with no indications of change, is the relative weakness on innovation outputs. While the region clearly outperforms the European average on innovation enablers and firm activities, the level of outputs in terms of innovation and economic benefits they create is only in line with the rest of Europe. This issue cuts across the region: the imbalance between inputs and outputs is relatively strongest in both Norway and Lithuania. The only exception to this overall pattern is Germany, which reports its strongest relative performance on innovation outputs, followed by firm activities.

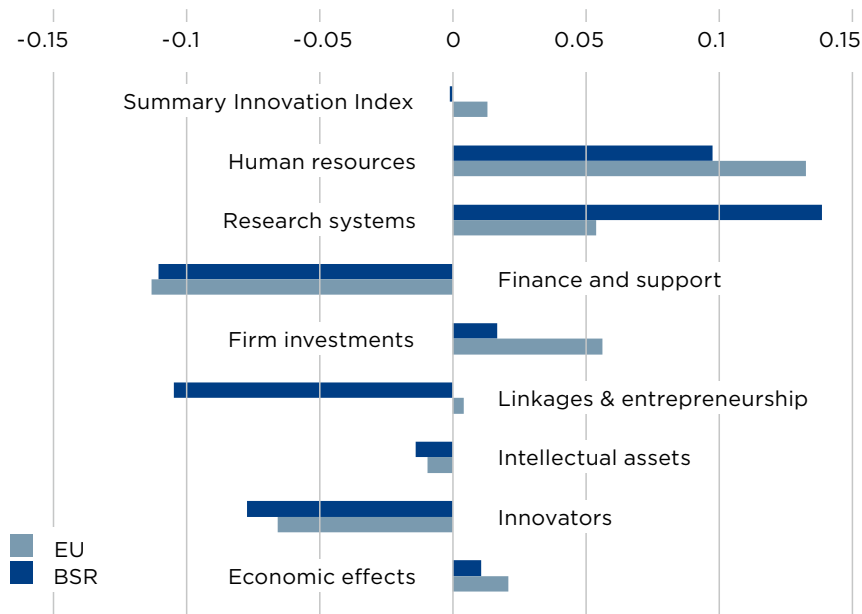
A look at the subnational regions across the Baltic Sea confirms the strong role that the region plays in Europe. Almost one third of all European regions classified as 'innovation leaders' are located in the

FIGURE 30

INNOVATION SCOREBOARD, 2010-15

Baltic Sea Region vs. EU by Broad Category

Change in score, 2010-2015



Source: European Innovation Scoreboard (2016), author's calculations

Baltic Sea Region. Conversely, only one Polish region from the Baltic Sea Region is among the 30 European regions classified as modest innovators.

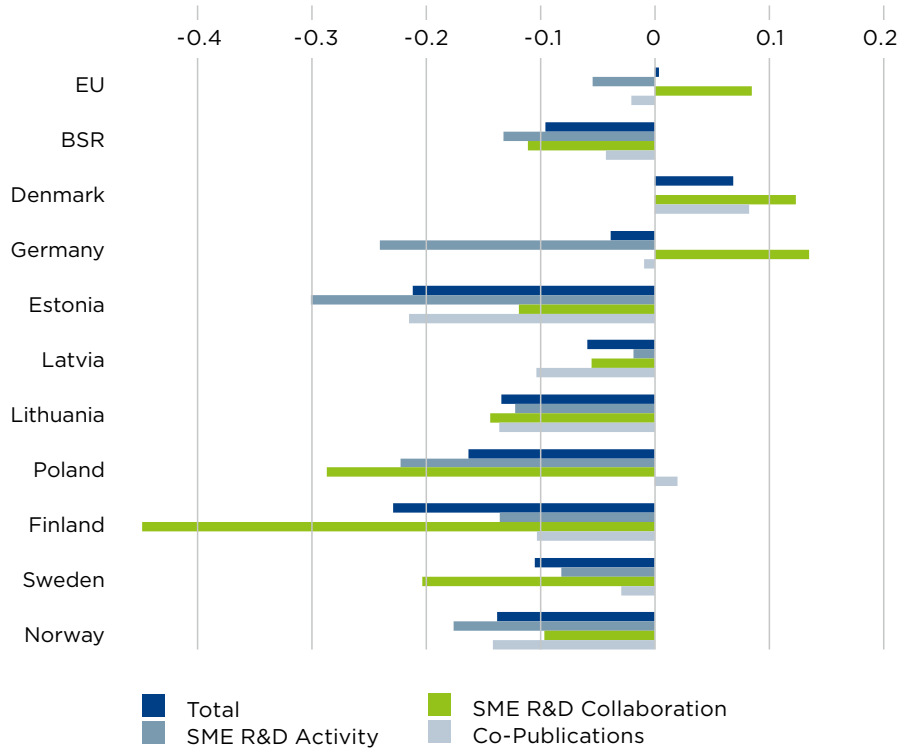
Looking at the changes the Baltic Sea Region has seen overall since 2010, the region has diverged negatively from the EU average in the area of linkages and entrepreneurship. A closer look at individual countries and indicators shows that this seems to be widespread challenge for the region. Only Denmark has registered a significantly different performance in this period, contributing to the country's strong overall gain in score. SME R&D activity has dropped the most, while the negative gap to the EU average performance is the highest for SME's collaborating with others on R&D. These trends run counter to the ambitions voiced and policy programs launched in many Baltic Sea Region countries that have this specific focus.

An indicator that shows both the strength, but also the disappointing dynamics of the Baltic Sea Region's performance on innovation, is the presence of companies from the region among the top 1000 R&D spending companies in the European Union. While the region remains strongly overrepresented – it accounts for about 15% of these firms relative to a GDP share of roughly 10% in the EU – it has been losing further ground last year. Sweden in particular has seen the number of firms on this list drop by ten compared to the last assessment. However, it still has a position that is strong compared to the last decade. Finland and Denmark have been stable year on year, but lost quite significantly compared to 2006 (Finland) and 2010 (Denmark).

A closer look at the data reveals a tremendous concentration of private sector R&D spending in the Baltic Sea Region in a small number of companies. The top four companies alone account for 57% of the total R&D spending of the 156 leading R&D spenders from the Baltic Sea Region on this list. Changes in these companies' fortunes, like we have seen with Nokia (note that this data refers to the last year before the Microsoft takeover of Nokia's mobile phone division), can have significant repercussions for the national and Baltic Sea Region innovation systems. The current concerns about Ericsson's future path and dramatic cuts in the company's Swedish operations (even if in manufacturing, rather than R&D) are therefore relevant for the entire region.

FIGURE 31

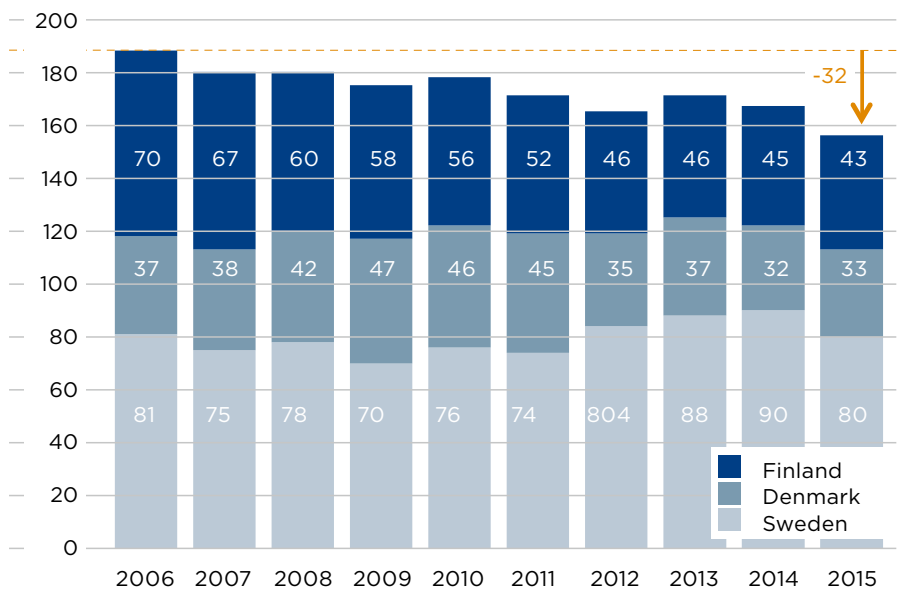
INNOVATION SCOREBOARD, 2010-15 Baltic Sea Region vs. EU: Linkages & Entrepreneurship



Source: European Innovation Scoreboard (2016), author's calculations

FIGURE 32

INNOVATION SCOREBOARD: BSR Companies among TOP 1000 EU R&D Spenders

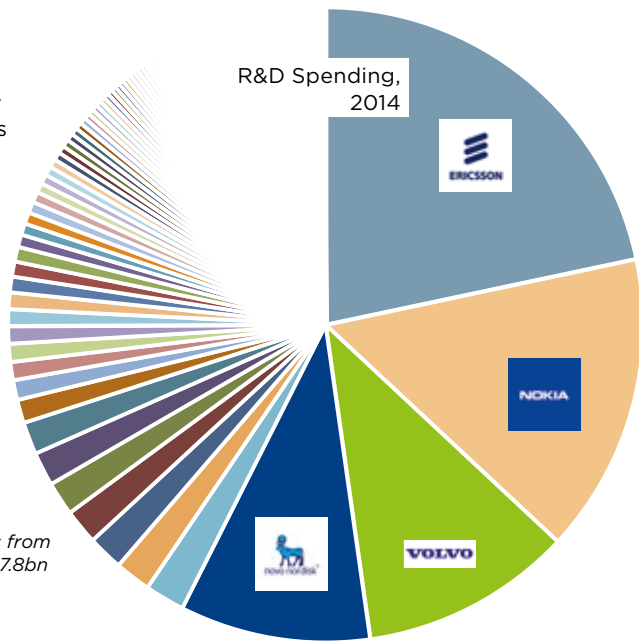


Source: European R&D Scoreboard (2015)

FIGURE 33

PRIVATE R&D SPENDING BY COMPANY IN THE BSR Top 1000 EU R&D Spenders, 2014

57% of total R&D spending is done by the top 4 companies



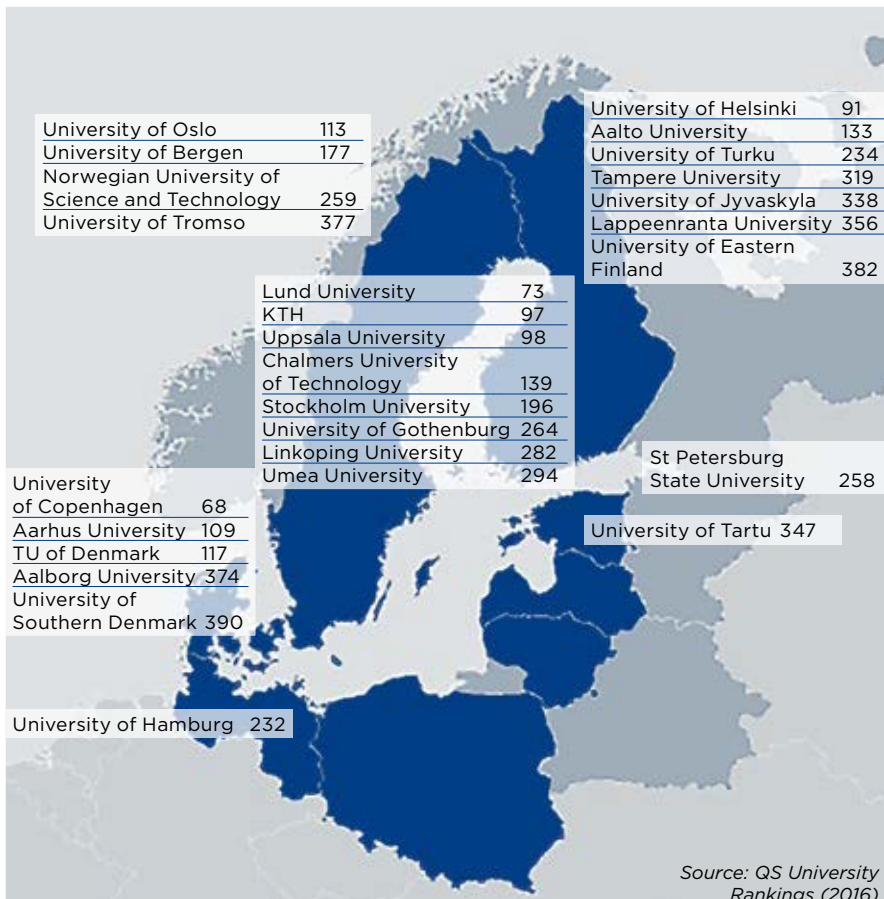
Note: Includes 156 Firms from the BSR spending EUR 17.8bn
Source: European R&D Scoreboard (2015)

Looking more closely at the sectoral patterns of private R&D spending, technology hardware and equipment, industrial engineering, and pharmaceuticals and biotechnology dominate in the Baltic Sea Region. Only for the first two does this also reflect a relative concentration compared to peers in the rest of the EU; biopharma R&D spending is actually a smaller share of total private R&D spending in the Baltic Sea Region, than in Europe overall. However, this data is biased in counting all of a company's R&D spending in the country where its headquarters are located. This matters for Sweden, where a strong, R&D intensive pharma industry has now for some years been under foreign ownership. Sectors with lower absolute R&D spending in which the Baltic Sea Region has a strong relative position are Forestry and Paper, Leisure Goods, and Alternative Energy.

While firm R&D is one important step in the innovation process, especially in terms of translating knowledge into economic activity, it often builds on the underlying foundations of the academic system for providing access to skills as well as conducting fundamental research. The Baltic Sea Region is well represented among the leading universities of the world, counting more than 27 among the top 400 according to the most recent listing. But it remains to be the case that even the best universities in the region are some distance behind the leading academic institutions both globally, and in Europe. This is not fully captured in the data on research systems in the Innovation Scoreboard, where the small size of many Baltic Sea Region countries creates higher counts of international collaboration.

FIGURE 34

LEADING UNIVERSITIES IN THE BALTIC SEA REGION Global Ranks among Top 400, 2016



Source: QS University Rankings (2016)

CLUSTERS AND SMART SPECIALISATION IN THE BALTIC SEA REGION

Cluster Portfolios across the Baltic Sea Region
Smart Specialisation in the Baltic Sea Region: A closer look



CLUSTERS AND SMART SPECIALISATION IN THE BALTIC SEA REGION

The European Union and its policy instruments set an important context for the Baltic Sea Region and its countries as they design and deploy policies for competitiveness upgrading. The EU Strategy for the Baltic Sea Region – a topic of deeper analysis in a number of past State of the Region Reports – in particular has had a large role in aligning especially cross-border collaboration efforts within the region.

A key new instrument in the EU's policy toolkit for competitiveness is Smart Specialisation as a guiding principle of Europe's regional policy. Smart Specialisation is a place-based policy concept promoting regional economic transformation and investment through innovative activities in selected domains. The identification of these strategic priority areas for policy support is based on both an analysis of the strengths and potential of the economy, and an entrepreneurial discovery process engaging wide stakeholder communities in decision-making processes. It embraces a broad view of innovation that goes beyond research-oriented and technology-based activities. In the 2014–2020 programming period of the European Structural and Investment Funds (ESIF), it has been an ex ante conditionality to develop Smart Specialisation Strategies (RIS3) to guide the planned investments under the Thematic Objective 1 (TO1) - Innovation and Research.

This section provides first some data on the current cluster composition of the Baltic Sea Region economy. Clusters are one important dimension to understand current specialisation patterns, focusing on economic activities as measured by the economic geography of employment across groups of related industries. These specialisation patterns have been shown to have a significant influence on the type of industries and sectors that are likely to emerge in the future. The second part of this section, written by Jens Sörvik and Lina Stanionyte from the European Commission's Joint Research Center in Seville, Spain, then provides an initial assessment of the Smart Specialization Strategies that have been devised across the Baltic Sea Region. Smart Specialisation Strategies add an additional focus on technological and scientific capabilities, and also outline in which direction regions aim to drive their development.

CLUSTER PORTFOLIOS ACROSS THE BALTIC SEA REGION

Clusters are geographical concentrations of economic activities in related industries. Clusters include so-called traded industries, i.e. those type of economic activities that do not have to be located close to the markets they serve and can be placed in those locations that offer the best environment for profitable operations. The European Commission provides through the EU Cluster Portal data on the presence of clusters in 51 categories across all European NUTS 2-regions. It also identifies 'strong clusters', i.e. those clusters that reach particular critical mass (measured by falling into the top 20% of all European regions in terms of the relative employment specialisation in this cluster category). Strong clusters have been shown to be associated with stronger performance in terms of wage levels and job creation.

EU CLUSTER PORTAL:

The EU Cluster Portal provides data on the presence of clusters across all EU member countries and some neighboring countries. It offers a growing range of analytical reporting and policy toolkits, that together aim to help policy makers across Europe to make more informed choices about cluster programs and regional strategy.

https://ec.europa.eu/growth/smes/cluster_en

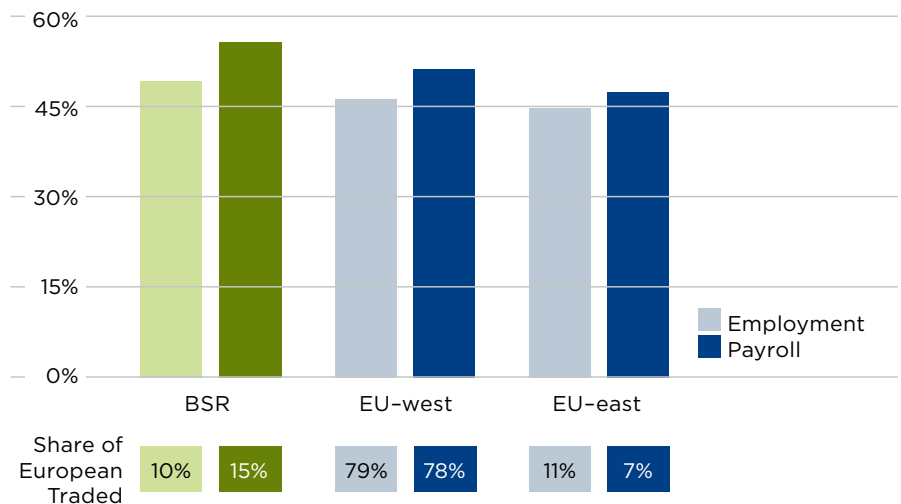
The Baltic Sea Region accounts for roughly 9% of European employment in traded industries. The region has a relatively high share of its total activity in traded industries concentrated in strong clusters. It registers a total of 280 strong clusters, compared to 510 in the remaining central and eastern European countries and 1624 in the remaining western and southern European parts of the EU. Strong clusters account in the Baltic Sea Region for around 50% of employment and payroll (total wages paid) in traded industries. This is higher than in the remainder of the European Union, providing the Baltic Sea Region with better opportunities to reach higher levels of productivity and innovation.

While sub-regions across the Baltic Sea Region tend to have a higher share of their traded industries activity in strong clusters, they do not have a higher number of strong clusters per sub-region. The median sub-region in the Baltic Sea Region has eight strong clusters, whereas the median region in the rest of Europe has nine. Hamburg, Copenhagen, and Stockholm have the highest absolute number of employees in strong clusters. The eight top sub-regions, including also Lithuania, Oslo, Helsinki, Western Sweden, and Pomorski, account together for 50% of all strong cluster employment across the Baltic Sea Region.

FIGURE 35

ROLE OF STRONG CLUSTERS IN LARGE EUROPEAN REGIONS

Share of Strong Clusters among all Traded Industries, 2014

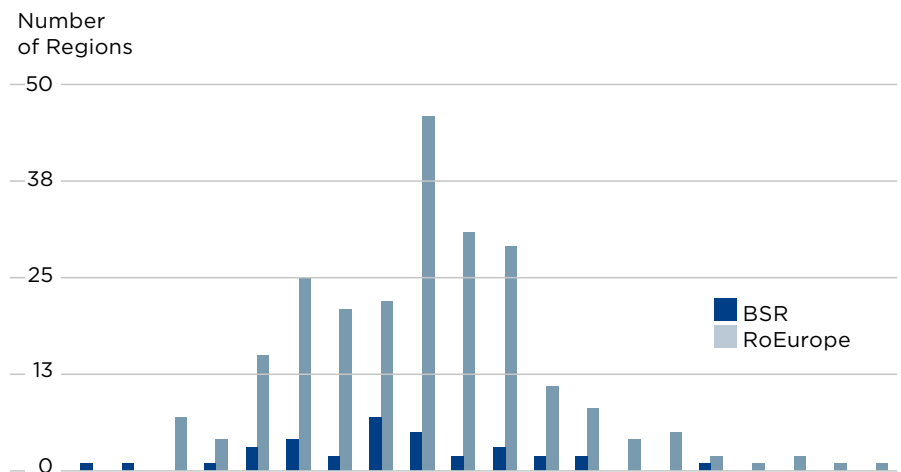


Source: European Commission – Cluster Observatory

FIGURE 36

STRENGTH OF REGIONAL CLUSTER PORTFOLIO

Number of Strong Clusters Per Region

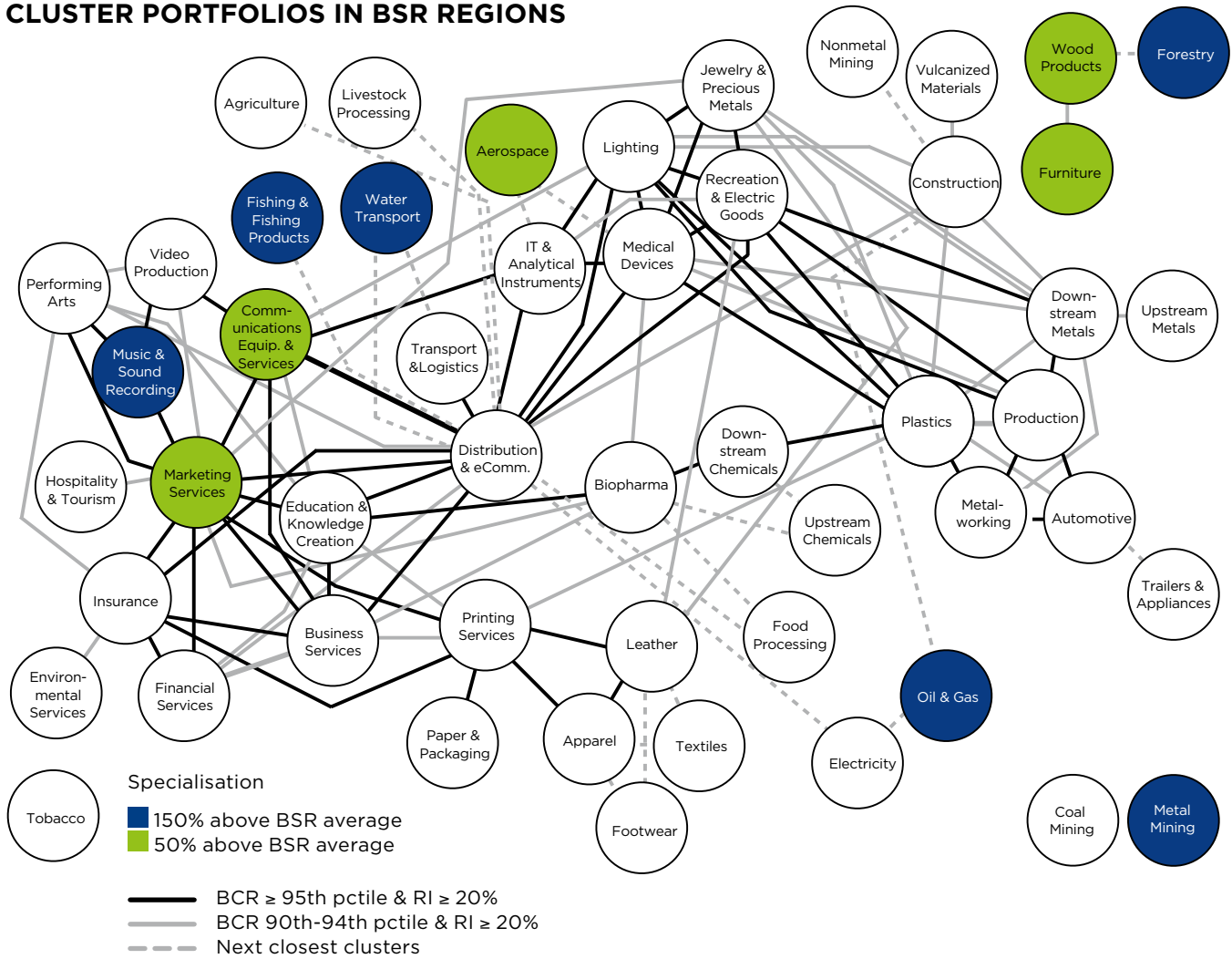


Source: European Commission – Cluster Observatory

Looking at the overall specialisation patterns across the Baltic Sea Region, a mix of both traditional and modern cluster categories emerge as areas in which the region has a relatively high share of European activity, focusing on strong clusters. The traditional clusters build on the competitive advantages inherent in regions' natural resources and geographic location, whereas the more modern clusters build on specific human capital that has developed in and been attracted to regions around the Baltic Sea.

FIGURE 37

CLUSTER PORTFOLIOS IN BSR REGIONS



Forestry, wood products, and furniture remain strong, despite some overall contraction in these sectors over recent years. Poland and the Baltic countries now dominate employment in these areas, but there are also some regions in the Nordics that remain focused on these activities.

FIGURE 38

CLUSTER FOOTPRINTS ACROSS THE BSR Furniture



Source: European Cluster Observatory (2016)

Communications equipment and services is an example of a range of skill-intensive cluster categories that are present especially in some of the main Nordic metropolitan regions, but have also created connected clusters elsewhere in the Nordics and Baltics to take advantage of lower cost levels for specific types of activities.

FIGURE 39

CLUSTER FOOTPRINTS ACROSS THE BSR Communications Equipment and Services



Source: European Cluster Observatory (2016)

FIGURE 40

CLUSTER FOOTPRINTS ACROSS THE BSR Production Technology



Source: European Cluster Observatory (2016)

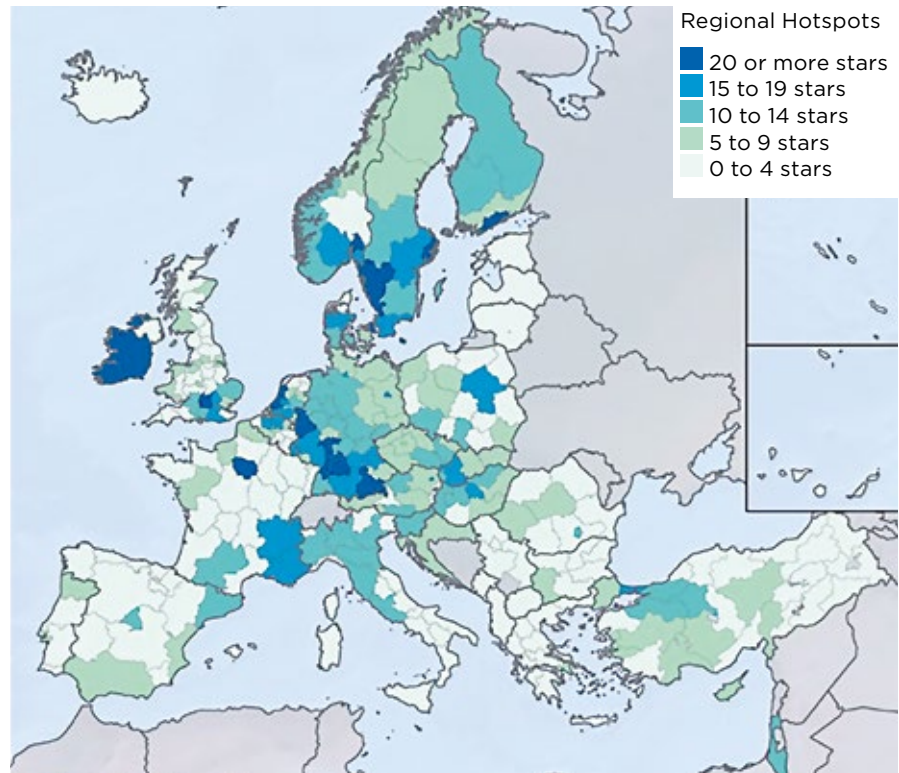
Production technology is an example of a cluster category that is not an overall strength of the Baltic Sea Region, but it remains important in those Nordic and Northern German regions outside of the big metropolitan centers with a strong manufacturing legacy.

The cluster categories used to track the current specialisation patterns across Europe capture the strongest linkages across traded industries, as they have influenced patterns of economic geography over the recent past. The European Commission has recently also tried to develop more forward-looking tools, identifying and mapping so-called emerging industries. These emerging industries are broader groups of clusters and related industries, leveraging information about weaker linkages that exist between them. The hypothesis is that new clusters will emerge somewhere within these broader emerging industries at the intersection of, what are currently, only weakly related activities.

The European Cluster Panorama has identified those regions that have a particularly strong position in these emerging industries, and so are seemingly best placed to see new clusters grow. The Baltic Sea Region – particularly a band stretching from Helsinki through Stockholm and Southern Sweden to Oslo, Copenhagen, and Hamburg – ranks among the leading European regions on this measure. Other parts of the Nordics and Northern Germany also provide robust opportunities, while the Baltics and most parts of Northern Poland lag behind. As for Europe overall, the challenge for policy makers is to find ways to diversify into new and more advanced clusters, particularly for those regions that are currently less advanced.

FIGURE 41

EUROPE'S HOTSPOTS OF EMERGING INDUSTRIES



Source: European Cluster Observatory (2016)

SMART SPECIALISATION IN THE BALTIC SEA REGION: A CLOSER LOOK⁶

In the Baltic Sea Region, Smart Specialisation Strategies have been completed in all European Union (EU) member countries, as well as in Norway at the level of subnational regions. Estonia, Denmark, Germany, Latvia, Lithuania, and Sweden have also completed strategies at the national level. In the three Baltic countries there are only national strategies. For the purposes of this analysis we have not included the German national RIS3, but the respective strategies for the three northern federal states. This generates a set of 70 Smart Specialisation Strategies from the Baltic Sea Region; the EU's bespoke reporting system known as the ye@RIS3 database, available on the S3 platform, also includes another 160 RIS3 from other parts of Europe.

S3 PLATFORM:

Since 2011, the Smart Specialisation Platform (S3 Platform) acts as a facilitator for regions and countries in the uptake and incorporation of the Smart Specialisation concept and methodology in their research and innovation strategies. By the end of 2015, 169 EU regions and 18 EU Member states, as well as eight non-EU regions and two non-EU countries have registered in the S3 Platform, and the community is continuously growing.

<http://s3platform.jrc.ec.europa.eu/>

⁶ By Jens Sörvik and Lina Stanionyte, JRC – Smart Specialisation Platform (S3P)

Smart Specialisation Strategies have the ambition to focus policy action, starting with structural funds, but aim beyond this to also include how other EU, national, and regional policy actions are being deployed. Regions around the Baltic Sea tend to be quite focused in their strategies, setting fewer priorities than their peers elsewhere in Europe. The implementation of these strategies in the coming years will show whether this higher level of focus enables more effective action.

The first observations after negotiations have been concluded are that the RIS3 process has provided input to regional development processes and changed governance processes in many countries and planning and directions towards impact has improved. There is more interest in inter-regional collaboration in research and innovation – currently more on the end of learning and knowledge exchange – but a number of initiatives to take collaboration further have been launched, the Vanguard Initiative, Smart Specialisation Thematic Platforms and Interreg projects.

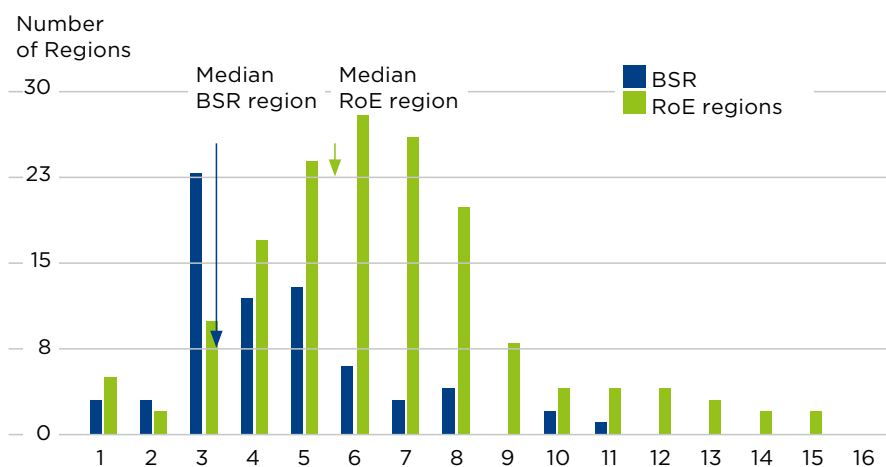
Central to the Smart Specialisation concept is the idea that regions focus their activities in a limited number of domains, but also engage with other regions in developing these. After a first review of priorities in European regions and member states⁷, it has been observed that regions do not have the same priority mixes, but that a number of common domains are dominating, and that many priority areas are still broad and undefined. The same can be said about the priorities in the Baltic Sea Region. In an analysis of the Baltic Sea Region (BSR)⁸ territories in the Eye@RIS3 database⁹ a number of themes appear as more common; ICT, health, industrial modernisation, energy, agro-food and services. These stand for 18-10% of all priorities in the BSR (total of 406) and are identified in 67-34% of the regions and member states (67 BSR territories in total are in the database).

ICT is the most common theme and together with health, it is a theme that is identified in all BSR member states. Third and fourth are industrial modernisation (advanced manufacturing and materials) and energy. In comparison to the main themes in the EU, the main difference is that energy is a more common theme in the BSR than the EU average (with 66% of EU territories and 12% of total priorities being in energy), as well as Industrial modernisation 56 % of territory and 14% of priorities). On the other hand, agro-food is more common in EU on average (67% of territories and 14% of priorities), as well as services and service innovation (40% of territories and 10% of priorities).

Within these broader categories there are more specific themes, such as ICT and health with 15 priorities in as many territories, biomass/ bio economy/ bioenergy (14 in 14), health services (13 in 9), metal and steel (10 in 10), knowledge-based and professional services (10 in 10), ICT and security (9 in 9), automatisisation (9 in 9), health and tourism (8 in 8), ICT and transport (8 in 8), energy efficiency (8 in 8), smart grids (8 in 7), food safety (8 in 8), high quality food (7 in 7).

FIGURE 42

HOW FOCUSED ARE EUROPEAN REGIONS RIS3? Number of Priorities by RIS3



Source: Eye@RIS3 database (2016)

TABLE 4

MAIN PRIORITY THEMES IN BSR

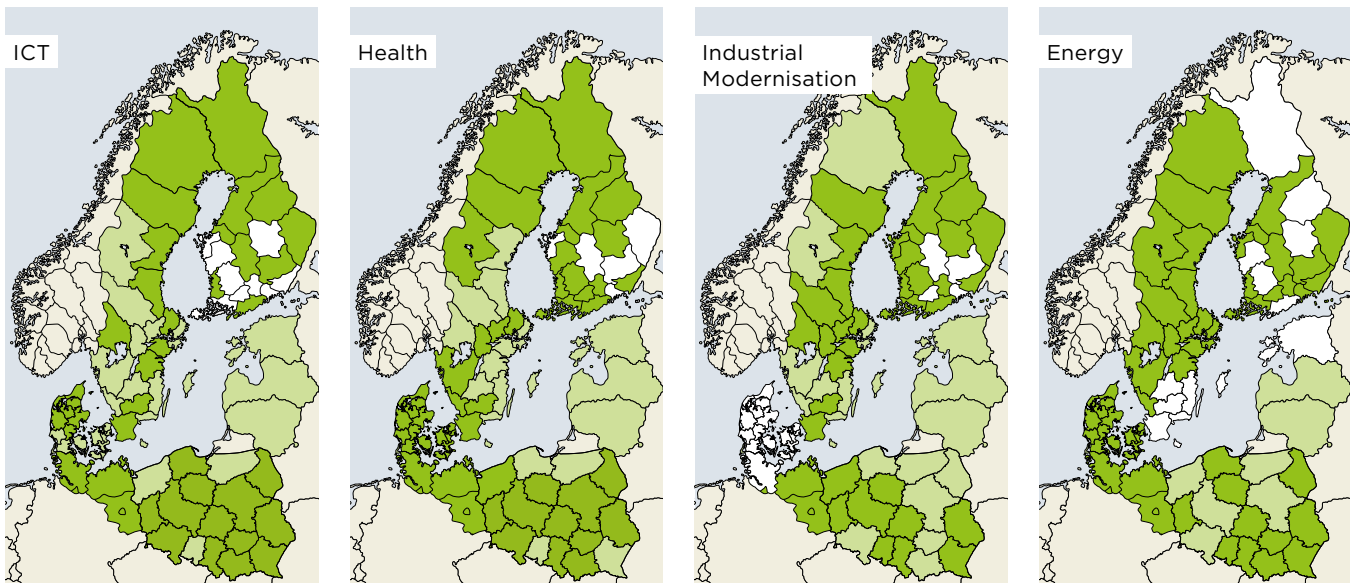
Theme	Territories		Priorities	
Health	51	76%	69	17%
Energy	49	73%	56	14%
ICT	45	67%	72	18%
Industrial modernisation (advanced manufacturing and materials)	44	66%	67	17%
Agrofood	41	61%	50	12%
Services	23	34%	40	10%
BSR total	67		406	

⁷ Jens Sörvik & Alexander Kleibrink, 2015. "Mapping Innovation Priorities and Specialisation Patterns in Europe," JRC Working Papers JRC95227, Directorate Growth & Innovation and JRC-Seville, Joint Research Centre.

⁸ Only EU MS, and in Germany only Berlin, Brandenburg, Hamburg, Schleswig-Holstein and Mecklenburg-Vorpommern.

⁹ Eye@RIS3 is an online database of RIS3 priorities managed by the S3 platform. The purpose of the database is to enable regions and countries to position themselves, find unique niches, and seek out potential partners for S3 collaboration.

GEOGRAPHICAL DISTRIBUTION OF MAIN THEMES IN SMART SPECIALISATION



Legend: bright green signifies a regional priority in the domain, darker green signifies a national priority

These RIS3 will guide the investments under ESIF Thematic Objective (TO) 1 'Strengthening research, technological development and innovation'. Out of the total 100.9 Billion Euro that will be invested under ESIF in the BSR, 10.8 billion will be in TO1, yet there will likely be other TOs with which there are synergies, such as transport (TO7), shift to a low carbon economy (TO4), SME support (TO3), and ICT (TO2). The largest investments will be undertaken by Poland (7,556 Million Euro), followed by Germany (1,056 Million Euro), Lithuania (682 Million Euro), Estonia (644 Million Euro), Latvia (469 Million Euro), Sweden (284 Million Euro), Denmark (128 Million Euro) and Finland (19 Million Euro), see Figure 2.

The main investment categories, in which the BSR top categories are more than one percentage point higher than the EU averages, include:

- 067 - SME business development, support to entrepreneurship and incubation (including support to spin offs and spin outs): - 3.60% of total funds
- 058 - Research and innovation infrastructure (public): - 2.90% of total funds
- 057 - Investment in infrastructure, capacities and equipment in large companies directly linked to research and innovation activities: - 1.80% of total funds
- 062 - Technology transfer and university-enterprise cooperation primarily benefiting SMEs: 1.60% of total funds
- 001 - Generic productive investment in small and medium – sized enterprises ('SMEs'): 1.20% of total funds
- 056 - Investment in infrastructure, capacities and equipment in SMEs directly linked to research and innovation activities: 1.00% of total funds

Relatively less emphasis compared to the EU average is in the Baltic Sea Region put on the categories 'Research and innovation processes in SMEs' (including voucher schemes, process, design, service and social innovation) and 'Generic productive investment in SMEs'.

In Smart Specialisation, there is an increased focus on identifying niches, specialisation, cross-sectorial innovation and on solving societal challenges. With this comes an increased need for collaboration in order to deliver through value chains, to address international markets and to solve these challenges jointly with actors outside the regions. In RIS3, the emphasis is on exploring regions' potential niches in relation to

other regions and on seeking collaboration with external actors to exploit these¹⁰. With the introduction of RIS3, there is increasing expectation that actors will collaborate across borders and beyond, with increased pressure on them to do so. Knowledge institutions and enterprises within regions often have extensive collaboration histories that go beyond regional borders. Therefore, there is an increased emphasis from the European Commission in its communication to regions and member states on the need to analyse a region's position in European networks, and to explore possibilities for collaboration. There are also a number of specific programmes for interregional collaboration, the European Territorial Cooperation programmes, but there is also a new possibility according to the Article 70 (2) in the Common Provisions Regulation (CPR), for regions to use ESIF for funding activities outside of one's programming area to facilitate collaboration.

New for this programming period is the so called European Regional Development Fund (ERDF) (Article 70(2)) possibility, which favours transnational strengthening of innovation systems and stipulates a possibility to spend up to 15% of the support from outside the programme area. So far this has not been exploited to a greater extent. To this end a number of actors around the BSR are coming together to establish a pilot ERDF Managing Authorities' (MA) Network. The purpose is to work out ways of more efficient financial support to the EUSBSR implementation by the European Structural and Investment Funds (ESIF) programmes as well as increase coordination across relevant macro-regional stakeholders.

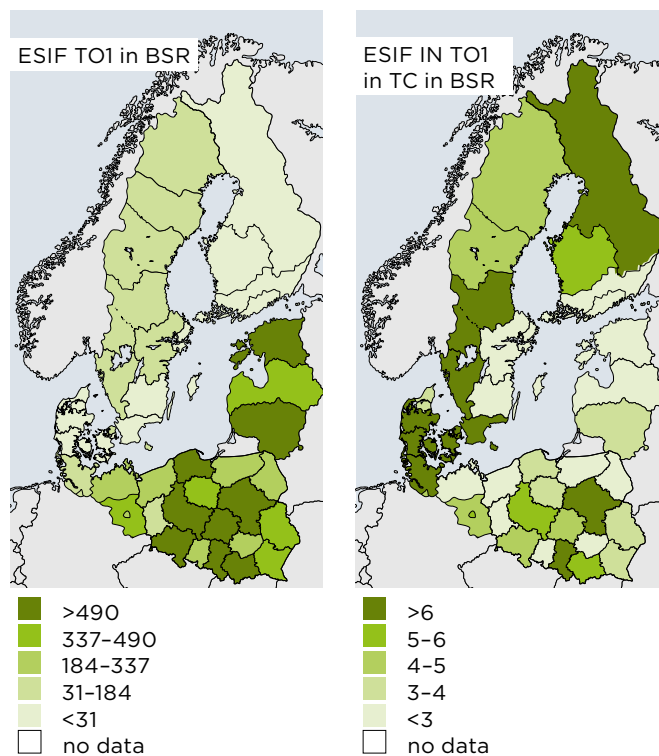
Also the Smart Specialisation Platform is working actively to support inter regional collaboration, both in a number of Thematic Platforms (energy, industrial modernisation and agri-food)¹¹, but also through involvement in macro regional strategies. The S3 Platform facilitates work on synergies in S3 within the BSR. The S3P works closely with the Priority Area Innovation (PA INNO) of the EUSBSR, the Baltic Sea Region Programme, DG Regio and BSR countries and regions towards increased innovation and growth through S3 in the macro region. Several joint meetings and events have taken place to share knowledge and exploit the synergies and to match-make stakeholders around similar S3 priorities. The S3P has also done this in the Danube area.¹²

For collaboration in the BSR in particular, the funds of European Territorial Cooperation programmes are of interest. An estimation is that there is around EUR 204 million from trans-border collaboration programmes for the Baltic Sea Region. The more important ones include the Baltic Sea which have planned 58 M for To1, Interreg V-A – DE-DK (38 M); Interreg V-A – SE, DK, NO (Öresund-Kattegat-Skagerrak) (33 M); Central Europe (22 M), Interreg V-A – SE, FI, NO (Botnia-Atlantica) (13 M), and Interreg Europe (13 M). The main categories these are aiming for are: cluster support and business networks (SMEs); technology transfer and university-enterprise cooperation (SMEs); research and innovation (R&I) in public research centres and centres of competence including networking and R&I processes in SMEs (vouchers, process, design, service and social innovation)

So far the main funding source for collaborative efforts in the Baltic Sea Region has been the Baltic Sea programme. Under the current programming period the Baltic Sea programme has made one round of calls, and in this there has been one objective area dedicated to Smart Specialisation. In the first call three projects were approved: empowering for innovation and growth in medium sized cities and region (EmpInno); stimulating smart specialisation ecosystem through engaging SMEs in open innovation processes (BSR Stars S3); and smart blue regions. In the second round, five projects out of 19 applications were invited to continue developing their ideas¹³: smart-up BSR (improving smart specialisation implementation of the Baltic Sea Region through orchestrating innovation hubs), RIS3Assessment (development of the assessment methodology and plan for evaluation of implementation of the Smart Specialisation Strategies in Baltic Sea region), RDI2CluB (Rural RDI milieus in transition towards smart Bioeconomy Clusters and innovation ecosystems), LARS (Learning Among Regions on Smart Specialisation),

FIGURE 44

ESIF IN BSR



¹⁰ Uyarra, E., Sörvik, J. and Midtkandal, I. (2014), Inter-regional collaboration in research and innovation strategies for smart specialisation (RIS3), S3 Working Paper Series No 06/2014.

¹¹ <http://s3platform.jrc.ec.europa.eu/s3-themes>

¹² <http://s3platform.jrc.ec.europa.eu/s3-cooperation>

¹³ <https://www.interreg-baltic.eu/news-detail/news/75-project-concepts-are-invited-to-develop-projects-applications.html>

and GoSmartTransnational (Strengthening smart specialisation by fostering transnational cooperation). There will be a third call for projects by mid-2017.

Beyond the Baltic Sea Region-specific funding instruments, there is also the Interreg Europe programme. In the Interreg Europe call there has been a call for Research and Innovation collaboration projects. These projects support collaboration on a European-wide scale. In 18 of 21 approved projects there were project partners from a Baltic Sea Region country. The projects with most participation from the Baltic Sea Region were: SUPER (Supporting eco-innovations towards international markets) with 5 regions from the Baltic Sea Region participating and ERUDITE (Enhancing Rural and Urban Digital Innovation Territories) with 4 partners. Poland had most participation in all projects (11), then Finland (11), Sweden (5), Denmark (4), Lithuania (4), Latvia (3), Estonia (1), and Germany (0). The regions most frequently participating are Satakunta (3), Helsinki-Uusimaa (2), Małopolska (2) and Pirkanmaa (2).

The last few years a number of regions have also started collaborating in the Vanguard Initiative which as a collaborative endeavour to stimulate growth by using their Smart Specialisation Strategy to boost new growth through bottom-up entrepreneurial innovation and industrial renewal in European priority areas. In this the following regions from the Baltic Sea Region participate: Dalarna (SE), Małopolska (PL), Ostrobothnia (FI), Pirkanmaa (FI), Skåne (SE) and South Denmark (DK)

As described above a Smart Specialisation analysis indicates many areas for BSR transnational and inter-regional collaboration: common/complementary priority groups, common challenges, distribution of ESIF funding to the similar areas for intervention. However, so far the opportunities to benefit from aligning RIS3 in transnational and inter-regional policy collaborations and to capitalise from synergies remain underexploited. Territorial cooperation programmes (BSR Programme, Interreg Europe) remain the main tools fostering S3 collaborations at BSR or European level. Information about ESIF investments into collaborative cross-border schemes is still rather limited. However, the EUSBSR Policy Area Innovation serves as a good platform for launching strategic Baltic Sea Region-level initiatives. This can be further enhanced through cooperation in S3 and the opportunities to use ESIF for the common challenge areas. The BSR ERDF MA network is a positive step towards connecting funding with collaboration opportunities. The S3 Platform encourages regions to join it as members and the specific thematic platforms currently being launched, but also engage with the EUSBSR.

CONCLUSIONS

The Baltic Sea Region in 2016
Looking ahead: what role for the region, and for regional collaborations?



CONCLUSIONS



THE BALTIC SEA REGION IN 2016

Shivering while the sun is (still?) shining. This is how the report was introduced, and in many ways an appropriate summary after taking a closer look at the evidence; both the short-term economic climate and the medium-term drivers of prosperity.

On the positive side, we see still good headline growth, even if the speed of expansion starts showing signs of a slowdown. Private consumption is particularly strong, and that is both an indication that people in the region enjoy a good quality of life and that current growth does not depend on the economic pull of external demand. The region has in general overcome the crises of recent years, with unemployment receding and public finances broadly in good shape. There are of course, country-specific challenges due to the drop in oil prices, the difficult political situation in the Ukraine and in the relations of Europe to Russia. But even in these cases 2016 has at least seen a degree of stability, not a process of deepening problems. Finally, the region and many of its member countries continue to rank high on international assessments of competitiveness and innovative capacity. The (slow) reduction of competitiveness differences across the region has, in combination with the openness of regional markets – with the exception of barriers affecting trade and investment with Russia - enabled prosperity convergence to continue.

Unfortunately, however, this year's Report documents also a more negative side to the reality across the Baltic Sea Region. The exceptional nature of monetary policy with interest rates close to zero in most parts of the region is a key factor explaining high levels of consumption. This is true also in other parts of the world, but still raises questions about the sustainability of current levels of prosperity and concerns about asset bubbles that might emerge in its shadow. What is already known, is that monetary policy has very limited ammunition left should a new shock or cyclical downturn hit the economy. And what is also evident is that the low level of interest rates has not sparked investment in the business sector. A specific concern for the Baltic Sea Region is the continued erosion of its position in global markets, both for exports and for foreign direct investment. Given no visible

dramatic worsening of conditions within the region, structural changes in the global economy might be at play. There is no simple diagnosis, and likely no simple action to take – but it is something the region with its high dependence on the global economy needs to reflect on.

In this complex economic environment, we continue to see little evidence of a coherent political action for higher competitiveness. Political interests are, for many understandable reasons, elsewhere. Governments, not only in Europe, are struggling with difficult parliamentary and public opinion conditions. Where economic issues are on the agenda, they seem more related with dividing the pie and managing macro stability than focusing on the foundations of longer-term prosperity growth. And even where governments aim to do more on competitiveness, the difficult political landscape severely limits their room for action.

Brexit reflects many of these issues, and has tested the balance between the short- and the long-term. In the short term, Brexit has a limited impact on the region. Trade exposure is there for some countries but is not huge on an overall level. And the changes so far are anyway largely related to the devaluation of the British Pound; Brexit has not happened yet. But in the longer term, the implications could be more far reaching. Brexit is already adding to the nervousness of companies considering investment bets on the future. And Brexit could lead to changes in European collaboration that might erode the competitiveness of the Baltic Sea Region, or at least the benefits to be had from being part of the European economy. Whether 'could' translates into 'will' depends on political choices, not only but also in the Baltic Sea Region.

LOOKING AHEAD: WHAT ROLE FOR THE REGION, AND FOR REGIONAL COLLABORATIONS?

The future of the Baltic Sea Region depends on the interplay of what policies are being pursued within the region, and what European and global economic and political environment they will face. The current challenges have their origin largely outside of the region. But it is also true that the

strong performance prior to the crisis owed a lot of the opportunities that the global economy offered to the region. This is the fate of Small-Open Economies and will not change. However, if globalisation is slowing down, the importance of neighbours and the opportunities for deeper integration within the macro region might be growing. At the minimum, it is unlikely that the global economy is going to provide strong growth impulses for the Baltic Sea Region. The region needs to not only prepare for global competition – this is something that it has been doing for some time. It also needs to explore the opportunities within the region – arguably this is something that has received somewhat less attention in recent years.

For policy makers in the region this suggests a need to look at three different levels for action. First, domestically it is critical for economic policy to both manage the economic conditions of today and to prepare for a possible slowing down of the economy in the future. Moving beyond the crisis also means moving beyond the short-term oriented crisis mode of economic policy. This is difficult, especially when governments are concerned about their political support. But it is critical if the region wants to remain on top also after the next economic shock.

Second, given the region's huge reliance on its external environment and specifically the nature of European markets and policies, it needs to actively engage in the process of defining the Europe that will emerge post-Brexit. Whether that is already happening beyond the staking out of short-term national interests is unclear. As smaller member countries the Baltic Sea Region might feel that it can only manage within the context of whatever structures the large EU member countries come up with. But that is neither doing justice to the high stakes the countries in the region have in the outcome of this process, nor to the influence they potentially could have.

Third, the opportunities and necessity to enable growth by pursuing higher levels of economic integration with neighbours in a macro region like the Baltic Sea might be increasing in the years to come. Here the region should leverage the many relationships, organisational platforms, and instruments that have been created

in recent years. Baltic Sea Region integration is not an alternative to broader-based internationalisation and a continued focus on global trade liberalisation. It is an opportunity to strengthen the region's hands in these efforts regardless of how the external environment will change.

Regional collaboration is no panacea but can play a supporting role in these efforts. Given the complexities in the political and economic environment already discussed in last year's State of the Region Report it is unlikely that the regional level is going to emerge as a central platform for common action. What it can do, however, is to enhance the quality of choices that policy makers across the region are going to take. And that in itself is a benefit that counts.

APPENDIX:

Real GDP growth, % y/y

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	2.2	0.9	0.7	1.6	1.9	1.7	1.6
Denmark	1.2	-0.1	-0.2	1.3	1.2	1.0	1.5
Estonia	7.6	5.2	1.6	2.9	1.1	1.7	2.6
Finland	2.6	-1.4	-0.8	-0.7	0.5	1.0	0.8
Germany	2.0	0.4	0.3	1.6	1.7	1.7	1.4
Iceland	2.0	1.2	4.4	2.0	4.0	3.5	3.3
Latvia	6.2	4.0	3.0	2.4	2.7	2.2	2.8
Lithuania	6.0	3.8	3.5	3.0	1.6	2.6	3.0
Norway	1.0	2.7	1.0	2.2	1.6	0.7	1.5
Poland	3.8	1.6	1.3	3.3	3.6	2.8	3.5
Russia	3.2	3.5	1.3	0.7	-3.7	-1.0	1.1
Sweden	2.7	-0.3	1.2	2.3	4.1	3.3	1.7

Real Government consumption growth, % y/y

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	0.3	1.0	0.8	1.4	1.4	2.1	1.4
Denmark	-1.4	-0.0	-0.7	0.2	0.6	0.9	0.5
Estonia	1.3	3.6	1.5	3.0	2.1	1.0	1.3
Finland	-0.1	0.5	1.1	-0.3	-0.9	0.3	0.2
Germany	0.9	1.3	0.8	1.7	2.4	3.6	1.3
Iceland	-0.1	-1.8	1.0	1.7	1.1	1.1	1.0
Latvia	3.0	0.3	1.6	4.9	3.1	2.0	2.0
Lithuania	0.2	1.3	1.0	1.3	2.0	1.5	2.0
Norway	1.0	1.6	1.0	2.9	1.8	2.4	2.7
Poland	-1.8	-0.4	2.2	4.7	3.4	4.0	2.9
Russia	1.4	2.5	1.4	0.2	-1.8	1.0	1.0
Sweden	0.8	1.1	1.3	1.3	2.5	3.0	1.6

Source: Nordea Markets

Real Private consumption growth, % y/y

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	2.2	1.7	1.5	1.5	2.0	1.9	1.8
Denmark	0.2	0.4	-0.1	0.5	2.1	1.8	1.8
Estonia	3.7	4.4	3.8	3.5	5.0	3.9	2.6
Finland	2.9	0.3	-0.5	0.6	1.4	1.2	0.4
Germany	1.4	1.0	0.6	0.9	1.9	1.4	1.5
Iceland	2.5	2.1	1.0	3.0	4.8	4.5	4.0
Latvia	3.0	3.2	5.1	2.3	3.3	3.0	3.5
Lithuania	4.6	3.6	4.3	4.1	4.9	5.2	4.0
Norway	2.3	3.5	2.7	1.7	2.0	1.9	2.0
Poland	3.1	0.7	0.2	2.6	3.0	4.1	4.0
Russia	6.7	7.4	4.3	1.5	-9.5	-4.0	1.5
Sweden	1.9	0.8	1.9	2.2	2.6	2.8	1.7

Source: Nordea Markets

Real Import growth, % y/y

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	7.8	2.1	2.1	3.3	1.6	2.0	3.1
Denmark	7.1	1.8	1.1	3.3	-1.4	0.8	3.2
Estonia	27.2	11.7	4.5	1.4	-1.8	3.7	3.5
Finland	6.0	1.6	0.5	0.0	-0.4	0.1	0.8
Germany	7.0	-0.3	3.1	3.7	5.8	3.2	3.6
Iceland	6.8	4.6	0.1	9.8	13.5	9.5	7.0
Latvia	22.0	5.4	-0.2	0.8	1.8	3.0	4.5
Lithuania	14.2	6.6	9.3	2.9	7.0	3.0	4.0
Norway	4.0	3.1	4.9	1.5	0.6	0.3	2.3
Poland	5.8	-0.3	1.7	10.0	6.3	7.1	7.4
Russia	20.3	9.7	3.6	-7.6	-25.7	-15.0	2.0
Sweden	7.3	0.5	-0.1	6.3	5.4	4.1	3.3

Source: Nordea Markets

Real Investment growth, % y/y

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	7.1	2.5	0.9	2.6	-0.3	2.4	2.6
Denmark	0.3	3.9	1.1	3.4	1.2	1.0	2.4
Estonia	34.4	6.7	3.2	-3.1	-4.4	0.8	4.2
Finland	4.1	-1.9	-4.9	-2.6	-1.1	2.4	1.9
Germany	7.2	-0.4	-1.3	3.5	2.2	2.4	2.1
Iceland	11.6	5.3	2.2	16.0	18.6	12.0	9.0
Latvia	24.1	14.4	-6.0	0.5	2.7	2.0	5.0
Lithuania	20.1	-1.8	8.3	5.4	10.3	0.0	6.0
Norway	7.4	7.6	6.3	0.0	-4.0	-1.2	1.4
Poland	8.8	-1.8	-1.1	10.0	5.8	4.4	4.5
Russia	21.0	3.9	-7.3	-8.0	-18.7	-3.0	2.0
Sweden	5.7	-0.2	0.6	7.5	7.3	6.3	3.2

Source: Nordea Markets

Real Export growth, % y/y

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	5.3	2.0	0.8	2.7	3.0	1.1	2.8
Denmark	7.3	0.6	0.9	3.1	-1.0	0.5	2.6
Estonia	24.2	6.2	4.7	1.8	-1.1	2.2	3.8
Finland	2.0	1.2	1.1	-0.9	0.6	-0.4	1.3
Germany	8.3	2.8	1.6	4.0	5.4	3.1	3.0
Iceland	3.4	3.6	6.7	3.1	8.2	6.1	4.8
Latvia	12.0	9.8	1.1	3.1	1.4	2.0	4.0
Lithuania	14.9	12.2	9.6	3.0	1.2	2.0	3.5
Norway	-0.8	1.4	-1.7	2.2	2.3	-0.9	1.0
Poland	7.9	4.6	6.1	6.4	6.8	6.2	6.6
Russia	0.3	1.4	4.6	0.6	3.6	-10.0	7.0
Sweden	6.1	1.0	-0.8	3.5	5.9	2.5	3.2

Source: Nordea Markets

Government budget balance, % of GDP

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	2.6	2.6	2.2	2.0	0.4	0.7	0.6
Denmark	-2.1	-3.5	-1.1	1.5	-2.0	-1.0	-1.5
Estonia	1.0	-0.4	-0.3	0.8	0.5	0.0	-0.1
Finland	-1.0	-2.1	-2.5	-3.3	-3.4	-2.6	-2.4
Germany	-0.9	0.1	0.1	0.3	0.6	0.5	0.5
Iceland	-5.6	-3.7	-1.8	-0.1	0.7	14.4	-0.5
Latvia	-3.1	0.1	-0.6	-1.7	-1.5	-0.8	-1.0
Lithuania	-8.9	-3.1	-2.6	-0.7	-0.7	-0.8	0.0
Norway	13.2	13.5	10.5	8.4	5.4	5.1	5.8
Poland	-4.9	-3.7	-4.0	-3.3	-2.9	-2.8	-3.1
Russia	1.4	0.4	-1.2	-1.1	-3.5	-4.0	-3.0
Sweden	-0.1	-0.9	-1.3	-1.7	-0.9	0.0	-0.5

Source: Nordea Markets

Current account balance, % of GDP

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	5.9	5.9	5.8	6.6	6.0	4.6	4.7
Denmark	5.7	5.7	7.1	7.7	6.9	6.5	6.5
Estonia	1.3	-2.4	-0.1	1.0	1.9	1.2	0.9
Finland	-1.8	-1.9	-1.7	-0.9	0.1	-1.0	-1.2
Germany	6.1	7.0	6.8	7.3	8.5	8.6	8.3
Iceland	-5.3	-4.2	5.7	3.7	4.2	4.1	2.4
Latvia	-2.8	-3.3	-2.4	-2.0	-1.6	-1.5	-2.0
Lithuania	-3.9	-1.2	1.5	3.6	-2.3	-1.0	0.0
Norway	12.4	12.4	10.2	11.9	9.0	5.6	6.3
Poland	-5.2	-3.7	-1.3	-2.0	-0.5	-1.8	-2.1
Russia	4.8	3.3	1.5	2.9	5.0	2.0	1.7
Sweden	6.1	5.9	6.0	5.4	5.9	4.4	4.7

Source: Nordea Markets

Gross general government debt, % of GDP

	2011	2012	2013	2014	2015	2016E	2017E
Baltic Sea Region	42.4	43.0	43.7	44.9	45.0	44.8	44.4
Denmark	46.4	45.2	44.6	44.6	45.6	47.4	47.7
Estonia	5.9	9.5	9.9	10.4	10.1	9.7	9.2
Finland	48.5	52.9	55.4	59.3	62.4	64.3	66.2
Germany	78.4	79.7	77.4	74.9	71.0	68.2	65.9
Iceland	95.1	92.6	84.8	82.5	67.6	56.1	52.6
Latvia	37.6	36.9	35.9	38.5	34.8	34.8	34.7
Lithuania	37.3	39.8	38.8	42.5	42.5	42.1	41.4
Norway	28.9	30.0	30.3	27.9	27.9	27.9	27.9
Poland	54.4	54.0	55.9	50.4	51.3	52.0	52.9
Russia	10.9	11.8	13.1	16.3	17.7	18.4	19.4
Sweden	36.9	37.2	39.8	44.9	44.1	42.6	41.9

Source: Nordea Markets



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