Baltic Port Barometer 2012

Views of the Baltic ports for the year 2013

Centre for Maritime Studies, University of Turku
Elisa Holma, Sakari Kajander
BALTIC PORT BAROMETER 2012

Port Development in the Baltic Sea Region
Views of the Baltic Ports for the Year 2013

September 2012
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SUMMARY

Baltic Port Barometer 2012

Expectations for economy and cargo volumes remain positive for 2013

Half of the Barometer respondents believe in moderate economic growth in the Baltic Sea region in 2013. The economic growth expectations remain approximately at the same level as in the previous Barometer. However, fewer respondents expect an economic downturn for 2013. Also the development expectations of ports’ cargo volumes are quite similar compared with last year. Expectations for cargo volume growth remain modestly positive in 2013.

The most positive views regarding economic development are clearly found among ports located on the eastern coast of the Baltic Sea. The eastern ports and middle-sized and big ports are also those who strongest believe in cargo volume growth.

The best outlook for dry bulk and non-bulk cargo

Prospects for all cargo types are positive but dry bulk and ‘other dry cargo’ market (including unitized cargo) are expected to develop slightly better than liquid bulk cargo market in the Baltic Sea in 2013. The expectations for all cargo types have slightly decreased since the previous Barometer but the prospects for all cargo types are still rather good.

Steady positive expectations for 2013

The Baltic Port Index (BPI) that provides a general overview of ports’ expectations for the upcoming year in the Baltic Sea is now at 25 (21 last year),

Capacity to be increased in half of the ports

Almost half of the respondents expect their ports’ capacity to increase in 2013. The most confident about capacity increase are the big ports and mixed cargo type ports. None of the respondents believe their port capacity will decrease in 2013.

Investment expectations remained at the same level as last year

Less than half foresee more investments to be made in their port in 2013. The share of ports expecting higher investments in 2013 is biggest among ports located on the northern and southern coast of the Baltic Sea and in other dry cargo ports. On the other hand, the investments in these port groups are simultaneously expected to decrease the most.

Environmental regulations, especially the sulphur directive and ship-generated waste handling, affect the ports in the years to come. In many ports, investments are required for waste water reception and handling and shore-side electricity for ships.

Survey background

A total of 53 seaport authorities around the Baltic Sea participated in the fifth Baltic Port Barometer survey, conducted between 3 July and 15 August 2012. The survey was conducted by the Centre for Maritime Studies at the University of Turku, Finland, in co-operation with the Baltic Ports Organization (BPO).
**COMMENTARY**

**Moderate growth expectations among ports**

Last year the Baltic Port Barometer survey was conducted at a time when the outlook for the European economy started to dim again, after a recovery from economic recession, and reportage of arising financial problems in the Euro area. The uncertain economic situation still prevails in Europe as the Euro crisis still continues. Nevertheless, year 2012 has not shown dramatic drops in volumes, instead, 42% of the Baltic Port Barometer respondents expect growth in cargo volumes this year. However, this year volume growth expectations are more modest than predicted last year. Growth in volumes is expected also for 2013, especially in the eastern part of the BSR, expectations being more optimistic than for the ongoing year.

Compared with last year’s Barometer, the 2012 Barometer results indicate somewhat similar level of confidence in the BSR economic development. The most positive economic development outlook is found again among the eastern ports. The fear of economic downturn within the next year has slightly faded compared to last year, and moderate economic growth or continuation of the prevailing economic situation is generally expected for 2013. Cargo volume growth is anticipated especially among the middle-sized or big ports. In different cargo segments, growth expectations are however slightly more modest than last year. Confidence in positive market development is once again strongest within the container segment, despite fallen growth expectations from the year before.

Compared to last year different issues stood out as major bottlenecks hindering the development and growth of ports. Environmental or other legislation is regarded the most significant bottleneck in the 2012 Barometer. Inadequate hinterland connections and insufficient storage capacity rose as two additional major issues among bottlenecks hindering growth. Hence, inadequate demand, fierce competition and difficulties in obtaining funding were not regarded as major bottlenecks as in 2011.

Tightening of environmental regulation, especially the sulphur directive, has a significant effect not only on maritime shipping actors but ports too by the year 2015. Concerning environmental regulations, sulphur emissions control was seen to have the biggest effects on ports. However, most of the investments needed in ports, due to environmental regulation, are related to handling or reception of ship waste waters.

Considering that the indicators in Europe pointed to weak economic activity in the second quarter of 2012 and at the beginning of the third quarter (at the time of the Barometer survey execution) ports’ future outlook remained fairly positive. After all, there are ports in the BSR that experienced rather good first six months and showed an increase in cargo volumes compared to the same period last year.

Turku, 5 September 2012

Elisa Holma, Researcher
Sakari Kajander, Head of Research and Consulting Services
Centre for Maritime Studies at the University of Turku
INTRODUCTION

Trend information on Baltic Sea ports

The European economy keeps wallowing in Euro crisis. Financial problems in the Euro area, which arose in headlines last autumn, have maintained the economic outlook uncertain throughout the year. In the Baltic Port Barometer survey Baltic Sea ports have been asked to consider the overall economic development and other factors affecting the port sector.

The port views provide valuable information on future economic development prospects in the region since port and cargo flow development can be considered important indicators of future market development confidence in trade and in economy.

The Baltic Port Barometer is a survey designed to provide trend information on Baltic Sea port development, by assessing business and traffic prospects across the Baltic Sea region (BSR). The Barometer comprises of a set of qualitative information received via electronic questionnaires from top-level port authority representatives in the BSR. It is especially designed to foresee the short-term trend throughout the BSR. A special theme in this year’s Barometer entails the effects of environmental regulation.

Most survey questions relate to ports’ expectations for 2013 but expectations for this year’s total cargo volume development have been covered too. This year’s survey was carried out between 3 July and 15 August 2012. The Barometer was conducted by the Centre for Maritime Studies (CMS) at the University of Turku, Finland, in co-operation with the Baltic Ports Organization (BPO).

The Centre for Maritime Studies and the Baltic Ports Organization wish to express their warmest thanks to the port authorities for contributing to the analysis and sharing valuable views.

The Baltic Port Barometer 2012 is due for publication in September 2012.
Survey Respondents

Seaports invited to take part in this fifth Baltic Port Barometer survey included ports from each BSR country totalling 53 participating respondents. The highest numbers of respondents were yet again from Sweden, Finland and Denmark, having also the highest numbers of ports in the Baltic Sea region. Ports from each country were represented.

The ports are classified into three classes according to the size of the port:
- **Small ports**: handling less than 2 million tonnes of cargo annually
- **Middle-sized ports**: handling 2-10 million tonnes of cargo annually
- **Big ports**: handling over 10 million tonnes of cargo annually

Hereafter, when ports are referred to as small, middle-sized or big, it is according to their annual cargo volumes. In the Barometer, each port has an equal weighting regardless of its size.

The ports have furthermore been divided according to the type of cargo handled. If a certain type of cargo constitutes 60% or more of all cargo handled in the port, this cargo type is considered dominating. The following classes have been formed:
- **Liquid bulk port**: 60% or more of all cargo in a port is liquid bulk
- **Dry bulk port**: 60% or more of all cargo in a port is dry bulk
- **Other dry cargo port**: 60% or more of all cargo in a port is other dry cargo (= non-bulk)
- **Mixed cargo port**: no dominating cargo type

<table>
<thead>
<tr>
<th>Country</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
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<tr>
<td>Finland</td>
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<tr>
<td>Denmark</td>
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<td>Russia</td>
<td>1</td>
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<td>Lithuania</td>
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</tr>
</tbody>
</table>

**Fig 1. Breakdown of respondents by country (n=53)**

As the anonymity of respondents is preserved the survey results are not analysed on a country based level. However, the BSR has been divided into three regions in order to establish spatial differences:
- **Northern coast**: Sweden and Finland
- **Eastern coast**: Russia, Estonia, Latvia and Lithuania
- **Southern coast**: Poland, Germany and Denmark

**Fig 2. Breakdown of respondents by region**

<table>
<thead>
<tr>
<th>Region</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
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<tr>
<td>Eastern</td>
<td>11</td>
</tr>
<tr>
<td>Southern</td>
<td>11</td>
</tr>
</tbody>
</table>

**Fig 3. Breakdown of respondents by size (handled cargo per year)**

**Fig 4. Breakdown of respondents by primary type of cargo handled in the port**
**Baltic Port Index**

**Abating expectations among Baltic Sea ports**

The Baltic Port Index (BPI) that provides a general overview on Baltic Sea ports’ expectations for the upcoming year has slightly strengthened since the previous Barometer.

This implies that the ports’ current expectations for 2013 are approximately at the same level as they were for 2012 last autumn. The Baltic Port Index is now at 25, which mostly indicates positive expectations.

**Calculating balance figures and Baltic Port Index (BPI)**

In most survey questions respondents are presented with a choice of five alternative responses (+++, +, 0, –, --). An index number is derived from the percentage distribution of the responses. This balance figure describing respondents’ average opinion is calculated by weighting the percentage shares of the different responses by +1, +0.5, 0, -0.5 and -1, accordingly. The highest possible balance figure is +100 and the lowest -100. Balance figure +100 will be reached when all respondents choose the most positive survey question alternative (++).

Based on the individual balance figures, an aggregated index number, the Baltic Port Index (BPI), is calculated. This is done by establishing an average of two balance figures: one describing ports’ expectations regarding the general economic development in the Baltic Sea region and one describing ports’ expectations with respect to the total cargo development in their own respective ports in 2013.

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**Fig 5. Outlook of the Baltic Sea ports for 2013 based on current survey (n=53), and for 2012 based on previous Barometer published in 2011 (n=56)**
Total cargo volumes in 2012

Cargo development outlook is modestly positive for the current year

A modest positive development in cargo volumes is expected this year. Less than half (42%) of the respondents expect either some or strong growth in their ports’ cargo volumes. The expectations for 2012 are now noticeably lower than one year ago; in last year’s Barometer 63% of the respondents forecasted higher volumes for 2012.

Most positive views are found among middle‐sized and big ports, liquid bulk and mixed cargo ports and ports located on the eastern coast of the Baltic Sea. The biggest differences between port groups can be observed when comparing ports by type.

Fig 6. Expected total cargo volume development in respondent ports in 2012 (n=53)

Fig 8. Expected total cargo volume development in respondent ports in 2012, ports by size class (n=53)

Fig 7. Expected total cargo volume development in respondents ports in 2012, ports by type (n=53)

Fig 9. Expected total cargo volume development in respondents ports in 2012, ports by location (n=53)
Ports’ development views for 2013

Baltic Sea region economy in 2013

Slow economic growth is expected for 2013

Half of the respondents have a positive outlook for the development of economy in the Baltic Sea region in 2013. 53% expect moderate economic growth, while 9% anticipate moderate economic downturn. The short-term forecast for the economic development is only slightly more optimistic than in the previous Barometer. Last year a fifth of the respondents were expecting an economic downturn.

Most confident about future growth of the Baltic Sea region economy are the big ports and liquid bulk ports, even if the difference between them is relatively small. Instead, future growth is regarded most positive among ports located in the eastern Baltic Sea, while ports located on the north coast are more sceptic.

Fig 10. Expected economic development in the BSR in 2013 (n=53)

Fig 11. Expected economic development in the BSR in 2013, ports by location (n=53)
Total cargo volumes in 2013

Growth expected in 2013

62% of the Barometer survey respondents believe that cargo volumes will grow in their ports in 2013. More than a quarter expects the volumes to remain at the same level as in 2012 whereas 9% expects a moderate fall in volumes. The estimations are similar to those of last year.

The most positive views with regards to cargo volume development are found in the groups of middle-sized and big ports, in liquid bulk ports and ports located on the eastern coast of the Baltic Sea.
Dry bulk, liquid bulk and other dry cargo volumes in 2013

Modest growth expected in liquid bulk segment

The expectations for liquid bulk cargo volume development are not as strong as for those of total cargo volumes. 30% of the respondents expect growth while 70% believe that the liquid bulk volumes in their port will stay at this year’s level or fall in 2013. Compared to the previous Barometer, there is a minor fall in expectations.

Growth in dry bulk cargo at last year’s level

The development expectations for dry bulk are quite similar to last year. The sentiment is more positive than for the liquid bulk cargo segment and at the same level as for the non-bulk cargo segment. 47% of the respondents expect the volumes to either remain at this year’s level or decline in 2013.

Receding yet positive outlook for non-bulk cargo

The growth expectations have diminished from the previous Barometer’s 60% to 52% but still growth prospects for the other dry cargo segment are similar to the dry bulk cargo market in the Baltic Sea.

In the survey, ports were asked to forecast the change in their cargo volumes by type of cargo. Since not all of the categories are relevant to all ports, the number of respondents in each category is mentioned under the figures.
Container, Ro-Ro and project cargo volumes in 2013

Less growth expected in container handling compared to 2012

50% see growth in their container volumes, while almost half anticipate no change. The expectations are the highest on the southern coast of the Baltic Sea, where 71% of the respondents expect growth.

Slight growth in Ro-Ro volumes

The outlook for the Ro-Ro segment is a bit more cautious compared containers. More than half believe that the volumes will remain at the level of 2012. Growth expectations are at a slightly lower level than last year, with none of the ports expecting strong growth.

Steady growth expectations in project cargo

The eastern ports show the highest expectations for project cargo growth, with 54% predicting growth. Overall growth expectations of 44% are close to previous Barometer’s 48%.

In the survey, containers, Ro-Ro and project cargo jointly form a part of the segment called other dry cargo (non-bulk).
Passenger traffic in 2013

Static or moderate passenger traffic expected

Out of the total 53 respondents, 33 have passenger traffic in their port. Half of the respondents expect the passenger traffic to remain at the level of 2012, while 45% expect mostly moderate growth in 2013.

Profitability in 2013

Profitability growth expectations unchanged

51% of the respondents see their port profitability to improve in 2013. 11% of the respondents are more cautious as they estimate the profitability for next year to diminish slightly. In the previous Barometer the respondents’ confidence in their ports’ profitability development was at the same level as this year.
Capacity in 2013

Almost half is expecting increase in capacity

48% of the respondents trust their port capacity to increase in 2013. Capacity increases are especially foreseen in the groups of big ports and ports having mixed cargo structures. Considerable increases are awaited especially in ports located on the eastern coast of the Baltic Sea. Expectations on capacity changes are quite similar to those in the previous Barometer.

![Fig 25. Expected changes in port capacity in 2013 (n=53)](image)

![Fig 26. Expected changes in port capacity in 2013, ports by type (n=53)](image)
Investments in 2013

Investment growth similar to last year

44% of the respondents foresee an increase in investments in their own port, while 15% of the respondents on the other hand foresee a decline. The other dry cargo ports and middle-sized ports are the ones most confident about increasing port investments.

The share of ports expecting higher investments is the greatest among ports located on the southern and northern coast of the Baltic Sea. On the other hand they simultaneously expect the largest drop in investments too.
Bottlenecks

Environmental legislation seen as a major challenge

Environmental or other legislation is mentioned most frequently (32%) as one of the most significant growth and development bottlenecks, contrary to previous Barometers. In the three previous Barometers, inadequate demand, which is now on the shared sixth place (21%), was considered as the most marked bottleneck.

The second most significant bottleneck, inadequate hinterland connections, is now a more often mentioned bottleneck (30%) compared to the previous Barometer (16%).

Port capacity related matters: inadequate storage capacity and lack of expansion areas were the third and fourth most commonly mentioned bottlenecks.

Instead, fierce competition, which in the previous Barometer was perceived as the second most noteworthy bottleneck in the Baltic Sea ports, dropped fifth. In excess of a fifth of the respondents recognised fierce competition as a bottleneck. 42% of the respondents expect competition to get tougher in 2013.

Fig 31. Major bottlenecks to port development and growth (n=53). The ports were asked to list 1-3 factors that they regard as the most important bottlenecks impeding their development and growth. These factors are listed according to the percentage of ports mentioning the bottleneck in question. The category “other” includes this year, for example, challenges in EU Russia transport connections, too high governmental fairway dues, ice navigation and inadequate regional transport planning.
**Special theme**

**CO-OPERATION, DRIVERS AND ENVIRONMENTAL REGULATIONS**

**Co-operation**

**Big ports with mixed cargo structure most willing to increase co-operation**

38% of the respondents considered that increasing co-operation with other ports would be beneficial whereas 40% identified no benefits. An increased co-operation was regarded and welcomed primarily by the big ports and ports located on the south coast of the Baltic Sea. Increased co-operation was most commonly perceived beneficial among ports handling mixed cargo types or predominantly other dry cargo.

The ports were furthermore asked to specify, what kind of port co-operation would be desirable. For example environmental legislation and incentives, information and experience sharing on cargo handling and infrastructure, common liner shipping and merging for specialisation were mentioned.

![Fig 32. Ports’ views on whether they find it beneficial to increase co-operation with other ports (n=53).](image)

Yes 38 %

No 40 %

No opinion 23 %
Drivers affecting ports in next 3 years

Port infrastructure and economic development are important drivers

As expected matters related to port infrastructure were most commonly mentioned when enquiring the ports, which are the most important drivers affecting the port during the next 3 years. These include for example investments that will increase the port’s cargo handling or passenger capacity and improve hinterland connections. Investments such as deepening or dredging of the port basin and construction or upgrading of berths or quays were mentioned.

Competition for land areas around the ports was seen a challenge, as possible expansion areas are reserved for other societal uses. Also inadequate balance between infrastructure investments and cargo growth arose as an issue. On the other hand, remarkable investments in certain ports may cause rivalry for similar cargoes and decrease cargo volumes in other ports.

The macro economic development of the Baltic Sea region affects ports directly. Trade patterns, state of economy and demand were often mentioned as drivers affecting the ports. “If companies in our area are well, we will do well. If a decline in the market will occur, our volumes will go down and with the volumes goes the result.”

Locally, the development of nearby or regional industries has an effect on ports’ outlook and cargo volumes. Growth of the mining industry and subsequent production increase of local plants were mentioned.

Environmental legislative questions, especially sulphur regulation, were additionally mentioned by several ports. This is believed to transfer volumes from sea to land and lead to distortion of competition.
Effects of environmental regulations

Regulations on sulphur emissions have the most significant effects on ports

The ports were enquired how significant they consider the effects of environmental regulation on their port. Regulation on sulphur and nitrogen emissions, handling or treatment of bilge and waste waters, ship-generated wastes and discharge of cargo residues are to be tightened internationally based on IMO regulations within a few years. Regulation on noise and dust as well as dredging disposal on the other hand are more local environmental issues which are assessed and regulated through environmental permission procedures at a more local or regional level.

The effects of the sulphur emission regulation were found as the most significant factor among the ports. 83% of the respondents found the effects of sulphur regulation at least somewhat significant to their ports and almost half either significant or very significant.

As ports are often located near housing or other societal activities, the effects of noise and dust dispersion regulations were found the second and third most significant among environmental regulations. 81% of the respondents found the effects of noise regulation at least somewhat significant and more than a third significant or very significant. 81% found also dust dispersion regulation at least somewhat significant, but only a good fifth saw them significant or very significant.

![Fig 33. Significance of the environmental regulation induced effects on ports (n=53)](image-url)
Actions required due to environmental regulations

Investments required in many ports

The ports were enquired which concrete actions will be required in the port due to environmental regulations within the next three years. In many ports, a certain amount of investments are required as a consequence of environmental regulations. Some of the ports, however, report that no investments are required, because they either already exist or the regulation adaptation is seen to concern more shipping lines than the port itself. In some ports, the actions required are still vague and yet to be established.

Investing in waste handling and reception capacity was frequently mentioned. Capacity for handling or receiving scrubber waste, ballast water, bilge water and black and grey waters from the ships were also mentioned.

Installation of shore-side power supply to ships, or to electrify berths, was mentioned by several ports. Also LNG-terminals are being constructed.

Responding to noise and dust requirements is at least partly a question of planning port areas and city functions in co-operation with city-planning, to consensus on the development of both, the port and the city. Certain actions to reduce dust and noise are required in some ports, but they are not specified in detail.
For further information, please contact

Elisa Holma, Researcher
elisa.holma@utu.fi

Sakari Kajander, Head of Research and Consulting Services Unit
sakari.kajander@utu.fi

Centre for Maritime Studies
University of Turku
FI-20014 Turun yliopisto
FINLAND
http://mkk.utu.fi/