Assessment of the Effectiveness of Maritime Industry in the Post-Crisis Period
Jelena Belova¹, Rima Mickiene²

Abstract Post-crisis period, 2010-2013, in Eastern Coast Baltic Seaports starts in different ways, related to the geopolitical changes in the region. Results of financial key performance analysis define the actual financial situation of the maritime company. It is necessary for its owners, shareholders and investors. A good financial situation of company creates an opportunity to attract new port service users, cargo owners, shipping lines, and investors. The financial analysis of key performance indicators acts as guidelines: for the port authority in order to develop an investment strategy; for the maritime industry– in their business development.

Index Terms: Seaport, Maritime economics, Economic crisis.
JEL: D53, G32.

I. INTRODUCTION

The efficiency of activities of the maritime sector generally strengthens the international and political positions of the country as the activities and development in the sector have a direct link with international economic cooperation, attraction of foreign investments, membership in international organizations and other crucial factors.

The scientific relevance of the problem justifies the idea that by defining the problems of efficiency from the point of view of globalization and integration, we can determine some problematic analogies the analysis of which is especially urgent in post-crisis period restoration activities of economic entities.

Port and maritime industry is a strategic area of economic activity in the Republic of Lithuania. It is significant when attracting the foreign investment, promoting the development and growth of country’s transport sector and whole economy.

Nevertheless, there is a lack of financial and economic research of maritime industry in Lithuania. Financial analysis of maritime companies, evaluation of efficiency and principles of economic behaviour formation according to economic cycles is an insufficiently analyzed area.

Foreign authors (Cariou, Ferrari, Parola, 2015; Talley, 2012; Branch, 2009, Cullinane, 2009; Stopford, 2009; Harwood, 2009; Baird, 2002, etc.) studies and researches focus more on economic impact than efficiency.

According to the authors’ point of view, the peculiarity of this area is when modelling the economic behaviour of marine company, it is necessary to take into account the mismatch of marine sector and general economic cycles, its scale effect and influence of macroeconomic indicators (Belova, Mickiene, 2008, 2010, 2011, 2012).

The object of research is the economic effectiveness of maritime industry companies in the post-crisis period. The time period of 2010-2013 is to be considered as the post-crisis. The behavior of different specializations maritime sector companies is determined by the efficiency level of companies under the conditions of economics fluctuations.

Despite having a strong macroeconomic basis, the maritime sector was severely affected by the global financial crisis during its early stage.

Once the global financial market collapsed, maritime business companies found themselves facing significant funding difficulties in the international capital markets. Maritime sector activities are characterized by the scale effect, so efficiency particularly significant in attracting foreign investments.

The objective of the research is to determine the assessment criteria and effectiveness formation problems in the maritime industry in the post-crisis period, according to the cyclic development tendency in the maritime industry.

The main objectives of the research are the following:
1. To theoretically support the cyclic development tendency in the maritime industry of local and global economics point of view.
2. To rank financial performance of maritime industry companies in the post-crisis period.
3. To evaluate the economic behavior of Lithuanian maritime industry companies in the post-crisis period.

Research methods: analysis of scientific literature, statistical analysis, financial analysis, comparison of key performance indicators, structural interview.

Empirical research was done in 3 different activities stevedoring companies and Klaipeda State Seaport Authority. The influence of cyclical fluctuations on main port freight indicators can be summed up on the basis of main activities.

The hypothesis of the research is that the effectiveness of the port must be understood as being a complex category which is determined by various factors and that the effectiveness of the maritime industry is directly

¹ Jelena Belova, associated professor of Port Economics and Management Department, Lithuanian Maritime Academy, I. Kanto str. 7, Klaipeda, Lithuania
² Rima Mickienė, lecturer, head of Port Economics and Management Department, Lithuanian Maritime Academy, I. Kanto str. 7, Klaipeda, Lithuania
dependent on the business interests and effectiveness of the actors in the maritime sector.

One of the components of the research is a structural interview with representatives of the main Lithuanian maritime company to highlight the general opinion and facts about the changes in the maritime industry from the company’s perspective. The thorough analysis of the data gathered from the representatives in the structural interviews clarifies the acting conditions of the companies and shows the complexity of the relevant issues that the maritime industry has to cope with.

According to the key performance analysis of companies efficiency in the global economics point of view, there are possibilities also to define economic behavior of a company under the global economic recession conditions and in post-crisis period by assessment on two levels: internal, within management functions, and external, via adaptation of a company under the changing market conditions.

II. THEORETICAL ASPECTS OF CRISIS MANAGEMENT IN THE CONTEXT OF LOCAL AND GLOBAL ECONOMICS

From the point of view of content and axiomatic the problems of the global economic crisis are examined and analyzed by two competing paradigms – methodological individualism and methodological holism. The globalization process is usually reflected by complicated regional, trans-national and global networks of relationship, and responds to the new knowledge making paradigm and the reasoning of collaborative and networking activities (Giddens 2000, Bauman 2002; Held, McGrew, Goldblatt, Perraton 2002).

The generalized reasoning of the globalization process from the point of view of Bauman (2002) and Tomlinson (2002) is based on a postmodernism philosophy which questioned the idea of the entire world outlook thus creating the possibility for neo-liberalism and free business doctrine to become predominant in economics and it revealed itself by great mobility of labor force and capital, Harvey (2005) which is still called as “time and space compression” or the notions in synergy science “in-placed time” and “in-timed space”. All this is applied when speaking about globalization processes, the consequence of which is – the on-going “shrinkage” of the world covering all parameters of the human life and his activities.

Nonetheless under the context of globalization, next to universality the significance of place also must be emphasized, i.e. locus, when the financial and information activity flows reach the global level, the complete opposite process of localization begins, which forms and restricts the space. Nevertheless, for some layers of population the same processes are global and providing the freedom, but from a different perspective – locals, limiting their discretion of making choices (Bauman 2002).

The tendencies of the modern economic thinking of Lithuanian society in the national and European context are transforming from individualistic to institutional, following Western European standards, when deep common national traditions and a universal national community are recognized both by the rights of an individual person and political freedom and independence of all nations (Kubilius 2006). Even though the dominant economic doctrines follow the principle of methodological individualism, the paradigm of methodological holism is more adequate for economic reality.

From the point of view of the paradigm of universality and integration, the effectiveness can be treated in two ways: as the achievement of the goals of the organization (external effectiveness) and as the optimization of activity processes of the organization (internal efficiency). In both cases it means efficiency and the best results.

Following by economics theory (Ansoff, McDonnel, 1998; Valackiene, 2005) there are allowed formation of several general statements about the crises:

- crises are different (according to time, reasons, forms and etc.);
- crises have the effect of resonance (inter-active, artificial, interlocked and etc.);
- crises are multi-staged (latent period, falling, depression or lower balance, livening);
- crises are necessary (though the periods of the end of them significantly depend on subjective factors);
- crises are unavoidable (as unavoidable is the phase in the life of any system);
- crises are progressive (from the point of view of renewal and intensification of development).

Assessing the impact of a crisis on a separate company, it may be stated that the crisis effects appear, as a rule, unexpectedly and immediately creating problems finding a solution which seems not existent at that particular period of time.

In similar situations quick reaction is necessary which cannot be worked-out within the frame of usual systems and methods of economic management. Non-adjustment to quick reaction leads to missed possibilities and direct economic losses.

Usually different indicators are used to analyze the cycles. They reflect national business or economic activities. The ones that mostly affect national economics are the pace of total gross product and the internal national product growth, the inflation rate, unemployment rate, money rate, currency fluctuations, resource cost (basic stores, energy, etc.) and investment climate. The maritime business indicators for the cyclic development tendency analysis are ton-miles, profit from activities, sales, capital profit and others (Stopford, 2009; Harwood, 2009, Branch, 2009). A cyclic development affects all factors of port activities: freight (amount, types); ships (number, types, rate of freight); capital (needs, price and the efficiency for the owners); staff (number, salaries); business efficiency (profitability of freight carries and other transport companies).
According to the economics theory (Ansoff, McDonnel 1998), there are different attitudes to the definition of effectiveness, which are connected with the search of different assessment criteria of the results of activities as well as with a number of changes influencing the result. For example, when assessing the financial efficiency we, as a rule, speak about the level of compliance of indices given for assessment (the compliance of actual indices showing the profitability of an organization to the recommended level of the given indices). Summarizing different attitudes to the assessment of effectiveness, it may be considered to be a degree of achievement of the given tasks.

It is necessary to emphasize that a crisis changes the understanding of economic environment, – from stable one to the developing and unstable. From the point of view of the management of the organizations, crisis in the organization creates the feeling of distinctness, losses and often assurance that changes will not bring anything good. The crisis creates a new approach towards the perspective and one’s place in the organization. Under crisis conditions changes to the system of management functions are evident, i.e. there are also changes of the types of work which are re-distributed between the managers and the specialists.

Rationality and effectiveness of the taken decisions concerning the re-distribution of functions is based on the introduction of market relationships inside the company (Valackiene, 2005). In the period of crisis the indicators of economic processes are chronically beyond the framework of standards and it turns to normal phenomenon of business life. For this reason the assessment of the effectiveness, i.e. correspondence to the indicated criteria, of activities in the period of post-crisis, turns to the assessment of rationality is the assessment of optimality with given constraints.

III. THE CYCLICAL NATURE OF NATIONAL ECONOMICS AND PORT ACTIVITIES

It is necessary to point out that the beginning of a crisis in the sea freight market usually falls behind the onset of pan-economic crisis (normally it emerges a half year later). That is why the beginning of 2008 crisis is March and April, however it started influencing the maritime sector only at the end of the year.

Total transfer volumes in European ports from 2002 until 2007 were steadily increasing, and they reached 3,9 billion tons in 2007 and basically did not change in 2008. In 2009, after the onset of crisis at freight markets, the ton-miles decreased 12% up to 3,4 billion tons. There was some increase in 2010, and in 2011 ton-miles were 3,7 billion, however, it did not reach the level of 2008. The increase in ton-miles in 2011 compared to 2010, was 2%. The permanent growth of cargo turnover of the all 11 Eastern Coast Baltic Seaports up to 2008, started to decrease since the second half of 2008. The tendency of decrease continued in 2009 (Eurostat, 2014).

Similar trends are characteristic for Lithuania as well. Following the results of the statistical analysis of Klaipeda port freight and Lithuanian GDP changes, it can be proved being of cyclical nature and the analogy between tendencies of national economics and the indicators of port activities (Fig. 1).

The dynamics of the development of the main economic indices of Lithuania was negative in January of 2008-2009 (Fig. 1).

Lithuanian economics was at its worst in 2009, when national product decreased nearly 18%. From 2010 onwards the situation improved, there was the positive growth of GDP in relation to significant European loans. Cargo handling volumes in the Port of Klaipeda decreased by 7%, in 2010 the growth reached almost 12%. It is worth to note that the growth in the volumes of handled cargo shows the increase in consumption and the economic growth.

After the growth in 2010-2011, indices of cargo handling of the Port of Klaipeda decreased again since 2012, but in 2013 it increased again.

The period of fluctuations in cargo turnover in the Port of Klaipeda takes approximately two times longer as the period of GDP fluctuations, i.e. through one cycle of handling change, GDP experienced the change of two cycles in 2011-2014.

The analysis indicates that the crisis increases the competition in market of port services. It determines the methods of competitive rivalry and positions in the market of port services. It should be noted that in Lithuanian maritime sector the crisis starts later than in the whole country’s economy, however in Lithuanian maritime sector cycle’s peculiarity is that the „decline“ is lower and the „growth“ is higher than the national economy (Fig. 1).

This can be explained by the fact that port activity depends on both: fluctuations of national economy of Lithuania and fluctuations of transit freight.

The post-crisis period, which generally began in 2010, in Eastern Coast Baltic Seaports starts in different ways (Fig. 2). After the restrictions of the Russian Federation on transport policy, the majority of freight flows, which moved through the ports of the eastern coasts of the Baltic Sea, were directed through the ports of Russia.
The activity of the newly built port of Ust-Luga dramatically changed the situation of cargo handling of ports (Fig. 2). The cargo turnover of the port of Ust-Luga in 2012 increased by 108%, comparing with 2011, in 2013 – by 34%, in 2014 – by 21%. Projected volume of cargo handling in the port of Ust-Luga is 180 million tons.

At the same time the cargo handling of the other ports in the region decreased.

The cargo volume in 2012 in the east coast of the Baltic Sea region, in the Russian ports (Primorsk, Ust-Luga, Saint Petersburg, Vysotsky, Vyborg) increased in comparison with the previous years by approximately 22%, while in the other ports (Klaipeda (Lithuania), Riga, Ventspils, Liepaja (Latvia) and Tallinn (Estonia)) increased only by 8%, respectively in 2013, in the Russian ports it increased by 8%, while in the other ports in this region a decrease of 10% is evident.

Cargo handling volumes in the Russian ports increased in 2014 as well, however less intensively, increase of only 5% is observed, in comparison with 2013.

It is likely that it was influenced by a more intensive increase of cargo handling in the other ports of region – cargo handling increased approximately by 14% in comparison with 2013 (Fig. 2).

However, this increase of cargo handling, meaning the recovery of entire maritime sector, does not reduce the negative increase intensity of cargo handling in the Russian ports – overall average of cargo handling change in post-crisis period in the Russian ports is 12%, while in the other ports of region – only 1%.

Nevertheless, it is significant to assess not only the competitive environment of the port, but also to take into consideration the geopolitical situation.

The role of the Port of Klaipeda is significant in the country’s economy – it creates 4.5% of the total Lithuanian GDP’s.

Taking into account all the related activities (motor transport, logistics, etc.) – it is related to 18% of Lithuania’s total GDP. 1 EUR of port incomes brings 78 EUR cents to Lithuania’s budget, each ton of handled cargo in port in 2013 brought about 3.25 EUR in taxes.

More than 800 different types of companies are engaged in port-related activities. Approximately 185,000 jobs are created by the operations of the Port of Klaipeda thus showing the importance of the port not only to the economy of the country but the society as well.

On the basis of a port activity management classifier, a port of Klaipeda belongs to Land Lord group. The state, represented by the port authority, leases the territory on a long term basis to the port companies. Superstructure development projects are funded by the companies, operating in the port. Port administration funds the projects related to the infrastructure development with its own and attracted funds.

The main sources of budget are the harbor dues (over 85%) and income from renting out the port land.

Cyclical fluctuations are typical of port profit, which is based on income (mainly – port dues) indicators. Port dues, which depend on a vessel type and size, are estimated for gross tonnage of the vessel. The correlation between the number of vessels, their tonnage and the income from the ship dues shows the impact of cyclical fluctuations (Fig. 3).

It is characteristic of a crisis year 2009 that all the indicators decreased, and in 2011 they were higher than pre-crisis indicators. In the crises period port dues decreased only in 2009 and was 3%.

The port of Klaipeda is located on the crossing of two European transport corridors (first motor and ninth rail) and the port of Klaipeda is multi-modal.

Since 2001 there were significant changes made to the directions of cargo in the port of Klaipeda more particularly, the direction of cargo when dominated local goods is export (Fig. 4).
Transit freight composes about 40% of port ton-miles. It makes a significant impact on port indicators (Fig. 4). The port is strategic object for the country’s economy as well as for its neighbors and long-term business partnerships (Belarus, Germany, Russia, Kazakhstan, etc.). It is reflected in export, import and transit port freight traffic indicators.

The main freight of the port of Klaipeda is fertilizers, oil products, containers and ro-ro. They make up about 75% altogether (Fig. 5).

Analyzing the structure of freight, it is necessary to point out that all of them are characterized by different tendencies.

Ro-ro and container transfers coincide with the economic cycle. The main ro-ro freight is the consumer goods, which is why the ro-ro market is mostly affected by the consumer demand. Klaipeda is the main port of the Eastern Baltics for ro-ro transfers.

All ro-ro freight is transported via 3 ro-ro lines that connect Klaipeda with Sweden and Germany. About 55% of this freight is import and 45 – export. Container freight has one of the best tendencies in the Eastern Baltics – 2013 increase of 5,5%.

A significant increase in freight traffic is related mainly to the construction and capturing of container terminals and new container distribution center, established by the stevedoring company “Klaipedos Smelte”.

Transfer of fertilizers greatly depends on the agricultural market. The crisis of this market, which is the characteristic of the Baltic Sea region, also affected the transfer indicators.

According to the latest crisis influence, in 2009 the crisis did not significantly affect this type of freight traffic, but in 2012 they dramatically decreased by 16%.

Nevertheless, this cargo is the main one in the Port of Klaipeda, which composes 26% of total cargo handling of port in 2014. Oil product transfers are considered to be stable, as they were increasing during the crisis years, but in 2013 decreased by 14%. This kind of freight traffic greatly depends on contracts with Russia and Belarus and not only on economical but rather political factors.

The Baltics are characterized by the active construction of oil terminals by Russia and its monopoly politics in this sphere. It is likely that this flow of freight will decrease additionally, because new LNG terminal starts it’s activity and it will reorient the energy market, by decreasing the handling from Russia and increasing the handling from other regions.

Therefore while overcoming the consequences of economic crisis, the activity of Port of Klaipeda was affected by the port’s universality. The Port of Klaipeda handles the different types of cargo. There is no dominating cargo type in the port.

Therefore, when business and economic conditions are varying, there is a higher probability to retain the handling volume. It should be noted that even the Port of Klaipeda is universal, however the cargo handling companies tend to specialize in their activities.

IV. STEVEDORING COMPANIES OF KLAIPEDA PORT FINANCIAL PERFORMANCE ANALYSIS

The influence of cyclical fluctuations on main port freight indicators can be summed up on the basis of main activities indicators: freight ton-miles (the part of market), profit, and revenue position.

There are 19 stevedoring companies in the Port of Klaipeda. Most of the companies specialize in accordance with the types of cargo.

The companies that have a dominant position in the dry cargo market and handle the main cargo in the Port of Klaipeda are analyzed in the research:
- JSC “Klaipeda Stevedoring Company (KLASCO)” specialize in bulk cargoes, it accounts for 36% of handling market of the Port of Klaipeda;
- “Klaipeda Container Terminal”, Ltd (KCT) handles containers; it accounts for 10% of handling market;
- JS stevedoring company “Klaipedos Smelte” (KS) – the company is changing its specialization in crisis period from the general cargo to the containers, at the moment; it
accounts for 6% of handling market, however in 2015 when new build Mediterranean Shipping Company (MSC) container distribution center starts, the company plans to increment the volume of handling several times;

- The activity of companies is directly related to the activity of Klaipeda State Seaport Authority (KSSPA), thus the results of this organization and these companies are analyzed together.

The influence of cyclical fluctuations on main port freight indicators can be summed up on the basis of main activities. The key performance indicators of companies profit and yield of 2012 was analyzed. Whereas the activity of companies and its indexes are different, the method of rating will be applied. The received assessments of the indicators will be ranged from the lowest (1) to the highest (4) (Table 1).

### Table 1
**Rank of Key Performance Indicators of Port of Klaipeda Companies in 2012**

<table>
<thead>
<tr>
<th>a) Current Ratio (Solvency)</th>
<th>b) Financial Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSSPA</td>
<td>KS</td>
</tr>
<tr>
<td>KCT</td>
<td>KLASCO</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>KS</td>
<td>KSSPA</td>
</tr>
<tr>
<td>KCT</td>
<td>KLASCO</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c) ROE, ROA, ROCE</td>
<td>d) RONOA</td>
</tr>
<tr>
<td>KCT</td>
<td>KSSPA</td>
</tr>
<tr>
<td>KLASCO</td>
<td>KS</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>KS</td>
<td>KSSPA</td>
</tr>
<tr>
<td>KCT</td>
<td>KLASCO</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e) ROS</td>
<td>f) EBIT</td>
</tr>
<tr>
<td>KSSPA</td>
<td>KLASCO</td>
</tr>
<tr>
<td>KCT</td>
<td>KS</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Source:** Annual Klaipeda State Seaport Authority Reports 2008-2013; KLASCO, “Klaipeda Container Terminal”, “Klaipedos Smelte” Balance, Profit and Loss Accounts 2010-2013

Analysis of rank of EBIT index of port and stevedoring companies (Table 1, f), shows that best index of stevedoring companies’ is KLASCO, main general cargo stevedoring company in the Port of Klaipeda, worst – “Klaipedos Smelte”.

Detailed profit analysis reveals the situation, that despite the fact that the profit of all the companies decreased in crisis period, the profit of Klaipeda State Seaport Authority (KSSPA) steadily increasing and in 2012 EBIT index rank was 4, maximum (Table 1, f; Fig. 6).

The profit of stevedoring companies (Fig. 6), dramatically decreased in 2009. In the container handling company “Klaipeda Container Terminal” (KCT) it decreased by 94%, and in “Klaipedos Smelte” by 75%. However, the profit of all companies tended to increase in the post-crisis period.

![Fig. 6. EBIT Indicator of Port of Klaipeda in 2012](image)

**Source:** Annual Klaipeda State Seaport Authority Reports 2008-2013; Lithuanian Stevedoring Companies Association Report 2012-2013

Especially it is related to the companies of container handling, when their profit increased accordingly, 14 or 10 times in 2010. “Klaipedos Smelte” incurred losses, because the company that operated the general cargo handling, since 2008 started to change its specialization – the new container terminal was built and exploit for the MSC container line. Thus, it explains the recession of “Klaipeda Container Terminal” (KCT), because this company cooperate with MSC until 2008 and lost this business partner.

Decreased profit of handling companies in 2009, which, presumably, decreased the development of stevedoring companies in 2010, indirectly influenced the decreased profit of KSSPA. According to RONOA indicator the capital of profit and profitability of company are assessed (Table 1, d). “Klaipeda Container Terminal” (KCT) indicator is assessed best; it demonstrates appropriate management of company activity.

ROCE indicator of invested capital profitability (Table 1, c) is the highest in “Klaipeda Container Terminal” (KCT), and the lowest is in “Klaipedos Smelte” (KS). It explains the fact that at the crisis period after the decrease of company’s profit “Klaipeda Container Terminal” KCT explored every avenue in order to adjust the situation and to attract new investments. The worst indicators, in comparison to the other companies, are those of “Klaipedos Smelte” (KS) and demonstrates especially complex and dynamic situation in company till 2012. Slightly better RONOA indicator (Table 1, d) depicts incoming positive alterations.

To summarize the analysis of indicators, it emerged that the most inviting company to invest is “Klaipeda Container Terminal” (KCT), which has the beneficial...
indicator RONOA, ROCE and combination of Solvency, in comparison to “Klaipedos Smelte” (KS) (2, 1, 1).

While analyzing indicators of companies of solvency and financial dependence (Table 1, a, b), it was assessed that the KSSPA has the highest indicator of solvency and the lowest financial dependence. Such values of indicators can make the presumption to consider that in the company the money is accumulating, the unoriginal capital is not attractive, the policy of credits is inactive, and thus it is essential to enhance utilization of finances in stock.

On the other hand, accumulation of finances was inevitable in relation to the construction of newest LNG terminal. The lowest indicator of RONOA is in KSSPA, because the main capital of company is composed of leasehold property, which constitutes only 15% of all the income. The highest values of indicators of KSSPA are Current Ratio, Financial Independence and Return on Sales (Table 1, a, b, e), it justifies the direction of investment of seaport authority, and appropriate policy of levies.

It should be noted that all indicators of KSSPA decreased in 2010. It is related to alterations in the management system and in the policy of reclamation investment. The variation of key performance indicators of companies not always match the variation of indicators of GDP, consequently of the global maritime business market, and may have different tendencies. The efficiency of the port’s companies determined the level of integration of the companies in the national economics; level of integration to the international transport business, as this is the activity directly connected with international economic cooperation; attraction of foreign investments; strategies of freight and company’s development in cycling.

V. POST-CRISIS BEHAVIOR MANAGEMENT OF MARITIME INDUSTRIES COMPANIES

The crisis phenomena in the maritime industry has made a significant impact on the economic indices of the participants of the maritime business (affecting income, profit, salaries, number of employees and etc.). In order to analyze the crisis impact and to highlight the behavior of relevant companies there has been a structural interview carried out in different stevedoring companies of the Lithuanian maritime sector.

Accordingly to data provided by the informants, it was highlighted that previously used methods may be a way out of the crisis for port companies (Table 2).

Analysis of activities of maritime sector organizations under crisis conditions describe that in order to achieve the efficiency of the company activities, general and separate solution ways of problems are possible. General solutions are the following:

- re-structuring of the organization;
- internal budget control;
- rationalization of use of internal resources.

Separate solutions of the efficiency of the company activities appear in those fields of activities:

- finances and budget management;
- solutions in organizational structure;
- management solutions.

<table>
<thead>
<tr>
<th>Short term methods</th>
<th>Long terms methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Decreased administration costs;</td>
<td>• Decreased tariff and cargo dues;</td>
</tr>
<tr>
<td>• Decreased number employees;</td>
<td>• Rearranged freight structure;</td>
</tr>
<tr>
<td>• Decreased salary;</td>
<td>• Changed marketing strategies;</td>
</tr>
<tr>
<td>• Got rid of non-productive assets;</td>
<td>• Activated investment policy;</td>
</tr>
<tr>
<td>• etc.</td>
<td>• etc.</td>
</tr>
</tbody>
</table>

For example, as many as there are maritime business companies with different perspective, as much of ways there may be to solve the problem of payment for work. Summarizing the data of the interview it is evident that different decisions are taken – in some companies the previously used methods are used more vastly; in other ones they the methods were not changed or even less applied. In some organizations the elements of authoritarian management are strengthened, in other ones the management is getting more democratic.

As a rule, all organizations need thorough overview, also organizational and structural changes, but the organization is far from coming to such a conclusion at once as there are such ideas about the possible effects of a crisis as “it is harmful only in the country”; there are “only minor disadvantages” within the organization and it is necessary “to live-through” this complicated time of crisis without alterations.

Analysis of interview data highlighted the peculiarities of economic behavior of maritime industries companies in post-crisis period. The data collected from the interview proves, that crisis’ are treated as an organization's competitiveness rating (88% of informants), new approach to the formation period of the company (75%) and the possibility of reorganizing (50%).

Crisis of the organization is characterized by lack of individual stocks, financial flows disorder, and lack attention for making management decisions.

Organization has implemented several performance optimization crisis measures (Fig. 7). The analysis of interview data formed opinion, that operational activity carried out at least change (84%) is business area adjustment, communication management (86%) and increasing of segmental operating efficiency (88%).
According to the opinion of the respondents, the occurrence of a crisis of an organization is the only real external cause (market demand, inflation, taxes, insolvent clients etc.), however the companies also engage in a closer contact with the “internal” partners (employees, shareholders, customers) and detected unsatisfactory level of communication with the “outside” – communicate with state institutions and society 88% of respondents, with political parties only 25%.

On the other hands, the most popular measures used in a company are cost management and financing (Fig. 7). This approach is related to the organizations taken post-crisis actions. Most popular are financial instruments and departmental budget planning implementation or strengthening (100%) and the changes in the strategy the organization.

Other actions: teamwork (88%); organization structure changes (50%); closer cooperation or even alliances with other organizations (38%); concentration of government, strengthening the management (25%); organizations fragmentation (13%).

The general overview of the data provided by the interview not only presupposes the general approach of the companies in order to cope with the crisis but also unveils what measures are most commonly used in the post-crisis period. Primarily the possibilities of further development are proposed as well as taking of urgent measures of reaction, including:

- creation of a team of specialists to overcome the crisis and able to make the post-crisis action program;
- review of the methods of management (centralization of power according to separate aspects, stimulation of creative ideas, integration of efforts, inducement of interchange of information etc.);
- initiating economic measures (budget planning, economy programs);
- initiating financial measures (cash flow control, attraction of additional financial steps etc.).

Analysis of development of crisis situation proposes the re-orientation of the main strategies of the company and its structural reorganization.

The interview data regarding the main features of economic behavior in Klaipeda port, can be divided into standard ones, peculiar to traditional economic behavior, and non-standard ones. The features of behavior are systemized using the principle of diada (Table 3).

The activities of the organizations in post-crisis period may be efficient, but it is not necessary to limit by the only solution and permanently correct the economic behavior of the organization – the companies must constantly review their strategy and try to adjust the changing conditions.

### VI. CONCLUSIONS

The analysis of business cycles influence on port activities allows making assumptions, planning the activities as well as increasing stability and effectiveness. Due to the fact that seaport operates globally, its activities reflect the trends of economics development of the countries the port cooperates with. That is why port activities depend on economic growth or national economic crises to a great extent as well as on regional and world economic processes.

In order to ensure the development of the marine sector and the consistency of its activities, a port constantly invests into growth of turnover capacity, performs harbor deepening, builds new terminals and modernizes the existing ones. However, the efficiency of such investments depends on internal factors (strategic planning, marketing, operations management) as well as on external factors (cyclical fluctuations of economics in particular).

The success of activity in post-crisis period of the Port of Klaipeda was affected by the port’s universality. Therefore, when business and economic conditions are varying, there is a higher probability to retain the handling volume. It must be noted that even though the Port of Klaipeda is universal, the cargo handling companies tend to specialize in their particular activities and narrow down their scope of services. The variation of key performance indicators of companies not always match variation of indicators of GDP, consequently of global maritime business market, and may have different tendencies.
The efficiency of the port’s companies determined the level of integration of the companies in the national economics; level of integration to the international transport business, as this is the activity directly connected with international economic cooperation; attraction of foreign investments; strategies of freight and company’s development in cycling. It will affects to the activities of the organizations under crisis conditions, but it is not necessary to limit company’s activities and to seek a sole solution in order to permanently correct the economic behavior of the organization as it is constantly developing and altering itself.

The Lithuanian maritime industry companies in post-crisis period changed their operational activity, communication management and increased the companies’ segmental operating efficiency. The occurrence of a crisis is the only external causes, but an effective solution was also brought up by introducing “internal” partners (employees, shareholders, customers) to the decision making process. Lack of communication and cooperation with the politicians and parties indicate a low level of lobbyism and political decision making.

The possibilities of further development in the post-crisis period are proposed as well as taking of urgent measures of reaction in the short term, including creation of a working group of specialists, trusting in the possibilities to overcome the crisis impact and able to make the post-crisis program; review of the methods of management (centralization of power according to separate aspects, stimulation of creative ideas, integration of efforts, inducement of interchange of information etc.); introducing economic measures (budget planning, economy programs); introducing financial measures (cash flow control, attraction of additional financial steps etc.).

Characterizing the economic behavior of the companies of the Lithuanian maritime industry and determining the rules of this behavior, it is necessary to take into consideration the geopolitical situation of the region.

REFERENCES


