

Multidisciplinary
SCIENTIFIC JOURNAL OF
MARITIME RESEARCH



University of Rijeka
Faculty of Maritime
Studies Rijeka

Multidisciplinarni
znanstveni časopis
POMORSTVO

Understanding the role of context in shaping the development of business systems

Danijela Sokolić¹, Marija Kaštelan Mrak², Jana Katunar³

¹University of Rijeka, Faculty of Economics, Ivana Filipovića 4, 51000 Rijeka, Croatia

²University of Rijeka, Faculty of Economics, Ivana Filipovića 4, 51000 Rijeka, Croatia

³University of Rijeka, Faculty of Economics, Ivana Filipovića 4, 51000 Rijeka, Croatia

ABSTRACT

The paper addresses the issue of strategic misconceptions in creating a national framework for an industry of strategic importance. In this paper, the shipbuilding industry was chosen as a model for analysing the strategic adjustments of decision makers in business entities and on national level before EU accession and its consequences on the national economy as a whole. The importance of the topic arises not only from benefits that national economy once had from this base industry, but from the fact that shipbuilding is still one of European strategic industries, even though its concepts and values have changed significantly with the technological development and rise of the Eastern emerging markets.

The main hypothesis of the paper is that shipbuilding has a broad extent of externalities in the national economy, and therefore, by leading it properly, especially in times of high unemployment and low level of GDP growth, it can act as an important generator of economic growth. Considering the potential size of the system, the economy can enjoy positive externalities such as a high multiplier effect or spill-overs, no matter whether the shipyards are privatized or state owned. It is ultimately the States responsibility to ensure the infrastructure for industries declared as strategic, i.e. vital to national economic development.

This study reports on a survey of Croatian shipyards decision makers done in 2009 and the strategic line of reasoning the management had 5 years ago, during the pre-accession period. The findings will be compared to the present state of the industry. These findings are put into the context of the Croatian government shipbuilding development strategy, EU recommendations for the development of shipbuilding industry and their impact on the financial, organizational and managerial issues in Croatian shipyards.

ARTICLE INFO

Preliminary communication
Received 20 November 2014
Accepted 16 December 2014

Key words:

Strategy
Business system
Industry
Shipbuilding
Croatia

1. Introduction

Not so long ago, Croatia had relatively successful industrial firms which employed a significant number of people and contributed to its GDP and export ratio. In the period of transition, from the times of privatization through the period of adjusting to EU directives Croatia suffered major losses in textile, wood, heavy metal, processing industry and other key industries in manufacturing sector. Especially in the EU pre-accession period, purely political and economically undefined governmental strategies brought many problems in the competitive positioning of national industries and their entities, especially those export related.

In addition to intra-state malfunctions, the EU Commission imposed its rigorous internal rules regarding competition policies and state aid issues to Croatia as a candidate country. For countries who wanted to join the Union, the Commission proposed certain directives but

which were, in fact, obligatory. However, due to internal socio-economic conditions in these countries and their level of development, these directives were, in some cases, harmful for their economies. Namely, in order to obey the rules countries often resorted to perform easier “cosmetic” rather than painful in-depth changes thus postponing the development and wasting money that the developing countries actually did not have and, therefore, deepening their debt and budget deficits.

The first part of the paper discusses the relevance of the shipbuilding industry in economic development. The second part of the paper presents data on the situation in the Croatian shipbuilding industry before and after accession and roughly lays out the organizational design of Croatian shipyards. In the third part, the paper argues the relevance of the shipbuilding for the Croatian economy and drafts possible directions of sustainable development of Croatian shipbuilding industry after EU accession as a

result of decisions in pre-accession period. The key findings of the research are summarized in the Conclusion.

2. Importance of shipbuilding for national economies

Some of the reasons for the frequent labelling of the shipbuilding industry as a strategic industry within the national economic development strategy will be explained in the following text.

Human resource employment. Regardless of the fast pace of technological developments, shipbuilding is still a labor intensive industry. It usually employs a significant number of people in the region in which it is being developed. Its specificity is the employment of a whole range of different educational levels, from high-tech professionals through highly qualified and unqualified workers, not only in itself but also in supporting and related industries. It is also an important source of highly paid jobs, thereby contributing to the prosperity and economic growth in the region where it is being developed, very often being otherwise disadvantaged coastal regions. Moreover, due to the large workforce involved, international competition, sensitivity and impact on economic cycles, there is a great number of strong trade unions associated with this industry. These unions play an important role and have a high bargaining power in the industry and region, and the economy in general. As a labour intensive industry it greatly affects the overall employment in the country as a whole, and therefore its maintenance is often a social and political issue. When thinking about closing a business or a business activity, the social cost of the newly unemployed should be taken into account.

Impact on other industries. Ship construction directly involves a range of related and supporting industries, therefore, shipbuilding directly or indirectly affects the levels of production level and employment of resources by domestic and foreign companies in other industries.

Multiplier effect and spin offs. Shipbuilding potentially has a high multiplier effect. In the shipbuilding industry, the multiplier consists of two components: direct and indirect effects.

Direct effects are visible in the shipbuilding industry as well as in all other industries that supply materials and equipment for construction of ships, or provide services to shipyards and related companies. The direct effects include shipbuilders' work, services to ship owners related to design and workshop documentation development, preparation of sections, corrosion protection, subcontractors work, etc.

Indirect effects are difficult to measure, and represent the influence of the shipbuilding industry on a range of other industries. Companies in shipbuilding industry such as shipyards, but also material and equipment suppliers and distributors, buyers, agents and other influential interest-groups need all kinds of products and services not classified as shipbuilding products or services (from steel

products through energy to restaurants). Therefore, shipbuilding affects development and increase of production and employment in significant part of the economy. The effects are visible even beyond the accompanying complementary sectors (spin-off effect on e.g. technology development, automotive industry development, tourism, etc.) and industry of consumer goods and services that depend on shipbuilding employees and their families' consumer power.

Industrial multiplier is greater in countries with developed supporting industry. Low shipbuilding multiplier indicates the high import dependency, which will result in lower benefits for the national economy.

Effect on geo region. From the foregoing it can be concluded that the shipbuilding industry has a positive effect on the region in which it is allocated. It is estimated that one job in the shipyard on average generates 3 to 5 additional jobs in the regional economy. As a consequence of high employment rate and development of new industries, shipbuilding often influences infrastructure building of the coastal areas, which attracts new domestic and foreign investments, improves the social status and standard of living, and the image and popularity of the region. Furthermore, shipbuilding industry is environmentally clean, and does not contribute to additional pollution of the region.

Basis for development of industries. It is directly involved in the maritime industry by producing merchant vessels, in the defence industry by construction of naval ships, in tourism by construction of ships for tourism purposes (e.g. cruisers) and in the sphere of scientific research and exploitation of natural resources by building facilities for research and exploitation of marine biological and mineral resources.

Spill over effect. Shipbuilding increasingly requires high technological sophistication, the application of global technological advancement and constant technical and technological innovation. By this, it is indirectly contributing to the development of industrial potential of a country. Shipbuilding has to develop its own knowledge and skills and import world's know-how as a basis for further innovations that will be, in addition to shipbuilding, used in other industries (spill over to other unrelated industries). Furthermore, it encourages the development of its own workforce in entrepreneurship, scientific and professional fields. It seeks for excellence through the implementation of international standards of quality in doing business. Through the creation of business networks, it encourages high growth potential of companies in network and basis for development based on innovation. If it is a cross-border networking, benefits can be manifold: the transfer of know-how and the use of trusted infrastructures for access to foreign markets through joint research and development and creation of a better political environment, inter-country dialogue and stronger image of the country, etc.

Export orientation. As a predominantly export-oriented industry, shipbuilding industry provides revenue from international markets and greatly contributes to the

foreign trade balance. On the other hand, the high value of the final product in combination with a long production cycle requires long-term bonding funds for what is needed to ensure stable sources of capital. For this reason many shipbuilding nations often fall short, especially the economically weaker countries and especially in times of crisis.

Strategic industry. Although shipbuilding is characterized by low profitability, the maritime countries identify it as strategically important because of its impact on the development of the region in which it is allocated, its employment rate, but also because of its multiplicative and cooperative character which affects the conjuncture of entire national economies. It is therefore extremely important especially for national governments but also for private sector to create conditions for increasing its international competitiveness.

For all these reasons, some countries have decided to use the shipbuilding industry as a key driver of industrialization of the country. Finally, nations are not to specialize according to comparative advantage but to competitive advantage (Porter, 1998), which has to be created over time, gradually investing in technology, people, knowledge, infrastructure, etc. The proof for that are today's shipbuilding market leaders, especially South Korea and China, which didn't have notable share in shipbuilding market until the end of the 20th century, and today they are the major ship producers. It is estimated that shipbuilding multiplier in South Korea is 10 which means that every won¹ produced in shipbuilding industry generates 10 won worth production in South Korean related and supporting industries. This level of productivity and efficiency of the system is achieved thanks to restrictive import policy, strong government support and highly developed supporting industries. On the other hand, the importance of shipbuilding for national economic development is also visible from the Polish and Greek examples.²

3. Methodology

There are at least five main segments of shipbuilding market: merchant, naval, inland, ship repair and conversion (Bitzer, von Hirschhausen, 1997, p. 19) and off-shore market segment.

This study is focused on commercial shipbuilding sector (merchant and inland vessels and off shore objects) excluding ship repair and conversion segment (since it has different regularities), and construction of naval ships (since the market of naval ships cannot be seen as a fully open competitive market as it is influenced strongly by non-economic factors).

The paper mainly covers segment of commercial sea-going vessels over 100 gross tonnes (GT), which also includes the mega-yacht sub-sector and specialized vessels production (such as off-shore, dredgers, etc.).³

The research had two stages. In the first stage extensive survey was designed and conducted on all Croatian shipyards. The questionnaire was sent to top level management in Croatian shipyards that are producing ships for commercial purposes. All shipyards replied so there are no sample biases. The second stage involved in-depth interviews with a group of shipyards managers and other representatives from shipbuilding industry.

4. A critique of strategic positioning of Croatian shipyards

In 2012 the total segment of building commercial ships and special off-shore vessels (further on: shipbuilding industry), recreational boats and other types of vessels, included 251 companies that employed 9.461 workers (0,7% of total Croatian workforce) (Industrijska strategija, p. 137). The ratio of exports and imports in the segment in 2012 was 3.28. The data for 2013 show a decline in the export of the whole segment. The production for export amounted to 361.5 million Euros in 2013, and when compared to 2012, it decreased by 52.4% (Croatia Bureau of Statistics). The shipbuilding industry makes up for 88.3% of the total segment revenue (C30.1 according to National Classification of Activities, 2007) and had 2.08% of revenue share in GDP in 2008. In 2013 the same ratio decreased to 0.96%.

Till the nineties, Croatian shipbuilding had a prominent impact on the global shipbuilding market. The ship is still the most complex and renowned individual Croatian exporting products. In the Croatian export strategy 2007 – 2010 shipbuilding industry was declared as one of three strategic industries in national economic development, as potential boosting industry with a potentially high multiplier effect. In 2013 shipbuilding in Croatia was ranked second largest, fastest growing and with most future potential marine and maritime activity, right behind coasted tourism (European Commission, Studies to Support the Development of Sea Basin Cooperation in the Mediterranean, Adriatic and Ionian, and Black Sea, 2013, p. 7). In spite of these facts, Croatian shipbuilding is rapidly losing positions on the global map, while, on the other hand, still rather unknown Vietnamese or Filipinas shipbuilding industry is growing at an extraordinary pace.

The main reason for problems in shipbuilding industry is inability of Croatian shipyards to cover their costs with

¹ The monetary unit in South Korea.

² Major Polish and Greek shipyards were closed due to inability to conform to demanding EU directives regarding state aid policies thus causing huge economic, political and social problems for those countries but also for the EU as whole.

³ Within the shipbuilding sector various ship categories are distinguished, including: liquid bulk carriers (crude oil and product tankers); dry bulk carriers; container ships; specialized vessels, including offshore vessels, dredgers, chemical tankers and LPG and LNG carriers; cruise ships and ferries; mega-yachts. According to study on Competitiveness of the European Shipbuilding Industry within the Framework Contract of Sectoral Competitiveness Studies – ENTR/06/054, Final report, Rotterdam, 2009.

Table 1 Shipyards in Croatia; facts and figures

Number of shipyards	6+1 ⁴ (2011) / 4 ⁵ (2014)
Production capacity (ships per year)	3 – 5 (2011) / 5 – 8 (2014)
Number of direct workforce (shipyards)	8,376 (2010) / 8,638 (2013)
Completions (CGT, 2010)	277,709
Export (CGT, 2010)	203,632
Completions (million EUR, 2010)	682
Export (million EUR, 2010)	565
Accumulated losses (million EUR, 2010)	1,361
Number of regions (counties) directly engaged	3

Source: CESA Annual Report 2010–2011, Minister Đuro Popijač, Ministry of Economy, Labour and Entrepreneurship, Companies Financial Statements

Table 2 Shipyards in the world; facts and figures

Year 2013	Croatia	Germany	Netherland	Japan	S. Korea	China
New orders						
- number	12	10	46	555	555	1,314
- GT (000)	144	384	207	13,400	35,906	42,971
- share (%)	0,1	0,4	0,2	13,2	35,4	42,4
Completions						
- number	7	12	30	540	386	1,073
- GT (000)	89	350	66	14,588	25,504	25,903
- share (%)	0,1	0,5	0,1	20,7	34,8	36,8
World order book at year–end						
- number	20	30	77	825	890	2,161
- GT (000)	231	1,109	345	26,089	60,624	73,039
- share (%)	0,1	0,6	0,2	14,3	33,2	39,9

Source: Shipbuilding Statistics 2014

stable income. Thus, they are operating at a loss and contributing to overall economic imbalance of the country. These losses are high, accumulated over time and partially financed from state budget and, therefore, represent an economic problem.

Croatian shipyards are currently oriented towards lower added value market segments. They are mainly producing simple and mid complex vessels. According to their product mix, the main rivals of most Croatian shipyards are Japan, South Korean and Chinese shipyards. Unlike Croatian shipyards, who have produced 7 ships, Japan, S. Korea and China have produced 540, 386 and 1,073 ships in 2013 respectively, thus exploiting economies of scale which allowed them to put significantly lower prices.

Moreover, in 2007, Japan, South Korea and China had 84.9% of the world completions while Croatia had 1.2%; in 2013 Japan, South Korean and China had 92.3% while Croatia had fallen to 0.1%. The share of European shipyards in the World new orders in 2013 was 1.1% while three Asian countries (Japan, S. Korea and China) participated with 91% (Shipbuilding Statistics 2014).

⁴ Six yards are mainly in ship construction and one is purely in repair and conversions.

⁵ In the privatization process Shipyard Uljanik bought Shipyard 3. maj. Shipyard Kraljevica was in bankruptcy until November 2014. In November 2014 a former partner (supplier) took control over shipyard, and for that reason it was not included in this statistics.

The common characteristic of Chinese, South Korean and some other Asian ship producers is agglomeration of domestic companies into broader networks called clusters, chaebols, keiretsu systems, etc. in order to achieve economies of scale and scope through production in large series, cost strategies and specialization. Moreover, the shipbuilding industry in these countries gets significant government support (as strategic national industry with an aim to employ large scope of resources – suppliers, R&D centres, universities, etc.) but in return they are submitted to strong state control. Achieving efficiency is based on a virtual business base and developed coordination mechanisms (taking into account simultaneous relations of cooperation and competition) between companies within the network (Hassink, Shin, 2005; Sungyoung, 2006).

Compared to its main competitors, Croatian shipyards are small production units which can not achieve competitiveness through economies of scale and scope (See Table 2). For example 200 – 300 Chinese shipyards are producing over 1,000 ships per year while Croatian shipyards produce around 5 ships per year in the same market segment. When analyzing their competitive strengths, the research shows that Croatian shipyards base their competitive positioning almost solely on 3 factors: long tradition, great geographical position and higher product quality. It is clear that those three factors are not sufficient to build sustainability and gain competitive advantage but

Table 3 Basic indicators of the Croatian shipbuilding industry 2008 – 2013

Shipyard	Total revenue (000 €)	Total cost (000 €)	Profit before income tax/loss (000 €)	Number of employees
Uljanik				
Year 2008	274,940	273,925	1,015	2,034
Year 2013	90,768	142,291	-51,523	1,596
3. MAJ				
Year 2008	187,138	206,088	-18,950	2,127
Year 2013	90,856	93,334	-2,478	1,307
Brodotrogir⁶				
Year 2008	94,981	138,478	-43,497	1,152
Year 2013	25,273	24,990	283	932
Viktor Lenac⁶				
Year 2008	55,370	41,787	13,583	651
Year 2013	36,836	36,774	62	495
Brodosplit⁶				
Year 2008	323,423	398,009	-74,586	3,772
Year 2013	173,370	105,728	67,642	3,255
TOTAL				
Year 2008	935,852	1,058,287	-122,435	9,736
Year 2013	417,103	403,117	13,986	7,585

Source: www.fina.hr

inside perception can be illusive. For example, contrary to the expectations, field research showed that managers of Croatian shipyards considered their companies large in comparison to the competition (Sokolić, 2011).

In the last six years revenues of Croatian shipyards have decreased by 513 millions € or 55.5%, while the number of employees was reduced by 22% or 2,151 employees (See Table 3).

Even though the observed period overlaps with global economic crisis, the fact that business activities in Asian shipyards led to the growth of the industry may point to the several conclusions; for instance: management weakness or inability to set the strategy and operate it towards growth, inert decision making, inadequate government support or sensitivity for the industry, etc.

5. The management perspective

During 2009, a questionnaire was run to explore the attitudes towards industry problems among top managers in the Croatian shipyards. Managers were offered a closed set of possible answers and demanded to rank them. The factors were ranked according to their perceived importance for managers of all Croatian shipyards. Some factors are perceived as equally relevant (1 – Most important; 9 – Least important).

As can be seen from Table 4, the factors that are indicated as crucial for the business success of shipyards indicate a rather self centred approach, dominantly preoccupied with

short term objectives and internal organizational issues, rather than strategic positioning on the dynamically growing world markets demonstrating tectonic changes in market shares and business positioning.

One would expect that acting managers, with industry experience would be more aware of their respective standing on issues such as comparative scale efficiency, market focusing (product profiling for niche markets), product customization, customer specific valued added, and particularly, awareness of the strategies of global competitors.

An interesting finding, contrary to our expectations was that Croatian managers considered business networking, strategic partnership and possible synergies that arise from virtual organizations rather unimportant to their business success (Table 4). A possible interpretation for

Table 4 Factors determining the business success of Croatian shipyards (Ranks, 2009)

Factors	Rank
Market recognition	1
Organizational knowledge	2
Staff professionalism	2
Financial strength	4
New trends in the world market	5
Cost efficiency	6
Lobbying/political influence	6
State bureaucracy	8
Business networking/strategic partnerships	9

Source: Authors

⁶ Consolidated financial Statements

such an attitude could be attributed to the fact that relationships with contractors historically developed over series of spin-offs (unfortunately, the same, privately owned spin-offs were often used as channels for tunnelling resources out of shipyards that remained under government ownership). Another probable interpretation would be that managers were unsettled by the unfavourable economic – political climate in Croatia, underdeveloped supporting industries and weak influence of acting managers on the process of selection of partners.

Even though political influence and state bureaucracy did not appear to be among the main obstacles for business success, the sole fact that they were given priority over networking, might be taken as an indication that management boards had higher expectation when it comes to the role of the government.

In our opinion, the Croatian government, acting as the sole owner till 2013, arbitrated in issues that could have (possibly) been handled better by insiders, or the managers themselves, such as business restructuring, and up to a point, provision of finance. Definitely the government had a role in promoting partnership/networks among Croatian partners (shipyards and suppliers), but it should have stressed the role of setting directions for specializations and cooperation that would allocate parts of the business process to those actors with best technological expertise and scale. Still, it is our opinion that the State should have done more in its role of facilitator.

The last three factors, in fact, imply that the role of the state should also be taken into account when explaining the downturn of Croatian shipbuilding.

6. Strategic issues at national level

The main role of the state, which it failed to exert, was to establish clearly how the shipyards contribute to the national economy and to act as a promoter of Croatian shipbuilding in relation to EU authorities.

Although the financial performance of the shipyards is not a negligible factor, the overall value of shipbuilding must be evaluated through a number of factors such as the multiplying effect, contribution to GDP, exports, employment, regional development, industry development, technological spin-off's, spill over effects, etc.

The estimated shipbuilding multiplier is between 2,5 and 3 in Croatia (Strategy for shipbuilding development⁷, 2002, p. 16-17; Veža, 2008). The multiplier is low due to the relatively underdeveloped supporting industries. Low multiplication effect implies high import dependence. Some estimates show that the critical portion of raw materials and components in a Croatian ship are imported (the import ratio depend on the type and size of ships and shipyards).

Moreover, there are various estimates of the proportions of imported materials in the products of local man-

ufacturers that produce materials and equipment for shipyards. If we add the foreign sources of financing production in the calculation, foreign component often represents half the total cost of building ships. The conclusion is that the effects of Croatian shipbuilding are mainly transmitted in favour of foreign suppliers.

On the other hand, the Croatian shipyards produce mostly for export. In 2010 they exported 83% of their production, and total exports amounted 565 mil EUR. The same year, share of their production in GDP was about 1.5% and the share in total exports was slightly oscillating around 6.2% (calculated according to sales value of the delivered ships).

The number of workforce directly employed in the shipbuilding production in relation to total employment in Croatia in 2013 amounted to 8,638 employees. That number rises to over 30,000 people if we add people employed in non-production parts of shipbuilding groups, as well as people employed in supporting companies. The conclusion is that the shipyards contribute significantly to employment in the regions where they are located, so maintenance of shipbuilding became socially very sensitive issue. One should also bear in mind the current situation in the country – the high rate of unemployment, underdevelopment of other industries, and the fact that retraining programs are poorly implemented. The downsizing of shipyards caused social issues, at least in the regions where the shipyards were active.

Croatian shipyards were state owned until 2013, and it is usually shareholders responsibility to manage capital and solve investments viability issues. In this case, the government (including different political options over last twenty years) proved to be perfectly incapable to solve the problem.

Given that the EU requires solving problems in the national economy before accessing the integration, shipbuilding became a political problem. The EU didn't require literally closure or privatization of the shipyards but when the owner (the state) chose the option called *privatization through restructuring*, the shipyards were granted state aid for restructuring and according to the restructuring agreement (called the Restructuring programs) the privatization became their contractual obligation.

In 2011 the government found potential investors who agreed to acquire the shipyards. Potential investors introduced Restructuring programs (2011). Those new Restructuring programs were approved by Croatian Competition Agency and the EC.⁸ Restructuring programs included solving problem of state aid otherwise inconsistent with the EU *aquis communautaire*.

Restructuring costs for Croatian shipyards were estimated at 3.7 billion EUR. The investors (and shipyards) were to invest about 40% of total costs (approximately 2.2 billion EUR in the restructuring), while the rest is cover-

⁸ This also means closure of another phase in a process of restructuring that began 2006 when the Croatia put into effect the obligations assumed under the Stabilization and Association Agreement.

⁷ Hrvatska u 21. stoljeću – Strategija razvitka brodogradnje, 2002.

ing all the aspects of state aid including grants, state guarantees, debt and the assumption of debt. Major part of State aid in that calculation referred to state aid already granted to shipyards from 2006 onwards. According to the EU directives regarding state aid, restructuring aid was assigned according to the principle “one time-last time”. After receiving the aid for restructuring, firms in difficulty were not allowed to receive any form of state aid for the next 10 years (See Table 5).

Table 5 Croatian Shipyards restructuring costs (according to Restructuring Programs)

Total restructuring costs (million EUR)	3,654.82
State aid (million EUR)	2,182.18
Own contribution to the restructuring (investor or shipyard, mill EUR)	1,472.64
The share of own funds in restructuring costs (%)	40.1%

1 EUR = 7,469579 HRK (CNB, October, 13 2011)

Source: Croatian Competition Agency Reports, 2011

Moreover, the restructuring plans included compensatory measures. Compensatory measures were mandatory reductions of shipyards' production capacities. The shipyards who received state aid had to reduce their production capacities because it was presumed they achieved an undeserved competitive advantage over other companies which operated independently and without reliance on funds from the state budget.

Table 6 Required production capacity reduction (according to Restructuring Programs)

Compensation measure (in CGT)	71.280
Permitted production capacity (CGT)	191.522
Required capacity reduction (within first year)	25.9%

Source: Croatian Competition Agency Reports

Required reduction in production capacity amounts to an average of about 25.9% of shipyards' capacities at the referred time (See Table 6). Capacity reduction was to be implemented in the first year after signing the privatization agreement. Finally, the negotiations between government and potential owners failed due to significant bureaucratic, operational and financial constraints imposed to private owners.

The EU practice of compensatory measures proved to be a serious obstacle to competitiveness. Reaching the maximum allowable annual production capacity of the shipyard means prohibition on further orders acquisition in order not to exceed the allowed amount of production so shipyards are forced to hand over the additional orders and, thus, potential profit to competition (Employment, Order Books and Perspectives in the German Shipbuilding Industry – Survey, 2002).

The privatization process ended in summer 2013, directly before Croatian accession into the EU (on July 1, 2013). Contrary to first impressions, the privatization might be a step forward. Finally, managerial boards will have more space to conceptualize and implement business strategies. Without being subject to threats of political replacements, managers will be able to concentrate on long term strategies, gaining employment stability, continuity in decision making, but also responsibility for strategy implementation and results. Not threatened by personal and political obligations, managers might also become more proactive and willing to take risks.

As for the State, its main role would be to position Croatian shipbuilding first in the national industry strategy. According to the Croatian Industrial Strategy, shipbuilding can not be placed among the “drivers” since its profits are negative or around zero, indicating it will not be getting the needed attention, neither promotion. What is more striking, the same document identifies shipbuilding as a problem industry (Industrijska strategija Republike Hrvatske 2014. – 2020.).

7. Conclusion

Even though the context under which business systems operate is generally acknowledged as an important factor influencing the size and business scope of specific firms and industry sectors, managers, as well as policy makers, seem to neglect the extent to which contexts (institutional, economic, social, political, etc...) shape the pace and direction of processes determining changes in market shares and internal business structure. Whereas managers focus on operational goals, governments, at least in our research, often focus on financial and ownership issues, often sacrificing long term business development (sustainability) to immediate political dictate. Consequently, both failed in addressing strategic considerations that could have improved future prospects – business continuity and growth as a managerial goal, and viable overall economic development, vital to governments.

Shipyards all around the world suffer the consequences of global economic downturns. The power of former market leaders in the global shipbuilding industry such as those of Great Britain, Netherlands or Spanish shipbuilding forces lapsed in the new market order. Major EU shipyards, like Polish and Greek, were closed due to inability to adapt to changing environment including unfair competition on global market thus causing huge economic problems for their economies. Closing giant companies which employed significant share of workforce and contributed largely to a country's GDP (without proper replacement plans) caused social, economic and political problems for their governments.

The Croatian shipbuilding industry represents the most vivid example of how politics influence business prospects of industries and firms. Once highly competitive on the global market, the Croatian shipbuilding industry has started

accumulating losses and technological lags that eventually led to decreasing in orders, illiquidity, significant lay offs, shutting down of related firms and industries, etc. Dynamic environment and long-term problems (both strategic and operational) present in once the third ranked producer in the world's shipbuilding industry have brought the Croatian shipbuilding industry on the verge of survival.

The research confirmed the importance of shipbuilding industry for overall economic development because of its high employment rate, impact on regions, GDP, export orientation, multiplier effects and other externalities on national economies. The shipbuilding industry is not easily replaceable and that, in the case of closure, adequate replacement should be employed even before the process of closure begins in order to maintain economic, social and political stability of the country.

Croatian shipbuilding is currently on the most important turning point in its history – it has to prove its sustainability or it is going to disappear. If the direction of change is well managed this could be an opportunity for the development of targeted businesses, strategic partnerships and other forms of networking, maybe even development of efficient shipbuilding cluster whose power, value and synergies can lead the stumbled Croatian economy into the better future.

Future research is demanded in order to see whether our findings apply in different setting; different industries, economic conditions, etc.

References

- [1] Bitzer, J., von Hirschhausen, C., *The Shipbuilding Industry in East and West: Industry Dynamics, Science and Technology Policies and Emerging Patterns of Co-operation*, Deutsches Institut für Wirtschaftsforschung, Berlin, 1997.
- [2] Community of European Shipyards' Associations (2011), *Annual Report 2010–2011*. Available at: http://forumokretowe.org.pl/files/news_pl_19.pdf (12.11.2014.)
- [3] Croatia bureau of statistics. Available at: http://www.dzs.hr/Hrv_Eng/publication/2014/02-01-05_01_2014.htm (14.11.2014.)
- [4] Croatian Competition Agency Reports. Available at <http://www.aztn.hr> (17.02.2012.)
- [5] Croatian Shipbuilding Corporation. Available at: <http://www.hb.hr/> (15.11.2014.)
- [6] European Commission (2014), *Studies to support the development of sea basin cooperation in the Mediterranean, Adriatic and Ionian, and Black Sea*. Available at: https://webgate.ec.europa.eu/maritimeforum/sites/maritimeforum/files/Croatia_cf.pdf (13.11.2014.)
- [7] Hassink, R.; Shin, D.H., *South Korea's Shipbuilding Industry: From a Couple of Cathedrals in the Desert to an Innovative Cluster*, *Asian Journal of Technology Innovation* (2005), 13, 2.
- [8] IG Metall – Bezirk Kuste and Institut Arbeit und Wirtschaft (2002), *Employment, Order Books and Perspectives in the German Shipbuilding Industry*, Available at: <http://www.iaw.uni-bremen.de/downloads/GermanShipbuildingIndustry2002.pdf> (12.11.2014.)
- [9] Ministarstvo gospodarstva, rada i poduzetništva, HIO – hrvatska izvozna ofenziva – Strategija za razdoblje 2007 – 2010, Zagreb, 2006.
- [10] Ministarstvo gospodarstva Republike Hrvatske (2014), *Industrijska strategija Republike Hrvatske 2014 – 2020*. Available at: http://forumokretowe.org.pl/files/news_pl_19.pdf (20.10.2014.)
- [11] Porter, M., *Clusters and the New Economics of Competition*, HBR, USA, 1998.
- [12] Sokolić, D., *From Global Leaders to the Edge of Survival – Crucial Decade For Croatian Shipyards*, *International Journal of Arts & Sciences* (2011), 4(12).
- [13] *Study on Competitiveness of the European Shipbuilding Industry within the Framework Contract of Sectoral Competitiveness Studies – ENTR/06/054 (2009)*, Final report, Rotterdam. Available at: http://ec.europa.eu/enterprise/sectors/construction/files/compet/sustainable_competitiveness/ecorys-final-report_en.pdf (20.09.2014.)
- [14] Sungyoung, K., *Developmental States under the WTO: The Shipbuilding Industry in Korea*, *Proceedings of Second Oceanic Conference on International Studies*, University of Melbourne, Melbourne, Australia, 2006.
- [15] *The Shipbuilder's Association of Japan, Shipbuilding Statistics 2014 (2014)*. Available at: http://www.sajn.or.jp/e/statistics/Shipbuilding_Statistics_Mar2014e.pdf (5.11.2014.)
- [16] Tijardović, I., *Without new technology there is no future for shipbuilding*, 2011. Available at: www.hrsvijet.net (25.10.2014.)
- [17] Ured za strategiju razvitka Republike Hrvatske, *Hrvatska u 21. stoljeću – Strategija razvitka brodogradnje, revidirano izdanje*, Zagreb, 2002.
- [18] Veža, I., *Restructuring of the Croatian Shipbuilding Industry (2008)*. Available at: <http://www.soec.nagoya-u.ac.jp/erc/DP/paper165.pdf> (29.09.2014.)