



Institute of
Public Finance

FISCUS

Prudent and responsible public
sector financial management

The restructuring and privatisation of the shipyards in Croatia

No. 2 | March 2016
doi: 10.3326/efiscus.2016.2
ISSN 1849-9317

Anto Bajo
Marko Primorac
Martin Hanich

The restructuring and privatisation of the shipyards in Croatia

There has been too little analysis in Croatian academic and professional literature of the economic operations of domestic shipyards. The public impression has always been that shipbuilding is a strategic industry from which the country has enormous benefits. But the reality is just the opposite – Croatian shipbuilding is an example of an incinerator of public money. Since 1992, 30bn kuna of taxpayers' money has been sunk into its rehabilitation and restructuring. In this paper, accordingly, there is an attempt to explain the process and put forward the costs of rehabilitation and restructuring, as record of a time that will have important fiscal consequences for the future development of Croatia. The fundamental objective of the paper is to explain the main characteristics of the processes in which the shipyards have been restructured, of the liabilities that the state has assumed pursuant to restructuring contracts and the sale of their shares and the liabilities and responsibilities that the new owners have taken on. Explained in particular will be the impact of restructuring on employment, wages, orders and the value of jobs contracted and deliveries.

Introduction

Shipbuilding in Croatia has a long tradition. The favourable geographical location along the Adriatic coast was crucial for the foundation of today's yards, which in the middle of the 19th and in the early 20th century were established as part of the naval arsenal of the Kingdom of Dalmatia (an Austrian crown country within the Habsburg Monarchy and the Austro-Hungarian Empire). Then, the shipyards proved themselves successful in the construction of naval vessels, and during the years were increasingly oriented towards the construction of commercial vessels. Today the production lines of the biggest Croatian shipyards include all kinds of merchantmen, floating docks, cranes, special purpose ships and warships, including submarines and all kinds of vessels.

Two hundred and fifty nine firms are in operation in Croatia that build ships and boats. They have total sales of almost 2bn kuna and employ a labour force of almost 11,000 (table 1).

Table 1 Review of the boat and shipbuilding sector, 2013

Number of firms	259
Number of persons employed	10,944
Number of paid employees	10,710
Number of employ hour worked (in thousands of hours)	17,643
Main characteristics of operations	(in million kuna)
Sales	1,937
Value of production	1,999
Added value according to costs of production factors	440
Gross operating surplus/ deficit	-669
Total procurements of goods and services	2,230
Personnel costs	1,108
Compensations and wages	712

Source: CBS

Shipbuilding has always been an important industrial sector, especially along the coast, in Istarska, Primorsko-goranska and Splitsko-dalmatinska counties. A large number of small and medium sized enterprises are contractors to the shipping industry, and its export orientation additionally enhances the importance of this branch of industry.

The five biggest shipyards are Brodosplit, Brodotrogir, Uljanik, Viktor Lenac and 3. maj. These shipyards employ about eight thousand workers (table 2).

Table 2 Number of persons employed in the five biggest Croatian shipyards from 2010 to 2014

	Brodosplit	Brodotrogir	Uljanik	Viktor Lenac	3. maj	Total
2010	3,553	1,208	2,760	590	2,628	10,739
2011	3,491	1,239	2,663	598	2,515	10,506
2012	3,255	1,203	2,631	573	1,824	9,486
2013	2,259	932	3,956	509	1,307	7,656
2014	2,447	983	3,826	537	1,242	7,793

Source: Financial reports of the shipyards (number of employees as of Dec. 31)

NB: in 2013 and 2014 3. maj figures are shown in Uljanik reports, and are thus not aggregated.

Although until a short time ago they were all state owned, by the end of 2013, all the big shipyards had been restructured and privatised. Viktor Lenac completed the restructuring and privatisation process in 1993 and is operating today in the same environment as shipyards that are still going through this process. The two biggest stockholders of Viktor Lenac are Tankerska plovdba d.d. of Zadar and Uljanik d.d. of Pula. The privatisation of Viktor Lenac was carried out according to the model of employee buyout. The largest chunk of equity in Uljanik is held by domestic natural persons (46%). After the privatisation of Uljanik, it made a binding offer to take over 3. maj, and today Uljanik owns 85.5% of 3. maj. Brodosplit is almost 100% owned by DIV brodogradnja d.o.o., and Brodotrogir is 95% owned by Kermas Energija d.o.o. (table 3).



Table 3 Structure of ownership of the shipyards in 2015 (in %)

	Shareholder	%
Brodosplit	DIV - Brodogradnja d.o.o.	99.76
	HGK	0.13
	Uniqa d.d.	0.07
Brodotrogir	Shareholder	%
	Kermas Energija d.o.o.	95.24
	Small Shareholders	4.35
	GERP/RH	0.23
Uljanik	Shareholder	%
	Domestic natural person	46.21
	Croatia osiguranje d.d.	9.93
	GERP/HZMO	7.74
Viktor Lenac	Shareholder	%
	Tankerska plovidba d.d. Zadar	36.95
	Uljanik d.d. Pula	34.67
	PBZ d.d. Custody account	8.13
3. maj	Shareholder	%
	Uljanik d.d.	85.46
	Domestic natural person	12.44
	Ljekarne Prima Pharme	0.89

Source: Financial reports of the shipyards

For a better understanding of the consequences of restructuring and privatisation it has to be said that DIV became the owner of Brodosplit in early 2013. A few months after that, Kermas energija took over Brodotrogir. In mid-2014, Uljanik (privatised in 2012) took over 3. maj.

The revenues of the shipyards in 2011 and 2013 were greater by the mere fact that state aids and grants were recorded as revenues. By a reduction of the level of aids and grants, the revenues of the yards as well as their expenditures were reduced (table 4). But state aids were the reason for the larger operating profits being made.

After 2012, the revenues of the shipyards fell drastically. In 2013, only Uljanik recorded a rise in overall revenues, but even this is only apparent, since revenues from sales did not rise, only financial revenues, which was actually the difference between the fair value of 3. maj and the market price, which came to about 560m kuna (revenues from favourable purchase). Total expenditures fell drastically after privatisation, thanks to rationalisation of costs, dismissals and reduction of high financial expenditures brought about by high interest. Thanks to the high reserves of Uljanik, total shipyard expenditures rose in 2014. In 2014 Brodotrogir and Viktor Lenac registered a very small profit, and the remaining yards made losses.

Revenues from sales of the biggest Croatian shipyards fell from 2011 to 2013, while in 2014 they rose to 2bn kuna (table 5).

Table 4 Revenues, expenditures, profit/loss (before tax) of the shipyards from 2011 to 2014 (in million kuna)

		2011	2012	2013	2014
Uljanik	Revenues	1,811	1,541	2,010	1,550
	Expenditures	1,807	1,613	1,906	2,049
	Profit/loss	4	-72	104	-499
3. maj	Revenues	3,871	2,001	693	778
	Expenditures	1,423	924	712	993
	Profit/loss	2,447	1,077	-19	-215
Brodosplit	Revenues	3,811	3,508	1,323	514
	Expenditures	2,076	839	807	662
	Profit/loss	1,736	2,669	516	-148
Brodotrogir	Revenues	993	2,172	196	337
	Expenditures	856	363	194	329
	Profit/loss	137	1,809	2	8
Viktor Lenac	Revenues	354	255	283	367
	Expenditures	348	284	283	366
	Profit/loss	6	-29	0	0
Total	Revenues	10,840	9,477	3,812	2,768
	Expenditures	6,510	4,023	3,191	3,406
	Profit/loss	4,330	5,454	623	-639

Source: Consolidated audited annual reports of the shipyards from 2011 to 2014 (at group level)

Note: In 2013 and 2014 data for 3. maj are not aggregated for they are already shown in the Uljanik's financial reports.

Table 5 Revenues from sales from 2011 to 2014 (in million kuna)

	2011	2012	2013	2014
Uljanik	1,555	1,391	1,054	1,099
3. maj	761	516	432*	434*
Brodosplit	818	376**	180	425
Brodotrogir	393	254	57	169
Viktor Lenac	335	236	265	354
Total	3,862	2,773	1,556	2,047

Source: Consolidated audited annual reports of the shipyards from 2011 to 2014 (at group level)

Notes: * In the total sum, these figures are subtracted, for they have already been published in the Uljanik consolidated reports

** From the 2012/2013 reports, for in the 2011/2012 reports there is no information concerning revenues from sales.

Revenue from exports of the five biggest shipyards have been falling since 2011 (table 6). In the world order books, in 2015 Croatia occupied 10th place (after China, South Korea, Japan, the Philippines, Romania, Vietnam, Brazil, Taiwan and the USA). China is at the top with 43% of the total market, then South Korea (29%) and Japan (21%). In 2015 Croatia accounted for about 0.23% of world production and in Europe accounted for 13% after Romania (57%), making it the second (Croatian Shipbuilding – Jadranbrod, 2015).

Table 6 Revenues from exports of the five biggest shipyards from 2011 to 2014 (in million kuna)

	2011	2012	2013	2014
Uljanik	n.a.	1,362	963	871
Viktor Lenac	289	215	164	312
3. maj	731	505	423	326
Brodosplit	723	305*	121	n.a.
Brodotrogir	3,565	215	0	0
Total	2,098	2,602	1,248	1,182

Source: Consolidated audited annual reports of the shipyards from 2011 to 2014 (at group level)

Note: n.a. – not available

* From the reports for 2012/2013, for in the 2011/2012 reports, there is no information about revenues from sales/exports. In 2013 of the total amount the 3. maj data are subtracted, for they are already shown in the revenues from exports of Uljanik.

In the last few years a considerable decline in production has been observed, the result of increased competition and of greater EU pressures for restructuring of the shipyards, and partially because of the poor market for ships. It became necessary to differentiate production and to get into new areas outside the building of ships. Thus classic shipbuilding began to slide in the shadow of offshore projects such as wind farms, dams and energy containers. It will be interesting to track the jobs that Croatian shipyards will carry out in the future. Judging from trends towards the diversification of production, the value of ships delivered could be a less important figure in the analysis of the operations of the big Croatian shipyards.

Compensated gross tonnage

Compensated gross tonnage – CGT – is the unit used to measure output in shipbuilding. It is based on gross tonnage (GT) or DWT (deadweight tonnage), adjusted with the use of compensating factors relative to the complexity of the ship relating to hull, engines and equipment in relation to the kind and size of the ship. The most recent formula for the calculation of CGT unit is: $CGT = A \times gt^B$, where A is the factor of the kind of ship, gt is the gross tonnage of the ship and B is the ship size factor (OECD, 2007).

Expressed in compensated gross tonnage, the value of the ships delivered has significantly reduced (table 7).

Bearing this in mind, it is a sensible decision of the shipyards gradually to tend towards non-shipbuilding production and to expand their market capacities. Privatisation was a logical path towards the strategic positioning of shipbuilding. The order book of Croatian shipyards shows that production measured according to CGT will rise in the coming period (table 8).

Table 7 Number and value of contracted and delivered new ships from 2011 to 2015

Year	Deliveries	Uljanik	3. maj	Brodotrogir	Brodosplit	Kraljevica	Total
2011	CGT	114,416	91,691	23,223	75,673	0	305,003
	quantity	5	5	1	3	1	15
2012	CGT	52,434	62,544	45,978	22,522	27,891	211,369
	quantity	4	5	2	3	2	16
2013	CGT	39,488	73,158	0	2,622	0	115,268
	quantity	3	14	0	1	0	18
2014	CGT	17,586	85,453	0	8,084	0	111,123
	quantity	5	31	0	1	0	37
2015	CGT	44,929	29,070	49,069	8,084	0	131,152
	quantity	5	10	4	1	0	20

Source: authors' calculations from the reference lists of the shipyards

Table 8 Order book of Croatian shipyards on January 1, 2016

Year	Deliveries	Uljanik	3. maj	Brodosplit	Brodotrogir	Total
2016	quantity	3	4	3	3	13
	CGT	59,221	74,184	3,792	31,284	168,481
2017	quantity	6	2	9	2	19
	CGT	149,767	24,380	66,181	16,602	256,930
2018	quantity	5	0	2	0	7
	CGT	103,728	0	0	0	103,728
2019	quantity	0	0	2	0	2
	CGT	0	0	32,116	0	32,116

Source: Croatian Shipbuilding – Jadranbrod d.d.

Attention has to be drawn to the absence of any orders made to Brodotrogir, which back in 2013 announced diversified operations, laying stress on ship servicing, maintenance and modifications, providing moorings at sea and dry dock facilities in the newly built marina the completion of which is expected in 2018. Brodotrogir obviously can hardly ensure continued operations by exclusive reliance on shipbuilding.

Costs of rehabilitation of the shipyards

Although the shipyards are in private hands today, from 1992 to 2012 the state put more than 28bn kuna into the rehabilitation of the shipyards – an average of about 1.4bn a year. And that is not all. From 2012 to 2017 it is planned to invest an extra 2.2bn kuna into the shipyards – 0.44bn kuna a year – which after a lengthy period should ensure them financial stabilisation and operations as private corporations (table 9).



Table 9 Rehabilitation of the shipbuilding corporations from 1992 to 2017 (in bn kuna)

	Uljanik	3. maj	Brodosplit	Brodotrogir	Kraljevica	Total
Creditor rehabilitation 1992 - 2002*	2.6	2.6	3.8	1.1	0.5	10.7
Subsidies 2000 - 2005	0.7	0.4	0.6	0.2	0.1	1.9
Subsidies 2006 - IX. 2009	0.4	0.3	0.4	0.1	0.1	1.4
Called-on state guarantees 2008 - 2012 (inc. interest)	0.0	1.9	2.1	0.7	0.3	5.1
Assumption of liabilities on Feb. 29, 2012**	0.7	2.6	3.3	1.8	0.9	9.4
Total 1992 - 2012	4.4	7.9	10.3	3.9	1.9	28.4
Future aid 2012 - 2017 (planned)***	0.0	0.6	1.3	0.3	0.1	2.3
Total 1992 - 2017	4.4	8.5	11.6	4.3	1.9	30.6

Source:
Ministry of
the Economy
(2012)

* Rehabilitation in which the national budget took part to the tune of 6.17bn kuna.

** Assumption of the repayment of debt and payment of liabilities for loans with state guarantees as of February 29, 2012, pursuant to the restructuring programmes accepted (liabilities relate to the period from 2003 to 2013), as follows: up to the amount of the claims of the shipyards against the Republic of Croatia on the basis of the compensation according to the Agreement and the write-off and transformation of liabilities for loans with government guarantees into a public debt above the amount of the claim of the shipyards on the basis of the compensation according to the Agreement.

*** Future aids for restructuring that would burden the state budget from 2012 to 2017. (For Brodotrogir and 3 maj, estimates are involved; Kraljevica – severance payments).

The first rehabilitation of the shipyards majority owned by the state in the amount of 3.3bn kuna was carried out from 1999 to 2001. The government wrote off its claims against the shipyards and partially replaced them by equity in the new ownership structure. The following shipyards were rehabilitated: Kraljevica (1999.), Uljanik, 3. maj, Brodosplit (2000) and Brodotrogir (2001).

The second rehabilitation of the shipyards started in 2002 and by 2008 the government was supposed to provide 2.8bn kuna worth of aid. However, after the implementation of the rehabilitation of 2002, the government did not continue with the rehabilitation programme.

According to the Pre-Accession Economic Programme of 2004, the Government announced the privatisation of firstly just one and then of all the other shipyards by the end of 2004. This was not carried out, and the state just continued covering the losses of the shipyards.

In 2007, and much more so in 2010, a large part of state financial guarantees of the Republic of Croatia was issued to firms in the manufacturing sector, mostly for the debts of the shipyards. Since the shipyards were privatised and restructured, from 2012 the state had no need to issue guarantees for their borrowings. But after a pause of two years, in 2015 shipbuilding once again became an important beneficiary of state guarantees (table 10).

Table 10 State financial guarantees from 2007 to June 20, 2015 (in bn kuna)

	2007	2008	2009	2010	2011	2012	2013	2014	2015 (I-VI)
Guarantees to shipbuilding	4.50	2.55	2.04	4.57	0.58	0.70	0.00	0.02	1.97
Total guarantees issued	5.09	12.60	6.04	5.59	10.36	9.63	9.39	7.94	13.60
Guarantees to shipbuilding as percentage of all guarantees issued	88.5	20.3	33.8	81.7	5.6	7.3	0	0.2	14.5

Source: Authors on the basis of MF data concerning issued financial guarantees from 2007 to 2015

Between 1998 and 2015 12.5bn of state guarantees were called, the lion's share being accounted for by shipbuilding. The considerable reduction of shipyard liabilities after 2012 was the result of an administrative manoeuvre by which the government turned the shipyard debt of 9.35bn kuna into direct public debt, and some of the liabilities into equity in the shipyards (table 11)

Table 11 Financial guarantees called from 1998 to October 31, 2015 (in bn kuna)

	1998-2006	2007-2015	Total
Shipbuilding	0.71	4.52	5.23
Other sectors	4.42	2.87	7.29
Total	5.14	7.38	12.52

Source: Authors' calculations pursuant to Reports of the Government of the Republic of Croatia (2016)

Plans for privatisations and models of restructuring

According to the provisions of Article 70 of the Stabilisation and Association Agreement, the restructuring of the shipbuilding industry was one of the important preconditions for European Union accession. As early as 2007 at the request of the EC, all the shipyards drew up restructuring plans, but the Commission considered them unsustainable and infeasible. On May 21, 2008, the government made a decision to privatise the shipyards, and from then three rounds of competitions for privatisation were held.

The *Competition for the first round of privatisation* (August 1, 2009) of all six shipyards was unsuccessful. In the *second round* (February 15, 2010) valid bids were received for Brodotrogir, Brodosplit and 3. maj. The *third round* of privatisation was carried out for the Kraljevica shipyard (November 3, 2010) for not a single bid was received in the second round, and for 3. maj (January 24, 2011) for the investor that appeared in the second round was rejected on account of its financial difficulties. In the assessment of the EC of December 14, 2010, Uljanik was no longer in difficulties because it had returned the state aids received, and the rules on state aids for rehabilitation and restructuring no longer had to be applied to it. The European Commission on January 24 accepted the Programme for the Restructuring of Brodosplit given by the investor



DIV d.o.o. of Samobor, the conditions thus being created for getting into the phase of negotiations for the privatisation contract to be signed by the government and DIV.

On the day the negotiations with the EU were closed (June 30, 2011), the Agency for the Protection of Market Competition and the EC accepted the plans for the restructuring of 3. maj, Kraljevica and Brodotrogir, after which it was possible to start negotiating the preparations for the privatisation contracts. From then until January 2012, the Government made no significant advance in the restructuring of the shipyards, because of which the planned costs of restructuring were increased by about one billion kuna. In order to speed up the procedure, finally, decisions were adopted and models for restructuring and privatisation were made for Uljanik, Brodotrogir, Brodosplit and 3. maj. In July 2012, the government started up bankruptcy proceedings in Kraljevica shipyard (Ministry of Economy, 2012).

In order to persuade the private sector to privatise the then heavily indebted shipyards, in 2012 the government assumed 9.35bn kuna of debt liabilities of the shipyards secured by state guarantees and transferred them to the debt of general government (table 9). The manner in which privatisation was carried out is interesting, to say the least.

For in the 1990s, the state (as majority owner) made over to the shipyards the land on which they were sited. Since the shipyards on the whole carried out their activity in special purpose ports (shipbuilding ports) on the maritime domain, the state expanded the borders of the maritime domain. The reason for extending the coverage of maritime domain was the intention of the state, as owner, to carry out offsetting of reciprocal claims and debts (rights and liabilities) with the shipyards and write off their debts in exchange for restitution of the maritime domain (real property) on which the shipyards carried out their activities. In this way the state protected itself from the risk that the new purchasers in the privatisation progress might become owners of valuable real estate. With this process, property law issues worth about 8.2bn kuna (table 12) were settled.

Table 12 Liabilities of shipyards compensated by exchange of assets on national maritime domain in 2011.

Shipyard	million kuna
Brodosplit	2,897
Brodotrogir	635
Kraljevica	369
3. maj	3,219
Uljanik	1,036
Total	8,156

Source: Ministry of Finance
(2012: 481)

The shipyards had their liabilities written off and the condition for privatisation was completed. According to Article 36 Paragraph 1 of the Act of Accession, all liabilities that the Government had assumed in the restructuring of the shipyards (all the state aids that the enterprises had received from March 1, 2006) were considered restructuring aid. The contribution of entrepreneurs to the restructuring plan out of their own resources had to be real, without state aids, and had to come to at least 40% of total costs of restructuring.

In the restructuring process compensatory measures were taken whereby Croatia guaranteed to reduce the total production capacity of the enterprises, from the 471,324 CGT of June 1 to 372,346. By permanently closing slipways and by reducing their areas the entrepreneurs had to reduce their production capacity at the latest twelve months after signing the privatisation agreement. The total annual production of entrepreneurs was restricted to 323,600 GGT (table 13) for a period of ten years, starting from January 1, 2011. Compensation measures were prescribed for the sake of neutralising the distorting effect of the aids given on the conditions of trade (market competition). The measures were prescribed so that Croatian shipbuilding (because of the fairly large amount of state aids received) should not be able to achieve a privileged position as against other European shipyards.

Table 13 Restriction on annual shipyard production from 2011 to 2020 (in CGT)

Shipyard:	CGT	Necessarily reduced capacity in 12-month period after treaty signing
Brodosplit and BSO	132,078	29,611
Brodotrogir	54,955	15,101
Kraljevica	26,997	9,636
3. maj	109,570	46,543
Total	323,600	100,891

Source: MFEA (2013)

The entrepreneurs were able to agree with the shipyards (whose production was curtailed) about the revision of individual restrictions on production, and on the basis of binding agreements to determine how much of their own individual production quota (in terms of CGT) they could make over to each other. In so doing they had to respect the total annual restriction of production to 323,600 CGT. Interestingly, not a single shipyard overstepped the maximally permitted annual amount of production (table 7).

The restructuring plans also set forth a number of other measures that each entrepreneur had to implement to be able to ensure the long-term sustainability of its operations. The European Commission can still order the return to the state of all aids for rehabilitation and restructuring given to entrepreneurs from March 1, 2005, with compound interest, in the following cases:

- if either the privatisation agreement was not signed or the conditions laid down in the plan of restructuring – accepted for the Agency for the Protection of Market Competition and the Commission – were not entirely put into it;
- if an entrepreneur did not make a contribution of its own (exclusive of state aids) coming to at least 40% of the costs of restructuring;
- if no reduction of total production capacity in the period of twelve months from the signing of the privatisation contract was made. In this case the return of aids was required from only those entrepreneurs who did not achieve the individual capacity reductions given in the table;
- there was an overall overstepping of the production restrictions for the entrepreneurs (of the 323,600 CGT) in any individual calendar year between 2011 and 2020. In this case the return of the aid was sought from the entrepreneurs who had overstepped the individual production restrictions.



A ban was implemented on the reception of any new aids for rehabilitation and restructuring before the elapse of at least ten years from the day the privatisation agreement was signed. Otherwise, the European Commission would order the government to ensure the return of all aids for rehabilitation and restructuring awarded in despite of the ban. Table 14 shows the dynamics of state aids and own contributions of shipyards, in line with the restructuring process.

Table 14 Contribution of the state and shipyards' own contributions to restructuring according to the privatisation contracts (in million kuna)

Shipyard contributions								
	2012	2013	2014	2015	2016	2017	2018	Total
Brodosplit	0	125	345	460	520	540	414**	2,404
Brodotrogir	0	134	310	294	264	Other*	0	1,002
3. maj	0	56	190	203	194	Other*	0	642
Government contributions								
Brodosplit	404	480	270	150	110	89	0	1,503
Brodotrogir	0	93	162	75	0	0	0	330***
3. maj	0	140	237	191	146	134	0	847

Source: Authors' calculation pursuant to privatisation contracts

* Amount remaining to fulfilment of the condition of at least 40% of restructuring costs being covered from own contributions.

** Up to February 28, 2018

*** For an additional amount of 50m kuna for employee provision, at most up to the amount of 50m kuna.

The impact of restructuring and privatisations on the operations of the shipyards

The impact of restructuring on employment and wages is analysed from the aspect of employee costs and total number of employed at the end of the business year (December 31) pursuant to the last available financial reports (table 15).

The labour force in the big shipyards was reduced from 2011 to 2015 by about 2,700 or 25.5%. Encouragement can be found in the fact that average monthly wages rose in 2014 from 2013 by 5.5%, with the reduction of average net wages being recorded only in 3. maj. The number of employees was enlarged by 1.8%, the first increase in the number of jobs after 2010. Although it is not mentioned in the reports, in the last two years wages in the shipyards were not paid regularly, and there were several strikes in Brodosplit and 3. maj because of delayed wages and the imposition of more stringent conditions of labour.

In 2014 the large Croatian shipyards employed a labour force of 7,793, which is 0.6% of all employed persons, or 0.71% of all those employed in legal persons. The share of those employed in shipbuilding is gradually falling as the consequence of restructuring and the endeavours that the shipyards should become financially sound and independent of state aids. If the labour force in all the shipyards were considered (small, medium-sized and large) then their share in overall

employment would come to from 2 to 5%, and with subcontractors to 10% (according to the data of Croatian Shipbuilding – Jadranbrod).

Table 15 Employment and cost of labour in the shipyards from 2011 to 2014

	Shipyard	Uljanik	Viktor Lenac	3. maj	Brodosplit	Brodotrogir	Total
2011	Number of employees	2,663	598	2,515	3,491	1,239	10,506
	Labour costs in m kuna	304	70	262	365	118	1,119
	Average net monthly wage in kuna	5,675	5,756	5,261	5,309	4,606	5,321
2012	Number of employees	2,631	573	1,824	3,255	1,203	9,486
	Labour costs in m kuna	312	60	192	351	105	1,021
	Average net monthly wage in kuna	5,902	5,285	5,375	5,595	4,387	5,309
2013	Number of employees	3,956	509	1,307	2,259	932	7,656
	Labour costs in m kuna	489	51	174	179	85	803
	Average net monthly wage in kuna	6,264	5,065	6,834	4,087	4,611	5,372
2014	Number of employees	3,826	537	1,242	2,447	983	7,793
	Labour costs in m kuna	479	59	132	255	109	902
	Average net monthly wage in kuna	6,286	5,428	5,463	5,820	5,345	5,668

Source: Authors' calculation pursuant to consolidated audited annual reports of the shipyards from 2011 to 2014 (at the level of the group)

Note: From 2013, the consolidated reports of Uljanik also include information for 3. maj and so the figures for them are not aggregated, rather only the figures for Uljanik are considered, while in the calculation of average wages, the average wage of Uljanik and 3. maj are taken into consideration; for the data to be commensurable, the numbers of employees at the end of the considered period (December 31) are taken into account as well as the total expenditure for employees, for individual shipyards in the reports did not publish information about the average number of employed people.

* Figures according to the report of 2011 and according to the report of 2014 come to 117.6 million kuna

For a complete comprehension of the financial position one needs to look at the trends in shipyard liabilities during the restructuring and privatization (table 16). There are two interesting trends – a considerable reduction of long-term liabilities (because they were transformed into government debt) and the gradual rise in short-term liabilities.

The total liabilities of the shipyards after privatisation were radically reduced. After it had written off their debts, the state ceased giving guarantees. For this reason the shipyards were no longer able to obtain high long-term loans as they had before, and accordingly their long-term liabilities were reduced. In 2014 most of the liabilities of the shipyards were short-term liabilities (88%). They were reduced after privatisation, and then they increased slightly, which can be justified by increased business activity. Most of the short-term liabilities are those owed



to suppliers and those related to advance payments received, which have to be met after the delivery of ships or the completion of some other business contracted for.

Table 16 Liabilities of the shipyards from 2011 to 2014
(in million kuna)

	Liabilities	2011	2012	2013	2014
Uljanik	Short-term	957	852	1,362	1,791
	Long-term	620	522	631	148
	Total	1,577	1,374	1,993	1,939
3. maj	Short-term	4,249	151	212	402
	Long-term	523	0	0	0
	Total	4,772	151	212	402
Brodosplit	Short-term	4,334	339	323	219
	Long-term	1,589	57	97	90
	Total	5,923	396	420	309
Brodotrogir	Short-term	1,240	33	111	336
	Long-term	1,380	22	56	40
	Total	2,620	55	167	376
Viktor Lenac	Short-term	94	81	74	141
	Long-term	11	74	77	75
	Total	105	155	151	216
Grand total	Short-term	10,874	1,456	1,870	2,487
	Long-term	4,123	675	861	353
	Total	14,997	2,131	2,731	2,840

Source: Consolidated audited annual reports of the shipyards from 2011 to 2014 (at group level)

Note: In 2013 and 2014, data for 3. maj are not aggregated, for they are already shown in the Uljanik financial reports.

The financial position of shipbuilding can be analysed in detail with the help of the relevant financial indicators – liquidity, assets and indebtedness, operating efficiency and financing as well as debt collection period and liability settlement period. The figures are tracked for four of the shipyards, which from 2011 to 2014 were in the process of restructuration and privatisation (Uljanik, 3. maj, Brodotrogir and Brodosplit).

From the point of view of liquidity, the position of Croatian shipyards is satisfactory (table 17). All liquidity indicators in 2012, as expected, increased because the state had taken over their liabilities, and after that in 2013 they fell and then rose again in 2014. The liquidity of the shipyards is satisfactory, particularly if one looks at the coefficient of quick and current liquidity, the average values of which are 1.47 or 1.82 in 2014. The average is spoiled by Uljanik, for which the coefficients of quick and current liquidity are less than 1 and have been constantly on the decline since 2010, although a slight recovery was seen in 2014 (Appendix P.1). Viktor Lenac too has shown increasingly low liquidity since 2011.

Table 17 Liquidity ratios of four big shipyards from 2011 to 2014

Liquidity ratios	2011	2012	2013	2014
Cash	0.07	1.02	0.43	0.11
Quick	0.72	2.29	1.33	1.47
Current	0.82	2.65	1.74	1.82

Source: Authors' calculations on the basis of the consolidate financial reports

Note: The analysis does not cover Viktor Lenac, which finished the restructuring process earlier.

Asset turnover ratios show that the shipyards do not have a very big market share, in other words are short on revenues (table 18). After 2012, all the shipyards have recorded a rise in the value of their assets that is not accompanied by a rise in revenues, because of high asset turnover ratios have been on the decline. The high ratios in 2011 and 2012 are on the whole the result of high state aids. The good side of restructuring is that the coefficient of indebtedness is within acceptable borders, but, with Uljanik and Brodotrogir, there are still above the 50% level that is considered the watershed between sound and unsound economic agents (Appendix P. 2). Viktor Lenac has recorded a growth in its asset turnover ratio since 2012, while its debt level has been constantly on the increase since 2008. Thus in 2014 for the first time the borrowing ratio was greater than 50%. If we take into consideration that the average borrowing ratio in 2010 was 3, and in 2014 was 0.62, and also that the value of state aids in 2013 and 2014 fell drastically after the write-off of liabilities of 2012, the question arises why so long was waited for privatisation. Had it been done much earlier, the compensation measures imposed by the EU (because of high state aids) to the shipbuilding section would have been avoided.

Table 18 Ratios of assets and indebtedness of four big shipyards from 2011 to 2014

Asset turnover ratios	2011	2012	2013	2014
Total	1.08	4.93	0.82	0.65
Long-term	11.25	15.24	1.81	1.82
Short-term	1.36	7.43	1.61	0.97
Coefficient of indebtedness	1.71	0.50	0.51	0.62

Source: Financial Agency, authors' calculations on the basis of the consolidate financial reports

Note: The analysis does not cover Viktor Lenac, which finished the restructuring process earlier.

In the claim turnover ratio total short-term claims are reduced by short-term claims from the government in order to obtain a figure for the duration of the collection of claims from customers and associated companies that is relevant for the shipyards have large claims against the state that could be brought down to faulty conclusions. Only revenues from sales are looked at (without revenues from the state). In the case of the liability turnover ratio all expenditures and short-term liabilities are included (table 19).

In 2014, Brodosplit and 3. maj had problems with collection (Appendix P.3). Interestingly, in 2014, 3. maj experienced a considerable increase in the collection period from associated firms, while Uljanik recorded a significant rise in the payment of liabilities. Since these firms are connected, we can conclude that Uljanik was late in paying its liabilities to 3. maj. On the whole shipyards do not have problems collecting claims from customers, except from Brodosplit and



3. maj. In 2014, for example, it took Brodosplit an average of 320 days to collect from customers, and 3. maj 285 days. Also perceptible is an increase in the payment period for all shipyards after 2012. But it still took much less time for the shipyards to pay their obligations than in the days before privatisation.

Table 19 The debt collection period and liability settlement period (in days) of four large shipyards from 2011 to 2014

	2011	2012	2013	2014
Claim turnover ratio (not. inc. state)	18.61	14.61	14.44	4.34
Debt collection period (days)	32	51	89	177
Liability turnover ratio	0.85	5.39	2.25	1.91
Liability settlement period	644	108	181	240

Source: Financial Agency, authors' calculations on the basis of the consolidate financial reports

Note: Analysis does not include Viktor Lenac, which finished the restructuring process earlier.

Table 20 Indicators of operating efficiency and financing of the four biggest shipyards from 2011 to 2014

Operating efficiency indicators	2011	2012	2013	2014
Total operations efficiency	1.68	3.32	1.17	0.84
Operations and sales efficiency	1.73	3.43	1.11	0.84
Financing efficiency	0.39	1.28	2.04	0.91
Gross profit margin	0.31	0.52	0.11	-0.22

Note: Analysis does not include Viktor Lenac, which finished the restructuring process earlier.

The indicators of overall operations efficiency and operations and sales efficiency are almost the same after the considerable cuts in state aids and grants. According to the profits and loss accounts, the financial activities of the shipyards are almost negligible as compared with their business activity, which can be expected from their great orientation to production. The efficiency of overall operations and sales in 2014 is worryingly lower than 1 which shows that expenditures exceed revenue. In 2013 all were bordering on 1 apart from Brodosplit that kept up the average. However, even this needs taking with caution, for in the revenues for 2013 Brodosplit showed all the future aids that it was supposed to receive from the state by 2017, thus speciously increasing its revenues (Appendix P.4). The gross profit margin up to 2014 is positive, while in 2014 because of the losses of all the yards (except for Brodotrogir) it is in negative area. It should be said that the financial reports of Brodotrogir are not transparent and inconsistent, for in the financial reports for 2013/2014 short-term liabilities of the group are shown different in two different places (p. 12 and p. 47).

Conclusion

Shipbuilding in Croatia has long been perceived as one of the chief branches of industry because of the large number of employees, its export orientation and the large number of subcontractors involved indirectly or directly in the production of ships. The fact that it was a

strategic branch of industry often justified considerable state aids directly by subsidies and grants, by assumption of the debts of the yards and also indirectly, by the issue of guarantees. With EU accession, the Government started insisting on restructuring and privatising the shipyards. In the rehabilitation and restructuring of the yards, 30 bn kuna were invested. This fact reveals the true picture of the operations of Croatian shipyards, which were not up to the challenges of the market and were able to exist only by becoming a burden on the government budget. The reasons why the operations of the shipyards were not self-sustaining are not at issue here, but in further research the operations of their subcontractors should certainly be analysed more comprehensively.

As a result of the progress of restructuring, the shipyards have considerably reduced their labour force, and production too has fallen, not only because of restructuring but also because of the weak condition of the shipbuilding market, and also the compensation measures by which Croatia bound itself to reduce total production capacity by 471,324 to 372,346 CGT. The revenues from sales and exports of the five biggest shipyards are falling, and the decision for the shipyards to gradually orient their efforts to non-shipbuilding product seems sound.

In the financial operations of the shipyards there are two interesting trends – a considerable reduction of long-term liabilities (because they were turned into government debt) and a gradual rise in short-term liabilities. After it had written off their debt, the state stopped issuing guarantees. For this reason the shipyards did not manage to take out many long-term debts, as they had earlier. Most of the short-term liabilities refer to debts to suppliers and obligations for advance payments received that have to be met after the delivery of ships or after the completion of some other job agreed on.

The liquidity position of the Croatian shipyards is satisfactory. All liquidity ratios in 2012 as expected rose because their debts had been taken over by the state. The asset turnover ratios however show that the shipyards are in want of a major market share, in other words of revenues. The coefficient of indebtedness after the restructuring of the shipyards is on the whole within acceptable boundaries. But in the case of Uljanik and Brodotrogir it is still over the 50% that is considered the watershed between sound and unsound business entities. The efficiency of overall operations and sales in 2014 was worryingly below 1, which shows that expenditures outweigh revenue. In 2013 it was only Brodosplit that to an extent improved this fairly unpropitious picture, but even this has to be taken with caution for in its revenues for 2013 Brodosplit showed all future aids that it was supposed to get from the state up to 2017.

The effects of the restructuration and privatisation of the shipyards are nevertheless positive, and it is a question why these processes were not started earlier, which would have created savings in the budget and might have enabled the yards to avoid the compensation measures that the EU insisted on to reduce production. The consequences of the restructuring and rehabilitation of shipbuilding will have long-term impacts on public finances. If one takes into consideration that the budget of general government is in deficit, then it can be concluded that grants to shipbuilding were largely debt-financed. In other words, the about 30bn of public debt was created as a consequence of the restructuring and rehabilitation of shipbuilding, and if one takes into account the growing expenditures on interest that has to be paid on this debt, the full impact is much greater.



The quasi-fiscal activities in the operations of shipbuilding and the important fiscal risks (which have turned into direct liabilities) should be a lesson to future governments in the formation of economic policies and the making of decisions about privatisation and giving concessions to properties. Using the example of shipbuilding, it has turned out to be illusory to expect a change of business orientation in firms in which the state is the owner and that are continually dependent on state aid. The privatisation of such corporations is necessary, and prompt decision can prevent even greater expenditures and harm to the state budget and the financial position of present and future generations of taxpayers. The government has to restrict and totally eliminate any state guarantees to the shipyards, to which in 2015 it once again approved guarantees worth 1.9bn kuna. The shipyards started to act like private companies by selling their claims against the state (pursuant to claims for grants) to factoring companies. There is no reason for the state not to behave reciprocally, denying them any new subsidies and state guarantees.

References

- Croatian Shipbuilding – Jadranbrod, 2015. *Svjetsko brodograđevno tržište – studeni 20015*. Croatian Shipbuilding – Jadranbrod.
- Government of the RC, 2016. *Izvješće o radu Vlade Republike Hrvatske i o preuzetim i nepodmirenim obvezama u mandatu predsjednika Zorana Milanovića*. Zagreb: Government of the RC.
- MFEA, 2013. *Treaty concerning the accession of the Republic of Croatia to the European Union*. Zagreb: Ministry of Foreign and European Affairs.
- MINGO, 2012. *Retrospektiva procesa sanacije i restrukturiranja brodograđevne industrije u Republici Hrvatskoj*. Zagreb: Ministry of the Economy.
- Ministry of Finance, 2009. *Godišnji izvještaj o izvršenju Državnog proračuna*. Zagreb: Ministry of Finance.
- Ministry of Finance, 2010. *Godišnji izvještaj o izvršenju Državnog proračuna za 2010*. Zagreb: Ministry of Finance.
- Ministry of Finance, 2011. *Godišnji izvještaj o izvršenju Državnog proračuna za 2011. godinu*. Zagreb: Ministry of Finance.
- Ministry of Finance, 2012. *Izvještaj o danim državnim jamstvima i izdacima po državnim jamstvima u 2012. godini*. Zagreb: Ministry of Finance.
- Ministry of Finance, 2013. *Izvještaj o danim državnim jamstvima i izdacima po državnim jamstvima u 2013. godini*. Zagreb: Ministry of Finance.
- Ministry of Finance, 2014a. *Izvještaj o danim državnim jamstvima i izdacima po državnim jamstvima u 2014. godini*. Zagreb: Ministry of Finance.
- Ministry of Finance, 2015a. *Polugodišnji izvještaj o izvršenju Državnog proračuna Republike Hrvatske za prvo polugodište 2015. godine. Nacrt prijedloga*. Zagreb: Ministry of Finance.
- OECD, 2007. *Compensated gross ton (CGT) system*. Paris: OECD.

Appendix

Table P. 1 Liquidity indicators per shipyard
from 2011 to 2014

Liquidity ratio	2011	2012	2013	2014
ULJANIK				
Cash	0.11	0.06	0.18	0.06
Quick	0.57	0.45	0.47	0.53
Current	0.87	0.7	0.67	0.69
3. maj				
Cash	0.06	0.64	0.72	0.11
Quick	0.9	3.77	1.68	2.7
Current	0.93	4.42	2.06	3.03
BRODOTROGIR				
Cash	0.07	2.71	0.64	0.09
Quick	0.65	3.24	1.37	0.74
Current	0.70	3.51	1.76	0.94
BRODOSPLIT				
Cash	0.04	0.68	0.17	0.19
Quick	0.77	1.68	1.80	1.90
Current	0.78	1.96	2.48	2.62
VIKTOR LENAC				
Cash	0.03	0.29	0.20	0.07
Quick	1.37	0.98	0.87	0.56
Current	1.72	1.27	1.13	0.72

Source: Financial Agency,
authors' calculations on the
basis of the consolidate
financial reports



**Table P. 2 Indicators of assets and indebtedness
per shipyard from 2011 to 2014**

Asset turnover ratio	2011	2012	2013	2014
ULJANIK				
Total*	1.22	1.21	0.86	0.66
Long-term	2.79	2.28	1.43	1.4
Short-term	2.18	2.58	2.19	1.26
Coefficient of indebtedness *	1.07	1.08	0.86	0.83
3. maj				
Total	0.92	2.23	0.71	0.54
Long-term	14.58	8.61	1.3	3.38
Short-term	0.98	3	1.59	0.64
Coefficient of indebtedness	1.13	0.17	0.22	0.28
BRODOTROGIR				
Total	1.15	12.61	0.76	1.02
Long-term	15.47	38.00	2.17	1.83
Short-term	1.15	18.88	1.00	1.06
Coefficient of indebtedness	3.05	0.32	0.64	1.14
BRODOSPLIT				
Total	1.03	3.67	0.97	0.38
Long-term	12.15	12.07	2.33	0.67
Short-term	1.12	5.27	1.65	0.90
Coefficient of indebtedness	1.59	0.41	0.31	0.23
VIKTOR LENAC				
Total	1.14	0.72	0.79	0.95
Long-term	2.34	1.00	1.03	1.30
Short-term	2.20	2.49	3.40	3.59
Coefficient of indebtedness	0.34	0.43	0.42	0.56

* Not incl. costs of the future period

Source: Financial Agency,
authors' calculations on the
basis of the consolidate
financial reports

Appendix P.3 Claim turnover and liability settlement period (in days)

	2011	2012	2013	2014
ULJANIK				
Claim turnover ratio (excl. state)	17.23	13	17.42	9.35
Debt collection period (excl. state)	21	28	21	39
Liability turnover ratio	1.89	1.89	1.4	1.14
Liability settlement period	193	193	261	319
3. maj				
Claim turnover ratio (excl. state)	12.47	23.93	25.64	1.28
Debt collection period (excl. state)	29	15	14	285
Liability turnover ratio	0.33	6.12	3.36	2.47
Liability settlement period	1090	60	109	148
BRODOTROGIR*				
Claim turnover ratio (excl. state)	39.45	18.94	13.45	5.59
Debt collection period (excl. state)	9	19	27	65
Liability turnover ratio	0.69	11.08	1.75	0.98
Liability settlement period	529	33	208	373
BRODOSPLIT				
Claim turnover ratio (excl. state)	5.28	2.55	1.25	1.14
Debt collection period (excl. state)	69	143	292	320
Liability turnover ratio	0.48	2.47	2.50	2.79
Liability settlement period	762	147	146	131
VIKTOR LENAC				
Claim turnover ratio (excl. state)	6.52	7.24	6.28	7.42
Debt collection period (excl. state)	56	50	58	49
Liability turnover ratio	3.72	3.53	3.84	2.59
Liability settlement period	98	103	95	141

Source: Financial Agency, authors' calculations based on consolidated financial reports 2011- 2014 (at group level)

Note: * In the reports for 2013/2014, in two places, different figures are shown relating to short-term liabilities, and hence the amounts from the balance sheets of 2013/2014 and previous years are included in the calculation



Appendix P.4 Indicators of shipyard economic efficiency and financing from 2011 to 2014

Economic efficiency	2011	2012	2013	2014
ULJANIK				
Total operations	1.01	0.96	1.05	0.76
Sales operations	1.02	0.99	0.79	0.77
Financing	0.73	0.62	3.89	0.6
Gross profit margin	0.002	-0.05	0.05	-0.32
3. maj				
Total operations	2.72	2.17	0.97	0.78
Sales operations	3.49	2.36	0.98	0.77
Financing	0.26	0.58	0.71	1.33
Gross profit margin	0.63	0.54	-0.03	-0.28
BRODOTROGIR				
Total operations	1.16	5.98	1.01	1.03
Sales operations	1.75	6.05	1.00	1.02
Financing	0.03	2.28	3.27	1.31
Gross profit margin	0.14	0.83	0.01	0.02
BRODOSPLIT				
Total operations	1.84	4.18	1.64	0.78
Sales operations	0.68	4.33	1.67	0.81
Financing	0.53	1.62	0.28	0.39
Gross profit margin	0.46	0.76	0.39	-0.29
VIKTOR LENAC				
Total operations	1.02	0.90	1.001	1.001
Sales operations	1.01	0.90	1.01	1.01
Financing	2.13	0.73	0.61	0.41
Gross profit margin	0.02	-0.11	0.001	0.001

Source: Financial Agency, authors' calculations based on consolidated financial reports 2011- 2014 (at group level)

Fiscus


Fiscus is an analytical serial publication of the Institute of Public Finance. It aims at analyzing current economic issues that affect the stability of public finances or are related to the production of goods and the provision of services of broader public interest. The topics concerned have not received adequate attention in the academic and professional community and relate to economic sectors in which the public interest is concerned, directly or indirectly. On scientific and professional foundations, Fiscus seeks to empower and encourage public debate on the establishment and preservation of the stability of Croatian public finances and the economy in general by promoting transparent, prudent and responsible management. Therefore, the topics focus on the identification and quantification of potential risks that could threaten the stability of public finance, market development, the competitiveness of the Croatian economy and the economic position of the citizens.

The vision of Fiscus is to become a reliable source of sectoral analyses through the prism of interaction between the public and private sector.

The mission of Fiscus is to identify the key challenges faced by certain economic sectors and offer suggestions for the improvement and preservation of the long-term stability of the Croatian economy.

The main objectives are:

- to provide in-depth analysis of the financial operations of public sector institutions and those institutions that are in any way associated with the production of goods and the provision of services of a broader public interest;
- to improve understanding of the financial consequences of their operations and increase accountability;
- to provide objective information on their business operations to the broader professional public and to investors;
- to contribute to the removal of administrative barriers to the development of competitiveness and the market economy.



Publisher: Institute of Public Finance
Zagreb, Smičiklasova 21
Phone: (+385 1) 4886 444 | fiscus@ijf.hr
Editors: Anto Bajo and Marko Primorac
www.ijf.hr/eng/fiscus

