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# SMALL-CRAFT BUILDING IN ESTONIA

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Estonian small craft building has quite a unique position - it is a field with a long history and tradition whose natural development was hindered due to limitations set during the years of the Soviet power. After regaining independence the boat building sector has restored its historic position and is becoming competitive on international markets.

In addition to its economic aspect small craft building is also significant from the point of view of the country's regional policy – most of the enterprises are located on the coast, but boat building is suitable for inland family businesses and small firms as well. Another important aspect is the fact that small-craft building is connected with a wide outsourcing and maintenance network.

The sector is characterised by social networking since several of its key figures have personal contacts. Cooperation between Estonian firms started a couple of years ago with launching a project towards developing a small-craft building cluster in Saaremaa. As a result of the project there is now a small craft-building cluster strategy which forms a basis for joint marketing of the companies. Together with Tallinn University of Technology Kuressaare College boat building firms have been contributing in professional development of their work force, which culminated with opening of a study programme in Small Craft Building at a professional higher education level at Kuressaare College. Preparations are being made for creating a regional competence centre in Saaremaa to facilitate intake of professional expertise to Estonia.

The present study helps to specify the needs of the sector towards a further rise in competitiveness, in terms of functioning of the boat building firms themselves as well as education and public sector support. The study has been carried out as part of the project of small craft building competence centre development, supported by the EU Regional Development Fund.

The overview of the current status of small craft building in the Baltic Sea region is based on the Eurostat data about companies dealing with building and maintenance of recreational vessels and yachts during the years 2003-2007. For performing the analysis of Estonian small craft building firms were used the annual reports of the companies. The study covers building of all 2.5-24-metre vessels irrespective of their type.

The overview of the small craft building of the Baltic Sea region is focused on manufacture of pleasure and sports boats in Sweden, Norway, Finland, Latvia, Lithuania, and Estonia in 2003-2007. Nordic countries is the main target market for Estonian small craft building sector, they also play a significant role in development of the sector in Estonia. Baltic countries and Estonia have a similar geopolitical background, Latvia and Lithuania can become competing regions in attracting foreign investments.

# GENERAL CHARACTERISTICS OF THE SECTOR

Small craft building is a sector that can be quite sensitive to the general economic situation. In general, the products of the small craft building sector are not among convenience goods that people need every day. Worsening of the economic situation has usually affected such boat building companies that have undergone a rapid growth and launched mass production during the years of the boom. Due to their middle class clients, demand for the boats of the companies mass-producing small craft is more deeply influenced by economic recession. However, in case of mass-production, reduction of output volume is also more complicated. This seems to be another factor restricting/limiting returns to scale.

The sector is competitive thanks to its quality products and product marketing, as well as the reliability of the brands and of the production region.
Since small craft building is strongly linked with varied branches of industry (manufacture of materials, IT and electronics sector, power engineering, furniture and textile industry, even manufacture of home appliances), any technological advancement in related sectors can open up new possibilities for product development also in small craft building. This feature adds the small craft building sector significance and value – small craft building helps to create jobs in a number of companies active in related sectors, including knowledge-based ones (steering and navigation systems, product development, production of energy, etc.).

As an exception, one can mention manufacture of work boats, in case of which most of the vessels are commissioned by the public sector. Sales and decision-making processes are slower and the products do not classify as luxury goods. Work boat building does not depend on the general economic situation and manufacture of work boats even helps to somewhat balance the decline in small craft building. The economic crisis is anticipated to hit the work boat market later and so the budget cuts in the public sector will affect work boat production in a couple of years.

While recreational boat and work boat producers have reached international markets in several continents, the producers of small rowing boats focus mainly on the domestic market. Very few strong rowing boat brands have succeeded in entering the markets of neighbouring countries (e.g., the Finnish Terhi and the Swedish Linder), in general, the proportion of rowing boat exports remains marginal compared to that of work boats. However, existence of small-size boat building firms is essential from social and regional aspects, as they offer jobs in regions where concentration of industry is not intense.

In traditional wooden boat building the legal form of the majority of the firms is non-profit company. This trend has started to prevail in Estonia as well. The main reason is high maintenance costs of wooden boats due to which costumers tend to prefer boats made of other materials than wood. The advantage of low labour costs that enabled to keep the building expenses of traditional wooden boats rather low and yet to earn revenue, is becoming more and more marginal. The market niche of wooden boat users is still there, but in most cases both the users and producers of wooden boats are non-profit organisations. The trend towards environmental sustainability can open up new opportunities for production and use of wooden boats.

According to Eurostat, the reduction of the European ship building sector (moving of big vessel building to cheaper production regions) has stopped and the sector has more or less stabilised. The trends of the branch reflect focusing onto such sectors as building of cruise ships, yachts and pleasure boats, while the manufacture of oil tankers and cargo ships is decreasing. This change of focus is favourable for small-size enterprises[1]

Another cause is a rather insignificant effect of the global economic recession compared to other industrial sectors, which can be explained with the following three key factors:

- relatively small production volumes of enterprises;
- region-focused production (needs and expectations of clients vary by regions);
- relatively high transport expenses.

Proceeding from the above-said, one can expect that small-craft building will remain a region-specific production domain, with a geographically limited opportunities for choosing economically more favourable production regions

## REGIONAL CONTEXT: BALTIC SEA

The key-producers of the Baltic Sea region are the Scandinavian countries and Germany. German enterprises are focused on mass production, which makes the sector rather vulnerable. In Lithuania and Latvia, small-craft building is marginal, however, Lithuania has connections with Norwegian small-craft sector since several Norwegian companies have opened production plants in Lithuania. Swedish and Finnish firms, in their turn, prefer Estonia as a production region.

### Distribution of small-craft building companies in the Baltic Sea Region as of 2007[2]

| Country | Population number (01.01.2008) | Number of enterprises in small-craft building | | | Turnover of small-craft building enterprises | |
|---|---|---|---|---|---|---|
| | | Number of enterprises in the domain, annual statistics for 2007 | Number of enterprises in the domain per 1 m inhabitants as of 2007 | Total turnover (millions of EEK) of enterprises in the domain as of 2007 | Turnover (million of EEK) of the domain per enterprise as of 2007 | Turnover (EEK) of the domain per capita as of 2007 |
| Sweden | 9 113 257 | 1 145 | 126 | 38 270 | 33 | 4 119 |
| Norway | 4 681 134 | 438 | 94 | 6 356 | 15 | 1 358 |
| Finland | 5 276 955 | 483 | 92 | 7 429 | 15 | 1 408 |
| Denmark | 5 447 084 | 225 | 41 | N/A | N/A | N/A |
| Estonia | 1 342 409 | 41 | 31 | 412 | 10 | 307 |
| Poland | 38 125 479 | 641 | 17 | 4 074 | 6 | 107 |
| Latvia | 2 281 305 | 24 | 11 | 183 | 8 | 80 |
| Germany | 82 314 906 | 387 | 5 | 43 379 | 112 | 527 |
| Lithuania | 3 384 879 | 11 | 3 | 379 | 34 | 112 |

[1] Eurostat: http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-SF-08-016

[2] KPMG Baltics 2010

# POSITION IN NORDIC - BALTIC REGION

Major small-craft building countries of the region are Sweden, Finland, and Norway with their well-developed maintenance and repair services and a big number of firms most of which are small size companies located along the coast. Nordic countries are also the biggest clients and users of small-craft. In case of Estonia whose local small-craft market is only taking its shape, the present target markets are also in Scandinavia.

The average staff number per company is 4-5 in small-craft building. Small number of employees refers to the high proportion of family firms active in the sector.

## Small in size, remarkable in proportions

| Characteristics as of the year 2007 | EST | LAT | LIT | FIN | SWE | NOR |
|---|---|---|---|---|---|---|
| Number of enterprises | 41 | 24 | 11 | 483 | 1145 | 438 |
| Number of persons employed per enterprise | 10 | 9 | 21 | 6,5 | 3,0 | 4,4 |
| Personnel costs per employee (thousand euro) | 10,3 | 10,7 | 9,9 | 37,6 | 37,5 | 52,0 |
| Share of personnel costs in production (%) | 15,3 | 19,7 | 17,1 | 23,2 | 22,1 | 22,7 |
| Share of turnover in manufacturing total (%) | 0,3 | 0,2 | 0,1 | 0,3 | 0,3 | 0,4 |

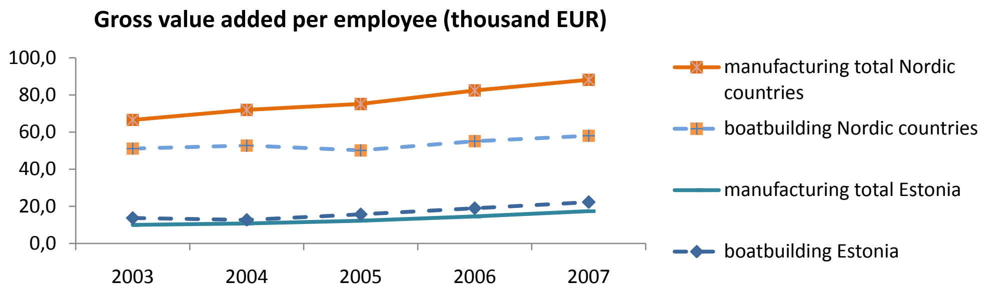
*Data: Eurostat, Building and repairing of pleasure and sporting boats*

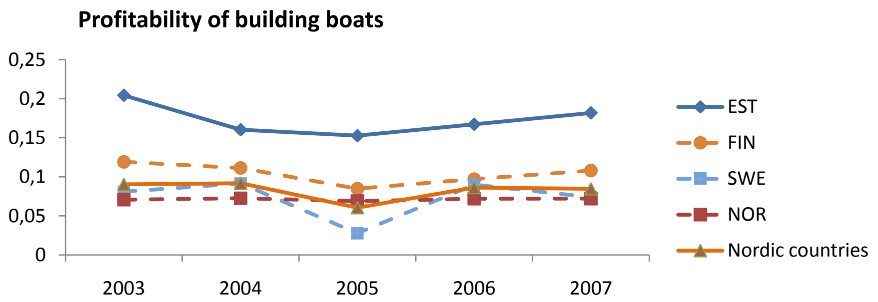
Labour costs form nearly 20% of production costs, which is rather similar to those of the neighbouring countries. However, small-craft building is considerably more labour intensive in Baltic states. As of 2007, labour costs in Estonian small-craft building companies were four times lower than in similar Scandinavian firms. Yet, it is likely that since 2007 salaries have grown in Baltic countries as well and so today the wage levels do not differ so drastically. In the foreseeable future staff expenses will remain dissimilar to a considerable extent both for unskilled and skilled workers in Nordic and Baltic countries.

In Nordic countries capital equipment investments have remained quite stable, while in Baltic countries annual investments range between 8,000 – 80,000 € per enterprise. One should not overlook the small number of small-craft building firms in Baltic states, which means that investments made by one big enterprise can considerably affect statistics.

Although the production capacity of the Estonian small-craft building companies is marginal compared to their Nordic counterparts, their proportional contribution to the overall domestic industrial production is equal to the respective indicators in Sweden and Finland. The profitability of the sector also varies significantly country by country: in Nordic countries the average profit forms 7-11% of the turnover, while in Estonia it is 15-20% and in Lithuania even up to 30% of the turnover. One of the reasons for this can be the cost advantage of the Scandinavian companies producing vessels under well-established trademarks at relatively low costs in Baltic countries.

## Valuable profitability




*Data: Eurostat, Building and repairing of pleasure and sporting boats*

Like in other industrial sectors, in Nordic countries the added value produced in the small-craft sector is two to three times higher than in Baltic countries. However, in recent years added value has remained at the same stable level, except for Norway were the value added has increased.

In Baltic states, especially in Lithuania the value added has grown as well. It is worth mentioning that in Nordic countries the small-craft building sector creates less added value compared to the total value added of the whole industrial production sector. In Baltic states the small-craft building sector creates higher level of value added compared to other economic sectors.

In the small-craft building sector the value added forms up to 0.5% of the total of the whole industrial sector. This indicator has remained stable and is comparable to that of Nordic countries.

# ESTONIAN BOATYARDS

In Estonia there are 62 certified small-craft building and repair enterprises 39 of which are actively engaged in small-craft building as of the year 2009. Boat production is concentrated in Saaremaa Island and this concentration has even strengthened during the years of economic recession. Small-craft building firms can be found also in the coastal regions of Harjumaa county, Pärnumaa, Läänemaa and even Võrumaa in South-Estonia has one boat-building company.

**The production range of Estonian small-craft building is wide and varied:** pleasure and recreational boats, work boats and vessels for special professional purposes (border guard ships, pilot vessels, diving vessels, boats for the handicapped), fibreglass and aluminium sailing and motor yachts and launches. The scope of the enterprises varies also considerably, however there is a risk that boat building might concentrate into two or three bigger enterprises (Baltic Workboats, Luksusjaht, and Saare Paat). On the other hand, there are **several rapidly developing small boatyards** (e.g., Lindvart, Alunaut, Alfa Yacht Production, Mareplast etc.) as well.

The largest proportion of the small-craft is made of fibreglass. In case of metal vessels the production indicators of one enterprise - Baltic Workboats influence the statistics and performance of metal vessel production as a whole.

As manufacture of wooden small-craft has ceased to be profitable in Estonia, it has been replaced by non-profit projects launched by non-profit-making societies, non-governmental associations and hobby clubs.

In 2009, the sales turnover of small-craft building enterprises amounted to nearly 380,000 Estonian kroons, 80% of which gave the boat yards located in Saaremaa, and 95% of the turnover was received from exports with major target markets being Sweden and Finland. According to the business plans of Saaremaa small-craft building companies as of 2009, the anticipated annual turnover for the year 2011 is 555 million Estonian kroons[3].

The per employee value added has varied considerably in different enterprises, amounting up to EUR 52,000 in Baltic Workboats as of 2009. The total value added per employee per sector was EUR 26,000 in 2009, the highest proportion of value added gave the production of yachts, launches and work boats. In case of tiny family and other businesses active in boat-building and maintenance the added value is marginal.

[3] Saaremaa small craft clusters strategy, June 2009

Most of the presently active small-craft building enterprises already have their original trademarks or are developing them. Subcontracting relations are mostly with Scandinavian companies, some Swedish and Finnish producers have completely transferred their small-craft production to Estonia. Product development is mostly outsourced from Scandinavia, except small boats most of which are designed by Estonian producers themselves.

Best-known domestic small-craft brands include the yacht Saare (**Saare 41** is among the nominees of the European Yacht of the Year 2010) and the motor boat **Stormer** by Saare Paat, the motor yacht **Delta** by Luksusjaht, the fibreglass launch **Seiskari** by Tekno-Marine Eesti, and of small rowing boats Kasse, Pakri and Ideal. In 2009, a small company Lindvart introduced the prototype of a boat with an electric inboard/outboard engine Linda 520. Of best-known foreign brands Saare Paat produces the yacht **Finngulf 33**, Alunaut manufactures aluminium launches Vector and boats for the handicapped Fred 25, Luksusjaht the yacht **Arcona** (Arcona 430 was awarded the European Yacht of the Year 2009 title), Lindvart the sailing yacht Contrast 400; Alfa Yacht Production produces a series of the Swedish yachts Diva.

Majority of boatbuilding firms have to be able to simultaneously act as subcontractors as well as invest into production marketing, as subcontractor services can often be a vital means for retaining production stability in the course of launching a new product.

Increase in mechanisation depends also on the number of engineers. Application of new production technologies and equipment requires highly qualified staff that is today lacking in Estonia. In recent years enterprises and educational institutions have cooperated to find solutions to the problem of qualified work force – a major development has been the opening of a **joint professional higher education programme of Tallinn University of Technology and Estonian Maritime Academy.**

Small-craft building is linked to several innovation-related domains (e.g., materials development, electronic systems, IT, etc.) which already have sufficient expertise and know-how in Estonia. However, the small scope of the domestic market as well as certification costs of small-craft components at entering the market cause problems in creation of new related enterprises.

The enterprises of the Estonian small-craft sector cooperate with each other. The initiators and main facilitators of this cooperation are in Saaremaa Island where the Association of Estonian Boatyards facilitates cooperation in the field of marketing, promotion of small-craft building and staff training in the region. Since the small-craft products of different enterprises vary and are targeted to different customers, Estonian firms compete with each only for hiring qualified work force. Staff training and development serves the interests of every company and marketing strategies are also quite similar in Estonian firms. **Via certain common actions** (such as purchase of basic materials, product marketing at fairs, cooperation with educational institutions towards staff development and training) **the cumulative effect is reached,** that would be hard to achieve if every company acted on its own.

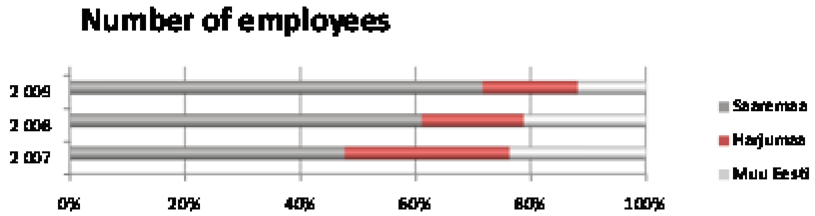
# IMPACT OF THE CRISIS: CONCENTRATION

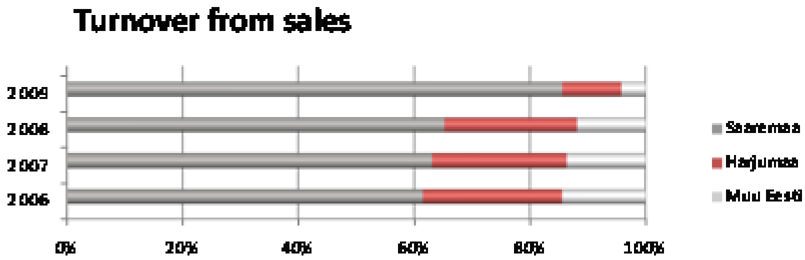
Due to a strong dependence on exports economic recession had its effect on the Estonian small-craft building sector relatively early. In 2008 the turnovers of building companies whose produce was targeted to the domestic market increased, while in the small-craft building sector the year 2008 turned out to be rather complicated. The total turnover of the sector did not actually decrease, but the profitability dropped remarkably. Yet, it was in 2008 and 2009 that several bigger small-craft building enterprises made remarkable investments into equipment.

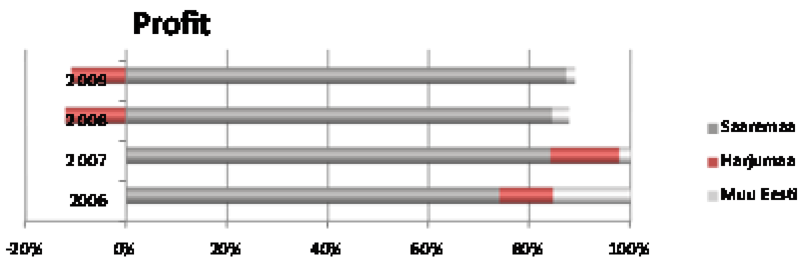
During recession the occupancy rate in small-craft building has dropped from 500 people to 300. The proportions of the distribution of  labour have shifted as well (especially in other regions of Estonia except Saaremaa where the occupancy rate in small-craft sector has remained at a stable level).

The turnover of Estonian small-craft building companies has not significantly decreased during the years of recession. By the year 2009, the previous profit rate was also restored. In 2009 Saaremaa boat-building yielded practically all the turnover and profit in the sector.

**Concentration to Saaremaa 86% in turnover**




*Data: annual reports of Estonian boatyards*

When in 2007 the small-craft building enterprises of Saaremaa comprised 45 % of the employees active in this sector in Estonia and yielded 60% of the sales turnover of the sector, by 2009 the situation had drastically changed. As of 2009, 72 % of the work force engaged in small-craft building are employed in Saaremaa producing 86% of the total turnover of the sector. Thus, the economic recession of the years 2008-2009 has hit first and foremost the small-craft building firms located in mainland Estonia.

In case of Saaremaa, small-craft building forms nearly 20% of the region's industrial output – the share can increase even more in the near future

## OPPORTUNITIES

According to the small-craft building cluster strategy, the competitive advantages of Estonian boat-building comprise tradition-based and maritime-life-related skills, high production quality, and a certain cost advantage of labour force (though this is decreasing). Due to the flexibility and versatility of the enterprises,

**the key-words of Estonian small-craft building are customer-orientation and quality.**

Estonian small-craft building has good prospects for production of special-purpose work boats and recreational boats, as well as for putting into practice innovative technical and technological solutions via projects or small production series. It is wise to make use of the advantages of Estonian small-craft building – high quality, customer-orientation, cost advantage), versatility and cooperation of enterprises combined with the flexibility achieved thanks to the small size of the firms.

However, successful completion of more specific projects might be problematic due to the lack of expert know-how and professional skills. The development strategy for the small-craft cluster defines work force to be both its strength and weakness. There is a pool of skilled labour but there is a lack of expert knowledge enabling to launch production based on increased value added. Investments into marketing and production technology also require contribution into human resources development.

Yet, in recent years there have been **remarkable advances in facilitation of specialist knowledge and staff training in small-craft building:** launch of a state-commissioned study programme at Kuressaare College of Tallinn University of Technology, ongoing curriculum development at vocational education level, start of the project of a small-craft competence centre, modernisation of professional standards and examinations, etc. Estonian small-craft building sector can rely on the expert know-how available in other countries of the Baltic-Nordic region (particularly Finland and Sweden). In case of successful international cooperation between small-craft building firms and educational institutions it is possible to attract the required know-how to Estonia.

Thanks to a relatively high value added of the Estonian small-craft building sector (in local context) and higher profitability compared to the enterprises of Nordic countries, attracting of foreign investors would be quite realistic.

It is also important that small-craft building enjoys the support of the public sector.
Developments in business environment facilitating small-craft building depend also on the following actions of the public sector:

- promotion of Estonia as a maritime tourism destination;
- developing of small harbours and marinas;
- development of Estonian maritime culture and creation of domestic clients.

# SUMMARY

The years of economic crisis have proved that Estonian small-craft building industry is competitive and has a potential for growth. In addition to economic factors (profitability, share in industrial production that is comparable to that of Nordic countries; volume of exports, and a variety of related sectors) the sector has an important regional policy aspect – its enterprises are located on the coast and a majority of them are small-size or family businesses.

Since the production cannot be moved too far from the target markets,  Estonia remains an attractive production region for Nordic small-craft builders looking for more a flexible and favourable production environment.

Estonia also has a **good potential for completion of one-off projects and** launch of **limited product lines.**

In addition to a favourable geographical location, attracting of foreign investments is facilitated also by the following factors: relatively high profitability, lower running costs, as well as the cost efficiency of labour at present and in the foreseeable future. Training of skilled and professional work force is the key to the stability of high-quality foreign investments and towards a higher level of value added in production.

There is unused potential in Estonia in the following areas:

- creation of a market for small-craft repair and maintenance that depends mostly on development and marketing of small harbours and marinas.
- Formation of domestic market that depends mostly on the recovery and strengthening of maritime culture as well on the growth of the standard of living in Estonia.

Factors depending on the state of business environment and on actions taken by the public sector include developing of small harbours and marinas, facilitation of maritime/coastal tourism and Estonian maritime culture (developing of seafaring skills and promotion of yachting).

As a conclusion we can say that small-craft building is a field of production that is significant for Estonia due to its regional policy aspects, which also has great potential for growth and whose stability is ensured through international cooperation in knowledge and investment transfer into the region.