Arengufond foresight project “Tööstusvedurid 2018”

Scoping paper for 28 May 2008 seminar

Introduction to the foresight project “Tööstusvedurid 2018”

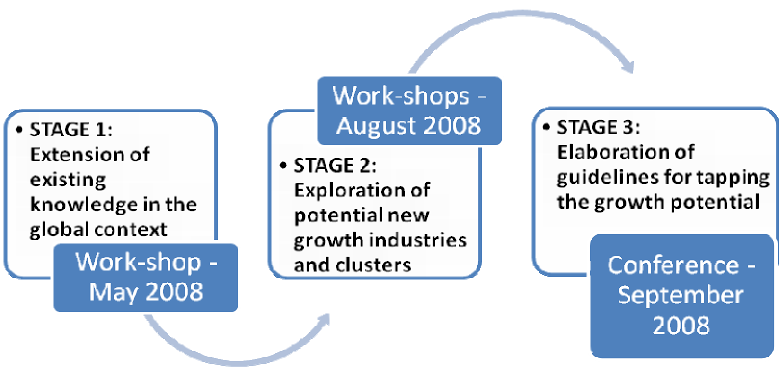
Eesti Arengufond (Estonian Development Fund) is a public law institution with a duty to carry out socio-economic and technology foresight in order to initiate and support changes in the Estonian economy and society to help updating the economic structure, ensuring the export growth, and creating new jobs requiring a high qualification.

Within the year of 2008, Arengufond will be carrying out foresight projects in order to look into the potential of Estonian manufacturing and service industries as well as the potential for tapping ICT trends in order to support development in other areas of life. These projects will feed the work for elaborating a coherent 10-year economic policy vision for Estonia, which is Arengufond’s longer aim.

The current project, “Ways of Restructuring the Estonian Manufacturing industry” or “Tööstusvedurid 2018” (“Industry Engines 2018”) has been initiated with the following objectives:

- to identify the growth possibilities of the Estonian manufacturing industry in the globalising world in the next 10 years;
- to identify the ways how to utilise these possibilities at the best possible manner within the next 3-5 years.

The project started in April 2008 and is to last until October 2008 with the following stages and milestones:



Arengufond’s partners within the „Tööstusvedurid 2018“ project are Etlatieto Oy (research and analysis) and Gaia Consulting Oy (workshop and conference facilitation).

The work-shop of May 28 marks the end of stage 1 of the project. Within the work-shop, preliminary results of stage 1 analyses of global manufacturing trends and current competitive situation of Estonian industries as well as identification of potential new growth industries will be discussed.

Workshop scope

The workshop aims at identifying potential future industries that will be more carefully analysed during the next phase of the project. For this purpose the workshop discussion will cover the following dimensions:

1) Understanding of the structure of the Estonian manufacturing industries

- Which industries and possibly more specific clusters can be identified in the Estonian manufacturing industries? What are the most important products and services these industries produce and what are the key companies? On a general level we can identify e.g. food, furniture, electronics, and chemicals etc. industries. However, discussion on the future potential requires also a more detailed understanding of the types of products and companies that exist within these industries.

2) Understanding of the essential trends, drivers and uncertainties that affect the industries

- General understanding of current economic situation and identified global megatrends provide a basis for analysing the future potential of the Estonian manufacturing industries. An in-depth discussion is needed in order to create a common understanding of which trends and uncertainties are the most important for the Estonian industries. Different trends and uncertainties also affect different industries in a different way.

3) Analysis of the future position of potential industries

- The future potential in terms of global competitiveness depends on many aspects. The workshop aims at analysing interesting industries from the point of view of their resources, demand structure, supporting activities and networks, as well as strategies and competition. The government role and potential to foster these dimensions of competitiveness play also an important role in the future potential. Hence, the Porter National Diamond framework provides an interesting view to the competitiveness. In the analysis the framework is adapted to the Estonian context, where clusters in traditional sense can hardly be identified and international links play an essential role. Furthermore, the potential needs to be analysed from the future perspective.

The key objective of the workshop is to identify industries that have future potential in terms of global competitiveness. For this purpose we aim at identifying industries and their parts that have e.g.

- Good current competitiveness
- Potential for moving up in the value chain
- Major restructuring pressure

Simultaneous changes in the global environment and the Estonian economy affect the industries in a very different way. Hence the future potential of the industries vary. In the discussions, future thinking expands until year 2018.

Questions to consider before the workshop

The following questions are the core questions to be discussed at the workshop. To prepare for active participation in the discussions, please take a few moments to think about the questions before the workshop.

- What industries are relevant parts of the Estonian manufacturing sector?
- How would you structure the sector in order to identify areas which have the greatest future potential? Think in terms of types of products, companies and potential clusters.
- What general or industry specific global and local trends and uncertainties can you identify?
- Which industries – other than your own – have the greatest future potential on international markets?

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Workshop background reading – preliminary summary and conclusions from Etlatieto analysis

by Pekka Ylä-Anttila (Etlatieto Oy)

Estonian Economy at the Brink of a Crisis

Estonia has been a success story in terms of GDP growth and catching up in income levels in Europe. However, recent years have shown that the economic growth has not been sustainable – there has been a sharp downturn, and, in fact, we are witnessing a hard landing in 2008. The economy is in an awkward *flow* (inflation and halting of growth) and *stock* (high debt and poor competitiveness) *imbalances* due to, in part, policy errors in recent years, which allowed these imbalances to emerge.

The rapid growth of domestic consumption and investment was possible due to huge inflow of foreign capital, especially in the form of foreign direct investment (FDI). The foreign debt has accumulated close to a critical level. Huge inflows of capital and exceptionally low real interest rates not only fuelled private consumption and investment, but evidently also reduced incentives for industrial restructuring and building new globally competitive export capabilities.

The main factors explaining the country's attractiveness as an FDI target have been relatively low costs and wages, as well as growing local markets. Now, the advantage based on lower costs is lost to a large extent. Inflation has exceeded that of other EU countries for long, and labor costs in relation to productivity have risen to unsustainable level. Estonia's competitiveness has deteriorated dramatically.

The crisis is related to structural weaknesses of the economy. Hence, long-term solutions are called for. Major restructurings are needed in institutions and industrial structures to overcome the huge economic imbalances.

Estonia needs to expand its export capacity and increase the competitiveness of internationally operating firms to cope with the huge indebtedness and to continue catching-up with EU-15 countries. This will, however, take several years.

Global trends – Manufacturing in transition

There is a major transformation going on in global manufacturing. East Asia accounts today for more than one third of total world manufacturing. China alone exports more manufacturing goods to global markets than all other emerging countries combined. Its export structure is also evolving and becoming rather similar to that of advanced EU countries. This convergence is a result of rapid accumulation of human and physical capital. As a result, the world market is becoming even more competitive – Asia (China) is strong both in low-cost and low-skill industries as well as also in many high-skill and high-tech product groups.

Consequently, European economies are facing an increasing need to specialize according to their own comparative or competitive advantages. Specialization and competition does not, however, necessarily take place at the level of industries. It often takes place at much finer level of disaggregation, namely, at the level of functions or even tasks. Firms split their value chains globally. As a consequence, largely national production systems are becoming globally dispersed. Rather than broad national clusters, relatively narrow regional hubs of specialization are emerging and competing successfully in the global market place.

Although services are growing in importance throughout the global economy, manufacturing still matters – even in the most advanced economies. Indirect or spill-over effects from manufacturing to the rest of the economy are – on average – much larger than those from services. However, borderline between manufacturing and services has been blurring over the past decades. Furthermore, manufacturing goods typically embody a lot of services. This is an important global trend that is likely to accelerate due to increasing role of ICT in all kind of production. Products that are traded in the global market today are increasingly combination of manufacturing goods and various kinds of (often knowledge-intensive) services.

Is it too Late – Can a Crisis be Turned into an Opportunity?

According to our observations industrial policies have never gained high priority in Estonian economic policy making. In spite of manufacturing industry's vital role as an engine of sustainable growth, strengthening manufacturing industry's operational environment has not been an issue in the policy agenda. Share of manufacturing in Estonia's GDP is small in international comparison. Although Estonia has been able to attract foreign direct investment in general, only fraction of them – about 15% of total FDI stock – is in manufacturing.

Industrial policies are in most industrial economies equated today with innovation policies. To some extent this has been the case in Estonia too. The policies have focused on high- and medium-tech industries while there might have been a lot of potential in upgrading technologies in existing less R&D-intensive industries.

Estonian exports of manufacturing goods have been growing relatively fast; the average annual growth in 1999-2007 was 17 per cent in nominal terms, i.e. a bit more than nominal GDP growth. However, the growth has been slowing down and it is evident that export capacity is too small and uncompetitive to support aspirations of constantly rising living standards.

Since it is not possible (?) under the current exchange rate regime to improve the competitiveness quickly, it is likely that there will be an "internal devaluation", i.e. an adjustment through increasing unemployment and gradual lowering of production costs in some industries alongside with upgrading existing products and developing new. This will, however, take time. There are both challenges and opportunities.

Strongholds, Challenges and Opportunities

Our analyses as well as those of Estonian scholars[1] clearly show that competitiveness of all Estonian manufacturing industries vis-à-vis EU-15 countries is low in terms of productivity and export performance. There are no clear strongholds, even though some traditional industries have done relatively well compared with other new EU member states.

Traditional wood based industry, e.g., has been much more successful than medium- and high-tech industries. In this industry, there are several product groups where Estonia has gained international market shares. Both foreign trade and productivity analyses show that Estonia has a *comparative advantage* in this industry, as well as in non-metallic mineral products (glass and cement industries). Consequently, these industries will hold strong position in industrial structure also in the future and, hence, continue to be a source of growth and export revenues. There is a need, and also an opportunity, to upgrade and increase value-added content of these industries. Economic and industrial history shows that it is most often the combination of traditionally strong industries and new innovative products, processes or business models that are likely to become competitive in the global market.

Our analyses show that Estonia has a *comparative disadvantage* (in terms of relative productivity level) in industries like chemical, plastics, machinery, and electrical equipment – many of which are regarded as technology-intensive industries.

It is extremely important – from the future competitiveness viewpoint – to ask with whom and in which markets Estonia and its firms are competing in the world market. Our analyses show that Estonia's export structure is the most similar to those of Lithuania and Latvia, followed by Romania, Poland, and, a bit surprisingly, Sweden. Over time, Estonia's exports have on average become more similar to with the rest of EU-27 countries. Most significant increases in similarity have occurred e.g. with the Netherlands, Germany, Greece, and Austria. Nevertheless, we should not look at only European markets and competitors, but the global economy as a whole. As indicated above, there is an increasing competition in the world market, especially from Asia – and across the full range of industrial products. Products and industries may, however, be the wrong level of analysis: as discussed above, competition and specialization of countries and regions may take place at a much finer level of disaggregation.

Therefore, it is extremely important to analyze Estonia's competitors, and Estonian companies' positions in global value chains in more detail. For that purpose analyses based on conventional statistical data are not sufficient. Insights from business community and decision makers are needed. The next stage of the project will focus on compiled, e.g., by interviewing representatives of Estonia's business community as well as Estonian based foreign companies.

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1 Especially topical and influential is "The Estonian Economy - Current Status of Competitiveness and Future Outlooks". Arengufond, Estonia in Focus Nr 1/ 2008.

Any lessons to be learned from international experiences?

The crisis is always an opportunity to do something radically new, as experiences from other countries indicate.

Although different, there are many similarities in Estonian economic crisis with the Finnish crisis in the early 1990s. In Finland too, before the crisis, the economy was overheated, there was an influx of foreign capital, growth was largely based on private consumption and credit expansion, current account was showing increasing deficit, etc. The economy went through a painful macro adjustment, but the revival from the depression and the restructuring thereafter were quite fast. The Finnish case demonstrates that it is possible to turn a crisis into new opportunities in a relatively short time. Estonia has, in some respects, even better chances to restructure its economy than Finland had. The economy is very flexible and responsive to incentives. On the other hand, due to relatively small accumulated knowledge capital, the transformation will be based more on traditional industries and perhaps also more on new entrepreneurship. At least these are the two assets that could be utilized.

One element in Finnish restructuring process was a reformulation of industrial policies. In the midst of the crisis National Industrial Strategy (1993) was launched. The starting point for the strategy was that export sector (manufacturing) was simply too small and one-sided to support sustainable economic growth. The basic task was to communicate a well-argued vision of future industrial structure without proposing, however, any interventionist policy measures. The strategy was prepared in collaboration with several stakeholders, discussed widely, and adopted as a guideline for individual programs, measures and decisions both in the public and private sector.

A similar type of effort could be undertaken in Estonia with the aim of producing a widely accepted view of future industrial structure and the restructurings needed to move to the direction indicated.