At Your Service

The Importance of Services for Manufacturing Companies and Possible Trade Policy Implications
The National Board of Trade is the Swedish governmental agency responsible for issues relating to foreign trade and trade policy. Our mission is to promote an open and free trade with transparent rules. The basis for this task, given us by the Government, is that a smoothly functioning international trade and a further liberalized trade policy are in the interest of Sweden. To this end we strive for an efficient internal market, a liberalized common trade policy in the EU and an open and strong multilateral trading system, especially within the World Trade Organization (WTO).

As the expert authority in trade and trade policy, the Board provides the Government with analyses and background material, related to ongoing international trade negotiation as well as more structural or long-term analyses of trade related issues. We also publish material intended to increase awareness of the role of international trade in a functioning economy and for economic development.

The National Board of Trade also provides service to companies, for instance through our SOLVIT Centre which assists companies as well as people encountering trade barriers on the internal market. The Board also administers the Swedish Council for Trade Facilitation, SWEPRO.

In addition, as an expert authority in trade policy issues, the National Board of Trade provides assistance to developing countries, through trade-related development cooperation. We also host Open Trade Gate Sweden, a one-stop information centre assisting exporters from developing countries with information on rules and requirements in Sweden and the EU.

www.kommers.se
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main findings</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>The increased importance of services</td>
<td>3</td>
</tr>
<tr>
<td>Services needed and offered by Sandvik Tooling</td>
<td>4</td>
</tr>
<tr>
<td>Services needed by Sandvik Tooling for effective supply chain and delivery of goods</td>
<td>4</td>
</tr>
<tr>
<td>Services supplied by Sandvik Tooling to customers</td>
<td>5</td>
</tr>
<tr>
<td>Restrictions on services hampers trade in goods</td>
<td>6</td>
</tr>
<tr>
<td>Trade policy considerations</td>
<td>7</td>
</tr>
<tr>
<td>Notes</td>
<td>8</td>
</tr>
</tbody>
</table>
Main findings

Services are needed in all aspects of manufacturing, from product development, through production to sales. The amount of services required in manufacturing, and sold by manufacturing companies, is increasing.

This case study of Sandvik Tooling (a part of the Swedish manufacturer, Sandvik Group) shows that the company needs over 40 different services to establish and uphold their supply chain. This is almost half of the services covered in the General Agreement on Trade in Services (GATS). Additionally, Sandvik Tooling supply about 15 different services themselves.

Since manufacturers use and sell an increasing amount of services, any restriction on services will mean increased costs and possible loss of competitiveness.

Measures that facilitate the availability of cheap, reliable high-quality services will improve the business of manufacturing companies. Important measures in this regard are the liberalization of services and improved regulatory frameworks.

From a trade policy perspective, it would be valuable to seek the perspective of manufacturing companies when discussing services, liberalization and regulatory improvements. Additionally, in trade negotiations, negotiators should focus on how services and goods liberalization can support each other and help facilitate every day trade.

This report is written by senior advisor Magnus Rentzhog, the Department for WTO and Developments in Trade, National Board of Trade.
Services are needed in all aspects of manufacturing, from product development, via production to sales. This is well-known and everyone can easily understand the need for transport when exporting goods. Manufacturing companies also sell services. In fact, the amount of services required in manufacturing, and sold by manufacturing companies, is increasing as the National Board of Trade shows in “Servicification of Swedish manufacturing”.

What is less understood is the actual number and diversity of services needed and sold by manufacturing companies and what these services are. By studying a Swedish manufacturer, Sandvik, we aim to illustrate servicification and consequently reinforce the findings of the study above.

Restrictions on the ability to deliver or purchase services can become direct restrictions on goods trade. These restrictions can result in anything from increased costs and decreased competitiveness to the inability to deliver the goods.

Considering the increased level of “servicification”, it is becoming more and more important for companies to understand the connection between services and manufacturing. Nevertheless, it is striking how seldom manufacturing companies realize this connection. Interestingly, two Swedish manufacturers – in the same field – have totally different views on this. One communicated to the Board that services was the most important aspect of the ongoing WTO Doha negotiations, while the other one had only focused on questions relating to tariffs and had not reflected on their interest as a services exporter. In this instance, it is equally important for policymakers, not the least in the field of trade policy, to recognize this linkage and broaden discussions about services to actors other than services suppliers.

This paper starts by briefly discussing the increased importance of services before the case study of Sandvik Tooling and its level of “servicification”. Secondly, the paper discusses the possible effects of restrictions on services and how trade policy measures can help companies. Finally, we draw some conclusions from a trade policy perspective.

The increased importance of services

Manufacturing companies need services for the production and for the sales of their products, not least when exporting their goods. This is becoming increasingly true in a globalised world that demands more sophisticated products and business offers. A production and business environment characterized by increased outsourcing, fragmentation, production sharing and off-shoring depends on access to cheap, reliable and high-quality services to function. Furthermore, services are becoming an increasingly large part of manufacturing companies’ business offers, including through the delivery of their own services to their customers.

Services constitute about 80 % of the business offer of some manufacturing companies. The business offers are becoming increasingly integrated and the distinction between services and goods is becoming ever more blurred. In essence, manufacturing companies are no longer selling a product but a function, where the services component is a means to help customers become more efficient and productive in their own processes and business. An important driving force, when it comes to this evolution, is the possibility to exploit a large customer base and secure long-term relations.

As evident in “Servicification of Swedish manufacturing”, manufacturing is changing in character; it is becoming servicified. The most striking result in the study is that, if looking from an enterprise group level, the export of qualified services by manufacturing companies has risen over 230 % (1998 to 2006). This can be compared with a rise of 160 % for services exports by services companies. Manufacturing companies represent almost a third of Swedish services exports. The most commonly offered services are business services, wholesale, retail and repair services. This clearly illustrates the importance of services for manufacturing companies.

On a competitive market, services need to be cheap, reliable and of high quality. Unnecessary costs due to unnecessarily high prices on the services needed and delivered, will impact on competitiveness. As the following case study will show, the number and diversity of services in question is substantial.
Services needed and offered by Sandvik Tooling

The company presented in this paper, the Sandvik Group (see box below), was chosen since it is a large exporter in a field where perhaps you would not expect services to be so prominent. The Sandvik Group only have a turnover from services of 6.5%.

Based on the list of classification under the General Agreement on Trade in Services (GATS), we identified the services needed for securing the supply chain, including building customer relations, and the services that Sandvik Tooling supply.

Services needed by Sandvik Tooling for effective supply chain and delivery of goods

The Sandvik Tooling supply chain has been streamlined and adapted to its business model. Sandvik Tooling supplies about 10,000 packages every day to customers all over the world. Sandvik Tooling has three central distribution centres (in the Netherlands, the USA and Singapore) and around 40 manufacturing units which are located around the world, each supplying the nearest central distribution centre. From these products are sent to the distributors’ warehouse, the customers’ warehouse or directly to the customers’ machine. The goal is early delivery the next day even if orders are received late in the day and the customer is located in a remote area. Today, Sandvik Tooling is fulfilling this goal in over 99% of the cases (if in stock) – and this makes it necessary for all parts of the supply chain to function flawlessly.

Services supplied by Sandvik Tooling to customers

An important aspect of Sandvik’s (and probably all manufacturers’) business model is to supply services on their own. Picture 3 shows the services supplied by Sandvik Tooling. All services are needed to uphold the business model and to secure the continued business relationship with their customers. Any obstacle to the delivery of the services renders the product more expensive or might hinder the entire relationship.

The Sandvik Group

Sandvik is a high-technology engineering group. Sandvik operates in 130 countries, employs over 50,000 people and had sales of approximately SEK 93 billion (2008). Operations are concentrated in three core areas:

The Tooling business area focuses mainly on tools and tooling systems for metalworking applications.

Mining and Construction specializes in rock-working equipment and tools used in mining and civil engineering.

Materials Technology primarily develops products made of stainless steel, special alloys and resistance heating materials as well as process systems.

Source: www.sandvik.com
Picture 1: Services needed for effective supply chain and delivery of goods

Legal services
Accounting, book-keeping etc.
Taxation services
Medical services
Computer services
Research and development
Rental/Leasing
Advertising
Market research
Services incidental to manufacturing
Placement of personnel
Maintenance and repair
Convention services

Security services
Packaging
Printing, publishing
Design
Building-cleaning services
Photographic services
Counter services
Logistic services
Postal services
Telecommunications
Audio-Visual services
Educational services
Environmental services
Banking services

Insurances
Health-related services
Hotels and restaurants
Travel agency services
Maritime transport - freight
Inland waterways - freight
Air transport - freight/passenger
Road transport - freight/passenger
Cargo-handling services
Storage and warehouse services
Freight transport agency service
Feeder services
Energy services

Picture 2: Examples of services needed at different parts of the supply chain

Before supply chain
Advertising
Research and development

All parts of supply chain
Legal services
Telecommunications

Transportation stage
Logistic services
Air transport

After supply chain
Maintenance and repair

Traditional Supply Chain

At distribution center
Security services
Placement of personnel

Sandvik Tooling Supply Chain
The services listed above serve different purposes. Some add value to the sale (e.g., financial and logistic services) while other services are basic services guaranteeing the basic functioning of the product (e.g., maintenance and repair and technical testing and analysis services). A third group of services offered aim at improving product efficiency (e.g., educational services) and a fourth group focuses on customizing products (e.g., design and research and development services).

Restrictions on services hampers trade in goods

Any restriction on services can at worst make trade in goods impossible. However, in most cases, restrictions will mean increased costs for manufacturing companies, either directly or indirectly – as the examples below will show. Costs can take the form of higher prices, lower quality and increased delivery times.

It can thus be argued that all actions to improve the possibility of companies to deliver cheap and reliable services will improve the competitiveness of manufacturing companies and facilitate sales of goods. One way to improve access to cheap and reliable services is to increase competition. A prime way to reach this end is the liberalization of services, which is lowering barriers to access markets and removing discriminatory measures. Done correctly, liberalization can increase access to services, foster new technology and lower prices.

Another approach for improving the possibility of delivering cheap and qualitative services is legislative improvements. Examples of legislative measures that can make it easier for companies delivering services include the removal of unnecessarily burdensome administrative measures (“red tape”), development and implementation of international standards and recognition of foreign licensing procedures.

Three actual examples encountered by Swedish manufacturing firms and reported to the National Board of Trade, clearly illustrate how restrictions on services may imply difficulties, costs and even the closure of subsidiaries.

1. A subsidiary of Company A was refused access to the telecommunications network. The subsidiary could not operate and was later closed.
2. Company B, with its own global logistics solution, was forced to use a national logistics services supplier in one country. This supplier was inferior both in price and quality which meant unnecessary costs.
3. Company C with a general global financial solution on leasing had to adapt a different solution for a central market. This solution was difficult to merge with other financial solutions of the company.

In all three cases, liberalization of services, including adaptation to multilateral trade rules and standards, could have removed the obstacles and
thus facilitated business. In the first case, the country in question violated their obligations under the Annex on telecommunications of the General Agreement on Trade in Services (GATS). In the second case, non-discriminatory market access would have allowed the manufacturer to establish their own logistics company in the country. In the third case, alignment of technical standards and liberalizing financial services would have allowed the manufacturer to use their usual leasing solution.

The total effect of a restriction should not be underestimated. The second example above illustrates the fact that a restriction on a specific market also has an implication on the export to other markets. In this case, the manufacturer, who produced goods in that particular country, was forced to transfer the products to their own logistics company at the border. This increased costs.

Costs can also be inherited, that is stem from costly restrictions faced by others. If a company’s sub-contractors have to deliver at unnecessarily high costs due to restrictions of services, this will mean that the final product becomes more expensive.

Trade policy considerations

First and foremost, this paper illustrates the fact that liberalization of services, services negotiations and improved regulatory environment are important to manufacturing companies – both as service deliverers and as consumers. Today, discussions about the liberalization and negotiations of services tend to be concentrated within service suppliers only. Typically, discussions even tend to be concentrated on suppliers in the specific sector being discussed. However, it is equally important to seek information from, and understand the position of, manufacturing companies when discussing liberalization and negotiations.

Secondly, taking this a bit further, services and goods liberalization should not be measured against each other in trade negotiations. Instead, negotiators should focus on how services and goods liberalization can support each other and help facilitate everyday trade. Negotiators should look at the reality of the business community. In real life goods (industrial/agricultural) are not artificially separated from services, but is a complete package. For manufacturing companies, the success of negotiations is based upon how it affects/facilitates their entire business model. Unfortunately, today, trade negotiations tend to treat trade topics as different entities, alien from each other. Outcome in one field is traded off for each other.

Finally, manufacturing companies need to realize, and engage in, the importance of services and service liberalization. In discussions with manufacturing companies, it is striking how often these companies are unaware of the benefits they can gain. It can be important for their competitiveness to understand how improvements in services sectors can positively affect their business environment.
Notes

1 National Board of Trade, 2010:01. This and the current study are part of a number of studies by the Board on the interaction between manufacturing and services and “servicification”.

2 This case study does not discuss services included in the product itself, e.g. diagnostic software in machinery. This is, however, an equally important sign of increased servicification. Here, the work on value-added trade data will highlight the importance of services in products and the value-added figures these services entail.

3 The last two paragraphs draw on Berggren, U. and T. Bergqvist (2006), Industriföretagens servicesinnovationer – en outnyttjad tillväxtfaktor (The services innovations of industrial companies – an unexploited growth factor), Swedish Agency for Economic and regional Growth (NUTEK). (In Swedish only).

4 The study does not include financial services in this calculation.

5 Note that the choice of base-year may affect the magnitude of the rise.

6 Transports account for about 30% and other services for the rest, i.e. almost 40%. Gozzo, Mauro (2009), Tjänsteexporten – den snabbaste växande sektorn i svensk ekonomi (Services exports – the fastest growing sector in Swedish economy), Swedish Trade Council (Exportrådet). (In Swedish only).


8 Under the GATS about 160 different services are identified in the so called W/20-list (MTN.GNS/W/120).

9 GATS is one of the three main agreements within the World Trade Organization (WTO) and aims to give international trade and services a common legal framework and to progressively liberalize services.

10 This part is based on an interview with Mr. Jan Sörlien, Global Process Owner Order to Delivery at Sandvik Tooling.

11 The services are not presented in any order of importance.

12 A number of services in picture 1 are broken down into sub-services in the GATS classification list. When counting the most relevant sub-services, the services needed by Sandvik constitute almost 50% of the services included in the classification list.

13 This part is based on five services strategies presented in Witell, Lars, Nina Löfberg, Anders Gustafsson, Bo Edvardsson (2009), Tjänster i fordonsindustrin (Services in the automobile sector), Centrum för tjänsteforskning. The fifth strategy is taking over the customers processes.