

**Summary:**

# **Production and consumption structures in Norway - trends and developing patterns**

## **Background**

The main focus of this report is to study, map and analyze trends in production, consumption and trade in Norway, and to analyze how trends in logistics influence the choice of transport. The report will form the basis for later analyses of how the structural developments influence the choice of logistics solutions, and how in turn the trends in logistics affect the structural developments.

Economies of scale in production and warehousing and increasing internationalization of trade and manufacturing lead to an enlarged distance between production and consumption. The main forces behind the size of freight transport are linked to volume, where the goods are produced and consumed, and where the wholesalers are located. These are also the main reasons for this study on the structural developments in production, consumption and trade.

## **Norway, a country of small sized firms.**

Norwegian industry is mostly comprised of small and medium sized firms with up to 100 employees. As many as 99 % of all firms employ fewer than 100 people, and these firms constitute 79 % of the total employment. Many of the small firms are sole proprietorships, acting as passive firms or holding companies.

The petroleum sector and the manufacturing sector have a higher share of larger firms than the rest of the industries.

## **Manufacturing**

The Norwegian manufacturing sector is mainly located along the coast from Østfold to Nordland. Norway has faced a reduction in the number of manufacturing firms as well as people employed in the manufacturing sector from 2001 to 2006.

The production value in the manufacturing sector has increased with almost 70 % from 1989 to 2006, in the same period the export value almost doubled. Thus, the Norwegian manufacturing sector is export oriented, and the export share has grown over the last 20 years. Exports have increased more in tons than in value, illustrating another important feature of the Norwegian export: goods with a low unit value exhibit the largest growth.

A major share of the increase in manufacturing production can be traced back to an increased production of chemicals and minerals, these goods constituting about 80 % of the export growth.

## **Wholesale**

There has been an increase in the number of wholesalers, but a reduction in the number of people employed in the wholesaling sector from 2001 to 2006. Most wholesaling businesses are located in the Oslo area, approximately 55 % of the turnover in the wholesaling sector are located in the Oslo area. Most goods for private consumption are imported, arriving at wholesalers in the Oslo region for cross docking and consolidation before being domestically distributed.

## **Retailers**

We have seen an increase in employment in the retailing sector as well as in the number of retailers. The average firm size, as measured by employment, among retailers has grown by 5 % from 2001 to 2006. For groceries the average employment per store has increased by 16 %, while the number of stores has declined.

## **Globalization**

Norway is a small, open economy which actively takes part in international trade and the international division of labor. This has given Norway the opportunity to concentrate domestic production in the sectors where the country has a comparative advantage, giving the Norwegian consumer a larger variety of products and Norwegian firms a larger export market.

From 2001 to 2008 the quantity imported from Asia nearly doubled, while the value of imports has increased somewhat less. Norwegian export to the same continent is approximately at the same level in 2008 as it was in 2001. Trade with China has grown substantially over the last decade. Import from China has almost quadrupled from 2001 to 2008 and export is five times bigger in 2008 than it was in 2001. China has grown from the 11<sup>th</sup> to the 3<sup>rd</sup> largest import country as measured in import value.

Although Asia is growing in importance, Europe is still Norway's most important trading partner. About ¾ of Norwegian exports in value have a European country as its first destination, in tons 90 % of the export go to Europe (excluding petroleum), while 75 % of the import come from a European country. Germany has passed Sweden as Norway's most important trading partner both in import and export.

An important trend in Norwegian manufacturing is an increased outsourcing of production to low cost countries, and an increased share of foreign ownership. The number of Norwegian firms with foreign majority owners has trebled over the last 10 years.

## **Supply chains**

The majority of goods for private consumption in Norway is imported and arrives Norway by car, ferry or in containers to ports located around the Oslo fjord. Svinesund (EV18) is the largest border point for crossing by heavy vehicles, and approximately half of all heavy vehicles cross the border at Svinesund. The increase in private consumption is a contributing factor for the growth in truck traffic across the Norwegian border, another contributing factor is the change in country of origin for the imported goods.

Growth in the consumption of fruit and vegetables has led to an increased import of foods. The range of goods in the supermarkets is also expanding, with the trend towards a more international selection of foods, leading to a growth in the import of food.

With the Norwegian manufacturing sector primarily located along the coast, a large part, 86 %, of the export of Norwegian goods and semi finished products are done by ship. Ships are also the most important transport mode for Norwegian import, 76 %. This is due to the fact that most Norwegian import is intermediary inputs to the manufacturing sector.

## **Future trends**

According to Statistics Norway the population of Norway is expected to grow by 23 % towards 2030, an additional 1.1 million inhabitants. Increased work immigration from new EU member states is expected as a result of the liberalization of the European labour market. In Statistics Norway's population projections an increased centralization is expected, with the largest growth in the Oslo area. A similar agglomeration is expected in the other major Norwegian cities.

The Nordic countries are expected to remain very important trading partners, but the EU-15 countries outside Scandinavia will have increased relative importance. Imports from the new EU member states are expected to double towards 2040. Along with this increase comes an expected growth in border crossings by trucks.