



BANK OF FINLAND **BULLETIN**

BANK OF FINLAND ARTICLES ON THE ECONOMY

Table of Contents

Finland struggling to defend its market share on rapidly expanding markets	3
--	---

Finland struggling to defend its market share on rapidly expanding markets

YESTERDAY 3:00 PM • BANK OF FINLAND BULLETIN 3/2017 • ECONOMIC OUTLOOK •

PETRI MÄKI-FRÄNTI

- Petri Mäki-Fränti
Senior Economist

The global market share of Finnish exports has been declining continuously ever since the financial crisis. While Finland's export markets expanded by 17% in the years 2008–2015, Finnish exports contracted by 12% over the same period. The loss of market share partly reflects a phenomenon common to the advanced economies. Emerging economies have gained a stronger foothold in the global economy since the 1990s, which has eroded the advanced economies' relative share of world trade.



Seppo Orjasniemi, Secretary-General of the Economic Policy Council, is co-author of the article. He was previously employed as Senior Economist by the Monetary Policy and Research department of the Bank of Finland.

The distribution of market shares across countries depends both on the relative cost-competitiveness of the countries' export sectors and on their export structures. If a country's exports are tilted towards products or markets for which demand increases faster than world trade, on average, the country's share of world trade will rise, even if market shares of the country's export goods remain unchanged in individual export countries.

To what extent can the contraction in Finland's market share be explained by the composition of goods exports? The present article explores this issue from the perspective of both product selection and geographical allocation of exports.

In the wake of the financial crisis, global growth in productive investment declined markedly. Finnish exports have traditionally focused expressly on capital goods, as well as intermediate goods, demand for which depends on investment. Furthermore, world trade growth has in recent years been reliant on the emerging economies, whereas Finland's main export markets have traditionally been in European countries that have suffered from sluggish economic growth since the financial and sovereign debt crises.

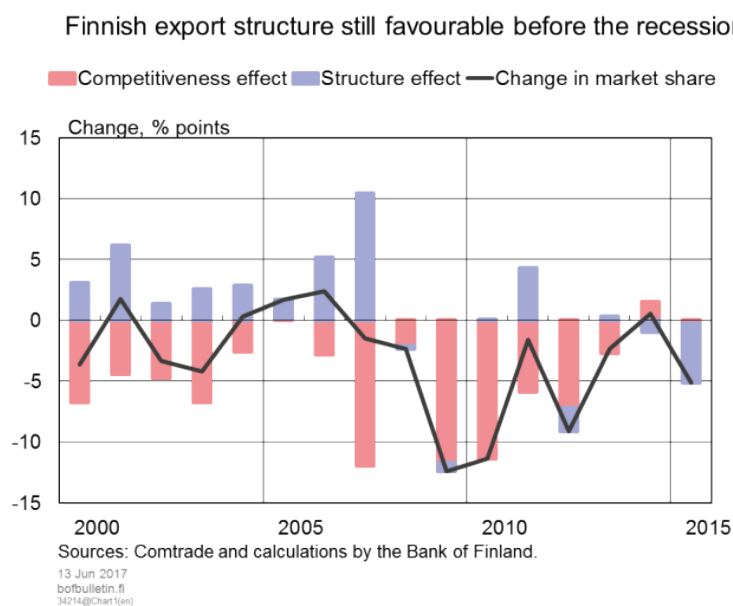
Changes in market share are examined using a constant market share (CMS) analysis. For purposes of the analysis, variations in market share are decomposed into their constituents. The **structural factor** measures the extent to which market share change is related to the export sector's specialisation in products or destination markets that have grown at a different pace than world trade, on average. The **competitiveness factor** is a residual factor indicating to what extent market share change reflects factors other than export structure, such as cost-competitiveness or other competitiveness factors.

The reference period starts at the beginning of the 2000s and ends with year 2015. The research data is based on UN Comtrade data, including 246 export commodities consistent with the Standard International Trade Classification (SITC 3). Export data is expressed in terms of the US dollar and, hence, does not differentiate between effects of price and volume change. Some commodities, including nickel and oil products, have been excluded from the analysis, as their prices have been especially volatile in the period under review.

Structure of Finnish goods exports favourable until onset of financial crisis

Finnish exports relative to world trade growth showed a mixed performance in the first post-millennium decade (Chart 1). Whereas the Finnish export industry lost market share in 2000–2004, exports increased faster in Finland than in the rest of the world from 2005 until the onset of the financial crisis. In terms of market share development, the financial crisis marked a distinct turn for the worse, with growth in the value of Finnish exports remaining below growth rates in the rest of the world in nearly every reference year between 2007 and 2015.

Chart 1.



Using the constant market share analysis, the change in market share was decomposed into a structure effect and a competitiveness effect (Chart 1). The structure effect is composed of the product and geographical structure of exports as well as the combined net effect of their interaction. The impact of the structure effect is positive in years when Finnish exports have, on average, been directed to commodities or export markets in which trade has increased faster than world trade. Conversely, if exports have been directed to slow-growth markets, the value of the structure effect is negative.

The competitiveness factor, in turn, portrays the component of relative market share change that is not ascribable to the product structure and geographical allocation of exports. However, the competitiveness factor cannot be interpreted as representing exclusively the cost-competitiveness of exports, but also embodies real competitiveness, such as product properties and quality attributes that are superior to those of competitors' products. Loss of market share in high-growth markets may also be due to constraints on output growth. In fact, factors acting as a constraint on output capacity growth show up as declining competitiveness in the CMS analysis.

During the early years of the new millennium, the structure of Finnish exports was favourable overall, buttressing export market share performance up until 2007. The contribution made by the structural factor to the rate of market share growth varied from 3–5 percentage points at the turn of the millennium to 10 percentage points in 2007. By contrast, the impact of the competitiveness factor was negative nearly throughout the reference period, and the competitiveness effect has generally been of greater importance for the evolution of market shares than the structure effect.

Already before the recession and through to 2004, the positive structure effects of exports on market share development were overturned by weak export competitiveness. Finnish exports gained market share only in 2001 and 2005–2007, with exports increasing at best around 2 percentage points faster than world trade.

The competitiveness effect also accounts for the continuous contraction in the market share of Finnish exports witnessed since the financial crisis. In the years 2008–2015, the structure effect was also negative more often than it was positive, but this has been of minor significance for the decline in market share.

We must exercise caution in interpreting the impact of the competitiveness factor on market share. A negative competitiveness effect does not directly merit a conclusion that Finland's cost-competitiveness or real competitiveness has performed weakly relative to the benchmark, which consists of countries of a broadly equivalent level of development and competing with Finland on the same export markets.

Emerging economies' share of world trade increased sharply over the reference years, when the advanced economies were struggling to defend their market shares notably in many traditional sectors of industry, regardless of developments in their mutual competitiveness. In fact, the negative competitiveness effect for Finland is likely to largely reflect difficulties of the Finnish export industry to prevail in the competition for market share with the emerging economies.^{[1], [2]}

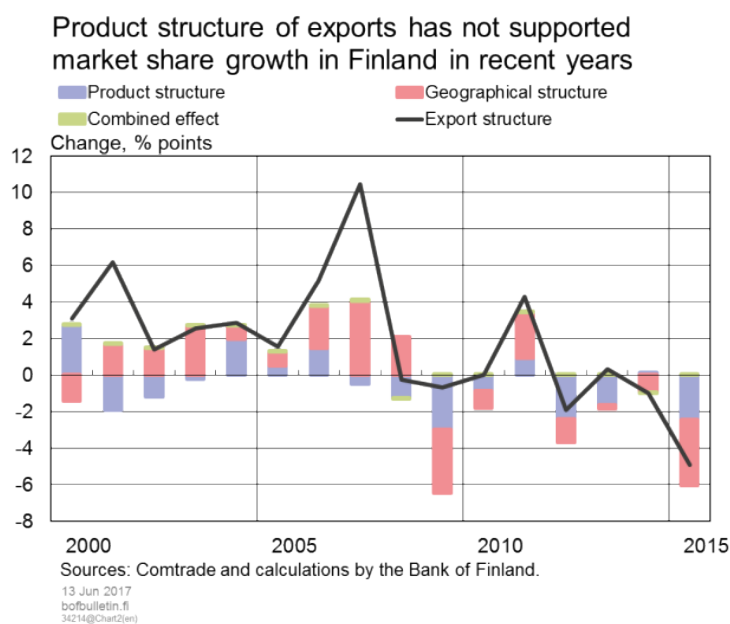
Investment slump has cut Finnish exports

The structure effect can be decomposed further into a product structure effect, which indicates to what extent variations in market share are related to the type of goods exported, and a geographical structure effect, which measures to what extent the geographical allocation of exports drives changes in market share (Chart 2). For individual product groups, trade growth may, to a large extent, be concentrated in one country, in which case the CMS analysis fails to fully distinguish between product and geographical structure effect. This is referred to as interaction effect, which captures the overlapping area between product and destination effect.

1. For a more detailed [analysis of competitiveness measurement](#), see e.g. Kajanoja (2017).

2. Amador and Cabral (2008) employed the CMS analysis to examine the evolution of Portuguese market shares in world exports, contrasting it with that of some European competitor countries. In a majority of these countries, export market shares began to decline in the 1990s, mostly due to the competitiveness effect. The competitiveness effect was interpreted as expressly signifying a sharpening of the competition for market share with emerging economies.

Chart 2.



The positive structure effect recorded in the early post-millennium years prior to the recession was predominantly due to the favourable geographical structure of exports. The geographical structure effect buttressed growth in market shares from 2001 through to 2009.

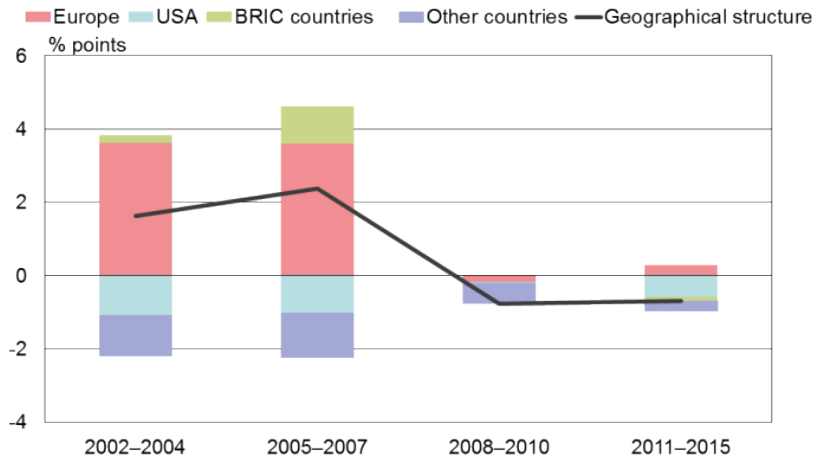
Over the same period, the importance of the product structure of exports for market share growth remained lower, on aggregate, than the geographical structure effect. While supporting the increase in market shares to some extent in 2000 and in 2004–2006, the product structure exerted an unfavourable effect overall in the other reference years.

In the years following the financial crisis, both product and geographical structure of exports mostly had an unfavourable impact on Finnish exports. In some years, notably immediately after the financial crisis in 2009, some of the separate immediate effects on market share of product and geographical breakdown were, nevertheless, offset by a positive interaction effect. All in all, the significance of these structure effects for loss of market share has, nevertheless, been negligible.

The constant market share analysis also enables a more detailed examination of the impact of the geographical and product structure on market share development (Charts 3 and 4).

Chart 3.

Importance of geographical structure of exports for market share development has declined

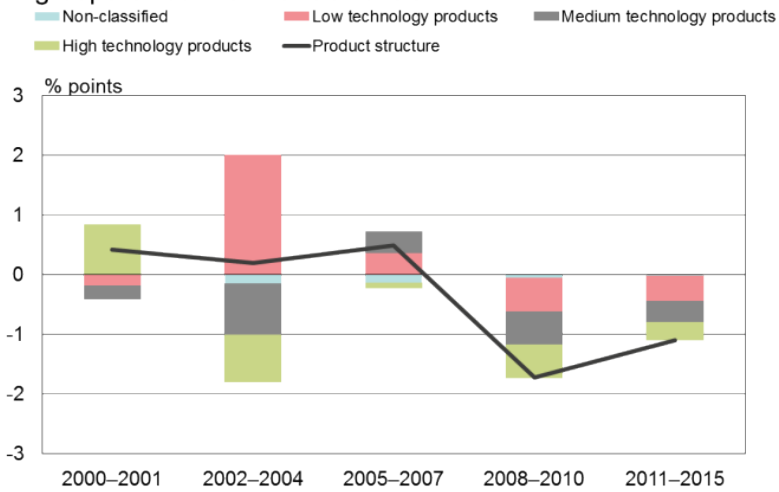


Sources: Comtrade and calculations by the Bank of Finland.

13 Jun 2017
bofbulletin.fi
34214@Chart3(en)

Chart 4.

Finnish exports performed sluggishly across all product groups since the financial crisis



Sources: Comtrade and calculations by the Bank of Finland.

13 Jun 2017
bofbulletin.fi
34214@Chart4(en)

In the early post-millennium years and until the onset of the financial crisis, the expansion of European markets still made an annual contribution of roughly 3.5 percentage points to growth in the market share of Finnish exports. However, the market share analysis may exaggerate the geographical structure effect of European exports. In the early years post-2000, growth in the trade of European countries was largely derived from the EU integration of European advanced economies and Central European countries and, by extension, an increase in their mutual trade, and Finland's exporters did not benefit directly from this.

In 2005–2007, Finland’s export markets in the BRIC countries (Brazil, Russia, India and China) were also growing faster than world trade. This is likely to be related mainly to exports to the rapidly expanding Russian market. By contrast, as shown by the results of the CMS analysis, the brisk growth witnessed in the Asian countries was barely reflected as an improvement in Finland’s export markets, as Asian countries account for a relatively minor share of Finnish exports. In fact, the expansion in Asian trade was driven largely by trade between Asian countries themselves.

In the post-crisis years of 2008–2010, Finnish export growth fell behind growth in world trade across nearly all markets. Since the financial crisis, the geographical structure of exports has been of minor significance for market share development, with the effect being at its highest around one percentage point in 2011–2015.

Capital goods have traditionally accounted for a relatively large share of Finnish exports, and demand for these goods is cyclically sensitive. The financial crisis caused a plunge in the investment rates of the advanced economies, and a gradual rebound in investment has got underway only recently. The capital goods exported by Finland are typically medium or high tech products. A breakdown of all export goods into low, medium and high tech products enables a closer evaluation of the significance for market share development of the concentration of Finnish exports on capital goods.^[3]

As well as capital goods, high tech products include mobile phones, exports of which still rose sharply in the early post-millennium years. However, growth in the market shares of Finnish exports was buoyed by rising demand for high technology products exported by Finland only during a short period at the turn of the millennium (Chart 4). Thereafter, the impact of high tech products on market share turned negative. This coincided with a steady decline in the share of high tech products in Finnish exports.

The favourable performance of trade in low tech products strongly underpinned growth in the market share of Finnish exports in 2002–2004, with demand especially for forest industry products – paper, pulp, plywood and sawn timber – picking up considerably towards the end of the period.

Most apparently, demand for capital goods supported growth in the market share of Finnish exports on the eve of the financial crisis in 2005–2007, when the structure effect of medium technology products was also positive. At that time, the global economy was enjoying an investment boom.

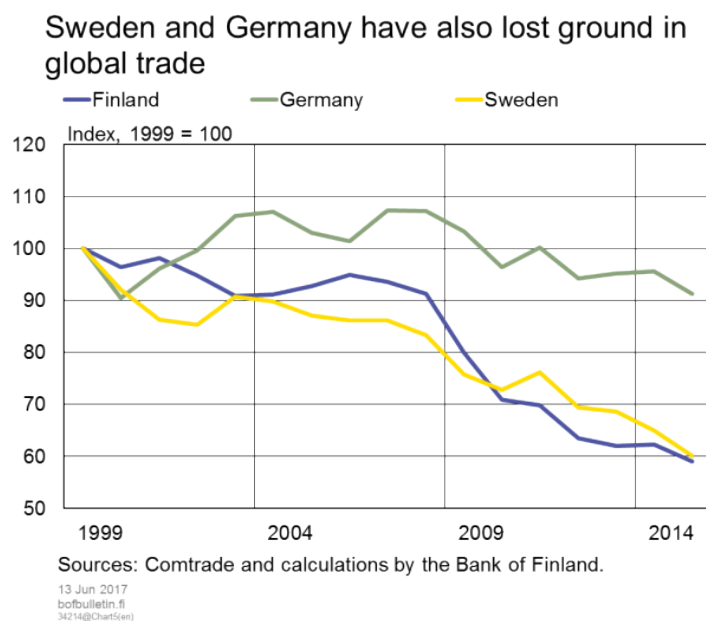
In the present decade, Finland’s export markets have performed weakly across all three product groups (Chart 4), which has resulted in a corresponding loss of market share. Growth in global demand has been fastest for high tech products, but Finnish exports have failed to benefit from this owing to a downturn in the electrical engineering and electronics industry. Simultaneously, global demand for medium technology products has contracted in response to the protracted investment slump.

3. The product groups differ in respect of the R&D intensity of production.

Swedish and German goods exports have also lagged behind world trade growth

As in Finland, Sweden, too, has suffered a trend decline in market share for its goods exports since the turn of the millennium (Chart 5). However, the timing of market share loss diverged across the two countries. In Sweden, market share declined at a steady pace throughout the reference period 2000–2015, with the contraction being notably faster than in Finland until the onset of the financial crisis. Finland, by contrast, experienced a turning point only with the financial crisis and the consequent recession, after which Finland’s market share began to decline markedly. Over the years 2011–2015, the rate of decline was broadly similar for the two countries.

Chart 5.



In Sweden, exports were supported by the export structure in respect of both product and geographical structure until the financial crisis and economic recession. However, in recent years the structure effect on export share has been negative in Sweden, too.

Until the financial crisis, German goods exports were much more successful in keeping pace with world trade growth than Finnish and Swedish goods exports, even managing to gain market share. With the onset of the financial crisis, however, German goods exports’ share of world trade began to dwindle, albeit the decline has not been as steep as in Finland or Sweden. Furthermore, the export structure of Germany has no longer been beneficial to market share development in the post-crisis years, especially as regards the geographical structure of its goods exports.

Geographical and product structure of Finnish exports has been unfavourable

In the post-crisis years, Finnish export growth has persistently lagged behind world trade growth. The declining market share can, in part, be explained by the unfavourable

structure of Finnish exports, given that they are largely bound for European countries, which were especially hard hit by the financial and sovereign debt crises. In addition, Finnish exports are tilted towards capital goods, which suffered a clear dip in global demand in response to the financial crisis.

For the most part, the loss of market share is due to a negative competitiveness effect and, hence, cannot be explained by the structural factor of the CMS analysis. This may partly reflect declining competitiveness relative to major competitor countries, but is principally due to difficulties faced in defending market share against competition from emerging economies.

Finnish exports were able to benefit from brisk growth in demand for high tech products only temporarily, from the late 1990s to the turn of the millennium. Since then, Finnish exports have increasingly shifted away from high technology products towards medium and low technology products, notably capital goods and intermediate goods, whose demand depends on investment. The loss of market share is partly attributable to the global investment slump that followed in the aftermath of the financial crisis. Moreover, the geographical structure of Finnish exports has been unfavourable due to the concentration on European countries, which have, as a rule, posted sluggish growth in recent years.

In the immediate years ahead, the export market situation is expected to develop more favourably from a Finnish perspective. Economic growth has got underway in Europe now, too, while global investment demand is set to recover. While the market share of Finnish exports will not return to growth over the forecast period 2017–2019, at least the contraction in market share will ease off {See article [Bank of Finland forecast: Finland grows, and gathers debt](#) (foreign trade)}.

SOURCES

Amador, J. and Cabral, S. (2008): 'The Portuguese Export Performance in Perspective: A Constant Market Share Analysis'. Economic Bulletin, Banco do Portugal, Autumn 2008.

Kajanoja, L (2017): 'Measuring cost-competitiveness in Finland', Bank of Finland Bulletin 3/2017: Economic outlook, 16 March 2017: <http://www.eurojatalous.fi/fi/2017/artikkelit/kustannuskilpailukyvyyn-mittaaminen-suomessa/>.

Tags

- [international trade](#)
- [market share](#)
- [structure of exports](#)

Authors



Petri Mäki-Fränki
Senior Economist
firstname.lastname(at)bof.fi