Analysis

Finland struggling to defend its market share in goods exports

Finnish economy | 05 July 2024 | Petri Mäki-Fränti

AUTHOR



Petri Mäki-Fränti
Senior Economist

Growth in Finland's goods exports has lagged behind world trade growth for a long time. The loss of market share in export markets is explained mainly by competition factors. These include cost competitiveness and the extent to which Finnish companies have been able to export products that stand out from the competition in competitive export markets. Maintaining market shares has been hampered by the focus of Finnish goods exports on the kinds of market areas and products where demand growth has remained relatively modest, especially in the years since the global financial crisis.



Finland's export growth has fallen behind the growth in world trade

In the 2000s, the trend in Finland's goods exports has fallen behind the growth in world trade (Chart 1). Excluding the short periods 2005–2007 and 2016–2018, the Finnish export industry has constantly been losing market share, which means that its share of all the world's exports has decreased. The loss of market shares has been rapid, especially in the period between the global financial crisis and 2011. A similar trend in the share of exports has also been seen in Sweden and Germany, key competitor countries for Finland. In addition to domestic factors, this development can therefore also be explained by changes in the structure of international trade. Advanced economies' market shares in many export markets have been eroded by strong growth in the goods exports of emerging Asian economies, such as China (Chart 2), in particular. Much of this trade consists of imports and exports between these countries, which is not something that advanced economies can benefit from.

Chart 1.

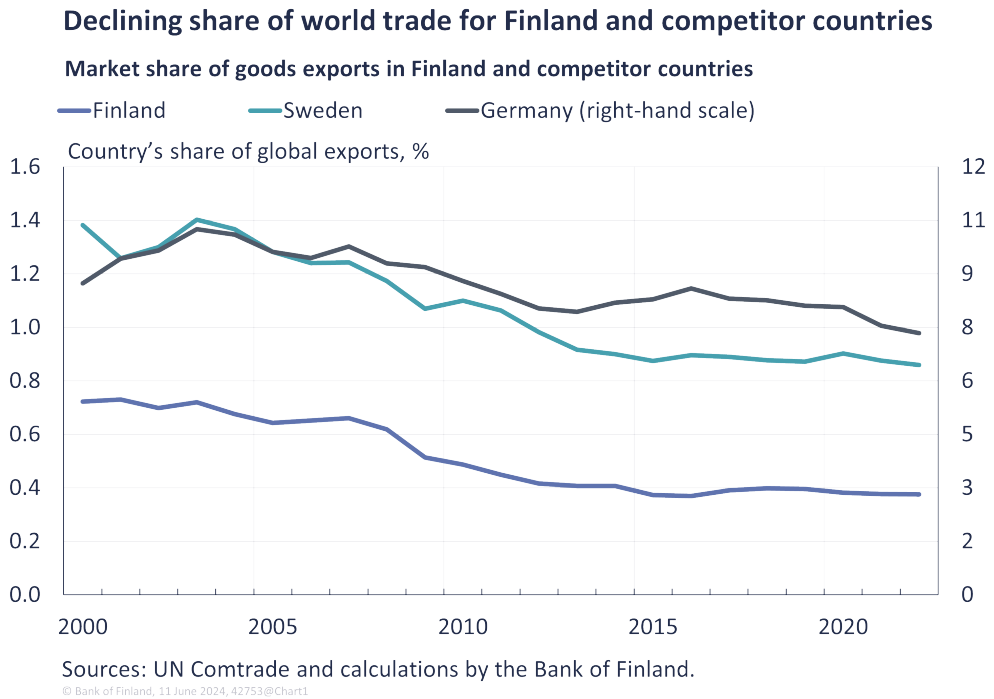
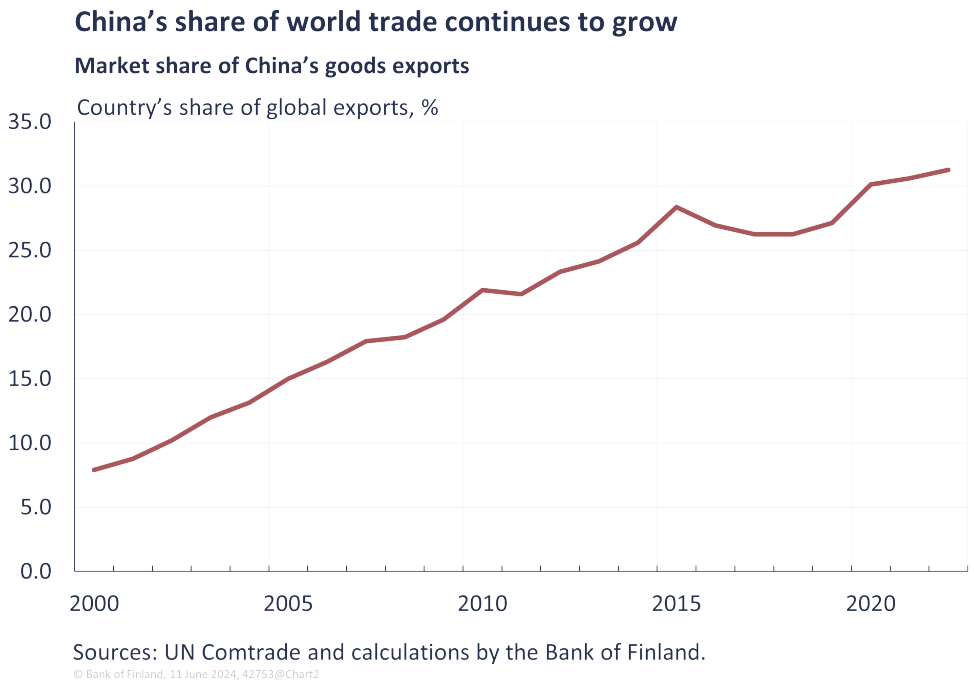


Chart 2.



Gains and losses in the market shares of exports are typically attributed to changes in the competitiveness of the export sectors. In addition to competitiveness factors, changes in export market shares depend on the composition of the country’s exports in relation to the overall structure of world trade. For example, even if Finnish exporters’ share of individual products imported by different countries were to remain constant, the proportion of Finland’s exports in overall world exports would diminish if the share of world trade accounted for by these products or by Finland’s export markets were to contract.

Constant market share analysis breaks down the change in market share into its components

Changes in export market shares can be broken down into their components with the help of constant market share (CMS) analysis. CMS analysis reveals the extent to which changes in market share are caused by changes in the structure of world trade and by competitiveness factors. Structural effects can be further divided into changes in the geographical distribution of world trade and changes in the product structure of world trade. The structural effect is positive in the years in which Finland’s goods exports are, on average, focused on goods or markets in which trade has grown faster than world trade as a whole. Likewise, if goods exports have focused on markets that are growing more slowly than world trade, the structural effect is negative.

The competitiveness factor represents that part of the change in relative market share which is caused by a shift in the market shares of individual export products in a particular market area. Here, competitiveness should be understood in the broad sense. In addition to cost and price competitiveness, it includes the non-cost competitiveness of exports. Non-cost competitiveness can be defined as the ability of companies to produce for export high added value goods that are in demand on global markets. Besides price, the demand for a product depends on the superiority of its characteristics and quality in relation to competitors' products.[1]

Several different versions of the CMS analysis have been presented.[2] The analysis below is based on the decomposition developed by Fagerberg and Sollie (1987), in which a change in export share is composed not only of the structural and competitiveness factors, but also the adaptation effects of the geographical and product structure of exports.[3] Adaptation effects indicate how a change in the share of exports can be attributed to changes under way in the export structure. The adaptation effect of the product structure or the geographical structure will be positive in those years in which the product or geographical structure of the exports of the country in question has developed in parallel with changes in the structure of global trade.[4] The CMS analysis has been carried out with data that includes the value of Finland's goods exports for 70 product groups to 80 of Finland's most important export destinations in 2000–2022. The export destinations accounted for around 99% of Finland's goods exports in 2022.

Competitiveness effect has been predominantly negative

Finland's share of exports has declined by around 0.45 percentage points since the turn of the millennium. Based on the CMS breakdown, around 0.4 percentage points of the decline is attributable to the cumulative contribution of competitive factors (Chart 3). The competitiveness effect has remained predominantly negative and was at its greatest from the turn of the millennium until 2012 (Charts 3 and 4). Only in 2016–2020 was the competitiveness effect slightly positive. It became negative again at the beginning of the 2020s.

The cumulative contribution of the structural and adaptation effects to the decline in Finland's share of exports was only around 0.05 percentage points in 2000–2022. However, in the short term, structural factors have at times been of greater significance to the share of exports than the cumulative examination might suggest, as positive and negative structural effects have offset each other over the review period.

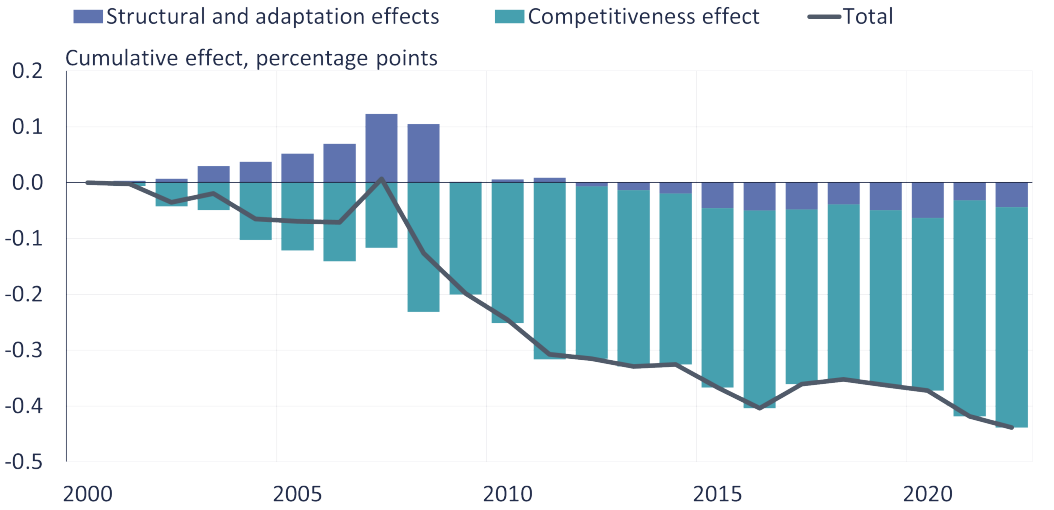
In Chart 4, the change in market share and its components are examined over four-year periods. Between 2000 and 2008, the structure of world trade growth underpinned the development of Finland's export market share, but with the global financial crisis, the structural effect became

negative. Until the start of the 2020s, the growth in world trade focused especially on products and market areas which were of relatively little importance in Finland's goods exports.

Chart 3.

Competitiveness factors important in market share contraction

Components in market share of goods exports

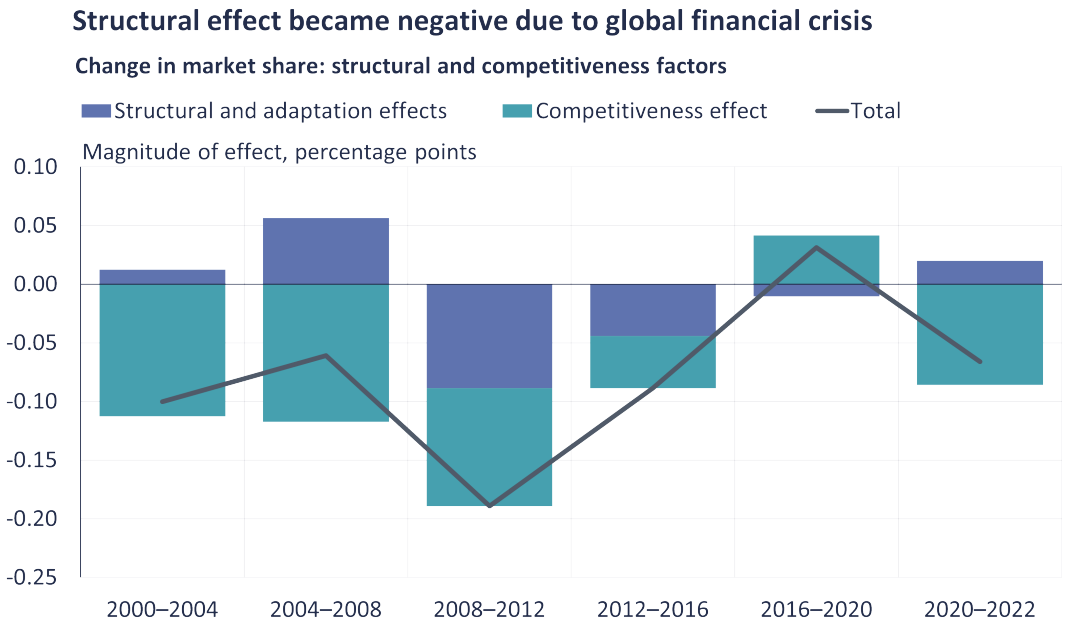


The bars illustrate cumulative changes in the market share of Finland's exports and its components. The structural and adaptation effects depict the cumulative effects on exports after 2000. Similarly, the competitiveness effect shows the cumulative competitiveness effects.

Sources: UN Comtrade and calculations by the Bank of Finland.

© Bank of Finland, 11 June 2024, 42753@Chart3

Chart 4.



The bars illustrate changes that have taken place in the market share of Finland's exports and its components between the first and the last year of each period.

Sources: UN Comtrade and calculations by the Bank of Finland.

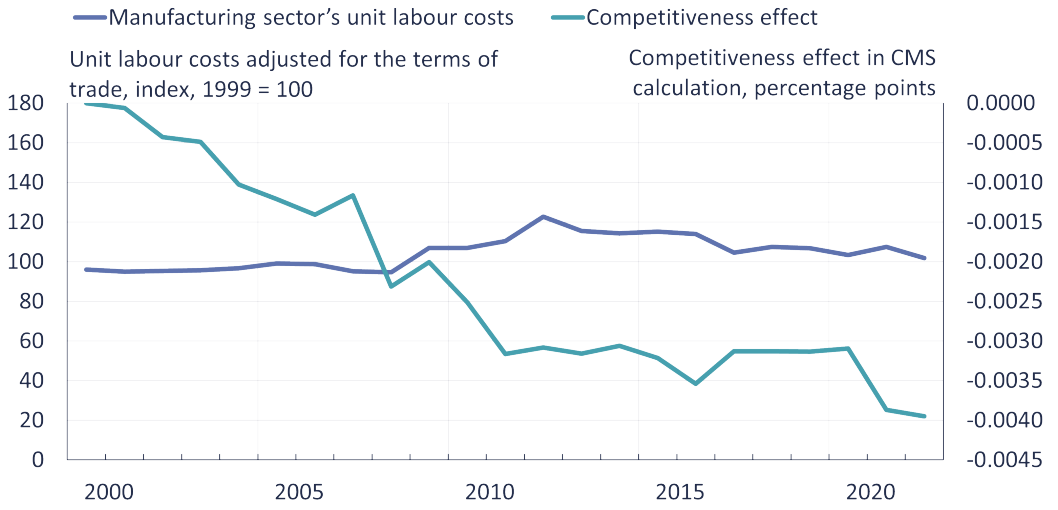
© Bank of Finland, 11 June 2024, 42753@Chart4

Cost competitiveness is just one component in the competitiveness effect according to CMS analysis. However, there seems to have been a clear connection between the measures of competitiveness at least in the years immediately following the global financial crisis (Chart 5). For example, according to Obstbaum et al. (2022), Finland's cost competitiveness in manufacturing, measured using relative unit labour costs adjusted for the terms of trade, weakened significantly from 2008 until 2012, after which it started to strengthen. After 2017, cost competitiveness remained fairly stable until the end of the review period.[5] However, competitiveness based on the CMS analysis has steadily weakened since 2000, although it eased in the early 2010s when the cost competitiveness of manufacturing started to improve.

Chart 5.

Competitiveness reflected the path of cost competitiveness especially during the years after the global financial crisis

Competitiveness factor and unit labour costs



The unit labour cost in the chart refers to Finland's unit labour costs in manufacturing adjusted for the terms of trade compared with main trade partners. An increase in the unit labour costs means a weakening of competitiveness.

Sources: UN Comtrade, Statistics Finland and calculations by the Bank of Finland.

© Bank of Finland, 11 June 2024, 42753@Chart5

In addition to cost competitiveness, the competitiveness effect in the CMS analysis includes various non-cost competitiveness factors, such as the ability of Finnish companies to export products that stand out from the competition in monopolistic markets. A further likely factor explaining the weakening market shares especially in the early 2000s is the substantial increase in the emerging economies' share of world trade. During these years, advanced economies had difficulty maintaining their market shares especially in many of the traditional industrial sectors, regardless of changes in the competitiveness of countries relative to each other.

Export structure has not supported growth in Finland's goods exports

The structural effects can be divided into their components (Chart 6). The product effect indicates the contribution of the goods exports' product structure, and the country effect the contribution of the geographical structure, to any change in the share of exports. Correspondingly, adaptation effects can be divided into the adaptation effects of changes in the country structure and in the product structure of exports.

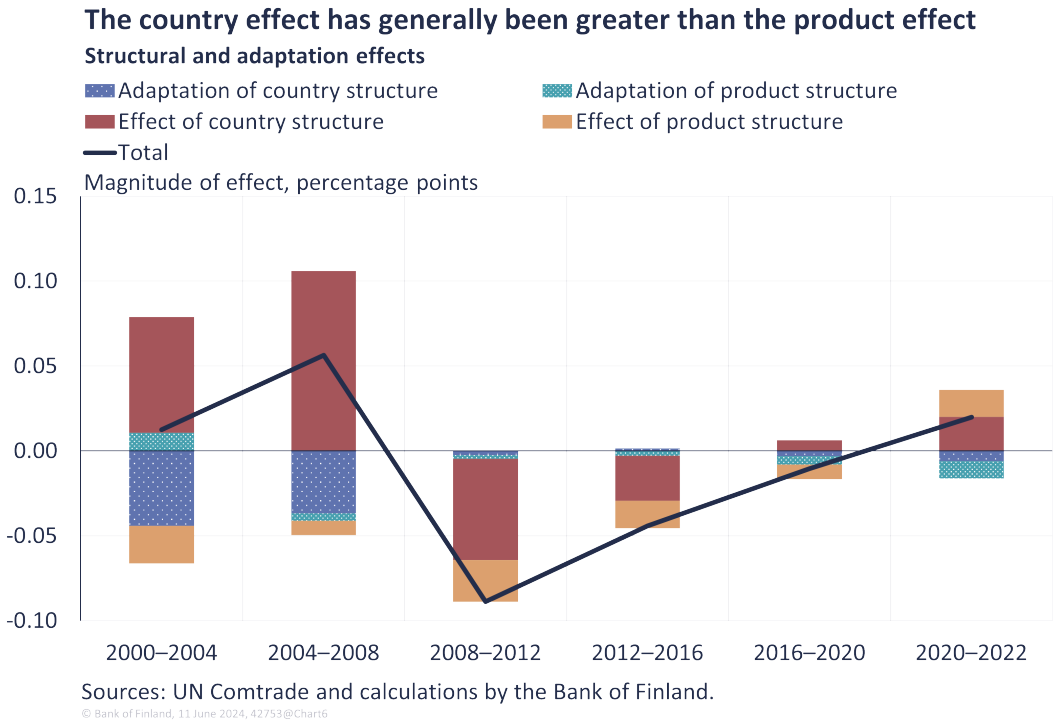
In the 2000s, the country effect has played a significantly greater role than the product effect in explaining the shrinking market share of Finland's goods exports. In the early 2000s, the country

effect was positive, as Finnish goods exports went to market areas in which foreign trade was growing more rapidly than world trade on average.

However, the geographical structure of Finnish exports was already changing in a different direction than the structure of world trade. This is discernible as a negative geographical adaptation effect. The country effect turned negative after the global financial crisis, and so Finland's exports subsequently, and up to the start of the 2020s, focused on market areas which, as a whole, were growing more slowly than the growth in world trade.

Finland's exports have centred on products whose significance in world trade has been on the decline this century. The impact of the product structure on the market share of Finland's exports was mostly negative up to 2020, when it turned positive. The adaptation effect of the product structure has also been mainly negative. In other words the product structure of Finland's exports has changed in a different direction than the product structure of world trade.

Chart 6.



Importance of Europe highlighted in Finland's export markets

In the early 2000s, growth in the market share of Finland's goods exports was buoyed by the rapid increase in the share of Europe and Russia in world trade. (In Chart 7, the country effect of the CMS analysis is further broken down into the geographical market areas of Finland's exports.)

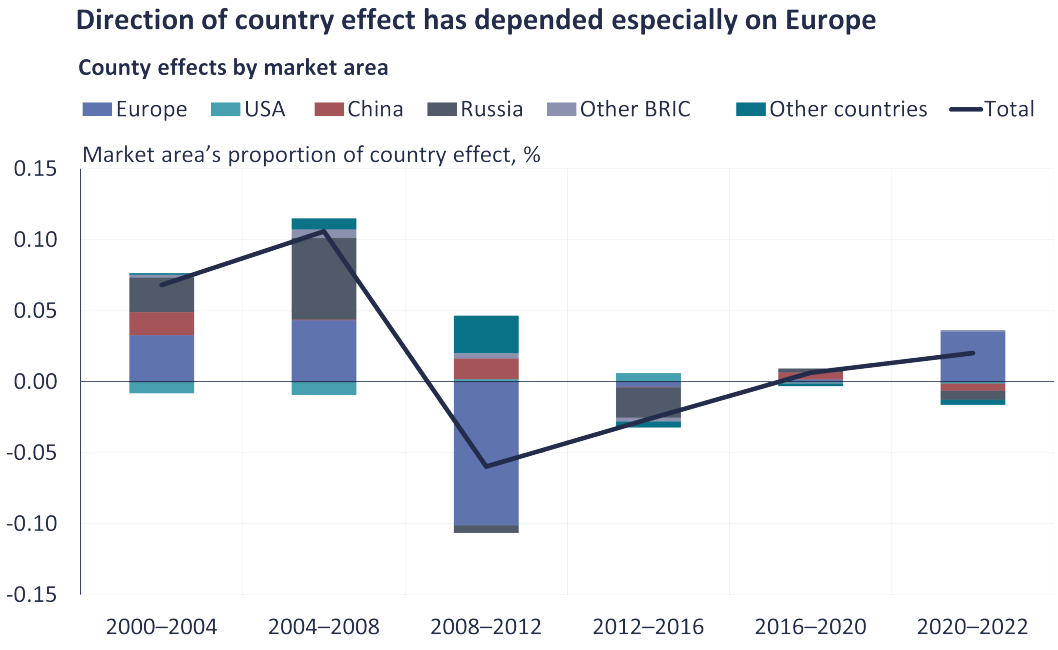
However, in the case of Europe, the CMS analysis could be exaggerating the true significance of the country effect on the development of market share: in the early years of the millennium, European emerging economies were still integrating with the rest of Europe. The growth in their foreign trade consisted largely of an increase in mutual trade between the countries, from which Finland's exports did not benefit.

In the years 2008–2012 following the global financial crisis, Finland's European export markets became less significant in world trade. The development of trade with Russia did not support a growth in market shares any more, either. In the 2010s, the significance of the country effect on the contraction of the market share of Finland's exports remained low overall. By contrast, in the early 2020s a positive trend in Europe has supported Finland's market share. The proportion of Asian emerging economies in world trade has grown constantly, and the value chains between the countries have strengthened. This has been partly at the expense of advanced economies' market shares. However, the increased role of China in global trade temporarily supported the market share of Finland's goods exports in the early 2000s and after the financial crisis.

Due to the war in Ukraine, which started in 2022, many countries imposed restrictions on foreign trade with Russia. Although Russia has been able to compensate for the impacts of sanctions by increasing trade with other countries, the significance of Russia in global trade has diminished, which is reflected as a slight negative country effect in the years 2020–2022.

Chart 7.

Direction of country effect has depended especially on Europe



Sources: UN Comtrade and calculations by the Bank of Finland.

© Bank of Finland, 11 June 2024, 42753@Chart7

Change in product structure of world trade has not favoured Finland

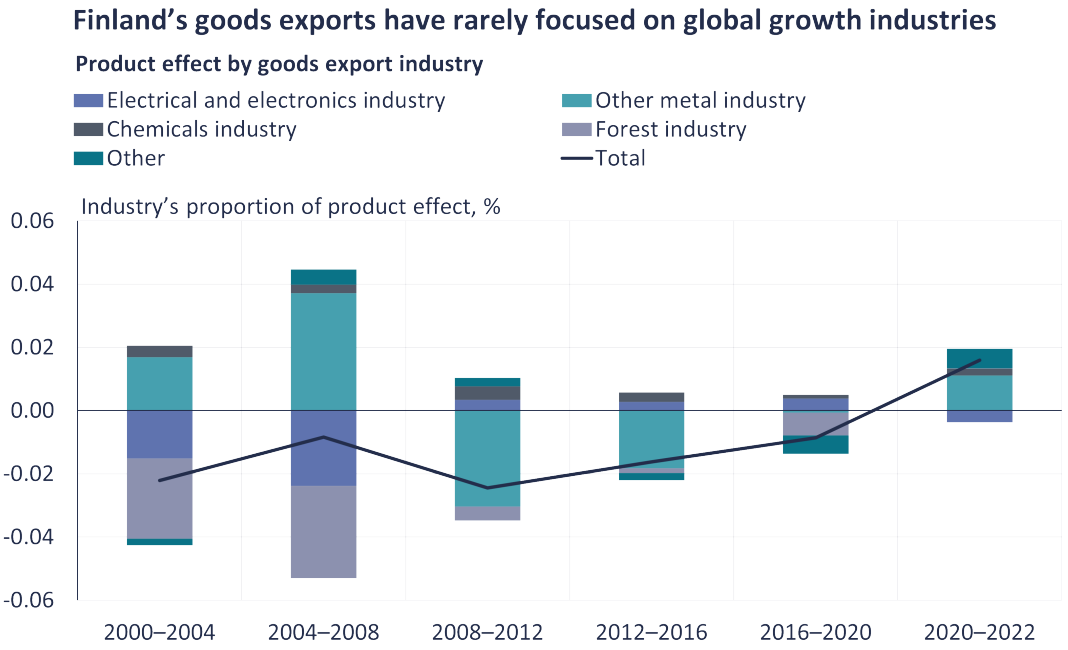
Changes in the significance of Finland's export industries to world trade have occurred at a differing pace. (In Chart 8, the product effect is shown for each of Finland's main export industries.) Since 2000, trade in forest industry goods has continuously grown more slowly than the average growth in world trade, which has meant that the product effect of the forest industry has been negative. The effect was at its strongest before the global financial crisis. The importance of forest industry products in global trade has declined due to, for example, the drop in demand for paper products as a result of progress in the digitalisation of the economy.[6]

The global trade in products of Finland's metal industry (excluding the electrical and electronics industry) grew at an above-average rate in 2000–2008, causing the product effect to be positive in these sectors. However, the global financial crisis caused the effect to become negative. This can probably be explained by the fact that the demand for industrial machinery and equipment and base metals in the world economy suffered from a downturn in investment following the financial crisis, and these products make up a substantial portion of the Finnish metal industry's exports. The product effect of the other parts of the metal industry ('other metal industry') remained negative almost all the way to 2020.

The significance of the electrical and electronics industry in global trade weakened in 2000–2008. Although Nokia was still in a leading position as a producer of mobile phones, the negative product effect of the industry slowed the growth of Finland's export market share. A factor that likely contributed to the weak product effect of the electrical and electronic industry was the strong decrease in the prices of finished products in the industry, as the CMS calculation is based on the value of exports and does not distinguish between changes in prices and quantities.

The only time since 2000 that the product structure of Finland's goods exports has supported growth in market shares was during the pandemic years 2020–2022. In particular, exports of the electrical and electronics industry and other metal industry have focused on products in which the growth in exports has been faster than the average world trade growth.

Chart 8.



Sources: UN Comtrade and calculations by the Bank of Finland.

© Bank of Finland, 11 June 2024, 42753@Chart8

Maintaining market share has become more difficult in a changing market

The Finnish export industry's market share in global goods exports has been continuously eroded. Although Finland's market share was still rising in the first decade of the millennium, supported by the focus of goods exports on markets with a rising significance in world trade, the global financial crisis changed this. Throughout the 2010s, world trade growth focused on products and especially market areas that had a lesser significance in Finland's goods exports. Europe, which had lacklustre growth for a long time after the financial crisis, has traditionally been an important market area for Finnish exports. The country and product composition of Finnish exports has not, this century, shown signs of adapting to changes in the structure of world trade.

Despite the structure of exports being significant, competitiveness constitutes an even more important explanatory factor in the contraction of Finland's market share. According to the CMS analysis, Finland's competitiveness weakened sharply during the first decade of the 2000s. The cost competitiveness of Finland's export industry also weakened, especially in the years that immediately followed the global financial crisis. However, price and cost factors alone are not enough to explain the falling trend observed in the competitiveness of Finnish manufacturing. The ability of companies to maintain their market shares also depends on non-cost competitiveness

factors, which are affected by, for example, the extent to which Finnish companies have been able to export products that stand out from the competition. Defending market shares has become more difficult as emerging economies have become more important in world trade. Any escalation in the current trade wars and other geopolitical tensions could bring further challenges in the future.

References

Fagerberg, J. and Sollie, G. (1987) 'The method of constant market shares analysis reconsidered', *Applied Economics* 19 (12): 1571–83.

Leamer, E. E. and Stern, R. M. (1970) *Quantitative International Economics*, Allen & Bacon, Boston.

Mäki-Fränti, P. (2017) 'Finland struggling to defend its market share on rapidly expanding markets', *Bank of Finland Bulletin*, 13 June 2017.

Nyssens, A. and Poullet, G. (1990) Parts de marché des producteurs del'UEBL sur les marchés extérieurs et intérieur, *Cahier 7*, Banque Nationale de Belgique.

Obstbaum, M., Pönkä, H. and Nippala, V. (2022) 'Cost competitiveness is key in replacing lost trade with Russia', *Bank of Finland Bulletin*, 21 June 2022.

Notes

1. In addition to non-cost and cost competitiveness, any capacity constraints will also be a factor in competitiveness. Export growth might fall behind the growth in export markets because companies are not able to produce enough to meet demand. ↑
2. The first CMS analysis version was presented by Leamer and Stern (1970). In Mäki-Fränti's (2017) previous CMS analysis, a version of the method that was originally presented by Nyssens and Poullet (1990) was applied to Finland's exports. ↑
3. The advantage of the Fagerberg and Sollie (1987) method compared with the Nyssens and Poullet (1990) method applied by Mäki-Fränti (2017) is that the breakdown of Fagerberg and Sollie directly examines the market shares of exports. In the Nyssens and Poullet version, the focus was on the difference between the export growth of the country in question and the growth in the rest of the world's exports. ↑
4. CMS analysis has previously been used to examine the market shares of Finland's exports in e.g. Mäki-Fränti (2017). ↑
5. Cost competitiveness was aided by e.g. the Competitiveness Pact introduced in 2017. ↑
6. However, the reduction in demand for printing papers has been counterbalanced by an ↑

increase in the demand for packaging board due to the growth in e-commerce.

Keywords

competitiveness, international trade, market share, structure of exports