Analysis

IT services are a key part of Finland’s service exports

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Service exports as a proportion of Finland’s total exports have grown substantially in recent years. However, service exports are dominated by a fairly small number of markets and product groups. Although the United States has become the most important destination country for Finnish service exports, a majority of these exports are still destined for Europe. Finland's traditional trading partners Sweden and Germany continue to be very significant export markets. Finland’s service exports are strongly focused on IT services.



Finnish exports are growing despite successive crises

Finland's export markets have been tested in recent years by successive crises. COVID-19 caused extensive supply-side disruptions throughout the global economy, while the war in Ukraine led to an energy crisis and a rapid rise in prices and interest rates, and to a cessation of trade with Russia. The fact that Finland's goods exports focus heavily on investment goods has made the situation more challenging, as the impact of uncertainties and crises is often first seen as a decline in global investment demand.

Despite the crises, Finland's exports have grown quite steadily in recent years. The value of Finland's exported goods and services in relation to gross domestic product (GDP) has remained at just over 40%, and in 2023 it was nearly EUR 114 billion.[1] Over the longer term, both imports and exports of goods and services have traditionally grown at almost the same rate, on average. However, differences in import and export growth on an annual basis can be substantial.

The geographical coverage of Finland's export markets is fairly concentrated, with the 10 most important export destinations accounting for nearly two thirds of Finland's exports. Almost two thirds of Finland's total exports are to Europe, and the euro area alone accounts for over a third of Finnish exports. Among countries outside Europe, the most important export market is without question the United States, which takes just over 13% of Finland's exports. The rest of the Americas accounts for a relatively small share, at just a few per cent. China's share of Finland's exports is slightly under 5%. However, the Asian countries combined account for nearly 15%.

Importance of service exports has grown rapidly

According to Finland's balance of payments statistics, goods comprised around 70%, and services 30%, of the value of the country's exports in 2023. The value of service exports was about EUR 33 billion. The significance of services in Finland's exports has grown rapidly, as they still accounted for under 25%, or around EUR 19 billion, of the total in 2013. In each of Finland's three main export destination countries, Germany, Sweden and the United States, the relative share of services and of goods among Finnish exports is roughly the same (Chart 1).

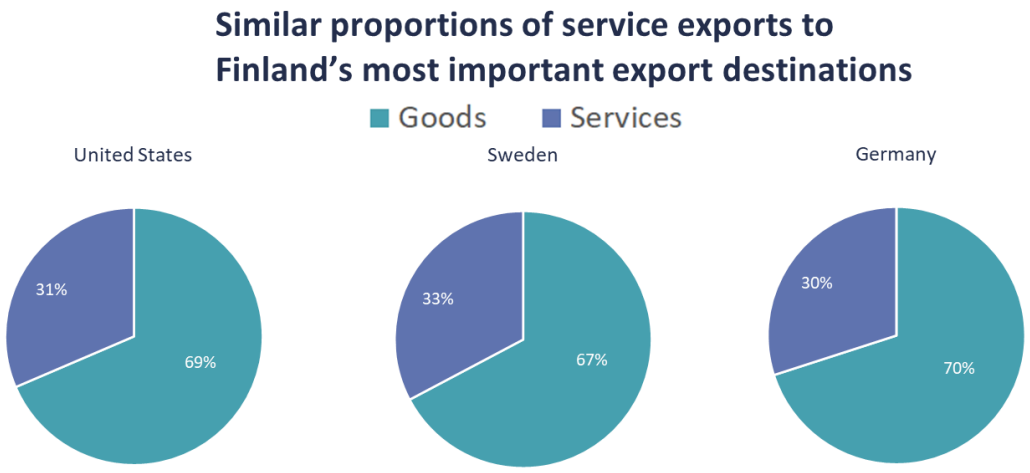
Finland's service imports have grown in value even more quickly than its service exports over the past 10 years. While the value of service imports was nearly EUR 24 billion in 2013, in 2023 it had grown to nearly EUR 42 billion, representing growth of around 77%. The services account in Finland's foreign trade consequently showed a deficit of around EUR 9 billion in 2023.

Finland's service exports consist mainly of services requiring advanced technological expertise, and similar services are also imported to Finland. By far the largest service import item is other

business services. This accounted for nearly 40% of all service imports in 2023. IT services and transport services are also imported extensively.

Finns spend more money on trips abroad than foreign travellers bring to Finland. The value of tourism imports amounted to EUR 5.4 billion in 2023, but the value of Finland's exports of tourism services was markedly lower, at EUR 3.8 billion.

Chart 1.

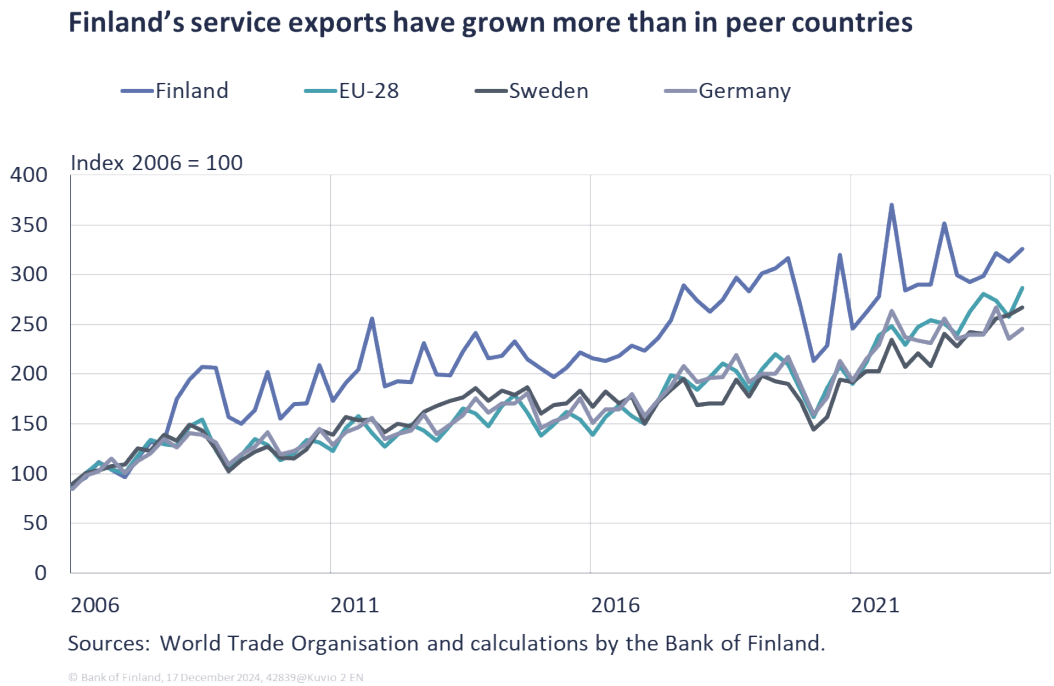


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Global trade in services growing more quickly than goods exports

The increasing role of the service sector in Finland's exports is by no means exceptional by international comparison. In recent years, the global trade in services has grown more quickly than the global goods trade.[2] According to World Trade Organisation (WTO) statistics on trade in services, Finland's service exports have grown slightly faster than those of EU Member States on average. The difference was particularly marked in 2015–2019. During these years, Finland's service exports also grew more quickly than those of its important trading partners Sweden and Germany. Although the COVID-19 pandemic resulted in a substantial dip in Finland's service exports and those of EU Member States, growth in service exports has now recovered. Between 2020 and 2024, Finland's service exports grew at approximately the same rate as those of peer countries (Chart 2).

Chart 2.



What are service exports?

Compiling statistics on service exports is more difficult than goods exports because the intangible nature of services means foreign trade in services cannot be defined as unequivocally as for goods. In the balance of payments statistics, service exports are defined as the provision of services to a customer across borders, including tourism services. The definition of service exports in the WTO’s General Agreement on Trade in Services (GATS) is broader than that used in the balance of payment statistics because GATS includes in service exports all trade in services in which the buyer and seller of a service represent different nationalities. This means that services which a foreign-based unit of a company offers to local customers on site are deemed to be service exports.[3, 4]

The distinction between goods and services is not straightforward, as many goods have a significant service component. Exports of services are more significant for the Finnish economy and for employment especially because the value added is greater than in goods production. In high technology products, in particular, the design, marketing and distribution typically account for a larger share of the value added than assembly. In the case of a tangible end product manufactured in Finland, the value created through product development and other services is nevertheless recorded as goods exports. If the product is manufactured abroad, however, the

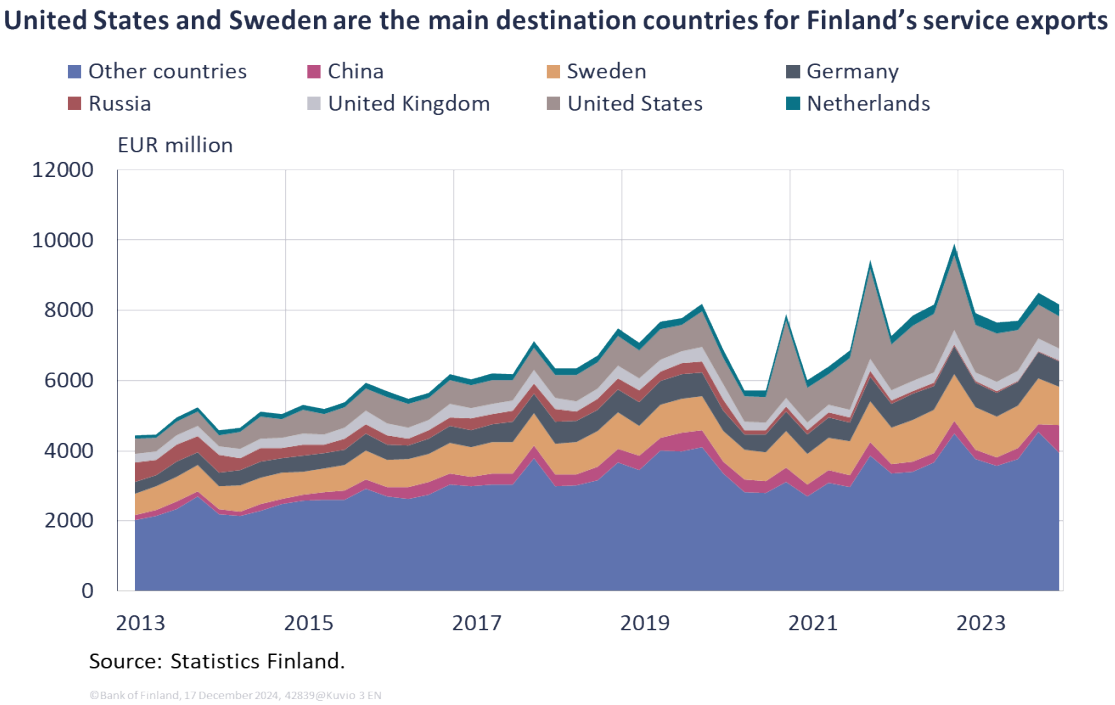
value of the services can be recognised in Finland, in which case this will be recorded as service exports.

Taking indirect service export items into account further adds to the dominance of service exports in both global trade and Finland's exports. According to Cernat's (2024) assessment, as much as two thirds of global trade consists of service exports in the broad sense. Cernat also examines the structure of service exports by country. Using Cernat's statistical collection method, around 40% of Finland's service exports consists of services produced by Finnish companies in the export destination country, and only 40% consists of direct cross-border service exports. The real importance of services to the Finnish economy may therefore be greater than suggested by the balance of payment statistics.[5]

Finland's service exports are geographically concentrated

Finland's service exports are more geographically concentrated than its goods exports. Around 40% of its service exports go to the three key destination countries of the United States, Germany and Sweden (Chart 3). The US is the most important of these markets. Service exports to the US alone account for around 15% of Finland's service exports. The growth in these exports to the US was slightly over 63% in the period 2018–2023. In 2023, the value of service exports to the United States had already risen to approximately EUR 5 billion.

Chart 3.

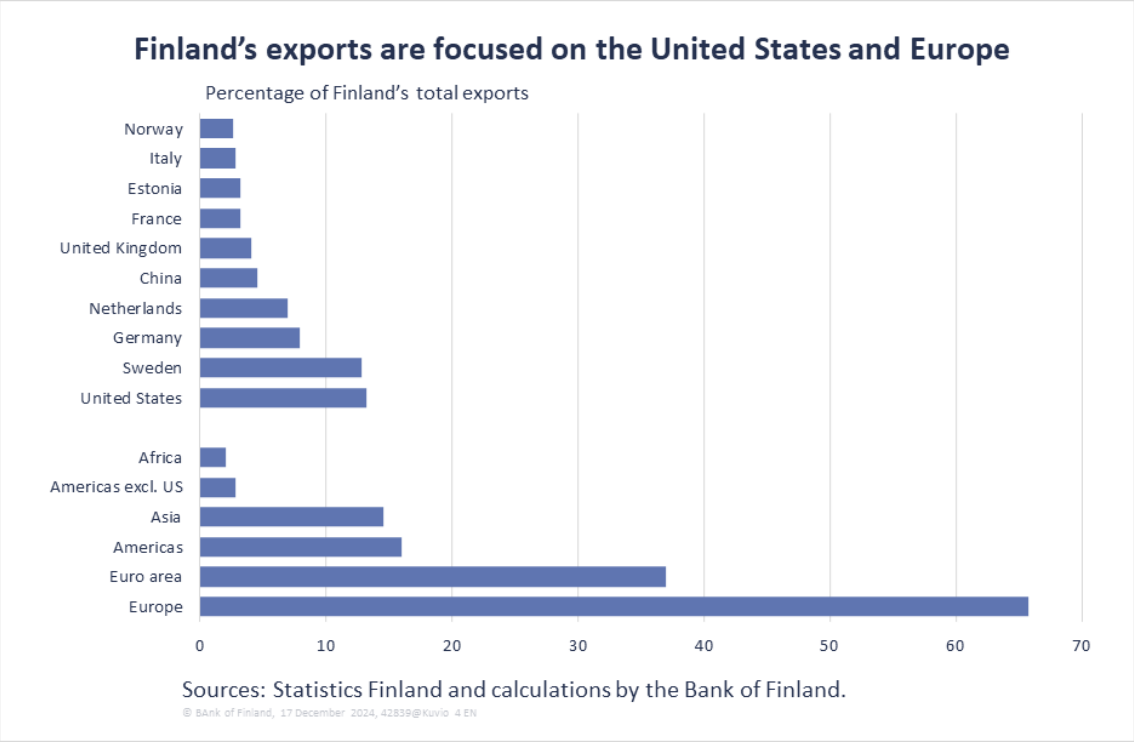


Other significant markets for Finland's service exports include China and the United Kingdom, but the exports to these countries are clearly lower than to the three main markets.

Finland's service exports to the rest of the Americas (excluding the United States) are not significant (Chart 4). The Asian market for Finland's service exports is almost the same size as the Americas market (including the US).

Finland's goods exports have been more important than its service exports when it comes to the Russian market. In some regions of Finland, however, Russia has been significant for tourism services and for the retail goods trade. In 2013, the value of Finland's service exports to Russia was still around EUR 2 billion. Travel by Russians to Finland already started to decline significantly from 2014, due to the weakening of the rouble and the declining price of crude oil following Russia's annexation of Crimea. This was accelerated by the COVID-19 pandemic and Russia's war in Ukraine, and the related sanctions. By 2023, Finland's service exports to Russia were only about one tenth of what they were a decade earlier.

Chart 4.



Finland exports services that require advanced expertise

The structure of Finland's service exports has changed somewhat during the past 10 years (Chart 5). In particular, services requiring advanced expertise have become more important. The most important product group for Finland's service exports is currently telecommunication, computer and information services, which comprises just under one third of service exports (Chart 6). Other important service export product groups are other business services and charges for the use of intellectual property.

Chart 5.

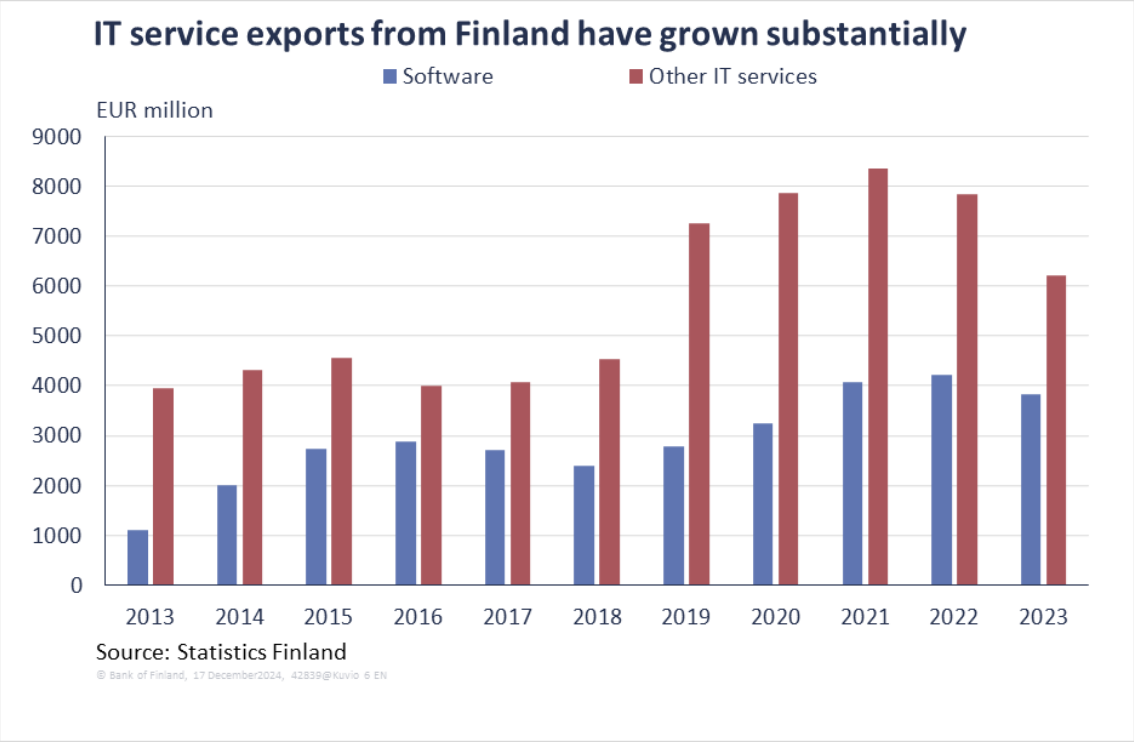


Manufacturing services and transport services have also slightly increased their relative share of Finland's service exports.[6] Tourism services, one of the traditional areas of service exports, has become less important. The reduced share of other services is explained mainly by the reduction in construction services.

Telecommunication, computer and information services comprises quite a large group of different services:

- **Computer services**, or IT services, are services concerned with hardware, software and information systems. They cover a wide range of services from software development and various advisory and consulting services to maintenance and repair of hardware.
- **Information services** refers to the services required to produce various types of information content. These services include direct subscriptions to printed and digital media and transmitting news and images to media outlets.
- **Telecommunication services** includes the services needed for information transmission, but does not include the value of the information content. These services also include mobile phone services and the provision of internet connections.

Chart 6.



Among the sectors listed above, IT services are clearly the most important, as information and telecommunication services have only a very small share. Software accounts for around one third of IT services, and the remaining two thirds consists of other computer services. Among IT services, the value of game industry exports alone exceeded EUR 2 billion in 2020.[7]

The second most important category of service exports is other business services, with a share of just under a quarter. Other business services covers a large group of expert services of various kinds, such as research and development, technical services and consulting.

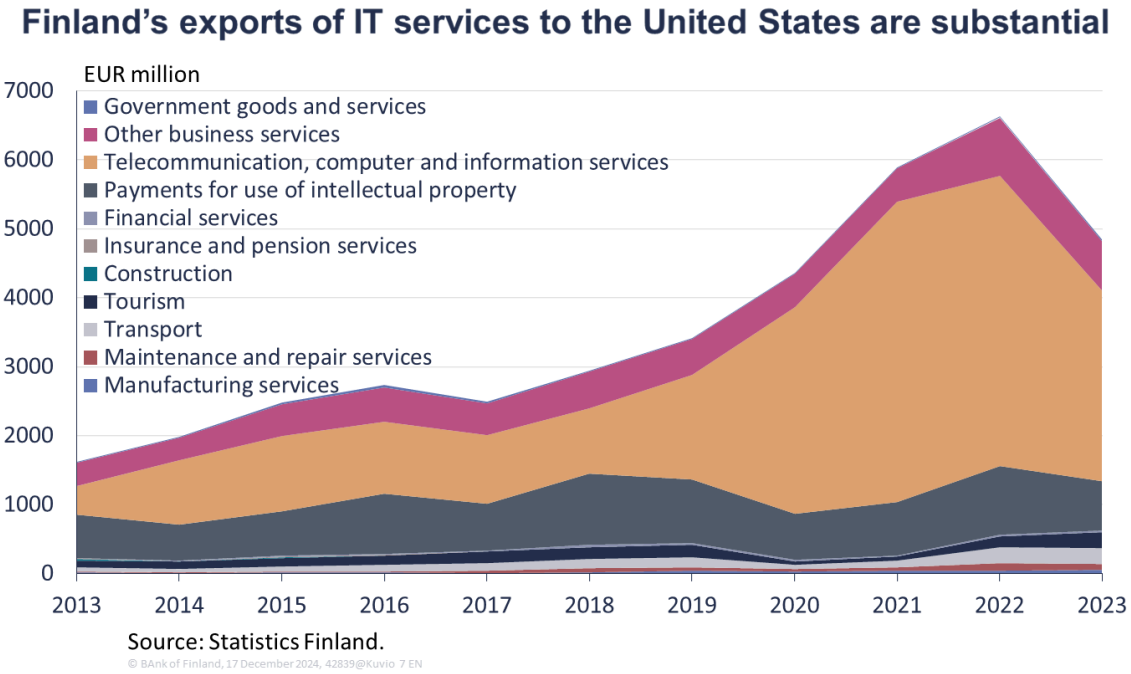
The third most important category of Finland's service exports is charges for the use of intellectual property. Patents, in particular, have generated a fairly steady income stream for Finnish companies in recent years. Nokia alone was paid EUR 1,085 million[8] in licence fees in 2023.

Manufacturing services include maintenance services, which are an integral part of the maintenance and upkeep of a delivered item. The most important exporter of manufacturing services is KONE. The 2023 turnover of its elevator service business totalled approximately EUR 4.1 billion, its modernisation business just under EUR 2 billion, and its sales of new elevators slightly less than EUR 5 billion.[9]

United States an important market for IT services

Finland's most important export market for IT services is the United States (Chart 7), which accounts for around one third of all of Finland's IT service exports. Most of these services have consisted of computer services and software. Exports of IT services to the US have grown rapidly in the last few years. In 2017, the value of exports of these services was only around EUR 1 billion. By 2022, the value had reached almost EUR 4.5 billion. Although exports of IT services to the US declined in 2023, their value was nevertheless still approximately EUR 3 billion. The second most important category of service exports to the United States is charges for the use of intellectual property, i.e. licence fees. Other business services are also a significant category in Finland's service exports to the US.

Chart 7.



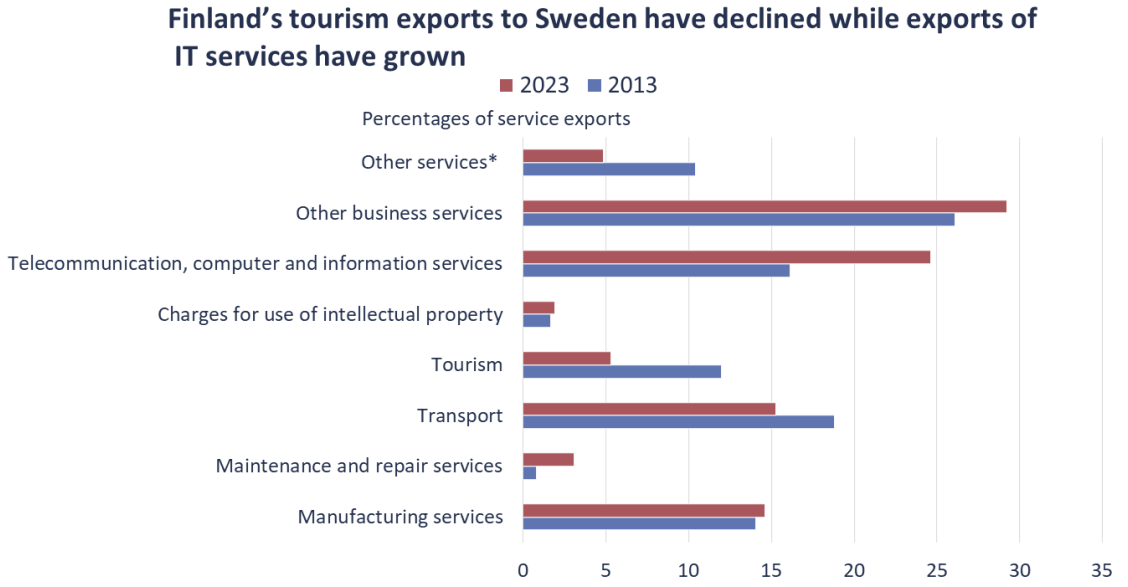
Finland's service exports to Sweden and Germany are more diverse than to the United States

The value of Finland's service exports to Sweden was almost EUR 4.9 billion in 2023, up nearly 80% from 2013. Within these service exports, telecommunication, computer and information services again accounted for a significant portion, nearly 30%, and the share of these services has increased substantially in recent years (Chart 8). However, the structure of service exports

destined for Sweden is more varied than exports to the United States. Other business services form an even larger item than IT services, with a share of more than one third, and the export value of these sectors has also grown over the past 10 years.

In addition, Finland exports a large amount of transport and tourism services to Sweden which, combined, comprise just under one quarter of service exports to Sweden. However, the share of tourism services has declined significantly. Tourism from Sweden to Finland has decreased.

Chart 8.



Germany is Finland's third most important destination country for service exports. All in all, nearly EUR 3 billion worth of services were exported to Germany in 2023. This represented a growth of more than 100% – a doubling in value – since 2013, although in 2023 growth came to a near-complete halt.

Exports of IT services make up a significant portion of service exports to Germany as well (Chart 9). Nevertheless, the structure of service exports to Germany is more diverse than to the United States, because in addition to IT services, Finland exports a large volume of transport services, other business services and manufacturing services to Germany. The last mentioned accounts for nearly one fifth of all service exports to Germany.

The share of computer equipment declined substantially in the 2010s, however. On the other hand, the share of manufacturing services has increased substantially. Tourism services and

transport services have also increased their share to some extent. The share of licence fees is small, however, compared with the United States, for example.

Chart 9.



Service exports are more significant than their value would indicate

Since the withering of the mobile phone industry, Finland's goods exports have become more one-sided, increasingly relying on traditional smokestack industries. However, goods exports only tell part of the story, as exports of Finnish companies' services have grown rapidly in recent years. As much as one third of Finland's export income comes from trade in services.

The increasing role of the service sector is part of a global phenomenon. Following the global financial crisis, growth in the goods trade waned globally, but this has been made up by the growth in services. Finland's service exports are geographically quite concentrated, as a substantial share goes to Europe, especially Sweden and Germany. However, the United States has become the most important destination country for Finland's service exports. Exports of services are also sectorally concentrated. IT services have a particularly large share.

Service exports are of even greater significance to the Finnish economy than is indicated by their relative share of total exports. The domestic value added is typically greater in service exports

than in goods exports, which are increasingly part of an international supply chain, and in which large quantities of imported components and intermediate goods are used. Moreover, Finland's service exports consist predominantly of IT services, patents and other services requiring advanced expertise, with high value added.

However, the growth in service exports is not without its risks. Finland's service exports have grown especially to the United States, which could be risky in the current geopolitical situation. Barriers to trade are not uncommon in international trade in services, and they could become more prevalent in the coming years. The United States has also become an important trading partner for Finland in goods exports, which further increases Finland's dependence on the US economy. US economic performance also affects Finland indirectly, as its trading partners, especially in Europe, have also become more dependent on the United States.

References

Baldwin, R., Freeman, R. and Theodorakopoulos, A. (2024), 'Deconstructing Deglobalization: The Future of Trade is in Intermediate Services', *Asian Economic Policy Review,* 19, pp. 18–37.

Cernat, L. (2024), 'What Mode of Supply Will Matter the Most for the Future of Services Trade?', *ECIPE Policy Brief*, 16/2024.

OECD (2023) ICIO-TIVA Highlights: GVC Indicators for Finland, OECD Inter-Country Input-Output (ICIO) tables, (https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/trade-in-value-added/tiva-2023-FIN.pdf).

Notes

1. From the perspective of aggregate demand, a better indicator of the importance of foreign trade is net exports, i.e. the difference between exports and imports. The share of Finland's GDP accounted for by net exports has fluctuated between -2% and 1.6%. ↑
2. See e.g. Baldwin et al. (2024). ↑
3. In the WTO's trade statistics, trade in services is defined as cross-border direct exports of services. This is conceptually better aligned with traditionally conceived trade flows. A problem with the definition used within the GATS framework is that recording statistics on indirect services, for example, can be difficult. Nevertheless, the GATS definition of service exports has been used as a basis in negotiations on international trade agreements (e.g. the Uruguay Round). ↑
4. In the conventional GATS classification, services are categorised according to how they are delivered from the provider to the customer: 1) Services that are delivered directly from ↑

one country to another from the provider to the customer (e.g. transport services and digital services); 2) Consumption that takes place abroad, i.e. mainly tourism services; 3) Services that companies provide to their customers directly through their units located abroad; 4) Services that companies provide to their customers directly from their country of domicile without a permanent operating site in the destination country.

5. In the OECD's Trade in Value Added (TiVA) analyses, foreign trade is assessed on a value-added basis and by sector. Their TiVA analysis indicates that services accounted for as much as 57% of Finnish exports in 2020 (https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/trade-in-value-added/tiva-2023-FIN.pdf). ↑
6. Transport services comprises passenger and freight traffic services, operations supporting these, and postal and courier services. ↑
7. Based on information presented by the Finnish Game Developers' Association. ↑
8. The turnover of Nokia Technologies according to Nokia Corporation's 2023 annual report. ↑
9. KONE Corporation annual report 2023. ↑

Keywords

export markets, export of goods, Finland, IT services, service exports