Analysis

Employment impact of exports has changed

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AUTHORS



Seppo Orjasniemi



Hannu Viertola
Senior Economist

The decline in exports has been the most important factor behind the contraction in GDP since 2008. The impact of this decline is also felt in sectors that traditionally focus on the domestic market, as the production of intermediate inputs for exports ties up a considerable amount of resources. Exports have had a significant indirect impact on employment. The overall drop in employment has, however, remained moderate, as employment has been sustained by domestic demand.



Exports have a significant indirect impact on employment

Finnish exports grew at a rapid pace between the early 1990s and 2008. However, the global financial crisis and structural changes in industry caused a collapse in exports after this period of prolonged growth. The volume of Finnish exports in 2014 was nearly 14%, i.e., approximately EUR 12 billion, lower than in 2008. The GDP share of exports likewise decreased from 45% to 36%. The largest decline in exports was witnessed in electrical engineering and electronics, manufacture of machinery and equipment, and the forest industries.

The contraction in exports has been reflected directly in employment and output in the key export industries. The lower level of exports has had an indirect impact via two channels. Firstly, the use of domestic intermediate inputs in the manufacture of export products has decreased. This has been reflected in lower output and employment in other industries. Secondly, operations have been outsourced to other sectors, e.g. services. In input-output statistics, this is reflected as a higher proportion of intermediate consumption.

This article examines the impact of exports on employment, using sector-specific input-output statistics that also take into account the indirect effects. The most recent statistics are for 2012, and therefore our examination of the changes in employment caused by developments in exports covers the years 2008–2012. In addition to the direct impact, the examination also takes into account the indirect impact of export industries on the number of employed. An indirect effect is the result of foreign or domestic intermediate consumption by export industries in the production of goods for export. As a result, changes in exports are reflected more extensively in the output and employment of other sectors, including the closed sector.

Exports employ less than before

In 2008, export industries employed nearly a quarter of the total amount of persons employed in Finland. The impact of the decline in exports differed considerably between the various industries in 2008–2012. Overall, however, exports-related employment fell only in the recession year 2009, after which employment developments have been fairly stable.

Employment decreased by a total of 32 thousand persons in 2008–2012. The most significant sources of employment in the export industries have been electrical engineering and electronics, metal and mechanical engineering, and the paper and forest industries. Jobs have decreased particularly in electronics and manufacture of machinery and equipment. In electrical engineering and electronics alone, 12,000 jobs were lost in the period under review. The figures do not, however, include intermediate consumption by these industries, as a result of which changes in the structure of production and its impact on employment are excluded from the analysis.

Including intermediate consumption, the employment contribution of the manufacture of export goods was in 2008 a total of 621,000 people. In 2012, the export industries employed only 504,000, or some 19% less than in 2008. In relative terms, employment has decreased more than the volume of exports, which means that productivity has improved.

For example, taking into consideration intermediate consumption by the electrical engineering and electronics industry, the contraction of exports in this sector has reduced employment by a total of 53,000, or 48%. As recently as 2008, electrical engineering and electronics exports employed directly and indirectly 108,000 people.

Table 1.

Overall employment contribution of each export industry

Industry	2008	2009	2010	2011	2012	Change, 1,000 persons
Manufacture of machinery and equipment	165	127	128	126	123	−42
Electrical engineering and electronics	108	79	66	61	56	−53
Paper and forest industries	96	88	95	96	92	−4
Services	137	129	125	130	138	1
Chemical products	53	38	41	43	44	−9
Agriculture, forestry and foodstuffs	32	29	32	36	36	4
Other	30	15	16	15	15	−14
Total	**622**	**504**	**503**	**507**	**504**	**−118**

Sources: Statistics Finland and calculations by the Bank of Finland.

Another important export industry has been the traditional manufacture of machinery and equipment, whose contribution to employment in 2008 was 165,000 (including the manufacture

of transport equipment).

The direct and indirect employment effect of exports of machinery and equipment has, however, decreased less in relative terms, and employment has declined by a quarter. In contrast, the fall in paper and forest industry exports has cut employment by only 4,000. Despite a lower total volume of exports, growth in exports of services and foodstuffs has supported employment by a total of 5,000 jobs.

Services exports have created new jobs

The structure of exports seems to have changed somewhat since 2008. Even though employment has declined significantly in the traditional export industries, some new growing export industries have replaced part of the job losses. However, in 2008–2012, growth in exports improved employment only in nine industries. In addition, in the growth industries, the bulk of the increase in employment is taking place in exports of services. This also means that export output has become increasingly labour-intensive.

Thus, the decrease in jobs in the traditional export industries seems to have been partly compensated by services exports. The contribution to employment of professional and technical services, in particular, has substantially increased. The employment contribution of exports in these services in 2008 was some 10,000, and by 2012 this had risen to 29,000.

Overall, aggregate employment decreased by only 16,000 in 2008–2012. Growth in domestic demand has improved employment at the same time as jobs have been lost in industries serving export demand (Chart 1). Employment based on domestic demand has thus increased by over 100,000, or some 5%.

Chart 1.



Employment has risen particularly in low-productivity sectors, such as the public sector and other services sectors. Growth in total demand for services has boosted employment by nearly 70,000. Demand growth has been most pronounced in health care and social services, which have boosted employment by a total of 40,000. In addition, other domestic demand has boosted employment by 35,000.

The employment share of exports has decreased

The largest decline in exports was witnessed in 2009, since when employment developments have been more stable. The examination in this article is based on the available input-output statistics for 2008–2012, and thus employment developments in recent years cannot be assessed in detail. In 2013 and 2014, the volume of exports has, however, remained virtually unchanged, and therefore exports-related employment could be expected to have remained unchanged. In recent years, growth in the export of services has, however, had a favourable impact on employment.

Export industries are still a significant source of employment. Favourable developments in exports will therefore be of key importance for the prosperity of the Finnish economy in the future as well. The employment share of exports has, however, decreased substantially. The rapid contraction in exports in 2008 was due to the decline in exports from high-productivity industries. With the current structure of exports, i.e. as the importance of services has increased in relative terms and productivity remains unchanged, growth in exports will boost employment probably more than in the period preceding the recession and the structural changes in the economy.

Keywords

employment, exports, industrial classification