

# The Role of the Largest Companies and Their Value Chains in the Economy

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## Executive summary and conclusions

This research focuses on two themes. The first one is to find out the most significant companies (in terms of GDP) to the Finnish economy and the evaluation of their significance. The second one is to examine the macroeconomic effects of a large investment, in this case a bio-product factory of 1,2 billion euros, to be built in Äänekoski, Finland.

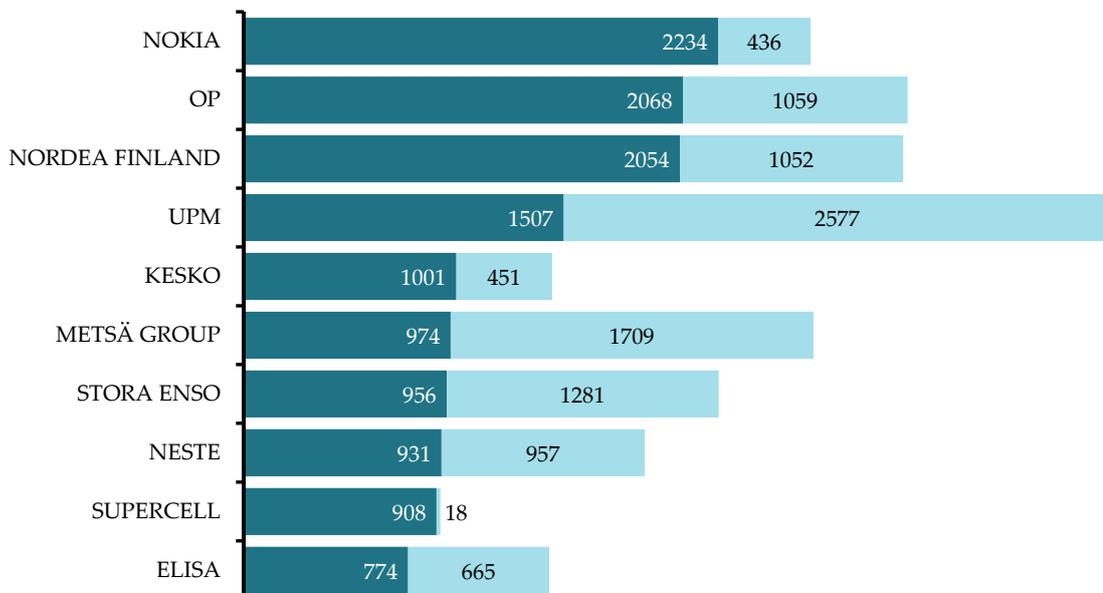
The ten most significant companies – which ones are they?

In the scale of companies, the measure of value added is equivalent to the measure of gross domestic product in the scale of countries. Due to this fact, the criteria for the most significant, or the largest companies in Finland is their value added produced in Finland. From the perspective of the national economy, value added is specifically relevant because when summed up together, the value added of all companies equate to the gross domestic product (GDP). The figures have been calculated on a company group level so that all the subsidiary units operating in Finland have been included in the calculations.

***In the scale of companies, value added equates to the GDP in the national scale***

The group of the ten most significant companies is quite versatile (Figure E1). The group contains companies from both the manufacturing industry as well as the service industry. Differences also exist in their bases of ownership. In this regard, the top ten group includes both

**Figure E1 The most significant companies in the Finnish economy in terms of the GDP, million euros**



Note: The figures presented are from 2015. The dark blue bars describe the value added produced by the companies themselves in Finland. The light blue bars describe the value added in Finland generated by the multiplicative effects resulting from their purchases from other companies. Companies in a monopoly position have been excluded from the comparison. For this reason, VR, Itella, Senaatti-kiinteistöt and Veikkaus are not included in the top ten, despite their significant value added in Finland.

publicly traded stock companies as well as co-operatives, with both domestic and foreign ownership structures.

In 2015, the most value added in Finland was produced by Nokia, OP and Nordea Finland. Nokia, the ultimate number one of the past years, has once again reclaimed its throne, whereas in 2013 it did not make it in the top ten group at all (Ali-Yrkkö, Mattila, Seppälä and Rouvinen, 2015).

**Nokia, OP and Nordea Finland produced the highest value added in Finland**

The group of the most significant companies has seen other changes as well between 2013 and 2015. In addition to Nokia, Supercell and Stora-Enso have also climbed onto the list. Founded only some five years ago, Supercell makes for an exceptional company on the list. All other companies of the top ten group have a history at least ten years long. Stora-Enso's ranking on the list has fluctuated over the years. In some years, (such as 2008 and 2015) it has risen to the top ten, while at other times (i.e. 2013) it has not qualified.

**Supercell has risen to the top ten list of companies producing the most GDP**

Companies also generate multiplicative effects into the economy through their purchases from other companies. The scale of these effects varies between industries, amongst other things due to the fact that the acquisitions of some companies have a higher degree of domesticity than others. This variance can be clearly seen in the multiplicative effects of the forest companies, for example (the light blue bars in the figure E1). Banks also generate considerable multiplicative effects. As can be expected, the ripples of their multiplicative effects mostly propagate through the service industry rather than the manufacturing industry.

### The top ten companies account for 7.5 % of the GDP

In 2015, the ten most significant companies together generated 7.5 percent of Finland's gross domestic product (GDP). The ratio has changed by one percent since 2013, when the top ten companies together accounted for 6.5 % of the GDP.

These figures only contain the value added produced by the companies themselves, and not their multiplicative effects. This is due to the fact that the multiplicative effects of all the different companies cannot simply be tallied up, as the end result would contain some of the same effects more than once.

For example, the figures of the forest industry company Metsä Group already includes the sawn timber sawed by the company itself, and the whole value chain behind the product. On the other hand, Kesko generically delivers sawn timber to hardware stores, and some of this timber may have originated at Metsä Group. Therefore, were the multiplicative effects of Kesko and Metsä Group simply added together, some of the effects would be erroneously included twice.

The productivity of the top ten companies has increased – but not because of increased value added

The level of productivity in the ten most significant companies clearly surpasses that of companies in the economy on average. The disparity between these two groups is astonishingly large. On average, the top ten companies of 2015 produced 221 000 euros of value added per employee. In other companies, the corresponding figure is less than half of that.

**A high value added enables simultaneous high wages and high earnings to owners**

A high level of productivity is important to both the company and its owners, as well as the employees. A high ratio of value added per employee enables simultaneous high profitability and high wages. If the value added per employee remains low, the company cannot claim large profits and pay high wages on average.

In addition to the differences in the productivity of the top ten companies versus other companies, the productivity growth rates of these two groups also differ drastically from each other. Between 2008 and 2015 the productivity of the top ten companies has risen 50 %, while in the group of other companies, productivity has fallen altogether.

This begs the question what is causing the differences in the growth rates. The most important explanation can be pinpointed to staff cutbacks. Going from 1995 to 2008, the number of employees of the top ten companies combined has decreased from 94 000 to 60 700. A part of the staff cutbacks can be explained by outsourcing functions to other companies, in which case these employees no longer are reported as the workforce of the outsourcing company.

### The multiplicative effects of a large investment – Case: Äänekoski Factory

Metsä Fibre, a subsidiary of Metsä Group, is currently constructing (investment amount EUR 1 200 millions) a new factory in Äänekoski, Finland. Its planned purpose is to replace the 30-year-old factory at the site. The new factory will also increase Finland's total production capacity.

**The employing effects of an investment largely depend on which countries purchases are made from**

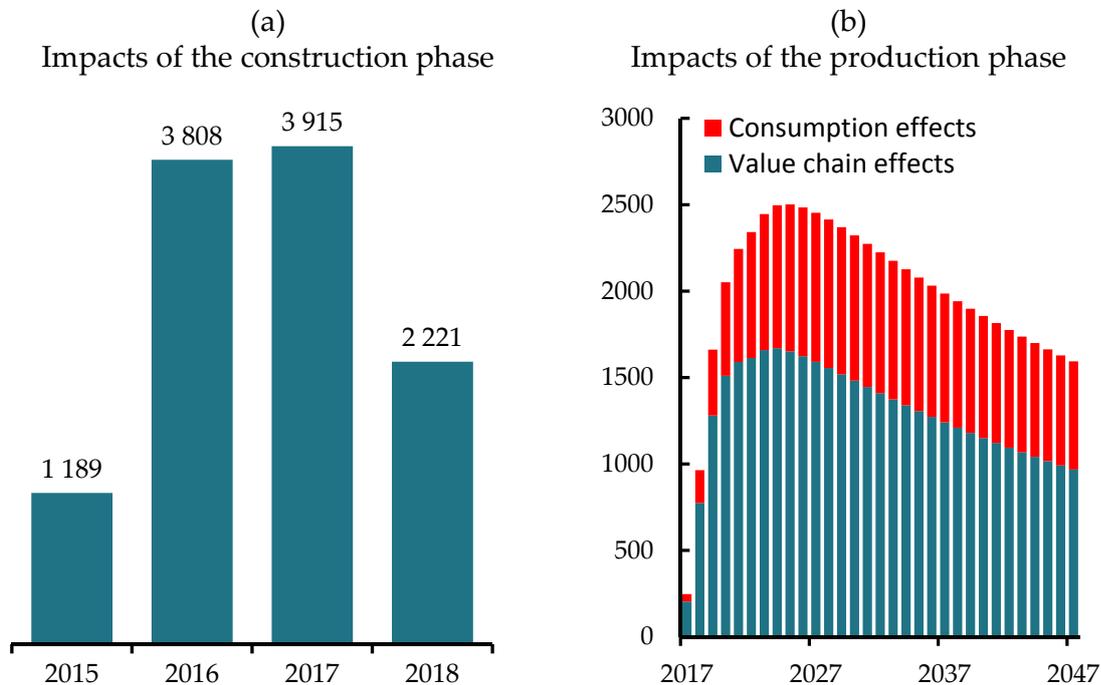
The total multiplicative effects are generated in two phases: the construction of the plant, and the production phase. According to the findings of this study, a large investment, such as the Äänekoski factory, generates significant employing effects already in the construction phase alone (Figure E2a).

The construction phase, mainly taking place in 2015–2017, brings a welcome demand boost into the Finnish economy. In 2016–2017 the annual employing effect reaches almost 4 000 man-years, when taking into account the entire value chain and all the consumption effects (Figure E2a). The scale of the employing effects is essentially affected by the fact that a large portion of the machines and devices for the Äänekoski factory will be supplied by Finnish companies.

**New jobs will be born into the value chain of Metsä Fibre, rather than into the factory itself**

The long-term effects of the factory investment will be seen in its production phase (Figure E2b). In the light of current knowledge, production will start in 2017 and is expected to continue up to 30 years into the future. In the years 2017–2030 the an-

**Figure E2 The employment effects in the construction (a) and the production phase (b), man-years**



Note: The employment effects in Finland during the construction phase of the Äänekoski Factory. The employment effects resulting from increased consumption are also included in the figures. All the effects are net effects, meaning that only the additional capacity in comparison to the old factory has been taken into account.

nual employing effects will be 2100 man-years on average, and from 2031 to 2047 on average 1 900 man-years per annum. The factory itself will not employ any more workers than the old factory in Äänekoski up until the present day, so all the employing effects in the production phase will be generated elsewhere than into the factory itself. More than two thirds of these effects will be generated into the value chain of Metsä Fibre. This value chain consists of all the supplier companies of Metsä Fibre, and their respective value chains. In addition, the increased consumption of the workers in this value chain will result in even more positive employing effects. Considering that the employees spend their earnings into a wide variety of goods and services, the employing effects will ripple out to almost all industries and to companies of all sizes.

Besides the employing effects, the new factory will also generate more turnover and value added in Finland. Between 2017 and 2030, the total effects of the new factory's production on turnover will exceed one billion euros per year. About one half of this, 530 million euros, will result from the increase in Metsä Fibre's own turnover. The rest will take form as increased turnover in the companies the products and services of which the employees working in Metsä Fibre's supply chain will purchase. Respectively, the same effect can be seen with value added which is a more important measurement for the national economy.

### What kinds of companies does our economy need?

The results show that the top ten companies have a significant role in the Finnish economy. This can be seen not only in the GDP but also in the productivity figures related to these companies. The higher productivity of the top ten companies reflected to the productivity figures of the entire economy.

The top ten companies are intertwined with other companies through their value chains. The development of one company ripples on through its value chain, and the effects are propagated to other companies. Large, mid-sized and small companies can all be found in a healthy economy. The growth of small companies into larger enterprises is reflected into the growth figures of the national economy. Furthermore, large companies often have resources at their disposal which enable sizeable investments and taking advantage of the economies of scale.

Finland needs large companies, but also smaller ones as well. A versatile group of companies operating in different industries enables seeking growth in many directions. At the same time, sufficient versatility ensures that the difficulties of single enterprises do not drastically sway the national economy.

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