Technology industry / Finnish economic outlook
January 2024
The Finnish technology industry is comprised of five sub-sectors:

**Electronics and Electrotechnical Industry**
ABB, Ensto, Murata Electronics, Nokia, Planmeca, Polar Electro, Suunto, Vacon, Vaisala...

**Metals Industry**
Boliden, Componenta, Kuusakoski, Luvata, Outokumpu, Ovako, Sacotec, SSAB...

**Mechanical Engineering**
Abloy, Cargotec, Fiskars, Glaston, Kone, Konecranes, Metso, Meyer Turku, Neles, Normet, Oras, Patria, Pemamek, Ponsse, Prima Power, Stala, Valmet, Valtra, Wärtsilä...

**Information Technology**
Basware, CGI, Digia, Efecte, Enfo, F-Secure, Fujitsu Finland, IBM, Innofactor, Knowit, Microsoft, Nixu, TietoEVRY...

**Consulting Engineering**
AFRY, A-Insinöörit, Citec, Elomatic, Etteplan, FCG, Granlund, Ramboll, Rejlers, Sitowise, SWECO, WSP...
The Finnish technology industry is comprised of five sub-sectors:

**ELEKTRONICS AND ELECTROTECHNICAL INDUSTRY**
- Data communications equipment, electrical machinery, medical technology
- Turnover (2022): 21 billion euros
- Personnel (2022): 40,700

**METALS INDUSTRY**
- Steel products, non-ferrous metals, castings, metallic minerals
- Turnover (2022): 19 billion euros
- Personnel (2022): 16,000

**MECHANICAL ENGINEERING**
- Machinery, metal products, vehicles
- Turnover (2022): 38 billion euros
- Personnel (2022): 135,800

**INFORMATION TECHNOLOGY**
- IT services, applications and programming
- Turnover (2022): 19 billion euros
- Personnel (2022): 83,500

**CONSULTING ENGINEERING**
- Expertise for construction industry and infrastructure
- Turnover (2022): 7 billion euros
- Personnel (2022): 54,100
The technology industry – the largest export sector in Finland

- Over 50% of total exports.
- Some 338,000 employed directly in the sector, including indirect effects 720,000 people.
- Effect on value added totaling €63 billion, or 29% of GDP value added.
- Bring to Finland €23 billion tax revenue annually.
- Investments almost EUR 6.0 billion annually in Finland.
- 65% of private-sector R&D investment.
Value added to the economy generated by the technology industry is EUR 55 billion, or over 28% of GDP *(2017)*

A total of EUR 54.5 billion

- **Impact on technology industry** (direct influence)
- **Impact on other industries** (indirect influence)
- **Impact on private consumption** (income effect)

*) GDP value added was EUR 193.3 billion in 2017. Source: Economic Impact of the Technology Industry in Finland 11/2018
Technology industry generates nearly 650,000 jobs in Finland (over 25% of all employees) (2017)

A total of 644,900 employees

10 jobs in the technology industry bring 11 jobs to the rest of the economy

Source: Economic Impact of the Technology Industry in Finland 11/2018
Every job in the technology industry generates almost another job in the services (2017)

Impact on other industries and on private consumption: 340,300 employees

- Services*: 295,100; 87%
- Primary production: 12,200; 3%
- Processing*: 33,100; 10%

*) Excl. the services industries in the technology industry.
Source: Economic Impact of the Technology Industry in Finland 11/2018
Technology industry generates over 18 billion euros in tax revenue annually in Finland (2017)

A total of EUR 18.2 billion

- Impact on technology industry (direct influence)
- Impact on other industries (indirect influence)
- Impact on private consumption (income effect)

Source: Economic Impact of the Technology Industry in Finland 11/2018
Turnover of the technology industry in Finland

Source: Macrobond, Statistics Finland, Technology Industries of Finland

Billion euros, at current prices

Electronics and electrotechnical industry
Mechanical engineering
Metals industry
Consulting engineering
Information technology
Export of technology industry goods from Finland by area in 2022

Total goods exports 41.31 billion euros*

<table>
<thead>
<tr>
<th>Region</th>
<th>Value</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>5.10 billion €</td>
<td>12.4 %</td>
</tr>
<tr>
<td>Western Europe</td>
<td>22.02 billion €</td>
<td>53.3 %</td>
</tr>
<tr>
<td>Central and Eastern Europe</td>
<td>5.43 billion €</td>
<td>13.1 %</td>
</tr>
<tr>
<td>South and Middle America</td>
<td>1.51 billion €</td>
<td>3.6 %</td>
</tr>
<tr>
<td>Africa</td>
<td>0.65 billion €</td>
<td>1.6 %</td>
</tr>
<tr>
<td>Asia</td>
<td>5.99 billion €</td>
<td>14.5 %</td>
</tr>
</tbody>
</table>

*) In addition to goods exports the sector exported services worth some 16-18 billion euros.

Source: Finnish Customs, Statistics Finland
Turnover of the industry and technology industry in Finland

Index 2005=100

Change: 1-10,2023 / 1-10,2022, %

Technology Industry -2 %

Industry -7 %

Latest information: October 2023
Turnover of the technology industry in Finland

Source: Macrobond, Statistics Finland

Change: 1-10,2023 / 1-10,2022, %

Information Technology 6 %
Consulting Engineering 4 %
Metals Industry -20 %
Mechanical Engineering 4 %
Electronics and Electrotechnical Industry -7 %
Value of new orders in the technology industry* in Finland


*) Excl. metals industry, game industry and data center companies
Value of order books in the technology industry* in Finland


Export: -15 % -4 %
Domestic: -6 % -5 %
Combined: -13 % -4 %

*) Excl. metals industry, game industry and data center companies

Value of new orders in the electronics and electrotechnical industry in Finland

Change:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Export</td>
<td>-26 %</td>
<td>-6 %</td>
</tr>
<tr>
<td>Domestic</td>
<td>-5 %</td>
<td>-19 %</td>
</tr>
<tr>
<td>Combined</td>
<td>-24 %</td>
<td>-8 %</td>
</tr>
</tbody>
</table>

Value of order books in the electronics and electrotechnical industry in Finland

Million euros, at current prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Export</th>
<th>Domestic</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>500</td>
<td>100</td>
<td>600</td>
</tr>
<tr>
<td>2011</td>
<td>650</td>
<td>150</td>
<td>800</td>
</tr>
<tr>
<td>2012</td>
<td>800</td>
<td>200</td>
<td>1000</td>
</tr>
<tr>
<td>2013</td>
<td>1000</td>
<td>250</td>
<td>1250</td>
</tr>
<tr>
<td>2014</td>
<td>1200</td>
<td>300</td>
<td>1500</td>
</tr>
<tr>
<td>2015</td>
<td>1500</td>
<td>350</td>
<td>1850</td>
</tr>
<tr>
<td>2016</td>
<td>1800</td>
<td>400</td>
<td>2200</td>
</tr>
<tr>
<td>2017</td>
<td>2100</td>
<td>450</td>
<td>2550</td>
</tr>
<tr>
<td>2018</td>
<td>2400</td>
<td>500</td>
<td>2900</td>
</tr>
<tr>
<td>2019</td>
<td>2700</td>
<td>550</td>
<td>3250</td>
</tr>
<tr>
<td>2020</td>
<td>3000</td>
<td>600</td>
<td>3600</td>
</tr>
<tr>
<td>2021</td>
<td>3300</td>
<td>650</td>
<td>3950</td>
</tr>
<tr>
<td>2022</td>
<td>3600</td>
<td>700</td>
<td>4300</td>
</tr>
<tr>
<td>2023</td>
<td>3900</td>
<td>750</td>
<td>4650</td>
</tr>
</tbody>
</table>


Export: -23 %  -4 %
Domestic: -9 %  -9 %
Combined: -21 %  -5 %

Value of new orders in the mechanical engineering in Finland

Million euros, at current prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Combined</th>
<th>Export</th>
<th>Domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Change:

Value of order books in the mechanical engineering in Finland

<table>
<thead>
<tr>
<th>Year</th>
<th>Export</th>
<th>Domestic</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2022</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2021</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2020</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2019</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2018</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2017</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2016</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2015</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2014</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2013</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2012</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2011</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
<tr>
<td>2010</td>
<td>-12 %</td>
<td>-6 %</td>
<td>-11 %</td>
</tr>
</tbody>
</table>


Export: -12 % -4 %
Domestic: -6 % -4 %
Combined: -11 % -4 %

Turnover of the metals industry in Finland

Seasonal adjusted turnover index
Shares of turnover 2022: iron and steel products, non-ferrous metals and castings 91 %, mining of metal ores 9 %
Source: Statistics Finland
Production volume of the metals industry in Finland

Seasonal adjusted volume index
Shares of turnover 2022: iron and steel products, non-ferrous metals and castings 91 %, mining of metal ores 9 %
Source: Statistics Finland
Value of new orders in the consulting engineering in Finland

Million euros, at current prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Export Change</th>
<th>Domestic Change</th>
<th>Combined Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Export: -49 %, -13 %
Domestic: -19 %, -20 %
Combined: -21 %, -19 %

Value of order books in the consulting engineering in Finland

Million euros, at current prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Export</th>
<th>Domestic</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>100</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>2011</td>
<td>200</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>2012</td>
<td>300</td>
<td>400</td>
<td>700</td>
</tr>
<tr>
<td>2013</td>
<td>400</td>
<td>500</td>
<td>900</td>
</tr>
<tr>
<td>2014</td>
<td>500</td>
<td>600</td>
<td>1100</td>
</tr>
<tr>
<td>2015</td>
<td>600</td>
<td>700</td>
<td>1300</td>
</tr>
<tr>
<td>2016</td>
<td>700</td>
<td>800</td>
<td>1500</td>
</tr>
<tr>
<td>2017</td>
<td>800</td>
<td>900</td>
<td>1700</td>
</tr>
<tr>
<td>2018</td>
<td>900</td>
<td>1000</td>
<td>1900</td>
</tr>
<tr>
<td>2019</td>
<td>1000</td>
<td>1100</td>
<td>2100</td>
</tr>
<tr>
<td>2020</td>
<td>1100</td>
<td>1200</td>
<td>2300</td>
</tr>
<tr>
<td>2021</td>
<td>1200</td>
<td>1300</td>
<td>2500</td>
</tr>
<tr>
<td>2022</td>
<td>1300</td>
<td>1400</td>
<td>2700</td>
</tr>
<tr>
<td>2023</td>
<td>1400</td>
<td>1500</td>
<td>2900</td>
</tr>
</tbody>
</table>

Change:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Export</td>
<td>-34 %</td>
<td>-6 %</td>
</tr>
<tr>
<td>Domestic</td>
<td>-6 %</td>
<td>-2 %</td>
</tr>
<tr>
<td>Combined</td>
<td>-7 %</td>
<td>-2 %</td>
</tr>
</tbody>
</table>

Value of new orders in the information technology* in Finland

Million euros, at current prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of new orders ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>230</td>
</tr>
<tr>
<td>2011</td>
<td>300</td>
</tr>
<tr>
<td>2012</td>
<td>280</td>
</tr>
<tr>
<td>2013</td>
<td>250</td>
</tr>
<tr>
<td>2014</td>
<td>220</td>
</tr>
<tr>
<td>2015</td>
<td>200</td>
</tr>
<tr>
<td>2016</td>
<td>180</td>
</tr>
<tr>
<td>2017</td>
<td>160</td>
</tr>
<tr>
<td>2018</td>
<td>140</td>
</tr>
<tr>
<td>2019</td>
<td>120</td>
</tr>
<tr>
<td>2020</td>
<td>100</td>
</tr>
<tr>
<td>2021</td>
<td>80</td>
</tr>
<tr>
<td>2022</td>
<td>60</td>
</tr>
<tr>
<td>2023</td>
<td>40</td>
</tr>
</tbody>
</table>

Change:
- III, 2023 / III, 2022: -2 %
- III, 2023 / II, 2023: -21 %

Combined:
-2 %
-21 %

*) Excl. game industry and data center companies

Value of Order Books in the Information Technology* in Finland

Million euros, at current prices

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1200</td>
<td>1400</td>
<td>1500</td>
<td>1600</td>
<td>1700</td>
<td>1800</td>
<td>1900</td>
<td>2000</td>
<td>2100</td>
<td>2200</td>
<td>2300</td>
<td>2400</td>
<td>2500</td>
<td>2600</td>
</tr>
<tr>
<td>2023</td>
<td>2000</td>
<td>2100</td>
<td>2200</td>
<td>2300</td>
<td>2400</td>
<td>2500</td>
<td>2600</td>
<td>2700</td>
<td>2800</td>
<td>2900</td>
<td>3000</td>
<td>3100</td>
<td>3200</td>
<td>3300</td>
</tr>
</tbody>
</table>

Change:
- 30.9.2023 / 30.9.2022: -3%
- 30.9.2023 / 30.6.2023: -3%

Combined: -3%

*) Excl. game industry and data center companies

Technology Industry Personnel

9,500 employees affected by temporary lay-offs 30th September 2023

Source: Statistics Finland, The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Technology Industry Personnel in Subsidiaries Abroad by Industry

Source: The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Technology Industry Personnel in Subsidiaries Abroad by Location

Source: The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Technology Industry Personnel in Subsidiaries Abroad by Location

Western Europe and North America
Asia, Oceania, Eastern Europe and Latin America
Middle East and Africa

Source: The Federation of Finnish Technology Industries' labour force survey, Macrobond
Technology Industry Personnel in Subsidiaries Abroad by Country

Information from year 2022, total 278 000

1. China | 44 200
2. India | 33 200
3. USA | 26 200
4. Germany | 18 400
5. Poland | 16 200
6. Sweden | 14 700
7. France | 9 900
8. UK | 8 000
9. Norway | 6 700
10. Italy | 5 800
Others | 94 200

1. China | 16%
2. India | 12%
3. USA | 9%
4. Germany | 7%
5. Poland | 6%
6. Sweden | 5%
7. France | 4%
8. UK | 3%
9. Norway | 2%
10. Italy | 2%
Others | 34%
Personnel in Electronics and Electrotechnical Industry

Source: Statistics Finland, The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Electronics and Electrotechnical Industry Personnel in Subsidiaries Abroad

Source: The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Personnel in the Mechanical Engineering

Source: Statistics Finland, The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Mechanical Engineering Personnel in Subsidiaries Abroad

Source: The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Personnel in the Metals Industry

Source: Statistics Finland, The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Metals Industry Personnel in Subsidiaries Abroad

Source: The Federation of Finnish Technology Industries’ labour force survey, Macrobond

1/17/2024
Technology Industries of Finland
Consulting Engineering Personnel in Subsidiaries Abroad

Source: The Federation of Finnish Technology Industries’ labour force survey, Macrobond
Personnel in Information Technology

Source: Statistics Finland, The Federation of Finnish Technology Industries’ labour force survey, Macrobond

September 30th
Information Technology Personnel in Subsidiaries Abroad

Source: The Federation of Finnish Technology Industries' labour force survey, Macrobond

1/17/2024
Technology Industries of Finland

1/17/2024
Technology Industries of Finland

Source: The Federation of Finnish Technology Industries' labour force survey, Macrobond
Retirement of technology industry personnel in Finland

Source: Wage inquiry of the Technology Industries of Finland, Finnish Centre for Pensions, Statistics Finland
Retirement of technology industry blue collar employees in Finland

Source: Wage inquiry of the Technology Industries of Finland, Finnish Centre for Pensions, Statistics Finland

Individuals per year

Number of individuals retired

Number of individuals retiring (estimation)
World economic outlook
- Finland as a part of global economy
GDP in Euro Area and Finland by quarter

Latest information: 2023 Q3

Index, 2005=100

Eurozone
Finland

1/17/2024
Technology Industries of Finland
Lähde: Macrobond
Export of goods and services from Finland and Euro Area by quarter

Export of goods and services by quarter, billion euros, at fixed prices, index 2005=100

Latest information: 2023 Q3
GDP by demand sector in Finland by quarter

Demand items for GDP growth, quarterly, billion euros, at fixed prices, 2005 = 100

Latest information: 2023 Q3

- Construction
- Export of goods and services
- Private consumption
- GDP
GDP in some western countries

GDP at fixed prices, index 2005=100

Latest information: 2023 Q3

Source: Macrobond
GDP in large developing countries

China, India, Brazil and Russia account for 31% of the world economy, adjusted for purchasing power
Purchasing Manager Indices for the entire business sector in Finland’s most important export countries

Manufacturing and services purchasing manager index, change over the previous month, 50 = no change

Latest information: December 2023

Source: Macrobond. Markit
Industrial Production Volume in USA, EU, Japan and Finland

Latest information: November 2023

Technology Industries of Finland
Seasonally adjusted volume index
Source: Macrobond

Index 2010=100

EU countries
USA
Japan
Finland

1/17/2024
Industrial Production Volume in EU-Countries

Index 2010=100

Latest information: November 2023

Source: Macrobond
Industrial production globally

Source: Macrobond, The CPB Netherlands Bureau for Economic Policy Analysis
Purchasing Manager indices for the manufacturing industries

Purchasing manager index is, change over the previous month, 50 = no change

Latest information: December 2023

Source: Macrobond, Markit
Purchasing Manager indices for the manufacturing industries in major developing countries

Manufacturing purchase manager index, change over the previous month, 50 = no change

Latest information: December 2023

Source: Macrobond, Markit
Exchange rates (when the curve rises, the value of the Euro strengthens against the other currency)

The value of the euro against other currencies, 2018 = 100
Goods export volume
Chinese goods imports

US dollars, at nominal prices, 3 months moving average, index 2014=100

Latest information: December 2023

Source: Macrobond

1/17/2024 Technology Industries of Finland
EU exports to Russia

Export value in each country's own currency, 3 months sliding sum, index 2005 = 100

Latest information: November 2023

Source: Macrobond

Technology Industries of Finland
Russia’s* share of the technology industry's Finnish exports

*) Soviet Union up to 1991
Source: Finnish Customs
Finland’s economic growth relies on exports and investments
Export of goods and services

Export of goods and services by quarter, billion euros, at fixed prices, index 2005=100

Latest information: 2023 Q3

Source: Macrobond, Eurostat

Technology Industries of Finland

1/17/2024
Industrial tangible and intangible investment* in Finland

Billion euros, at fixed 2015 prices

1/17/2024 Technology Industries of Finland * Including software investments. Source: Statistics Finland (National Accounts), Confederation of Finnish Industries’ Investment Survey June 2022
Industrial investment and consumption of fixed capital in Finland

**Graph Description:**
- **Tangible and intangible investment**
- **Consumption of Fixed Capital**

**Data Source:**
- Statistics Finland (National Accounts), Confederation of Finnish Industries’ Investment Survey June 2022

**Note:** Including software investments.

1/17/2024 Technology Industries of Finland

---

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22e

Billion euros, at fixed 2015 prices
Industrial production capital loss in Finland

Cumulative consumption of tangible capital

Cumulative tangible investment

Billion euros, at fixed 2015 prices

= 6.2 bill. €
Industrial tangible investment

Billion euros, at fixed 2015 prices, index 2005=100

Source: Eurostat (National Accounts), Confederation of Finnish Industries’ investment survey, June 2022

Technology Industries of Finland
Investment rate in industrial tangible investments

Tangible investments / value added, %

- Hungary
- Poland
- Netherlands
- Austria
- Germany
- Czech Republic
- Sweden
- Belgium
- Finland

Source: Eurostat (National Accounts)
Industrial intangible investments

Billion euros, at fixed 2015 prices, index 2005=100

*) Intangible investments include research and development and software investments etc.

Source: Eurostat (National Accounts), Confederation of Finnish Industries' investment survey, June 2021
Investment rate of industrial intangible investments*

Intangible investments include research and development and software investments. Source: Eurostat (National Accounts)

*) Intangible investments include research and development and software investments.

1/17/2024 Technology Industries of Finland

Source: Eurostat (National Accounts)
Productivity* development in Finland

*) Productivity is measured as real value added per hours worked. When productivity grows (the curve rises) value added grows more than hours worked.

Source: Statistics Finland
GDP productivity development
GDP at fixed prices / hours worked

Index 2008=100 (the year before the collapse of Finnish industrial production capacity)

- Euro countries
- Sweden
- Finland
- Germany

1/17/2024
Technology Industries of Finland
Latest information April-June 2022.
Source: Eurostat: Quarterly National Accounts
Industrial productivity development

Industrial value added at fixed prices / hours worked

2008=100 (the year before the collapse of Finnish industrial production capacity)

Euro countries
Sweden
Finland
Germany

1/17/2024
Technology Industries of Finland
Latest information April-June 2022.
Source: Eurostat: Quarterly National Accounts
Corporate investment rate

Companies’ tangible and intangible investment in relation to their value added (excluding financial institutions), %

Latest information: 2023 Q2

Source: Macrobond, Eurostat
Finland’s cost competitiveness compared to the average of Euro countries

Unit labour costs in the whole economy = labour costs / productivity, including the influence of effective exchange rates.

*) In the ECB Harmonised Competitiveness Index, the average effective exchange rate of each country is calculated vis-à-vis main trade partners, as well as the development of unit labour costs for the total economy. Latest information January-March 2022. Source: European Central Bank.
Member Companies of the Federation of Finnish Technology Industries
The Federation’s Member Companies 2022

Number of enterprises / 1,806
- 1–249 employees: 1,634 (90%)
- 250–499 employees: 95 (5%)
- 500–999 employees: 49 (3%)
- 1,000–employees: 28 (2%)

Number of personnel / 211,145
- 1–249 employees: 63,728 (30%)
- 250–499 employees: 32,720 (15%)
- 500–999 employees: 32,615 (15%)
- 1,000–employees: 82,082 (39%)
The Federation’s SME Member Companies 2022

Number of enterprises / 1,634

- 234 (14%) 1–19 employees
- 508 (31%) 20–49 employees
- 324 (20%) 50–99 employees
- 568 (35%) 100–249 employees

Number of personnel / 80,082

- 35,679 (43%) 1–19 employees
- 18,507 (23%) 20–49 employees
- 5,293 (6%) 50–99 employees
- 22,603 (28%) 100–249 employees

1/17/2024
Technology Industries of Finland
Operating Profit in the Member Companies of Technology Industries of Finland in 2020

Operating profit-% = operating result / turnover * 100 (before taxes and financial income and expenses)

(Median: 5.2 %)

Good (30 %)
Satisfactory (22 %)
Weak (26 %)
Unprofitable (22 %)

Companies in random order
Net Profit in the Member Companies of Technology Industries of Finland in 2020

Return on assets \(-\%) = \frac{\text{net income} + \text{financial expenses} + \text{taxes}}{\text{capital invested in the financial year}} \times 100\%

(Median: 4.2 %)

- Unprofitable (24 %)
- Weak (30 %)
- Satisfactory (21 %)
- Good (25 %)

Companies in random order
Return on Assets in the Member Companies of Technology Industries of Finland in 2020

Equity ratio -\% = (total equity + total appropriations accrued) / adjusted balance sheet * 100

(Median: 11.9 \%)

Good (43 \%)

Unsatisfactory (11 \%)

Mediocre (26 \%)

Weak (20 \%)

Companies in random order
Equity Ratio in the Member Companies of Technology Industries of Finland in 2020

Equity ratio -% = (total equity + total appropriations accrued) / adjusted balance sheet * 100

(Median: 44.9 %)

- Good (56 %)
- Satisfactory (23 %)
- Weak (21 %)