



ANNEX 4.9 TO THE JRC TECHNICAL REPORT

# High Growth Enterprises:

demographics,  
finance &  
policy measures

## FACTSHEET – FINLAND (FI)

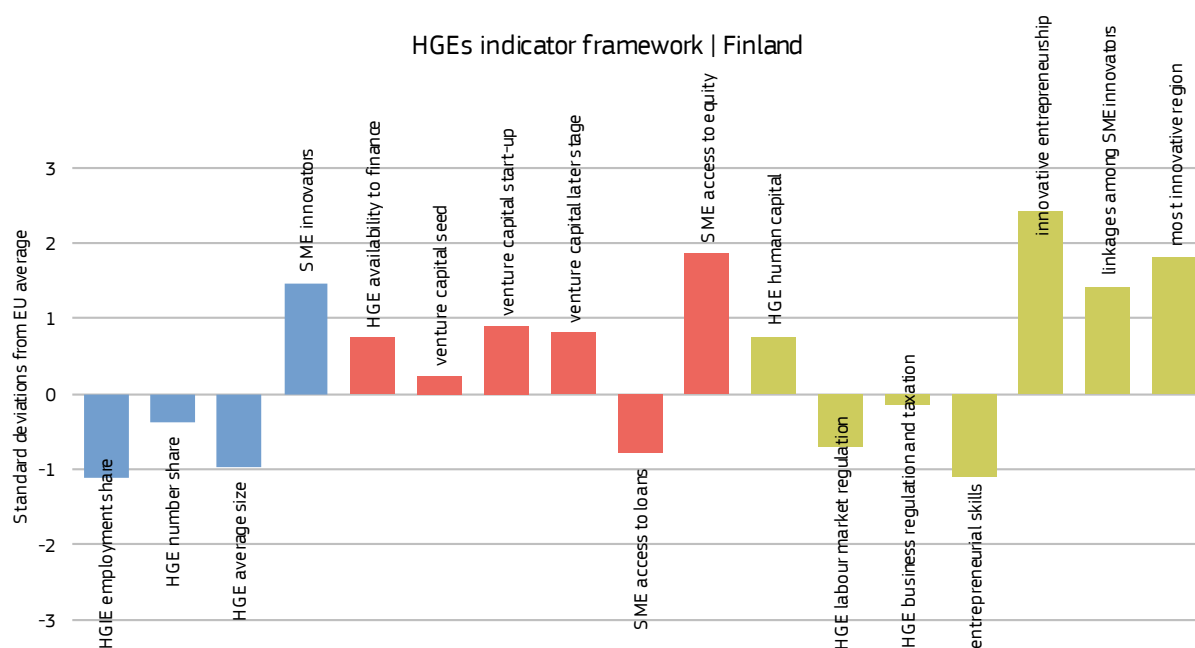
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## 1. Executive summary

FI performs well in factors determining the development of high growth enterprises\* (HGEs). In general, there is a strong performance of the innovation ecosystem. In fact, the HGEs indicator framework reveals that FI is one of the top performers in the EU. More specifically, the emergence of HGEs is favoured by the easy access to human capital and financing, the high incidence of innovative entrepreneurship, the privileged position of the capital city region as the most innovative in the EU and the existence and well functioning of linkages among SME innovators. The highest shares of HGEs among active enterprises are found in the Helsinki-Uusimaa region and in North and East Finland. There is still margin to improvements, but the situation of HGEs has improved recently (the number of HGEs increased in 2017 after years of decline). This may be also due to the gradual increases in venture capital investments recorded since 2014. As a result, it can be seen that venture capital markets in FI remain well positioned vis-à-vis the EU average. The sectoral distribution of venture capital investments is concentrated in two sectors: information and communication, and manufacturing. There is also a strong concentration of venture capital in one mayor hub (Helsinki area) across all stages of financing, which may also be related to the strong innovation performance of this region in the EU context.

The HGE employment share and the HGE number share remain below the EU average. Despite the strong performance of the innovation ecosystem in FI, the relative share of HGEs in Finland is still below EU average and well below its Nordic peers. Part of the explanation may be that the economic recovery after the financial crisis has been slower in Finland than in many other countries, which may have slowed down the scaling of Finnish HGEs as well. There are also some more deep-rooted challenges as well, as indicated by the indicators measuring entrepreneurial culture in general. But the situation has improved in the last year: after three years of decline between 2014-2016, the number of HGEs increased again in 2017. The conditions for HGEs could further be improved by supporting the development of relevant entrepreneurial skills, facilitating SME access to loans and promoting changes in HGE-relevant labour market regulation.

## 2. HGEs indicator framework



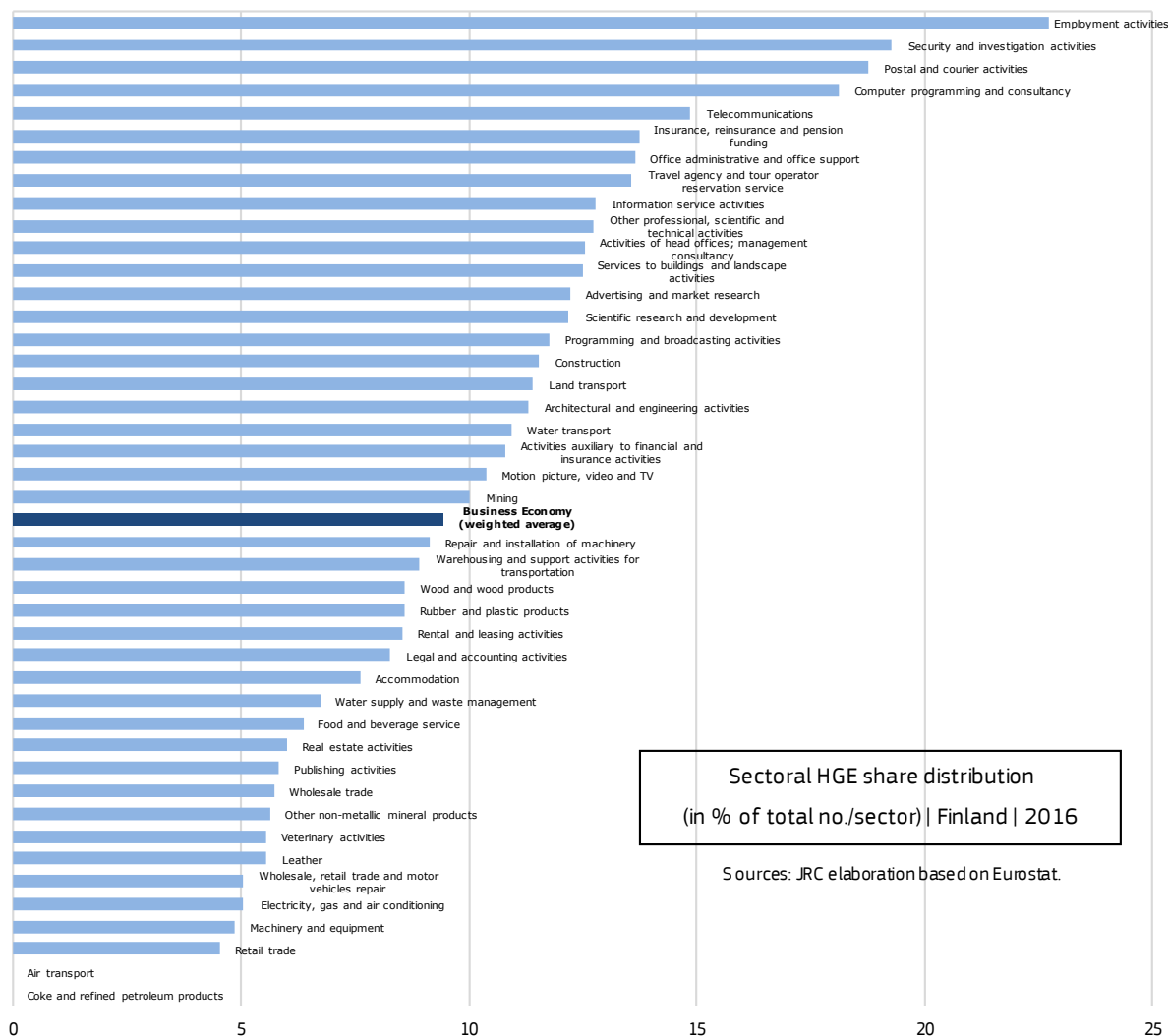
- FI performs above the EU average in many indicators, especially in terms of innovative entrepreneurship, SME access to equity, its most innovative region and SME innovators.
- The emergence of HGEs in FI is favoured particularly by the easy access to human capital and financing, the high

\* In line with Eurostat, HGEs are defined in this factsheet as enterprises having (i) experienced an annualised average employment growth rate of 10% per year over a three-year period and (ii) at least 10 employees at the beginning of the growth period. The importance of HGEs is directly linked to their substantial contribution to employment growth, productivity improvements, economic renewal and innovativeness.

incidence of innovative entrepreneurship, the privileged position of the capital city region of the country as an innovative one and the existence and well functioning of linkages among SME innovators.

- FI could further improve the conditions for the emergence of HGEs by improving the SME access to loans, changing the HGE-relevant labourmarket regulation and also with the promotion entrepreneurial skills.

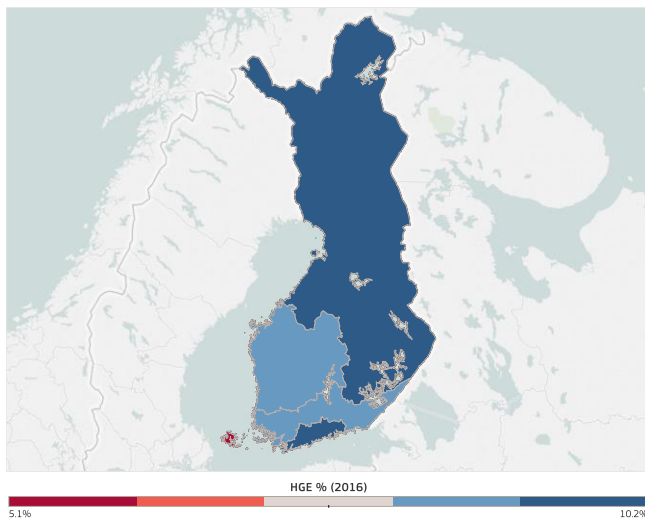
### 3. Firm demographics and sectoral decomposition



Sectoral HGE share distribution  
(in % of total no./sector) | Finland | 2016

Sources: JRC elaboration based on Eurostat.

- The average share of HGEs in FI is around 9.5% across the business economy, ranging from 4.5% in retail trade to 22.7% in employment activities.
- The highest share of HGEs is found in knowledge-intensive services and transportations, and particularly in knowledge-intensive market services (such as employment activities and security and investigation activities) and postal and courier activities.



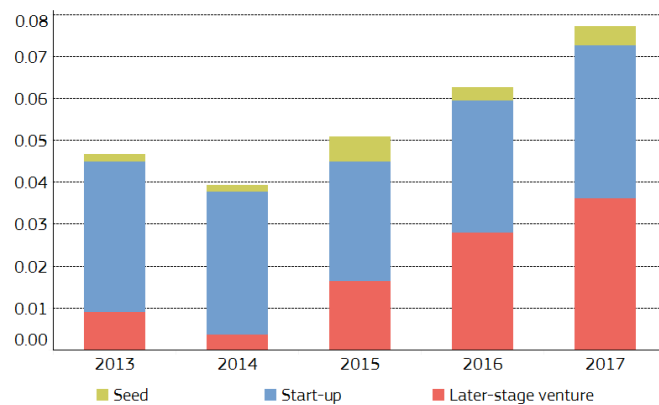
HGE share (% of active enterprises) across NUTS2 regions | Finland | 2016

Sources: JRC elaboration based on Eurostat

- From a geographical point of view, the highest shares of HGEs among active enterprises are found in the Helsinki-Uusimaa region and in North and East Finland. The presence of this type of companies is lower in West Finland, South Finland and specially the non-continental part of the country.
- The regional share of HGEs does not correlate well with the GDP per capita level of the region (except in the case of the capital city region).

#### 4. Financing HGEs and start-ups: the role of venture capital

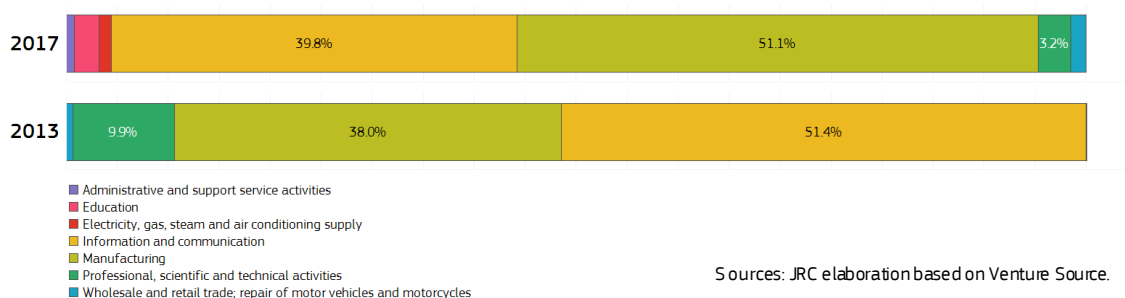
Venture capital by stage of financing (in % of GDP) | Finland | 2013-2017



Sources: JRC elaboration based on Venture Source.

- FI has increased venture capital investments as a share of GDP since 2014. The share of later-stage ventures has substantially increased in FI during that period.
- The size of investments in seed companies is increasing in line with the EU average but remains relatively modest.

Sectoral distribution of VC investment (in %) | Finland | 2013 & 2017

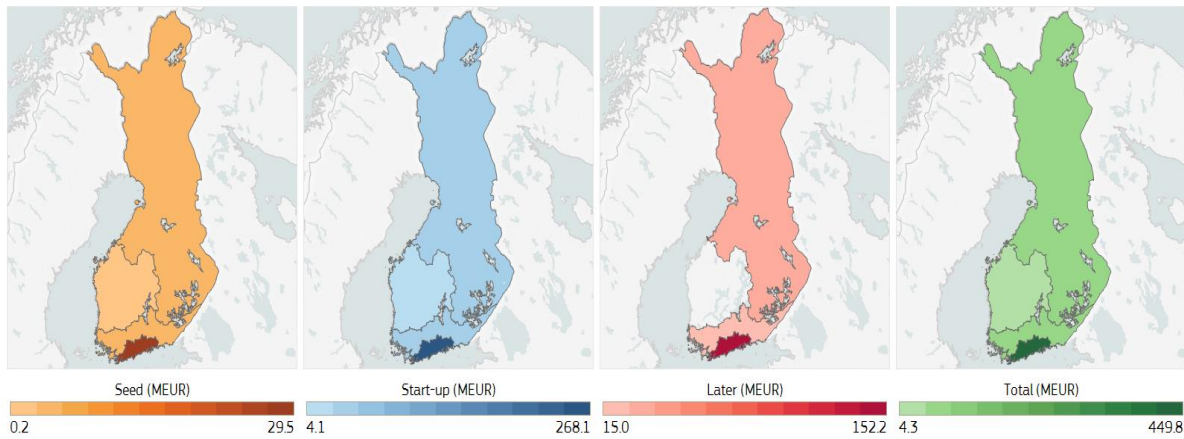


Sources: JRC elaboration based on Venture Source.

- The sectoral distribution of venture capital investments is concentrated in two major sectors: information and communication, and especially manufacturing.

- In 2017, manufacturing received more investments than four years ago (the same is happening with the education and also electricity, gas, steam and air conditioning supply sectors), while the share of investments in other sectors (information and communication and also professional, scientific and technical activities) has declined.

Regional distribution of VC investment by stage of financing (in MEUR) | Finland | 2013-2017

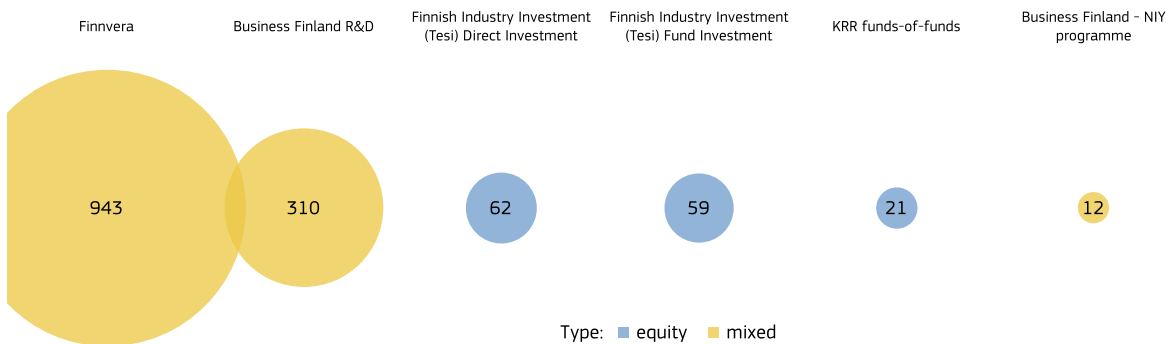


Sources: JRC elaboration based on Venture Source.

- Over the period 2013–2017, there is a strong concentration of venture capital in one major hub (Helsinki region) across all stages of financing.
- A similar pattern is observed for all stages of financing, with the capital city region attracting most of the investments and West Finland showing the lowest VC investments.
- Later-stage investments are the ones that are more concentrated.

### 5. Finance-related policy measures

Financial instruments Finland (MEUR)



- Finnish Industry Investment (Tesi) – direct VC investments. Finnish Industry Investment makes investments in companies in their growth and internationalisation phases and M&A situations. In 2018, Tesi's direct investments to Finnish startups and growth companies were €62 million (of which €52 million were first investments).
- Finnish Industry Investment (Tesi) – fund investments. In addition to direct investments into Finnish companies, Tesi also makes investments in venture capital and buyout funds, with the objective of developing the venture capital and private equity market in Finland. In 2018 Tesi made investments into 8 funds, €59 million in total.
- KRR funds-of-funds, managed by Tesi, invest in venture capital and growth funds operating in Finland that invest in Finnish growth companies. Besides Tesi, other investors include Finnish insurance and pension companies. So far there have been three different KRRs. The total capital of the currently active KRR III is 150 million euros. In 2018 it invested €21 million into two Finnish VC funds.
- Business Finland - NIY programme (grant+loan). The objective of the NIY programme is to accelerate the global

growth of the most ambitious, rapidly growing startups in Finland. The maximum amount of Business Finland funding per company amounts to €1.25 million, of which a maximum of €500,000 may be funded as a grant, and €750,000 as a loan. Since 2008, a total of 386 startups have been selected for the funding. The total volume of the programme between 2008-2017 has been approximately €116 million (€11,6 million annually on average).

- Business Finland Venture Capital (BFVC) Ltd invests in venture capital funds which invest in companies in their early stages of development. The purpose of the company is to develop Finland's venture capital market. So far Business Finland Venture Capital Ltd has invested €37,4 million into 11 funds. There were no investments in 2018.
- Other financing instruments: \* Business Finland R&D grants and loans – Finland's main instrument for supporting companies' R&D activities. The total funding for SMEs in 2018 was €310 million, of which 51% were loans and 48% were grants. The funding is predominantly, but not exclusively, aimed at companies aiming for international growth. \* Finnvera - provides loans and guarantees for SMEs. Total amount of funding for SMEs in 2018 was €943 million. \* VIGO Accelerator programme (2009-2015) – aimed to stimulate the Finnish private VC industry by giving support to new VC investor teams. Some of teams have managed to raise a VC fund, in which BFVC (see above) has invested. \* Vake Oy - a Finnish state company, which was established in 2016 and became operational in 2018. Its balance sheet is €1.8 billion. It can operate as an active owner and utilize different investment tools and instruments. By the time of writing Vake is only starting its investments activities.

## Annex: HGEs indicator framework details

Indicators	Details	Motivation
<b>HGEs indicators</b>		
HGE employment share	Percentage share of employees among HGEs in 50% 'most innovative' industries relative to total employment ( <a href="#">EIS; 2018</a> )	Measures contribution of HGEs to employment creation
HGE number share	Percentage share of HGEs of total enterprises with at least 10 employees ( <a href="#">Eurostat; 2016</a> )	Measures how many firms are HGEs
HGE average size	Average size of HGEs (employment definition); employees divided by number of HGEs ( <a href="#">Eurostat; 2016</a> )	Measures average size of HGEs, an indication for future job growth potential
SME innovators	Share of SMEs with product, process, marketing or organisational innovations or innovating in-house among all SMEs ( <a href="#">EIS; 2018</a> )	Existing SME innovativeness as predictor for future innovations
<b>Financing HGEs indicators</b>		
HGE availability of finance	Percentage of HGEs considering the availability of finance is not an investment barrier ( <a href="#">EIBIS; 2016-2018</a> )	HGEs access to finance is considered a precondition for the development of HGEs
Venture capital seed	Share of seed venture capital to GDP ( <a href="#">Venture Source; 2017</a> )	Venture capital is a relevant source of finance for potential HGEs
Venture capital start-up	Share of start-up venture capital to GDP ( <a href="#">Venture Source; 2017</a> )	Venture capital is a relevant source of finance for potential HGEs
Venture capital later stage	Share of later stage venture capital to GDP ( <a href="#">Venture Source; 2017</a> )	Venture capital is a relevant source of finance for potential HGEs
SME access to loans	EIF SME Access to Finance Sub-index for loans, comprising the use and cost of loans ( <a href="#">EIF; 2018</a> ).	SME access to loans is an important framework condition indicating the access to loans for HGEs
SME access to equity	EIF SME Access to Finance Sub-index for equity, comprising use of equity and the sophistication of the equity market ( <a href="#">EIF; 2018</a> )	SME access to equity is an important framework condition indicating the access to equity for HGEs
<b>HGEs framework conditions indicators</b>		
HGE human capital	Percentage of HGEs considering the availability of staff with the right skills is not an investment barrier ( <a href="#">EIBIS; 2016-2018</a> )	HGEs access to human capital is essential for the development of HGEs
HGE labour market regulation	Percentage of HGEs considering the labour market regulation is not an investment barrier ( <a href="#">EIBIS; 2016-2018</a> )	HGEs may be constrained by existing labour market regulation
HGE business regulation and taxation	Percentage of HGEs considering the business regulation (e.g., licences, permits, bankruptcy) and taxation is not an investment barrier ( <a href="#">EIBIS; 2016-2018</a> )	HGEs may be constrained by existing business regulation
Entrepreneurial skills	Percentage of 18-64 population who believe to have the required skills and knowledge to start a business ( <a href="#">GEM; 2018</a> )	HGEs may require entrepreneurial spirit, skills and knowledge
Innovative entrepreneurship	Ratio between improvement-driven and necessity-driven entrepreneurship ( <a href="#">EIS; 2018</a> )	Countries with high relative prevalence of improvement-driven opportunity, and entrepreneurship tend to be primarily innovation-driven, thus conducive for HGEs
Linkages among SME innovators	Innovative SMEs collaborating with others, public-private co-publications and private co-funding of public R&D expenditures ( <a href="#">EIS; 2018</a> ).	Quality of innovations increases with collaboration and provides information on sophistication of SME innovation ecosystem, thus related to HGEs.
Most innovative region	Relative performance of most advanced region in the Regional Innovation Scoreboard within each Member State vis-à-vis the best performing regions across all other Member States ( <a href="#">RIS; 2017</a> ).	HGEs innovation ecosystems tend to be concentrated in most innovative regions/centres.

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