



ANNEX 4.20 TO THE JRC TECHNICAL REPORT

High Growth Enterprises:

demographics,
finance &
policy measures

FACTSHEET - SWEDEN (SE)

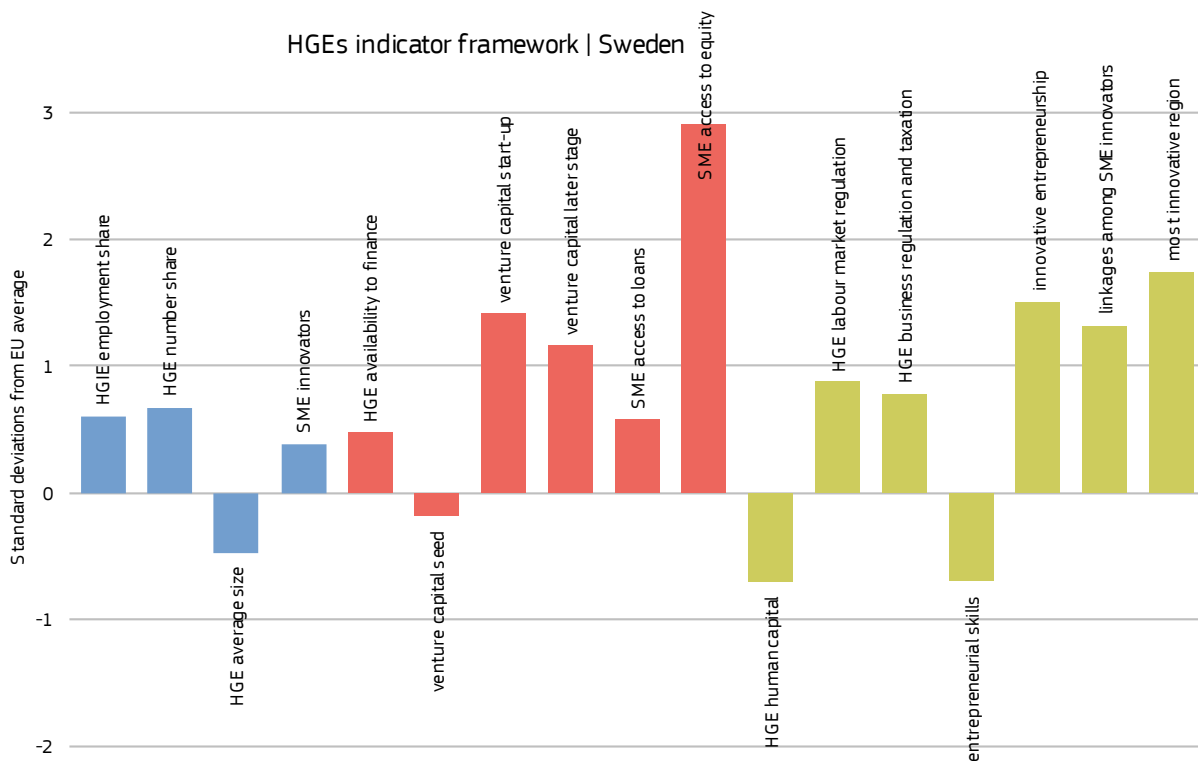
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1. Executive summary

SE overall performs well in factors determining the development of high growth enterprises* (HGEs). The employment and number share of HGEs in SE are both above the EU average. The generally strong performance of the innovation ecosystem in SE supports the development of HGEs. The emergence of HGEs is also favoured by the high accessibility to finance. This is also reflected in the overall increase in venture capital (VC) available in SE in recent years, thereby partly addressing previous shortcomings in access to finance since 2008. The sectoral distribution of VC investments is diversified, but certain sectors stand out, such as ICT and manufacturing. There is a strong concentration of VC in Stockholm across all stages of financing, which may also be related to the relatively strong innovation performance by the region vis-à-vis the EU average†. Despite progress, the VC market in SE remain relatively underdeveloped in comparison to the US and UK. Nevertheless, SE remains above the EU average in that regard.

The conditions for HGEs could further improve by supporting the development of relevant HGE skills. The availability of staff with the right skills is considered an obstacle for investments by HGEs. SE performs below the EU average for this indicator. The lack of adequate skills is also reflected by the low proportion of the working-age population who believe they have the required skills and knowledge to start a business. This might also help in addressing a lower than EU average HGE size and to increase SE capacity to attract VC seed investments.

2. HGEs indicator framework



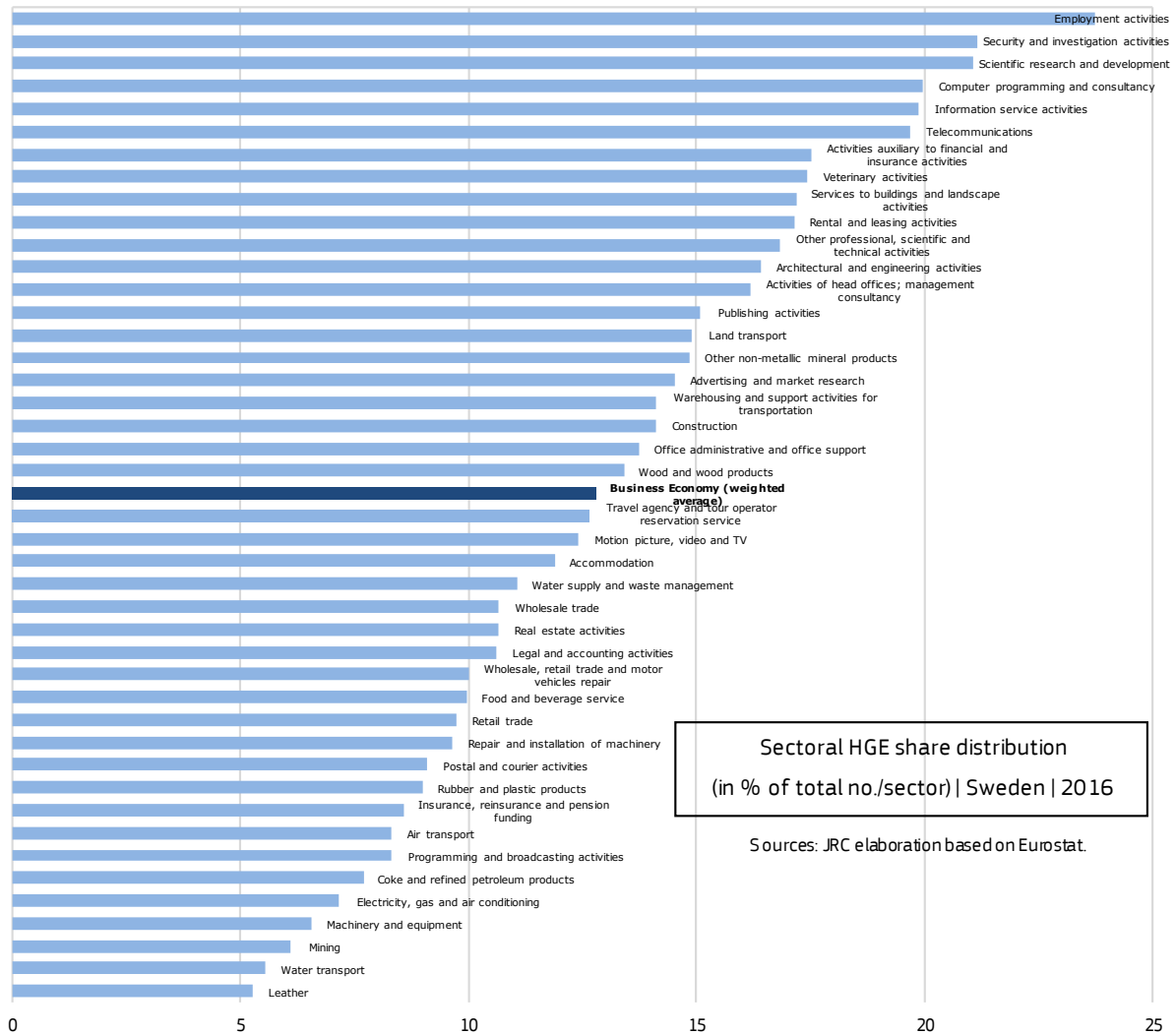
- SE performs above the EU average in several indicators, especially in terms of SME access to equity, most innovative region, innovative entrepreneurs, linkages among SME innovators and VC start-up and later stage investments.
- The emergence of HGEs is favoured particularly by the availability of finance and the overall strong performing innovation ecosystem in SE.
- SE could further improve the conditions for HGEs by supporting the development of the right skills related to HGEs

* In line with Eurostat, HGEs are defined in this factsheet (unless otherwise stated) 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.

† According to the Regional Innovation Index (RII) available from the Regional Innovation Scoreboard (RIS), the region of Stockholm improved its innovation performance by 61% in 2019 with respect to 2011. For benchmarking purposes, Berlin did so by 52% during the same period.

and enhance the overall entrepreneurial skills available across the working-age population. This might also help in addressing a lower than EU average HGE size and attraction of VC seed investments.

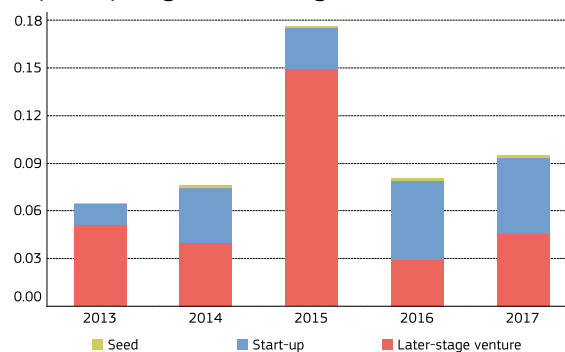
3. Firm demographics and sectoral decomposition



- The average share of HGEs in SE is around 13% across the business economy, ranging from 5.3% in the leather industry to 23.8% in employment activities.
- The highest shares of HGEs are found in knowledge-intensive industries, particularly in employment activities as well as ICT and research-related sectors.

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

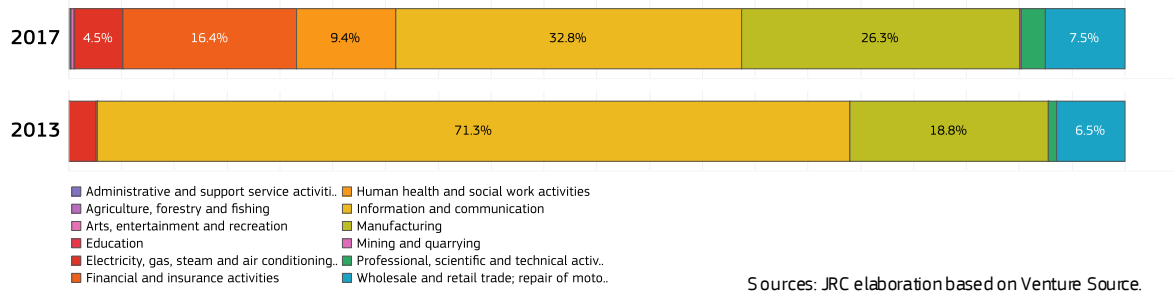
Venture capital by stage of financing (in % of GDP) | Sweden | 2013-2017



Sources: JRC elaboration based on Venture Source.

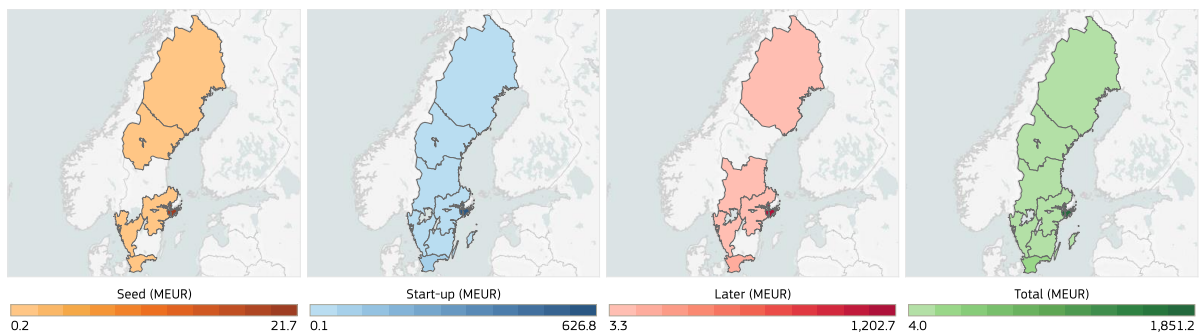
- SE has overall increased VC investments as a share of GDP since 2013, but with a peak during 2015.
- The share of start-up ventures has substantially increased in SE despite an overall drop in VC investments during 2016 with respect to 2015. The size of investments in later stage ventures has steeply increased in 2015 for then progressively dropping in 2017 to a similar level to 2013.

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



- The sectoral distribution of VC investments is diversified, but certain sectors receive most investments, such as ICT, manufacturing, financial and insurance activities, wholesale and retail trade, human health and social work activities, and education.

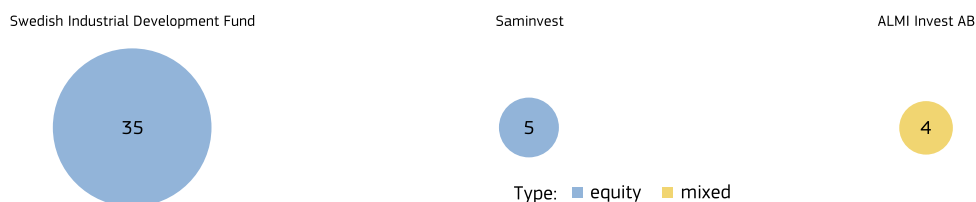
Regional distribution of VC investment by stage of financing (in MEUR) | Sweden | 2013-2017



- Over the period 2013-2017, there is a strong concentration of VC in Stockholm across all stages of financing (seed: 79%; start-up: 80%; later: 85%; total: 83%).
- The start-up stage funding is most distributed across regions in SE, whereas seed and later stage venture capital are less evenly distributed across regions.

5. Finance-related policy measures

Financial instruments Sweden (MEUR 2018)



Policy Measure	Year	Target	Value (€)
Swedish Industrial Development Fund	2018	Large companies and SMEs during growth and expansion phases	€35m
Saminvest (public venture capital firm)	2018	six venture capital funds, which have made 56 investments in growth companies	€5.4m
ALMI Invest AB (public agency)	2018	Loans, equity and advisory services to companies with high growth potentials	€4.4m

- The Swedish Industrial Development Fund invests primarily through equity capital but also offers options and convertibles. Investments are made primarily in the growth and expansion phase in which the Fund will be an active and long-term minority shareholder. In 2018, the fund invested €35m, out of which €0.45m in three new companies, and €30m as follow-on investments.
- Saminvest was established in 2017 incorporating the two existing public VC companies Inlandsinnovation AB and Fouriertransform Aktiebolag. Saminvest has since then invested in six VC funds, which have made 56 investments in growth companies. In 2018, €0.6m of totally promised €5.4m was used by the six VC funds. Also in 2018, Saminvest made 17 exits to a value of over €100m, also to be invested in VC funds in the future.
- Almi Invest AB has a broad mandate and activities include brokering of loans, equity and advisory services to companies. Operations are supposed to complement the private market and be accessible across the country. Almi has no formal limit as concerns the industry or development focus of businesses. Even so, today, the operational focus is on companies with high growth potential. In 2018, Almi granted Growth loans of €1.7m. In addition, in 2018, Almi granted €2.6m in “micro loans” and €0.1m in “export loans”.

Annex: HGEs indicator framework details

Indicators	Details	Motivation
HGEs indicators		
HGE employment share	Percentage share of employees among HGEs in 50% 'most innovative' industries relative to total employment (EIS; 2018)	Measures contribution of HGEs to employment creation
HGE number share	Percentage share of HGEs of total enterprises with at least 10 employees (Eurostat; 2016)	Measures how many firms are HGEs
HGE average size	Average size of HGEs (employment definition); employees divided by number of HGEs (Eurostat; 2016)	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 (EIS; 2018)	Existing SME innovativeness as predictor for future innovations
Financing HGEs indicators		
HGE availability of finance	Percentage of HGEs considering the availability of finance is not an investment barrier (EIBIS; 2016-2018)	HGEs access to finance is considered a precondition for the development of HGEs
Venture capital seed	Share of seed venture capital to GDP (Venture Source; 2017)	Venture capital is a relevant source of finance for potential HGEs
Venture capital start-up	Share of start-up venture capital to GDP (Venture Source; 2017)	Venture capital is a relevant source of finance for potential HGEs
Venture capital later stage	Share of later stage venture capital to GDP (Venture Source; 2017)	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 (EIF; 2018).	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 (EIF; 2018)	SME access to equity is an important framework condition indicating the access to equity for HGEs
HGEs framework conditions indicators		
HGE human capital	Percentage of HGEs considering the availability of staff with the right skills is not an investment barrier (EIBIS; 2016-2018)	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 (EIBIS; 2016-2018)	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 (EIBIS; 2016-2018)	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 (GEM; 2018)	HGEs may require entrepreneurial spirit, skills and knowledge
Innovative entrepreneurship	Ratio between improvement-driven and necessity-driven entrepreneurship (EIS; 2018)	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 (EIS; 2018).	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 (RIS; 2017).	HGEs innovation ecosystems tend to be concentrated in most innovative regions/centres.

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