



ANNEX 4.18 TO THE JRC TECHNICAL REPORT

# High Growth Enterprises:

demographics,  
finance &  
policy measures

## FACTSHEET – PORTUGAL (PT)

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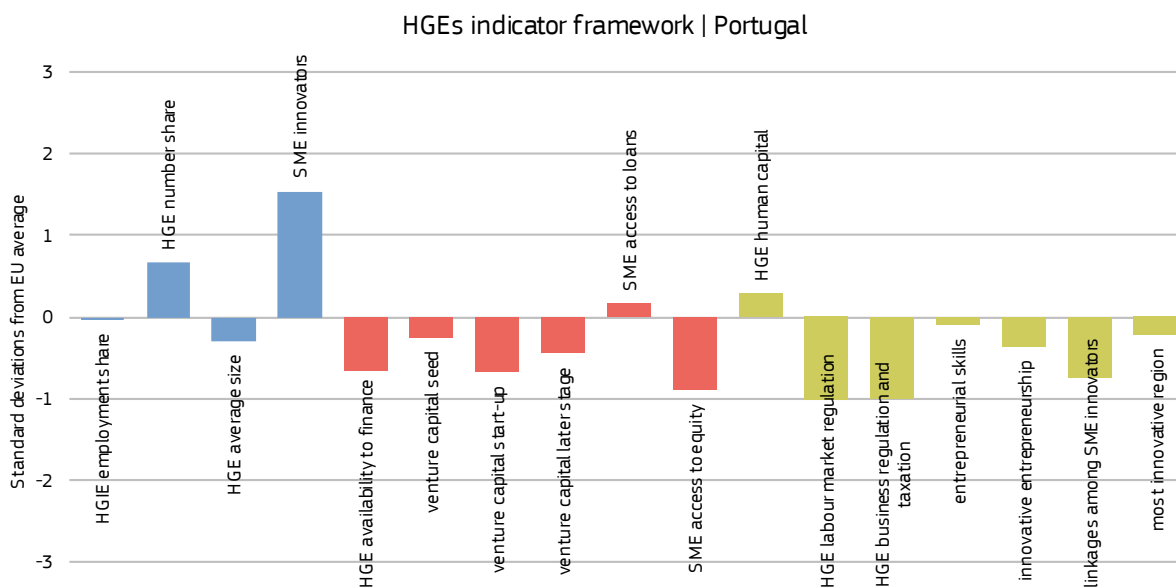
## 1. Executive summary

On average, the shares of HGEs\* in the most knowledge intensive sectors in PT are higher than for the whole business economy: around 20% in the information and communication sector; 18% in administrative and support service activities; and 13% in professional, scientific and technical activities. This compares with an equivalent share of 12.8% for the overall business economy.

The evolution of venture capital (VC) investments in PT in the period 2013-2017 shows an irregular pattern: after an initial increase from 2013 to 2015, it declined in 2016 and 2017, without recovering to earlier levels. VC investments are mainly concentrated in the ICT industry, and professional and technical activities. Lisbon and Porto take the lead in terms of the amount of VC invested.

The performance of HGEs is strongly influenced in terms of their innovation strategies and growth opportunities by the relatively poor framework conditions in PT. Among other measures, the national government could develop a strong innovation system and adopt policies that allow specific firms to effectively assimilate foreign technology. Improving SMEs access to equity as well as promoting linkages among SME innovators also represent important challenges for policy.

## 2. HGEs indicator framework



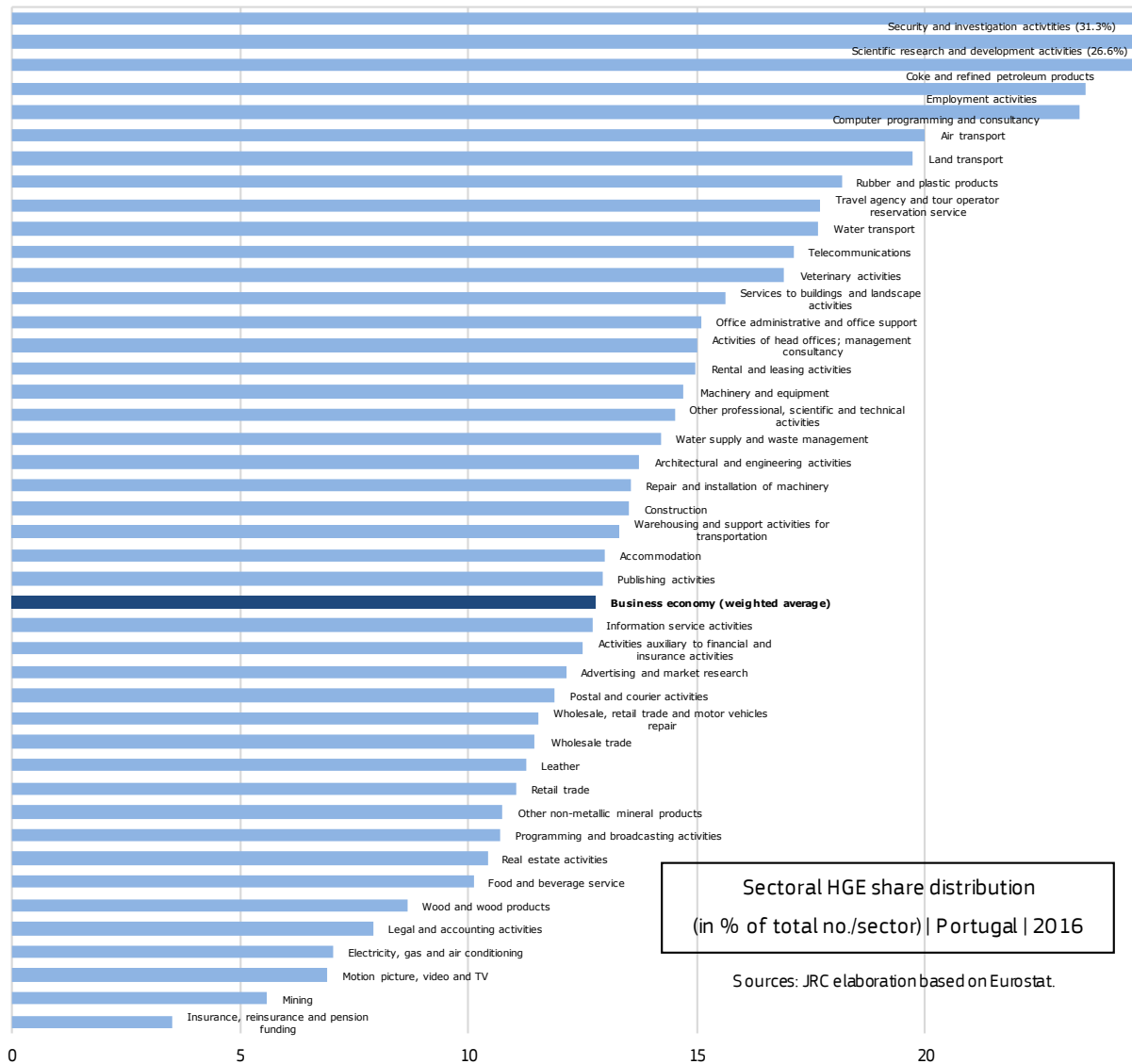
\*for details on the years each indicator was calculated in and their definition, see the Annex at the end of the document.

- PT performs above the EU average in terms of the share of total HGEs and SME innovators.<sup>†</sup>
- PTSMEs benefit more from loans than other sources of external financing compared to the EU average. Overall, access to finance remains a large barrier to the emergence of HGEs.
- In PT, the environment is not conducive to the emergence of HGEs. There is a need of more supportive framework conditions, concerning both institutions and policies, for both SMEs and HGEs.

\* 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.

<sup>†</sup> Units are normalized using the standard deviation of the distribution of "differences" across countries with respect to the EU for each indicator. These differences should thus be interpreted as "number of standard deviations away from the EU average".

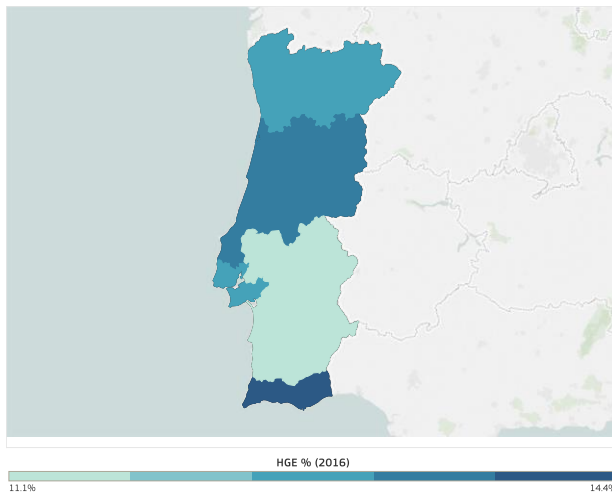
### 3. Firm demographics and sectoral decomposition



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

Sources: JRC elaboration based on Eurostat.

- The average share of HGEs in PT is 12.8 % across the business economy, ranging from 3.5% in insurance and pension funding activities to a remarkable 31% in security and investigation activities.
- The highest shares of HGEs are found not only in knowledge-intensive and medium-high tech manufacturing industries, such as computer programming, telecommunications and scientific research, but also in less knowledge-intensive sectors such as services to buildings and landscape, postal and office support activities, and rental and leasing.



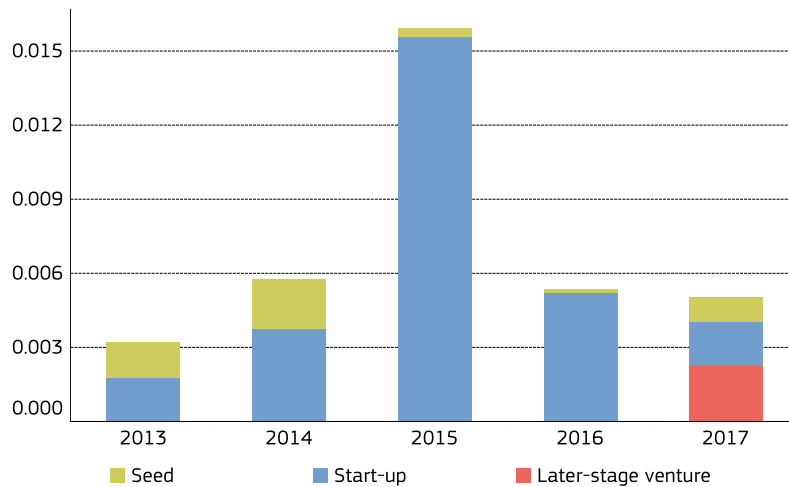
HGE share (% of active enterprises) across NUTS2 regions | 2016 | Portugal

Sources: JRC elaboration based on Eurostat

- From a geographical point of view, the highest share of HGEs among all active enterprises are found in the Algarve and Centro regions.

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

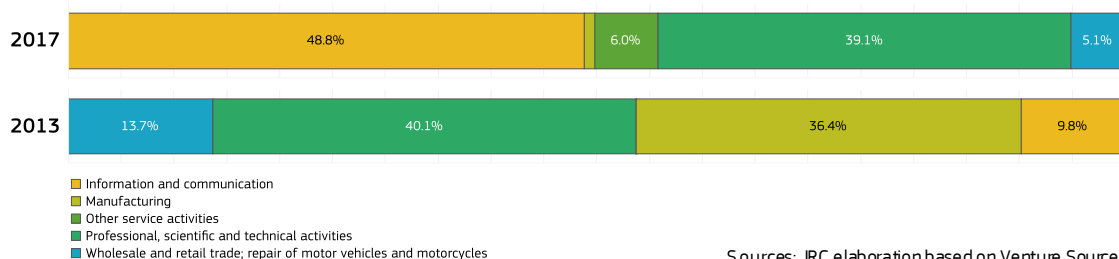
Venture capital by stage of financing (in % of GDP) | Portugal | 2013-2017



Sources: JRC elaboration based on Venture Source.

- Start-up VC investments as a share of GDP increased considerably from 2013 to 2015, then they declined in 2016 and 2017. The overall amount invested is in any case one of the lowest in the EU.
- The share of seed VC investments increased from 2013 to 2014, declined in 2015-2016 and recovered to the earlier share.
- Regarding later-stage VC investments, the picture is very much affected by missing information.

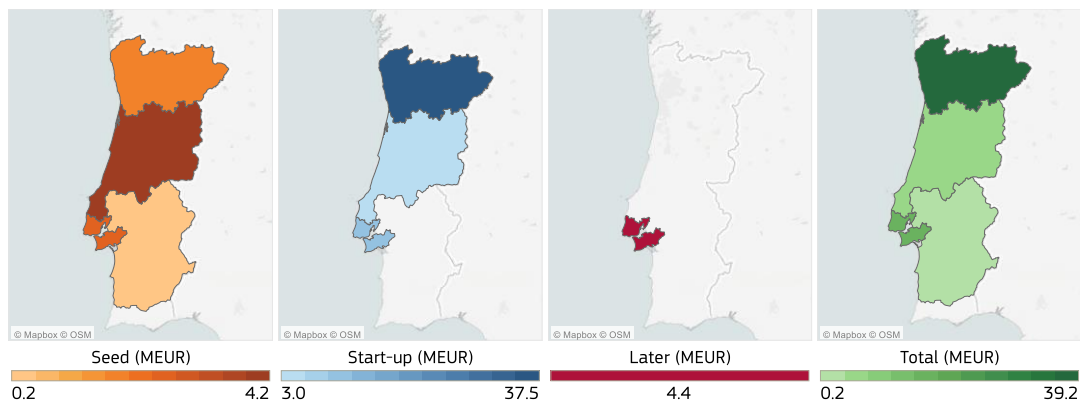
Sectoral distribution of VC investment (in %) | Portugal | 2013 & 2017



Sources: JRC elaboration based on Venture Source.

- Compared to 2013, in 2017 the largest amount of VC investments were made in the ICT industry and in scientific and technical activities, whilst the reverse is the case of manufacturing and wholesale and retail trade.

#### Regional distribution of VC investment by stage of financing (in million euros) | Portugal | 2013-2017



Sources: JRC elaboration based on Venture Source.

- Most of seed VC-backed companies are located in the Centro and Lisbon regions.
- Start-up companies are mostly located in Norte region, whereas later stage companies are located in the Lisbon region.

### 5. Finance-related policy measures

- The innovation policy mix in PT has no specific measures targeted at HGEs. However, HGEs may apply to the wide set of instruments available to support their growth and innovative performance.
- Some of most important programmes in place are:
  - SIFIDE (Tax Incentive System) for R&D support.
  - Financial Incentives in the form of grants and loans, including the new System of Incentives for Productive Innovation in SMEs (Notice N.º 31/SI/2018) as well as support to R&D projects, including those in cooperation with S&T organisations and firms;
  - Financial guarantees, provided through the Mutual Guarantee system
  - Start up Voucher programme, ADN-Start-up Credit line;
  - Equity, through *Venture Capital* funds managed by both public (Portugal Ventures) and private organisations
  - Support to the participation of Portuguese firms in EU R&D instruments/programmes and EUREKA.

## 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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