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# Models and contributions for innovative entrepreneurship

### What are the models for innovative entrepreneurship?

#### **Key actors**

Gazelles, defined as high-growth enterprises that have been employers for a period of up to five years, represent less than 1% of the total population of enterprises with ten or more employees (OECD, 2013). Gazelles and innovative entrepreneurs play, however, a critical role in the economy (figure 4) (see Metrics and evaluation for innovative entrepreneurship [1]).

Other actors also contribute to the success of innovative entrepreneurship including public agencies and external partners (such as e.g. suppliers, customers or universities). These collaborations help innovative entrepreneurs stay abreast of developments, expand their market reach, tap into a larger base of ideas and technology, find complementary expertise, access specific skills and competences and get new products or services to market before their competitors. However, evidence shows the extent to which firms co-operate varies and small and medium-sized enterprises (SMEs) tend to collaborate less on innovation activities than large firms (OECD, 2011a).

#### Inputs to innovative entrepreneurship

As for innovative businesses in general, key inputs for innovation include (see <u>Models of firm innovation</u> [2]):

- **Finance.** Innovative entrepreneurs often face greater difficulties when it comes to accessing to finance than larger firms (see <u>Access to finance for innovative entrepreneurship</u> [3]). The needs for finance and the type of finance that innovative entrepreneurs can access evolve with the stage of development (See Trajectories of new innovative ventures Link to 62. Trajectories of new innovative ventures).
- **Skilled labour.** The challenge of accessing labour can also be particularly difficult for innovative start-ups (see Access to labour for innovative entrepreneurship) [4]. The administrative burdens of employment are often more difficult for smaller businesses to handle than for larger firms. Moreover, SMEs often suffer disproportionately from a lack of available qualified personnel, compared to their larger counterparts.
- **Knowledge.** Access to knowledge can be of particularly importance for innovative entrepreneurship as collaborations may allow overcoming disadvantages related to size (see Firms' access to knowledge for innovative entrepreneurship [5]).

## Innovation process in innovative entrepreneurship

The process of innovation in new ventures may differ from the process of innovation in larger firms (see <u>Models of firm innovation</u> [2]) in several respects: Firm size may affect innovative productivity (Cohen & Levin, 1989; Galbraith, 1952; Schumpeter, 1942). On the one hand, larger firms may benefit from scale economies provided by R&D, and from complementarities between R&D and other activities that enhance R&D productivity. On the other hand, larger firms may face obstacles when it comes to introducing innovations due to more cumbersome administrative processes, lower incentives by employees to innovate and greater resistance to changing existing practices. The results of empirical research regarding the effects of firm size and research effort on



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innovative productivity are mixed (Ahuja et al. 2008): some studies find a positive effect (Lieberman,1987; Schwartzman, 1976), while other studies find negative or no effects of both (Chakrabarti, 1991; Graves & Langowitz, 1993; Halperin & Chakrabarti, 1987).

#### **Innovation outputs**

As for other businesses in general, innovative new ventures may pursue various kinds of innovation (see Models of firm innovation [2]). The innovation output may differ along several dimensions, including the degree of novelty (e.g. new to the firm, new to the market or new to the world), the type of innovation (e.g., product, process, organizational or marketing innovation), the impacts (e.g. radical or incremental innovation) and the source of innovation (technological and non-technological innovation). Evidence shows that innovation strategies, defined as the mix of innovation mode, differ between small and medium enterprises (SMEs) and large firms (figures 1, 2 and 3). On average, small and medium enterprises are less likely to pursue complementary innovation strategies involving both product or process innovation and marketing or organisational innovation. In contrast, they are more likely to pursue an innovation strategy involving only marketing or organisational innovation.

Innovative new ventures and small firms may be more inclined to develop radical or breakthrough innovation than larger firms since they are less constrained by existing products, technologies, skills, and organization, and can, thus, more easily work outside dominant paradigms (Baumol, 2002; Veugelers, 2009).

### Figure 1. Innovative firms

Figure 2. Innovative firms, SMEs, % of total SMEs

Figure 3. Innovative firms, large firms, % of total large firms

Figure 4. Gazelles (employment definition) of enterprises with 10+ employees

## What are the contributions of innovative entrepreneurship?

Innovative entrepreneurship can play an important role in addressing socio-economic objectives (see <u>Contributions to socio-economic objective</u> [6]), including notably:

- Through the Schumpeterian process of "creative destruction", new firms entering the market may displace obsolescent firms, improving aggregate productivity.
- Innovative entrepreneurs can also play a critical role in introducing breakthrough innovations and, in this way, initiate waves of technological change and innovation stimulating economic growth.
- The formation of new enterprises can also lead to employment creation and may also provide job opportunities for disadvantaged groups.



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- Innovative entrepreneurs can also play an important role in addressing social challenges due to their ability as "actors of change"—they often have greater freedom to experiment, take risks and develop more radical innovations than larger firms.
- The creation and development of innovative enterprises can lead to reductions in the informal sector, since characteristics of innovative entrepreneurs (e.g. being growth oriented, partnering with financial institutions) are typically incompatible with informality (see Formalising the informal sector [7])

Yet, the contributions of innovative new ventures to addressing socio-economic objectives significantly vary as innovative new ventures face a variety of potential trajectories and exits (see <u>Trajectories of new innovative ventures</u> [8]). The exit of innovative businesses will be important if the company did not prove to be profitable (e.g. through failures and bankruptcies), as it will free up resources and allow a shift to more valuable uses. If, however, the company was successful, then a positive exit (e.g. trade sales and IPO) can result in wider benefits for the innovations provided by these firms.

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