



*advancing with ESIF financial instruments*



# Stocktaking study on financial instruments by sector

Progress to date, market needs and implications for financial instruments

The use of financial instruments in the 'Research, Development and Innovation in Small and Medium-sized Enterprises' sector

Synthesis



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Small and Medium-sized Enterprises (SMEs) are the backbone of the European economy and innovation is the key driver of the SMEs’ competitiveness. The lack of innovators in the European Union (EU) in comparison with other regions reduces the chance that new products, services and business models will be developed by SMEs in EU Member States (MSs). To overcome this, the EU has developed objectives and instruments. With regards to Research and Development (R&D) objectives, the Europe 2020 Strategy has a target to invest 3% of the EU’s Gross Domestic Product (GDP) in R&D. With regards to policy instruments, **Horizon 2020 is the largest RDI funding programme in the world** (with a budget of EUR 77 billion for the 2014-2020 period). By end of 2016, it had unlocked EUR 6.7 billion from EU resources to finance innovative ‘private for-profit companies’ (around 27% of the EUR 24.8 billion allocated to grants over the 2014-2016 period), but, the demand for Research, Development and Innovation (RDI) financing in Europe is continuous and there is still significant room for other RDI financing programmes, including with ERDF funding support.

## 1. ESIF investments and the use of financial instruments

About **EUR 25.3 billion of ESIF investment is planned to support ‘RDI in SMEs’ activities** through all forms of support during the 2014-2020 programming period. As of 31 December 2017, **thirteen MSs were using ERDF for financial instruments** in the sector. This represented **EUR 2,148.9 million, so 12.0% of the total eligible cost for the whole sector** (EUR 18.0 billion). The main form of finance chosen was equity financing (for 51.5% of the amounts), followed by loans (32.7%), and guarantees (13.1%).

Four MS have devoted large amounts for financial instruments: Hungary (EUR 587.5 million), Italy (EUR 470.9 million), Poland (EUR 462.8 million), and Germany (EUR 221.9 million). Amounts devoted by other MS appear quite limited (EUR 13.0 million for France in one region, or EUR 1.2 million for Portugal). Three MS have financial instruments that represent more than 1/3 of the total eligible cost: 84.0% in Greece (with EUR 70 million), 37.9% in Slovenia (with EUR 59.3 million), and 37.5% in Bulgaria (with EUR 51.0 million).

**The ‘RDI in SMEs’ sector seems one of the main sectors considered by managing authorities/Intermediate Bodies for financial instruments, indicating that they know the added value of revolving finance mechanisms for the sector. Room for improvement however still exists for the development of financial instruments in the sector.**

## 2. Market opportunities

The EU is a global leader in research and scientific activities, but **turning knowledge into innovative products still remains a major challenge. A gap in R&D intensity between the EU and leading global innovators** (South Korea, Japan, and the United States) **exists**<sup>1</sup>. The EU has more **static firms** compared to the US and **the majority of the MS are classified** by the European Innovation Scoreboard **as moderate innovators**.

<sup>1</sup> Eurostat, R&D expenditure as percentage of GDP, 2015 and 2017.



The European Investment Bank (EIB) estimated in 2016 that **additional EUR 130 billion of annual R&D spending is needed to reach the EU R&D target of 3%**<sup>2</sup>. This target has been reached by four MS: Sweden, Austria, Denmark, and Germany, however the **EU average is 2.07%** with **the majority of the MS significantly below it**<sup>3</sup>. **SMEs are not the main contributor to the EU R&D intensity** – the larger companies are – and **only 15% of the EU SMEs have invested in innovation in 2017**<sup>4</sup>. Also, only 3% of EU start-ups became scale-ups between 2003 and 2016<sup>5</sup>.

Venture Capital (VC) funds in the EU are three times smaller than in the US (EUR 56 million on average compared to EUR 156 million). The amounts of VC capital invested in EU start-ups are six times less than in the US (EUR 6.5 billion compared to EUR 39.4 billion). The EU VC market is focused on the initial stages of start-ups’ development, while the US focus on the scaling-up stages. **EU start-ups have more difficulties to scale-up than their US competitors.**

**Europe’s potential to improve its innovation performance lies in its ability to leverage on its competitive advantages:** high-quality research, world-class universities, and skilled workforce. **Policy interventions should continue to focus on narrowing the discrepancies between MS and to further unlock access to finance for innovation across all MSs,** especially to support RDI financing for scaling-up high-growth SMEs.

**Financial instruments can help bridge the gap in R&D intensity between the EU and leading global innovators, as well as among MSs.** Thanks to their **leverage effect**, they can attract private financiers and participate to the annual additional EUR 130 billion R&D spending needed to reach the EU R&D target of 3%. During the 2021-2027 programming period, more ERDF-supported financial instruments (especially providing equity and venture debt products) would facilitate SMEs’ overall access to finance, foster (high-growth) SMEs’ scaling-up process, and reinforce the EU VC market with additional resources and further capacity to attract leading fund managers.

### 3. Barriers

Whilst some challenges in financing innovation are not appropriate to be addressed by financial instruments (such the difficulty to generate networks / partnerships), others can be alleviated with their use. SMEs experience several challenges when developing innovative projects: (i) **limited availability of resources** (financial, human, organisational), (ii) **limited tangible assets** hindering their capacity to provide collateral, (iii) need for finance before projects become bankable and **difficulties to access such early-stage finance**. Financial instruments may provide solutions for these challenges.

Financiers/investors also face further challenges when financing innovation that may be addressed by financial instruments: (i) **uncertainties regarding returns on investment** (and so a need for risk finance), (ii) **difficulties to develop a critical mass of investment-ready innovative projects** (and so a need for additional resources to source and finance RDI projects), and (iii) **lack of technical expertise to appraise the risks and profitability** of the projects (so a need to develop ecosystems of investors with various risk appetites and expertise).

2 European Investment Bank, Restoring EU Competitiveness, 2016.

Available here: [https://www.eib.org/attachments/efs/restoring\\_eu\\_competitiveness\\_en](https://www.eib.org/attachments/efs/restoring_eu_competitiveness_en).

3 For the latest Eurostat data on the GDP per capita in PPS, please refer to:

<https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tec00114&plugin=1>.

4 EIB, EIB Investment Survey 2018, 2018.

5 EIB Working Paper 2019/03, Financing and obstacles for high growth enterprises: the European case, 2019.



In the meantime, a wider use of ERDF-supported financial instruments in the sector is constrained by: (i) **difficulties in aligning ERDF rules with common market practice** in relation to timing, geography and monitoring/reporting (for instance, equity funds are used to work on a 10-year baseline), (ii) **difficulties in integrating ERDF-supported financial instruments into existing environments** of grants (and of financial instruments) where supply and demand stakeholders are not knowledgeable about financial instruments or where ERDF-supported instruments may be in competition with other schemes, (iii) **perceived complexity of compliance requirements** for the managing authorities (especially in comparison with grants), and (iv) **perceived complexity in relation to State aid** (even if the regimes are clearly identified in this sector).

## 4. Potential for the use of financial instruments for RDI in SMEs

SMEs' financing needs when developing RDI projects depend on the development stage (i) of the company and (ii) of the project itself, both inducing various risks. **Grants** are a key financing scheme when an RDI project does not generate revenues. When the project reaches its commercialisation phase, **ERDF-supported financial instruments** become the most relevant form of public-sector finance, mobilising additional private sector investment into the project. When it reaches its market maturity and has a high degree of bankability, it can be **fully financed by private sector financing**, without public support. Following this:

- During the **proof of concept stage** of a project (new technology, product or service), grants and VC financing are relevant;
- During its **commercialisation**, a combination of grants, equity financing and subordinated loans is relevant; and
- During its **scale-up and development stage**, equity and debt financing (potentially with preferential conditions) are relevant.

### ERDF-supported financial instruments are relevant to provide:

- **Equity financing** for all development stages;
- **Loans** with different risk tolerance levels and conditions (such as subordinated and concessional debt products) for the commercialisation and scale-up stages;
- **Guarantees** to support innovative SMEs with limited collateral and unlock their access to debt finance; and
- A **combination of financial instruments with grants**. The grant would act as an enabling factor, financing the non-revenue generating part of the RDI project (such as activities related to R&D or networking activities), while the financial instrument(s) would provide equity financing or loans with preferential conditions to cover the revenue-generating part of the project and would enable the fund manager and the managing authority to reinvest returns in other/new projects in the future. Clear boundaries and synergies between grants and financial instruments would be needed. Grants may also provide **Technical Assistance (TA)**, particularly to start-ups and innovative projects in emerging technologies from start-ups or later-stage enterprises.



## 5. Key enabling factors for the use of financial instruments

Market stakeholders reported during interviews, focus groups and a survey that key enabling factors that may facilitate the deployment of ERDF-supported financial instruments in the sector include:

### 5.1 Strengthening the political support towards revolving finance for SME financing addressed to RDI projects

Innovation is a priority for public authorities. Consistent political consensus/support in the use of revolving finance for RDI projects helps the development of financial instruments. Increasing awareness of public entities of the benefits of financial instruments, and their willingness to take a higher risk in RDI projects (i.e. accept a certain degree of losses) is valuable. Such considerations are needed early on during the programming period in order to deploy financial instrument sooner, rather than later. Learning from the experience of other managing authorities may help.

### 5.2 Better aligning the ERDF regulation with common practices of the sector

ERDF-supported financial instruments need to be as close to common market practices as possible, especially in the case of equity markets (debt/guarantee financial instruments are quicker to set up and ramp up). This would facilitate the selection of financial intermediaries, and would increase the impact of the instruments (i.e. taking additional risks and/or addressing niche/more risky sectors) by counter-balancing the 'extra-effort' asked to the intermediaries. Regulatory constraints have been reported in relation to: (i) timing (a longer time period of eligibility for the equity instruments would be helpful, a common practice being of 10 years), (ii) geography (a more open definition of 'geographical coverage' would be supportive), and (iii) monitoring/reporting (clarifications of the nature/level of details of the documentation required by each stakeholder, as well as the assurance that audit authorities are fully informed/knowledgeable about these requirements before initiating their procedures). During the discussions on the CPR for the 2021-2027 programming period, further consideration should be given to adaptations to the regulation in order to facilitate the uptake of ERDF-supported financial instruments.

### 5.3 Combining grants with financial instruments

The development of financial instruments may be perceived by managing authorities as more time-consuming and complicated compared to the use of grants. Grants can however be an enabling factor for financial instruments and finance the highest risk part of an RDI project. Defining clearer boundaries and synergies between both forms of support may foster the use of financial instruments and create incentives for managing authorities to consider them<sup>6</sup>. Greater knowledge of how financial instruments can be combined with grants during the 2021-2027 programming period should be promoted and used to the best extent possible.

<sup>6</sup> Such boundaries are currently discussed for other Funds for the 2021-2027 programming period. Some expenditures are predicted to be 'eligible' under ESF+ or EAFRD 'only' if they are financed by financial instruments (and 'not eligible' if they are financed by grants).



## 5.4 Fostering collaborative partnerships between academia, businesses and governments

Cooperation between research institutes, businesses and public entities facilitates the development of pipelines of innovative projects with critical mass that may then be financed by financial instruments. Such cooperation should be promoted and stimulated by managing authorities when developing their Smart Specialisation Strategies for the 2021-2027 programming period. Investments to be financed under Policy Objective 1 during this new programming period (promoting 'a smarter Europe, [through] innovative and smart economic transformation [including digitalisation and support to SMEs]') should be aligned with these Strategies, including under the form of financial instruments. In parallel to well-structured local ecosystems of investors (see next enabling factor), these cooperative partnerships between academia, businesses and governments help generate knowledge-intensive projects supporting local Smart Specialisation Strategies that can be then financed and commercialised.

## 5.5 Developing an ecosystems of investors

Financial intermediaries know the socio-economic and the institutional context of SMEs. This knowledge should be leveraged during the design and the implementation stages of a financial instrument. Their experience and capacity to reach SMEs can also help the sourcing of viable innovative projects. An ecosystem of supply-side stakeholders (National Promotional Banks/Institutions, commercial banks, Business Angels' networks, and equity funds) should be nurtured by public and private actors, and should be consulted by the managing authority/Intermediate Body during the design phase of the financial instruments. These supply-side actors should also be made aware of ensuing proposals during the financial intermediary selection process, and of co-investment opportunities into the future instruments.

## 5.6 Technical Assistance

Technical Assistance (TA) may provide RDI projects with business advisory support in their transition from an innovative idea to an investment opportunity. It is relevant for all SMEs' development stages and for all types of sub-sectors/technologies. The supported SMEs may then be financed by a financial instrument. TA hence (i) increases the chances of reaching a critical mass of projects for the instrument, (ii) attracts interest of (co-)investors, and (iii) brings more innovations to the market. Since public sponsoring and a proactive approach from public authorities also help financial instruments, TA can support the latter in developing their knowledge of ERDF-supported financial instruments and of their local innovation ecosystems.



Fostering the development of financial instruments should be a solution to support innovative/high-growth SMEs accessing finance, generate leverage and help equity funds in Europe develop. Such financial instruments could provide equity, debt and/or guarantee products, depending on the maturity/needs of the SMEs and of the RDI projects. Barriers to RDI financing in Europe exist on both demand and supply-sides. Financial instruments should again be part of the solution, especially with the support of ERDF funding. Barriers to the development of such ERDF-supported financial instruments however also exist and further consideration for adapting the CPR for the 2021-2027 programming period could facilitate their development. In this context, key enabling factors for a better uptake of ERDF-supported financial instrument in the ‘RDI in SMEs’ sector relate to gaining greater political support for financial instruments in the sector, maximising opportunities in relation to grant combination, and reinforcing collaboration between various actors (research institutes, businesses, financiers and public entities). Technical Assistance to managing authorities and to SMEs would also facilitate the implementation and the uptake of such instruments, including through additional measures to increase awareness of the opportunities for financial instruments in the sector.



