Interim Evaluation of Horizon 2020's Financial Instruments

Final Report

Written by The Centre for Strategy & Evaluation Services LLP (CSES)
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Interim Evaluation of Horizon 2020's Financial Instruments

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Interim Evaluation of Horizon 2020's Financial Instruments

*Final Report*

edited by
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<td>CIP</td>
<td>Competitiveness and Innovation Framework Programme</td>
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<tr>
<td><strong>DG ENTR, DG GROW</strong></td>
<td>Directorate-General Enterprise and Industry (now replaced by DG GROW – Internal Market, Industry, Entrepreneurship and SMEs)</td>
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<td>DG RTD</td>
<td>Directorate-General Research &amp; Innovation</td>
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<td>EDP</td>
<td>Energy Demo Projects, one of the InnovFin products</td>
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<tr>
<td>EFSI</td>
<td>European Fund for Strategic Investments</td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
</tr>
<tr>
<td>EIP</td>
<td>Entrepreneurship and Innovation Programme, specific programme under the CIP (see above)</td>
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<tr>
<td>EIF</td>
<td>European Investment Fund</td>
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<td>ESIFs</td>
<td>The European Structural and Investment Funds</td>
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<td>EU15</td>
<td>EU Member States prior to the 2004 EU Enlargement, namely: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom</td>
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<td><strong>Financial instrument (FI)</strong></td>
<td>A financial instrument offers debt, equity or hybrid finance, either directly or intermediated by guaranteeing debt finance provided by financial intermediaries (see next entry).</td>
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<tr>
<td><strong>Financial intermediary</strong></td>
<td>The financial intermediaries participating in the InnovFin programme include public guarantee institutions, mutual guarantee organisations, microfinance institutions and commercial or publicly-owned or controlled banks. They may be direct lenders that provide loans to SMEs, or indirect guarantee organisations that either co-guarantee or counter-guarantee a loan portfolio, of one or several direct lenders.</td>
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<tr>
<td>FoF</td>
<td>Fund-of-Funds, an equity fund investing in underlying equity funds which in turn invest in final beneficiaries (companies).</td>
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<tr>
<td>FP7</td>
<td>The Seventh EU Research Framework (also GFI and RSFF)</td>
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<td><strong>Guarantee instrument</strong></td>
<td>A financial instrument that enables one financial institution to cover a set share of losses that another financial institution may make in case the financing it provides is not repaid. For example, the European Investment Fund may provide a guarantee to a commercial bank that 50% of the losses that bank incurs on its loans will be refunded by the EIF.</td>
</tr>
<tr>
<td>H2020</td>
<td>Horizon 2020, the European Union’s eighth research programme</td>
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<tr>
<td>IDFF</td>
<td>Infectious Diseases, one of the 7 InnovFin products</td>
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<tr>
<td>Large firms</td>
<td>Firms with more than 3,000 employees</td>
</tr>
<tr>
<td>Large MidCaps</td>
<td>Firms with between 500 and 3,000 employees, as defined in the Delegation Agreement for InnovFin (p. 12)</td>
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<td>LP</td>
<td>Large Projects, one of the seven InnovFin products</td>
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<tr>
<td>Market failure</td>
<td>Defined here as a situation in which the allocation of goods and services is not efficient and can be improved upon from a societal point of view without anyone being worse off.</td>
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<td>Term</td>
<td>Definition</td>
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<td>MCG</td>
<td>MidCap Guarantee, one of the 7 InnovFin products</td>
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<td>MFF</td>
<td>Multi-Annual Financial Framework in which the EU budget is agreed and operates, usually over a timeframe of 7 years</td>
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<td>MGF</td>
<td>MidCap Growth Finance, one of the 7 InnovFin products</td>
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<td>MidCap</td>
<td>Firms with between 500 and 3000 employees</td>
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<tr>
<td>PFLP</td>
<td>Portfolio-first-loss-piece model by which an investor covers a previously determined first loss piece in case of no repayment by the beneficiary (e.g. in case of a loan default). Such agreements on investments can then be summarised in a portfolio.</td>
</tr>
<tr>
<td>Risk capital</td>
<td>Defined here as financing used for high-risk activities, high-reward investments, covering both debt and equity finance.</td>
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<tr>
<td>RSFF</td>
<td>Risk-Sharing Financial Facility</td>
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<tr>
<td>RSI</td>
<td>Risk-Sharing Instrument</td>
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<td>Small midcaps</td>
<td>Firms with up to 499 employees and which are not an SME, as defined in the Delegation Agreement for InnovFin (p. 13f.)</td>
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<td>SMEG</td>
<td>SME Guarantee, one of the 7 InnovFin products</td>
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<td>SMEs</td>
<td>Micro, small and medium enterprises up to 250 employees and up to an annual turnover of EUR 50m and/or annual balance sheet of up to EUR 43m, as defined in the Commission Recommendation 2003/3617EC</td>
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EXECUTIVE SUMMARY

Below we summarise the key findings, conclusions and recommendations of the interim evaluation of Horizon 2020’s (H2020) Financial Instruments. The assignment was carried out in the first half of 2017 for the European Commission (DG RTD) by the Centre for Strategy & Evaluation Services (CSES).

1. Objectives of the interim evaluation

The purpose of this interim evaluation was to assess the performance of H2020’s Financial Instruments (InnovFin) so far and to consider priorities for the remainder of the 2014-20 programming period and beyond. The following questions guided the research:

- How relevant have Horizon 2020’s Financial Instruments been to market needs?
- How effective and efficient has the implementation of InnovFin been?
- How coherent is InnovFin as a group of financial instruments and also with respect to other EU financial instruments and national support programmes?
- What is the EU added value of InnovFin?

2. Methodological approach

The study was carried out over five months during the first half of 2017. The main data collection tools were:

- Desk research, including a review of relevant literature and the operational reports provided by the EIF and EIB managing the programme (the latest reports available to us were dated 31 December 2016).
- Approximately 100 interviews were carried out with officials from the Commission (DG RTD, DG ECFIN, DG GROW), the EIB and EIF, national contact points of the Access to Finance Working Group, financial intermediaries using one or several of the InnovFin products, final beneficiaries receiving financial support under the programme, and other relevant stakeholders. The national interviews and other research were summarised in individual country reports and complemented by operational data.
- Focus groups were held in six countries (Austria, Belgium, Denmark, France, Germany, Italy) with representatives from neighbouring countries which were attended by Commission officials, EIF representatives, financial intermediaries and a few final beneficiaries. The focus groups served to discuss the preliminary findings of the study, to make cross-country comparisons and to consider ways of improving InnovFin.
- Two online surveys were also carried out. The first survey targeted financial intermediaries (of 107 intermediaries contacted, a total of 54 responded). The second survey focused on a sample of final beneficiaries (this received 35 responses which were analysed in a qualitative way).

3. Overview of InnovFin

The Horizon 2020 Financial Instruments are being implemented under the umbrella term ‘InnovFin’ in the 2014-20 Multi-Annual Financial Framework (MFF) period.

InnovFin consists of a debt instrument and an equity instrument, and is broken down into seven individual products: the SME Guarantee (SMEG); InnovFin Equity (which is split in four different components: InnovFin Technology Transfer, InnovFin Business Angels, InnovFin Fund-of-Funds, InnovFin Venture Capital); the MidCap Guarantee;
MidCap Growth Finance; Large Projects; Energy Demo (EDP); and the Infectious Diseases (IDFF) scheme. While primarily funded by H2020, the InnovFin programme has also received additional funding under the EFSI.

The European Commission expects the InnovFin programme to make more than EUR 24bn available in debt and equity instruments over the seven-year Multi-Annual Financial Framework period, and this is expected to leverage up to a further EUR 48bn of overall R&I funding, implying a leverage ratio of 2:1.\(^1\)

The seven InnovFin financial products are complemented by InnovFin Advisory which works alongside the EIB-managed InnovFin products and provides research, awareness-raising, and capacity-building services.

InnovFin’s general objective is to increase the supply of financial support to research and innovation (R&I)-driven enterprises and other relevant entities. The programme is also expected to contribute to H2020’s wider objectives, the Commission’s ten political priorities, and to the Agenda of Open Innovation, Open Science, and Open to the World. This reflects the rationale for setting up the programme according to which there are market deficiencies in both the debt and equity financing of innovative firms and projects across Europe that require public intervention if the aim of fostering the creation of new products and services, and ultimately generating economic growth and jobs, is to be achieved.

InnovFin builds on predecessor financial instruments from the 2007-13 MFF period, notably the SMEG, the InnovFin Equity within the Entrepreneurship and Innovation Programme, and Large Projects which builds on the Risk-Sharing Financial Facility. The other products are new. The programme’s implementation also needs to be viewed in the context of the European Fund for Strategic Investments (EFSI) which is used to frontload, and soon to top up, funding under InnovFin.

### 4. Key Findings - Evaluation of the InnovFin Financial Instruments

Overall, InnovFin represents a significant development in the provision of EU-supported innovation financing that builds on the more modest and rather disparate schemes that previously existed. Continuity is strong between some elements, e.g. the Risk-Sharing Instrument and the SMEG, and Large Projects and the Risk-Sharing Finance Facility (RSFF). Other aspects are new with the thematic products introducing a new type of financial support.

As at 31 December 2016, some EUR 7.42bn of InnovFin financial assistance had been committed to an estimated 5,780 final beneficiaries across the EU28 Member States and other eligible countries.\(^2\) These figures should be interpreted with caution since it is difficult to compare and aggregate the value of guarantees and loans, and because some firms may be a beneficiary of more than one product.

Overall, the research suggests that the InnovFin scheme is performing well against its objectives of improving access to finance for innovative companies and projects, and helping to address related market failures. To the extent that shortcomings have been identified, these are more to do with the implementation of particular InnovFin schemes than being inherent programme design faults. One key findings emerging from the research is that any proliferation of different InnovFin products should be avoided.

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\(^1\) European Commission. 2016. Open Innovation Open Science Open to the World. p. 25

\(^2\) Excludes the MidCap Guarantee product where data is not provided in the Operational Report
The specific findings relating to each of the seven products and InnovFin Advisory are as follows:

**There has been a high take-up of the SME Guarantee (SMEG) with many agreements signed with financial intermediaries and already more than several thousand loans made to final beneficiaries, covering almost all eligible countries.** Without the top-up provided by the EFSI, the resources available to the SME Guarantee would already have been exhausted. While the full delegation model adopted under the product is praised by financial intermediaries, there are concerns about the pricing of guarantees. There also seem to be misunderstandings regarding the correct application of the innovation eligibility criteria defined for the SMEG.

**Under InnovFin Equity, 10 deals with fund managers have been signed to date.** Due to the early phase of programme deployment, take-up and implementation in terms of commitments to final beneficiaries is still fairly low. Nevertheless, the evidence available at this stage suggests that fund managers benefited from participation in the equity scheme, pointing to considerable volume effects compared with non-InnovFin funded equity funds. Issues affecting the scheme’s implementation include the lack of home-grown fund managers in some markets, a lack of exit opportunities, and the general fragmentation of the European venture capital market.

**Take-up of the MidCap Guarantee scheme has lagged behind expectations and is considerably lower than that of the SMEG.** Some commercial banks have argued that the application process under InnovFin is too cumbersome, making them hesitant to apply for more than one financial product, and suggesting that the scope of the fully delegated and standardised SMEG should be widened to cover firms with up to 3,000 employees rather than having to sign a separate agreement under MidCap Guarantee. The EIB has reacted to this situation by going down the equity scale to provide quasi-equity and mezzanine financing to Midcaps.

**The MidCap Growth Finance scheme is performing reasonably well with a good number of signatures to date but the pipeline is rather low.** As with the Midcaps Guarantees, it could be argued that in recent years this market segment has tended to become ‘overbanked’ in terms of relatively cheap debt financing in the context of falling interest rates, at least in the Eurozone.

**The thematic products were launched one year later than the rest of the InnovFin programme. Take-up of Infectious Diseases has been reasonable whereas in case of Energy Demonstration it has been slow.** A high number of applications that have been put on hold suggesting that slow implementation may not entirely be due to a lack of interest among potential beneficiaries. There has been a tendency for projects to be put forward that are bankable, at least in theory, even if because of the circumstances on the ground they may struggle to obtain the financing to go ahead. Some stakeholders question the usefulness of thematic products, also from a branding point of view, and argue that Large Projects and other similar schemes could be used to fund such projects which would streamline the overall InnovFin product offering. Clearly, any introduction of new thematic products would need to be fully justified in order to avoid the emergence of a plethora of thematic products which could lead to over-fragmentation and undermine the profile of the InnovFin programme as a whole.

**The take-up to date of Large Projects has been strong with a total of EUR 4.5bn being committed to beneficiaries.** The pipeline also suggests continued demand despite the overlap with the EFSI’s Infrastructure & Innovation Window. Nevertheless, the further development of this product in the context of EFSI needs to
be closely monitored as it may be opportune to reallocate resources to other InnovFin products.

**InnovFin Advisory** is a useful feature of InnovFin with the potential to make an important contribution to the success of the scheme and to facilitate spillover effects. Its role in generating deal flow, especially in regions where uptake has been slow so far, could be further strengthened, possibly by decentralising its structure and integrating it with existing networks such as the Access to Finance Working Group and within the EFSI Advisory Hub.

5. **Geographical spread of InnovFin operations**

So far, the great majority of InnovFin activity has been in Western Europe but within this region take-up has varied quite considerably because of specific national factors. In Germany, for example, public promotional banks as well as commercial banks already offer financial support schemes that have quite strong similarities with InnovFin, reducing the demand for the SMEG and MidCap Guarantee. In other countries, however, the InnovFin financial instruments address market gaps and shortcoming.

The take-up of InnovFin in EU Member States in Central and Eastern Europe has lagged behind. Many enterprises in the region do not have a strong enough balance sheet to borrow from the EIB. There is also a misperception in many countries in terms of what constitutes innovative companies which could have reduced the number of applications. In general, there is also still a relatively weak system of intermediaries and innovation support in place in Central and Eastern Europe which slows down take-up of the InnovFin programme. However, it should also be noted that many firms have not applied for InnovFin support due the availability of other EU funding, mainly the Structural Funds (ESIFs) but also COSME.

Third countries eligible for H2020 support have generally not made extensive use of InnovFin so far. However, unlike grants provided under H2020, which tend to fund international projects involving partners from both EU Member States and accession countries, in case of InnovFin financing it is less obvious why projects exclusively benefitting accession countries should be supported.

6. **Cross cutting evaluation issues**

**Relevance** - InnovFin’s objectives of addressing market failures, strengthening risk capital provision and promoting R&I investment in Europe remain as relevant as ever. The scheme has proved responsive to changing market conditions with further changes under consideration. However, the definition of innovation, in particular in the context of the eligibility criteria used under the SMEG, remains a challenge for some intermediaries in adapting the programme to market needs.

**Effectiveness** - While it is still too early to evaluate the extent to which InnovFin will achieve its objectives, the programme has already contributed to a substantial increase in the finance available for innovative enterprises. The amounts committed to final beneficiaries are somewhat lower than what might be expected 2.5 years after the programme’s launch but this may be due to non-linear implementation and there is a strong likelihood that the available funding will be fully utilised by the end of the programme. It is difficult at this stage to measure the impact the programme is having on R&I investment rates at country and firm level, and this is likely to be possible only at the end of the programming period.

As regards the branding of InnovFin, many stakeholders appreciated the use of an umbrella label to market the programme more effectively. At the same time,
stakeholders stress the importance of continuity as programme changes and introducing new products can confuse both financial intermediaries and final beneficiaries. Case studies were mentioned as the most effective means of communicating the benefits of the programme.

**Efficiency** - InnovFin is being efficiently implemented and the costs of managing the products seem to be in line with expectations of financial intermediaries and the Commission. However, some financial intermediaries consider the application procedure to be excessively burdensome. Reporting procedures are also considered too demanding by some and there is an issue for many commercial banks of having to make costly adaptations to IT systems in order to track InnovFin-supported projects for monitoring and reporting purposes to the EIF.

In addition to take-up, leverage is an indication of how well InnovFin is helping to mobilise private sector investment in innovation, an important aim. Comparing the target leverage effect with the actual one achieved, the EIB-managed instruments as a whole are performing quite well (11.2 actual leverage effect vs. 12.5 target), while the SMEG (4.8 vs 9.0) is somewhat lower; the result for Equity (0.2 vs 6.0) can be explained by the specific nature of equity funds which take more time to yield results.

**Coherence** - With regard to coherence, the debt instruments are clearly differentiated from one another, and InnovFin Equity complements them. There is a case, however, for strengthening the link between the debt and equity instruments. The link could also be strengthened between final beneficiaries receiving a grant under H2020 and the provision of equity or loan finance at a later stage. In relation to external coherence, InnovFin is broadly coherent with other EU programmes, including COSME. Looking ahead, a key question is the relationship with EFSI 2 and the ways in which complementarities between InnovFin, COSME, EFSI and other EU funding sources can be maximised.

In the SME Window, EFSI funding has been used to ‘top up’ the SMEG, and the funding has therefore been complementary. However, within EFSI’s Infrastructure & Innovation Window, there is evidence of overlaps and competing funding available through the IIW for large projects and MidCaps on the one hand, and InnovFin on the other. One way to address this could be to clearly delineate the two programmes, for example, in terms of geographical coverage, where InnovFin is wider in scope than EFSI.

With regard to COSME, while coherence between this and InnovFin SMEG may have proved challenging at the beginning, it seems that since then each has found its own niche. On the equity side, there is less of a risk of overlap between COSME and InnovFin equity, since the latter focuses on particularly risky investment, for example, in the area of technology transfers. A viable alternative to the current set-up would have been not to have separate instruments but instead to have combined them within a single programme, which would have been easier to explain to financial intermediaries.

In terms of the extent of coherence between InnovFin and national loan guarantee and VC programmes, there is strong coherence, especially in respect of innovation financing for SMEs (the dual focus on SME Guarantees and on InnovFin Equity). The fact that similar support is already available in some Member States is not seen as duplicative, since there is evidence of sufficient demand to absorb additional funds. A small number of national guarantee institutions are concerned that EIF-backed guarantee products risk crowding-out equivalent national schemes, however.

**EU added value** - Overall, added value is generally high but with some variation between InnovFin instruments and between countries. There is evidence of
additionality of scale, with intermediaries under the SMEG increasing loan volumes, and scope, with new riskier market segments being covered thanks to the programme and cross-border investments being promoted. From a commercial bank perspective, the SMEG has clear added value helping banks to access new market segments that would otherwise have been considered to be too high-risk for debt-financing without a guarantee in place.

Overall, the research suggests that the InnovFin scheme is performing well against its main objectives of improving access to finance for innovative companies and projects, and addressing market failures. To the extent that shortcomings have been identified, these are more to do with the implementation of particular InnovFin schemes rather than being inherent programme design faults. The research suggests that InnovFin has proved responsive to changing market circumstances and changes in the EU policy support environment with some adjustments already in place and others under consideration. At the interim stage, it is not possible to evaluate the longer-term impact of the InnovFin financial instruments on innovation and economic growth in Europe. This will only be possible towards the end of the programming period, with some of the full impacts materialising and being evaluable even later.

7. Recommendations

The study results suggest that some modifications could be made to enhance InnovFin’s performance and make it ‘future-proof’. In summary:

- **Recommendation 1:** The additional EFSI funding that is likely to be made available to the SME Guarantee should be used to help extend the scope of the guarantees.

- **Recommendation 2:** The correct interpretation and application of the innovation eligibility criteria used in the case of the SMEG should be more clearly communicated.

- **Recommendation 3:** The scheme’s effectiveness should be enhanced by taking into account external factors in local markets such as the existence of home-grown fund managers, availability of exit opportunities, and fundraising cycles.

- **Recommendation 4:** The eligibility criteria of the thematic products should be extended to develop the pipeline and to introduce a platform approach with the EIB cooperating with a private sector manager to run the platform and InnovFin resources being used to provide downside investor protection.

- **Recommendation 5:** A proliferation of different InnovFin financial products should be avoided.

- **Recommendation 6:** The take-up of InnovFin in Central and Eastern Europe should be encouraged through measures such as awareness-raising and a further strengthening technical support to develop capacity and increase investment readiness.

- **Recommendation 7:** More emphasis should be put on awareness-raising and developing effective signposting mechanisms for InnovFin (and other financial products) at a regional and national level in EU Member States.

- **Recommendation 8:** The national contact points of the Access to Finance Working Group should receive training to ensure they are informed about the
InnovFin programme and its possibilities in a national context.

- **Recommendation 9**: Ways to strengthen cross-border cooperation between Member States and accession countries through InnovFin should be explored, for example, through umbrella agreements with EU-based financial intermediaries operating in third country markets.

- **Recommendation 10**: A more decentralised structure for InnovFin Advisory should be developed to facilitate the reaching of target groups across the EU28 Member States and beyond, for example, by working together with the JEREMIE Co-Investment Fund and the EBRD and the EFSI Advisory Hub.

- **Recommendation 11**: Consideration should be given to combining COSME and InnovFin, at least their equity instruments, in the next MFF.

- **Recommendation 12**: A long-term perspective for InnovFin in the context of the ninth Framework Programme should be developed, taking into account likely budgetary constraints and the ongoing economic recovery in Europe, by further emphasising the need for additionality and leverage effects.

- **Recommendation 13**: The system of intermediaries to support the implementation of EU-supported financial instruments should continue to be developed, especially in regions where their capabilities are currently quite limited.

- **Recommendation 14**: The visibility of InnovFin should be increased by clearly labelling projects and highlighting firms that receive funding and making them more easily identifiable in the EIB’s website.

- **Recommendation 15**: The operational reports should be streamlined across the InnovFin portfolio, collecting and presenting data in the same manner on key variables for all seven products.
1. **INTRODUCTION**

This document contains the final report for the assignment ‘Interim Evaluation of Horizon 2020’s Financial Instruments’ which was carried out in the first half of 2017 for the European Commission’s DG RTD by the Centre for Strategy & Evaluation Services (CSES), supported by Oxford Research and other members of the consortium.

1.1 **Objectives of the interim evaluation**

The purpose of the interim evaluation was to address a number of key questions in relation to InnovFin:

- What is the current situation, and how has it evolved since the financial instruments were launched?
- How effective have the InnovFin financial instruments been?
- How efficient has the intervention been?
- How relevant are the financial instruments?
- How coherent are they both as a group of products and also with respect to other EU financial instruments and national support programmes?
- What is the EU added value?

DG RTD’s terms of reference highlighted a number of more specific key questions for the interim evaluation which are listed in Appendix 1 (Research Framework). The scope of the evaluation encompassed the seven InnovFin financial products (Large Projects, MidCap Growth Finance, MidCap Guarantee, Energy Demo Projects, Infectious Diseases, SME Guarantee, and InnovFin SME Venture Capital schemes) and covered the 43 countries that are eligible to make use of the financial products.

As is the case with any interim evaluation, in addition to providing an assessment of the performance of InnovFin so far, an important aim of the evaluation was to consider priorities for the remainder of the programming period and beyond. Another implication of this being an interim evaluation is that it was not possible to evaluate the full impacts of the InnovFin interventions – this will only be possible in an ex-post evaluation at the end of the programming period.

The data for the interim evaluation was collected over a three-month period at the beginning of 2017.

1.2 **Methodological approach**

This interim evaluation has been carried out in three phases:

- **Phase 1: Preparatory tasks** – a set-up meeting with DG RTD and preliminary interviews, desk research, finalisation of the methodological approach, and inception report.
- **Phase 2: Survey work, interview programme, case studies, and interim reporting** - an online survey, an interview programme, and a number of focus groups. Preparation of a first and second interim report.
- **Phase 3: Evaluation and final report** – detailed analysis of the research findings and preparation of a draft final report, discussions with DG RTD and finalisation of the report.
The following diagram provides an overview of the work plan and timescales used for the assignment:

Figure 1.1 - Overview of Work Plan

Most financial data presented in this report are based on the Operational Reports. The latest versions of these reports at the time when the research was undertaken were dated 31 December 2016. Apart from the time lag, a number of complications in analysing the data should be noted:

Firstly, there were complications providing an analysis separately for each financial product given that the EIB reports on all the products it manages jointly, and sometimes uses terms and abbreviations from the Seventh Framework Programme (FP7) such as GFI instead of MGF for MidCap Growth, and RSFF instead of Large Projects. Moreover, disaggregated data on the EIB-managed products’ target and leverage effects is not available. This is problematic since it means it is not easy to evaluate the effectiveness and efficiency of each of the financial products individually, taking into account the specific market deficiencies they respectively seek to address.

Secondly, the early stage of implementation of some of the financial products, in particular the InnovFin Equity and the thematic products, and the fact that there have been several modifications to the InnovFin programme in recent months, raised the problem of trying to evaluate a ‘moving target’. Changes such as the use of EFSI to top up the SME Guarantee product (SMEG), and the conversion of SME Venture Capital (VC) product into InnovFin Equity and the separation of this instrument into four separate components will take time to have measurable impacts (although an increase in the pipeline for InnovFin Equity suggests that the redesign has ‘unlocked’ potential demand). Moreover, the multi-country focus of most of the funds signed up under InnovFin Equity makes it hard to evaluate its implementation across different eligible countries at this stage. In terms of data availability, one suggestion is for the
EIB to ensure that the press release database allows to search specifically for InnovFin transactions and to make sure that all relevant projects and intermediaries supported under InnovFin (including those that are also EFSI-backed) can easily be identified via the individual InnovFin product pages.

Thirdly, the fact that two InnovFin products are managed by the EIF, and reported on in two different Operational Reports, whereas the other five financial instruments are managed by the EIB and reported on jointly in one Operational Report, makes it more difficult to compare performance of the various products. This is particular the case for the EIB-managed instruments where key data is only reported in aggregate format, rather than being disaggregated by individual product. This is due to the fact that the EIB receives a single budget allocation for the five products it manages. Moreover, the EIB’s Operational Report does not include data on the amount of funding committed to final beneficiaries under the MidCap Guarantee product, but only the amounts committed to financial intermediaries. This makes it difficult to compare that product’s effectiveness to that of the other six InnovFin products.

Research methods

Turning to the research methods, in addition to desk research to analyse InnovFin monitoring data and other secondary material, around 100 interviews were carried out across the 43 countries that can benefit from the InnovFin programme (the EU28 and 15 associated countries).

In addition to the country-level research, focus groups were carried out in six countries (Austria, Belgium, Denmark, France, Germany, Italy) with in several cases representatives from neighbouring countries (the Czech Republic, Netherlands) taking part. The participants included representatives from the European Commission (Brussels focus group), EIF, National Promotional Banks, financial intermediaries, and final beneficiaries. The focus groups served to discuss key issues and the emerging findings of the study. Finally, face-to-face meetings took place with the EIB, the EIF, and representatives from DG ECFIN, DG GROW, and DG RTD.

Two online surveys were also carried out. The first survey targeted financial intermediaries (of the 107 intermediaries contacted, a total of 54 responded, mainly implementing the SME Guarantee product meaning that the survey results cannot easily be generalised beyond that particular product). The second survey focused on a sample of final beneficiaries. The 35 responses received are not representative given that there are more than 1,000 beneficiaries but the survey nevertheless provided a valuable source of qualitative feedback from the end users’ point of view. Details of the types of stakeholders consulted in the interview programme and a breakdown of the survey responses by country can be found in the appendices.

1.3 Structure of the Final Report

The final report is structured as follows:

- **Section 2: InnovFin financial instruments and context** – summarises InnovFin’s objectives, key features of the different types of financial instruments, how they promote Horizon 2020, and how the programme fits into the wider context of innovation financing and macroeconomic trends.
- **Section 3: Evaluation of financial instruments** - uses the InnovFin monitoring data (as at 31 December 2016), the desk research and the feedback from the interview programme and focus groups to evaluate implementation to date and the performance of the individual financial products.
- **Section 4: Cross-cutting issues** - provides an assessment of the key evaluation issues – relevance, coherence, efficiency, effectiveness, and added value.
- **Section 5: Conclusions and recommendations** - presents the overall
conclusions of the interim evaluation and recommendations.

The final report includes a number of appendices, namely a list of interviews, supporting data for the assessment of monitoring data in Section 3, and a tabular overview of coherence between InnovFin and other EU support financial programmes.
2. **INNOVFIN FINANCIAL INSTRUMENTS AND CONTEXT**

2.1 **Horizon 2020 and the challenge of innovation financing**

Horizon 2020\(^3\) is the EU’s Framework Programme for research and innovation (R&I) for the 2014-2020 period providing EUR 78.6bn, an increase of EUR 30bn compared with its predecessor, FP7 in 2007-2013.\(^4\) Figure 2.1 shows a breakdown of budget allocation between Horizon 2020 priorities.

**Figure 2.1 - Horizon 2020 budget**

Source: Factsheet: Horizon 2020 budget

The majority of the H2020 resources are allocated to the three pillars of the programme *Excellent Science* (including European Research Council and Marie Skłodowska Curie actions), *Industrial Leadership* and *Societal Challenges*. InnovFin financial instruments are supported under Pillar 2, *Industrial leadership*, and within that through the Access to Risk Finance priority which helps SMEs, mid-caps and large firms and other types of organisations engaged in R&I gain easier access, via financial instruments, to loans, guarantees, counter-guarantees and hybrid, mezzanine and equity finance.

The H2020 financial instruments build on the legacy and experience of the financial instruments supported by the *Entrepreneurship and Innovation Programme* (EIP)\(^5\), the Competitiveness and Innovation Framework Programme (CIP) and on the experience gained by DG RTD in implementing the Risk Sharing Instrument (RSI) pilot\(^6\) under the Risk Sharing Finance Facility (RSFF) in FP7. InnovFin aims to leverage private finance and to counteract financing gaps and market deficiencies in investment in R&I (see Section 2.2).

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4 Universities UK and Briefing – Horizon 2020 budget


6 RSI was a guarantee scheme managed by EIF in the 2007-2013 programming period launched in cooperation with the EIB and the EC (the InnovFin SME Guarantee Facility is the RSI’s successor programme under Horizon 2020).
Innovation finance – market context

The InnovFin programme is being implemented in a post-financial crisis context. For much of this period, Eurozone countries have experienced economic stagnation with persistent levels of high unemployment in southern Europe.

The financing of innovation is associated with higher risk but also higher returns than the financing of most other activities. The difficult macroeconomic environment aggravated the problem of a lack of finance for R&I which is needed to ensure European companies can maintain and improve their competitiveness in global markets. All in all, this means that Europe still falls short by an estimated EUR 130bn a year of its target of 3% of GDP being invested in R&I. This gap is accounted for by EUR 70bn of private sector R&I spending and EUR 50bn of public sector spending. On the innovation output side, one consequence is that over 30% fewer patents are filed per EU citizen than per US citizen. An EIB study comparing investments in intangible assets (including R&I) in 18 European countries and the US found that such investments had decreased in both regions during the recent economic crisis but had recovered in the US whereas they remained low in Europe. This was partly due to lower government investment in R&I compared to the US.

The figures cited above reflect a general market deficiency in the provision of innovation financing in the EU. On the one hand, financial institutions regard the risk and payback as too uncertain while enterprises often have difficulties providing sufficient collateral. As a consequence, investment in such innovative firms, especially SMEs, is at a suboptimal level from a macroeconomic point of view. Investment in Member States was still between 0 and 27% below pre-crisis level in 2016.

On the demand side for innovation finance, R&I-driven companies ideally need seamless and continuous financial support along the ‘funding escalator’, starting at company set-up and when developing product/service prototypes and all the way through to commercialisation and expansion into international markets (if desired). In practice, innovative enterprises face the two related funding gaps, known as the “Valleys of Death”, when trying to obtain funds for a new idea and when launching and commercialising products and services (but also when merely trying to absorb new technologies and know-how developed by others). This occurs for both new start-up micro and small enterprises and established medium-sized and large firms.

Another challenge is that innovative companies face access to finance issues in R&I in different contexts, for example when there is a rapid rate of company creation and a highly dynamic technological environment; where there is high level of capital intensity; and where there are long lead times to commercialisation and profitability. This is especially so in sectors such as biotech, pharmaceuticals, healthcare, energy, some ICT – all sectors where innovation plays a crucial role and which are targeted through Horizon 2020. The situation is exacerbated by the fact that Europe’s financial markets are still quite fragmented with cross-border capital flows into less developed Member States and regions also still below pre-crisis level.

However, it is also worth pointing out that demand for innovation finance varies considerably across Europe, with large firms in Northern and Western Europe accounting for the majority of R&I expenditure and corresponding financing demand. One reason why Eastern Europe lags behind is that large firms in this region are often

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7 EIB. Restoring EU competitiveness 2016 updated version p. vii
8 Ibid.
9 EIB Working Papers 2016/08. Intangible investment in the EU and US before and since the Great Recession and its contribution to productivity growth
10 EIB. Investment and Investment Finance in Europe. Financing productivity growth. p. 5
11 Ibid. P. 7
former state-owned monopolies (e.g. telecoms, utilities) with well-established business models that are less driven by innovation. Moreover, small firms and MidCaps in the region are still generally smaller and generally need less finance than their Western European counterparts. This is compounded by the fact that salaries for researchers in the region tend to be a fraction of those in Western Europe, meaning that the ticket size of company research projects is often too small to attract international investors. Moreover, a larger share of economic activity in Eastern Europe is accounted for by subsidiaries of multinational firms which may centralise their R&I activities at headquarters level, usually outside the region.

Another useful insight into demand-side issues is provided by the European Commission’s ‘Innobarometer’ on EU business innovation trends. The latest report (2016\(^\text{12}\)) is based on responses from 13,112 companies and compares countries’ R&I intensity. The report ranks countries in terms of the share of turnover that companies invest in innovation activities. The list is led by Finland, Austria and the Czech Republic, with the UK, France, and Romania at the bottom. In countries where companies invest relatively little or rarely in R&I, demand for InnovFin schemes may be lower than in others. This can only provide a rough guide, however, since the level of innovation activity differs widely between sectors within different countries.

According to the survey, 28% of firms said that a lack of financial resources was one of the two main reasons for not investing in innovation. Lack of financial resources was the main reason in 11 EU Member States. For example, half of the companies in Cyprus that participated in the survey gave this explanation, whilst more than four in ten companies in Greece (43%), Bulgaria (42%) and Croatia (41%) said this was why they were not investing in innovation. This is in contrast to small proportions of companies in Malta (7%), Denmark (7%) and Sweden (8%) that considered lack of suitable finance to be the main reason they did not invest in innovation. Excluding any other factors, this would suggest that demand for InnovFin instruments should be higher in countries such as Greece and Bulgaria than Denmark and Sweden. On the other hand, the lack of suitable financial intermediaries, and the generally lower levels of investment in innovation in Greece and Bulgaria may indicate that actual take-up of the InnovFin financial instruments is likely to be lower than in countries such as Denmark and Sweden.

Another survey that is relevant to this study is the Survey on the Access to Finance of Enterprises (SAFE) which is regularly carried out by the European Commission and the European Central Bank. The latest edition\(^\text{13}\), contains data from EU Member States and EU Accession Countries. The data shows that in 2016, more SMEs reported an improvement in the availability of finance than a deterioration but that the majority experienced no change.\(^\text{14}\) Bank loan rejection rates were rather low in most countries, ranging from 2% in Romania to 9% in Poland, but in a few countries (Denmark, Greece, Latvia, Lithuania and the Netherlands) rejection rates were considerably higher, ranging from 16 to 20%.\(^\text{15}\) The report also shows the share of respondents for whom access to finance was the most important problem faced in the past six months.

The data show that access to finance decreased as the most pressing problem between 2011 (when it was considered the most pressing problem by 15% of respondents) and 2016 (9%).\(^\text{16}\) However, this trend conceals stark differences. Whilst in Estonia, Germany and the UK, access to finance was the most pressing problem in 2016 only for 6% of responding enterprises, this was the case for 24% of Cypriot and Greek respondents. In the survey, of those enterprises (from micro to large firms) who did not apply for bank loans even though they would have

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12 Flash Eurobarometer 433. Innobarometer 2016 – EU business innovation trends
13 European Commission, 2016, Survey on the access to finance of enterprises (SAFE)
14 Ibid. P. 67
15 Ibid. P. 43
16 Ibid. P. 134
liked to, most quoted high interest rates (especially in case of micro enterprises and SMEs) and too much paper work as reasons. Insufficient collateral seems to have played a smaller role.17 Greece is the only sample country where a sizeable share of SMEs would have liked to apply for a bank loan in the past three years but did not do so because of possible rejection. Overall, interest rates have gone down considerably in all sample countries since 2013. These figures suggest that bank lending to SMEs has improved in recent years but firms still face obstacles, mainly because of interest rates still being too high.

Besides these publications and data sources looking at the general access to (risk) finance situation across Europe, in the context of the launch of the InnovFin programme, a range of studies were carried out looking at the access to finance situation in specific high-risk, high-innovation sectors.

One study carried out by InnovFin Advisory looked at the ‘circular economy’18, i.e. the re-use, repairing and recycling of products, components and materials in the economy. The transition towards a circular economy is expected to yield substantial economic and social benefits, but investment in this sector is not directly mandated by the InnovFin programme’s objectives (see Section 2.3). The study concluded that while market forces could create a circular economy on their own, public support could accelerate this process and would reduce the EU’s dependence on imported resources as well as bring about societal and environmental benefits sooner. On its own, companies will hesitate to invest in this transition due to the high volatility of resources’ prices, making it more or less profitable over time to invest in resource-saving measures.

A second study prepared by InnovFin Advisory considered the access to finance conditions for ‘Key Enabling Technologies’ (KET) companies19. The European Commission focuses on four areas in the context of KETs: nanotechnology, biotechnology, advanced manufacturing and processing, and advanced materials. The study identified a market gap in debt financing for KETs companies due to the conservative attitude of banks towards such business models when companies lack adequate assets and guarantees and due to a lack of knowledge within banks of KETs and a cash-flow-based lending approach. This suggested there is a case for InnovFin to engage in capacity-building among potential financial intermediaries in this sector.

In preparation of the InnovFin Infectious Diseases pilot scheme (see Sections 2.2 and 3.8), InnovFin Advisory found that financial constraints in the healthcare sector limited the investment made in researching treatments and cures for infectious diseases, which constitute a global societal challenge. The study also found that the purchasing power of patients affected by such diseases is on average lower than that of patients affected by other conditions. As a result, pharmaceutical companies prefer to invest in chronic disease drugs. Public support could help European pharmaceutical companies gain a competitive edge in this market.

Existing research sheds light on how access to risk finance for innovators varies between countries and on differences between countries as to whether and what market deficiencies exist.

Starting with equity, the situation across different EU Member States with regard to demand- and supply-side factors influencing the take-up of relevant financial instruments such as those falling under the InnovFin programme is discussed in more detail in a recent study by CSES for DG RTD (2015): Assessing the Potential for EU Investment in Venture Capital and Other Risk Capital Fund of Funds. This found that in

17 ibid. P. 14
18 InnovFin Advisory. 2015. Assessment of access-to-finance conditions for projects supporting Circular Economy
19 InnovFin Advisory. 2016. Access-to-finance conditions for KETs companies
some Southern European countries, VC markets are relatively under-developed, whereas in other countries, such as France, Germany, Scandinavia and the UK, VC markets are more mature. Overall, a small number of countries account for a high proportion of the EU-28 VC market activity.

In some of the newer Member States, although there has historically been a lack of equity investment available for start-ups and early growth stage firms, VC markets have developed quickly, driven by EIF-backed fund of funds (e.g. in Poland) and by other EU-financed VC investments, such as the JEREMIE holding fund (e.g. in Bulgaria, Cyprus, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia). Generally, VC investments tend to be concentrated in a limited number of hubs across Europe. Thus, 40% of EIF-backed investments between 1996 and 2014 were concentrated in 20 European cities, and 83% of all invested amounts originated in those hubs. In the European VC market as a whole, the EIF estimates that its investments accounted for 41% of total investments in 2014. These findings suggest that the European VC market is rather concentrated geographically, and heavily reliant elsewhere on public support at a European level.

A presentation by the EIF made in 2016 showed European equity investments were increasingly producing exits on a scale of more than US$100mn (either through mergers and acquisitions or through initial public offerings). On the other hand, Invest Europe, the European association representing private equity funds, in its 2016 annual report showed that 3,500 European companies exited in 2016, representing EUR 38.9bn of former equity investments, down 14% from 2015, demonstrating that the European equity market is highly volatile. A lack of exit possibilities may also be related to the fact that stock market capitalisation of EU-based companies is only about half that of US companies. Equity investments in European companies remained stable in 2015-16, with an overall investment of EUR 53.7bn in the latter year, but benefited 7% fewer firms than in 2015. Worryingly, matching US levels of venture capital financing as a share of GDP would require around EUR 35bn a year (based on 2014 data) in additional venture capital investments in the EU.

With regard to debt, which due to the relatively high dependence on banks in European financial markets is of key importance in innovation finance, access to finance generally suffers from fewer market deficiencies than in case of equity, with some notable exceptions. The World Economic Forum gives the EU28 a score of 1.7 in 2015 in terms of access to loans, compared to a score of close to 4 (out of a total of 7) in the US. While the European Central Bank’s ‘quantitative easing’ measures, which began in 2010, have helped to make credit more readily available and reduced the spread of interest rates between Eurozone countries, high private-sector debt levels and a high ratio of non-performing loans are restricting banks’ lending capacity. These factors constrain European banks’ capacity to take on more risk which in turn means that the increased liquidity that is available does not translate into the right kind of risk financing instruments, with adverse effects on companies’ capability to innovative and maintain or enhance their competitiveness.

On top of general risk averseness according to an EIB study non-performing loan ratios are increasing in some Eurozone countries, demonstrating an actually increasing

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21 EIF, European Commission. The Equity Steering Committee for COSME and Horizon 2020 Equity Facilities 5th Meeting of the Equity Steering Committee. Brussels 09 November 2016
22 EIB Restoring EU competitiveness 2016 updated version p. viii
23 Invest Europe. 2016 European Private Equity Activity. Statistics on Fundraising, Investments & Divestments
24 EIB Restoring EU competitiveness 2016 updated version p. viii
26 EIB, 2014, Unlocking lending in Europe
risk of new lending in these countries. The report states that credit guarantee schemes (as foreseen under InnovFin) may enhance banks’ risk-taking capacity through risk sharing, in the process helping SMEs in particular to obtain access to finance. While guarantee schemes could be set up in cooperation by private sector investors in theory, this often does not happen in practice in a market where most actors are risk-averse and in competition with each other, thus creating the case for public intervention to address a market shortcoming.27

The EIF in 2015 published a working paper28 that looked at the economic impact of the EU SME Guarantee Facility 2005-12, a predecessor of the SME Guarantee product under InnovFin, in Central and Eastern Europe. Based on administrative data and firms’ financial accounts, the study found that firms benefitting from the scheme were, on average, able to increase the size of their workforce by 17.3% compared with firms in a control group, within the first five years following the issuance of the guaranteed loan. Turnover was 19.6% higher over the same period. While it is not possible to generalise findings from a single study, the research does suggest that loan guarantee schemes can have a positive effect for firms, such as SMEs, which struggle to access finance due to their risk profile, especially in countries with relatively less developed financial markets.

Previous evaluations and other research have tended to focus on access to finance (including innovation finance) for SMEs and, to a lesser extent, on small MidCaps, but there has been much less attention given to MidCaps and large firms. This is surprising given the role large firms play in innovation, as the case of the US demonstrates, where the VC ecosystem developed in the context of the Cold War and research funds given to large firms, and only later facilitated the creation of new start-up companies. Large firms are also responsible for the majority of R&I expenditure in Europe, according to the EIB. CSES provided Technical Assistance to the Operations Evaluation Division of the EIB in the Framework of the Evaluation of the EIB Group’s Contribution to the European Knowledge Economy (2007-2013).

This found that the availability of large loans (at preferential rates) from the EIB to fund R&D activities was crucial in many sectors (e.g. automotive, clean energy) since bond markets had dried up during the economic and financial crisis. Moreover, access to large loans to finance innovation was also crucial for universities seeking to upgrade their research infrastructure in Western Europe because of public sector funding constraints. Whereas in Central and Eastern Europe such projects might be financed through the ESIFs, insufficient funding was available for this purpose in some EU15 countries (e.g. Germany).

The ex-ante evaluation’ Financial instrument facilities supporting access to risk finance for research and innovation in Horizon 202029, which also informed the intervention logic later in this report, found that two aspects of additionality could be distinguished: firstly, financial additionality - which results from targeting an intervention where the market capacity to deliver is lacking, where the R&I can be funded under better terms and conditions through the intervention, the portfolio of financial liabilities is diversified, and the intervention leads to additional investment from other sources; and secondly, policy additionality - where the promoter’s capacity to undertake R&I is enhanced or preserved, and where commercialisation that contributes to a strengthening of EU competitiveness is accelerated.

27 Ibid. P. 30
28 EIF Working Paper 2015/29 - The Economic Impact of EU Guarantees on Credit to SMEs - Evidence from CESEE Countries
29 European Commission (2013) Financial instrument facilities supporting access to risk finance for research and innovation in Horizon 2020, p.32
Conclusions: problems and needs to be addressed by InnovFin

As this section has shown, there are several obstacles to an optimal level of investment in R&I in the European economy. The data summarised in the paragraphs above suggests that access to finance for SMEs has become less of a problem in the past three years in the EU28, meaning that public support programmes need to be tailored to specific target groups such as R&I-driven beneficiaries in order to ensure additionality and avoid crowding out private investment. The access to finance situation for MidCaps and large firms is less researched, but some studies point to added value of public support schemes in providing finance to such firms. The need for financial support as provided by InnovFin across the EU and Accession Countries is further explored in Section 4.1 (relevance) of this report.

A further conclusion is that access to equity funding, especially for small, innovative businesses, remains limited. Furthermore, high private-sector debt levels and a high ratio of non-performing loans are restricting banks’ lending capacity. This is significant due to the heavy reliance of the European economy on debt finance. In this context, investors are reluctant to provide finance to innovative firms, and SMEs in particular, who are considered high-risk. This constitutes the rationale for InnovFin: the scale of demand for financing, combined with the limited supply of public resources, means that additional capital flows need to be leveraged to fill the gap.

2.2 Overview of InnovFin

The Horizon 2020 Financial Instruments are implemented under the umbrella of the InnovFin programme (‘EU Finance for Innovators’). The programme was launched on 12 June 2014 for the 2014-20 programming period through the Access to Risk Finance priority under Pillar 2 (Industrial Leadership) of Horizon 2020 (H2020), the EU’s Framework Programme for research and innovation (R&I).

InnovFin consists of a debt instrument and an equity instrument, and is broken down into seven products: the SME Guarantee; SME Venture Capital (in the autumn of 2016 renamed InnovFin Equity, which is split up in four different components InnovFin Technology Transfer, InnovFin Business Angels, InnovFin Fund-of-Funds, and InnovFin Venture Capital); MidCap Guarantee; MidCap Growth Finance; Large Projects; Energy Demo; and Infectious Diseases. While primarily funded through H2020, the InnovFin programme has also received additional funding from the EFSI.

The diagram below shows how the different InnovFin components fit into the overall programme. Taken together, InnovFin covers the entire life-cycle of R&I-driven firms, from start-up to risky projects undertaken by large firms. However, there is no automatic mechanism by which a firm benefitting from the SME Guarantee, for example, can also receive funding under another InnovFin financial instrument, for example Large Projects, once it has grown into a larger firm.
The European Commission expects the InnovFin programme to make more than EUR 24bn available in debt and equity instruments over the seven-year period of the Multi-Annual Financial Framework 2014-2020, and this is expected to leverage up to a further EUR 48bn of overall R&I funding, implying a leverage ratio of 2:1.\textsuperscript{30}

The European Commission has entrusted the day-to-day management of the programmes to two entities: the EIF manages the SME Guarantee and InnovFin Equity whereas the EIB manages the MidCap Guarantee, MidCap Growth Finance, Large Projects, Energy Demonstration and Infectious Diseases products. The seven InnovFin financial instruments are complemented by InnovFin Advisory which works alongside the EIB-managed InnovFin products and provides guidance to financial institutions acting as intermediaries and to firms that are eligible for funding on how to improve the bankability of projects and on in access to finance generally in different sectors and countries.

Due to its demand-driven nature, the InnovFin programme is constantly adapting to changing market needs. The InnovFin programme and its individual products are currently undergoing substantial revision: thus, in a seventh amendment to the InnovFin Delegation Agreement with the EIB and EIF, the following changes are proposed:

- Turn the ‘frontloading’ of EFSI funds in the SME Guarantee product into a top-up and add another EUR 280m (EUR 150m from Horizon 2020 and EUR 130m from EFSI) to expand the coverage of the SMEG to include subordinated loans. This will increase the overall budget of the SMEG from EUR 1.06bn to EUR 2.09bn.
- Transform the five EIB-managed products into two portfolios – one for debt and one for quasi-equity. There would also be a shift in focus to thematic instruments and an increase in their deployment through a higher loss coverage to support in higher risk equity-type operations.
- Focus EIB support on those countries and risk segments constrained under or excluded from EFSI.

In addition, two new facilities will be created under EIB management: InnovFin Research Institutes, Universities, Research Organisations Facility (RIURO); and InnovFin Moderate and Modest Innovator Countries and Associated Countries Facility (MMI). The Thematic Investment Platforms will also be set up engaging one intermediary per platform (one example is a “Circular Bio-economy Investment Platform Facility”). EFSI funds will be combined with EIB products to provide quasi-equity finance, and additional budgetary support will be provided to InnovFin Advisory to expand and to accelerate the deployment of funds. These changes are likely to come into effect in early June 2017.

2.3 Intervention logic

InnovFin’s primary objectives

The InnovFin programme’s general objective is to increase the supply of direct and indirect financial support to research and innovation (R&I)-driven enterprises (covering the full spectrum from SMEs to large caps), universities, public research organisations, R&I infrastructures and innovation-enabling infrastructures and other entities.  

As per the Delegation Agreement signed between the European Commission and the EIB and EIF, the specific objectives of InnovFin are to:

- Increase private investment in research and innovation;
- Provide a range of debt and equity financing products and facilities in line with the variety of potential final beneficiaries at different developmental stages, seeking access to risk finance for research and innovation;
- Increase the debt and equity financing of research and innovation in terms of the number of firms and other entities funded and the volume of funding mobilised.

The ex-ante evaluation carried out before setting up the InnovFin programme also presented the three specific objectives above, and three additional ones relating to equity financing, namely:

- Strengthen the EU’s venture capital industry in terms of its ability to attract institutional and other investors and to operate on a pan-European basis;
- Increase the involvement of business angels in funding R&I;
- Increase investments in technology transfer in terms of the number and volume of deals.

These are what can be described as ‘intermediate’ objectives. Thus, an increase in the number and volume of technology transfer deals can be regarded as ‘results’ indicators rather than impact indicators. What is missing from the documentation related to InnovFin’s set-up is an overarching strategic objective that would allow to assess the long-term impact of the programme. Such a strategic objective for InnovFin could be to contribute to an ecosystem that helps enterprises at all development stages to innovate and this, together with the associated benefits in terms of job creation, and the enhanced growth and competitiveness of the European economy, are what can be described as the ‘final’ objectives and anticipated impacts of the intervention.

The above objectives are complemented by a range of secondary objectives relating to the policy context in which InnovFin has been launched:

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31 As per Delegation Agreement and EC Communication Strategy
32 As per ex-ante evaluation, p. 34-36
General objectives

As part of Horizon 2020’s ‘Access to Risk Finance’ pillar, InnovFin can also be expected to contribute to achieving other Horizon 2020 objectives, namely:\(^{33}\):

- **Excellent Science**: reinforce and extend the EU’s science base and consolidate the European Research Area;
- **Industrial Leadership**: accelerate development of technologies and innovations and help innovative European SMEs to grow into world-leading companies;
- **Societal Challenges**: stimulate research and innovation efforts in areas such as health, food security, secure and clean energy, etc.;
- Spread excellence and widen participation by addressing disparities across Europe in R&I performance; and
- Strengthen social and political support for science and technology.

Moreover, the programme should at least be complementary with, and ideally contribute to the European Commission’s 10 political priorities:\(^{34}\):

<table>
<thead>
<tr>
<th>European Commission’s 10 political priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Jobs, Growth and Investment: <em>Stimulating investment for the purpose of job creation</em></td>
</tr>
<tr>
<td>- Digital Single Market: Bringing down barriers to unlock online opportunities</td>
</tr>
<tr>
<td>- Energy Union and Climate: Making energy more secure, affordable and sustainable</td>
</tr>
<tr>
<td>- Internal Market: A deeper and fairer internal market</td>
</tr>
<tr>
<td>- A Deeper and Fairer Economic and Monetary Union: Stability for the single currency, solidity of public finances and social fairness in implementing structural reforms</td>
</tr>
<tr>
<td>- A balanced EU-US Free Trade Agreement: Freer trade – without sacrificing Europe’s standards</td>
</tr>
<tr>
<td>- Justice and Fundamental Rights: Upholding the rule of law and linking up Europe’s justice systems</td>
</tr>
<tr>
<td>- Migration: Towards a European agenda on Migration</td>
</tr>
<tr>
<td>- A Stronger Global Actor: <em>Bringing together the tools of Europe’s external action</em></td>
</tr>
<tr>
<td>- Democratic change: <em>Making the EU more democratic</em></td>
</tr>
</tbody>
</table>

InnovFin should also be complementary with, and contribute to the ‘Open Innovation, Open Science, Open to the World’ policy agenda\(^{35}\), which aims to create a Europe that: opens up the innovation process a wide range of actors so that knowledge can circulate freely through regulatory reform, boosting private investment in R&I and combining different sources of finance; emphasises cooperative work in science and new ways of diffusing knowledge; and fostering international cooperation in R&I.

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\(^{34}\) European Commission, 2017, Commission and its priorities, 10 priorities, https://ec.europa.eu/commission/priorities_en

Operational objectives

At a more practical level, the operational objectives and outputs to be achieved are, according to the ex-ante evaluation:

- Increase the supply of direct loans to larger firms and other entities in terms of the number of operations and the volume of funding mobilised;
- Increase the supply of intermediated loans to SMEs, small MidCaps and other MidCaps in terms of the number of agreements reached with financial intermediaries and the volume of funding mobilised;
- Increase the supply of 'formal' early-stage equity financing available to innovative SMEs and small MidCaps in terms of the number of agreements reached with VC funds and the volume of funding mobilised;
- Increase the supply of 'less formal' early-stage equity financing available to innovative SMEs and small MidCaps in terms of the number of agreements reached with business angel groups and other less institutionalised groups and the volume of funding mobilised;
- Increase the supply of TT financing in terms of the number of agreements reached with TT funds and vehicles and the volume of funding provided.

Key performance indicators

The above operational objectives are directly reflected in the output indicators: the number of agreements signed with financial intermediaries (for intermediated InnovFin financial instruments) and the number and volume of loans or of investments (for direct products).

The results indicators proposed in the ex-ante evaluation were: the number and volume of loans made or guarantees extended in the case of debt facilities (for intermediated financial instruments) and the number of final beneficiaries and the volume of investments made in the case of equity facilities. In addition to these results indicators, two additional performance indicators were foreseen in the ex-ante evaluation: the numbers of Member States and countries associated to Horizon2020 in which operations have taken place; and geographical dispersal. These last two hint at the importance of the secondary objective of contributing to H2020’s wider objectives, which, as pointed out above, includes addressing disparities across Europe in R&I performance.

Finally, the ex-ante evaluation suggested possible impact indicators: (1) the share of beneficiary SMEs and small MidCaps introducing innovations new to the company or the market (for intermediated financial instruments); and (2) growth in numbers of employees at beneficiary level. The first impact indicator is difficult to measure as it is challenging to establish whether or not a firm introduced a genuinely new innovation to the company or to the market.

Moreover, this is not something that is expected from all beneficiaries under InnovFin. Indeed, the EIB-managed products select beneficiaries on a case-by-case basis, and only in case of the SME Guarantee (SMEG) is there a set of defined innovation eligibility criteria, one of which refers to introducing innovations to the company or market (see also Section 3.3). As regards the second indicator, some data is collected by the EIB but the way the data is presented does not establish a clear causal link between the provision of InnovFin finance and the number of jobs at the beneficiary level. This is not surprising as the link between innovation and job creation is not clear-cut: introducing innovations to a company could just as well boost employment (for example, if it allows the company to expand into new markets) as it could reduce the number of jobs in the company (for example, in case of introducing automatization to the company, boosting the productivity per employee but reducing the need for a large workforce). This issue is further discussed in Section 4.2.
Generally, it is not clear from the programme documentation (H2020 Annual Work Programmes, Delegation Agreement with the EIB and the EIF, InnovFin Communication Strategy) to what extent the indicators proposed in the ex-ante evaluation for InnovFin have been incorporated systematically and consistently in the programme design.

The InnovFin programme’s objectives, inputs, processes, outputs and impacts can be summarised in an intervention logic. This provides a reference point against which actual performance can be evaluated. The diagram below visualises the intervention logic and shows how the programme’s objectives, inputs, outputs, results and impacts are linked to evaluation criteria relevance, effectiveness, efficiency, coherence and added value. These cross-cutting issues are assessed at programme level in Section 4 of this report.

The fact that the intervention logic is not clearly spelt out in InnovFin’s documentation has implications for the evaluability of the programme. Crucially, while this interim evaluation necessarily focuses on the achievement of ‘results’ indicators, the long-term impact of the programme can only be assessed at ex-post stage. However, this necessitates the collection of appropriate data on impact indicators now in order to allow for a full evaluation at a later stage.

**Figure 2.3 – Overall Intervention Logic for Horizon 2020 Financial Instruments**

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36 See Better Regulation guidelines (COM(2015) 215 final), May 2015: “Evaluations thus need to deconstruct the expected chain of events by using a simplified model of causality – showing how an intervention was triggered by a certain set of needs or problems occurring within a certain context and how it was designed, with the intention of producing the desired changes”.
2.4 Other EU financial instruments and past experience

2.4.1 Predecessor schemes

InnovFin builds on predecessor financial instruments from the 2007-13 Multi-Annual Financial Framework (MFF) period (managed by DG ENTR, DG ECFIN and DG RTD at the time), notably the SMEG and InnovFin Equity within the Entrepreneurship and Innovation Programme (EIP) and Large Projects which builds on the Risk-Sharing Financial Facility (RSFF). The other InnovFin financial instruments have been more recently set up for the 2014-20 programming period. Strengthened links are envisaged between different EU-supported financial instruments including those being implemented under H2020, COSME, CEF and the ESIF, as summarised below.

<table>
<thead>
<tr>
<th>Research, Development and Innovation</th>
<th>Centrally managed by COM</th>
<th>Shared Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizon 2020 (InnovFin) EUR 2.7bn</td>
<td>European Fund for Strategic Investments (EFSI) EUR 23.7bn&lt;sup&gt;37&lt;/sup&gt;</td>
<td>Loans, guarantees, venture capital/ equity or grants for SMEs</td>
</tr>
<tr>
<td>Guarantees to RDI-drive/ innovative SMEs &amp; small MidCaps between EUR 25,000 and EUR 7.5m and ambitious RDI projects</td>
<td>Infrastructure &amp; Innovation Window; SME Window</td>
<td>EU level instrument</td>
</tr>
<tr>
<td>Risk capital – at early and start-up phase</td>
<td>Creative Europe Guarantee Facility EUR 210m</td>
<td>(contribution of Member State funds from Operational Programmes to centrally managed EU programme)</td>
</tr>
<tr>
<td>Financing of large innovation projects</td>
<td>Social Change &amp; Innovation Micro-finance EUR 193m</td>
<td>Off-the-shelf instruments</td>
</tr>
<tr>
<td></td>
<td>Social enterprise</td>
<td>Tailor made instruments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Growth, Jobs and Social Cohesion</th>
<th>Cosme (EUR 1.3bn)</th>
<th>(EFSI) EUR 23.7bn&lt;sup&gt;38&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity &amp; guarantees</td>
<td>Infrastructure &amp; Innovation Window; SME Window</td>
<td>(contribution of Member State funds from Operational Programmes to centrally managed EU programme)</td>
</tr>
<tr>
<td>Guarantee – SME focus up to EUR 150,000</td>
<td>Creative Europe Guarantee Facility EUR 210m</td>
<td>Off-the-shelf instruments</td>
</tr>
<tr>
<td>Risk capital for SME – growth and expansion</td>
<td>Social Change &amp; Innovation Micro-finance EUR 193m</td>
<td>Tailor made instruments</td>
</tr>
<tr>
<td></td>
<td>Social enterprise</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Connecting Europe Facility (CEF)</th>
<th>(EFSI) EUR 23.7bn&lt;sup&gt;39&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk sharing (e.g. project bonds) and equity instruments</td>
<td>Infrastructure &amp; Innovation Window</td>
<td>(contribution of Member State funds from Operational Programmes to centrally managed EU programme)</td>
</tr>
</tbody>
</table>

The Structural Funds are also a major source of funding for financial instruments schemes. Indeed, the Structural Funds have provided support for financial instruments since the 1994-99 period, with evidence of a significant increase in the use of such schemes in both the 2007-13 and 2014-20 programming periods. In terms of funding levels, financial instruments within ESIFs amount to an estimated EUR 17.5bn in the current period. Financial instruments can be set-up by Member States and regions to invest available ESIF funding (ERDF) through financial products such as loans, guarantees, equity and other risk-bearing mechanisms that support projects on the ground.

Research on the implementation of EU-supported financial instruments in the 2007-13 period identified a number of lessons for later programmes such as H2020. It is worth summarising these here since they informed the research for this study.

As regards the RSFF (under FP7), whose beneficiaries were mainly large firms, the **interim evaluation of the RSFF** (2010) findings were largely positive. However, the study considered that some target groups (SMEs and research infrastructure) needed more focused support\(^\text{40}\). The subsequent adoption of the portfolio-first-loss-piece (PFLP) meant that capacity to finance loans for SMEs and research infrastructures would be enhanced. A counter-guarantee mechanism for the Risk Sharing Instrument (RSI) was also introduced.

The **second interim evaluation** (2013) supported the flexible, demand-driven approach adopted and suggested that better targeting of innovative MidCaps with specific financing products including higher risk finance should be adopted.\(^\text{41}\) There was also a call for closer linkages to be developed between COSME and Horizon 2020 and an emphasis on the potential to develop joint instruments involving centrally managed and shared programmes such as the ESIFs. The latter recommendation has been taken on board since the governance arrangements for the implementation of COSME and Horizon 2020 have been integrated by type of financing (debt on the one hand and equity on the other) and a joint instrument, the SME Initiative, has been put in place combining ESIF with financial instruments (COSME, Horizon 2020) and EIB Group and National Promotional Bank financing.

Research by CSES for the European Parliament on the role of National Promotional Banks (NPBs) and Regional Promotional Banks (RPBs) in implementing SME financial instruments\(^\text{42}\) found that several NPBs in Central and Eastern Europe have not applied to take part in COSME or in the InnovFin instruments yet (or have only participated in one or the other). The main reason cited was the abundance of funding to support financial instruments through the Structural Funds in 2007-13 and ESIF in 2014-20. Also, it was concluded that there was a lack of demand for equity finance from innovative start-ups and SMEs in some countries in the newer EU Member States and a more generalised lack of demand for finance from non-high-tech start-ups and SMEs. It is important to recall that whilst EU financial instruments have an important role to play on the supply side, there are also variations across the EU in terms of investment-readiness and levels of demand for such financing. Crucially, the existence of an ecosystem promoting entrepreneurship and innovation is a prerequisite for a market being able to absorb R&I finance.


A key issue in this interim evaluation is the extent to which the InnovFin financial instruments demonstrate additionality so that the benefits of the interventions are maximised. The European Court of Auditors Special Report on the implementation of FP7 (2013) found that the Commission had not sufficiently demonstrated additionality in respect of the RSFF and RSI pilots. Based on a small sample of interventions and a stakeholder survey, the European Court of Auditors (ECA) found that obtaining access to finance was not a barrier for half of the respondents and that lower interest rates were the decisive factor in taking up loans. The ECA recommended better targeting of firms with limited access to finance to help maximise additionality. The ECA also suggested that the RSFF could have had a ‘crowding-out’ effect. The Commission response was that final beneficiaries with limited access to finance had been targeted and that there were also other forms of additionality that are as important as financial additionality (for example, additionality relating to scale, scope and timing). Section 4.4 examines the different aspects of additionality in case of InnovFin.

More generally, a report by the Court of Auditors on the financial instruments used under the ERDF and ESF in the 2007-2013 funding period provides some lessons for the evaluation of the InnovFin programme, including:

**Special Report - Implementing the EU budget through financial instruments — lessons to be learnt from the 2007-2013 programme period (European Court of Auditors)**

- The leverage effect and revolving nature of (i.e. the use of the same funds in several cycles) are one of the key benefits of the use of financial instruments along with the positive incentives that an expectation of return on investment imposes on final recipients. The leverage effect of the InnovFin products is investigated in Sections 3.1 and under efficiency (4.3.2);
- In addition to lessons learnt, the Commission should assess the effect of major socioeconomic changes on the rationale of different instruments and corresponding contribution required from the EU budget in interim evaluations. This study looks at external factors affecting the InnovFin programme’s performance;
- There is a need to define in the Financial Regulation the leverage of financial instruments applicable across all areas of the EU budget, distinguishing between leverage of private and national public contributions and taking into account the different types of instruments available (e.g. loan vs equity instruments). One observation explored in this study is that public promotional banks providing counter-guarantees to commercial banks may achieve a greater leverage effect than commercial banks directly working with the EIF;
- Ensure Member States (or financial intermediaries) provide complete and reliable data on private contributions;
- For centrally managed instruments, the general risk-sharing principles which may have an impact on the EU budget should be defined in the legislation governing the instruments concerned;
- Provide guidance in regarding the continued use of instruments into the following programme period (i.e. beyond 2020). This study makes recommendations in Section 5 regarding the future evolution of InnovFin in the ninth Framework Programme;
- Ensure Member States (or intermediaries) report comprehensively on management costs and fees incurred during the programming period. These

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43 European Court of Auditors (2016) Special Report. Implementing the EU budget through financial instruments — lessons to be learnt from the 2007-2013 programme period.
issues are explored in relation to InnovFin in Section 4.3. of this report;

- Strengthen incentives for fund managers by changing rules on performance-based remuneration in the common provisions regulation;
- Carry out comparative analysis of the implementation costs of grants and repayable financial support for the 2014-2010 period.

In 2016, the European Court of Auditors launched a performance audit of the loan portfolio guarantee instruments of CIP, COSME, RSI and InnovFin (i.e., InnovFin SME Guarantee). The aim was to assess whether the guarantees support the growth of SMEs by improving their access to finance have the desired effect. The audit focused on the implementation of the products by the EIF and financial intermediaries and the effects of the guarantees on SMEs. The report was not available at the time when this study was finalised.

The EIB conducted a stock-taking exercise in preparation for the 2014-20 programming period in 2013. Among the main findings from the review were that EU-supported financial instruments were particularly valuable during the financial crisis as mainstream banks ceased lending to SMEs and even larger firms. The EIB’s operations during this period addressed a financing gap, thereby supporting the proposition that these interventions address market failures.

As part of the Final Evaluation of the EIP, an assessment was carried out of the relevance, efficiency and effectiveness of the High Growth and Innovative SME facility (GIF), managed by the EIF, which provides risk capital for SMEs at early (GIF1) and expansion stages (GIF2). This was examined as part of the evaluation of the EIP sub-programme of the CIP. The study, carried out by CSES, concluded that the GIF had addressed a clear gap in SME access to finance. Approximately two-thirds of the final beneficiaries of the GIF equity instrument indicated that they would not have set up the business or made a particular investment without the financial support they received under the GIF. This was also the case for almost half of the beneficiaries of the SMEG.

The European Commission in 2016 published its annual report on centrally managed financial instruments (COM(2016) 675 final). Along with a supporting staff working paper (SWD(2016) 335 final), the report provided some key data on the implementation of InnovFin SMEG. The report highlighted the reduction of administrative burden and continued monitoring of financial instrument management as priorities. This included using lessons learnt to potentially revise the Financial Regulation rules on financial instruments to improve their leverage and efficiency.

Some overlaps were identified between the financial instruments supported through the EIP and the Structural Funds, under which VC and loan guarantee schemes can also be provided. The Interim Evaluation of the EIP concluded that the European Commission should encourage the EIF to develop a more visible deal-allocation policy for the different mandates. The report to the EIPC on the Follow-Up of the Recommendations from the Interim Evaluation states that coordination mechanisms have already been established between the Directorates-General involved (DG GROW, DG ECFIN and DG REGIO) and the EIF, and a common deal-allocation policy was developed. In H2020, the need to strengthen synergies between the financial instruments available under H2020 and through the ESIFs was emphasised. The extent of these and other synergies is further explored in Section 4.4.

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45 CSES (2011); Final Evaluation of the Entrepreneurship and Innovation Programme
As regards geographic coverage, EU-15 countries accounted for the majority of operations in case of GIF. This suggests that for follow-on instruments there should be more targeted marketing and training to ensure that all countries in need of more finance actually benefit from EU support. However, in assessing the geographical take-up by SMEs, MidCaps and large firms of different financial products, it is also important to take into account wider debt, equity and quasi-equity provision through other sources in different geographies. For instance, the EIF’s VC fund-of-funds (FoF) programmes have been active in the newer EU Member States while the European Bank for Reconstruction and Development (EBRD) has provided support for seed and equity capital through funding programmes, as well as support for business accelerators.

A general observation is that there has been an evolution between FP7 and H2020 in the use of financial instruments which have moved away from a focus mainly on SMEs to a wider SME – MidCap – large company lifecycle approach. The focus on access to finance for innovators is also new under H2020 since in FP7 there was only a pilot scheme. Other changes are more presentational and programmatic. For example, large firms benefited directly from support for the knowledge economy in the 2007-13 period but this was part of one of the EIB’s own mandates rather than FP7 whereas now it is explicitly included under H2020.

2.4.2 European Fund for Strategic Investments

Following the set-up and launch of InnovFin, the European Fund for Strategic Investments (EFSI) was introduced in 2015. EFSI is an initiative launched jointly by the EIB Group and the European Commission to help overcome the investment gap in the EU by mobilising private financing for strategic investments. It is one of the three pillars of the Investment Plan for Europe that aims to revive investment in strategic projects across the EU Member States. EFSI should unlock additional investment of at least EUR 315bn over a three-year period.

EFSI is not formally classified as an EU funding programme, but rather as funding to supplement existing EU programming instruments. However, whilst some funding is being channelled through InnovFin, for instance through the SME Window (implemented in part through the SMEG) and through the EFSI Equity Instrument (implemented largely through InnovFin Equity), there are also new funding instruments that are EFSI-specific.

Under EFSI, the EIB Group provides funding for economically viable projects where it adds value, including projects with a higher risk profile than ordinary EIB activities. It focuses on sectors of key importance where the EIB Group has expertise and the capacity to deliver a positive impact on the European economy, including: strategic infrastructure including digital, transport and energy; education, research, development and innovation; the expansion of renewable energy and resource efficiency; and support for smaller businesses and MidCaps.

Although the EFSI is a broader funding mechanism with wider eligibility, it has become highly relevant as a source of additional top-up funding to complement Horizon 2020 funding since InnovFin is used as a mechanism to implement the additional funding available through EFSI.
3. EVALUATION OF THE INNOVFIN FINANCIAL INSTRUMENTS

3.1 Overview

This section provides an interim evaluation of each of the seven InnovFin financial products. The section is structured as follows:

- **Section 3.2** provides an analysis of the take-up of each of the InnovFin portfolio of financial products overall and the distribution of take-up by country.
- **Sections 3.3 to 3.9** assess the performance of each of the InnovFin financial instruments. In each case we provide a summary description of the product and key data, an assessment of progress with implementation to date and an evaluation of performance so far.

The data presented in this section is mainly based on the two operational reports compiled by the EIF and the one operational report compiled by the EIB for the products each of them manages respectively. The reports date back to 31 December 2016. This is complemented by information retrieved from product flysheets, press releases, and steering committee meeting presentations. Some feedback on individual products is reported based on interviews and focus groups.

Two issues were identified in relation to the presentation of InnovFin operational data: first, in order to obtain further insights to operations implemented under InnovFin instruments, useful sources of further information are the press releases and project summary sheets published on the EIB’s website. However, there is seldom an indication of whether projects are funded by InnovFin on the website and it is thus not possible to systematically search for these. The website does, however, provide additional information on projects already identified through the research. Second, the Operational Report could also more explicitly distinguish between the individual products and thus facilitate an analysis by product which is essential before one can take a decision on the continuation/discontinuation of individual products within the programme.

3.2 Analysis of the take up of InnovFin financial products

As at 31 December 2016, some EUR 7.42bn of InnovFin financial assistance had been committed to an estimated 5,780 final beneficiaries across the EU28 Member States and other eligible countries. This figure does not include any amounts that may have been committed to final beneficiaries under the MidCap Guarantees (the EIB’s Operational Report only includes the amount committed to financial intermediaries). These estimates should be treated with caution since it is difficult to combine guarantee and loan data and because some firms may be a beneficiary of more than one InnovFin product. In particular, the total volume of funding already committed is inflated by a small number of high volume transactions under Large Projects. In case of the SMEG, the average size of a transaction to final beneficiaries is EUR 353,136 (see Section 3.2).

It is difficult to compare the different InnovFin schemes in terms of the amount of finance provided to beneficiaries. In case of the SMEG, the maximum amount of newly originated beneficiary transactions rather than the EU budget allocation is included in guarantee agreements with intermediaries (EUR 6,874m). In case of InnovFin Equity, and the two thematic instruments, the overall budget figures are presented. In case of the other three EIB-managed financial instruments

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47 Based on EIB and EIF Operational Reports as of 31/12/2016
(MidCap Guarantee, MidCap Growth Finance and Large Projects) no overall data on the financial outlays for the 2014-20 period are available. Rather, an annual figure of EUR 2.7bn has been taken and multiplied by 2.5 years (i.e. the period between the launch of the schemes and the end of 2016) to arrive at a figure of EUR 6.75bn.

When comparing the amounts already committed to final beneficiaries as at 31 December 2016 and the overall amount agreed (budgets) for each InnovFin financial instrument, it appears that:

- 32% of the agreed volume of SMEG budget (EUR 6,874m) has been committed to final beneficiaries (EUR 2,196.5m). The fact that under this guarantee instrument the EIF first needs to sign agreements with financial intermediaries before these can provide loans to firms slows down the delivery of financing. The same applies to the MidCap Guarantee instrument.
- In case of InnovFin Equity, only 8% of available funding (EUR 495m) has been committed to final beneficiaries by fund managers (EUR 41.5m) which can be explained by the long time it takes to implement an equity instrument – fund managers need to first raise funds and close the fund before making investment in firms.
- For the EIB-managed products, a comparison between the budget and amount committed is not possible at the level of individual financial instruments since the EIB allocates funds flexibly between the five products it manages.
- However, such a comparison is possible for the two thematic schemes, for which an overall budget of EUR 150m each is available for the 2014-20 period. In case of the Energy Demo product, 7% (EUR 10m) of this allocation has already been committed to final beneficiaries, and in case of the Infectious Diseases product the share is 30% (EUR 45m). The thematic products were launched in 2015, one year later than the other schemes, which influences implementation to date.

Once again, precaution is in order when interpreting these figures given different reporting methods used by the EIF and the EIB in their operational reports and adjustments to the budget for the individual InnovFin products. Several other considerations should be noted: first, there are complications in providing an analysis separately for each financial product given that the EIB reports on all the products it manages jointly, and sometimes uses terms and abbreviations from FP7 (e.g. GFI instead of MGF for MidCap Growth, and RSFF instead of Large Projects). These considerations make the evaluation more difficult. One example is that disaggregated data on the EIB-managed product’s individual leverage effects is not available. While this reflects the Delegation Agreement between the European Commission and the EIB, it is problematic from an evaluation point of view since it means it is not easy to assess the efficiency of each of these financial instruments individually.

The table on the page after next suggests that as of late 2016:

- The InnovFin financial instrument with the highest take-up (based on the number of contracts signed with financial intermediaries) was the SME Guarantee (109 signatures). This has been far more popular than the MidCap Guarantee with only five signed intermediary agreements as at 31 December 2016.
- In terms of the number of final beneficiaries, once again the SME Guarantee dominates by far with 5,682 firms benefitting, followed by MidCap Growth Finance (38 signatures with beneficiaries) and Large Projects (49 signatures with beneficiaries, out of which three cancelled after signature).
- The investment duration varies from up to 5 or 7 years in case of the MidCap Growth Finance and Infectious Diseases schemes, to up to 15 years in case of the Energy Demo Projects.

Regarding the total amount committed so far to final beneficiaries and leverage effects, information is not available consistently across all the financial products. A few observations can, however, be made:
• Large Projects committed the most finance to final beneficiaries with EUR 4.5bn, followed by SME Guarantee beneficiaries with EUR 2.2 bn.

• As regards the **leverage effect** achieved by the different InnovFin products, the SMEG has achieved to date already 4.8 and is well on track to hit the targeted leverage of 9 by end of 2022. In case of InnovFin Equity, the achieved leverage so far is 0.2 compared to a target of 6, but this may be explained by the early phase of implementation of this product, and the fact that equity instruments generally take much longer to result in investments to portfolio companies than debt-based ones as they first have to raise additional funds from private investors before closing the fund and beginning to invest in companies. The final leverage will likely only be determined in 2026 at the earliest.

• The aggregate target leverage effect of the **EIB-managed products** (excluding the thematic products) is 12.5, and the products have come close to that with an actual effect of 11.2. However, this may conceal substantive differences between the individual EIB-managed products.

In case of the SMEG, later data from March 2017 is available and presented in the subsequent section which exclusively focuses on that product. To allow for comparison with the other 6 products for which data later than end of 2016 is not yet available, the March 2017 data is not used in the table below.
Table 3.1 – Key data on the InnovFin financial instruments

<table>
<thead>
<tr>
<th>Financial products</th>
<th>Investment size per beneficiary</th>
<th>No. of contracts signed with intermediaries</th>
<th>No. of final beneficiaries</th>
<th>Agreed volume/expected overall budget</th>
<th>Amount committed&lt;sup&gt;50&lt;/sup&gt;</th>
<th>% of agreed volume actually committed to beneficiaries to date&lt;sup&gt;51&lt;/sup&gt;</th>
<th>Target leverage effect</th>
<th>Actual leverage effect</th>
<th>Investment duration</th>
<th>Implementation period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SME Guarantee</strong></td>
<td>EUR25,000- EUR7.5m (firms with up to 500 employees)</td>
<td>109</td>
<td>5,682</td>
<td>EUR 6,874m&lt;sup&gt;52&lt;/sup&gt;</td>
<td>To financial intermediaries: EUR 4,080.5m&lt;sup&gt;53&lt;/sup&gt;</td>
<td>To final beneficiaries: EUR 2,196.5m&lt;sup&gt;54&lt;/sup&gt;</td>
<td>32</td>
<td>9</td>
<td>4.8</td>
<td>1-10 years</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td>Up to EUR 50m (or equivalent in a foreign currency)</td>
<td>10</td>
<td>19</td>
<td>EUR 495m</td>
<td>EUR 41.5m</td>
<td></td>
<td>8</td>
<td>6</td>
<td>0.2&lt;sup&gt;56&lt;/sup&gt;</td>
<td>15 years</td>
</tr>
<tr>
<td><strong>MidCap Guarantee</strong></td>
<td>EUR7.5-50m (firms with 500-3000 employees)</td>
<td>5</td>
<td>6</td>
<td>EUR 6,750m&lt;sup&gt;57&lt;/sup&gt;</td>
<td>To financial intermediaries: EUR 700m</td>
<td>To final beneficiaries: n/a</td>
<td>Not possible to calculate</td>
<td>12.5</td>
<td>11.2</td>
<td></td>
</tr>
<tr>
<td><strong>MidCap Growth Finance</strong></td>
<td>EUR7.5-25m (firms with 500-3000 employees)</td>
<td>n/a (direct loan by EIB)</td>
<td>38</td>
<td>EUR 619.5m</td>
<td></td>
<td></td>
<td></td>
<td>12.5</td>
<td>11.2</td>
<td>Usually up to 5-7 years</td>
</tr>
</tbody>
</table>

<sup>49</sup> Based on Operational Reports as of 31/12/2016, unless specified otherwise

<sup>50</sup> One needs to clearly distinguish between guarantee instruments, where amounts committed are much lower compared to other instruments where actual investments are made.

<sup>51</sup> Own calculation dividing figure in column “Amount committed” to final beneficiaries by figure in column “Agreed volume/expected overall budget

<sup>52</sup> The maximum amount of capital of newly originated beneficiary transactions included in Guarantee Agreements with intermediaries, as per: http://www.eif.org/what_we_do/guarantees/single_eu_debt_instrument/innovfin-guarantee-facility/call/Annex%20II%20Indicative%20Guarantee%20Termsheet.pdf p. 5

<sup>53</sup> (Counter-) guarantee amount of operations signed with financial intermediaries


<sup>55</sup> Formerly SME Venture Capital

<sup>56</sup> Based on eligible beneficiaries only

<sup>57</sup> Aggregate for all EIB-managed instruments of EUR 2.7bn per year, i.e. after 2.5 years of implementation as of 31 December 2016
<table>
<thead>
<tr>
<th>Financial products</th>
<th>Investment size per beneficiary</th>
<th>No. of contracts signed with intermediaries</th>
<th>No. of final beneficiaries</th>
<th>Agreed volume/expected overall budget</th>
<th>Amount committed&lt;sup&gt;59&lt;/sup&gt;</th>
<th>% of agreed volume actually committed to beneficiaries to date&lt;sup&gt;51&lt;/sup&gt;</th>
<th>Target leverage effect</th>
<th>Actual leverage effect</th>
<th>Investment duration</th>
<th>Implementation period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Projects</td>
<td>EUR 25-300m</td>
<td>n/a (direct loan by EIB)</td>
<td>49</td>
<td>EUR 4,543.9m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>up to 10 years</td>
<td>12 June 2014</td>
</tr>
<tr>
<td>Energy Demo Projects</td>
<td>EUR 7.5-75m</td>
<td>n/a (direct loan by EIB)</td>
<td>1</td>
<td>EUR 150m&lt;sup&gt;58&lt;/sup&gt;</td>
<td>10m</td>
<td>7</td>
<td>Not specified</td>
<td>Not specified</td>
<td>Up to 15 years</td>
<td>15 June 2015 – 31 December 2020</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>EUR 7.5-75m</td>
<td>n/a (direct loan by EIB)</td>
<td>3</td>
<td>EUR 150m&lt;sup&gt;59&lt;/sup&gt;</td>
<td>45m</td>
<td>30</td>
<td>Not specified</td>
<td>Not specified</td>
<td>up to 7 years</td>
<td>12 June 2015</td>
</tr>
</tbody>
</table>

<sup>58</sup> Initially EUR 100m, increased by another EUR 50m through amendment to Delegation Agreement; sub-set of the above EUR 6,750m
<sup>59</sup> Initially EUR 100m, increased by another EUR 50m through amendment to Delegation Agreement; sub-set of the above EUR 6,750m
3.2.1 Geographical distribution of InnovFin finance

So far, the geographical distribution of InnovFin finance is quite concentrated from a geographical perspective. The chart below shows the proportion of total funding committed to final beneficiaries as at 31 December 2016 by country. This excludes data from InnovFin Equity where most intermediaries signed up so far have a multi-country focus but are at early stage of implementation, making it impossible to estimate the country breakdown of investments at this stage. Italy, leads by far, followed by Spain, France, Belgium, Germany, the UK and Sweden. Generally, investment is heavily concentrated in Western Europe.

Figure 3.1 - Ranking of countries by proportion of total finance committed to final beneficiaries of the InnovFin financial instruments (EUR m)60

Figure 3.2 - Ranking of countries in terms of number of beneficiaries61

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60 Excludes InnovFin Equity due to multi-country focus of intermediaries and lack of data on final beneficiaries, and MidCap Guarantee due to lack of data on final beneficiaries

61 Excludes InnovFin Equity due to multi-country focus of intermediaries and lack of data on final beneficiaries, and MidCap Guarantee due to lack of data on final beneficiaries
As at 31 December 2016, no InnovFin finance had been committed in a total of seven countries to final beneficiaries under any of the financial instruments. These countries were: Latvia, Lithuania, Slovakia, Faroe Islands, Georgia, Montenegro, Norway, and Ukraine. However, of these countries, in case of Latvia, Lithuania, Slovakia and Ukraine, one intermediary each had signed up to the SMEG before 31 December 2016, meaning that investments could be expected in these countries shortly. We understand that the position has indeed changed since then. In case of the SMEG (as at mid-March), further operations have been signed, and countries newly covered since end of 2016 are Faroe Islands, Georgia and Norway. This leaves Montenegro as the only country that has not made any use so far of InnovFin to date. Since we do not have up-to-date information available to us for all the financial products, we have presented the position as at 31 December 2016 in the tables in this section. More up-to-date information is presented in the separate country reports.

The map below illustrates the geographic concentration in southern and western Europe of InnovFin financial instruments to date. This situation is changing as the pipeline of applications develops.

---

As at 31 December 2016, InnovFin finance had been committed in a total of seven countries to final beneficiaries under any of the financial instruments. These countries were: Latvia, Lithuania, Slovakia, Faroe Islands, Georgia, Montenegro, Norway, and Ukraine. However, of these countries, in case of Latvia, Lithuania, Slovakia and Ukraine, one intermediary each had signed up to the SMEG before 31 December 2016, meaning that investments could be expected in these countries shortly. We understand that the position has indeed changed since then. In case of the SMEG (as at mid-March), further operations have been signed, and countries newly covered since end of 2016 are Faroe Islands, Georgia and Norway. This leaves Montenegro as the only country that has not made any use so far of InnovFin to date. Since we do not have up-to-date information available to us for all the financial products, we have presented the position as at 31 December 2016 in the tables in this section. More up-to-date information is presented in the separate country reports.

The map below illustrates the geographic concentration in southern and western Europe of InnovFin financial instruments to date. This situation is changing as the pipeline of applications develops.

---

Excludes InnovFin Equity due to multi-country focus of intermediaries and lack of data on final beneficiaries, and MidCap Guarantee due to lack of data on final beneficiaries
3.2.2 Future demand for the InnovFin financial instruments

The table below provides an overview of the number of InnovFin operations in the pipeline by financial instrument. It shows a promising pipeline indicating demand picking up for Large Projects and MidCap Guarantees. In the case of MidCap Growth Finance, demand seems to be very low, raising the question of how it can either be made more relevant and effective, or whether there is a case for discontinuing it.

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63 CSES based on Operational Reports 31/12/2016
Table 3.3 – Pipeline projections for the InnovFin products

<table>
<thead>
<tr>
<th>Financial products</th>
<th>No. of operations forecast</th>
<th>Total (expected) signature amount of operations (in EUR m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>InnovFin Large Projects&lt;sup&gt;64&lt;/sup&gt;</td>
<td>11</td>
<td>1,012.9</td>
</tr>
<tr>
<td>InnovFin MidCap Growth&lt;sup&gt;65&lt;/sup&gt; Finance</td>
<td>1</td>
<td>7.5</td>
</tr>
<tr>
<td>InnovFin MidCap Guarantee&lt;sup&gt;66&lt;/sup&gt;</td>
<td>6 (with intermediaries)&lt;sup&gt;67&lt;/sup&gt;</td>
<td>690</td>
</tr>
<tr>
<td>InnovFin Energy Demo Projects&lt;sup&gt;68&lt;/sup&gt;</td>
<td>4</td>
<td>78</td>
</tr>
<tr>
<td>InnovFin Infectious Diseases&lt;sup&gt;69&lt;/sup&gt;</td>
<td>7</td>
<td>129</td>
</tr>
<tr>
<td>InnovFin SME Guarantee&lt;sup&gt;70&lt;/sup&gt;</td>
<td>52 (with intermediaries)&lt;sup&gt;71&lt;/sup&gt;</td>
<td>2,863.3 (guarantee amount)</td>
</tr>
<tr>
<td>InnovFin Equity&lt;sup&gt;72&lt;/sup&gt;</td>
<td>34</td>
<td>1,032</td>
</tr>
</tbody>
</table>

Based on pipeline reports prepared by the EIF and the EIB

We now examine the performance of the various InnovFin financial instruments separately, reviewing their main features and the extent to which they are being utilized (based on monitoring data as of 31 December 2016) and evaluating their performance.<sup>73</sup>

3.3 SME Guarantee

The InnovFin SME Guarantee (SMEG) scheme is implemented by the EIF and provides guarantees to financial intermediaries (such as banks and non-bank lenders) that, in turn, provide loans and leases to final beneficiaries. The guarantee covers up to 50% of intermediaries' potential losses.<sup>74</sup> The goal is to improve access to finance for innovative SMEs and small MidCaps (i.e. enterprises with up to 499 employees). The EIF also offers counter-guarantees to financial intermediaries (such as guarantee institutions) providing risk protection to banks or other entities extending loans to R&I-driven SMEs and small MidCaps.

The SMEG was allocated finance under the Access to Risk Finance Working Programme within Horizon 2020 with an indicative budget of EUR 1.06bn. The product benefits from a frontloading of up to EUR 750m from the EFSI which has

<sup>64</sup> Forecast for 2017, as of 15/01/17  
<sup>65</sup> Forecast for 2017, as of 15/01/17  
<sup>66</sup> Forecast for 2017, as of 15/01/17  
<sup>67</sup> Data for forecast number of beneficiaries not available  
<sup>68</sup> Forecast for 2017, as of 15/01/17  
<sup>69</sup> Forecast for 2017, as of 15/01/17  
<sup>70</sup> Forecast for 2017, as of 15/01/17  
<sup>71</sup> Data for forecast number of beneficiaries not available  
<sup>72</sup> As of 16/01/17  
<sup>73</sup> Regarding the pipeline projections for the thematic instruments, it is worth mentioning that the EIB has subjected the delivery of this pipeline on conditions such as the 100% risk transfer rate, meaning the 5% risk exposure they currently have would be removed.  
<sup>74</sup> The main documents used to produce this section are the Commission Staff Working Document entitled Activities relating to financial instruments SWD(2016) 335 final, the EIF Horizon 2020 – InnovFin SME Guarantee Facility (InnovFin SMEG) – Interim Operational Report – 2016 and the two Annual Work Programmes on Access to Risk Finance under H2020. It will be useful to update this section with data from end of 2016 once available. The information that could not be obtained through desk research leads to the research questions at the end of this sub-section which will be taken up in the field research phase.
accelerated the ramp up phase. This frontloading is to be transformed in 2017 into a permanent second loss position (top-up) which together with another contribution of EUR 280m (EUR 150m from Horizon 2020 and EUR 130m from EFSI) will increase the SMEG facility budget to EUR 2.09bn.75

Table 3.4 – Overview of SME Guarantee and main implementation status to date (as of 31 December 2016)

<table>
<thead>
<tr>
<th>Title</th>
<th>InnovFin SME Guarantee Facility (InnovFin SMEG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation period</td>
<td>12 June 2014 – 31 December 2020</td>
</tr>
<tr>
<td>Total EU contribution committed to date76</td>
<td>EUR 534,471,560</td>
</tr>
<tr>
<td>Total EU contribution expected overall77</td>
<td>EUR 2,090m</td>
</tr>
<tr>
<td>Total agreed volume of operations signed78</td>
<td>EUR 6,874,093,553</td>
</tr>
<tr>
<td>(Counter-) guarantee amount of operations signed with financial intermediaries (EUR equivalent)</td>
<td>EUR 4,080,522,514</td>
</tr>
<tr>
<td>Amount committed to final beneficiaries</td>
<td>EUR 2,691.3m79</td>
</tr>
<tr>
<td>% of agreed volume actually committed to beneficiaries to date</td>
<td>32</td>
</tr>
<tr>
<td>Average size of transaction to final beneficiary</td>
<td>EUR 353,136</td>
</tr>
<tr>
<td>Eligible intermediaries</td>
<td>Public and private banks and other lending institutions</td>
</tr>
<tr>
<td>Eligible beneficiaries</td>
<td>Innovation-driven SMEs and small MidCaps</td>
</tr>
<tr>
<td>Number of financial intermediaries operations signed with to date</td>
<td>109</td>
</tr>
<tr>
<td>Number of final beneficiaries to date</td>
<td>6,23480</td>
</tr>
<tr>
<td>Target leverage effect81</td>
<td>9</td>
</tr>
<tr>
<td>Leverage effect achieved to date82</td>
<td>4.8</td>
</tr>
<tr>
<td>Geographical scope</td>
<td>EU Member States and Horizon 2020 Associated Countries</td>
</tr>
<tr>
<td>Funding sources</td>
<td>Horizon 2020, EFSI, EIF own resources.</td>
</tr>
</tbody>
</table>

76 All financial data based on Operational Report as of 31/12/2016, unless stated otherwise
77 See text on previous page
78 The maximum amount of capital of newly originated beneficiary transactions included in Guarantee Agreements with intermediaries, as per: http://www.eif.org/what_we_do/guarantees/single_eu_debt_instrument/innovfin-guarantee-facility/call/Annex%20II%20Indicative%20Guarantee%20Termsheet.pdf p. 5
81 As per Operational Report
82 Defined as Aggregate of Actual Volume / EU Contribution Utilised
3.3.1 Progress with implementation to date of the SMEG

Due to demand in the period since the launch of the InnovFin SMEG being greater than anticipated, this product has (as noted above) been front-loaded using additional support made available under the EFSI to complement the projected expenditure profile under the H2020 Access to Risk Finance budget stream. Reflecting this, by end of 2016, 109 SMEG guarantee or counter-guarantee schemes had already been signed with banks and other financial intermediaries. A breakdown of these by country is provided below:

Figure 3.3 - Number of operations signed with intermediaries by country (31 December 2016)

The monitoring data from the latest Implementation Update83 provides a breakdown by economic sector of the final beneficiaries:

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The sector receiving the most support by far is manufacturing (49% of all beneficiaries), followed by information and communication (14.8%), and professional, scientific and technical services (11%). This may reflect the additional investment of EUR 90bn per year for advanced manufacturing technologies. Further analysis of the monitoring data on the SMEG indicates that:

**Key findings - Progress with implementation to date of the SMEG**

- **Of the 109 signatures so far, 99 were direct guarantees and 10 were counter-guarantees.** Since the last Operational Report (mid-March), further operations have been signed, taking the total to 116 contracts covering 38 countries (countries newly covered since end of 2016: Faroe Islands, Finland, Georgia, and Norway). The total amount of (counter) guarantees has now been raised to EUR 4.8bn, enabling intermediaries to make loans of EUR 10.3bn to final beneficiaries over the contract duration.

- **In 98 cases, the EIF guarantee covered 50% of potential losses, in two cases it covered 40% (both with BPIFrance), in 8 cases 35%, and in another case 25% of the volume.** The maximum threshold for the proportion of losses that the EIF accepts when signing an agreement with a financial intermediary varies, depending on a number of criteria and on the outcome of negotiations between the EIF and the intermediaries concerned.

- **According to the Operational Report of 31 December 2016, a total of 5,682 final beneficiaries received funding under the SMEG and SIUGI.** This included 5,528 SMEs (97% of total) and within this number, 4,604 SMEs with fewer than 50 employees and 154 small MidCaps (3%). Due to the larger

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84 EIB Restoring EU competitiveness 2016 updated version p. vii
85 All data taken from the EIF Operational Report for the SMEG, 31/12/2016
86 The 8 cases with a guarantee of 35% and the once case of a rate of 25% concern agreements with regional and national promotional banks in Germany who engage in on-lending to commercial banks. The actual amount of losses covered by the EIF for the intermediaries is 50%.
87 Breakdown not available from the latest implementation update, hence total figure of final beneficiaries different from that presented in table 3.4
88 SIUGI stands for the guarantee and counter-guarantee financial instrument under SME Initiative (SME Initiative Uncapped Guarantee Instrument). Disaggregated data not available from the Annual Operational Report
89 Based on latest data received from Financial Intermediaries.
average funding requirement of MidCaps, the SMEG guarantees involving this group are equivalent to 10% of the total funding committed. The average size of loans to final beneficiaries is EUR 353,136.

**Innovation Criteria**

The Delegation Agreement between the European Commission and the EIF sets out the innovation eligibility criteria to be used by financial intermediaries to decide on loan applications by firms. The criteria are based on the definition of innovation set out in the Oslo Manual, according to which: *An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations.* Clearly, the phrasing ‘significantly improved’ leaves room for interpretation and in theory allows for a very broad set of firms and projects to be funded.

The chart below shows the **most common innovation eligibility criteria**. These have been categorised in terms of whether they are retrospective, i.e. focus on firm achievements in the past, or prospective, i.e. based on firm characteristics/achievements to be verified in the future. They have furthermore been categorised distinguishing between subjective/perception-based and objective/measurable criteria. While the majority of criteria are retrospective and objective, some are prospective and a few are subjective, allowing for greater flexibility in supporting a wide range of firms and projects, at least in theory.

The popularity of **Criterion 1** (develop innovative product or service) may be explained by its broad general definition, and its prospective and subjective nature, making it relevant to a wide range of firms and their projects. Some intermediaries confirmed that they first look at this criterion, and only if it does not fit do they then look at more specific ones. Other intermediaries adopt the opposite approach, first checking the potential usefulness of very specific eligibility criteria when reviewing a beneficiary application and only using Criterion 1 when the other criteria do not work but they nevertheless believe the applicant is an innovative firm.

**Criterion 6** should also be relatively easy to report on, and may be attractive due to the continuity of funding it ensures, for example when an organisation first receives a H2020 grant and then applies for a loan or equity investment once it realises its project’s commercialisation potential. Some intermediaries reported however that certain criteria were not considered straightforward (for example, **Criterion 9** – exploiting a technology right which is considered by some interviewees as too restrictive) or were found difficult to implement (for example, **Criterion 14**).

A critical issue in the on-going implementation of the SMEG will be the monitoring of the achievement of prospective innovation eligibility criteria such as Criterion 1 where these have been used to award firms a loan. This issue should be further considered in the ex-post evaluation of the programme.

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Figure 3.5 - Aggregate number of final beneficiaries broken down by type of innovation eligibility criterion used

Legend

1. Will use the financing to develop innovative products/processes/services
   - Prospective; subjective
2. Are fast-growing enterprises
   - Retrospective; subjective
3. Have spent on R&I more than 5% of their total operating costs in at least one of the three years preceding the loan application
   - Retrospective; objective
4. Have spent on R&I more than 20% of the requested loan amount and will increase their R&I expenses for at least their loan amount
   - Retrospective; objective
5. Will spend more than 80% of the loan on R&I activities
   - Prospective; objective
6. Have received innovation support from European or national/regional schemes
   - Retrospective, objective
7. Have been awarded an innovation prize by an EU institution/EU body
   - Retrospective; objective
8. Have registered at least one technology right and will use the loan to exploit it
   - Retrospective & prospective; objective
9. Have received an investment from a venture-capital fund/business angel
   - Retrospective; objective
10. Will use the financing to enter a new product or geographical market
    - Prospective; subjective & objective
11. Have spent on R&I at least 10% of their total operation costs in at least one of the past three years
    - Retrospective; objective
12. Have spent on R&I at least 10% p.a. or more than 15% of their total operating costs in at least one of the past three years (small mid-cap)
    - Retrospective, objective
13. Have incurred R&I expenses qualified in the past 36 months by competent national or regional bodies or institutions as part of general support measures approved by the EC
    - Retrospective; objective
14. Have been designated in the past 36 months as an innovative company by an EU or national or regional institution or body
    - Retrospective; objective

Based on Operational Report 31/12/2016
3.3.2 Assessment of performance to date of the SMEG

The SMEG is designed to serve a counter-cyclical function. In an economic downturn, innovative firms generally find it harder to access finance as lenders usually reduce the financing of new ventures. This is precisely when publicly funded schemes are most relevant. This means that the SMEG should address market failures and a credit crunch in phases of an economic downturn, and address a lack of R&I investment in specific high-risk market segments in economic upturns. This means that demand for such finance as backed by the SMEG is likely to vary depending on the overall health of the European economy and across the different Member States who often are at different phases of the economic cycle, with some growing faster than others. The SMEG, as InnovFin overall, as a demand-driven scheme can adapt to changing market conditions as resources can be shifted around to satisfy the most pressing needs of R&I-driven firms.

From the monitoring data it can be seen that the SMEG has experienced very strong demand to date and has exceeded the projected expenditure profile. This is even though economic conditions have improved since the previous period when demand was also strong under the predecessor SMEG. The conclusion to be drawn is that access to finance for innovative SMEs has not improved to the extent that overall economic conditions have since the economic crisis of 2007-09. The subsequent sovereign debt crisis and tightening of bank lending rules and capital requirements may have had a knock-on effect on the level of demand for SMEG guarantees and counter-guarantees.

A factor that is influencing the performance of the SMEG is the capacity of different countries’ financial intermediaries to make use of the scheme, and the extent to which the scheme complements national public and private alternatives. The EIF cooperates with NPBs rather than competing with them. The focus is often on targeting a specific risk segment of the market, whereas in case of cooperation with commercial banks the focus is more on banks encouraging their existing clients to take more risks, or on financing riskier clients or attracting new clients in new segments.

The research indicates that the SMEG has by far the largest number of intermediaries compared to the other InnovFin products, as well as by far the largest number of final beneficiaries. Some of the key points are:

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**Key points - Assessment of performance to date of the SMEG**

- **There has been a high take-up of the SMEG with broad geographic coverage, although the overall disbursement of funds at this stage falls slightly short of target.** The EIF pointed out that this may be explained by a non-linear demand curve, whereby following the introduction of a new financial instrument in a certain market a familiarisation phase is needed for intermediaries and potential beneficiaries to be made aware and appreciative of the benefits of the product. The monitoring data suggests that take-up has indeed increased more substantially over the six months between June and December 2016, and more still since then according to the latest implementation update. Take-up still varies quite considerably between Western, Central and Eastern Europe, however.

- **In France, the feedback from a major SMEG intermediary was that the product has been very well-received. Almost 1,000 InnovFin-backed agreements mainly with SMEs have been signed - well ahead of expectations. The number of companies taking up loans is up by 50% and seed loans up by 200%.** Although the sums involved are large in Spain, a major commercial bank (intermediary) indicated that the effect on providing access to finance is not quite as positive as was hoped because a proportion of applications that are put forward to the bank’s loan board fail to pass the risk threshold of the internal rating system. In Portugal, where the
difficult financial climate for SMEs is reflected in the low loan approval rate (58%),
the SMEG is seen as a positive force in stimulating market take-up of investment in
R&I, SME activity and start-ups.

- There is also a quite high take up in the Czech Republic, Sweden and Germany. Here the improving economic climate is helping SMEs generate more funds themselves, but is also fuelling demand over and above this for additional innovation finance. In the Czech Republic, some intermediaries reported a stronger than expected demand for innovation finance. In Sweden there has also been strong demand and SMEG is seen as useful by interviewees, while in Germany the take-up is below expectations due, it seems, to more favourable terms being available elsewhere. However, among NPBs there is an appreciation of the wider definition of innovation under InnovFin which makes it easier to finance a wider range of SMEs. Also in Germany, the NBP suggest that demand is not as good as expected – even though interest rates are low, companies often prefer private sector finance.

- In Belgium take-up is low because of the abundant availability of private sector finance. Collateral is an issue in Austria (according to a NPB) and the more flexible definition of innovation that is used in the SMEG is seen as preferable to the definition used in previous schemes. In Israel a key reason for the success of the SMEG is that there is a surplus of venture capital funding and young enterprises see bank loans as a route to retaining more of the value-added of their innovative endeavours.

- The full delegation model giving financial intermediaries autonomy in their selection of final beneficiaries based on the standardised eligibility criteria is praised by many financial intermediaries and preferred over the less flexible model under the MidCap Guarantee.

- The relationship with the EIF is regarded as very professional and helpful. Intermediaries felt the EIF ‘spoke their language’ and ensured the product could be used by them without excessive administrative burden.

- However, several intermediaries stated that the pricing policy of the SMEG, which has doubled compared to the previous RSI, squeezed profit margins, and any further increase in the pricing would make it difficult to apply the product in practice, at least for commercial banks.

- There is also some confusion among intermediaries as regards the correct interpretation and application of (some of) the innovation eligibility criteria, with intermediaries taking different approaches to applying these. While some intermediaries (e.g. in Italy) appear to use the more general criteria to fund a wide range of companies, intermediaries in other countries (e.g. in Germany) appear to be more reluctant to use the general criteria, fearing that if it turns out they provided loans to non-eligible companies, the EIF would refuse to cover their agreed share of any losses incurred, and thus rather focused on the more specific criteria, which in turn reduced the scope of companies they would consider to fund.

- At the same time, the fact that potential beneficiaries only need to comply with one of these criteria, should increase the number of eligible firms. In practice, however, intermediaries may shy away from using some of the criteria that are less clear to them. An example highlighted by several intermediaries is the criterion of registering a technology right and using the loan provided by the intermediary to exploit it. Interviewees stated that it was difficult in practice to demonstrate that a loan was used to exploit a patent or other technology right. Another example was that of a presence in a science park which was used as a criterion under RSI but no longer under InnovFin. A German intermediary considered that this had reduced demand in Germany. On the other hand, it was argued that this criterion was close to meaningless given that presence in a science park does not convey innovativeness in itself.

- The EIF affirms that despite the high demand for the product leading to a boost in
the budget available, it is up to financial intermediaries to decide in each individual case whether or not to provide a loan or offer a guarantee. This should only be done in cases where the loan application is problematic from a purely commercial point of view for one or several reasons, such as lack of collateral, maturity of the loan being too long, risk profile of the loan applicant being too high.

- The **application procedure** for the product was regarded by many intermediaries as rather tedious, whereas the overall **administrative burden** of managing the product, once set up, was regarded as proportionate. There was some concern regarding the **reporting requirements**, although case studies of individual transactions were praised for being inspirational and useful in illustrating how the product can add value in practice.

### 3.4 InnovFin Equity (formerly SME Venture Capital)

'InnovFin Equity' (which also encompasses InnovFin Technology Transfer, InnovFin Business Angels, and InnovFin Fund-of-Funds) provides access to risk finance for early-stage R&I-driven SMEs and small MidCaps through supporting early-stage and (along with COSME and EFSI) multi-stage risk-capital funds that invest mainly on a cross-border basis in individual enterprises. The funds concerned make venture capital and quasi-equity (including mezzanine capital) available to early-stage investments in enterprises. The mechanism for delivering the scheme is support to early-stage risk capital funds that in turn invest, on a predominantly cross-border basis, in enterprises.\(^2\)

#### Table 3.5 – Overview of product

<table>
<thead>
<tr>
<th>Title</th>
<th>InnovFin Equity Facility for Early-Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation period</td>
<td>15 June 2015- 31 December 2020 – de facto started end of 2015. In July 2016, the scheme was transitioned to new risk sharing structure with EFSI participation</td>
</tr>
<tr>
<td>Expected overall budget for the facility (2014-2020)(^3)</td>
<td>Horizon 2020: EUR 495,000,000</td>
</tr>
<tr>
<td></td>
<td>EFSI: EUR 270,000,000</td>
</tr>
<tr>
<td></td>
<td>EIF: EUR 290,000,000</td>
</tr>
<tr>
<td>Total amount of operations signed (committed to financial intermediaries)</td>
<td>EUR 164,500,000</td>
</tr>
<tr>
<td>Total amount investments made to final beneficiaries by financial intermediaries</td>
<td>EUR 41,485,357, out of which EUR 15,004,321 invested in InnovFin eligible recipients</td>
</tr>
<tr>
<td>Eligible intermediaries</td>
<td>VC funds, Business Angel funds, technology transfer funds, fund-of-funds, (indicative number of intermediaries targeted: at least 40)</td>
</tr>
<tr>
<td>Eligible beneficiaries</td>
<td>SMEs. Spin-offs, spin-outs, projects, small MidCaps and other early stage final recipients located in Member States or in Associated Countries</td>
</tr>
<tr>
<td>Number of financial intermediaries operations signed with to date</td>
<td>10 (early-stage: 7, multi-stage: 3)</td>
</tr>
</tbody>
</table>

\(^2\) The main documents used for this section are the Commission Staff Working Document on ‘Activities relating to financial instruments SWD(2016) 335 final and the EIF Horizon 2020 – InnovFin SME Venture Capital (IFE) – Interim Operational Report – 2016. It will be useful to update this with data from end of 2016 once available. The information that could not be obtained through desk research leads to the research questions below which will be taken up in the field research phase.

\(^3\) All financial data based on Operational Report as of 31/12/2016
### Number of final beneficiaries to date

|                        | 19 (InnovFin eligible: 8, InnovFin non-eligible: 11) |

<table>
<thead>
<tr>
<th>Exits</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target leverage effect</td>
<td>6</td>
</tr>
<tr>
<td>Leverage effect achieved to date</td>
<td>0.2</td>
</tr>
<tr>
<td>Total management fees to date</td>
<td>EUR 9,587,066</td>
</tr>
<tr>
<td>Realised investment gain/loss on exit made by IFE Financial Intermediaries</td>
<td>EUR (3,134,030)</td>
</tr>
<tr>
<td>Geographic scope</td>
<td>EU Member States and Horizon 2020 Associated Countries</td>
</tr>
<tr>
<td>Funding sources</td>
<td>EU 1.018bn investable amount split between Horizon 2020 EFSI, EIF own resources 96</td>
</tr>
</tbody>
</table>

#### 3.4.1 Progress with the implementation so far of InnovFin Equity

InnovFin Equity funds are allocated by the EIF according to demand with no prior allocations between sectors, countries, or regions. However, the European Commission incentivises the EIF to achieve targets with regard to the proportion of final beneficiaries that are eco-innovative. Our research indicates that:

**Key findings - Progress with the implementation so far of InnovFin Equity**

- **So far, operations have been signed with ten funds/intermediaries (31 December 2016):** four agreements have been signed with funds established in France, three in Spain and one agreement each has been signed with funds established in Ireland, Italy, and the Netherlands.

- **Except for two of the Spanish funds and one of the French funds, all the funds have a multi-country focus.** Seven of the 10 funds have a focus on companies at an early stage of business development, with the other three having a multi-stage focus. While eight funds are typical VC funds, one is a technology transfer fund, and another can be described as a Business Angel. In terms of **sector focus**, Information Communication Technology (ICT) and life science dominate.

- **The multi-stage focus** of three of the funds where InnovFin and COSME resources are invested, may in part explain the high share (64%) of investments in non-eligible firms made to date. The InnovFin commitments to these funds were made in line with expected early stage portion of investments enshrined in the respective investment strategies of the funds. As a result, the portion of InnovFin eligible investments is expected to increase in time to at least the level agreed in contractual documentation with these funds.

Some of the 10 signings so far are very recent and overall there are few final beneficiaries as yet. Several of the funds signed up so far are multi-country and under **InnovFin Equity, the EIF monitors the investments made by multi-country funds to ensure they invest in all the countries they claim to cover. At this stage, it is too early to say whether this is going to be achieved or not.** It also remains to be seen whether the refinement of the former InnovFin SME Venture

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94 Defined as the total funding (EU funding plus contribution from other financial institutions) / EU financial contribution, i.e. EUR 2.7bn of new equity investments (in addition to the EUR 460 m budgeted by the EU).

95 Based on the IFE operations signed

Capital into a product with a specific business angels and technology transfer component will increase the role of such intermediaries in R&I funding.

If some of the InnovFin Equity funds’ resources are used for later-stage investments, this would not be within the scope of the SME VC instrument which focuses on early-stage investments. As of 31 December 2016, the funds had only invested in eight eligible beneficiaries. Five of these are based in Spain, and one each in the Italy, the Netherlands, Spain and the UK. The beneficiaries operate in the life sciences, computer and consumer electronics, business and industrial products, and energy and environment sectors.

One issue is why such a high share of money is invested in ‘non-eligible IFE final recipients’. The multi-stage focus of most intermediaries the EIF has signed up with so far means that these also invest in later stages. The EIF can only ensure that by the end of the agreement, the proportion of non-eligible beneficiaries is on target. Before that, it is up to fund managers to take the decision on fund allocation. It may be that they first focus on more lucrative later stage investments to improve performance of the fund before investing in early stage. Or it could simply be the case that successful later-stage companies need larger sums of investment than early-stage ones (but then the fund managers could compensate for this by investing in a larger number of early- than late-stage companies).

In terms of coherence with other relevant EU support programmes, there seems to be complementarity between InnovFin Equity and COSME. The risk profile of beneficiaries varies sufficiently for them not to compete directly.

Actions are undertaken to raise awareness and build capacity among potential intermediaries and beneficiaries of InnovFin Equity. Channels include the European Commission’s pilot initiative PROGRESS TT 2.0⁹⁷ which may play a positive role with regard to InnovFin Technology Transfer, and Capacity-Building for Business Angels (CBBA), another EC initiative which should support the InnovFin Business Angels component. There may be a case for expanding capacity-building and awareness-raising to ensure InnovFin Equity makes a meaningful contribution to the European R&I equity market.

### 3.4.2 Assessment of performance to date of InnovFin Equity

**Given the slow implementation - explained by the time it takes to raise and close funds and to start making investments - only limited feedback has been obtained in relation to InnovFin Equity.** Moreover, the product has only recently made a transition from InnovFin SME Venture Capital to InnovFin Equity with sub-products targeting ‘Technology Transfer’, ‘Business Angels’, ‘Venture Capital’, and ‘Fund-of-Funds’. This makes it particularly difficult to evaluate the performance of InnovFin Equity, at least at this stage. Some key findings are nevertheless summarised below.

#### Key findings - Assessment of performance to date of InnovFin Equity

- There are a few countries (e.g. the United Kingdom and Israel) where venture capital is readily available, reducing the need for InnovFin Equity. In Slovakia, the existence of grants for companies appears to reduce the demand for equity finance.
- The research in several countries (Austria, Denmark, Malta, Norway) confirms that there is a market gap in equity finance, particularly for start-ups and other

⁹⁷ ProgressTT, Capacity Building for Technology Transfer, [http://www.progresstt.eu/](http://www.progresstt.eu/)
firms that are not (yet) bankable and for which equity would be the most suitable finance. Even where equity finance does exist, there is a hesitation among many firms to make use of it due to concerns about giving away partial ownership of the firm (e.g. Austria, Germany). In Germany, the market gap in equity finance seems to be less pronounced at early stages, and more so at later stages, suggesting that this is where InnovFin Equity could have the greatest relevance. In Norway, interviewees confirmed there were plans to cooperate with the EIF on equity finance support although no transactions have been signed to date.

• The multi-country focus of most of the funds the EIF signed with to date may suggest great potential for EU added value, in that the funds may support cross-border investments in Europe and beyond. In Germany, Malta and Spain, cross-border equity investments seem to already be on the rise. In the latter case, this was explicitly linked to the introduction of InnovFin Equity.

• A key concern in some countries (e.g. Austria) is that there is a lack of suitable fund managers and potential intermediaries for InnovFin Equity. This means that firms in the countries concerned can only benefit from the programme if fund managers in other countries adopt a multi-country focus also covering their country. It may be that InnovFin Equity could play a more pronounced role in supporting first-time fund managers without a track record to make a meaningful contribution to developing the R&I equity market in certain countries.

• The lack of exit options for start-up firms in some countries means that such firms end up being acquired by US investors, which was highlighted as a concern by some of those we interviewed. This could be remedied or prevented if InnovFin Equity led to more Europe-based funds engaging in the market. However, InnovFin Equity does not address the issue of a lack of suitable exit options. The upside for the European economy would be that more of the value and know-how of innovative firms, which tend to generate most value at a later stage in company growth, would be captured in Europe rather than overseas. While equity may not prevent firms from pursuing an exit strategy it may help those who would prefer to remain independent but cannot so long as no financing is available in their growth phase. This, according to a commercial bank in Germany, is often the case in the medicine and pharmaceutical industries.

• The fact that fundraising rounds did not coincide with the introduction of InnovFin Equity was cited as a reason for no Danish fund managers so far signing operations under the product, even though it is considered relevant in the Danish market. This shows that InnovFin Equity's performance can only be assessed in the long-term, accounting for the different stages in the equity and economic cycle that countries find themselves in.

VC funds take time to implement and many of the funds supported under InnovFin Equity have only recently closed, meaning there has been little time to make actual investments into companies. Moreover, there is a considerable difference across the EU and associated countries with equity-based national and regional support schemes still quite under-developed in many countries compared with debt-based instruments, which have been run by NPBs in many countries for many years.

Moreover, the performance of InnovFin Equity is likely to be influenced by wider market conditions. Private VC fund investing is pro-cyclical in nature and thus dependent on the state of the European and national economies, as well as by the needs of investors who look at the VC activity at a global level. VC sector fragmentation means that a reduction in the number of funds could boost their profitability by compensating for management costs, which are in part fixed, through a larger investment portfolio, and thus realising economies of scale.98 At the same time,

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98 Mina with Lahr (2011), and Ernst & Young (2011). As per Commission Staff Working Document Activities relating to financial instruments SWD(2016) 335 final p. 71
larger funds also require a larger ticket size for individual investments, keeping some potential investors out who cannot afford to make investments of such a size in individual funds.

3.5 MidCap Guarantee

The InnovFin MidCap Guarantee (MCG) enables the EIB to provide a 50% guarantee on a portfolio (up to EUR 500m) of new loans granted by financial intermediaries to innovative companies with fewer than 3,000 employees at group level. The term MidCap is used in the InnovFin context to mean enterprises with between 500 and 2,999 employees (that is, medium- and large MidCaps. Small MidCaps with between 250-499 employees are covered by the SMEG). Firms with fewer than 500 employees can also receive funding, but only in form of loans over more than EUR 7.5m.  

The InnovFin MidCap Guarantee scheme covers debt financing of between EUR 7.5m (EUR 1m if the project is not eligible under the SME Guarantee) and EUR 50m. Maturity is set at between two and 10 years with a fixed repayment schedule. Lending is provided through intermediaries to benefitting companies. There is a difference with regard to the level of leverage that can be achieved between lending through intermediaries, where a higher leverage ratio is expected, and direct lending. MCG is a risk-sharing product covering credit losses (principal and interest) on each loan which guarantees payment upon default and pro-rata sharing of recoveries. There is an alignment of interests between the EIB and the FI under a pari passu agreement with full delegation to the financial intermediary for the loan inclusions (quarterly reports), based on eligibility criteria under a streamlined process (with one exception, namely EIB pre-approval for the financed R&I projects above a threshold). Market-based pricing, aligned with the financial intermediary’s loan margin and fees, is used. The main benefit for commercial banks is regulatory capital relief, which incentivises banks to lend.

The MidCap portfolio is typically built-up over a three-year period. The MCG can either be set up as a straight guarantee or combined with a funding element. There is indirect EIB participation of up to EUR 250m (guarantee amount) per transaction. MCG is expected to provide capital relief on the guaranteed exposure allowing the financial intermediary to take on larger ticket sizes.

Table 3.6 – Overview of MidCap Guarantee

<table>
<thead>
<tr>
<th>Title</th>
<th>InnovFin Mid-Cap Guarantee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launch date</td>
<td>The facility was launched on 12 June 2014, with an open call for financial intermediaries open since 28 May 2015.</td>
</tr>
<tr>
<td>Investment amount(^{100})</td>
<td>EUR 6,750m (for all EIB-managed products)(^{101})</td>
</tr>
<tr>
<td>Aggregate of operations signed with intermediaries</td>
<td>EUR 700m</td>
</tr>
<tr>
<td>Amount committed to final beneficiaries</td>
<td>n/a(^{102})</td>
</tr>
<tr>
<td>Eligible intermediaries</td>
<td>Public or private credit or financial institutions or loan (debt) funds, in each case, duly authorised to carry out lending or leasing activities according to the applicable legislation, in each case established and operating in</td>
</tr>
</tbody>
</table>


\(^{100}\) All financial data based on Operational Report as of 31/12/2016; EUR equivalent

\(^{101}\) Aggregate for all EIB-managed instruments of EUR 2.7bn per year, i.e. after 2.5 years of implementation as of 31 December 2016

\(^{102}\) The EIB’s report only contains data on the amount committed to financial intermediaries
In a highly volatile market with hesitant investors, this InnovFin facility allows financial intermediaries to share risk by covering credit losses (principal and interest). The EIB support should allow financial intermediaries to take larger ticket sizes, leveraging investment into innovative MidCaps.\(^{107}\)

A 2012 study by PWC identified some 28,000 MidCaps in the EU, of which about half were considered innovative.\(^{108}\) Most were based in Germany, followed by the UK and France. The study found that most had maintained or increased their R&I spending despite the economic downturn. Their primary cost is human resources which is not usually considered good collateral for investors. According to the study, for two-thirds of firms debt is the preferred form of financing. Most of MidCap financing demand is from enterprises with over 500 employees.\(^{109}\) While the PWC study found that the supply of debt available is several times greater than demand, it was considered that what was available was mainly short-term, highly collateralised financing, with high fees, and does not meet the long-term, flexible debt requirements of innovative MidCaps to finance investment in intangible assets (demand exceeds supply of suitable offerings).

### 3.5.1 Progress to date with implementation of the MidCap Guarantee

Take up of this instrument has been slow. The calls for expression of interest were published in Q2 of 2015 but first formal applications were only received after a marketing campaign towards the end of 2016.

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\(^{103}\) For more detail see: OPEN CALL FOR EXPRESSION OF INTEREST TO SELECT FINANCIAL INTERMEDIARIES (Published on 28 May 2015, amended on 26 June 20151)


\(^{105}\) Across all EIB-managed instruments (MidCap Growth, MidCap Guarantee, Large Projects, Energy Demo, Infectious Diseases

\(^{106}\) Across all EIB-managed instruments, excluding EDP and IDFF portfolios

\(^{107}\) The comments below replicate those under MGF.

\(^{108}\) EIB Innovative Mid-Cap Financing Study, EU-EIB RSFF Cooperation Agreement.

\(^{109}\) Ex ante evaluation, Pp. 16-18.
The EIB suggests that slow take-up is the result of difficulties in identifying suitable beneficiaries within the target group because most financial institutions define MidCaps in terms of their balance sheet or turnover whereas the Commission uses headcount, which is not tracked by the financial intermediaries. It also takes time to evaluate applications and even for financial intermediaries signed up to the scheme, quite a lot of time is needed to understand eligibility and reporting requirements, as well as to train staff. Given that a three-year period is usually required to build up a portfolio, it will only really be possible to assess the programme from 2019-20 onwards.

The MCG is managed by the EIB. Funds are allocated according to demand, with no prior allocations between sectors, countries, or regions. It is worth noting that whilst a clear advantage of having no fixed allocation is that this maintains maximum flexibility, looking ahead, there is an issue as to how the allocations between sectors would be managed if there is excess demand during the latter half of the H2020 programming period.

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**Key findings - Progress to date with Implementation of the MidCap Guarantee**

- The first five MCG transactions (with Commerzbank in Germany, NIBC in the Netherlands, ING Belgium, KBC Bank in Belgium and Ceska Sporitelna (Czech Republic) have been signed.\(^{110}\) A further operation with IKB in Germany has been approved.

- **Total signature volume to date (31 December 2016) is EUR 700m.** The signature of the MCG operations with IKB, NIBC and Ceska Sporitelna (in aggregate EUR 450m) took place in Q4 2016.

- **Other NPBs interviewed have indicated that they are intending to participate in the future.** For example, a new MCG application (BPI France Financement) has been received and selected since the last Steering Committee meeting, raising the number of selected applications since the publication of the Call for Expression of Interest to six. As a result, the volume of MCG operations either signed or under due diligence represents 75% of the MCG business plan.

- The MCG operations with Banco BPI (EUR 150m - Portugal) and OP Bank (EUR 150m - Finland) were presented for internal approval in Q4 2016 and are expected to be signed in 2017. The due diligence of the MCG operation with Banca Monte dei Paschi di Siena (EUR 40m - Italy) is currently in progress and is expected to be also submitted for internal approval in 2017. The due diligence of the MCG operation with BPI France Financement should have taken place in Q4 2016. One additional MCG application is expected from the UK.

- Of the six final beneficiaries that had been supported by the end of 2016, 5 were in Germany and 1 in Belgium. Of these, two were for EUR 1m, one for EUR 1.3m, and the others for EUR 3.5, EUR5 and EUR14m.

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Several factors could affect the performance of MCG. The structure of the banking system might have an impact on the extent of uptake – for example, the prevalence of different kinds of banks and the nature of their relationships with customers (e.g. a ‘hausbank’ as opposed to a more transactional banking relationship) are important factors. The structure of the population of enterprises by firm size might also, on its own, and in combination with the abovementioned factors, influence uptake. Countries with very large endowments of micro and small enterprises might exhibit a lesser

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\(^{110}\) 6th Steering Committee Meeting for H2020 Debt Financial Instruments Business plan and operation pipeline
Brussels, 10 November 2016
demand for MCG than those with more large enterprises. A further key factor might be the extent to which innovation networks or ecosystems are developed and ready to absorb finance focusing on innovation-driven projects.

### 3.5.2 Assessment of performance to date of the MidCap Guarantee

The MCG agreements have so far only been signed in five countries, and not a great deal of feedback has been obtained on the use of this instrument.

#### Examples of feedback on of the MidCap Guarantee

- **Some feedback has been obtained in relation to the non-use of the MCG scheme in some countries.** For instance, in France, although in theory providing guarantees to other financial intermediaries lending to innovative MidCaps ought to be attractive, in practice, the design of the scheme has some key differences with the terms and conditions for the SMEG which from a financial intermediary perspective makes it less attractive.

- One German intermediary sees MCG as less attractive than SMEG as there is no benefit for the MidCap under the terms and conditions given, which might explain why it has not been used so much, and suggested extending SMEG to enterprises with 3,000 employees as more useful than operating a separate MCG product. A Dutch interviewee expressed scepticism about the value of a guarantee to back risk financing as banks do not invest in risky activities anyway.

- Both Austrian and German financial intermediaries under the SMEG stated that they regarded the application procedure under the MCG as too cumbersome.

- A Czech intermediary signed up to the MCG regarded the relationship with the EIB as more complicated than their relationship with the EIF under the MCG could benefit from drawing on the experience gained through the SMEG. The full delegation model with its standard eligibility criteria under the SMEG was preferred over the MCG model where applications are reviewed on a case-by-case basis. Moreover, the pricing of the MCG was considered suboptimal.

- Research in Portugal suggested that the main gap in the market for finance was with start-ups, and that there is ample access to debt and equity for “growth” or “expansion/ scale-up” operations.

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More generally, some concerns have been expressed that the product’s design is disadvantageous from both a NPB and commercial bank perspective, since the conditions for the guarantee are based on a risk-sharing approach, with the costs of the guarantee calculated on a daily basis. This is a very different approach from the EIF’s other guarantee schemes where the costs of guarantees are fixed. Several banks stated that they would have preferred fixed guarantee pricing for the MCG (as one workshop participant put it: “Commercial banks do not find variability in guarantee pricing or the risk-sharing element very attractive, especially compared with the SMEG”). More generally, it was argued that the product does not respond to market needs (i.e. those of financial intermediaries). One reason is that, compared to start-ups and SMEs supported through the SMEG, MidCaps eligible for MCG funding do not face the same problem of asymmetric information and can more easily shoulder the monitoring costs associated with InnovFin funding. It could also be argued that the emphasis on risk-sharing for a guarantee product is inappropriate since it is more applicable to equity where the financial institution or investor has a greater share of the rewards.

As noted earlier, take-up of the MidCap Guarantee scheme has lagged behind expectation and is considerably lower than that of the SMEG. Some commercial
banks have highlighted what they see as the cumbersome application process making them hesitant to apply for more than one InnovFin scheme, and would prefer to see the scope of the fully delegated and standardised SMEG widened to cover firms with up to 3,000 employees without changing the maximum loan size, rather than having to sign a separate agreement under the MidCap Guarantee. The EIB has reacted to this situation by going down the equity scale to provide quasi equity and mezzanine financing to MidCaps. Conversely, it could be argued that offering guarantees to MidCaps will be beneficial in the medium-long term since it is compatible with the funding escalator approach outlined in the 2015 Capital Markets Union Action Plan.

### 3.6 MidCap Growth Finance

Under the MidCap Growth Finance (MGF) scheme, the EIB can provide between EUR 7.5m and EUR 25m of long-term senior, subordinated or mezzanine loans to innovative businesses with between 500 and 2,999 employees to support their growth and investments in research and innovation (R&I).

<table>
<thead>
<tr>
<th>Table 3.7 – Overview of MidCap Growth Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong></td>
</tr>
<tr>
<td>Implementation period</td>
</tr>
<tr>
<td>Amount invested</td>
</tr>
<tr>
<td>Amount committed to final beneficiaries</td>
</tr>
<tr>
<td><strong>Eligible intermediaries</strong></td>
</tr>
<tr>
<td>Number of beneficiaries supported to date</td>
</tr>
<tr>
<td>Target leverage effect</td>
</tr>
</tbody>
</table>

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111 The main data sources used for this were the EIB Annual Operational Report 31/12/2016 for the EIB Facility under Horizon 2020 Debt Financial Instruments; the Commission Staff Working Document on Activities Relating to Financial Instruments, SWD (2016) 335 final; and the presentation to the 6th Steering Committee Meeting for H2020 Debt Financial Instruments, Business plan and operation pipeline, at Brussels on 10 November 2016.

112 All financial data based on Operational Report as of 31/12/2016; EUR equivalent

113 Aggregate for all EIB-managed instruments of EUR 2.7bn per year, i.e. after 2.5 years of implementation as of 31 December 2016

114 Satisfying at least one of the following criteria: its certified accountant has highlighted in the latest financial statements R&I expenses/investment that are at least equal to 5% of its annual turnover the company undertakes to spend an amount at least equal to 80% of the EIB loan on R&I expenses/investment in the next 36 months as indicated in its business plan; it has been formally awarded grants, loans or guarantees from European R&I support schemes (e.g. Horizon 2020 or FP7) or through their funding instruments (e.g. Joint Technology Initiatives, “Eurostars”) or through a national or regional research or innovation support scheme over the last 36 months; it has been awarded an innovation prize over the last 24 months; it has registered at least one patent in the last 24 months; it has received an investment from a private-equity fund or from a business angel that is a member of a business angel network; or such a private equity fund or business angel is a shareholder of the company at the time of its application for the EIB loan; its registered office is in a science, technology or innovation park, technology cluster or technology incubator, in each case with activities relating to R&I; it has benefited from tax credit or tax exemption related to R&I investment in the last 24 months.

115 Across all EIB-managed instruments (MidCap Growth, MidCap Guarantee, Large Projects, excluding Energy Demo, Infectious Diseases
The objective of the MGF is to finance future investment programmes linked to research and innovation. This financial product is also designed to support innovative companies such as those mentioned in the introductory paragraph of Section 3.4. According to the EIB, the late-stage growth capital instrument targeting equity risk was tailor made by EIB to address the specific needs of late-stage VC companies (tenors, amounts, conditions). It has no direct market precedent and therefore it received a lot of interest from innovative companies. Capital restrictions and regulations limit the involvement of commercial banks and commercial fund managers in this area.

Typically, companies will plan to spend a cumulative amount of at least EUR 15m over three years. Loans usually run for five-to-seven years and covenants and security are decided on a case-by-case basis. Pricing reflects the promotional nature of the EIB and the funding advantage based on its excellent rating.

### 3.6.1 Progress to date with the implementation of MidCap Growth Finance

As at 31 December 2016, MGF loans and quasi-equity projects had been signed for a total amount of EUR 619m for 38 projects covering 16 countries.117

#### Figure 3.6 MGF Geographical spread (amount in EURm)

![Graph showing geographical spread of MGF projects](image)

The pie chart below sets out the number of MGF projects by country.

#### Figure 3.7 – MGF Portfolio: Countries

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116 Across all EIB-managed instruments, excluding Energy Demo, Infectious Diseases
117 Including Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Netherlands, Portugal, Spain, and the United Kingdom
118 EIB (2016); EIB Facility under Horizon 2020 Debt Financial Instruments, Annual Operational Report, 31/12/2017
The table below from the Operational Report sets out the value and number of operations by innovation eligibility criteria for MGF. In terms of number of operations, and signed value, “Fast Growing Enterprise” leads, followed by “Patent”. They are followed by “R&I Expenses/ Investment”, “Tax Credit for R&I Investment”, and “80% loan spent on R&I Expenses”. In terms of number of operations, “Fast Growing Enterprise” has been the most often applied eligibility criterion, followed closely by “Patent” and “80% loan spent in R&I Expenses”.

Table 3.8 – Value and number of operations by innovation eligibility criteria for MGF

<table>
<thead>
<tr>
<th>Financial products</th>
<th>2016 H1</th>
<th>2015</th>
<th>2014</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signed Amount (EUR m)</td>
<td>No. of Operations</td>
<td>Signed Amount (EUR m)</td>
<td>No. of Operations</td>
</tr>
<tr>
<td>Fast Growing Enterprise</td>
<td>45</td>
<td>2</td>
<td>97</td>
<td>5</td>
</tr>
<tr>
<td>R&amp;I Expenses/ Investment</td>
<td>-</td>
<td>-</td>
<td>72</td>
<td>4</td>
</tr>
<tr>
<td>80% loan spent in R&amp;I Expenses</td>
<td>40</td>
<td>2</td>
<td>57</td>
<td>4</td>
</tr>
<tr>
<td>Patent</td>
<td>60</td>
<td>3</td>
<td>85</td>
<td>4</td>
</tr>
<tr>
<td>Tax Credit for R&amp;I Investment</td>
<td>-</td>
<td>-</td>
<td>72</td>
<td>4</td>
</tr>
<tr>
<td>Innovation Prize</td>
<td>25</td>
<td>1</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Private Equity/ Business Angel</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Science, Technology, Innovation Park</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>R&amp;I Support Schemes</td>
<td>20</td>
<td>1</td>
<td>35</td>
<td>2</td>
</tr>
</tbody>
</table>

Notes (1) Operations are double counted (for amount and number) if they fall into more than one category.

119 EU Portfolio only
Some of the key points from the November 2016 data are that:

- **The sectors** in which MGF has been most active are Engineering (40%), ICT (37%), Life Sciences (20%) and ‘Others’ (3%);
- An important **trend in MGF financing is the growth in quasi-equity instruments.** The quasi-equity portfolio of EUR 298.5m (19 deals) consists of 62% in ICT, 27% in Bio pharma and 11% in Other; and the MGF debt portfolio of EUR 293.5m (17 deals) of 62% in Engineering, 17% in Biopharma and EUR 125m in ICT.
- As the quasi-equity portfolio grows, the relative **support to engineering companies is likely to diminish while Biotech/Pharma exposure is likely to grow** in significance. Software exposure is likely to grow from almost no existent track record to one-third of the deal flow.

Quasi-equity operations have reached 50% of the overall MGF portfolio within 18 months. Expansion into corporate quasi-equity and new EFSI MGF-type operations will shift the portfolio to predominantly quasi-equity deals. Such operations bring high additionality and provide a significant boost to innovation, although they also bring a higher risk to the investors.

### 3.6.2 Assessment of Performance to Date of MidCap Growth Finance

The MidCap Growth scheme had 38 projects approved as at 31st December 2016 but the pipeline is rather low, and there is a degree of (potential) overlap with commercial providers in some countries. As with the MidCaps Guarantees, it could be argued that in recent years this market segment has tended to become ‘overbanked’ in terms of relatively cheap debt financing in the context of ever lower interest rates, at least in the Eurozone. Cheap debt is likely to always be preferred to diluting shareholders’ equity. This can, however, produce vulnerabilities as the firm grows and becomes over reliant on debt (over-geared). The guarantee schemes could exacerbate such a scenario.

The MGF is particularly affected by the introduction of the EFSI (see Section 4.4.4 for more information). In line with the EIB Equity Strategy, approved in 2016, and the Commission’s non-objection as per the November 2016 H2020 Debt Steering Committee meeting, all MGF quasi-equity operations that were not signed before are transferred and signed under the EFSI ‘Infrastructure & Innovation Equity Window’. Furthermore, there is an overlap of the MGF debt type operations with the debt financing under the EFSI IIW Debt window. This will have had an effect on the performance of the scheme to date.

Some examples of the feedback on MidCap Growth Finance are provided below:

<table>
<thead>
<tr>
<th>Examples of feedback on performance of MidCap Growth Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In the Netherlands MGF is seen by the interviewees as a useful instrument for MidCaps. However, it is necessary to apply directly to the EIB and one of the interviewees was of the view that the number of EIB staff to handle applications for MGF seems to be too low. This hampers the use of this product but is a bottleneck could be solved by giving a larger role to ‘National Promotional Banks or Institutions’.</td>
</tr>
<tr>
<td>• There seems to be some overlap between InnovFin MidCap Growth Finance with the Dutch support scheme called ‘Innovatiekrediet/Innovation credit’. But that is</td>
</tr>
</tbody>
</table>

---

120 6th Steering Committee Meeting for H2020 Debt Financial Instruments Business plan and operation pipeline
Brussels, 10 November 2016
not seen as an important consideration.

- In Spain MGF’s ability to provide access to debt and equity finance was ranked as being effective to some extent by a beneficiary responding to survey questions. A Portuguese respondent suggested that there is ample funding available for firms in the MGF target market and the product was of limited value.

- In Poland, demand for MGF was low and this was not expected to change due to the recent focus on the EFSI, in particular the Innovation Window.

### 3.7 Large Projects

InnovFin Large Projects is directly managed by the EIB and aims to improve access to risk finance for R&I projects emanating from larger firms, universities and public research organisations, R&I infrastructures (including innovation-enabling infrastructures), public-private partnerships, and special-purpose vehicles or projects (including those promoting first-of-a-kind, commercial-scale industrial demonstration projects).

The product builds on the previous RSFF product and consists of two windows with slightly different eligibility criteria. The EU window focuses on supporting projects for R&I activities in the TRL 1-8 area and on R&I Infrastructures, while the EIB window is able to also address projects aiming at TRL 9, i.e. the deployment of innovative technologies. Funding is provided in form of direct loans or guarantees to partly finance projects. The aim is to cover the cumulative investments costs related to eligible R&I activities over a period of three to five years. Apart from the general framework conditions regarding eligibility and the EIB’s usual limits and constraints, the terms and conditions are considered quite flexible, and are tailored to the individual needs of beneficiaries.

The Large Projects scheme offers longer-term finance on a market-priced basis. It is expected to also have a signalling effect by attracting additional public and private investors. Loans and guarantees range from EUR 25m to EUR 300m and are delivered directly by the EIB. The programme operates alongside EFSI, in particular the ‘Infrastructure & Innovation Window’ since July 2015 (see Section 4.4.4 for further information).

<table>
<thead>
<tr>
<th>Title</th>
<th>InnovFin Large Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation period</td>
<td>12 June 2014 – 122</td>
</tr>
<tr>
<td>Duration</td>
<td>Up to ten years</td>
</tr>
<tr>
<td>Investment amount123</td>
<td>EUR 6,750m (for all EIB-managed products)124</td>
</tr>
<tr>
<td>Amount committed to final beneficiaries</td>
<td>EUR 4,543m</td>
</tr>
<tr>
<td>Eligible intermediaries</td>
<td>No intermediaries</td>
</tr>
<tr>
<td>Eligible beneficiaries</td>
<td>larger firms; universities and public research organisations; R&amp;I infrastructures; public-private</td>
</tr>
</tbody>
</table>

121 The main data source used in this section is the EIB Facility under Horizon 2020 Debt Financial Instruments Semi-Annual Operational Report and the InnovFin Flysheet.
122 Signature of delegation agreement – not actually agreement LP specific
123 All financial data based on Operational Report as of 31/12/2016; EUR equivalent
124 Aggregate for all EIB-managed instruments of EUR 2.7bn per year, i.e. after 2.5 years of implementation as of 31 December 2016
3.7.1 Progress to date with implementation of Large Projects

The 49 signatures so far (31 December 2016) with final beneficiaries are distributed across 15 EU Member States and four Accession Countries (Turkey, Tunisia, Israel and Switzerland). A breakdown by amount committed to final beneficiaries in each country is provided below:

**Figure 3.8 Breakdown of final beneficiaries by country (amount in EUR m)**

The chart shows that Italy has by far benefitted the most from Large Projects so far, followed by Spain and the United Kingdom. Both countries are also in the top four of recipients overall across all seven InnovFin products (see Section 3.1 of the report). This raises the question as to whether the prominence of these countries in the rankings is indeed a reflection of the presence of large firms pursuing highly innovative projects in these countries, or whether it is rather a reflection of the state of these countries’ financial markets, which may not be capable of funding such projects to the same extent that is the case in other markets such as France, Germany or the UK. Our research suggests that the explanation lies in a combination of these factors.

3.7.2 Assessment of the performance to date of Large Projects

So far, the take-up of InnovFin Large Projects has been good with a total of EUR 4.5bn being committed to beneficiaries. The pipeline also suggests continued high demand. However, demand could probably be even higher if it were not for external factors: since the InnovFin financial instruments were launched, the amount

<table>
<thead>
<tr>
<th>Number of final beneficiaries to date</th>
<th>49, out of which 3 cancelled after signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target leverage effect(^ {125})</td>
<td>12.5</td>
</tr>
<tr>
<td>Leverage effect achieved to date(^ {126})</td>
<td>11.2</td>
</tr>
</tbody>
</table>

\(^ {125}\) Across all EIB-managed instruments (MidCap Growth, MidCap Guarantee, Large Projects, excluding Energy Demo, Infectious Diseases

\(^ {126}\) Across all EIB-managed instruments
of liquidity in the European money markets has increased. One consequence of this is that the EIB’s offering has lost some of its competitive advantage in relation to large companies that can now obtain finance at similar rates of interest from commercial sources. Another key external factor is the launch of EFSI since its Infrastructure & Innovation Window tends to cover the same market segment as InnovFin Large Projects. The fact that Large Projects nevertheless receives a considerable amount of interest suggests that the EIB has managed to specific high-risk projects within the market segment that are otherwise unlikely to receive the type of finance required even under favourable market conditions.

Examples of feedback from the research are provided below:

<table>
<thead>
<tr>
<th>Examples of feedback on the performance to date of Large Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>• This financial instrument has seen increased demand over the past nine months but is geographically far more concentrated than other InnovFin financial instruments (e.g. the SMEG).</td>
</tr>
<tr>
<td>• Some stakeholders have expressed concern that the EIB is crowding out commercial banks. For example, an Austrian stakeholder mentioned that one beneficiary had previously received loan offers from several major banks but then picked the EIB loan due to better conditions. Generally, the national contact point had the impression that the EIB selected beneficiaries with a good track record that would have no trouble obtaining a loan on the market. The EIB stated that they only support bankable projects, meaning that by definition other banks may also provide finance using the same criteria. This suggests that the product is used rather to increase loan volume than to support a specific segment of the market that could not be supported otherwise.</td>
</tr>
<tr>
<td>• A German stakeholder believed that demand for Large Projects support was rather low as such firms would rather need equity or mezzanine financing than debt finance. A Dutch interviewee believed that the way the product is run by the EIB does not fit with the needs of large enterprises. Specifically, the requirement to report on this support as a loan in firms’ balance sheets can negatively affect their credit rating. It was recommended to allow firms to categorise it as risk finance instead.</td>
</tr>
<tr>
<td>• Lower demand for this product than expected was linked in several countries (e.g. Poland) to the introduction of the EFSI which under the window ‘infrastructure and innovation’ funds similar types of projects.</td>
</tr>
</tbody>
</table>

Examples of projects supported through Large Projects include a Swedish company, Getinge, which was granted a EUR 160m loan from the EIB in 2015 to support the development of technologies that will benefit European citizens. The loan was granted to the company’s Research and Development unit to allow it to continue its research in the areas of surgery, intensive care, infection control, care ergonomics and wound care. The two-year project focuses on cardiac surgery, cardiology, intensive care and emergency medicine, but will also concern the areas of critical care and surgical workplaces. It covers the complete research and development circle from initial concept to clinical trials at Getinge’s facilities in Sweden, Germany and France.

A second example is a Polish pharmaceutical company that had previously received EU grants stated that the loan it received under Large Projects allowed it to validate their biotechnology projects in the market, and encouraged other banks to engage in long-term projects with them due to the EIB support (confirming a signalling effect). The firm also credited the support with enhancing its competitiveness and some positive
employment effects, but saw no effect on business performance and long-term growth prospects.

3.8 Infectious Diseases

InnovFin Infectious Diseases Finance Facility (IDFF) is a thematic pilot product for financing R&I activities developing vaccines, treatments and medical and diagnostic devices for infectious diseases.\(^{127}\)

IDFF makes loans to SMEs, MidCaps, special project vehicles, research institutions and other entities for corporate or project finance, and to large pharmaceutical companies to finance the development of medical products on a risk-sharing basis. Loans are provided at a stage when the company’s products are not yet fully bankable (although they should have the prospect of becoming bankable). Beneficiaries can be project developers, for example, that have successfully completed the pre-clinical stage but require clinical validation or have projects that are ready for later stage clinical trials. The EIB provides loans of between EUR 7.5m and EUR 75m. Under IDFF, the risk profile is higher than for other EU funds and this risk to European funding is shared between the EU and the EIB along the time-axis of loans.

Table 3.10 Overview of Infectious Diseases

<table>
<thead>
<tr>
<th>Title</th>
<th>InnovFin Infectious Diseases Finance Facility (IDFF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation period</td>
<td>15 June 2015 –</td>
</tr>
<tr>
<td>Total EU contribution(^{128})</td>
<td>EUR 150 m(^{129})</td>
</tr>
<tr>
<td>Amount committed to final beneficiaries</td>
<td>EUR 45m</td>
</tr>
<tr>
<td>Nature of product</td>
<td>Risk sharing loans</td>
</tr>
<tr>
<td>Eligible intermediaries</td>
<td>No intermediaries</td>
</tr>
<tr>
<td>Eligible beneficiaries</td>
<td>Project promoters active in developing vaccines, drugs, medical and diagnostic devices, and research infrastructure for combatting infectious diseases that have completed the pre-clinical stage and for which clinical validation is needed for further development</td>
</tr>
<tr>
<td>Number of beneficiaries operations signed with to date</td>
<td>3(^{130})</td>
</tr>
<tr>
<td>Geographic scope</td>
<td>EU Member States and Horizon 2020 Associated Countries</td>
</tr>
<tr>
<td>Funding sources</td>
<td>Access to Risk Finance Programme, Horizon 2020</td>
</tr>
</tbody>
</table>

\(^{127}\) The key data sources consulted include the EIB website, the EIB flysheet on Infectious Diseases, the DG RTD News Alert ‘First loan under InnovFin Infectious Diseases’, the EIB Press Release 28 January 2016 ‘France: EIB lends EUR 20m to Transgene’, and a study by David M. Brogan and Elias Mossialos (2016) entitles ‘A critical analysis of the review on antimicrobial resistance report and the infectious disease financing facility’, published by LSE Research Online. EIB information on the IDFF is still relatively restricted, in that the IDFF tends only to be included in passing references, given its later start than the other instruments and its more restricted scope. Nonetheless, the facility has already begun to attract academic attention, notably in the article by David M. Brogan and Elias Mossialos (2016) entitles ‘A critical analysis of the review on antimicrobial resistance report and the infectious disease financing facility’, published by LSE Research Online.

\(^{128}\) All financial data based on Operational Report as at 31/12/2016; EUR equivalent

\(^{129}\) Initially EUR 100m, increased by another EUR 50m through amendment to Delegation Agreement

\(^{130}\) EIB: The operation with Mobidiag has been signed mid-2016
Infectious Diseases pose a major global health threat and are the second most common cause of mortality after heart disease and strokes, causing approximately 17% of all deaths globally. Furthermore, AMR (Antimicrobial Resistance / antibiotic resistance) - a significant area covered by InnovFin Infectious Diseases – is a major issue in relation to infectious diseases. The World Health Organisation (WHO) considers antibiotic resistance to be one of the biggest treats to global health today and hence a major priority. It has been estimated to be responsible for some 700,000 deaths globally each year, a number that could rise as high as 10m, potentially exceeding the annual number of deaths from cancer. The Centre for Disease Prevention and Control (CDC) estimates consequent healthcare costs and productivity losses in Europe to be at lease EUR 1.5bn.

In spite of the evident need to respond to infectious diseases, there is often considerable uncertainty about the market prospects of potential cures. This presents a particular problem for those seeking to exploit the results of research supported by Horizon 2020 and especially the Societal Challenge on Health, demographic change and wellbeing and associated programmes such as the innovative Medicines Initiative.

A specific problem has been identified in the context of the InnovFin programme in that infectious diseases is an area, within the ‘Health, demographic change and wellbeing Societal Challenge’, where researchers have experienced particular difficulties in carrying research through to treatments and medical products and therapies. IDFF exists to assist in addressing this problem. New medicines require extensive pre-clinical and clinical trials before they can be deployed and frequently there can be long delays before research feeds through to medicinal products and broader therapies. This poses problems for the financing of the whole process and is one of the reasons that this market tends to be dominated by large organisations which can afford to take a long view of prospects. There are nonetheless smaller firms that find a niche and are often important in carrying out initial research, but these can face a difficult financial environment.

With infectious diseases, there are additional problems. The prospects in the market are often more uncertain than for medicines in general, adding to the uncertainty surrounding the technical feasibility and safety of new treatment. The cause of emerging epidemics, for instance, is always unknown and developing drugs to combat them may be an uncertain commercial proposition. Furthermore, infectious diseases treatments may be compromised by antimicrobial resistance, and restricting their use (the main countermeasure), can discourage drug developers from investing. Consequently, equity and other performance returns have been poor in this particular sector.

Within this context, there can be problems even for therapies that show initial promise, for example difficulties in obtaining financing for clinical validation and later-stage clinical trials. Sharing the risk with other investors can therefore be a way of encouraging enterprises to proceed with the later stages of clinical validation. The InnovFin IDFF instrument in providing an “equity risk” type of loan is designed to address these difficulties. The loans often carry a warrant or a royalty obligation providing appropriate loan remuneration and are less dilutive than straight equity. It is usually more advantageous for the companies to take such loans, since, given that they are mostly not immediately bankable (the other alternative is highly diluted equity).

3.8.1 Assessment of implementation to date of the Infectious Diseases Finance Facility

The launch of the InnovFin IDFF took place on 15 June 2015. The product makes risk-sharing loans of between EUR 7.5m and EUR 75m, financing up to 50% of eligible project costs. Co-financing is required from an enterprise’s own resources, possibly supplemented by external sources.
Since the launch three agreements have been signed (as at 31 December 2016) including one loan of EUR 10m to a Swedish company to improve an HIV viral load testing device and a second loan of EUR 20m to a French enterprise to help finance clinical developments for the treatment of diseases, such as chronic hepatitis B, virus-induced cancers such as HPV (human papilloma virus) and tuberculosis. The third loan of EUR 15m benefits a cross-border Finnish-French research project. The enterprises involved (and some of those in the pipeline) are exploiting intellectual property developed from academic research or academic collaborations, for the most part in projects supported by the EU Framework Programmes.

A number of the IDFF proposals received have not been accepted because the projects were at a too early stage, lacking a commercial potential in the near future (i.e. within a 5-year time horizon) and hence being considered too risky. In addition, the eligible investment requirements were not sufficient to allow for a direct EIB loan (this is now partially being addressed through the widening of the eligibility rules). However, it should be noted that a significant number of these applicants have been put on hold and not rejected (as at the beginning of May 2017, 31 projects are on hold out of 78 proposals received). A number of these projects will evolve positively in the coming months and are expected to be reconsidered for support given that their risk profile should have evolved positively.

There is growing international attention being paid to infectious diseases and, in particular, anti-microbial resistance. This is likely to encourage the research environment in this area and also to increase the numbers of those seeking finance to develop medicinal responses.

### 3.9 Energy Demonstration Projects

Launched in June 2015, InnovFin Energy Demo Projects (EDP) enables the EIB to finance innovative first-of-a-kind demonstration projects in the fields of renewable energy, sustainable hydrogen and fuel cells. EDP supports those seeking to exploit the results of research funded by Horizon 2020 and especially the Societal Challenge on Secure, clean and efficient energy.

The scheme facilitates the rollout of low-carbon energy technologies to the market and focuses on first-of-a-kind power, heat and/or fuel production plants and first-of-a-kind manufacturing plants. It has been designed to address the financing bottleneck identified in the EU’s Strategic Energy Technology (SET) Plan.

Under the EDP, the EIB provides loans of between EUR 7.5m and EUR 75m. Support is provided for pre-commercial innovations that have commercialisation potential, up to Technological Readiness Levels (TRL) 7 or 8. The duration of projects is up to 15 years. Projects must have a commercial component and demonstrate the ability to generate revenues after completion. In a large number of cases, finance is provided in the form of non-recourse project finance loans to special purpose vehicles created by the promoters for scaling up operations using a new technology which has passed the pilot phase and needs to be tested at a commercial level. The EDP may also extend guarantees to financial intermediaries who make such loans.

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131 The main data sources consulted for this section are the EIB website, the EIB flysheet on InnovFin Energy Demo Projects, the DG RTD News Alert on First loan under InnovFin Energy Demo Project, and a Presentation on ‘The Financing of Energy and innovative RE projects’ by Alessandro Boschi. EIB information on the EDP is still relatively restricted, in that the EDP tends only to be included in passing references, given its later start than the other instruments and its more restricted scope.
### Table 3.11 - Overview of product

<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>InnovFin Energy Demo Projects (EDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Implementation period</strong></td>
<td>15 June 2015 – 31 December 2020</td>
</tr>
<tr>
<td><strong>Total EU contribution</strong></td>
<td>EUR 150 m$^{132}$</td>
</tr>
<tr>
<td><strong>Amount committed to final beneficiaries</strong></td>
<td>EUR 10m</td>
</tr>
<tr>
<td><strong>Nature of product</strong></td>
<td>Loans to projects or loan guarantees to financial intermediaries</td>
</tr>
<tr>
<td><strong>Amount disbursed</strong></td>
<td>EUR 10m</td>
</tr>
<tr>
<td><strong>Who are eligible intermediaries?</strong></td>
<td>Financial intermediaries proving finance to first-of-a-kind commercial-scale demonstration projects in the fields of renewable energy and hydrogen and fuel cells</td>
</tr>
<tr>
<td><strong>Who are eligible beneficiaries?</strong></td>
<td>Project developers for first-of-a-kind commercial-scale demonstration projects in the fields of renewable energy and hydrogen and fuel cells</td>
</tr>
<tr>
<td><strong>How many financial intermediaries operations signed with to date?</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>How many final beneficiaries signed operations with to date?</strong></td>
<td>1, a further one project has been approved</td>
</tr>
<tr>
<td><strong>Geographic scope</strong></td>
<td>EU Member States and Horizon 2020 Associated Countries</td>
</tr>
<tr>
<td><strong>Funding sources</strong></td>
<td>Access to Risk Finance Programme, Horizon 2020</td>
</tr>
</tbody>
</table>

The aim of EDP is to promote the rollout of low-carbon energy technologies to the market and thus to contribute to EU energy and environmental policies. The European Union is committed to reducing greenhouse gas emissions by 20% below 1990 levels by 2020, with a further reduction to 80-95% by 2050, and also that 20% of final energy consumption in 2020 should be provided by renewables.

The strategy for achieving these goals has been detailed in the Strategic Energy Technology (SET) Plan$^{134}$ which also identified a specific financing need relating to high-risk first-of-a-kind energy demo projects. EDP responds to this need in that its specific objective is to support the transition of energy projects from demonstration to commercialisation with appropriate forms of finance. As such, the EDP helps to bridge the “valley of death” encountered at the construction and initial operating stages by supporting cutting-edge energy technology projects that may otherwise find it difficult to raise finance. Projects funded are intended to be close to the market with a high Technological Readiness Level (TRL) but where they are not able to obtain finance from alternative sources.

The financing bottleneck identified in the Strategic Energy Technology (SET) Plan arises with high-risk first-of-a-kind energy demonstration projects, which aim to prove the commercial viability of new renewable energy technologies but which first need to move from technical demonstration to operational readiness, often involving construction and the beginnings of operational activity. This stage is deemed to be particularly risky, involving the bigger scale of outlay that is necessary before revenue can be generated. The focus of the EDP was defined by the Commission on the basis

$^{132}$ All financial data based on Operational Report as at 31/12/2016; EUR equivalent

$^{133}$ Initially EUR 100m, increased by another EUR 50m through amendment to Delegation Agreement

of a specific market gap analysis and it was decided that it should be on TRL levels 7-8 and not cover all the elements in the SET plan). The scope is thus rather restricted, but given the limited size of the pilot, this was thought to be reasonable initially.

EDP is a response to difficulties in an area of policy where the delivery of feasible solutions to a broad market base is critical to achieving overall energy and environmental aims.

### 3.9.1 Implementation to date of the Energy Demonstration Projects

As at 31 December 2016, one project had been signed and several more are in the pipeline. The signed project involved a EUR 10m loan to a Finnish company to build a full-scale demonstration unit in Portugal to harness ocean wave energy. Otherwise, the low uptake to date is largely due to the novelty of such a product, the eligibility criteria, the technical complexity of projects, and the high risk they may carry.

#### Figure 3.9 - Energy Demo Projects by status (as of April 2017)

![Energy Demo Projects by status](source: EC presentation)

The pipeline for InnovFin Energy Demo Projects looks promising. There were initially a significant number of proposals that did not proceed. It appears that there was a misperception in the market at the beginning and applications were not aligned with the objectives of the facility either in terms of risk level or eligibility. EDF is aimed at a very specific stage of product development (i.e. the first commercial rollout of pre-commercial technologies and projects ready to commence construction as soon as possible). There is also a demanding bankability test (projects are expected to progress from non-bankable to bankable during the life of the project) and a requirement for substantial sponsor co-funding (some sponsors, especially the weaker entities, have failed the co-funding test). This is all because the instrument is aiming to address a specific problem. The communication of the aims has been strengthened and demand is now picking up. There are currently 56 transactions in the pipeline, although still only one deal has been signed (May 2016) with another approaching this point after approval by the Board of Directors.

### 3.9.2 Assessment of Performance to date of the Energy Demonstration Projects

Overall, however, there has been less demand than hoped for in relation to the Energy Demonstration Projects. Around half of the current financial allocation is expected to have been utilised by mid-2017. We understand that nine applications have been rejected since they did not match the scheme’s risk profile or application criteria. These applications have been referred to other more appropriate sources of funding. There also appears to have been a problem - in relation to both the thematic
instruments, but particularly in the case of EDP - arising from the internal rules of the EIB on risk management and the residual risk (5%) borne by the Bank. Horizon 2020 covers the first loss piece (FLP) risk of 95%, but even the proportionately small coverage of non-bankable transactions poses problems for the institution.

**With financial allocations set to double from EUR 150m to EUR 300m, in line with the commitments in the European Commission’s Communication ‘Accelerating Clean Energy Innovation’**, there is a need to accelerate the **take-up of the scheme**. In effect, the Energy Demonstration Projects operated as a pilot with lessons being learnt that point to possible improvements. Conceivably, if it is supported by evidence of market demand, a greater flexibility in the definition of the eligibility could be introduced, leading to a greater market uptake. This could be done, for example by expanding the TRL level or broadening EDP focus to other areas of the SET plan.

**More generally, feedback from the research suggests that there may continue to be problems with the general marketing of the thematic products.** The relatively small budget available and the fact that there may be a limited number of eligible companies that could make it difficult for intermediaries to establish a critical mass of enterprises that qualify for the product make these products more difficult to mobilise. Specifically in relation to the Energy Demonstration Projects scheme, the potential for renewable energy technologies is highly susceptible to developments in public policy that may very well impact, either positively or negatively, on the ultimate viability of projects supported by this product.

### 3.10 InnovFin Advisory

The five EIB-managed InnovFin products are complemented by InnovFin Advisory.136 InnovFin Advisory was set up as a joint EIB-European Commission initiative under Horizon 2020 to assist eligible public (including government agencies) and private sector undertakings (including companies and industry associations) to improve the bankability and investment-readiness of large, complex, innovative projects that need substantial long-term investments. The capacity-building service helps clients adjust their business model, governance, funding sources and financing structure and other aspects of their operations to improve the capacity to make use of funding. This way, it contributes to increasing investment readiness of potential beneficiaries under InnovFin and thus building a strong pipeline for the EIB products.

Beyond client- or project-specific services, InnovFin Advisory also considers the business case for new financing mechanisms and prepares studies on increasing the effectiveness of financial instruments to address specific R&I needs. This way, InnovFin Advisory also provides inputs to Commission planning. It operates in close collaboration, strategically and operationally, with the **European Investment Advisory Hub (EIAH)** which was created as part of the launch of the EFSI and acts as a single entry point to EU funding schemes, including InnovFin. The EIAH aims to help public authorities and project promoters in Member States to identify, prioritise, prepare and implement strategic projects and to make more efficient use of EU funds, bringing together specialist advisory services currently successfully delivered by the EIB and the European Commission.

At present, InnovFin Advisory is operated by a small team at the EIB’s headquarters in Luxembourg. The considerable geographic variation in the take-up of the InnovFin products suggests that a more decentralised structure for InnovFin Advisory could

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help raise awareness and build capacity and investment readiness in markets that have so far made less use of the programme.

In carrying out the research, it was suggested that InnovFin Advisory should collaborate more closely with the network of national contact points and provide training to help disseminate information and advice on the financial instruments in countries where take-up is relatively low. Related to this, it was suggested that InnovFin Advisory should make increased use of case studies help stakeholders understand the role of InnovFin in promoting innovation. This and issues such as the lack of clarity around the meaning of innovation eligibility criteria used in case of the SMEG (see Section 3.3) indicate that there is a need for InnovFin Advisory not only to help promote the EIB-managed financial instruments but also the EIF-managed instruments, even though many intermediaries interviewed for this study praised the working relationship with the EIF (see also Section 4.3).
4. EVALUATION OF CROSS-CUTTING ISSUES

In this section, we present findings from the research on cross-cutting issues relating to the interim evaluation of Horizon 2020’s financial instruments – the InnovFin programme. This section is structured as follows:

- **Section 4.1: Relevance**, i.e. to what extent the InnovFin programme addresses the needs of R&I-driven firms in participating countries;
- **Section 4.2: Effectiveness**, namely the extent to which InnovFin is achieving its objectives;
- **Section 4.3: Efficiency** - how the InnovFin financial instruments are being implemented and whether costs are proportionate;
- **Section 4.4: Coherence** – internally between the different financial products and externally with other EU-supported and relevant national schemes.
- **Section 4.5: Added value** – the extent to which InnovFin achieves outcomes that would not be achieved in absence of the programme.

4.1 Relevance - To what extent does the InnovFin programme address the needs of R&I-driven firms?

4.1.1 Overview

This section considers the extent to which the seven InnovFin financial products demonstrate relevance, the first of the key evaluation issues considered in this report. We look at the extent to which the InnovFin financial instruments correspond to the identified needs of R&I-driven firms, including start-ups, SMEs and small MidCaps accessing InnovFin support through financial intermediaries and MidCaps and large firms accessing both loans from financial intermediaries and directly from the EIB.

As described in Section 2, innovative enterprises have differing types of financing needs at different stages of their development, starting with the need for risk capital during the early stages and progressing to various forms of equity and debt finance as projects are commercialised and businesses expand. The extent to which the different InnovFin products meet the identified needs of businesses at different stages of their development is being examined in this section together with the impact this has had on demand for the products in different countries.

The nature and extent of market deficiencies that the InnovFin programme seeks to address have already been referred to in Section 2. That analysis highlighted the fact that there are regional variations across the EU with regard to the maturity of risk financing markets which are more developed in Western and Northern Europe than Southern or Eastern Europe. Whilst the scale of VC activity in Central and Eastern Europe is much lower than in more mature markets, such markets have developed relatively quickly, in part driven by EU financial instruments, notably the Structural Funds (including the JEREMIE holding instrument) and by the EIF’s fund-of-funds programme (e.g. the EIF Polish Fund of Funds, Baltic Innovation Fund). But even in mature markets, intermediaries and national authorities have indicated that the InnovFin instruments are filling a gap, especially in the area of debt finance and after the start-up phase in the business cycle when enterprises begin to expand. This observation is confirmed by high demand for the SMEG thanks to more favourable conditions than offered on the market.137 The

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137 A specific market gap filled by SMEG in Sweden relates to university- and IT-related companies and micro-enterprises that would otherwise have most likely not succeeded in obtaining a loan at all.
Infectious Diseases product is also credited with filling a specific market gap for projects that are too late in the R&I cycle to receive a grant but too early to receive a commercial loan (due to commercialisation potential being not yet appraisable).

**The availability of grant funding in Central and Eastern European countries may be a factor explaining a lack of interest among financial intermediaries in participating in InnovFin.** The research suggests that there is sufficient grant funding available in many such countries so that firms do not feel the need to apply for EU-supported loans. The Innobarometer and SAFE Survey data presented in Section 2.1 highlight differences in terms of access to finance problems, and the reasons for these, between different regions across Europe. The findings suggest that access to finance has become less of an issue in recent years but still poses a major problem for firms in some countries.

**There are many factors influencing demand for and the uptake of the InnovFin instruments.** The research for this study also suggests that both a lack of finance and the degree of R&I intensity in the economy shape potential demand for InnovFin in certain countries. Looking at firm size, our research suggests that even large firms can benefit from InnovFin support to invest in R&I activities so long as this related to specific high-risk high-reward projects that these firms could not fund from their cash flow. One factor determining demand for debt instruments are market interest rates but this alone does not explain demand for debt-based products, as the situation in Belgium and the Netherlands presented further below in this section indicates. These are two countries affected by the same ECB monetary policies but with very different market conditions for debt finance.

**The availability of alternative sources of finance is also an important factor influencing demand for InnovFin.** For example, if alternative sources of finance are plentiful, this tends to reduce the need for the InnovFin instruments, as has been confirmed, for example, in many Central and Eastern European countries. Conversely, a high level of R&I intensity in the economy positively correlates with demand for the InnovFin instruments. The link between business development stage and demand for InnovFin is inconclusive, and seems to vary by country. Generally, start-ups and early-stage companies tend to face more access to finance issues than later-stage companies.

In relation to the question of the geographic distribution of take-up, it should be recognised that while it is an implicit aim of InnovFin as one of H2020’s overall objectives to widen participation by addressing disparities across Europe in R&I performance (see Section 2.3) there are justifiable reasons why take-up is unlikely to be even across all EU Member States during the lifetime of the InnovFin programme. This includes factors such as wide variations in alternative sources of funding, differences in maturity of debt and equity markets, differences in demand for innovation financing across geographies, which all mean that an even distribution is unrealistic and may indeed not be optimal for the European economy as a whole.

**4.1.2 Extent to which InnovFin addresses market gaps**

Overall, the InnovFin instruments’ objectives of addressing market failures, strengthening risk capital provision and promoting R&I investment appear to remain relevant to the needs of R&I-driven firms across the EU28 and H2020 Associated Countries. The research suggests that there remains a need for innovation financing at the firm level, as evidenced by strong interest in InnovFin, in particular for the SMEG. Demand for most of the other products has also picked up over the last year.

With regard to coverage of the InnovFin FIs by funding stage, the InnovFin instruments address most but not all stages of the enterprise development lifecycle. Two of the products are focused on SMEs, a further two on MidCaps and
one product is focused on large projects. The latter accepts applications from large firms but also institutions such as universities wishing to take out loans from the EIB to invest in strengthening R&I infrastructures. The energy demo and infectious diseases products are thematic. Overall, this appears to be an appropriate portfolio of different instruments bearing in mind InnovFin’s objectives.

Strong demand is indicative that the InnovFin FIs remain relevant to identified needs. A total of 6,234 firms have benefited from the SMEG, and 91 final beneficiaries have been signed across all EIB-managed products (31 December 2016). This is encouraging given that the implementation of the InnovFin instruments has only been underway for 2-3 years, and keeping in mind that the two thematic products were launched a year later than the other products. While strong demand is a necessary ingredient for a successful programme, it should be noted that even if the relevance of the programme’s objectives to business needs is high, it may be that these needs can also be satisfied by alternative sources of finance, including private sector finance. In this case, the relevance of the programme would still be high but its added value in the market would be diminished. This is further discussed in Section 4.5.

The level of take-up of InnovFin products in some markets is not necessarily a reflection of their relevance/ lack of relevance since low uptake may be due to other factors than demand for innovation financing. The factors include restrictive eligibility criteria, lack of interest among intermediaries to become involved in particular countries, and the availability of alternative sources of financing offering better conditions or being perceived as easier to access).

The EIB’s own assessment has identified factors that suggest that InnovFin FIs are highly relevant in addressing market gaps. For instance, commercial banks are not geared up to supporting companies with little or no assets to collateralise and thus offer insufficient or inadequate financing for innovative companies. This deficiency appears to be strongest in case of MidCaps whereas SMEs may resort to equity funding and large companies find it easier to obtain loans from commercial banks. Our research suggests that demand is lower in some new Member States but also that there may be a stronger focus on early-stage investments in these countries which may not always translate into demand for the EIB-managed products since these focus on MidCaps and larger firms. Feedback from intermediaries and industry associations suggests that the extent of market gaps varies considerably between countries, both in terms of private sector supply of finance, and in terms of existence or lack of programmes similar to InnovFin provided by NPBs. This suggests that the relevance of InnovFin differs by country, and hence its overall relevance, could be maximised by adopting a more tailored approach distinguishing between different countries rather than a ‘one-size-fits-all’ model.

Also important in assessing relevance is the difference between supporting disruptive and incremental innovation. The latter is much more common in most businesses, and such companies in many cases tend to prefer debt products over equity. This means that the SMEG is highly relevant to identified needs. The research suggests that there could be a correlation between countries where SMEs invest a lot in product and process innovation and demand for InnovFin products (and the SMEG in particular). Italy and Sweden stand out in terms of demand, whereas demand in Poland is lower.

Another factor influencing InnovFin’s relevance is the state of development of the financial markets in different countries and the macroeconomic environment overall. However, it is difficult to establish a clear link between the level of economic and financial development of a country and the need for InnovFin support since a low level of development may both indicate a lack of suitable finance available for R&I-driven firms, but might equally reflect a lack of R&I intensity and thus low demand for R&I finance. Moreover, there are differences between regions
within a country making any generalisations difficult. In banking systems with a lack of capital, guarantee instruments can be particularly effective and can thus be considered very relevant to the needs of companies.

Given that the InnovFin programme is set up in line with the EU-funding cycle over a period of seven years (2014-20), it will most likely have to operate under varying, more or less favourable, market conditions, both in temporal and geographic terms. There will be situations where the programme and its components provide finance during an economic downturn but equally during an upturn when the private sector increases investment, also in innovation-driven firms. This fluctuation is mirrored within companies that move from early stages of business development to growth and expansion stages. There are implications for the relevance of InnovFin. It is in the earlier stages where demand for the programme should be highest given the lack of interest among private investors in this asset class which is perceived to be riskier than other asset classes. Whether the differences in take-up across countries and individual InnovFin products described in Section 3 reflect varying extents of market deficiencies is not straightforward to answer. High take-up may indicate a market deficiency but may equally indicate high demand in a market already providing some access to R&I finance but at less favourable conditions. The objective of the InnovFin programme is to improve R&I financing for innovative firms, suggesting that both those firms that could not obtain financing otherwise and those that could but at less favourable conditions should be supported. These issues are further discussed in Section 4.5 examining InnovFin added value.

Financial intermediaries consulted for this study appear to agree that investors’ interest in innovation has generally increased since the previous programming period, and in particular in the last five years. According to several interviews, the InnovFin financial instruments, and especially those targeted at SMEs, remain highly relevant since there is a growing market for innovation financing capable of absorbing additional funds. This leads to the conclusion that investment in R&I is not yet at the level where additional investment cannot create any further economic benefits, irrespective of whether InnovFin is the most relevant tool to remedy this or not. The fact that the SMEG is in particular high demand may indicate that InnovFin is particularly relevant in reducing the risk of innovation financing for other investors.

Looking at the need for additional equity and debt finance for innovation, the research provides a mixed picture across those countries that have made use of the InnovFin programme:

**Examples of feedback from different countries on the need for additional equity and debt finance for innovation and the role of InnovFin**

- In many countries (e.g. Austria, Denmark, Finland, Germany, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Portugal and Romania), the innovation-financing situation has improved across all stages and types of financing in recent years, reducing the need for public intervention although not making it entirely unnecessary. In Turkey, in contrast, the availability of both debt and equity finance has worsened in recent years, and large firms are the only ones who can easily obtain appropriate financing. Political uncertainty is credited with a lack of investor appetite in Turkey, suggesting that InnovFin, while relevant, may not be able to improve the situation significantly on its own.

- In some countries (e.g. Austria), the credit crunch following the financial crisis appears to be over, and market gaps are much larger in the area of equity finance (the latter also confirmed in Bosnia-Herzegovina, Italy and Malta) with a lack of ‘home-grown’ suitable venture capital fund managers and exit possibilities (the latter also seems to be an issue in Germany). In Finland, interviewees suggested that many start-ups are sold prematurely to foreign investors due to
financing issues that could be partially remedied by InnovFin Equity. However, it was also mentioned by interviewees that the European VC market as a whole may be too small to prevent this from happening, in which case InnovFin may not be able to address this issue on its own.

- In other countries, for example Israel and in the United Kingdom, in contrast, equity finance is readily available, but there is a lack of debt finance, suggesting a greater role for the InnovFin debt and guarantee instruments.

- A common market gap as perceived by interviewees that remains (e.g. in Denmark, Finland, Greece, Ireland, Italy, Luxembourg, Malta, Turkey) is in finance for young, innovative and scalable firms with limited collateral and short or no credit history, and it is argued that InnovFin, and the SMEG in particular, is key in addressing this market gap. In Romania, where most SMEs finance their activities through own resources, access to finance is a major obstacle to development. On the other hand, one reason for the difficulties young and small companies face in accessing finance seems to be information asymmetry and banks not being able to adequately assess loan application from such firms and the underlying business models. This issue may not be resolved by InnovFin, although InnovFin advisory and the EIF may play a role in enabling financial intermediaries to take such decisions. In Greece, there is a problem with the loan terms provided by banks in the absence of guarantees, making the InnovFin intermediated products highly relevant.

Generally, the innovation finance market gap seems far less pronounced or non-existent in most countries for large and well-established firms, suggesting that the EIB-managed InnovFin products targeting such firms need to focus on high-risk projects to be relevant in the market. It was suggested by some interviewees that a more thorough market gap analysis should be carried out for every loan application by larger firms in order to ensure the support is actually needed. That the need for innovation finance varies extensively even between countries which at first glance may be rather similar in structure can be illustrated by the cases of Belgium and the Netherlands, which have very different situations in terms of access to finance:

**Market situation in Belgium and Netherlands**

In Belgium, there is plenty of finance available for firms. In case of debt, there may actually be too much finance available, with banks having very high deposit rates. Bank lending has never been as high as it is now in Belgium with the equivalent of 175% of GDP being provided in loans. The reason for this is that banks would be penalised by the ECB due to the low interest rates if they did not lend. This influences the behaviour of banks and increases their risk appetite. The approach taken by banks is that ‘every firm that is bankable should be banked’. As a result of this situation, 77% of loan applications are granted.

In The Netherlands, in contrast, there is not enough money available to provide loans to all firms in need of finance. Only 35% of loan applications are granted. Consequently, loans are mainly made to low-risk firms, and risk appetite for funding start-ups is much lower than in Belgium.

As a result of this situation, fewer Belgian firms now say they have problems with access to finance than in the past. In the Netherlands, due to the dearth of debt finance, alternative forms of finance such as crowdfunding are booming. These are less important in the Belgian market.

This comparison illustrates that a ‘one-size-fits-all’ approach is problematic in that even rather similar countries may provide a very different context for implementing the programme. More particularly, differences are pronounced between Western and
Eastern Europe. A more tailored approach reflecting different market needs may be more effective and increase the programme’s overall relevance, but this should not come at the expense of simplicity and accessibility from an intermediary and beneficiary point of view.

There are a range of countries in which the InnovFin programme has to date not been used or only to a very limited extent. The research suggests that this is so because:

**Examples of feedback in the reasons for lack of use of InnovFin**

- **In some countries** (e.g. Cyprus, Hungary, Poland particularly compared to the thematic instruments, Slovakia) **alternative sources of financing for innovation are available.** This is often in the form of grants which are more attractive than loans to many firms who would also be eligible for InnovFin support. Grants are available both through national support programmes and through the European Structural Funds. In Lithuania, the Baltic Innovation Fund, backed by the EIF, has helped in developing the equity market, reducing the need for further support. Likewise, in Cyprus, COSME with its wider target group of firms has proven more suitable given a R&I system that is not very well developed.

- **In other countries** (e.g. Latvia, Montenegro, Slovakia) the view is that the economy has little innovation potential, thus reducing demand for InnovFin. Here, it may be a case of better communication to increase awareness of the fact that the InnovFin programme funds not only high-tech and cutting-edge innovation, but also incremental and other types of innovation.

- **Lack of experience and expertise among key stakeholders to understand and implement the financial instruments is also a reason for low or no take-up** (e.g. in Latvia, Montenegro), suggesting there is a need for more capacity-building in certain markets to increase investment readiness, both at intermediary and beneficiary level. Even in more developed economies such as in Germany, banks draw on external expertise, for example from research institutes, when trying to assess innovative business proposals and projects. Switzerland, in contrast, seems to have such a well-funded R&I system that there is little need for InnovFin. Even so, it recently signed its first operation under Large Projects.

- **There are also countries in which the programme appears to be relevant, and low take-up can be explained by the time it takes to raise awareness among potential intermediaries and beneficiaries to achieve a roll-out of the products.** This appears to be the case, for example, in Cyprus, and Slovakia. It was suggested by the EIF that the SMEG in particular follows a non-linear implementation path, and the analysis of monitoring data in Section 3.1, including pipeline analysis, suggests that demand is picking up dynamically in case of several of the financial products.

Finally, **some interview feedback suggests there remain market gaps not sufficiently addressed by InnovFin.** For example, in Spain, one financial intermediary stated that even with the SMEG support they were not able to support certain SMEs that were given an internal risk score higher than four. In this sense, the InnovFin objective of financing innovation is undermined as the risk assessment disqualified certain SMEs from accessing funding.
Another specific market gap may be financing of company leadership successions. This problem is particularly prevalent in Austria and Germany where there are many family-owned small and medium-sized businesses, but the EIF also receive many requests relating to such financing from Scandinavia. The SMEG rules could be adapted to allow for financing such cases as this is currently not possible. But this would require introducing a ‘purpose of transaction’ criterion and the criterion of ‘independent investment’ would have to be dropped. There are also other country-specific issues. For example, in the Netherlands, a specific market gap was identified in the health sector, where returns are too low for investors to become interested. In Finland, an issue relating to equity finance is the risk that many start-ups need to raise venture capital too early when their valuation is still low. This leads to situations where start-up companies are sold to foreign investors when they are still young and the selling price is too low, meaning that value is captured overseas. Another problem concerns finding adequate funding for companies that are growing and internationalising rapidly but have products that are not easily scalable. This mainly concerns companies outside the ICT and software industries.

Survey responses from financial intermediaries show some trends with regard to perceptions of InnovFin’s relevance. The findings mainly apply to the SMEG and to a more limited extent to InnovFin Equity and MidCap Guarantee. Of 54 respondents, 74% believed that R&I-driven currently have insufficient access to finance. But this differs substantially between individual products and countries. Some NPBs noted that there is growing interest among both promotional and commercial banks in lending to start-ups and high-growth SMEs, given the growing interest in the commercial potential of gazelles that are able to scale up and internationalise rapidly. The development of major clusters of start-ups, such as Tech City in London, Silicon Valley in Berlin and similar clusters in Paris and across Scandinavia has stimulated interest in lending to innovative firms that was previously rather limited.

As shown below, of 52 survey respondents (mainly financial intermediaries implementing the SMEG, and to a lesser extent the MidCap Guarantee), 40% viewed the instruments as addressing a gap in risk finance to a great extent, with another 58% believing the programme achieved this to some extent. Only 2% regarded the programme as irrelevant in addressing the finance gap. One survey respondents stated that for weak start-ups, even a 50% guarantee was insufficient. Another survey respondent believed their operation was helping reduce the market gap, but insufficient due to the scale of finance needs of target companies.

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138 There is some evidence to suggest that where NPBs are well-established and experienced there may be less of a need for EU-funding managed by the EIF/EIB in general. This is the case, for instance, in Germany, whereas Ireland and the UK have more recent NPBs and hence may benefit from EIF/EIB-managed instruments more directly. In newer Member States, intermediaries may be less prepared to invest in what they consider risky assets and hence prefer COSME with its wider focus over InnovFin when choosing EIF support. This shows that InnovFin can play a role in addressing shortcomings in national support measures.
Figure 4.1 - In your view, to what extent are the InnovFin financial instruments helping to address a gap in the availability of risk capital finance for companies involved in research & innovation?

Only 26% of respondents (n=54) stated that R&I-driven companies and projects in their region (at all stages of development) currently have sufficient access to debt and equity finance. Distinguishing between different stages of development, a particular need seems to be seen in access to finance for start-ups, and to some extent companies in growth stage, but less so for companies in expansion /scale-up stage, as shown in the figure below. This seems to differ across countries, however. Interview feedback suggests that in certain markets, such as Germany, there is a greater market gap in growth than in start-up and early stages.

Figure 4.2 - To what extent do research and innovation-driven companies and projects currently have sufficient access to debt and equity finance at different stages of development? (Please rank from 1 - market failure to 5 - abundant financing supply) %
Moving from company stage to different types of R&I-related finance needs, the chart below shows that financial intermediary survey respondents believed there was a somewhat larger market need for financial support to develop and commercialise new innovations and technologies than to develop new products or services, or to invest in R&I infrastructures.

**Figure 4.3 - How far do R&I-driven companies and projects currently have sufficient access to debt and equity finance to make the following different types of investment in R&I? (Please rank them from 1 - market failure to 5 - abundant financing supply) %**

The perception that the InnovFin instruments are highly relevant is contrasted by more nuanced interview feedback from financial intermediaries. In case of the SMEG, while an intermediary in France faced higher demand than expected, and already had to sign additional agreements with the EIF after having disbursed all funds within 16 months rather than the anticipated three years, the opposite was the case in Germany where demand under the Risk-Sharing Instrument (RSI) had been higher than now under InnovFin both at the level of commercial banks as intermediaries and at beneficiary level. The German intermediary mentioned more favourable conditions under the RSI and more restrictive eligibility criteria under InnovFin as possible reasons for lower demand. A Spanish intermediary also stated that demand had been lower than expected and attributed this to increased competition from commercial banks that have developed an interest in innovation financing.

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139 InnovFin funding is also considered to be more conditional in that, for instance, when a company applies for funding because it has registered a patent for an innovation, then it has to use the finance it receives under InnovFin to market that patent whereas previously under RSI it could have used the money for any purpose it preferred (once it had been established that the company was innovative). However, overall the demand for innovation financing is high in Germany meaning that the instruments may still be relevant but perhaps ineffective in reaching their target group.

140 This, however, would suggest that there is less of a need for InnovFin than in the past. The loans offered by commercial banks outside InnovFin are generally more flexible and come with fewer requirements. At the
4.1.3 Conclusions – relevance

Overall, our assessment suggests that the degree of InnovFin relevance is high. This varies by InnovFin financial product and also differs by country and company development stage, reflecting different market needs and preferences for equity or debt finance by different types of companies. Some countries have not yet made (much) use of the programme, suggesting it is less relevant there, although in some cases it may be relevant, and low take-up is explained by other factors. There seem to remain a few specific market niches not fully addressed by the programme such as equity where there is a lack of ‘home-grown’ fund managers, mezzanine and quasi-equity finance, and financing of company leadership successions. Generally, while high take-up is an indication of actual demand for the programme, and indicates its relevance, it does not answer the question of additionality, i.e. whether or not the same financing could be obtained on similar conditions from other sources. This is further analysed under coherence and EU Added Value below.

There is a question of whether InnovFin should seek to achieve a more even geographic distribution of funding or whether it should only fund the most innovative firms and projects, irrespective of where they are based. This tension between the goals of excellence and cohesion cannot easily be resolved. In case of equity finance, which needs a critical mass in order to be effective, a focus on a limited number of clusters seems particularly pertinent. When comparing the situation to the US, where venture capital is highly concentrated in Silicon Valley, and a few other regions, policy-makers may have to accept that transformative innovation naturally takes place in a limited number of clusters, and that any attempt to foster innovation in other regions and countries may not be in line with market needs. In this context, the EIF stresses the importance of innovation clusters as they exist in London, Paris, and Berlin, to be connected also in terms of cross-border funding, and that there is a role for them and the InnovFin programme in helping emerging clusters in Eastern Europe, for example in Sofia, to connect with more established Western European clusters.

4.2 Effectiveness - To what extent does the programme achieve its objectives?

The effectiveness of the InnovFin programme is assessed from the perspective of several key objectives:

- **Specific objectives** – i.e. InnovFin’s principal aim of increasing financial support to R&I-driven companies and innovation projects. This includes both the effect on financial intermediaries and the willingness to provide finance to R&I-driven SMEs and other enterprises and organisations.

- **General objectives** - the contribution to EU policy objectives such as the Europe 2020 strategy, the Commission’s ten political priorities, the associated Investment Plan for Europe and the EFSI, as well as the Innovation Union policy flagship and the vision of Open Innovation, Open Science and Open to the World.

There are challenges regarding assessing the effectiveness of the instruments in detail at the interim stage because InnovFin’s effects are not yet fully felt or known. Taking the MCG as an example, applications were only received at the end of 2015. Deals were signed during 2016 but then three years may be required to build up the portfolio, and only after that will it be possible to evaluate effectiveness and longer-term impacts.

same time, particularly small firms can still not be supported by the Spanish intermediary interviewed even with a guarantee from the EIF since they are too risky, meaning that an unserved market remains.
The extent of the contribution of the InnovFin programme to creating an ecosystem supporting innovation at all stages of development and across countries where intervention is needed will be the ultimate test of the programme’s effectiveness, in line with the strategic objective suggested in Section 2.3. A practical challenge in this regard is that the design of the InnovFin programme has moved on since the launch of this interim evaluation.

4.2.1 To what extent is InnovFin achieving its primary objectives, including the specific objective of "enhancing access to risk finance for investing in R&I"?

The overall aim of the InnovFin programme is to help SMEs, MidCaps, large firms, and other organisations such as research and technology organisations, research infrastructures, and universities to gain easier access to risk finance (e.g. loans, guarantees, counter-guarantees and equity finance) to engage in R&I.

As the review of monitoring data shows, nearly all EU Member States as well as several accession and associated countries have made use of InnovFin instruments. As a result, a substantial amount of finance has become available to support innovative enterprises and organisations in various ways throughout the EU, accession and associated countries – some EUR 7.42bn by the end of 2016 of which EUR 2.7bn has been committed to SMEs, small MidCaps and the remainder to larger enterprises. This means significant progress has been made towards meeting the specific objectives of the programme, namely to increase debt and equity financing of R&I through a range of debt and equity products.

As noted earlier, there is a wide variation in take-up rates between countries. Thus, Italy is by far the largest user of InnovFin funds (over 20% of the total), followed by Spain, France and then Belgium, Germany, and the UK. Clearly country size is not the key driver of the use of InnovFin funds. France, Spain, Italy, and Portugal are the most intense users of programmes directed at SMEs, with Italy by far the largest user of programmes directed at larger enterprises, followed by Belgium and then Germany. Countries such as Belgium, Denmark, Finland, Italy, Malta, and Sweden have, in terms of their GDP relative to that of other countries, taken up much more InnovFin funding than others.

As shown earlier, the take-up of Innovfin varies across the products. As the analysis in Section 3.1 has shown, 32% of the SMEG’s budget has already been committed, 8% in case of InnovFin Equity, 7% in case of Energy Demo and 30% in case of Infectious Diseases, with no calculation possible for the MCG, MGF and Large Projects schemes. These figures suggest that the SMEG is well on track and being effectively implemented. The comparatively low figure for InnovFin Equity can be explained by the nature of implementing equity financing schemes. The figure for Energy Demo is relatively low, potentially undermining its effectiveness. The specific objective of increasing private sector investment in R&I can also be measured through the leverage effect achieved.

So far the leverage effect seems to be on track to achieve targets. The SMEG has to date already achieved a leverage effect of 4.8 and is well on track to achieve the targeted leverage of 9.0 by the end of 2022. In the case of InnovFin Equity, the achieved leverage so far is 0.2 compared to a target of 6.0, but this may be explained by the fact that it takes time to raise additional funds from additional investors before closing the fund and beginning to invest in portfolio companies. A clear picture of the total leverage effect will only begin to emerge in the 2020s. As mentioned earlier, disaggregated data on the EIB-managed products’ target and actual leverage effects is not available. The aggregate target leverage effect of the EIB-managed products (not including the thematic products) is 12.5, and the products already have an actual leverage effect of 11.2.
The financial intermediaries have a positive view on the leverage effect. The survey responses show that 51% find that the financial instruments to a great extent have had a leverage effect at the financial intermediate level. A total of 49% find that the financial instruments to some extent have had a leverage effect. No respondents find that the financial instruments have had no leverage effect.

The three specific objectives relating to InnovFin Equity, namely to strengthen the EU’s VC industry, involve business angels in funding R&I, and to increase investment in technology transfer are more difficult to measure at this early stage. Only recently, SME VC was transformed into InnovFin Equity, and broken down into the components Venture Capital, Business Angels, Technology Transfer, and Fund-of-Funds. This means the structure is in place now to allow for making progress towards these objectives, to be evaluated at a later stage.

As indicated at various stages throughout this report, the effectiveness of InnovFin overall as well as individual instruments in increasing access to finance has been affected by a range of external factors. These include: the presence of other EU financial instruments such as COSME, the SME Initiative, EFSI and the Structural Funds. Other programmes also influence the InnovFin instruments’ performance. Some of these are regional, others national and others at EU level. The existence of these programmes means that in some instances clients can be confused about which programmes offer the best options for them.

The strength of the existing innovation ecosystem in different countries might also explain why some InnovFin products are more or less effective at a national level. It is recognised that effectiveness of the provision of additional finance for entrepreneurial businesses is in part conditional on the ‘entrepreneurial environment’ and innovation infrastructure present in particular countries. This can affect ‘investment readiness’, how effectively financial intermediaries perform their role and consequently take-up. The banking and business culture also has an impact on the success of programmes. For example, the approach to banking in Italy, where companies often switch between several short-term lenders as opposed to say, in Germany or Austria, where there often one ‘Hausbank’, is a factor that has made it difficult for Italian companies to meet the formal requirements of EIF/ EIB loan applications.

The survey results suggest that the financial intermediaries view the most positive results in terms of effectiveness as related to the objective of ‘increased risk financing’ (number of entities and volume of funds) followed by ‘increasing private investment in R&I’. Survey responses from financial intermediaries (mainly implementing the SMEG, with some being involved in InnovFin Equity and MidCap Guarantee) to the question as to whether respondents either believe that the InnovFin financial instruments have achieved their objectives, or are likely to have achieved their objectives by the end of the planning period are presented in Table 4-1 below.

Table 4.1 - To what extent have the financial instruments achieved their objectives, or are likely to by the end of the programming period? Please distinguish between the specific objectives (intermediary survey responses; n=51)

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>To a great extent</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased private investment in R&amp;I</td>
<td>13</td>
<td>35</td>
<td>3</td>
</tr>
<tr>
<td>Provided risk financing for a variety of beneficiaries at different stages at reasonable terms:</td>
<td>10</td>
<td>36</td>
<td>4</td>
</tr>
<tr>
<td>Increased risk financing (number of entities and volume of funds)</td>
<td>18</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>Strengthened EU venture capital in terms of attracting institutions and operating cross-border</td>
<td>8</td>
<td>26</td>
<td>16</td>
</tr>
</tbody>
</table>

4.2.2 How effectively is InnovFin contributing to its general objectives, including the wider H2020 objectives and the Commission’s political priorities?

As noted earlier, effectiveness should also be assessed in terms of the contribution of the InnovFin products to EU policy objectives such as the Commission’s Top Ten priorities, the Europe 2020 strategy\(^{142}\), as well as the Innovation Union policy flagship and the vision of Open Innovation, Open Science and Open to the World.

According to [142], the Europe 2020 strategy is the EU’s agenda for growth and jobs for the current decade. It emphasises smart, sustainable and inclusive growth as a way to overcome the structural weaknesses in Europe’s economy, improve its competitiveness and productivity and underpin a sustainable social market economy.
programme. On the other hand, this would also increase the administrative burden on the EIF and EIB, as well as for financial intermediaries and potentially final beneficiaries which would negatively affect efficiency (see also Section 4.3.2).

The 2015 Employment and Growth Report provides data on the change of number of employees and annual turnover of final beneficiaries before and after receiving InnovFin financing. On this basis, it calculates job creation and growth ratios. It calculated a job creation ratio of 1.06 and a turnover growth ratio of 1.23. The problem, as pointed out earlier in this report, is that attributing any increase in employment or company turnover to receiving InnovFin financing is not straightforward. Indeed, innovation, by increasing productivity, may just as well lead to a reduction in jobs, and turnover is affected by many external factors independent from a company’s innovativeness. Nevertheless, some individual cases where final beneficiaries provided feedback on the impact that receiving InnovFin financing had on their firms’ performance (see Section 3) suggests that there may be a positive impact on firms’ competitiveness.

Given these considerations, it is not possible at this stage to fully assess InnovFin’s effectiveness in contributing to its general objectives, although existing evidence points to positive contributions.

4.2.3 To what extent are the instruments reaching the target group or groups of beneficiaries envisaged? What could be done to improve targeting? Is sector coverage in line with expectations?

The InnovFin target group is enterprises or organisations with difficulties in obtaining access to finance for relatively higher risk innovative projects. As is set out in the ex-ante evaluation, these tend to be SMEs and also some smaller mid-caps. In addition, there are organisations with strong innovative capacity whose funding is being limited by rigidities in public funding (e.g. the European Spallation Resource).

Overall, feedback from financial intermediaries is that they market the InnovFin products to existing well-defined target groups. In countries such as France and Moldova, feedback is strongly positive, whereas in others like Germany it has proved harder to reach the target markets. However, it has also emerged that the term “innovative” may be interpreted in different ways in different countries. Thus, feedback is in some instances that the definitions available under the SMEG was considered too constraining, whereas in others it seems banks’ loan officers have more flexibility in defining what is considered innovative.

More generally, large enterprises tend to be more successful than SMEs in obtaining finance, and on better terms. So the challenge for InnovFin is to identify the firms that would not obtain finance through normal banking channels for innovative projects. In terms of sectors, according to the 2016 Operational Report, 65.6% of the InnovFin EU portfolio was invested in manufacturing, 23% in professional, scientific, and technical services, 7.3% in Information and communication, with the remainder in construction (1.7%), mining and quarrying (1.3%) electricity gas and air conditioning supply (0.8%) and water supply, sewerage and waste management (0.3%). It can be expected that there will be more collateral for debt in the manufacturing sector than in services.

4.2.4 Has the communications strategy achieved its goals? How could the strategy be improved?

The research has indicated that intermediaries implementing the MCG and SMEG follow differentiated branding approaches regarding InnovFin products. In some instances, InnovFin is mentioned prominently, but in other cases it is just communicated through a logo. This is usually related to where InnovFin fits in the financial institution’s portfolio - whether it is a leading product or one among
Many, or has effectively been blended into an existing or new product offered by the intermediary.

**Many stakeholders consulted for this study maintained that it was crucial to keep brand names unchanged for as long as possible in order to maximise visibility.** Furthermore, it was recommended to limit the proliferation of sub-programmes and new brands to avoid a situation where agreements intermediaries sign with beneficiaries include a ‘logo jungle’ that only confuses firms and the public. The marketing tools considered to be the most useful by some stakeholders are case studies that demonstrate real-life benefits of the InnovFin. However, there is a limitation in the use of case studies in that there are some beneficiaries who prefer not to disclose information on the support they received through InnovFin.

**The use of InnovFin as an umbrella brand is considered useful as it indicates clearly what the product is for.** However, in some instances it was considered that having such different products with a very similar name was confusing. Several intermediaries indicated that the branding was not very relevant for the final beneficiary anyway. They were told what the source of the support was and the logo displayed, but their interest really is in getting the money on the best terms, no matter where it comes from.

The above comments refer mainly to the EIF products. The EIB’s route to market is different (through the EIB group website, in-country awareness raising events, and active promotion by regional operations teams). But demand is very much market-driven.

### 4.2.5 Conclusions – effectiveness

**Overall, the research suggests that the InnovFin scheme is performing well in promoting its primary objectives, notably of improving access to finance for innovative companies and projects.** InnovFin is also making a useful contribution to wider EU programmes such as H2020, the Top Ten Priorities of the EU, the Europe 2020 Strategy, the Innovation Union Flagship and the Open Innovation agenda.

**To the extent that shortcomings have been identified, generally these have more to do with the implementation of InnovFin schemes or external factors rather than being inherent programme design faults.** The research suggests that InnovFin has proved responsive to changing market circumstances and changes in the EU policy support environment with some adjustments already in place and others currently under consideration. At this interim stage, it is not possible to evaluate the impact of the InnovFin financial instruments on innovation and economic growth in Europe. This will only be possible towards the end of the programming period, when some of the full impacts start to materialise.

### 4.3 Efficiency - How efficiently is the programme run?

In this section we analyse the efficiency of the instruments. Efficiency can be defined as the extent to which the benefits and outputs of an intervention are commensurate with the costs/resources and inputs used to achieve benefits/outputs. More specifically:

- The costs related to **InnovFin** can be assessed at an overall governance level involving DG RTD, EIF and EIB, at a more operational level using financial intermediaries (in case of intermediated products) to implement the financial instruments, and at the level of the final beneficiaries.
- The costs for **DG RTD** using the EIB and EIF to manage the instruments includes the procurement exercise to set up delivery mechanisms, the allocation of funds to intermediaries (to cover loans which default), monitoring and reporting, and an overall supervisory function.
• The **costs of managing the financial instruments** lies in the cost of the application procedure, overheads, namely the costs of the personnel needed to process applications, monitor loans and investments, reporting to DG RTD, the EIF and/or EIB and to manage the FI entities themselves (where new entities are created to specifically operate an FI, e.g. a new venture capital fund).

• The **cost for the final beneficiaries** relates to the application procedure, the price for the financing, typically in the form of interest and/or equity, and administration.

In addition to examining how efficiently the financial instruments themselves are being managed, there is the question of efficiency in relation to the loans and investments. The key issue here is whether the outcomes achieved by InnovFin loans (supporting innovation, creating jobs, generating revenue, etc.) and investments are proportionate to the costs (losses from defaulted loans and investments in unsuccessful SMEs as well as costs related to management). More specifically, the question is whether the same financial inputs could lead to more outputs or, conversely, whether the same outputs could be achieved with reduced inputs. However, since the instruments have only been in operation for a limited number of years it is too early to fully assess the InnovFin cost-benefits. A first indication of the cost of the instruments is included in this report but it will otherwise be a key issue for the ex-post evaluation to address.

4.3.1 **What are the barriers, if any, impeding access by beneficiaries to the instrument? What could be done to make access easier?**

Barriers to using the various InnovFin financial instruments, which have an important bearing on efficiency, have been partially analysed by the assessment of relevance and effectiveness above (specifically with regard to demand for, ease of use and design of products). As mentioned in Section 4.1, the financial intermediaries regard the relevance of the intermediated InnovFin products as high and the design of the products as good. At the same time the monitoring data analysed in Section 3 shows the level of uptake differs by product, which could indicate that barriers might impede access for final beneficiaries.

Barriers to access can both be at the financial intermediary level (if intermediated) – if the InnovFin products are not offered and at the final beneficiary level – if the products are offered but not known or regarded as attractive. At the financial intermediate level, the following barriers have been highlighted in interviews:

<table>
<thead>
<tr>
<th>Barriers to access / efficiency</th>
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**Financial intermediaries**

• **Lack of interest in becoming involved among intermediaries in certain countries**, for instance due to alternative sources of financing being available - offering better conditions or being perceived as easier to access - meaning that competing products offered by commercial banks through more streamlined administrative processes are at an advantage compared to the level of administration associated with the InnovFin products.

• **Difficulties convincing the commercial banks to participate** – for example due to lack of knowledge, tradition and interest in financing innovation (even if interest is growing). Or because intermediated InnovFin debt products are offered by the national promotional banks – often in partnership with commercial banks.

• **Availability of alternative EU and national equity and debt instruments** leading to reduced demand for InnovFin instruments.

• **Resources needed to sign an agreement with the EIF and burdensome reporting requirements** (e.g. case studies, various performance metrics)

• **Lack of knowledge of InnovFin instruments** and difficulty distinguishing
between the financial products and what product to apply for.

**Final beneficiaries**

- **Strict eligibility criteria** for accessing InnovFin financing\(^{143}\) - meaning that not all firms in need of innovation financing may be served.
- **Lack of availability of collateral.** As highlighted by e.g. Iceland and Austria.
- **Rigorous risk assessment** carried out under the banks internal rating system as required by Basel III/ CRDiv CRR means that many companies fail.

Generally, there is a perception among some intermediaries that the bureaucracy around implementing EU-supported financial programmes has increased over the years and that there is limited scope for applying for new instruments and programmes.

### 4.3.2 To what extent are the costs of managing the instrument reasonable and in line with the expectations of DG RTD, EIB and EIF, and financial intermediaries?

Following criticism of the burden and costs involved with administration of many instruments under the European Framework Programmes in general significant efforts have been made to reduce administrative burdens and costs associated with instruments under Horizon 2020. The number of control visits has, for example, been reduced and the timing has been made more flexible, in order to allow EIF to visit when it is relevant and not when the calendar obliges them to. This has been mentioned by financial intermediaries as an example of an improvement which has reduced administrative burdens without reducing the effect of the control visits.

**EIF and EIB manage InnovFin funding alongside their other mandates (e.g. the EIB Group’s own risk capital financing mandate, the InnovFin and COSME).** Financial intermediaries need to have a good understanding of the two mandates and the intermediated products to understand the differences. The financial intermediaries do not always have the necessary understanding to identify the most relevant product for them. Since both COSME and InnovFin are under EIF the current setup allows the EIF to guide interested financial intermediaries to the most appropriate financial product to apply for. This saves financial intermediaries from having to navigate through a plethora of different FIs since they are advised on which FI is most suitable for the financing needs.

According to the EIF, financial intermediary applicants often do not apply for the intermediated products through the formal application process but contacts the EIF informally first to understand which product is the most adequate to meet their needs and to understand the application process. This is especially for COSME but also InnovFin. This reduces costs for financial intermediaries, helps achieving commitments and reaching disbursement targets and thereby improves efficiency compared to a scenario where a separate organisation manages InnovFin.

**An alternative scenario would have been to merge access to finance for SMEs (COSME under DG GROW) and innovation financing (InnovFin under DG RTD) into a single umbrella programme providing finance for SMEs and innovation.** Despite the products having different purposes, structures, pricing, target audience and conditions some intermediaries find it difficult to distinguish between the products under COSME and InnovFin. Even if the EIF guides financial intermediaries to the most

\(^{143}\) The views on this differ greatly between financial intermediaries. Some intermediaries also expressed appreciation of the criteria being broad and well suited for the target group. Some even expressed concern that they were too broad and that most companies could fit the definition.
appropriate product, financial intermediaries often spent time and resources on researching the different products before they contact the EIF in order to understand if the products could be relevant for them. This increases costs for financial intermediaries and reduces efficiency. It also affects efficiency of the programme as a whole if costs are passed on by the financial intermediaries to the EIF through increased overheads, and to final beneficiaries through a higher price for finance. A single structure would make it easier for financial intermediaries to understand and apply for the most appropriate product and reduce their costs. It would also be easier to communicate to other stakeholders, who might struggle to understand the difference between the different financing mandates. At the same time the efficiency gain would be rather limited since the current framework remains relatively efficient with the EIF signposting intermediaries to the most relevant FI.

The results of the survey of financial intermediaries indicate that the costs of managing the products are in line with the expectations of the financial intermediaries. Table 6 below shows that the most positive assessment in terms of expectations versus actual costs relates to “Direct financial costs of implementation”. Some 19% of the financial intermediaries find the costs “very much” in line with expectations and 56% find the costs in line with expectations. Only two percent find the costs “not at all” in line with expectations. The level of human resources needed is also favourably assessed by almost 60% which find the cost in line with or very much in line with expectations. Seven percent find the costs “not at all” in line with expectations.

Figure 4.4 - Have the costs of implementing the instrument from a financial intermediary perspective been in line with expectations? (n=17)

Monitoring and reporting data is the cost item considered least in line with expectations. Just below half of the respondents find the costs to be in line with or very much in line with expectations. Just over 40% find the costs “somewhat” in line with expectations and 11% find the costs “not at all” in line with expectations. Direct financial costs of implementation appear to be more in line with expectations, and the same can be said to a smaller extent for the level of human resources needed.

The results of the survey are in line with the views expressed by financial intermediaries in the interviews, which are mainly made in relation to the SMEG. While most of the financial intermediaries find it difficult to provide an exact

144 The intermediated SME Guarantee and the MidCap Guarantee products
estimate of their total costs involved in managing the instruments they generally estimate them to be in line with their expectations and accept the need to report to the EIF. At the same time, interviewees also point to monitoring and reporting as a burdensome task where improvement is possible. Also, some financial intermediaries point out that they expected administrative costs to be burdensome so stating costs are "in line with expectations" does not necessarily mean that burdens were low but rather that they were already factored in.

Excessive administrative cost may have also led some intermediaries in Central and Eastern Europe not to sign an InnovFin agreement, given that much of the cost is fixed and the critical mass of loans intermediaries can make in some smaller Eastern European countries is not large enough to justify the cost. However, this may be mitigated by signing umbrella agreements with banks covering several smaller countries, as the EIF has done under the SMEG with a Finnish bank covering the Baltic States, and with UniCredit covering a range of Central and Eastern European countries. The same was also done to reduce administrative burden in Germany, where an umbrella agreement was signed with a regional promotional bank covering eight of these banks in different countries.

The premiums (guarantee fees) under SMEG have to be calculated daily and in case of some financial intermediaries the calculations needed differ from those used internally. While it is recognised by the financial intermediaries that it is correct to charge on actual non-defaulted exposure to make sure the EIF does not over-charge for guarantees, this requirement is perceived as an administrative burden. While reporting could in theory be done on a computerised basis it would require significant IT-investments for many intermediaries and reporting is therefore often conducted manually. Several intermediaries suggested the need for simpler or more automated reporting. This could increase the cost effectiveness of the SMEG scheme. At the same time, if the EIF were to accept reporting procedures tailored better to the existing reporting standards of the financial intermediaries the administrative burden for the EIF would go up and the EIF has pointed out that they do not have the resources to for this option.

Some stakeholders believe that the reporting requirements are as onerous as they are because of information requirements put forward by the European Court of Auditors, and to some extent the European Parliament. They argue that InnovFin financial instruments should be treated differently to grants under the Structural Funds where more detailed reporting and due diligence is needed. Intermediaries point out, for example, that any bank as part of their due diligence process will look at whether a firm has broken any EU law, so there is no need to make this a particular reporting requirement under the SMEG.

Moreover, it is very costly to add new reporting requirements during programme implementation since banks often have to manually collect the relevant information. As an example, banks will look at the number of employees a final beneficiary has when they sign a loan agreement to make sure these fit the scope of the SMEG (or the MCG), but they will not monitor the evolution of workforce size throughout the loan duration. If there is an interest in obtaining new information during programme implementation, a sample could be used, it is argued, to reduce the burden on financial intermediaries. The EIF points out that this is already done as part of the Growth & Employment Report using data mining techniques which track the growth and employment impact of the product at specific milestone dates.

Some SMEG intermediaries and companies also find that the application procedure for a loan/guarantee agreement is complex, it takes long time to get an agreement in place with the EIB or EIF and that the terms of the guarantee agreement can pose challenges. One example mentioned is that the agreement contains many clauses which the intermediaries have to pass on to final beneficiaries, who often find the clauses complex and difficult to understand. Another
example is that procedures can be slow if a minor contract addendum is needed. Some also point out that they see a general trend towards increasing reporting requirements. Several intermediaries indicated that this may explain why they only signed up to the SMEG so far, and shy away from applying separately for the MidCap Guarantee.

Some SMEG financial intermediaries called for enhanced dialogue with the EIF and a single point of contact. The intermediaries receive ex-ante a full reporting manual and discussions have taken place between the EIF’s reporting team and the intermediaries. Still, some financial intermediaries do not know why the EIF is asking for certain pieces of information or how they use it. This can make it difficult to provide the right information to the EIF in the most cost efficient manner. Similarly, some intermediaries who have a long history of dealing with the EIF deal with different staff and new staff often have limited knowledge of the financial intermediary and previous cooperation. Some therefore call for a single point of contact or a key account at the EIF. The EIF has on the other hand pointed out that they already have a single team responsible for handling reporting with intermediaries and that they cannot dedicate a person to each intermediary.

The EIF is working on a new reporting platform that could potentially reduce the reporting costs. A dialogue with the financial intermediaries on the design of the new reporting platform would contribute to increased reporting efficiency and quality. Especially in the smaller markets where NPBs and export credit agencies offer guarantees in cooperation with commercial banks, the administrative burdens have been mentioned as one of the reasons why some commercial banks do not find the guarantees attractive. The EIF has already attempted to reduce the reporting requirements for financial intermediaries. In Germany, for example, it has signed individual agreements with seven NPBs with an overall combined allocated volume. This means that the banks can report jointly, which reduces the reporting requirements and the legal work for each bank. Financial intermediaries in other countries have expressed an interest in such solutions indicating that joint (umbrella) agreements and reporting can potentially be employed elsewhere and improve cost efficiency.

The EIF is also working on developing outcome and impact indicators to monitor the development of the portfolio companies and impact continuously. It is in most cases difficult to identify the effect of the finance provided by InnovaFin due to the influence of external factors on company performance and potential time delay from when financing is provided to when the impact can be measured. The EIF is reluctant to introduce new reporting requirements which increase administrative burdens on intermediaries and final recipients. They therefore focus on utilising existing public data.

Besides the reporting requirements, the EIF receives praise from some intermediaries for their professionalism, communication, understanding of the how banks operate and their response time.

Overall, the cost of managing the products seems to be similar to other financial schemes. Asked how the administrative burden of operating the financial products on a scale from 1-5 compare with other schemes, the InnovaFin financial intermediaries on average rank the financial products at 3.17 (1 being very difficult and 5 being very easy). No respondents rank the costs at 5 or 1. Similar views are expressed in the interviews.

One issue raised by German promotional banks is the burden created by compliance with state aid rules. While DG RTD does not consider this an issue, and it is also clarified in the call for expression of interest and related FAQ that the SMEG is not a state aid instrument, there is concern among some stakeholders that DG COMP may view the case differently. So long as this is not resolved, these promotional
banks will try to comply with the Financial Regulation and state aid rules to the full extent. The same does not apply to commercial banks, meaning there is not a level playing field for financial intermediaries under the SMEG (and possibly the MCG). One way to tackle this may be to adapt the pricing for national and regional promotional banks to account for a) the fact that they face a higher administrative burden than commercial banks in implementing the InnovFin products, and b) the fact that due to their on-lending to partners banks, they can achieve a greater leverage for the programme than when the EIF signs directly with commercial banks.

The InnovFin products are also generally regarded as well designed by financial intermediaries. The survey of intermediaries asked respondents to rate the overall design of the product(s) they dealt with. On a scale from one to five - five being positive – the products received an average rating of 4.94, with 41 out of 51 respondents giving a score of four or five, nine respondents giving a score of three, and 1 giving the lowest score of five. This suggests that respondents see the design of the products they dealt with as fairly strong overall. In the eyes of the financial intermediaries, the financial products are also fairly easy to use for final beneficiaries. Asked if the financial product has been easy to use for final beneficiaries – again using a scale from 1-5 with 1 being very difficult and 5 being very easy – the financial intermediaries rank the easiness at 3.53.

4.3.3 So far, overall, has the instrument been implemented and managed efficiently by the EIB or EIF (depending on the instrument) and DG RTD? What could be done to improve efficiency for the period 2018-2020?

Overall the interim assessment of the efficiency of managing the instruments is positive, highlighting:

The relationship with the EIB and the EIF in particular has been praised by intermediaries– mainly involved with SMEG – from several countries for being very positive and professional, with the EIF and EIB staff responding quickly to any queries and ‘speaking the same language’ as bank staff. Even if it might be difficult for financial intermediaries – and other stakeholders - to distinguish between the different financial products under the EIB Group the fact that they are under the same organisation helps EIF guide financial intermediaries to identify and apply for the most appropriate product.

The costs of managing the instruments are generally in line with the expectations of the financial intermediaries and in line with other financial schemes. However, there is some concern in relation to the resources involved for financial intermediaries to sign agreements with the EIF (EIB for MidCap Guarantees) and monitoring and reporting requirements. While there is an understanding among financial intermediaries that reporting is necessary, there is also a desire to simplify requirements and move away from requirements that financial intermediaries fulfil manually, better dialogue with the EIF/EIB before reporting starts and a single point of contact at the EIB and EIF.

As mentioned it is too early to measure the costs in terms of loans defaulting but the first indications are that this is in line with the EIB limits. There are no EIB targets for share of loans defaulting or for the profitability/cost of the instrument. According to the operational report from end of 2016 the average overall expected loss for the portfolio has been calculated as 2.81%, which is within the limits for Special Activities (2%). The calculations are performed over the life of the instrument, currently being in the ramp up phase. The current default rate is less than 0.1%. The EIF does not find that the default rate at this early stage is a meaningful indicator since the portfolio is still at ramp up phase and defaults on average do not tend to occur in the first years of an SME transaction.
4.4 How coherent is the programme internally and externally with other EU and national support programmes?

This section considers the extent to which the seven InnovFin financial products demonstrate coherence.

4.4.1 Introduction

The specific evaluation questions to be examined under coherence are: firstly, the extent to which the seven InnovFin products relate to, and support each other; and, secondly, the extent to which the instruments are complementary to other EU programmes implemented under the 2014-20 Multiannual Financial Framework such as the financial instruments schemes supported through EFSI, COSME, the European Structural and Investment Funds (ESIFs) and the CEF. A further consideration relating to external coherence is whether there is any overlap and/or ‘crowding-out’ between national and regional financial instruments schemes funded in certain countries at the Member State level, either through national or regional promotional banks or guarantee institutions.

4.4.2 Definition of key concepts – synergies and complementarities, duplication and overlaps

Before setting out the findings in relation to the evaluation questions, it is important to define what is meant in the context of the coherence criterion by the following key terms:

- **Synergies** – the extent of alignment of (and cooperation between) financial instruments programmes such that in attaining their different respective objectives, the instruments mutually assist and reinforce each other and amplify each other’s effects.

- **Complementarities** - the extent to which as a result of the alignment between different EU programmes and financing instruments, the different EU programmes collectively are able to address a series of different but related needs. Programmes may be complementary in the sense that one programme can support innovation financing, whilst another supports SME expansion across all sectors and types of firms, whether innovative or not.

- **Overlaps** – a situation where InnovFin and other EU financial instruments cover similar areas to some extent in terms of their objectives, target groups, eligibility criteria or desired outcomes (or a combination of these). Generally, this would constitute a wasteful situation in the context of scarce resources and could create confusion among key stakeholders as to the most appropriate source of EU finance for certain firms/projects.

- **Duplication** – a situation where InnovFin and other financial instruments duplicate either each other or pre-existing provision, targeting the same beneficiaries.

It should be noted that these terms are also used outside the coherence section of this report but extended to non-programmatic aspects. For instance, synergies might also be achieved through combining public and private sector funding by ‘crowding-in’ private finance and generating high levels of leverage. Complementarity is also relevant to assessing internal coherence in that it may be understood in a sequential sense as relating to having a portfolio of instruments that reflects the concept of a ‘funding escalator’, as mentioned in the Capital Markets Union Communication (COM(2015)468 final).

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4.4.3 To what extent do the instruments relate to and support each other?

Feedback from the survey of financial intermediaries suggests a clear majority consider that the InnovFin portfolio of products demonstrate internal coherence, at least ‘to some extent’. However, respondents typically only knew one or two of the products that they are directly dealing with and the others are less interesting for them. The large number of “don’t know” answers given to the question in the online survey on this issue is therefore not surprising.”

The findings from the survey were then triangulated against those from the desk research and interview programme. The review of the InnovFin programming architecture found that the programme was internally coherent and well-designed overall, since it is part of an integrated portfolio of FIs. Four of the seven InnovFin financial products are closely related to one another and provide a funding continuum. These are the two guarantee schemes (SMEG and MCG), and the two loan schemes (MidCap Growth Finance and Large Projects), which involve direct loans from the EIB.

**Compared with the predecessor EIP programme (2007-13), there is arguably greater coherence between the InnovFin programming architecture and the evolving EU policy context in respect of access to finance.** For the debt instrument, firms are supported along the “funding escalator”, i.e. from SMEs through to mid-caps and large firms. The ‘funding escalator’ concept is consistent with the Communication for an Action Plan for the Capital Markets Union (2015) and describes a situation in which EU FI programmes (ideally mirrored in the financial system more widely) are designed to meet the financing needs of all businesses from micro-firms through to large companies and other types of entities that need to invest in R&I (e.g. universities) at different stages in their development.

The current expenditure profile does not indicate a strong preference for firms of a particular size as the SMEG receives an EU contribution of EUR 2.09bn and a further EUR 495m is allocated to InnovFin Equity for SMEs, whereas the EIB-managed products mainly aimed at Mid-Caps and large firm projects receive an annual budget allocation of EUR 2.7bn. Whilst a multi-stage approach was recognised by stakeholders as having a number of benefits, such as ensuring funding continuity, there is however arguably a need for the prioritisation of resources within InnovFin to help focus more on areas of identified market failure, with streamlining of funding allocation within InnovFin according to firm size and funding stage. As noted in Section 2.1, the lack of access to innovation financing by SMEs on reasonable terms is one of the main market deficiencies identified. It could therefore be argued that the evidence base suggests that SMEs need a greater proportion of the total, especially given low levels of take-up of the mid-cap schemes.

**In the previous period, under the EIP within the CIP, only SMEs were targeted, whereas in 2014-20 through InnovFin, all Mid-Caps, as well as prospective beneficiaries seeking loans for large R&I projects, can access innovation financing.** Moreover, whereas in 2007-13, corporates and universities wishing to access large loans to invest in the Knowledge Economy had to apply directly to the EIB for loan finance for support under an own-financed funding scheme to promote R&I and other types of investments, this is now EU-financed and has been brought under the framework of Horizon 2020 and InnovFin. This has arguably strengthened the coherence of the offering from an external stakeholder perspective, since the investments concerned relate to major investments in R&I, both in particular priority sectors (e.g. investment in the automotive sector to develop clean emissions.

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146 The concept of Europe’s ‘funding escalator’ was mentioned in the Action Plan on Building a Capital Markets Union, COM(2015)468 final.

147 EIB large loans to support the Knowledge Economy 2007-2013 - [http://www.eib.org/infocentre/publications/all/ev-report-knowledge-economy.htm](http://www.eib.org/infocentre/publications/all/ev-report-knowledge-economy.htm)
technologies and electric vehicles) and for universities / research institutions to invest in modernising research infrastructures where Structural Funds are not available).

Some feedback was received in terms of perceptions of internal coherence among external stakeholders between programming periods. Some SMEG financial intermediaries that had participated in the predecessor programme see the InnovFin products as being strongly complementary to their predecessors, especially the SMEG. However, the renaming between programming periods of EU financial instrument programmes and of the specific products available within these programmes is confusing. For example, at the programme level, the EIP within the CIP in 2007-13 became two different programmes, InnovFin and COSME in 2014-2020. As a result of frequent changes in the names of programming instruments, there is a need for NCPs as well as promotional banks that serve as financial intermediaries through on-lending and through the provisions of guarantees to smaller banks (larger banks tend to have a direct relationship with the EIF and/ or the EIB) to explain programming changes and changes in the names of the different products available to other prospective financial intermediaries. This may also explain why some financial intermediaries, especially commercial banks but even promotional banks, prefer to apply indirectly through EIF signposting to the most appropriate EU instrument rather than to apply directly, since awareness of the InnovFin brand and of the evolution in the different EU programmes and financial instruments is often low, especially among commercial banks.

The four debt-based guarantee and loans products appear to be internally consistent and coherent, since investment size / product have all been defined in a distinctive way to avoid overlaps. Through the SMEG and MidCap Guarantee schemes respectively, there is a funding continuum between EUR 25,000 and EUR 50m which covers a large range of guarantee needs for firms of all sizes. Although micro-credits of less than EUR 25,000 are not available through InnovFin, start-ups and micro-enterprises can take out a guarantee through COSME of less than EUR 25,000 which means that all stages of the SME financing lifecycle are addressed either through COSME (start-ups, early-stage) or InnovFin (early-stage, growth and expansion).

Table 4.2 - InnovFin debt-based Financial Instrument (guarantees/ counter-guarantees, direct loans)

<table>
<thead>
<tr>
<th>InnovFin Financial products</th>
<th>Type of FI</th>
<th>Investment size per beneficiary</th>
<th>Investment duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>SME Guarantee</td>
<td>Guarantee</td>
<td>EUR 25,000-EUR 7.5m</td>
<td>1-10 years</td>
</tr>
<tr>
<td>MidCap Guarantee</td>
<td>Guarantee</td>
<td>EUR 7.5-50m (firms with 500-3000 employees)</td>
<td>Maturity from 2-10 years, with a fixed repayment schedule</td>
</tr>
<tr>
<td>MidCap Growth Finance'</td>
<td>Loans</td>
<td>EUR 7.5m to EUR25m</td>
<td>Up to 10 years</td>
</tr>
<tr>
<td>Large Projects</td>
<td>Loans</td>
<td>EUR 25m-350m</td>
<td>Up to 10 years</td>
</tr>
</tbody>
</table>

A further issue in relation to internal coherence is whether there is sufficient communication across the products within the InnovFin portfolio to ensure more effective cross-promotion or whether opportunities are being missed in this regard. For instance, the development of a new MidCap Guarantee scheme alongside the SME Guarantee Scheme (which built on the SMEG under the EIP in 2007-2013) should in theory reinforce interest in, and stimulate the future take-up of
the MCGS by providing a future project portfolio of potential applicants that have already participated through a financial intermediary in the SMEG.

However, as noted under Section 4.2 on effectiveness, and also in Section 4.5, although there has been some cross-promotion of the schemes and encouragement of financial intermediaries to make an application to both the SMEG and MCGS, there appears to be a lack of awareness among participants in a given FI as to wider FI schemes that they could potentially apply for, even within InnovFin. This was attributed to the fact that the InnovFin brand is new and also because the EIF is often the central actor that influences which schemes financial intermediaries decide to apply for. Since the programming architecture has been designed to represent a funding continuum through a portfolio of FIs, action needs to be taken to address this issue (see Section 5 – recommendations).

The research confirms that there are low levels of awareness among financial intermediaries (and also final beneficiaries) as to which other products are potentially available. One possibility worth raising is that every firm that has received funding ought to receive information about other products in order to strengthen awareness and to promote the idea of an integrated suite of financial instruments. However, the EIF commented during one of the focus groups on the practical difficulties involved, in terms of the risk of creating expectations that intermediaries and final beneficiary firms will gain access to other products successfully, which cannot be determined in advance.

The design of the InnovFin Equity scheme is seen as being broadly coherent. The focus of InnovFin VC is on supporting early-stage and growth enterprises (i.e. equity financing to SMEs and Small MidCaps with less than 500 employees). This is consistent with the evidence base in available literature (see Section 2.1) which showed that market deficiencies are concentrated in early-stage financing, but that there is in parallel a need to facilitate the rapid scale-up and internationalisation of start-ups, gazelles (high-growth SMEs in the scaling up phase) and unicorns (fast-growth start-ups and scale-ups that have rapidly achieved an estimated market value of a minimum of $1bn). For later-stage expansions and especially management buy-outs, there are a wider range of private sector funding opportunities. Moreover, through the new InnovFin Fund-of-Funds Programme, multi-stage fund-of-funds may be supported since the operating model will not be restricted to investing in early-stage finance, so long as this is part of a balanced investment portfolio overall, in order to achieve a balanced risk profile through diversification and to be able to support higher risk tolerance at the early-stages, whilst still in principle maintaining strong profitability.

The thematic InnovFin schemes are different to the other InnovFin products. These new instruments have pilot characteristics, address specific market failures and have been designed in a way that they can operate on a standalone basis. An issue identified from a coherence perspective is whether it is appropriate to support projects in the areas of renewable energy and infectious diseases, but not in other thematic areas such as food security, green transport, secure societies and even other aspects of energy and medical and health research.

The research suggests that having thematic instruments is helpful for these specific sectors, but if the scope of these instruments is widened and if too many thematic instruments are supported, there is a risk of a lack of coherence emerging, i.e. lack of clear rationale for having dedicated financial instruments for some sectors but not others. If a broader range of first-of-a-kind energy demonstration projects were to be included, there is a risk of crowding out the private sector, since there is considerable private sector funding (including VC) available for investment in some renewable energy sectors notably solar and wind. It might therefore be more coherent to continue to focus on supporting energy projects that are further from the market, where at present it is more difficult to establish commercial viability.
4.4.4 To what extent are the InnovFin Financial Instruments complementary with other financial instruments such as COSME, the European Structural and Investment Funds and the CEF? Are there any other relevant funding schemes such as EFSI? How could complementarities be improved?

It is also important to assess external coherence, i.e. the extent to which there is evidence of complementarity, or conversely of duplication or gaps between InnovFin and other EU programmes that incorporate financial instruments. Reference should be made to the definition of these terms provided earlier. In recent EC literature, a strong focus has been placed on ensuring that synergies between different EU financial instruments programmes are maximised wherever possible, and that potential duplication or overlap between different EU financial instruments programmes is avoided. The extent to which these steps have been effective in ensuring coherence during actual implementation is considered. Before presenting the findings, it is important to review the most relevant documents that have addressed these issues in the current 2014-2020 period, and looking ahead to FP9, to ensure that any lessons learnt are incorporated into programme planning for FP9.

Appendix 6 presents overview tables comparing InnovFin with COSME, the EFSI, and the ESIFs, highlighting complementarities, synergies, and overlaps. The aim is to identify what are the main differences between InnovFin and other EU financial instruments programmes and to assess whether there is a sufficiently clear delineation and coherence. Coherence with these programmes is analysed further in the remainder of this section.

Analysis of coherence between InnovFin and COSME

The InnovFin and COSME programmes were created as a result of a political decision to go ahead with two separate programmes within two different Commission DGs.

This meant that at the outset of the programme planning process, there were challenges for policy makers of ensuring that the design of the programming architecture for the COSME and InnovFin FIs respectively was sufficiently differentiated and delineated. The two programmes risked being duplicative at the outset but once a political decision had been made to go ahead and implement two different programmes, there was subsequently a recognition on the part of the policy officials of the need to differentiate the InnovFin and COSME financial instruments respectively during the programme design process. Each programme has therefore developed its own programming approach, and translated this into an appropriate intervention logic underpinned by a different policy rationale.

Some areas were identified where there is a clear and appropriately delineated distinction between the two (see also Appendix 6 for further information). For instance, COSME targets start-ups, whereas InnovFin doesn’t. There are however some areas of potential overlap. A possible overlap was identified through the research between the InnovFin and COSME programmes in that both seek to provide

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149 In 2014, DG REGIO published guidance on "Enabling synergies between European Structural and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes". However, this has addressed general issues relating to coordination and the possibility of using joint programming approaches, such as the new SME Instrument. More specific guidance has been published by REGIO to ensure effective coordination and synergies between financial instruments schemes supported through ESIFs and other FI programmes, for example, a publication on European Structural and Investment Funds and European Fund for Strategic Investments complementarities: Ensuring coordination, synergies and complementarity.
finance for SMEs, but the extent to which this is considered a problem varies among financial intermediaries.

The overall picture is that coherence between InnovFin and COSME FIs has been achieved by:

- **Setting different policy objectives** - COSME focuses on promoting entrepreneurship by supporting start-ups and SMEs with financing needs EUR <150,000, and on addressing market failures while InnovFin promotes access to finance for innovators, and on improving the terms and conditions for access to innovation finance respectively.

- **Defining different targeting strategies** - however, there is some overlap in targeting within the SME segments, since both target SMEs with a higher risk profile.

- **Drawing up different eligibility criteria** - in the case of COSME, criteria relating to market failure and being an SME, in the case of InnovFin, developing a list of 14 innovation-related criteria.

The fact that the two programmes have evolved in different ways to avoid duplication has led to a reasonably clear delineation emerging, even if there is some blurring of targeting strategies for the SME products (i.e. both the LGF and SMEG provide guarantees to SMEs). This can be looked at separately for equity and debt finance.

**In the case of equity, there is a natural separation between the COSME EFG and InnovFin Equity, with the latter focusing on riskier and more innovation-intensive investments, e.g. through the technology transfer pilot and the business angel schemes.** In the case of the InnovFin debt financial instruments, differentiation has been achieved by setting different thresholds for guarantees and loans. Whereas COSME guarantees loans up to EUR 150,000, the SMEG can guarantee loan sizes up to EUR 7.5m (see Section 3.3). Moreover, the approach to deciding on the eligibility of beneficiaries is different. In the case of COSME, all criteria need to be met whereas in case of the InnovFin SMEG, only one of the criteria needs to be met in order to qualify. Crucially, COSME provides capped guarantees, meaning losses are only covered up to a fixed cap, whereas the SMEG is uncapped, meaning all losses within the agreed guarantee coverage (usually 50%) are covered.

In practice, many SME final beneficiaries will be eligible to participate in either programme through a financial intermediary, which has caused some confusion for financial intermediaries as to which FI to apply for until the schemes and their differences became better known.

**Some overlapping may not necessarily be a negative in practice since in some Member States, financial intermediaries have only applied to COSME (or only applied to InnovFin).** Therefore, SMEs may not be able to participate in both financing schemes through an intermediary in all 28 EU Member States. Moreover, the geographic coverage of InnovFin (EU-28 plus 14 associated countries) is wider than for COSME which mainly focuses on the EU Member States although there are a very limited number of COSME associated countries. A particular issue from a final beneficiary perspective relates to the lack of uniform geographic coverage in being able to access both COSME and InnovFin FIs, depending which is more appropriate to the particular circumstances of the start-up or SME concerned. If for example, there are no financial intermediaries in a particular country that have applied for COSME funding, this would mean that there is a financing gap for start-ups and similarly if there are as yet no intermediaries applying for InnovFin in certain countries, this means that there is presently a financing gap for any final beneficiary seeking over EUR 150,000.
At an intermediary level, a distinction between COSME and the SMEG is that in terms of those administering the financing the skills sets will also need to be differentiated since innovation-related financing needs much greater knowledge of technologies, markets, and trends. There were no coherence-related issues in respect of the programming architecture for MidCaps and large firms, since these have been addressed through InnovFin, and are not targeted through COSME. The fact that the maximum ceiling for COSME investments/ firm is EUR 150,000 means that by definition, there can be no overlaps with InnovFin.

Feedback was obtained through the online survey with regard to coherence with other EU programmes. The survey findings from financial intermediaries in terms of external coherence are summarised in the following chart:

**Figure 4.5 - To what extent are the instruments coherent with EFSI, COSME, and other EIB/EIF/EU financial instruments such as the Cohesion Policy Funds?**

A clear majority of respondents stated at least to some extent, and 17 financial intermediaries stated that this was to a strong extent. A further important question relates to how well the different financial products within InnovFin complement national instruments relating to investment in businesses involved in R&I. The responses suggest that only 4% believe they are not complementary at all, whilst 55% stated to some extent and 41% to a great extent.

**Coherence between InnovFin and EFSI I and II**

As noted earlier (Section 2), following the set-up and launch of InnovFin, the European Fund for Strategic Investments (EFSI) was launched in 2015.

A key distinction between the EFSI and InnovFin is that the former can only fund projects in the EU28 Member States, whereas the latter can also support projects in H2020 Associated Countries. This may complicate the integration of EFSI funds into the SMEG, for example, which is implemented across all 42 countries. One way to strengthen coherence between InnovFin and the EFSI may thus be to clearly delineate the support to third countries using H2020 focus from the support to EU28 beneficiaries through a combination of H2020 and EFSI funds. Although the EFSI is a broader funding mechanism with wider eligibility, it has become highly relevant as a source of additional top-up funding to complement Horizon 2020 funding since InnovFin is used as a mechanism to implement the additional funding available through EFSI.
The SMEG and the EFSI SME Window are complementary, since funding mainly tops up that available through an existing financial intermediary. Although there are a few minor differences, the two are targeted at similar beneficiaries and are meant to respond to market failures. In practice, the EFSI guarantee has been used, through the SME Window, to frontload guarantee operations under the SMEG, supported by Horizon 2020 funds as well. This means that the EFSI has not overlapped but boosted its implementation by allocating additional funds to InnovFin. It is foreseen to top-up the H2020 budget allocation to the SMEG with EFSI funds, potentially further increasing its impact. This way, rather than creating competition between different EU funding channels, synergies can be created in a flexible way adapting to changing market conditions.

There also appears to be strong coherence between the EFSI Equity Instrument and the InnovFin Equity scheme, since funding is being channelled directly into the suite of four FIs within InnovFin Equity, especially InnovFin VC and the new fund-of-funds programme.

However, evidence of a risk of competing funding between EFSI and InnovFin was also identified. For example, under the Infrastructure & Innovation Window (IIW), there is scope to fund large projects directly by the EIB, which may lead to the displacement of demand from InnovFin Large Projects to the EFSI IIW. While Large Projects has seen a considerable deal flow (see section 3.7), there is a risk of a preference of using EFSI funds, leading to fragmentation of the EU’s overall R&I support and some internal competition. Moreover, a significant proportion of the products deployed under InnovFin overlap with those supported through EFSI in terms of the risk-spectrum and eligibility.

There are also concerns about overlaps between the Infrastructure & Innovation Window (IIW) under the EFSI and the MidCap Growth Finance scheme. This could be a possible explanatory factor in terms of low levels of take-up to date. Some stakeholders within the Commission expressed a concern that there may be pressure under the Juncker Presidency given the political importance and also the sheer scale of EFSI funding resources required to be disbursed. There may consequently be human resource pressures on the EIB group that mean that the anticipated expenditure profile for InnovFin Large Projects and Mid-Caps is not achieved since the EIB Group may have insufficient resources to focus on these FIs given that. The EIB has a large number of EU programming mandates in 2014-2020, as well as other Mandates, including the EFSI and the EIB’s own Risk Capital Resources (RCR) Mandate. These different Mandates and the associated funding instruments compete for human resources and may be given different levels of priority at different points in time by the EIB and the EIF.

Whilst EFSI is coming to an end in 2018, on-going discussion of launching EFSI 2.0 in the same year mean that the end of that programme is likely to be extended to 2020. This will mean that on the one hand, synergies between InnovFin and EFSI will continue until the end of the period, with supplementary top-up funding being made available. On the other hand, it also means that competition with EFSI will continue.

Coherence between InnovFin and the Structural Funds (ESIFs)

A key distinction between financial instruments schemes under ESIFs and those under InnovFin is that the objectives differ, even if the target groups may converge. Whereas InnovFin aims to facilitate and accelerate access to finance for innovative businesses, FI schemes supported through ESIFs often have a more general objective of strengthening access to finance for start-ups and SMEs. Whilst

150 CEPS Research Report. The European Fund for Strategic Investments as a New Type of Budgetary Instrument. No 2017/07 p. 17
innovative firms and firms investing in R&I may sometimes be explicitly among the target groups, there is typically a broader target group than under InnovFin. A further distinction relates to management and implementation approach.

Whereas ESIFs are implemented under shared management with the Member States, InnovFin is managed directly by the EIF and EIB on the basis of a delegated agreement on behalf of the Commission. This is reflected in the way the programmes work in practice, with InnovFin providing a standard tool on the intermediated side with a fixed set of eligibility criteria for beneficiaries (under the SMEG), and the ESIFs being implemented once Member State authorities have carried out an ex-ante market assessment and adapting new financial instruments to needs in a national or regional market. In some market contexts, this may allow financial instruments under the ESIFs to cover specific market gaps in innovation financing not met by the suite of InnovFin products, suggesting there is complementarity. One French financial intermediary even suggested exploring the possibility of combining InnovFin and ESIFs by providing an InnovFin counter guarantee to EFIFs loans to maximise economic impact, although acknowledging that this may create difficulties due to the different rules applying to the two programmes.

There is also a distinction in terms of geographic coverage. Whereas InnovFin is available to all 42 countries participating in H2020, including the Associated Countries, ESIFs are only available in the EU-28. There are some further differences, such as the fact that ESIFs FI schemes must demonstrate compliance with state aid rules, whereas EU FI schemes set up using say H2020 resources operated by the EIB / EIF on a delegated basis are exempt from the state aid rules since they constitute Union resources. A Staff Working Document151 has been published by the European Commission to facilitate the application of State Aid rules in the field of financial instruments and to point to different possibilities of achieving State aid compliance.

Although there are concerns among a small number of stakeholders regarding possible overlap between financial instruments schemes supported through ESIFs and InnovFin, some stakeholders pointed to there being procedures in place within ESIFs to avoid duplication. For example, Managing Authorities are required in the 2014-2020 programme to conduct ex-ante market assessments before setting up new financial instruments schemes at regional level. This requirement should contribute to making sure that financing schemes for innovation address market needs and that potential overlap with InnovFin and other EU financed schemes are considered prior to setting up new regional schemes. Moreover, it could also be argued that maintaining a diversity of EU supported financing tools at different governance levels (e.g. national, regional) to support innovation is important.

With regard to equity funding, there has been scope to finance venture capital through the ESIFs overall several successive programming periods. In terms of the investment stage, this has typically focused on a combination of start-ups and early growth stage businesses. With regard to possible evidence of crowding-out, in the equity field, there is some evidence that the lack of applications from intermediaries to InnovFin in the EU-13 countries (the former ‘new’ Member States) is linked to the availability of venture capital from other sources, such as the Jeremie co-investment funds in the 2007-13 period and also the EIF’s fund-of-funds programme, which has invested alongside national financing institutions in a number of fund-of-funds such as the Baltic Innovation Fund and the Polish Fund of Funds. In the 2014-20 period, using ERDF, the Commission launched a new instrument, a co-investment facility to provide funding to start-ups and SMEs to enable them to develop their business models and to attract additional funding through a collective investment

151 European Commission, 2017, Guidance on State aid in European Structural and Investment Funds Financial Instruments in the 2014-2020 programing period
scheme managed by a financial intermediary. Total investment combining public and private resources can amount to up to EUR 15m per SME.

**Supported by ESIFs, EFSI and H2020 funds, the new SME Initiative**\(^{152}\) **may also compete with the SMEG funding.** This was confirmed to be the case in Finland, where already three intermediaries have signed up to the SME Initiative, but only one to the SMEG. Whilst the SME initiative is relatively new and formally out of scope, it can be noted that the instrument is already currently operational in Bulgaria, Finland, Malta, Romania and Spain. In the future, it may be extended to other EU Member States.

**In relation to the InnovFin Energy Demo thematic instrument, there is partial evidence of complementarity with JASPERS**\(^{153}\), a technical assistance partnership managed by the EIB and co-sponsored by the European Commission (DG REGIO) and the European Bank for Reconstruction and Development (EBRD). JASPERS is an important instrument for implementing EU Cohesion Policy. Projects are supported in the following sectors: Roads, Air, Maritime, Public transport, Water, Solid waste, Smart development and Energy. JASPERS provides a potential funding continuum with InnovFin Energy Demo.

Whereas InnovFin focuses on proof of commerciality by funding first-of-a-kind demonstration projects relating to low-carbon renewable energy, sustainable hydrogen and fuel cells, JASPERS focuses on the construction of facilities for renewable energy production and the improvement of energy efficiency in buildings (residential and non-residential) including thermal rehabilitation of the building envelope and replacement of energy systems. In addition, whereas for InnovFin Energy Demo, are loans provided between EUR 7.5m and a ceiling of EUR 75m, Jaspers focuses on projects exceeding EUR 75m (unless a pilot project or targeted at a small EU MS), demonstrating coherence in ensuring that EU funding is available to make the transition from demonstration project through to actual implementation on a larger scale.

Some feedback was obtained on possible overlaps as well as evidence of complementarities between InnovFin and other EU support programmes (especially the Structural Funds). For instance, in France, interviewees stated that ESIFs and InnovFin are relatively coherent in that ESI funds typically target final beneficiaries with lower funding requirements and are implemented at regional level. There are also key differences between the programmes since with regional OPs, there is scope to tailor-design financial instruments given that ESIFs are implemented on a decentralised basis whereas InnovFin financial intermediaries (promotional banks and commercial banks) operate national level schemes.

There is arguably a geographical differentiation in targeting since InnovFin will tend to benefit final beneficiaries located in major conurbations that may receive less ESI funding whereas start-ups and firms typically benefiting from ESI support may be located in smaller towns and cities and also in Convergence regions and though although there is some overlap between target groups, the extent of this is constrained by different targeting strategies for attracting final beneficiaries to apply for the different FI schemes available through intermediaries under ESIFs and InnovFin respectively.

In Poland, however, there were concerns about overlap and possible duplication. Financial guarantees for firms investing in innovation are being funded by the Operational Programme to Promote an Innovative Economy 2007-2013 were

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\(^{152}\) EIF, 2017, the SME initiative, [http://www.eif.org/what_we_do/guarantees/sme_initiative/](http://www.eif.org/what_we_do/guarantees/sme_initiative/)

\(^{153}\) Jaspers, 2017, Energy and Solid Waste, [http://www.jaspers-europa-info.org/content/energy-and-solid-waste](http://www.jaspers-europa-info.org/content/energy-and-solid-waste)
introduced. This was a policy-level allocation aimed at using the remaining funds not used in other parts of the programme. This instrument was implemented using procedures similar to those defined for InnovFin RSI. This mechanism was in direct competition with the predecessor pilot to InnovFin. A similar situation has arisen in the current financial perspective within the Operational Programme Intelligent Growth. This new product will compete with InnovFin for market share.

However, it was observed by a stakeholder interviewed that the risk of overlap is probably more significant when ESIFs are managed at national instead of regional level. However, it is the responsibility of the Managing Authority concerned to avoid this situation by designing instruments that are complementary to InnovFin. In this regard, there are two possible alternative options either firstly conceiving of a different type of instrument altogether or secondly, mobilising the InnovFin programme through its counter-guarantee scheme to back ESIF guarantee funds, thereby increasing their economic impact. However, with regard to the latter, the existing ESIFs Regulation is not clear on how ESIF and InnovFin funding can be effectively combined. Combining the two funding sources would in practice be very difficult (if not impossible) since there are two sets of rules (i.e. with different eligibility criteria, state aid rules and exemptions regimes from state aids), different justifications required for the expenditure, ESIFs requires an ex-ante assessment of the proposed instrument etc.). This latter option would therefore be highly challenging to implement in practice in terms of both practical feasibility and reporting. Therefore, to date, no promotional banks or Managing Authorities have yet attempted to combine InnovFin with ESIF funding).

In Lithuania, there was evidence that the main reason why there are no financial intermediaries that have yet signed agreements through InnovFin is the availability of alternative sources of VC funding which has arguably 'crowded out' InnovFin. In 2007-2013, a JEREMIE co-investment fund of EUR 60m in ERDF funding was available for investments in ERDF. In 2014-2020, through the Baltic Innovation Fund (BIF) Fund-of-Fund initiative a further EUR 130m has been made available in Lithuania, Latvia and Estonia. A significant part of the resources committed by national agencies are returned resources from earlier Structural Fund financed financial instruments under JEREMIE framework, now being reused.\[154\]

Overall, some evidence of overlap in provision was identified between ESIFs and InnovFin, but the fact that there are differences in geographical coverage between the two instruments has helped to limit these. Evidence of overlap is more pronounced in former new member states which have proportionately greater Structural Funds support than in Western Europe and access to the EIF's FoF programme. Due to more limited demand in these countries overall for FI products, especially in respect of equity, this has led to low take-up of InnovFin in most EU13 countries.

\[154\] It should be noted that in smaller VC markets such as the Baltic States, whilst there is demand from start-ups and high-tech firms for VC, the number of firms concerned is limited and therefore, existing instruments – including those using ESIFs - may mean that existing supply is sufficient to meet demand. Stakeholders did not appear to perceive there to be a problem the other way around i.e. no evidence that successful applications by financial intermediaries through InnovFin has led to a decline in interest in ESIFs schemes, although more research is needed in this area in the planned second evaluation of InnovFin.
**SME Initiative**

Although formally beyond the scope of this evaluation since it is a relatively new initiative, the SME Initiative\(^{155}\) is also important to consider from a coherence perspective, since it provides an example of efforts to stimulate synergies through joint programming. The SME Initiative is a joint financial instrument of the Commission and the EIB Group which aims to stimulate SME financing by providing partial risk cover for SME loan portfolios of originating financial institutions. This hybrid instrument involves blending a combination of Structural Funds (ESIF), EU budget (COSME/H2020), EIB, EIF, and potentially financial contributions from national financing institutions. The SME Initiative is currently operational in Bulgaria, Finland, Malta, Romania and Spain. In future, it may be extended to other EU Member States.

The initiative contemplates the implementation of up to two products: an uncapped portfolio guarantee instrument and a securitisation instrument. Via the SME Initiative, the EIF offers selected financial intermediaries (e.g. banks, leasing companies, guarantee institutions, debt funds) loss protection and potential capital relief at an advantageous cost. In return for this risk-sharing, the financial intermediaries undertake to provide SME loans, leasing and/or guarantees at favourable terms (for example, reduced interest rates and collateral requirements for the final recipients). Consideration is being given to using some InnovFin funding to contribute to these new instruments. However, since the funding will include contributions from H2020 and other sources, the scheme is designed to maximise synergies and to ensure greater coordination between these different programming instruments.

4.4.5 **Coherence with national support programmes**

InnovFin is not only implemented in the context of other EU support programmes, but also in many countries its coherence also has to evaluated in the context of the existence of national (and sometimes also regional) financial instruments. In many countries (e.g. in Germany), promotional banks combine resources from national programmes and InnovFin (SMEG) to support the same target group of beneficiaries. This means that in practice, coherence with national programmes can be maximised by working through financial intermediaries familiar with the local market. In the case of products directly implemented by the EIB, there may be more of a risk of competing with a range of national support programmes due to a lack of direct involvement of relevant national actors.

In Austria, there may be competition between the SMEG and a national guarantee instrument that is very popular with banks although there is no evidence of this being the case in practice. At a European level, a study was carried out on behalf of the European Association of Guarantee Institutions (AECM) which noted that several national guarantee institutions view the provision of EIF-backed counter-guarantees and guarantees through InnovFin as potentially duplicating non-EU funded national support schemes, risking a crowding-out effect and making it difficult to compete with non-commercial rates for guarantees.

In Germany, a financial intermediary pointed out that the SMEG is less restrictive than national support programmes, and thus provides added value. Other interviewees criticised that the EC seemed to not have taken into account potential overlaps with national programmes when designing the InnovFin programme. This was also a point made in a focus group in Vienna by one stakeholder: "An ex ante assessment should always be carried out to look at where market gaps are. However, EIF-backed national guarantee schemes may risk cannibalising the market and making existing products uncompetitive even when such an assessment is done”

In **Norway**, it was pointed out by interviewees that EIB loans under InnovFin can, in theory, be combined with national loans and grants to finance up to 75% of investment costs, showing the potential for synergies between instruments at different levels. Two interviewees in **Portugal** maintained that InnovFin complemented national funding sources for R&I-driven businesses.

There was also feedback from the online survey related to coherence with national programmes:

**Figure 4.6 - How well do the financial products complement national sources of funding for businesses involved in research and innovation?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>4%</td>
</tr>
<tr>
<td>To some extent</td>
<td>41%</td>
</tr>
<tr>
<td>To a great extent</td>
<td>55%</td>
</tr>
</tbody>
</table>

### 4.4.6 Coherence of EU financial instruments with other EU policies and legislation

A further aspect of external coherence is whether wider EU policies and legislation, which determine the framework conditions for start-ups and SMEs are consistent with EU policies and programmes (including InnovFin) on access to innovation and SME finance more broadly. This includes, for instance: EU legislation pertaining to financial reporting and regulatory simplification; EU legislation relating to capital adequacy; and EU legislation and support structures relating to IPR (e.g. setting up of the European Patent Office, IPR helpdesk).

There has been a tendency towards the simplification of financial reporting requirements for small firms promoted by the European Commission, for instance, through reforms introduced through Directive 2012/6/EU on accounting requirements for micro-entities\(^{156}\). However, simplifying reporting requirements means that those firms have less quantitative data available to back up loan applications making it harder for them to obtain financing from conventional sources. This was an issue addressed in a study by CSES for DG GROW on SME credit ratings (Evaluation of Market Practices and Policies on SME Rating). A further issue relating to coherence is the inherent tension between the imperative of encouraging banks to finance start-ups and SMEs, and to try and persuade small firms to invest and innovate and the need to ensure capital adequacy within banks through the Basel III rules to avoid a repeat of systemic risks to the banking system during the global economic and financial crisis, and. This often amounts to a direct conflict of interest in which Basel-related considerations usually win. This helps to explain the rationale for the creation of the British Business Bank in the UK, for example.

Whilst these are important considerations, they are not unique to the InnovFin financial instruments but are part of the wider policy backdrop in terms of the difficulty of ensuring consistency between EU programmes that provide financial instruments to strengthen access to (innovation) finance, and the need to align EU policies and legislation pertaining to the framework conditions accordingly so that the policy framework is fully consistent.

4.4.7 Overall conclusions – coherence

InnovFin’s inclusion of a combination of debt financing and equity-based financial instruments is coherent overall from a programme design perspective. From an internal coherence perspective, the InnovFin programming architecture is generally consistent with the EU policy aim of ensuring that firms can access either debt (guarantees or loan products) or equity through financial intermediaries, irrespective of their stage in the development lifecycle. The debt instruments within InnovFin provide a continuum in terms of ensuring access to innovative finance for firms along the funding escalator. Access to innovation financing for start-ups was the main gap identified, but such funding is available through COSME and national start-up financing schemes (at least in some EU-28 Member States).

Summary – InnovFin Coherence

COSME and InnovFin - there is some overlap between in that both target SMEs, however, there is also a clear delineation in that only COSME target start-ups and is limited to financing amounts up to EUR 150,000. The research found that whilst the programming architecture between COSME and InnovFin has ended up being coherent, a viable alternative would have been not separating access to finance for SMEs from innovation financing and instead combining these within a single umbrella programme, which would have been easier to explain to financial intermediaries.

EFSI and InnovFin - in the SME Window, EFSI funding has been used to ‘top up’ the SMEG, and the funding has therefore been complementary. However, within EFSI’s Infrastructure & Innovation Window, there is evidence of overlap and competing funding available through the IIW for large projects and mid-caps on the one hand and InnovFin on the other. Looking ahead, it will be important to strengthen coherence between EFSI and the other Windows. There is already some differentiation such as geographic coverage, since InnovFin is wider in scope than the EFSI, but more should be done to more clearly delineate the two funding programmes, or to ensure that EFSI is used only top up existing financial instruments.

ESIFs and InnovFin – there was some evidence of overlap between Structural Funds and ESIFs FI schemes and therefore of ESIFs effectively crowding out demand for InnovFin especially in Central and Eastern European Member States. However, there are other aspects of the interaction between the two programmes where there is no overlap, such as the geographic differences (H2020 Associated Countries can benefit from InnovFin whereas ESIF FIs are confined to EU Member States only). A consequence of limited demand and over-supply of VC in some of the former new Member States is that there has so far been limited take-up of InnovFin in those countries.

CEF and InnovFin - no evidence of overlap was identified since the focus of CEF projects is on cross-border and transnational projects in the energy sector, among others. This therefore does not overlap with the Energy Demo projects, which does not involve funding major strategic projects or have a transnational dimension.

National loan guarantees and VC programmes - there is strong coherence in
terms of the types of instruments available through InnovFin, especially in respect
of innovation financing for SMEs (the dual focus on SME Guarantees and on InnovFin
Equity). The fact that similar support was already available in some Member States
was not seen as duplicative, since there was evidence of sufficient demand,
especially under the SMEG, for InnovFin to be seen as complementary in allowing
national promotional banks to engage in a greater volume of guarantee-backed
lending activity. A small number of national guarantee institutions were concerned
that EIF-backed guarantee products risk crowding-out equivalent national schemes.
A number of banks were also concerned that the availability of EIF-backed
guarantees through InnovFin to national guarantee institutions could enable them to
provide competitive guarantees and crowd out any commercial involvement in the
 provisioning of loan guarantees.

4.5 Added value – To what extent does InnovFin demonstrate added value?

In this section, we assess the extent to which the InnovFin Financial Instruments are
adding value by reason of interventions at a European level and achieving results that
could not have been obtained by the Member States acting individually or through the
action of smaller groupings of Member States.

Critical to the issue is the extent to which the action at a European level is
addressing market failures in a way that could not be achieved through
action at national level alone. However, as well as considering the case for
intervention through financial instruments at a European level as a general
proposition, there are also issues relating to the added value of the specific EU
interventions in the form of the InnovFin financial instruments as opposed to the other
financial instruments provided at a European level, and to the added value of these
financial instruments, as opposed to other forms of support.

European added value involves in its broadest scope the counterpart of a consideration
of whether the EU principles of subsidiarity have been applied (Article 5 Treaty on
European Union). It considers what is the nature of the contribution that means that
the objective of the action can be achieved at a European level, when it would not
have been sufficiently achieved by the Member States at national, regional and local
levels and also the extent to which the action at the EU level is better achieving the
objective by reason of its scale or effects.

European added value may result from delivering legal and market certainty,
coordination gains, economies of scale, multiplier effects, complementarities,
demonstration and catalytic effects, capacity building and European
integration. Most of these considerations are relevant to financial instruments, which
to a large extent are motivated by the need to address market failures. These take the
form of significant information asymmetries and high transaction costs and also the
possibility of exploiting positive externalities. Financial institutions are frequently not
in a position to be able to assess the prospects of scientific developments or new
procedures and processes or cannot do so without considerable investigation and
transaction costs. There is therefore a situation of asymmetric information.
Alternatively, there can be positive externalities, where EU interventions generate
demonstration and catalytic effects. Confirming this rationale for the intervention in
the form of the Financial Instruments is the fact that banks remain largely absent from
higher-risk lending and, more generally, that there is a persistent gap between the
supply and demand for funds to finance research and innovation.

Furthermore, the greater scope for support to cross-border operations that is
a feature of European instruments in contrast to national instruments should
not be neglected. In effect, the European instruments are assisting transnational
partners to overcome the continuing barriers they face from financial systems still
operating with a largely national perspective, while interviewees have also mentioned that the transfer of know-how and experience developed around the European instruments is also a significant factor, especially when this facilitates further international linkages.

The ex-ante evaluation of ‘The financial instrument facilities supporting access to risk finance for research and innovation in Horizon 2020’\textsuperscript{157} considered the European added value that the Financial Instruments were capable of delivering. It estimated that at any one time, 150,000 to 500,000 innovating SMEs were originating bankable operations that the market cannot support, suggesting a loan funding gap of between, roughly, EUR 112bn and EUR 375bn. In addition, for innovative MidCaps, it was estimated that there was an average total annual demand for debt of EUR 250bn for debt financing, though the shortfall in relation to supply was difficult to estimate. Similarly, for equity finance, the gap for SMEs was estimated to be some EUR 800m per year, while for MidCaps, there was an estimated demand of just under EUR 39bn for equity, considerably above the available funds.

EU-level intervention to foster access to risk finance was said to support the achievement of the EU's innovation policy objectives, facilitate the financing of cross-border projects and lead to capacity-building through the transfer of the expertise accumulated in the European institutions responsible for implementing the interventions (the Commission, the EIB, EIF). The implementation also led to economies of scale, multiplier effects, complementarities and other demonstration and catalytic effects. A significant question at this stage then is the extent to which these anticipated effects have been realised.

4.5.1 Financial additionality

A key question is whether there is additionality associated with the interventions and whether the scale of the intervention at an EU level is such that there is definite added value. Clearly, although they are not of the same order as the estimated funding gap, contributions are being made to addressing it. At the general level, therefore, the InnovFin instruments as a whole appear to be making a contribution of absolute additionality and also to be complementary to the other financial instruments offered at a European level in that taken altogether (and also including national funding) there still remains a significant funding gap, if the estimates made previously are correct. In fact, rather than crowding out national funds, the intervention through the InnovFin instruments is helping other funders to invest and through this leverage effect contributing further to filling the funding gap.

Furthermore, although the scale is insufficient to make a significant impact on the funding gap in general, it is clearly making considerable contributions to certain parts of it, in some countries more than others. This applies especially where there are enterprises that are promising in that they have passed through highly competitive Horizon 2020 selection processes in order to develop their initial ideas. Furthermore, specific investments can make a substantial difference. In the case of one Danish SME, for instance, an InnovFin loan has helped them move from a defensive to an offensive strategy and this has led to the development of new products, the targeting of new markets, opening an office in a new country and doubling their growth rate.

In addition, there is a clear element of added value in that, as well as contributing to the quantum of financing available to enterprises with eligible projects, finance through the InnovFin financial instruments can be delivered on more favourable terms, as far as final beneficiaries are concerned, since the EIB

\textsuperscript{157} European Commission (2013) Financial instrument facilities supporting access to risk finance for research and innovation in Horizon 2020, p.32
can raise capital on the international money markets at relatively low rates of interest and pass this advantage on to financial intermediaries and final beneficiaries. Moreover, the financial instruments’ debt interventions can also offer easier collateral requirements and longer loan terms because of the EIB’s position and there are other elements to the added value associated with their favourable terms. One of the interviewees remarked that this was a major consideration for their involvement and for the impact on beneficiaries. Similarly, an interviewee commented that the arrangements with the EIB meant that national intermediaries shared the risk on advantageous terms and this made them better able to support potentially high growth SMEs with a limited collateral and credit history.

The reference to the differential impact of the instruments points to extra dimensions of the analysis that it is necessary to consider, since as well as assessing the added value of the InnovFin instruments as a whole, it is also important to consider whether each of them individually can be said to be offering added-value. At this level, it is much more likely that particular products may be offering only partial additionality, if they are addressing defined needs that others are also seeking to address. The conclusions of the section on the coherence of the instruments are that, in fact, there is not an overlap of this kind, not least because the different products have been designed to avoid such an overlap.

Evidence has been provided by the responses to the survey of intermediaries developed for this assignment. Responses are generally from well-established financial institutions, though in all but a couple of cases they are from institutions involved with the SMEG.

- 20 respondents thought that the financial products complement national sources of funding for businesses involved in research and innovation ‘to a great extent’ while a further 27 thought that this happened ‘to some extent’ and only 1 thought ‘not at all’.
- Similarly, 17 thought that the product is coherent with EFSI, COSME, and other EIB/EIF/EU financial instruments such as the Cohesion Policy Funds ‘to a great extent’ while 29 thought that this was the case ‘to some extent’.
- In terms of the possibility of using alternative sources of finance, a question that is critical for determining the extent of additionality, most responded to the question ‘What would be the impact for you or your organisation if the InnovFin programme were to be discontinued?’ by saying that they would have to reduce activities or leave the market altogether.

Similarly, in response to the survey of beneficiaries, 12 said that ‘without the funding we would not have been able to go ahead with our plans’, 16 said that ‘we could have gone ahead but at a later date and/or with a reduced or modified basis’ and only 5 stated that ‘without the funding we would have gone ahead as planned’.

4.5.2 Other types of added value

However, the most detailed responses in this area were to a question in the survey of intermediaries asking about areas where the Financial Instruments could be providing added value. The responses are set out below:
Table 4.3 – Areas of Added Value from the Financial Instruments

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping to achieve EU policy objectives</td>
<td>3.7</td>
<td>n=48</td>
</tr>
<tr>
<td>Facilitating the financing of cross-border projects</td>
<td>2.5</td>
<td>n=48</td>
</tr>
<tr>
<td>Demonstration and catalytic effects</td>
<td>3.0</td>
<td>n=48</td>
</tr>
<tr>
<td>Economies of scale</td>
<td>3.2</td>
<td>n=47</td>
</tr>
<tr>
<td>Multiplier effects</td>
<td>3.4</td>
<td>n=47</td>
</tr>
<tr>
<td>Capacity-building</td>
<td>3.4</td>
<td>n=46</td>
</tr>
</tbody>
</table>

Clearly the evidence has its limits, but it can be seen that the responses were generally positive, though not strongly so. The highest added value was felt to be in ‘helping to achieve EU policy objectives’, ‘multiplier effects’ and ‘capacity-building’, while there was less added value perceived in relation to ‘demonstration and particularly ‘Facilitating the financing of cross-border projects’. This last result is also consistent with responses to a question on ‘gaps or overlaps in the R&I funding cycle not covered by financial instruments’, where there were some comments that there were problems in the period after initial start-up funding but before a project starts to generate sufficient positive returns, but also there was a gap in relation to finance to support international trade.

It is worth noting that while most of the respondents were involved in the InnovFin SME Guarantee scheme, two respondents involved in InnovFin Equity, who replied to these questions, were considerably more positive. In the case of this last product, an interesting point brought forward by a German intermediary involved in the SMEG is that currently, US investors capture a significant share of the value of fast-growing enterprises in Germany, which would not be the case if European VC investors would become more engaged. InnovFin may play a role here in making sure fast-growing enterprises can remain in European ownership, which is another point of added value.

Evidence cited in relation to the other evaluation criteria and the specific instruments suggests that the positive effects of the InnovFin financial instruments’ interventions are more systematic. Intermediaries under the SMEG, for example, have spoken of increasing loan volumes and new riskier market segments being covered and also the programme enabling cross-border investments. From a commercial bank perspective, the SMEG in particular has had a clear value added in allowing banks to access new market segments that would ordinarily have been considered to be too high-risk for debt-financing without a guarantee in place. The thematic instruments are also introducing new and additional forms of finance addressing particular problems evident in the infectious diseases and energy areas. IDFF, for instance, is providing funding through a high risk quasi-equity debt instrument that is not available elsewhere, while EDF supports projects that are non-bankable at the time they are supported (though they are expected to become bankable during the course of the project. Although not yet applied extensively, there is clear additionality in addressing the market failures that have been defined as the targets for these instruments.

More generally, it has been remarked that the InnovFin financial instruments have raised the profile of innovation financing, and particularly addressing the needs of
high-risk enterprises, as challenges for the financial sector to meet. This development could represent a considerable element of value-added over the longer-term.

**Overall, therefore, the evidence that is currently available points to positive, though not really substantial added value arising from the deployment of the specific InnovFin Financial Products.** This may well be because the products have only been partially deployed, and the more specialised of them (the InnovFin Energy Demo Projects and Infectious Diseases) hardly at all, at this stage in the policy cycle. There may also be a problem that intermediaries only have a partial view of the impacts of the system as a whole. For instance, many of the projects funded under Horizon 2020 are still under way and have yet to produce results that can be exploited. As these results emerge, the fact that the InnovFin instruments are in place represents a strategic advantage in the process of delivering more effective commercial exploitation of the results of research. In this sense, the real added value of the InnovFin instruments is yet to reveal itself.

**There may also be some differences between the extent of added value in different Member States.** The extent of added value clearly depends on what already exists in each Member State and the terms on which funding is made available through national schemes, but there also appear to be differences in implementation. While the SMEG is generally appreciated and in Sweden, for instance, it is felt that the InnovFin instruments have successfully complemented national provision, feedback from Belgium suggests that due to local market conditions and cautious local implementation the SMEG did not manage to reach a large number of the target SMEs.

**This consideration of the availability of finance suggests a further question, prompted by the comments of some MEPs, and Member State authorities who seemingly would prefer to increase the allocation of funding to grants and to allocate less to InnovFin.** Here, there is a broader political issue relating to the balance in the financial allocation through H2020, as between innovative Financial Instruments and other types of interventions, principally R&I collaborative grants. The arguments are that grants are more likely to encourage the involvement in research particularly of SMEs than finance which needs to be repaid and that, since there is already intensive competition to obtain grants under Horizon 2020, additional funding would be welcome. In terms of the additionality of the InnovFin instruments, it could be said on the basis of this argument that the instruments are squeezing out the direct funding of research and innovation through grants.

**However, this argument fails to take into account an important part of the rationale for the developments in Horizon 2020 that have put greater emphasis on the practical (and particularly commercial) exploitation of the research conducted.** The InnovFin instruments are appropriate especially for these later stages in the innovation cycle and, as has just been suggested, need to be in place to ensure that the full strategy is implemented. Furthermore, the Financial Instruments are leveraging considerable further private investment and are therefore increasing the total amount of funding directed to achieving Horizon 2020 aims. Rather than squeezing out funding, the Financial Instruments are adding additional contributions.

**Finally, by changing the funding mechanisms for a significant part of the work carried out under the Horizon 2020 umbrella, the InnovFin financial instruments are adding value to research and innovation policy.** While the traditional form of research financing - grants - are non-refundable, the Financial Instruments create a form of revolving finance in that once loans are repaid and loan guarantees expire and once exits are made from venture capital investments, funding can be recycled. In other words, the outlay is returned and can be used again. In an era of budgetary austerity, when the effectiveness of EU funding is a political issue,
the recycling of funds has considerable advantages and adds to the credibility of EU policy in this area, as well as enhancing the capacity for future funding.

In general, therefore, it can be said that there is evidence of additionality of scale, with intermediaries under the SMEG, for example, increasing loan volumes, and of scope, with new risky market segments being covered thanks to the programme and also the programme supporting cross-border investments.
5. **CONCLUSIONS AND RECOMMENDATIONS**

The purpose of this interim evaluation was to assess the performance of InnovFin so far and to consider priorities for the remainder of the programming period and beyond. Below, we present the overall conclusions and recommendations.

After the overall conclusions of the interim evaluation, we summarise the key findings with regard to the performance of the seven InnovFin financial products. We then present conclusions on other key aspects of InnovFin’s performance - the geographical distribution of InnovFin operations, role of InnovFin Advisory, and relationship with COSME and EFSI. Last but not least, we present conclusions with regard to the cross-cutting issues of relevance, efficiency, effectiveness, coherence, and added value. Priorities for the future and recommendations are included throughout the text where appropriate.

5.1 **Overall Conclusions**

InnovFin represents a significant development in the provision of EU-supported innovation financing that builds on the more modest and rather disparate schemes that previously existed. InnovFin has brought together different programmes previously run by the European Commission, EIB and the EIF under one umbrella. Continuity is strong between some elements, e.g. the Risk-Sharing Instrument and the SMEG, and Large Projects and the Risk-Sharing Finance Facility (RSFF). Other aspects are new - the thematic products introduce a new type of financial support.

So far, an estimated EUR 7.42bn of InnovFin financial assistance has been committed to some 5,780 enterprises (at 31 December 2016). This means that some 32% of the SMEG budget and 8% of the InnovFin Equity funding earmarked for InnovFin for the 2014-20 period has now been committed. In case of the Energy Demonstration product, this figure is 7%, and in case of Infectious Diseases 30%. For the other three EIB-managed products, such an estimate is not possible due to the way data is reported.

Overall, the research suggests that the InnovFin scheme is performing well against its main objectives of improving access to finance for innovative companies and projects, and helping to address related market failures. To the extent that shortcomings have been identified, these are more to do with the implementation of particular InnovFin schemes than being inherent programme design faults. The research suggests that InnovFin has proved responsive to changing market circumstances and changes in the EU policy support environment with some adjustments already in place and others under consideration. At the interim stage, it is not possible to evaluate the longer-term impact of the InnovFin financial instruments on innovation and economic growth in Europe. This will only be possible towards the end of the programming period, with some of the full impacts only materialising and being evaluable much later.

5.2 **Performance of the various InnovFin financial products**

Although the use of the different InnovFin financial products varies, overall the take-up is broadly in line with the expectations of the EIF, the EIB, and many financial intermediaries under the SMEG. Where take-up has falled short of expectations, the reasons include low levels of R&I investment and hence the appetite for InnovFin (some Central and Eastern European countries), the existence of well-established national and regional support programmes operated by public banks (e.g. in Germany), competition with low interest rates offered by commercial banks and a preference for other support schemes such as EFSI (in case of larger firms) and COSME (in case of SMEs), and Structural Funds grants (in the case of Central and Eastern Europe).
5.2.1 SME Guarantee

There has been a high take-up of the SM Guarantee with many agreements signed with financial intermediaries and already more than several thousand loans made to final beneficiaries, covering almost all eligible countries. Without the top-up provided by the EFSI, the resources available at this stage to the SMEG would already have been exhausted.

While the full delegation model adopted under the product is praised by financial intermediaries, there are some concerns about the pricing of guarantees which is seen as relatively high (twice as high as with the previous scheme). Along with the obligation to pass on financial benefits to the loan-receiving firms, this leaves only a modest margin for financial intermediaries and reduces the advantages for the final beneficiaries. Conversely, some banks have stated that the costs of the guarantee are highly favourable and significantly cheaper than what would be available from other sources, highlighting the difficulty of finding a single pricing model suitable to different countries. Several promotional banks argued that reporting burden was higher for them compared to commercial banks under the SMEG, putting them at a disadvantage. While InnovFin is not bound by state aid rules, some promotional banks take a cautious approach and nevertheless seek to comply with them. The Commission may wish to explore ways to improve terms and conditions for promotional banks to account for this additional burden and the higher leverage effect they may achieve when on-lending to commercial banks.

Notwithstanding concerns among some banks, the fact that there has been such a high take-up of the SMEG indicates that it is proving to be a very successful intervention in helping banks to provide finance to riskier businesses. From a business perspective, there is strong evidence that this product largely benefits firms that would otherwise not have received the debt finance they require to innovate, or only on a much smaller scale and on less favourable conditions. For example, the guarantees free up assets that would otherwise have to be used to provide collateral to receive a bank loan.

There seem to be some misunderstandings regarding the correct application of the innovation eligibility criteria defined for the SMEG. In parts of Central and Eastern Europe, there is a lack of financial intermediaries with the know-how required to help implement the financial instruments. Experience in several countries (e.g. Greece, Czech Republic) suggests that there can be a snowball effect – once the first agreement has been signed with a bank, its competitors are then keen to participate in the SMEG, too.

**Recommendation 1:** The additional EFSI funding that is likely to be made available to the SME Guarantee could be used to help to extend the scope of the guarantees. In particular, the EFSI could be used to extend the SME Guarantee to cover even more risky debt financing with the InnovFin covering any losses in the first instance and EFSI then coming in to cover subsequent losses.

**Recommendation 2:** There should be clearer communication of the correct interpretation and application of the innovation eligibility criteria used in case of the SMEG. This could be done, for example, through workshops with financial intermediaries or by developing a toolkit/manual circulated among all financial intermediaries signing up to the product.
5.2.2 InnovFin Equity

In the case of the InnovFin Equity scheme, a total of 10 deals with fund managers have so far been signed with financial intermediaries. Due to the early phase of programme deployment, take-up and implementation in terms of commitments to final beneficiaries is still low. Even more so than with the other InnovFin products, InnovFin Equity’s effectiveness can only be fully assessed at the ex-post stage. This is partly because of the late launch of the scheme and the fact that it takes a considerable time for the EIF to review calls for expressions of interest from VC fund managers. It then takes time for those fund managers to make investments in firms. Moreover, investments are typically made over a period of several years and beyond in the form of follow-on investments. It also emerges from the stakeholder feedback that the scheme’s implementation is strongly affected by external factors, such as the stage in the fundraising cycle and the availability of exit opportunities for firms suitable for VC investments.

Nevertheless, evidence available at this stage suggests that fund managers have benefited from participation in the InnovFin Equity scheme, pointing to considerable volume effects compared with non-InnovFin supported equity funds. Fund managers also noted that the presence of the EIF through InnovFin during the first closing round of their equity funds had helped to secure additional equity funding both from promotional banks during first closing and in subsequent closings from private equity investors. However, this is less to do with the specific characteristics of InnovFin and more to do with the presence of the EIF as a cornerstone investor. However, to the extent that InnovFin Equity enables the EIF to support first time or emerging teams focusing on the high-risk asset classes of technology transfer, business angels and early stage VC financing, the scheme demonstrates clear added value both at the EIF and intermediary levels. Added value also stems from the fact that many of the VC fund managers signed up to the scheme so far have a multi-country focus which should lead to an increase in cross-border investments. This could also benefit countries which lack ‘home-grown’ fund managers and where the VC ecosystem is underdeveloped.

5.2.3 MidCap Guarantees and MidCap Growth scheme

Take-up of the MidCap Guarantee scheme has lagged behind expectations and is considerably lower than that of the SMEG. Some commercial banks have said that they see the application process under InnovFin as cumbersome making them hesitant to apply for more than one financial product, and would prefer to see the scope of the fully delegated and standardised SMEG widened to cover firms with up to 3,000 employees without changing the maximum loan size, rather than having to sign a separate agreement under MidCap Guarantee. The EIB has reacted to this situation by going down the equity scale to provide quasi-equity and mezzanine financing to MidCaps. Conversely, it could be argued that offering guarantees to Mid-caps will be beneficial over the medium-long term, since it is compatible with the funding escalator approach outlined in the 2015 Capital Markets Union Action Plan.

There are also concerns among prospective applicants that the variable pricing of the MidCap Guarantee and the emphasis on risk-sharing principles is unattractive and the absence of a standardised pricing model for the costs of the MCG (unlike the SMEG) dissuades financial intermediaries from making an application.

The MidCap Growth Finance scheme is performing reasonably well with a good number of signatures to date. But the pipeline is rather low (see Section 3.2.2) and there is a degree of overlap with commercial providers in some countries. As with the MidCap Guarantees, it could be argued that in recent years this market segment has tended to become ‘overbanked’ in terms of relatively cheap debt financing in the context of reduced interest rates, at least in the Eurozone. From a business point of view, cheap debt is likely to always be preferred to increasing
external shareholders’ shares in the company. This, however, can produce vulnerabilities as a firm grows and becomes over reliant on debt. The MidCap schemes could exacerbate such a scenario, and also in some cases replace commercial bank funding, increasing the reliance of such firms on EU public funds and crowding out the private sector. Such a tendency can be remedied by properly monitoring and managing developments in the two product’s portfolios. In any case, at the current low rate of take-up, especially in the case of MidCap Growth, there is little risk of having adverse effects in the market.

5.2.4 InnovFin thematic products

Launched one year later than the rest of the programme, the take-up of Infectious Diseases has been reasonable, with 30% of the budget already allocated, whereas in case of Energy Demonstration Projects take-up has been slow with only 7% of funds allocated. In addition, there has been a tendency for projects to be put forward that are bankable, at least in theory, even if in the circumstances on the ground they may struggle to obtain the financing to go ahead at this stage. Although it is still quite early in the implementation phase, enough experience has been gained to make it possible to identify actions that could be taken to optimise the two products’ performance.

There have been only three Infectious Diseases loan agreements signed so far but these have a quite high combined value of EUR 45m, and there is a large pipeline of 78 applications (of which 31 have been put on hold).

**Recommendation 3:** While interest in the Infectious Diseases scheme has been good, it could be further boosted by extending the eligibility criteria to include a broader range of projects. For example, the scheme could be extended to also include pre-clinical developments as eligible costs. Consideration should also be given to boosting the advisory support available to financial intermediaries to help generate the pipeline and deal-flow. Take-up should be monitored on a regular basis with a view to discontinuing the scheme if it is not performing as expected, and it may be pertinent to not accept any further applications until the backlog of applications currently on hold has been dealt with.

There has been less demand than originally anticipated for the Energy Demonstration Projects. So far there have been 92 applications and around half of the current financial allocation is expected to have been utilized by mid-2017. We understand that 33 applications have been rejected, mainly on the grounds that they are ‘bankable’ projects and therefore do not match the scheme’s risk profile. These applications have been referred to other more appropriate sources of funding. A further 20 applications have been put on hold which may be related to the burden this scheme and the IDFF put on the EIB. With financial allocations set to double from EUR 150m to EUR 300m, there is a need to accelerate the take-up of the scheme and to accelerate the processing of applications. In effect, the Energy Demonstration Projects has operated as a pilot with lessons being learnt that point to possible improvements.

**Recommendation 4:** Consideration should be given to extending the eligibility criteria for the Energy Demonstration Projects to include other types of projects (e.g. relating to climate change). Similarly, there is an argument in favour of more flexibility in the type of support that can be provided after the first market testing. However, this should not result in a product that is so generic that it competes directly with MidCap Growth Finance and Large Projects. Another possibility would be to introduce a platform approach with the EIB to operating the Energy Demonstration Projects (and possibly also the Infectious Diseases) with a private sector manager being appointed to run the platform and
InnovFin resources being used to provide downside investor protection.

Some stakeholders question the usefulness of thematic products, also from a branding point of view, and argue that Large Projects and other similar schemes could be used to fund such projects which would streamline the overall product offering. Clearly, any introduction of new thematic products should be fully justified to avoid the emergence of a plethora of thematic products which could lead to over-fragmentation and undermine the profile of the InnovFin programme as a whole. An issue relating to coherence was also raised in respect of the thematic products and why these particular areas deserve special support rather than other thematic areas. An alternative approach could be to focus on a specific development stage rather than thematic areas, e.g. on demonstration projects across different themes. However, no stakeholder feedback was obtained on this possibility.

5.2.5 Large Projects

Building on the success of the EIB’s Large Projects schemes to support the Knowledge Economy in the 2007-13 period, the take-up to date of InnovFin Large Projects has been strong with a total of EUR 4.5bn being committed to beneficiaries. The pipeline also suggests continued demand despite the overlap with EFSI’s ‘Infrastructure & Innovation Window’. Other factors such as the amount of liquidity in the European money markets have also had a strong influence. Since the InnovFin financial instruments were launched, liquidity in the European money markets has increased and a consequence of this is that the EIB’s offering has lost some of its competitive advantage in relation to large companies that can now obtain finance at similar rates of interest from commercial sources. The fact that the product nevertheless receives a considerable number of applications suggests that the EIB has managed to target a specific segment of high-risk projects. In some cases, this risks crowding out commercial investors, however, as suggested by stakeholders.

To ensure that InnovFin remains relevant in this market segment, the EIB is increasingly sharing the risks associated with innovation and new product development with the companies it lends to. Equally, in addition to sharing the downside risks, the EIB is able to benefit more fully from the upside gains. However, such facilities require bespoke structuring on a deal-by-deal basis, especially where the focus is on a single product rather than a company’s IP portfolio as whole. This points to a general issue with the InnovFin instruments that the need for them can vary across the economic cycle with greater private sector finance becoming available in the boom periods, but the obvious institutional difficulty of switching off availability or modifying such that it remains relevant in such periods.  

Recommendation 5: A proliferation of different InnovFin financial products should be avoided. This could, for example come about if more thematic products are introduced. The research suggests that there is already some confusion, not only in relation to the interplay between different InnovFin products but also regarding how these relate to other sources of EU funding, COSME and the EFSI in particular. Simplification is probably not feasible in the current programing period but should be considered as a priority for the next one. At least on the EIF side, the diversity of funding sources available is less of a problem as the EIF decides which product is the most suitable for specific intermediaries’ priorities. Continuity is important to intermediaries and beneficiaries.

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158 Public funding is there when private markets are ineffective. The scheme has to be structured to facilitate such changes in liquidity. Not providing historic targets of money when the market is doing its proper job, should not be seen as a failure.
5.3 Geographical spread of InnovFin operations

So far, the majority of InnovFin activity has been in Western Europe but within this region take-up has varied quite considerably because of specific national factors. In some countries (e.g. Belgium), plentiful debt finance is available whereas in other countries (e.g. Netherlands) the opposite is the case. In other countries (e.g. Germany), public promotional banks as well as commercial banks already offer financial support schemes that have quite strong similarities with InnovFin, reducing the demand for the SMEG and MidCap Guarantee. But InnovFin allows such institutions to extend the scale and scope of their guarantee activities, specifically through the availability of the EIF counter-guarantee. In the UK, the uncertainties created by Brexit mean that delays have occurred in implementing InnovFin. In the majority of countries, access to innovation finance has improved in recent years, but in many it is still at a level where additional public support can be justified.

The take-up of InnovFin in EU Member States in Central and Eastern Europe has lagged behind. Many enterprises in the region do not have a strong enough balance sheet to borrow from the EIB. There is also a misperception in many countries in terms of what constitutes innovative companies which may reduce the number of applications. In general, there is still a relatively weak system of intermediaries and innovation support in place in Central and Eastern Europe which slows down the take-up of the programme.

Another reason why many firms have not applied for InnovFin support is the availability of other EU support funds, mainly the Structural Funds (ESIFs) but equally COSME. There remains a misperception among relevant stakeholders that since Horizon 2020 is generally highly selective and competitive, accessing other EU programmes, especially ESIFs which are nationally organised, is easier. Awareness-raising measures in liaison with national contact points of the Access to Finance Group and potential financial intermediaries might correct this.

Similar considerations apply to countries beyond the EU that are eligible for InnovFin support. Only a few associated and accession countries (notably Israel, Switzerland, Tunisia and Turkey) have made significant use of the schemes. Unlike grants provided under H2020, which tend to fund international projects involving partners from both EU Member States and accession countries, in case of InnovFin financing it is less obvious why projects exclusively benefitting accession countries should be supported, although this does contribute to the vision of a Europe open to the world (see Section 2.3). On the other hand, only seven countries had not allocated any resources under InnovFin to final beneficiaries at the time when the monitoring data was analysed for this report.

**Recommendation 6:** a priority should be to increase take-up of InnovFin in Central and Eastern Europe, including through awareness-raising and further strengthening technical support to build capacity and increase investment readiness. NPBs and national contact points of the Access to Finance Working Group may play a key role in this respect. The EIF should build on its experience working with BPI France, UniCredit and others to extent the SMEG to the region through umbrella agreements, and the EIB should further develop the role of InnovFin Advisory to support its direct loan products (see also separate sub-section below). However, it is clearly important to focus any such efforts on realistic objectives given the limited resources available to provide advisory support. In particular, whilst help can be provided to develop the capacity of financial intermediaries, other factors that are important in developing deal flow in Central and Eastern Europe (e.g. exit mechanisms for venture capital investments) depend on factors that cannot be easily influenced, at least in the short-term.
Recommendation 7: More emphasis should be put on awareness-raising and developing effective signposting mechanisms for InnovFin (and other financial products) at a regional and national level in EU Member States, but especially in Central and Eastern Europe, in order to help ensure that potential financial intermediaries and firms are in a better position to gain access to InnovFin. This would also make it easier for enterprises to make use of different financial products as they develop. Ideally, there should also be a way of identifying enterprises that are making use of Horizon 2020 grants but are not using InnovFin (at the moment this is limited by data protection rules). Awareness-raising initiatives should also be expanded, both amongst financial intermediaries and enterprises (e.g. through the circulation of real-life case studies that could be presented at relevant conferences and distributed to industry associations). Measures to increase communication between intermediaries under the SMEG and InnovFin Equity on suitable beneficiaries without increasing administrative burden could be explored.

Recommendation 8: The national contact points of the Access to Finance Working Group should receive training to ensure they are informed of InnovFin programme and its possibilities in a national context. Regular meetings should update members on changes to the programme and other relevant developments (e.g. the continuation of EFSI). Training sessions could also involve national research agencies and other relevant interest groups that could act as multipliers and ‘ambassadors’ of InnovFin in their respective countries and thus increase awareness and investment readiness. Sessions could also include the presentation of case studies (see previous recommendation) and best practice examples to foster mutual learning across countries. This recommendation should be implemented taking into account of the existing working group of national promotional banks cooperating with the EIF.

Recommendation 9: It would be worth exploring ways to strengthen cross-border cooperation between Member States and accession countries through InnovFin. This could be done in a similar way as has already been done under the SMEG in case of Western European banks which the EIF signed umbrella agreements covering Central and Eastern European EU Member States. Similar agreements could be signed covering eligible third countries, especially in the Western Balkans where take-up of InnovFin has been quite low and where local financial markets may be too small and fragmented to allow for implementation of InnovFin on a country-by-country basis.

5.4 Role of InnovFin Advisory

InnovFin Advisory is a useful feature of InnovFin with the potential to make an important contribution to the success of the scheme and to facilitate spill-over effects. Operated by the EIB, this service has essentially two objectives – firstly, to help ensure that there is a strong pipeline of ‘investable’ projects for the EIB-managed financial products and, secondly, to provide inputs to Commission planning.

Given the quite varied use of the financial products, InnovFin Advisory has an important role in generating deal flow and, more generally, in actively identifying and preparing projects. This helps to develop the pipeline of projects, both in terms of sectors and geographic coverage. While it has already improved firms’
prospects of accessing InnovFin financing and played a significant role in developing the thematic products based on continuous research on market needs, InnovFin Advisory needs to be developed further to fulfil this role. At present, there is only a small Luxembourg-based team whose activities focus on providing support to EIB personnel who are involved in implementing InnovFin products. It concentrates mainly on supporting the EIB operations and is less relevant to the intermediated financial products falling under the EIF’s responsibility.

Recommendation 10: Consideration should be given to developing a more decentralised structure for InnovFin Advisory that is capable of reaching target groups across the EU28 Member States and beyond. Working together through the JEREMIE Co-Investment Fund approach and the EBRD could be one way of achieving this, and could help stimulate demand for InnovFin in Eastern Europe in particular. This is in line with the finding from a recent study looking at the EFSI\(^{159}\) which recommended establishing country offices for the Advisory Hub and investing in human capital to allow the funds to contribute to cohesion and development. The new Business Angel component of InnovFin Equity could also help in strengthening the advisory and capacity-building dimension of InnovFin due to the nature of support given by such entities. There could also be a case for strengthening the EIF’s advisory role, specifically to help with capacity-building amongst financial intermediaries in Central and Eastern Europe and some of the countries covered by InnovFin outside the EU.

5.5 Relationship between InnovFin, EFSI and COSME

Looking ahead, a key question is the relationship with EFSI 2 and the ways in which complementarities between InnovFin, COSME, EFSI and other EU funding sources can be maximised. The main challenges lie in maximising complementarities but also ascertaining what steps can realistically be taken to reduce any negative effects arising from interactions between InnovFin and other EU funded programmes, such as the risk of possible duplication.

EFSI and InnovFin - in the SME Window, EFSI funding has been used to top up the SMEG, and the funding has therefore been complementary. However, within EFSI’s ‘Infrastructure & Innovation Window’ there is evidence of overlap and competing funding available through the IIW for large projects and mid-caps on the one hand and InnovFin on the other. Looking ahead, it will be important to strengthen coherence between EFSI and the other Windows. There is already some differentiation such as geographic coverage, since InnovFin, unlike the EFSI, also covers non-EU countries, but more should be done to clearly delineate the two funding programmes, or to ensure that EFSI is used only top up existing financial instruments.

With InnovFin Equity, there is a strong degree of complementarity with the EFSI insofar as InnovFin is able to cover higher risks than EFSI, at least in case of the thematic products. In effect, InnovFin helps to cover the downside risks, thereby enabling EFSI to preserve its risk profile.

With regard to COSME, while coherence between this and InnovFin SMEG may have proved challenging at the beginning, it seems that since then each has found its own niche. While COSME supports SMEs more generally, InnovFin has a clear focus on innovation. COSME’s focus is on increasing the volume of bank lending by providing capped guarantees whereas SMEG, which provides uncapped guarantees, can reduce interest rates for borrowers and is particularly attractive to commercial banks. On the equity side, there is less of a risk of overlap between COSME and

\(^{159}\) CEPS. 2017. The European Fund for Strategic Investments as a New Type of Budgetary Instrument
InnovFin equity, since the latter focuses on particularly risky investment, e.g. in the area of technology transfers. Looking ahead, an important issue is how complementarity between InnovFin and COSME can be maximised, and what the inter-connection with EFSI should be in the next programming period. A proposal for EFSI 2 is currently being considered by the Council, Commission and the Parliament and if this is adopted, there will be increased resources for InnovFin.

Finally, there was some evidence of overlap with ESIFs financial instrument schemes which effectively crowd out demand for InnovFin in some Central and Eastern European Member States, translating into lower take-up for InnovFin Equity.

**Recommendation 11:** Consideration should be given as to how the relationship between COSME and InnovFin can be strengthened in the next programming period. There could be a case for combining the two financial programmes. The aim should be to ensure that enterprises have seamless access to a range of financial instruments at the different stages in their development, thereby helping them to grow into ‘unicorns’ and take on competitors around the world. In case of equity, the branding of InnovFin Equity and COSME Equity under one label ‘Single EU Equity Financial Instrument’ is a step in this direction. As things stand, the fragmentation of EU financial instruments makes their implementation more complex and this is reflected in the feedback obtained from a number of financial intermediaries for this interim evaluation.

**Recommendation 12:** In view of preparations for designing the next Framework Programme FP9, a long-term perspective should be developed for InnovFin as a whole, and for each of its components. This should look at how market deficiencies are likely to evolve, and consider exit strategies or reallocation of funds where market gaps are likely to close in the foreseeable future. Two external factors will most likely need to be considered:

First, with the departure of the UK from the EU, the EU budget will come under pressure in the next multi-annual financial framework and funding priorities may shift. Demonstrating added value of innovation financing will be a key to ensuring continuity of funding for R&I-driven firms. Combining and streamlining existing support programmes may help in this regard. If InnovFin is able to demonstrate a strong leverage effect at the end of the current programming period, this may also help build the case for its continuation in one form or the other since with the EU budget under pressure, the priority will be to focus on areas where public money has the greatest impact. If InnovFin’s take-up in Central and Eastern Europe can be increased, this would also improve its chances having a positive impact on territorial cohesion within the EU, although this is not an explicit objective of the programme right now. Second, with the ongoing economic recovery in Europe, the programme’s countercyclical role is arguably becoming less important. Consistently monitoring and verifying additionality will be crucial in maintaining the programme’s legitimacy.

**Recommendation 13:** Another longer-term priority should be to continue to develop the system of financial intermediaries to support the implementation of InnovFin financial instruments, especially in regions where their capabilities are currently quite limited. Consideration might be given to providing financial support for capacity-building, i.e. by supporting banks in the areas of innovation research and staff training.
5.6 Conclusions - Cross Cutting Issues

Relevance - InnovFin instruments’ objectives of strengthening risk capital provision and promoting R&I investment in Europe remain as relevant to market needs as ever, although a few market niches that have not been addressed remain. The programme has proved responsive to changing market conditions with further changes under consideration. However, the definition of innovation, in particular in the context of the eligibility criteria used under the SMEG, remains a challenge for some intermediaries. Key to maintaining the programme’s relevance is to find the right balance between promoting innovation excellence and ensuring an even geographic distribution of funds.

Effectiveness - it is still too early to fully evaluate the extent to which InnovFin will achieve its aims. However, InnovFin has already contributed to a substantial increase in the finance available for innovative enterprises and organisations throughout the EU (volume effects). Disbursement rates vary, and are in line with expectations in the case of some products, and in some countries, higher or lower in the case of others. Where the amounts of funding committed to final beneficiaries are somewhat lower than what might be expected 2.5 years after the programme’s launch, this may be explained by non-linear implementation and it is likely that take-up will speed up between now and the end of the programming period.

In addition to take-up rates, leverage is an indication of effectiveness in helping to mobilise private sector investment, one of InnovFin’s specific objectives. Comparing the target leverage effect with the actual effect achieved, the EIB-managed instruments as a whole are performing quite well (11.2 actual effect vs. 12.5 target), while the SMEG (4.8 vs 9) is somewhat lower. The result for Equity (0.2 vs 6) can be explained by the specific nature of equity funds which take more time to yield results. No evidence has been obtained as yet on the efficiency of InnovFin Equity.

As regards contribution to more general EU policy objectives, it is difficult to measure the impact the programme has on employment and growth at this stage.

As regards the branding of InnovFin, many stakeholders appreciated the use of an umbrella label to market the programme more effectively. At the same time, stakeholders stress the importance of continuity as programme changes and introducing new products can confuse both financial intermediaries and final beneficiaries. Case studies were mentioned as the most effective means of communicating the benefits of the programme.

Recommendation 14: The visibility of InnovFin could be strengthened. This could be achieved by clearly labelling projects and identifying firms that received funding and making them more easily identifiable on the EIB’s website.

Efficiency - InnovFin is being efficiently implemented with generally positive feedback from the research. The cost of managing the instruments seems to be in line with intermediaries’ expectations although some intermediaries consider the application procedure to be burdensome. However, not all do so since some effectively have the EIF managing aspects of the application process, for instance through signposting and identifying InnovFin as the most suitable form of financial support. Reporting procedures are considered burdensome by some and there is an issue in many commercial banks of having to make costly adaptations to IT systems to track InnovFin-supported projects for monitoring and reporting purposes. The requirement under the MCG scheme to provide daily calculation of risk pricing for guarantees is regarded as especially burdensome and some banks have experienced difficulties in automating this process.
In terms of the EIB’s and EIF’s reporting on the implementation of the seven InnovFin products, several deficiencies were noted in Section 1.2 and 3.1. The reporting should be streamlined across the InnovFin programme’s entire portfolio, and data presented in a way that allows to clearly compare individual products to assess their performance and draw conclusions on their effectiveness and efficiency. This is currently very difficult and makes the evaluation of the programme as a whole more difficult.

**Recommendation 15:** Operational reports should be streamlined across the InnovFin portfolio, collecting and presenting data in the same manner on key variables for all seven products.

**Coherence - InnovFin’s combination of debt financing and equity-based financial instruments is coherent overall from a programme design perspective.** There is a case, however, for strengthening the link between the debt and equity instruments. In relation to external coherence, InnovFin is broadly coherent with other EU programmes, including COSME. In the relationship with EFSI there is a key distinction because EFSI cannot be used outside the EU whereas this does not apply to InnovFin. Also, the link could be strengthened between organisations receiving a grant under H2020 and providing equity or loan finance at a later stage. Regarding the ESIFs, there is some evidence of overlap with the Structural Funds effectively crowding out demand for InnovFin, especially in Central and Eastern European countries. But no overlap was identified between InnovFin and the Connecting Europe Facility (CEF). The InnovFin programme also seems to be coherent with national support programmes with national promotional banks playing a role in ensuring this is the case.

**Added value - is generally high but with some variation between InnovFin instruments and between countries.** There is evidence of additionality of *scale*, with intermediaries under the SMEG, for example, increasing loan volumes, and *scope*, with new riskier market segments being covered by InnovFin and cross-border investments being facilitated. From a commercial bank perspective, the SMEG in particular has had a clear value added in allowing banks to access new market segments that would have been considered to be too high-risk for debt-financing without a guarantee in place. Conversely, there is a risk of crowding out private investment in case of some products and in some countries, e.g. in case of Large Projects in Austria.
## APPENDIX 1 – RESEARCH FRAMEWORK

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<th>Evaluation aspect/key research questions</th>
<th>Performance indicators</th>
<th>Main data sources</th>
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<td><strong>Overview – high level indicators</strong></td>
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**By instrument:**
- Number/value of contracts signed with financial intermediaries by country and by sector
- Number/value of contracts signed with final beneficiaries by country and by sector
- Number/value of any repayments, realised equity investments, bad debts.

In each case, compared with targets set at the outset of the programming period for the financial instruments.

**Relevance**

**To what extent is the instrument meeting demand and addressing market deficiencies?**
- Level of uptake of the 7 instruments
- (Development of investment levels in relevant sectors/countries before/after the introduction of the instrument)

**Main data sources**
- H2020 Strategic Plan Management plan
- National level data and analysis
- Operational reports
- EU/international level data and analysis
- Interview programme
- Survey responses
- Focus groups

**To what extent are the instrument’s objectives pertinent to the needs, priorities, and problems it is designed to address?**
- Insufficient investment in R&I
- High risk of innovation financing
- Shortcomings in national support measures
- Any instrument-specific issues (e.g. lack of large-scale projects demonstrating viability of new energy technologies)
- Number of beneficiaries supported/Number of transactions/Number of intermediaries/Funding or loans awarded
- (Development of investment levels in relevant sectors/countries before/after the introduction of the instrument and before/after introduction of national support measures) (if applicable)

**Main data sources**
- H2020 Strategic Plan Management plan
- National level data and analysis
- EU/international level data and analysis
- Interview programme
- Online survey (beneficiaries)
- Focus groups

**Effectiveness**

**To what extent is the instrument contributing to the objective of “enhancing access to risk finance for investing in R&I”?**
- Development of investment levels in relevant sectors/countries before/after the introduction of the instrument
- Level of uptake of the 7 instruments

**Main data sources**
- H2020 / EIB(EIF)/Fund monitoring data
- Operational reports
- National level data
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<th>Evaluation aspect/key research questions</th>
<th>Performance indicators</th>
<th>Main data sources</th>
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| **Performance indicators**               | instruments vs other instruments  
• Number of venture capital funds supported/Number of transactions/Number of intermediaries  
• (Development of investment levels in relevant sectors/countries before/after the introduction of the instrument) | • Interview programme  
• Online survey (beneficiaries) |
| **Are there external factors that may explain performance of the instrument?** | Presence of factors such as macroeconomic climate, parallel national measures | • National level data  
• Interview programme  
• Online survey (beneficiaries)  
• Focus groups |
| **What are the key achievements so far?** | Number of beneficiaries supported/Number of transactions/Number of intermediaries/Funding or loans awarded  
• New products or services developed  
• Number of new enterprises supported  
• Good practice cases | • H2020 / EIB/EIF/Fund monitoring data  
• Operational reports  
• Interview programme  
• Online survey (beneficiaries)  
• Focus groups |
| **To what extent is the instrument reaching the target group or groups of beneficiaries envisaged? What could be done to improve targeting? Is sector coverage in line with expectations?** | Contracts signed by sector  
• Types and number of beneficiaries supported/Types of transactions/Types of intermediaries/Funding or loans awarded | • National level data  
• H2020 / EIB/EIF/Fund monitoring data  
• Operational reports  
• Interview programme  
• Online survey (beneficiaries) |
| **Has the instrument met the expectations of final beneficiaries and (if intermediated) of financial intermediaries? In particular, for both parties, what is their perception of ease of use, complexity, and speed of operation?** | Level of satisfaction of beneficiaries (compared with comparable evaluations, e.g. of other funds)  
• Level of satisfaction of intermediaries | • H2020 / EIB/EIF/Fund monitoring data  
• Interview programme  
• Online surveys  
• Focus groups (beneficiaries) |
| **For intermediated instruments: what steps could be taken to facilitate connections between potential final beneficiaries and financial intermediaries?** | Level of satisfaction of beneficiaries (compared with comparable evaluations, e.g. of other funds)  
• Level of satisfaction of | • National level data  
• H2020 / EIB/EIF/Fund monitoring data  
• Interview programme |
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<td><strong>Intermediaries</strong></td>
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<td>• Level of satisfaction by EIB/EC</td>
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<td>Has the communications strategy achieved its goals? How could the strategy be improved?</td>
<td>Number of campaigns</td>
<td>EIB/EIF and national level documentation</td>
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<td>• Content of campaigns</td>
<td>Online surveys</td>
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| What is the contribution of the instrument to achieving other Horizon 2020 objectives? To the current European Commission’s 10 political priorities? And to the ‘Open Innovation, Open Science, Open to the World' policy agenda? | New products and services developed by beneficiaries by the 7 instruments and development by other (non-H2020) instruments | H2020 / EIB(EIF)/Fund monitoring data |
|                                                                                                           | New products and services designed tackling societal challenges, enhancing industrial leadership and competitiveness, supporting sustainable, low-carbon, inclusive growth, and providing environmental and other public goods | Interview reports |
|                                                                                                           | New innovations developed by beneficiaries by the 7 instruments by other (non-H2020) instruments | Online surveys (beneficiaries) |
|                                                                                                           | H2020 / EIB(EIF) /Fund monitoring data | |

| Efficiency | |
| What are the barriers, if any, impeding access by beneficiaries to the instrument? What could be done to make access easier? | Level of satisfaction of beneficiaries | H2020 / EIB(EIF)/Fund monitoring data |
|                                                      | Level of satisfaction of intermediaries | Interview programme |
|                                                      |                                           | Online surveys |
|                                                      |                                           | Focus groups (beneficiaries) |

| Given the results that have been or are likely to be generated, and in terms of money, personnel and administrative burden, to what extent are the costs of managing the instrument reasonable and in line with the expectations of DG RTD, EIB and EIF, and (if applicable) financial intermediaries? | EU Investment/EU cost/EU support per intermediary or transaction (EURm) | H2020 / EIB(EIF)/Fund monitoring data |
|                                                                                                           | Cost of 7 instruments vs expected impacts of beneficiaries (stakeholder perception) | Interview programme |
|                                                                                                           | Level of operational costs (EU) vs MS/AC level | Online surveys |
|                                                                                                           | Level of operational costs (EU) vs MS/AC level | Operational reports |
|                                                                                                           | Perception of administrative burden and reporting | Focus groups (beneficiaries) |

<p>|                                                     |                                           | Online survey (intermediaries) |</p>
<table>
<thead>
<tr>
<th>Evaluation aspect/key research questions</th>
<th>Performance indicators</th>
<th>Main data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Leverage effect</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>To what extent do the monitoring and operational reports provide useful management information? What could be improved?</strong></td>
<td>• Level of detail of management/ monitoring data</td>
<td>• EU level documentation</td>
</tr>
<tr>
<td></td>
<td>• Extent of use of management/ monitoring data</td>
<td>• Operational reports</td>
</tr>
<tr>
<td></td>
<td>• Costs of collecting data</td>
<td>• H2020 / EIB/EIF /Fund monitoring data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Interview programme</td>
</tr>
<tr>
<td><strong>So far, overall, has the instrument been implemented and managed efficiently by the EIB or EIF (depending on the instrument) and DG RTD? What could be done to improve efficiency for the period 2018-2020?</strong></td>
<td>• Level of satisfaction of beneficiaries</td>
<td>• H2020 / EIB/EIF /Fund monitoring data</td>
</tr>
<tr>
<td></td>
<td>• Level of satisfaction of intermediaries</td>
<td>• Interview programme</td>
</tr>
<tr>
<td></td>
<td>• EU Investment/EU cost/EU support per intermediary or transaction (EURm)</td>
<td>• Online survey (beneficiaries)</td>
</tr>
<tr>
<td></td>
<td>• Cost of 7 instruments vs outputs of beneficiaries</td>
<td>• Online survey (intermediaries)</td>
</tr>
<tr>
<td></td>
<td>• Level of operational costs (EU)</td>
<td></td>
</tr>
</tbody>
</table>

### Coherence

| **To what extent do the instruments relate to and support each other? Are there any overlaps?** | • Existence of synergies between the 7 instruments | • H2020 / EIB/EIF /Fund monitoring data |
|                                                                                               | • Existence of overlaps and/or inconsistencies between individual instruments | • Interview programme |
|                                                                                               |                                                                                     | • Focus groups |
|                                                                                               |                                                                                     | • Online survey (beneficiaries) |
|                                                                                               |                                                                                     | • Online survey (intermediaries) |

| **How coherent are the instruments with respect to other EU financial instruments such as EFSI’s, COSME’s and CEF’s?** | • Existence of overlaps and/or inconsistencies with other instruments | • H2020 / EIB/EIF /Fund monitoring data |
|                                                                                               |                                                                                     | • Interview programme |
|                                                                                               |                                                                                     | • Focus groups |
|                                                                                               |                                                                                     | • Online survey (beneficiaries) |
|                                                                                               |                                                                                     | • Online survey (intermediaries) |

<p>| <strong>In terms of the funding escalator, valleys of death and company/project</strong> | • Changes in level of R&amp; I investment | • National and EU level data on R&amp;I |
|                                                                           |                                       |                   |</p>
<table>
<thead>
<tr>
<th>Evaluation aspect/key research questions</th>
<th>Performance indicators</th>
<th>Main data sources</th>
</tr>
</thead>
</table>
| lifecycles, are there gaps? If so, how could these be filled via other financial instruments or by other means? | ▪ By country
▪ By sector
▪ Public/private
▪ Types and number of beneficiaries supported/Types of transactions/Types of intermediaries/Funding or loans awarded
▪ (Changes in level of R&I investment
▪ By country
▪ By sector
▪ Public/private) | ▪ H2020 / EIB/EIF
▪ Operational reports
▪ Interview programme
▪ Focus groups
▪ Online survey (beneficiaries)
▪ Online survey (intermediaries) |

**EU Added Value**

To what extent has the instrument demonstrated added value in terms of:
- helping achieve EU policy objectives,
- facilitating the financing of cross-border projects,
- demonstration and catalytic effects,
- economies of scale, multiplier effects, and capacity-building.

<table>
<thead>
<tr>
<th>Performance indicators</th>
<th>Main data sources</th>
</tr>
</thead>
</table>
| Numbers and budgets of financial instruments for R&I firms/projects available at i) MS / AC level, ii) EU level | ▪ H2020 Strategic Plan Management plan
▪ Ex-ante evaluation report
▪ National level data and analysis
▪ EU/international level data and analysis
▪ Operational reports
▪ Interview programme
▪ Online surveys
▪ Focus groups |
| Comparison of InnovFin with national support programmes | |
| Numbers of R&I firms/projects supported at i) MS / AC level, ii) EU level | |
| Outputs of projects | |

Indicators presented in brackets will have to be evaluated at ex-post stage as data is currently not yet available: Most of the observations on the programmes’ outcomes to date are partial and qualitative in nature, with some quantitative evidence information obtained from the Operational Reports provided by the EIF and the EIB. The available information makes it possible to assess the InnovFin programme and the individual financial instruments during the first half of the programming period. Although the data required to fully assess impacts is not yet available, it is nevertheless possible to reach some conclusions regarding eventual effects based on the performance of InnovFin so far. Products to be explored at their initial implementation. For a full evaluation of the programme against its objectives, the EIF, EIB, financial intermediaries and final beneficiaries need to collect/provide data that would allow for a more robust analysis of the programme ex-post.
### APPENDIX 2 – INTERVIEW AND SURVEY PROGRAMME OVERVIEW

**Table A.2.1 – Number of interviews carried out by type of stakeholder**\(^{160}\)

<table>
<thead>
<tr>
<th>Type of Stakeholder</th>
<th>Number of interview contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC/EIB(EIF) official</td>
<td>6</td>
</tr>
<tr>
<td>Final beneficiary</td>
<td>8</td>
</tr>
<tr>
<td>Financial intermediary</td>
<td>40</td>
</tr>
<tr>
<td>Industry association</td>
<td>1</td>
</tr>
<tr>
<td>National/regional authority</td>
<td>29</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>No information</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
</tr>
</tbody>
</table>

**Table A.2.2 – Number of interview contacts by financial product**\(^{161}\)

<table>
<thead>
<tr>
<th>Financial product</th>
<th>Number of interview contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>SME guarantee</td>
<td>38</td>
</tr>
<tr>
<td>SME VC/Equity</td>
<td>2</td>
</tr>
<tr>
<td>MidCap growth</td>
<td>1</td>
</tr>
<tr>
<td>MidCap guarantee</td>
<td>0</td>
</tr>
<tr>
<td>Large projects</td>
<td>2</td>
</tr>
<tr>
<td>Infectious diseases</td>
<td>1</td>
</tr>
<tr>
<td>Energy demo</td>
<td>0</td>
</tr>
<tr>
<td>Not specified</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
</tr>
</tbody>
</table>

**Table A.2.3 Number of interview contacts by country**

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of interview contacts</th>
<th>Country</th>
<th>Number of interview contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU countries</td>
<td></td>
<td>Other countries</td>
<td></td>
</tr>
<tr>
<td>AT</td>
<td>3</td>
<td>Albania</td>
<td>To be clarified</td>
</tr>
<tr>
<td>CY</td>
<td>1</td>
<td>Bosnia and Herzegovina</td>
<td>To be clarified</td>
</tr>
<tr>
<td>DE</td>
<td>7</td>
<td>Faroe Islands</td>
<td>4</td>
</tr>
<tr>
<td>EE</td>
<td>1</td>
<td>Iceland</td>
<td>2</td>
</tr>
<tr>
<td>EL</td>
<td>1</td>
<td>Israel</td>
<td>2</td>
</tr>
<tr>
<td>FI</td>
<td>5</td>
<td>Kosovo</td>
<td>To be clarified</td>
</tr>
<tr>
<td>FR</td>
<td>6</td>
<td>Macedonia</td>
<td>To be clarified</td>
</tr>
<tr>
<td>HR</td>
<td>To be clarified</td>
<td>Moldova</td>
<td>2</td>
</tr>
<tr>
<td>HU</td>
<td>2</td>
<td>Montenegro</td>
<td>2</td>
</tr>
<tr>
<td>IT</td>
<td>7</td>
<td>Norway</td>
<td>2</td>
</tr>
<tr>
<td>LT</td>
<td>To be clarified</td>
<td>Serbia</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^{160}\) Some updated outstanding, to be updated for the Revised Final Report  
\(^{161}\) Some updated outstanding, to be updated for the Revised Final Report
<table>
<thead>
<tr>
<th>Country</th>
<th>Number of interview contacts</th>
<th>Country</th>
<th>Number of interview contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU countries</td>
<td></td>
<td>Other countries</td>
<td></td>
</tr>
<tr>
<td>LU</td>
<td>2</td>
<td>Switzerland</td>
<td>0</td>
</tr>
<tr>
<td>NL</td>
<td>5</td>
<td>Turkey</td>
<td>3</td>
</tr>
<tr>
<td>PL</td>
<td>4</td>
<td>Ukraine</td>
<td>To be clarified</td>
</tr>
<tr>
<td>SE</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SK</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure A.1.1 – Number of financial intermediary survey respondents by product**

**Figure A.1.2 – Number of financial intermediary survey respondents by country**

In which country/countries have you signed agreements relating to the InnovFin instruments?
Figure A.1.3 Number of final beneficiary survey respondents by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>13</td>
</tr>
<tr>
<td>Portugal</td>
<td>12</td>
</tr>
<tr>
<td>France</td>
<td>2</td>
</tr>
<tr>
<td>Poland</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td>2</td>
</tr>
<tr>
<td>Albania</td>
<td>1</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1</td>
</tr>
</tbody>
</table>
## APPENDIX 3 – COUNTRY COVERAGE INNOVFIN OVERVIEW

<table>
<thead>
<tr>
<th>Country</th>
<th>SME Guarantee</th>
<th>MidCap Growth Finance</th>
<th>Large Projects</th>
<th>Infectious Diseases</th>
<th>Energy Demo</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>2,604,690</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,604,690</td>
</tr>
<tr>
<td>Austria</td>
<td>29,943,000</td>
<td>25,000,000</td>
<td>143,750,000</td>
<td></td>
<td></td>
<td>198,693,000</td>
</tr>
<tr>
<td>Belgium</td>
<td>20,210,550</td>
<td>25,000,000</td>
<td>390,991,585</td>
<td></td>
<td></td>
<td>436,202,135</td>
</tr>
<tr>
<td>Bosnia Herzegovina</td>
<td>10,564,313</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10,564,313</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>21,169,469</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21,169,469</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>164,654,413</td>
<td>1,500,000</td>
<td></td>
<td></td>
<td></td>
<td>166,154,413</td>
</tr>
<tr>
<td>Denmark</td>
<td>61,649,689</td>
<td>25,000,000</td>
<td>127,000,000</td>
<td></td>
<td></td>
<td>213,649,689</td>
</tr>
<tr>
<td>Estonia</td>
<td>11,986,860</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11,986,860</td>
</tr>
<tr>
<td>Finland</td>
<td>23,504,000</td>
<td>97,400,000</td>
<td>67,500,000</td>
<td>12,000,000</td>
<td>7,000,000</td>
<td>207,404,000</td>
</tr>
<tr>
<td>France</td>
<td>421,764,048</td>
<td>87,000,000</td>
<td>346,272,039</td>
<td>23,000,000</td>
<td></td>
<td>878,036,086</td>
</tr>
<tr>
<td>Germany</td>
<td>147,997,000</td>
<td>80,460,000</td>
<td>314,703,150</td>
<td></td>
<td></td>
<td>543,160,150</td>
</tr>
<tr>
<td>Greece</td>
<td>60,000</td>
<td>25,000,000</td>
<td></td>
<td></td>
<td></td>
<td>25,060,000</td>
</tr>
<tr>
<td>Hungary</td>
<td>25,000,000</td>
<td>37,981,168</td>
<td></td>
<td></td>
<td></td>
<td>62,981,168</td>
</tr>
<tr>
<td>Ireland</td>
<td>1,642,000</td>
<td>27,000,000</td>
<td></td>
<td></td>
<td></td>
<td>28,642,000</td>
</tr>
<tr>
<td>Israel</td>
<td>13,229,622</td>
<td>92,073,343</td>
<td></td>
<td></td>
<td></td>
<td>105,302,965</td>
</tr>
<tr>
<td>Italy</td>
<td>339,952,840</td>
<td>43,000,000</td>
<td>1,304,550,000</td>
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<td></td>
<td>1,687,502,840</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>30,612,996</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30,612,996</td>
</tr>
<tr>
<td>Macedonia</td>
<td>2,470,040</td>
<td></td>
<td></td>
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<td>2,470,040</td>
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<tr>
<td>Malta</td>
<td></td>
<td>20,000,000</td>
<td></td>
<td></td>
<td></td>
<td>20,000,000</td>
</tr>
<tr>
<td>Moldova</td>
<td>4,105,680</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,105,680</td>
</tr>
<tr>
<td>Netherlands</td>
<td>48,000,000</td>
<td>174,403,150</td>
<td></td>
<td></td>
<td></td>
<td>222,403,150</td>
</tr>
<tr>
<td>Poland</td>
<td>2,047,586</td>
<td>640,000</td>
<td>45,000,000</td>
<td></td>
<td></td>
<td>47,687,586</td>
</tr>
<tr>
<td>Portugal</td>
<td>314,220,119</td>
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<td>9,569,000</td>
<td>3,000,000</td>
<td></td>
<td>352,789,119</td>
</tr>
<tr>
<td>Romania</td>
<td>5,948,064</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5,948,064</td>
</tr>
<tr>
<td>Country</td>
<td>SME Guarantee</td>
<td>MidCap Growth Finance</td>
<td>Large Projects</td>
<td>Infectious Diseases</td>
<td>Energy Demo</td>
<td>Grand Total</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------</td>
<td>-----------------------</td>
<td>----------------</td>
<td>---------------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Serbia</td>
<td>17,092,501</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17,092,501</td>
</tr>
<tr>
<td>Slovenia</td>
<td></td>
<td>36,000,000</td>
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<td>36,000,000</td>
</tr>
<tr>
<td>Spain</td>
<td>356,606,134</td>
<td>27,500,000</td>
<td>526,724,000</td>
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<td></td>
<td>910,830,134</td>
</tr>
<tr>
<td>Sweden</td>
<td>151,201,518</td>
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<td>233,850,000</td>
<td>10,000,000</td>
<td></td>
<td>402,551,518</td>
</tr>
<tr>
<td>Switzerland</td>
<td></td>
<td></td>
<td>4,564,126</td>
<td></td>
<td></td>
<td>45,641,260</td>
</tr>
<tr>
<td>Tunisia</td>
<td></td>
<td></td>
<td></td>
<td>100,000,000</td>
<td></td>
<td>100,000,000</td>
</tr>
<tr>
<td>Turkey</td>
<td>3,000,000</td>
<td></td>
<td>90,000,000</td>
<td></td>
<td></td>
<td>93,000,000</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>38,270,472</td>
<td>50,000,000</td>
<td>436,188,507</td>
<td></td>
<td></td>
<td>524,458,979</td>
</tr>
<tr>
<td>Total</td>
<td>2,196,507,603</td>
<td>619,500,000</td>
<td>4,543,697,201</td>
<td>45,000,000</td>
<td>10,000,000</td>
<td>7,414,704,804</td>
</tr>
</tbody>
</table>

*Based on Operational Report 31 December 2016; No data available for MidCap Guarantee and InnovFin Equity; No amounts yet committed to: Latvia, Lithuania, Slovakia, Faroe Islands, Georgia, Montenegro, Norway, and Ukraine*
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APPENDIX 5 – AUXILIARY INFORMATION FOR SELECTED FINANCIAL PRODUCTS

SME Guarantee

Market needs

As the European Commission points out in a staff working document\(^\text{162}\), while SMEs are at the centre of EU policy initiatives, small Mid-caps are increasingly recognised for their important role in growth and employment\(^\text{163}\). At this stage of the economic cycle and following the constraints posed for the whole EU economy by the financial crisis, the Commission’s view is that small Mid-caps will play a key role in economic recovery, growth and employment in Europe.\(^\text{164}\) The document also suggests that small Mid-caps, in certain circumstances, could face financing constraints comparable to those affecting SMEs. However, they benefit from better name recognition, longer credit history and better product track record than SMEs. But, it is argued by the Commission, small Mid-caps in the EU are facing the challenge of being obliged to expand and innovate or else lose their competitive edge. These Mid-caps usually need to invest in research and development (R&D) and pursue a more active internationalisation strategy than SMEs, with the corresponding needs for equity and debt finance.

Modalities of product

The EIF, acting as the implementing body on the basis of a Delegation Agreement, implements the SMEG facility by providing direct guarantees to financial intermediaries such as banks and other lending institutions who extend loans on favourable terms to final beneficiaries, either directly or through guarantee schemes or debt funds.

The guarantee covers up to 50% of intermediaries’ potential losses on loans, leases and guarantees and the EIF also offers counter-guarantees to financial intermediaries (such as guarantee institutions), providing risk protection to banks or other entities extending loans to R&I-driven SMEs and small MidCaps. Guarantees are offered to financial intermediaries against a commitment of the intermediary to provide more debt financing (loans, leases or guarantees that support loans and leases) to target SMEs.

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\(^{162}\) COMMISSION STAFF WORKING DOCUMENT Activities relating to financial instruments Accompanying the document REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on financial instruments supported by the general budget according to Art. 140.8 of the Financial Regulation as at 31 December 2015, pp.29-30.

\(^{163}\) At this stage, no EU-wide definition for small MidCaps exists. However, for the purpose of Horizon 2020, the Commission defined the small MidCap as an enterprise within the meaning of Article 1 of the Title I of the Annex of the Commission Recommendation (C2003/1422, OJ L124/36, 20.05.2003) which i) has up to 499 employees calculated in accordance with Articles 3, 4, 5 and 6 of the Title I of the Annex; and (ii) is not a micro, small or medium-sized enterprise as defined in this Commission Recommendation.

\(^{164}\) While consistent data on small mid-caps are not readily available, the Commission suggest that it is possible, from a recent study (PricewaterhouseCoopers 2012), to gauge the number of Mid-caps in the EU to be around 39 000, with about half of them being innovative MidCaps. A great part of them has mainly relied on debt finance as their main source of external finance in the recent past. Data from the latest Survey on the Access to Finance of Enterprises show that only 7% of the respondent mid-caps consider access to finance as a problem. According to the latest report on Annual Operations (31/12/2017), 3% of the total EU InnovFin Portfolio has gone to small MidCaps, and 33% to large MidCaps.
The Delegation Agreement between the EC and the EIF signed for SMEG sets eleven innovation-related eligibility criteria for beneficiary companies, summarised in the table below:

**Table A.3.1 – Definition of innovation-related eligibility criteria under SMEG\(^{165}\)**

<table>
<thead>
<tr>
<th>Short Description</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovative products / processes / services</strong></td>
<td>Company intends to use the funds to invest in producing, developing or implementing new or substantially improved products, processes or services that are innovative (i.e. implying a technological or industrial risk)</td>
<td>Company investing in a new machine that will improve its current production</td>
</tr>
<tr>
<td><strong>Fast-growing enterprise</strong></td>
<td>Company operating for less than 12 years, with an average annualised employee or turnover growth greater than 20% a year, over a 3-year period.</td>
<td>Company must have ten or more employees at the beginning of the observation period, with 20% average annual growth in turnover between year 7 and 9 of its incorporation</td>
</tr>
<tr>
<td><strong>R&amp;I cost ≥ 5% of operating costs.</strong></td>
<td>Company operating in a market for less than 7 years, whose R&amp;I costs represent at least 5% of its total operating costs, in at least one of the 3 years preceding the loan application. In case of a company (e.g. start-up) without financial history, the calculation is done using its current financial statements</td>
<td>Car rental company investing in a new car fleet, which represents 5% of its operating costs in the previous year</td>
</tr>
<tr>
<td><strong>Innovation potential</strong></td>
<td>The company shall have a significant innovation potential or be an “R&amp;I-intensive enterprise”. This is assessed through additional 11 sub-criteria, where the most used criteria are detailed below</td>
<td>As per one of the below criteria</td>
</tr>
<tr>
<td>- <strong>Innovation support / grants</strong></td>
<td>Company has been formally awarded grants, loans or guarantees from European R&amp;I schemes (Horizon 2020/FP7) or national research or innovation support schemes.</td>
<td>Pharmaceutical company is eligible after receiving a grant from a national research scheme</td>
</tr>
<tr>
<td>- <strong>Venture Capital Early stage</strong></td>
<td>Company that has received an investment over last 24 months from a venture capital investor / business angel</td>
<td>Venture capital investor decided recently to invest in the Company</td>
</tr>
<tr>
<td>- <strong>Annual R&amp;I expense ≥ 20% of transaction size</strong></td>
<td>Annual R&amp;I expense ≥ 20% of underlying transaction size</td>
<td>Also the increase in R&amp;I expenses is at least equal to the underlying transaction size as per business plan. Investment in a new online page that will increase sales is more</td>
</tr>
</tbody>
</table>

The remaining 20% will be spent on costs that enable such activities (e.g. salaries) 80% of loan will be used to invest in a new delivery service

Company has registered at least one technology right in the last 24 months, and the purpose of the loan is to enable the use of this technology. Technology right could be patent, utility model, software copyright, etc.

Company recently registered a patent for a production process and now intends to build it.

A typical company or small mid-cap covered by an InnovFin loan guarantee would have received grants/schemes from EU R&I schemes (Horizon 2020 or FP7); is producing, developing or implementing innovative new products, processes or services; had a venture capital/business angel investment; is a fast-growing enterprise; and has registered at least one technology right; or has satisfactory proportion of R&I costs as % of total operating costs.

As shown in section 4, many intermediaries commented on the innovation eligibility criteria, with some criticising them as too restrictive, and others as too broad. Certainly, some criteria, such as the one of “R&I cost ≥ 5% of operating costs” where the example of a car rental company is cited show that the programme defines innovation rather broadly.

**Specific market gap the product is intended to address**

The SMEG product targets a particularly vulnerable SME segment by providing leverage to SME debt financing and thus increasing the volume of lending to SMEs who can then invest in innovation.

The expectation is that this will lead to financial intermediaries either providing more financing to SMEs, or extending their financing to riskier and previously not serviced segments of the SME target group (e.g. start-ups and companies lacking sufficient collateral).\(^{166}\) The instrument is primarily intended to be counter-cyclical, and as such, following the economic crisis, it already experienced strong demand through the SMEG scheme within the predecessor EIP programme in the 2007-13 period. A further significant leverage effect should also be achieved through the use of counter-guarantees to increase the volume effects of what financial intermediaries (including national and regional promotional banks) can provide.

The SME guarantees offered by the EIF to financial intermediaries allow them to provide better terms (e.g. lower interest rates) than would otherwise have been available for the target group of final beneficiaries i.e. start-ups and SMEs themselves. Interview feedback suggests that benefits are indeed passed on to final beneficiaries,
and most intermediaries do not charge a management fee to beneficiaries, as further explained in Section 4.

It is worth mentioning that although the SMEG is seen as playing an important role, the European Commission has identified an outstanding market gap insufficiently addressed by the SMEG. It has announced in the H2020 Access to Finance Annual Work Plan (AWP) 2016-17 the setting up of a new “Uncapped Guarantee for Unsecured Loans to R&I-driven SMEs and Small MidCaps” instrument. This focuses on the 25% of R&I investments that are not covered by collateralised bank lending available through the SMEG. This new product will be based on risk-sharing between the Horizon 2020 budget, EFSI (SME Window) and EIB Group commitments.167

In addition, the 2016-17 AWP168 notes the launch of the SME Initiative169 and announced that within the SME Initiative significant amounts of ESIF funds will support R&I-driven SMEs and small MidCaps. This scheme is complementary to the SMEG since it can be implemented where SMEG doesn’t have a very strong presence (e.g. Spain) and it utilises ESIF, thus supporting a wide range of companies that are not necessarily innovative, and Horizon 2020 (through the creation of a sub-portfolio of innovative companies). The SMEG shares some similarities in terms of its target group with the Loan Guarantee Facility (LGF) under COSME which is also managed by the EIF. Counter-guarantees are also offered through COSME. Overlaps between SMEG and the Loan Guarantee Facility under COSME are avoided: the EUR 150,000 threshold for loans used in the case of COSME should clearly differentiate that product from the SMEG. Moreover, the uncapped guarantees offered by SMEG and the associated capital relief are particularly attractive to commercial banks whereas the COSME mainly helps increase loan volume which is particularly attractive for promotional banks.

**InnovFin Equity (formerly SME Venture Capital)**

*Type of financial support and target group*

The Equity Facility for R&I is part of a single equity financial instrument supporting the growth of enterprises and their R&I activities (which integrates the intervention by Horizon 2020 and COSME). As such **the InnovFin Equity scheme is complemented by COSME’s Equity Facility for Growth.** The focus of the instrument should be on risk-capital funds investing in seed, start-up and early-stage R&I driven SMEs and small MidCaps, whereas COSME focuses on venture capital, and mezzanine funds investing in SMEs in the expansion and growth phases. In the case of multi-stage funds (i.e. covering both early and growth-stage investments), funding is provided pro-rata from this facility and COSME’s growth-stage equity facility, the EFG.

**InnovFin Equity also complements national and regional schemes that cannot cater for cross-border investments.** It should have a demonstration effect that can provide a signal to public and private investors across Europe that worthwhile investments can be made in innovation-driven companies with relatively few assets that can be used as collateral. The argument is that for MidCaps in their growth phase, the scale necessary to provide meaningful support can only be achieved at the European level, and better still in cooperation with third countries (such as the associated countries under H2020, including VC strongholds like Israel).

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168 Action 2.1 P. 13

Specific market gap the instrument is intended to address

InnovFin Equity targets businesses facing the ‘valley of death’ and helps them through this stage in their development. During the technology and start-up phase, new companies face a ‘valley of death’ where public research grants stop and it is often not (yet) possible to attract sufficient private finance. Existing public support schemes are too fragmented and intermittent (i.e. not continuous) and/or their management lacks the necessary expertise. Moreover, most European venture capital funds lack critical mass to specialise and operate transnationally. Data by Invest Europe, the European association of private equity and venture capital funds, shows that European VC funds lack scale and are only half the size of their US equivalents. Between 2007 and 2012, the average size of European VC funds (at final closing) was EUR 61m and 50% of all VC funds were smaller than EUR 27m. This is striking given that returns and investment in European venture capital have improved in recent years, while fundraising has actually dropped. This mismatch between VC returns and investment on the one hand, and fundraising on the other can be interpreted as a market failure.

Beyond these general points, the specific gaps the SME Venture Capital product is intended to address are: investment in knowledge transfer and start-ups; provision of capital for fast growing firms expanding in EU and global markets; and risk-sharing finance for investments in R&I projects.

As with many risk capital schemes, there is also an advisory element: information and coaching activities for SMEs are provided to beneficiaries in consultation, where appropriate, with regional authorities, SMEs associations, chambers of commerce and relevant financial intermediaries. While this will not turn all SMEs thus supported into ‘gazelles’, i.e. rapidly-growing enterprises, it may enhance the chances of some of them becoming such successes.

Large Projects

The instrument aims to improve access to finance for R&I projects in larger firms and other research-driven organisations. The instrument addresses R&I financing needs of larger firms, universities and public research organisations and projects whose financing needs cannot be fully met at a national level due to a lack of available funding sources or lack of interest among investors in the national market. A counter-argument to this rationale could be that so long as cross-border financing is readily available, the fact that national financing sources do not exist does not constitute a market failure.

As at 11 October 2016, the average amount of Large Projects operations was EUR 89m. The signature pipeline to mid-2017 shows that another 11 operations have been agreed worth a total volume of EUR 1,098m. The charts below show the contribution to H2020’s Objectives in terms of amount of EUR invested and number of operations.

171 However, broad-brush geographic comparisons can be misleading since there is a need to compare key innovative regions in Europe and the US to look at specific eco-system level characteristics.
173 Steering Committee Business Plan presentation
As the charts show, by far the largest contribution so far has been made to the objectives ‘Societal Challenges’ (covering the topics health, food security, energy, transport, climate action, inclusive and secure societies) and ‘Industrial Leadership’ (covering the topics industrial technologies, access to risk finance, and innovation in SMEs), both in terms of the amount of funding and the number of operations. This could be due to the relatively large financing needs, and possibly the importance of public-private partnerships and other forms of large-scale cooperation in these research areas. It is interesting to note that Societal Challenges plays such an important role given that InnovFin was set up under the Industrial Leadership pillar of H2020.

174 (2) Operations are double counted (for amount and number) if they fall into more than one category.
This is less surprising when one considers that priority sectors covered by Societal Challenges are R&I-intensive and where industrial leadership also plays an important role (for example, in the Secure Societies programme, cutting-edge security technology is developed). Moreover, the dominance of Societal Challenges and Industrial Leadership may be explained by the fact that these areas attract more private sector interest than Spreading Excellence and Widening Participation, and Excellent Science which relate to fundamental research often financed through grants or other forms of public support.

It is worth looking at the breakdown of Large Projects by technology readiness level (TRL). The classification system for TRls starts from 0 (idea) to 9 (full commercial application). Based on the operations (excluding Research Infrastructures) where an eligibility checklist has been submitted, the projects are almost evenly spread across TRLs 1-3, TRLs 4-6, and TRLs 7-8, with each category accounting for approximately one-third of the total. No projects have yet been supported at TRL 9, presumably because at that level of readiness, financing can be obtained from commercial banks or capital markets under normal conditions and public support is not needed.

http://ncp-space.net/are-you-familiar-with-the-technology-readiness-levels/

Operations are double counted (for amount and number) if they fall into more than one category
**APPENDIX 6 – COHERENCE BETWEEN INNOVFIN AND OTHER EU SUPPORT PROGRAMMES – OVERVIEW TABLES**

Table A.6.1 – Comparative overview between InnovFin Financial instruments and other schemes

<table>
<thead>
<tr>
<th>Programme 1 - COSME - Europe’s programme for small and medium-sized enterprises (SMEs).</th>
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</thead>
<tbody>
<tr>
<td><strong>Financial instruments</strong></td>
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<tr>
<td><strong>Budget</strong></td>
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<tr>
<td><strong>Instruments</strong></td>
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<tr>
<td><strong>Maximum allocation / SME/ investee firm</strong></td>
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<tr>
<td><strong>Eligibility criteria</strong></td>
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<tr>
<td><strong>Differences between financial instrument and InnovFin</strong></td>
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<tr>
<td>Programme 1 - COSME - Europe’s programme for small and medium-sized enterprises (SMEs).</td>
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<tr>
<td>---------------------------------------------------------------</td>
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<tr>
<td>of charge capped portfolio guarantees and counter-guarantees for additional SME risk-taking whereas InnovFin has uncapped guarantees.</td>
</tr>
<tr>
<td>• Different loan ticket sizes i.e. COSME up to EUR 150,000s maximum whereas InnovFin from EUR 25,000, up to a maximum of EUR 7.5m.</td>
</tr>
<tr>
<td>EFG</td>
</tr>
<tr>
<td>• For equity, there are a number of differential elements between the EFG and InnovFin Equity, such as the geographic focus. Whereas COSME provides funding to intermediary entities undertaking risk capital investments into SMEs (investment funds, private equity funds and special purpose vehicles), established and operating in one or more of the EU Member States and COSME Associated Countries, InnovFin Equity is available to all H2020 participant countries including a much wider range of Associated Countries.</td>
</tr>
<tr>
<td>• COSME targets financial intermediaries operating across borders that provide venture capital and mezzanine finance to expansion and growth stage SMEs, whereas InnovFin targets financial intermediaries providing equity innovation financing but with less focus on the cross-border element.</td>
</tr>
<tr>
<td>Synergies and complementarities</td>
</tr>
<tr>
<td>• Attempt to integrate the equity instruments respectively between COSME and InnovFin e.g. through the Single EU Equity Financial Instrument</td>
</tr>
<tr>
<td>• Governance structure of COSME and InnovFin guarantee and equity instruments overhauled in 2014-2020, so that rather than having separate programme monitoring committees/instrument as in 2007-2013, there is a single Steering Committee focusing on equity and one on guarantees.</td>
</tr>
<tr>
<td>Overlap and duplication (if applicable)</td>
</tr>
<tr>
<td>• No specific overlaps or duplication were identified (largely because of the maximum COSME threshold being set at EUR 150,000).</td>
</tr>
<tr>
<td>• However, issue raised by small number of stakeholders as to whether programming architecture could be made more effective by combining COSME and H2020 into a single suite of financial instruments the post-2020 period.</td>
</tr>
<tr>
<td>Gaps (if applicable)</td>
</tr>
<tr>
<td>• Concerns among some stakeholders that some SMEs may not fit either the eligibility criteria for COSME or InnovFin but still need access to finance.</td>
</tr>
</tbody>
</table>
Programme 2 – EFSI

<table>
<thead>
<tr>
<th>Financial instruments and target groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>There were originally two windows within EFSI:</td>
</tr>
<tr>
<td>• <strong>SME Window (SMEW)</strong> – targeted at SMEs, through frontloading of InnovFin/ COSME guarantee instruments</td>
</tr>
<tr>
<td>• <strong>Infrastructure &amp; Innovation Window (IIW)</strong> - loans, guarantees, equity and other risk-bearing mechanisms. Targeting economically viable, higher-risk projects within the EU.</td>
</tr>
<tr>
<td>Since late 2016, there is additionally a third and fourth window through the <strong>EFSI Equity Instrument</strong>. This consists of two further windows:</td>
</tr>
<tr>
<td>• <strong>Expansion &amp; Growth Window</strong> – equity investments to, or alongside funds or other entities focusing on later stage and multi-stage financing of SMEs and small mid-caps.</td>
</tr>
<tr>
<td>• <strong>Stage Window (InnovFin Equity)</strong> – early-stage financing of SMEs and small mid-caps operating in innovative sectors covered by H2020. EFSI Equity also contributes to the new Pan-European Venture Capital Fund-of-Funds programme within InnovFin Equity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Budget</th>
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</thead>
<tbody>
<tr>
<td>• SME Window (SMEW) - EUR 5.5bn 177 (25% of total overall), of which the frontloading of COSME LGF and InnovFin SMEG budgets in the period 2016-2020 estimated at EUR 500m and EUR 750m respectively. The SMEG was scaled up in July 2016 by transferring EUR 500m of the EU guarantee from the IIW.</td>
</tr>
<tr>
<td>• EFSI Equity Instrument - each EFSI investment must be &lt;EUR 50m or its EUR equivalent at the time of commitment, except if the EFSI Investment is entered into through a Fund-of-Funds.</td>
</tr>
<tr>
<td>• IIW – EUR 16bn178.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maximum allocation /SME</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SMEW - as per the InnovFin SME guarantee scheme, since involves topping up an existing instrument.</td>
</tr>
<tr>
<td>• EFSI Equity – as per InnovFin Equity in the case of EFSI Equity Early Stage Window since implemented through this mechanism.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eligibility criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SMEW - as per InnovFin SME guarantee scheme, since involves top-up funding of existing instrument.</td>
</tr>
<tr>
<td>• EFSI Equity – most funding is channelled through the InnovFin Equity instruments and therefore the criteria are determined under InnovFin. An exception relates to the new equity funding for social impacts implemented by the EIF, where separate criteria have been determined i.e. prioritising investments in Social Enterprises, dedicating ideally a majority of its invested amount and Committing to invest at least 2 times the EFSI Equity Investment size into target final recipients established or operating in one or more EU MS.</td>
</tr>
<tr>
<td>• IIW – must correspond to the H2020 objectives and fall...</td>
</tr>
</tbody>
</table>

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177 [http://www.eib.org/attachments/strategies/efsi_smew_eur_500m_increase_en.pdf](http://www.eib.org/attachments/strategies/efsi_smew_eur_500m_increase_en.pdf)
### Programme 2 – EFSI

<table>
<thead>
<tr>
<th>Differences between financial instrument and InnovFin</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SMEW – the potential maximum risk level that can be covered through the EFSI SMEW is higher than those that can be covered through the SMEG. However, this should not affect funding frontloaded from SMEW to InnovFin SMEG since top-up funding is channelled directly to the SMEG instrument and implemented under the same rules.</td>
</tr>
<tr>
<td>• EFSI Equity – whilst most equity funding is implemented through InnovFin instruments, under the EFSI Expansion &amp; Growth Window, there are funding possibilities available directly from the EIF. Since late 2016, the EIF is able to make equity investments intended to generate social impacts, targeting social enterprises and social sector organisations. Maximum size of a single EIF’s investment is limited to EUR 50m, representing at least 7.5% up to typically 50% of the aggregate commitments made to the financial intermediary.</td>
</tr>
<tr>
<td>• EFSI IIW - may also be combined with technical support, interest rate subsidies or guarantee fee subsidies within the same operation.</td>
</tr>
</tbody>
</table>

### Synergies and complementarities

<table>
<thead>
<tr>
<th>Synergies and complementarities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Since the different InnovFin instruments (guarantees, equity, fund-of-funds) are one of the primary mechanisms through which EFSI funding is channelled, EFSI is complementary. Since EFSI was not envisaged at the outset of the 2014-2020 period when planning for the access to finance work programme within H2020, funding is additional.</td>
</tr>
<tr>
<td>• Strong funding synergies can clearly be discerned between EFSI and the InnovFin instruments. Strong additionality since evidence of high utilisation of available support under the SMEG. Top-up funding has led to increased volume effects.</td>
</tr>
</tbody>
</table>

### Overlap and duplication (if applicable)

<table>
<thead>
<tr>
<th>Overlap and duplication (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• EFSI SMEW - non-duplicative in respect of financial inputs to the SMEG since EFSI allows InnovFin to increase volume effects through frontloading.</td>
</tr>
<tr>
<td>• EFSI Equity - Early Stage Window sits within InnovFin Equity. Since this is implemented directly through InnovFin Equity, there is no duplication, but rather additional volume effects.</td>
</tr>
<tr>
<td>• EFSI IIW – potentially duplication in target groups, since InnovFin large projects support similar projects to the IIW, such as projects in line with the priorities of H2020, and large infrastructure projects in the education and training, health, demonstration projects, research infrastructure fields. In addition, there is scope for support of the following types of projects: Support for renewable energy, energy efficiency and energy savings, development and modernisation of energy infrastructure projects, smart and sustainable urban mobility projects, and projects connecting nodes to TEN-T infrastructures. Here, there is a potential risk of overlap with some of the thematic instruments within InnovFin, in particular first-of-a-kind energy demonstration</td>
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</table>
**Programme 2 – EFSI**

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| projects. There may also be a coherence issue in terms of coherence between EFSI IIW and the Connecting Europe facility in terms of competing funds, unless EFSI is used as top-up funding.  
• However, other areas of support through the IIW are not connected with InnovFin at all, such as infrastructure investment in digital content & services, high speed telecommunications infrastructures and broadband networks projects. |

**Programme 3 – European Structural and Investment Funds (ESIFs)**

<table>
<thead>
<tr>
<th>Financial instruments</th>
<th>• Loan, guarantee and equity schemes (including fund of funds)</th>
</tr>
</thead>
</table>
| Budget | • Financial instruments within ESIFs\(^ {179}\) represent 5% of total European Regional Development Fund (ERDF) resources (total of EUR 351.8bn\(^ {180}\) so circa EUR 17.5bn.  
• Difficult to obtain disaggregated data by financial instrument type (e.g. loans, guarantees, equity), but some data available (e.g. FoF).  
  – Managing authorities in 6 Member States (CZ, DE, FR, HU, LT, SK) have committed funding to fund-of-funds with a total amount of EUR 3,022.77m, out of which EUR 2,861.21m ERDF and CF.  
• In contrast to the 2007-2013 period, the rules adopted for 2014-2020 financial instruments are non-prescriptive in regards to sectors, beneficiaries, types of projects and activities that are to be supported. Member States and managing authorities may use financial instruments in relation to all thematic objectives covered by OPs. |
| Maximum funding allocation / participant | • Not determined at EU level. Minimum and maximum amounts for loans and guarantees vary depending on the OP. The same applies to equity investments. |
| Eligibility criteria | • In 2014-2020, all five ESI Funds and all eleven thematic objectives are eligible for financial instruments. This includes investment in research, development and innovation; energy; transport; information and communication technologies (ICT); employment and labour mobility, support to SMEs, the low carbon economy, climate change adaptation, environmental and resource efficiency. |
| Differences between financial instrument and InnovFin | • ESIFs are implemented on a decentralised basis, with a choice of using pre-existing or newly-created instruments, tailored to specific conditions and needs by Managing Authorities at the level of each Operational Programme (OP) or standardised (off-the-shelf) instruments.  
• Differences in management and implementation arrangements. Under ESIFs, legislative framework of 2014-2020 offers the possibility for Managing Authorities to


Programme 3 – European Structural and Investment Funds (ESIFs)

- Implement the FIs directly in the case of loans and guarantees (not applicable to equity).
- New financial instruments incorporated within OPs have to be designed on the basis of an ex-ante assessment that has identified market failures or sub-optimal investment situations. Not the case with InnovFin where the instruments are designed at EU level and implemented on basis of a DA.
- Whereas ESIFs may only be used where there are demonstrable market failures (required in the ex-ante assessment as per Article 37(2)(a)), InnovFin is able to intervene partly to address market failures in access to innovation financing but also to improve the terms and conditions of financing when those offered by the market are deemed to be sub-optimal.
- Some differences in funding arrangements since ESIF funding of FI schemes operated by financial intermediaries involves a combination of ESI Funds and national co-financing (public) whereas InnovFin is more concerned with generating leverage on funds (either public, private or both) through co-investment (especially equity given the emphasis on sharing of risks).

<table>
<thead>
<tr>
<th>Synergies and complementarities</th>
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<tbody>
<tr>
<td>An effort was made at the outset of the programme to ensure synergies and effective coordination between ESIFs and H2020 generally by DG REGIO(^\text{181}). However, this related more to the synchronisation of the timing of the funding decisions under H2020 and ESIF when funding different aspects of a large project.</td>
</tr>
<tr>
<td>Prior to the adoption of the programme legal text for ESIFs, H2020, COSME etc. a decision was taken to ensure reference to the possible scope for combining funding sources across different innovation-oriented funding financial instruments programmes. Indeed, a Synergies Expert Group (SEG) published a report on this issue in 2011 and recommended that scope should be included to ensure that the blending of funds to maximise synergies was possible. This has been taken up through the SME Initiative (see description below table).</td>
</tr>
<tr>
<td>Although there are some similarities in terms of the types of interventions supported (see below), since InnovFin is not geographically targeted (unlike ESIFs), InnovFin FIs are complementary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overlap and duplication (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is arguably a differentiation between financial instruments schemes supported through the ESIFs and the different FIs supported through InnovFin in terms of targeting. ESIFs are targeted at addressing financing gaps for start-ups, SMEs and firms needing innovation funding at regional level, but with a strong geographic orientation (e.g. through the Convergence objective, etc.). InnovFin does not target start-ups, which is the role of COSME, and is none geographically targeted. This means that it fills a gap outside regions eligible for ESIFs support and it is also available to</td>
</tr>
</tbody>
</table>

Programme 3 – European Structural and Investment Funds (ESIFs)

<table>
<thead>
<tr>
<th>Associated Countries, which is not the case with ESIFs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• However, there is some degree of overlap in terms of the</td>
</tr>
<tr>
<td>types of financial instruments available e.g. guarantees</td>
</tr>
<tr>
<td>and equity, and in respect of the target groups (e.g.</td>
</tr>
<tr>
<td>SMEs, firms needing to invest in R&amp;D&amp;I), although as</td>
</tr>
<tr>
<td>noted above there are differences (e.g. ESIFs also</td>
</tr>
<tr>
<td>include support for start-ups).</td>
</tr>
</tbody>
</table>

Instrument 4 – The Connecting Europe Facility (CEF)

<table>
<thead>
<tr>
<th>Financial instruments</th>
<th>• Supports targeted infrastructure investment at EU level. Supports the development of interconnected trans-European networks in the fields of transport, energy and digital services.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>• CEF programme budget – EUR 30.4bn in total (EUR 22.4bn for Transport, EUR 4.7bn for Energy, and EUR 0.3bn for Telecom).</td>
</tr>
<tr>
<td>Instruments</td>
<td>• CEF – contributions to innovative financial instruments, developed together with entrusted financial institutions such as the European Investment Bank.</td>
</tr>
<tr>
<td>Maximum allocation /participant</td>
<td>• Various – dependent on specific calls for proposals e.g. on transport, energy, telecoms¹⁸²</td>
</tr>
<tr>
<td>Eligibility criteria</td>
<td>• CEF – transnational requirement.</td>
</tr>
<tr>
<td>Differences between financial instrument and InnovFin</td>
<td>• The CEF funds trans-European networks in the fields of transport, energy and digital services.</td>
</tr>
<tr>
<td></td>
<td>• Unlike the CEF, InnovFin does not fund trans-European energy networks, but instead finances innovative first-of-a-kind energy demonstration projects in the fields of renewable energy, sustainable hydrogen and fuel cells. InnovFin Energy Demo focuses on energy only, whereas the CEF focuses on three thematic areas.</td>
</tr>
<tr>
<td></td>
<td>• However, the CEF focuses on electricity and gas interconnections between different European markets and is not based on demonstrating the market potential of renewable energies unlike InnovFin.</td>
</tr>
<tr>
<td></td>
<td>• InnovFin doesn’t have transnational requirements, whereas CEF projects are by definition transnational.</td>
</tr>
<tr>
<td></td>
<td>• InnovFin Energy Demo: only projects of TRL 7-8 are eligible under facility</td>
</tr>
<tr>
<td></td>
<td>• Only projects/companies located in an EU Member State or H2020 associated countries eligible.</td>
</tr>
<tr>
<td>Synergies and</td>
<td></td>
</tr>
<tr>
<td>complementarities</td>
<td>• Whereas InnovFin Energy Demo provides support for national level investments in first-of-a-kind energy projects, the CEF focuses on funding transnational projects wherever</td>
</tr>
</tbody>
</table>

### Instrument 4 – The Connecting Europe Facility (CEF)

<table>
<thead>
<tr>
<th></th>
<th>it would be difficult to finance these solely through the private sector. This distinction helps to ensure synergies between the two programmes.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overlap and duplication (if applicable)</strong></td>
<td>NA</td>
</tr>
</tbody>
</table>
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This midterm assessment, part of the overall interim evaluation of Horizon 2020, looked into Horizon 2020’s 'InnovFin' financial instruments and considered priorities for the remainder of the 2014-20 programming period. The following questions guided the assessment:

- How relevant have Horizon 2020's financial instruments been to market needs?
- How coherent is InnovFin, both as a group of financial instruments and with respect to other EU schemes, such as EFSI and COSME, and national support programmes?
- How effective and efficient has the implementation of InnovFin been?
- What is the EU added value of InnovFin?

The main conclusion of the study is that InnovFin represents a significant development in the provision of EU-supported innovation financing, successfully building on and overcoming the limitations of the earlier generation of financial instruments. The study makes a total of 15 recommendations to improve the targeting and functioning of InnovFin.

*Studies and reports*