

- ERDF
- EUR 118.3 million
- Equity
- SMEs, CO₂ reduction
- Sweden

...previous experience with financial instruments helps in preparing and drafting the ex-ante assessment...

Ex-ante assessment for financial instruments, Sweden

Case Study



DISCLAIMER

This document has been produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union or the European Investment Bank. Sole responsibility for the views, interpretations or conclusions contained in this document lies with the authors. No representation or warranty express or implied is given and no liability or responsibility is or will be accepted by the European Investment Bank or the European Commission or the managing authorities of Structural Funds Operational Programmes in relation to the accuracy or completeness of the information contained in this document and any such liability or responsibility is expressly excluded. This document is provided for information only. Financial data given in this document has not been audited, the business plans examined for the selected case studies have not been checked and the financial model used for simulations has not been audited. The case studies and financial simulations are purely for theoretical and explanatory illustration purposes.

The case projects can in no way be taken to reflect projects that will actually be financed using financial instruments. Neither the European Investment Bank nor the European Commission gives any undertaking to provide any additional information on this document or correct any inaccuracies contained therein.

The authors of this study are a consortium of five companies: Sweco (lead), t33, University of Strathclyde – EPRC, infeuope and Spatial Foresight.

Abbreviations

Abbreviation	Full name
CO ₂	Carbon dioxide
CPR	Common Provisions Regulation (Regulation (EU) No 1303/2013) ¹
ERDF	European Regional Development Fund
ESIF	European Structural and Investment Funds
GBER	General Block Exemption Regulation ²
OP	Operational Programme
RMC	Ramböll Management Consulting
SEK	Swedish Krona, the national currency
SME	Small and medium-sized enterprise
SVCA	Svenska Riskkapitalföreningen - Swedish Private Equity and Venture Capital Association

¹ Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006 (OJ L 347, 20.12.2013, p. 320).

² Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty Text with EEA relevance (OJ L 187, 26.6.2014, p. 1).



Table of contents

Abbreviations	2
1 Summary	4
2 Design and set-up of the ex-ante assessment	6
2.1 Objectives of the ex-ante assessment	6
2.2 Consistency with Operational Programmes	6
2.3 First steps of the ex-ante assessment	7
3 The ex-ante assessment study	8
3.1 Market assessment	8
3.2 Delivery and management of the proposed financial instruments	10
4 Successes and shortcomings	14
4.1 Main success factors	14
4.2 Main shortcomings	14
5 Lessons learned	15



1 Summary

Private venture capital investments have decreased in Sweden in recent years³, with a negative impact on small and medium-sized enterprises (SMEs) in early stages of growth. The managing authority of Swedish programmes financed by the European Regional Development Fund (ERDF) – the Swedish Agency for Economic and Regional Growth – suggested in 2014 that financial instruments, supported by the ERDF, should be considered to reverse this trend. The ex-ante assessment described in this case study was conducted by the managing authority between March 2014 and February 2015, and was written on the basis of studies, statistics, interviews and workshops with stakeholders.

The case study describes the process of drafting the ex-ante assessment covering the potential use of financial instruments in Sweden under the ERDF during the 2014-2020 programming period. It outlines the ex-ante process and highlights the importance of previous experience and lessons learned.

Based on its experience, the Swedish managing authority advises starting the ex-ante assessment as early as possible in the programming period. It also recommends having a clear and detailed plan concerning timing and resources from the outset. Informing and involving all stakeholders, such as state-owned providers of venture capital and private venture capital firms, is also important in shaping the proposed investments. The Swedish ex-ante assessment also illustrates the challenge of quantifying the funding gap for SMEs in their early growth stages.

To address the market failures identified in the ex-ante assessment, the suggested financial instruments would provide venture capital, supplementing private investment. Over the long term, they are expected to strengthen the venture capital market in Sweden, improving both growth opportunities for SMEs and their access to strategic expertise and networks. One of the main lessons learned was the importance of previous work and experience concerning the evaluation of financial instruments. This eased and accelerated the ex-ante assessment process.

Ex-ante assessment definition

According to Article 37(2) of the Common Provisions Regulation (CPR), the support of financial instruments shall be based on an ex-ante assessment which has established evidence of market failures or suboptimal investment situations and the estimated level and scope of public investment needs, including types of financial instruments to be supported. According to the CPR, European Structural and Investment Funds (ESIF) can be used to support financial instruments, under one or more programmes, to contribute to different specific objectives under a priority (Article 37). The ex-ante assessment must be completed before the managing authority makes programme contributions to a financial instrument.

The ex-ante assessment should not be confused with an ex-ante evaluation of the Operational Programme (OP).

3 Swedish Agency for Growth Policy Analysis (2013) 'Riskkapitalmarknaden i Sverige 2013, Statistik 2013:07, Myndigheten för tillväxtpolitiska utvärderingar och analyser', p. 5.



Ex-ante assessment for financial instruments in Sweden 2014-2020

PROPOSED FINANCIAL INSTRUMENT⁴

Funding source

ERDF, the national OP for investments in growth and jobs 2014-2020, and eight Swedish regional OPs: Upper Norrland OP, West Sweden OP, South Sweden OP, East-Central Sweden OP, Stockholm OP, North-Central OP, Central Norrland OP and the Småland och Öarna OP.

Type of financial products

Equity (venture capital)

Financial size

EUR 118.3 million total ERDF with additional public (EUR 124.2 million) and private resources (EUR 186.3 million)

Thematic focus

SME support, with a particular focus on projects reducing carbon dioxide (CO₂) emissions

THE EX-ANTE ASSESSMENT

Players involved in the ex-ante assessment

The Swedish Agency for Economic and Regional Growth (managing authority of the national OP for investments in growth and jobs and all eight regional OPs)

Ramböll Management Consulting (RMC) (author of the mid-term report for the ongoing evaluation of the programme, as well as the report "The need for venture capital in Sweden during the EU programming period 2014–2020", used as a Background Report for the ex-ante assessment)

Timing of the ex-ante assessment

March 2014 to February 2015⁵

Main results of the ex-ante assessment

Three types of financial instruments were proposed: eight regional venture capital funds, a national fund of funds investing in private venture capital funds supporting SMEs, and a national CO₂ reduction fund, which provides venture capital to SMEs in early stages of development within the energy/environmental technology and clean technology sectors

Exchange rate: EUR 1 = approx. SEK 9.5 (Swedish Krona)

4 Swedish Agency for Economic and Regional Growth, 'Förhandsbedömning för stöd till finansieringsinstrument inom den Europeiska regionala utvecklingsfonden 2014-2020', 2015, accessible at: https://tillvaxtverket.se/download/18.7e784787153f0f33aa514cef/1463573733436/Rapport%2B0183_web.pdf.

5 Ibidem, p.11.



2 Design and set-up of the ex-ante assessment

The lack of available funding for small businesses in their early growth stages was a challenge in Sweden. Although the available public funding to address this gap through loans and guarantees was satisfactory, a report commissioned by the managing authority in 2009 showed unmet demand for venture capital from enterprises in their early stages, particularly in the clean technology sector. Based on its previous experience with financial instruments, the Swedish managing authority initiated the ex-ante assessment process and decided to focus on the possibilities of providing support through venture capital. The ex-ante assessment provided guidance and evidence on the envisaged contribution of financial instruments to the specific objectives of ERDF programmes in the 2014-2020 programming period in Sweden.

2.1 Objectives of the ex-ante assessment

The objective of the ex-ante assessment was to find evidence of potential funding gaps and propose an investment strategy to address them through ERDF co-funded financial instruments. The ex-ante assessment focused on access to venture capital, as this was considered by the managing authority to be crucial for the commercialisation of innovations. More specifically, the managing authority was concerned that the decline of private venture capital investments, resulting in a lack of funding for small businesses in their early stages, could adversely affect employment and economic growth in the long term. Available public funding for such businesses through loans and guarantees was viewed as satisfactory e.g. those provided through the governmental loan agency Almi Företagspartners AB, so this area was not in the scope of the ex-ante assessment. In addition, the ex-ante focused on enterprises in the clean technology sector, which had seen a dramatic decline of venture capital investments, as well as specific entry barriers that deterred private investment in early stage SMEs.

2.2 Consistency with Operational Programmes

The use of financial instruments was explored to promote SME competitiveness (thematic objective 3) in the eight Swedish regional ERDF OPs, and in the national ERDF OP for investment in growth and jobs. Also assessed was the potential for financial instruments to support the shift to a low-carbon economy in all sectors (thematic objective 4) in the national regional ERDF OP for investments in growth and jobs. The proposed financial instruments were designed to contribute to the specific objectives of these programmes.

The OPs and the ex-ante assessment were developed in parallel. Consequently, the managing authority leading the ex-ante drafting process had to pay attention to changes in government decisions, such as budgetary allocations, that could affect the design of financial instruments.



2.3 First steps of the ex-ante assessment

During the 2007-2013 programming period, the managing authority implemented financial instruments co-funded by the ERDF. Their capacity to achieve programme objectives was analysed in the five-year on-going evaluation of the programme launched in 2009 and carried out by Ramböll Management Consulting (RMC). The mid-term review of the evaluation was completed in 2012 and revealed positive results from using financial instruments.

Later in the programming period, the managing authority commissioned RMC to analyse and draft a report on 'The need for venture capital in Sweden during the EU programming period 2014–2020'⁶ (the Background Report). The report, prepared between October 2013 and March 2014, summarised experience from using financial instruments in the 2007-2013 period and assessed their added value for 2014-2020.

The Background Report was based on interviews with 138 representatives of private investors, businesses, incubators, public administration and other organisations with an interest in financial instruments. Workshops were organised to discuss the need for public support through venture capital finance during the 2014-2020 programming period and to encourage an exchange of experience. Almi Invest, Saminvest, Norrlandsfonden and Inlandsinnovation, all state-owned companies and foundations providing venture capital in Sweden, were among the invitees. RMC also used written sources such as research studies, official reports and quantitative data from the Swedish Agency for Growth Policy Analysis and the Swedish Private Equity and Venture Capital Association (SVCA).

Based on the information gathered, the Background Report concluded positively on the use of financial instruments in the 2014-2020 programming period for the national regional ERDF programme for investments in growth and jobs and for all eight regional ERDF programmes i.e. Upper Norrland, Central Norrland, North-Central Sweden, West Sweden, Stockholm, East-Central Sweden, Småland och Öarna and South Sweden.

Once finalised, the Background Report became the basis for preparation of the ex-ante assessment, which the managing authority started drafting in March 2014.

6 Ramböll Management Consulting (2014), 'The need for venture capital in Sweden during the EU programming period 2014–2020'.



3 The ex-ante assessment study

A core team of four people at the managing authority worked on the ex-ante assessment. The ex-ante assessment was structured to address the seven blocks of content required by Article 37(2) of the CPR, as indicated in the following illustrations.

3.1 Market assessment

This part of the analysis addressed:

- a. the business structure at national and regional levels, highlighting factors affecting SME growth;
- b. different sources of funding;
- c. financing needs in Sweden and its eight regional programme areas;
- d. gaps between the demand and supply of finance;
- e. venture capital, highlighting how it could cover the financing gap for SMEs in their early stages of development;
- f. market failures in relation to venture capital.

The analysis addressed the national level as well as specifics in the eight regional programme areas. The focus was on the clean technology and energy sectors where Sweden has a strong innovation climate. In addition clean technology SMEs had suffered a marked decline in venture capital investments during 2008-2012.

The ex-ante assessment identified a number of **market failures** in SME access to venture capital. The number of active funds investing in small enterprises had decreased. Early stage businesses were at particular risk of not having access to venture capital due to difficulties financial intermediaries faced in assessing their potential for development. Furthermore, the ex-ante assessment showed that venture capital was strongly concentrated in metropolitan areas and access was more difficult for early stage businesses in other areas. In addition, the ex-ante assessment highlighted specific entry barriers for investors in the clean energy technology sector as large investments were required in the early stages and the commercialisation process is lengthy. On this basis, the ex-ante assessment confirmed that ERDF co-funded financial instruments could help address existing market failures and financing gaps by:

- increasing the supply of venture capital to all businesses in their early stages of development;
- improving the availability of venture capital for early stage companies in the clean technology sector;
- increasing the diversity and number of early-stage investors;
- mobilising regional capital.

Article 37(2)(a)

Market failure, suboptimal investment situations and investment needs

- Market failure in relation to venture capital to SMEs.
- Difficult for SMEs at their early stage of growth to assess their development potential and the activities at particular risk.
- Venture capital is strongly concentrated in metropolitan areas.
- General lack of and particular need for venture capital in the energy technology sector.

1

Article 37(2)(b)
Value added

- Companies grow faster and have better results with venture capital.
- More effective use of ERDF resources, as SMEs gain better access due to business skills and networks.
- Co-investment funds can contribute to increasing the supply of private venture capital in Sweden.

2

Addressing these market failures through venture capital could potentially **add more value** to companies and society (as identified in the ex-ante assessment) than other forms of support. Research had shown⁷ that companies can grow faster and generate better financial results with the help of venture capital.

In addition, equity financial instruments can facilitate more effective use of ERDF resources as SMEs gain better access to business skills and networks.

The eight regional funds were proposed to be private co-investment funds, reflecting the fact that most business angel investment in Sweden took place in the region where the investor lives. The mid-term evaluation of the previous programming period indicated that private investors or business angels with limited investment experience were attracted to this type of investment opportunity due to the well-structured investment procedure, including assessment criteria and contract experience.

The two national funds were also expected to raise private funds. The national fund of funds could attract larger investors, such as venture capital funds, that may be reluctant to limit their investment to a given region. Similarly, the national level was considered the most appropriate for the fund supporting clean energy SMEs, as it would be difficult to attract private capital with a sector focus, if investments were limited to individual regions.

In order to attract **additional resources**, the ex-ante assessment proposed that public and private investors would share the same risks and rewards, investing *pari passu*. This would be a continuation of the approach taken in the 2007-2013 programming period, when private investments reached SEK 1.7 billion (EUR 181 million) by March 2014. This was much more than the target of SEK 1.2 billion (EUR 127 million) set for December 2014.

Financial instruments for the 2014-2020 programming period were expected to raise a minimum of one euro of private funds for each euro of public investment. Although in principle no State aid will be provided to investors⁸, preferential remuneration would remain an option to address specific situations, such as for small value investments during the seed phase. Support provided to final recipients will be compliant with the General Block Exemption Regulation (GBER).

While developing the investment strategies, **lessons learned** from previous experience with ERDF financial instruments played a crucial role.

7 Large och Muegge (2007) Venture capitalist's non-financial value added: an evaluation of the evidence and implications for research, *Venture capital*, Vol. 10, No. 1, January 2008, 21-53.

8 [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0122\(04\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0122(04)&from=EN).



Article 37(2)(c)

Additional resources to be potentially raised

- The co-investor model mobilises capital from regional business angels and activates capital from people investing for the first time.
- 'Pari Passu' agreement – State aid not provided to investors.

3

Article 37(2)(d)

Lessons learned

- Existing knowledge and experience were helpful in the design and implementation of the financial instrument.
- The existence of a Background Report on the evaluation of the financial instruments during 2007-2013 was a major advantage for the ex-ante assessment process.

4

3.2 Delivery and management of the proposed financial instruments

The ex-ante assessment included a **proposed investment strategy with eight regional co-investment funds, one national fund of funds, and one national co-investment fund for CO₂ reduction**:

- Based on experience in the 2007-2013 programming period, eight regional co-investment funds were proposed. These were expected to function as a catalyst to establish a regional structure of private investors.
- A national fund of funds would attract private capital to new venture capital funds for investments primarily in start-up and, to some degree, expansion phases.
- A specific national co-investment fund would support SMEs in the energy/environmental technology and clean technology sectors, in their early stages of development, to explore business ideas aimed at reducing CO₂ emissions.

The managing authority considered it useful to create a steering group for each of the three initiatives.

Article 37(2)(e)

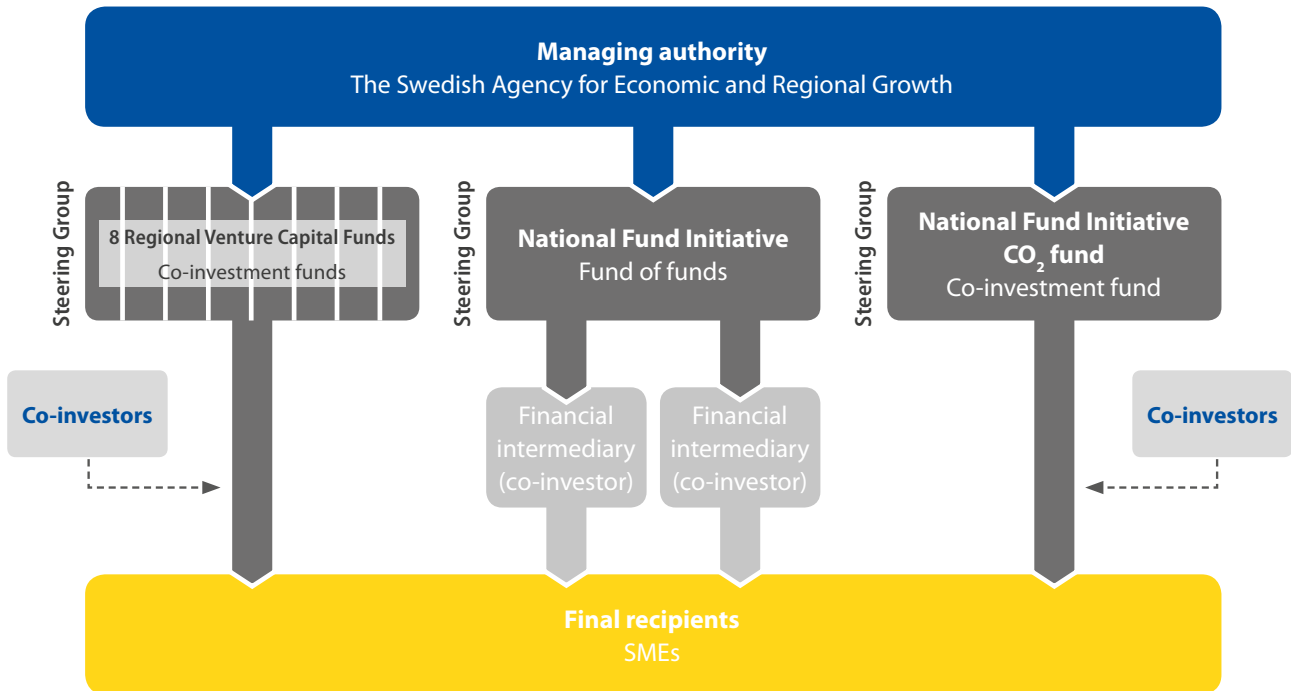
Proposed investment strategy

The investment strategy proposed:

- Eight regional venture capital funds;
- A national fund of funds;
- A national CO₂ fund aiming to support the shift to low carbon economy in all sectors.

5

Figure 1: Governance structure



The regional financial instruments are expected to invest small amounts in a large number of companies, normally SEK 3-5 million (EUR 320 000 – 530 000) per company. The national fund of funds, as well as the national CO₂ fund, is expected to make investments of SEK 20-30 million (EUR 2.1 – 3.2 million).

The total ERDF amount allocated to financial instruments was EUR 118.3 million, which included EUR 63.7 million for the eight regional funds, EUR 20.4 million for the national fund of funds and EUR 34.2 million for the national CO₂ fund. Public co-financing was EUR 69.6 million for the regional funds, EUR 20.4 million for the fund of funds and EUR 34.2 million for the national CO₂ fund. The expected private co-financing was EUR 133.3 million for the regional funds, EUR 50.3 million for the fund of funds and EUR 2.6 million for the national CO₂ fund.

The following figure illustrates the differences between the investment strategies of the financial instruments. Despite different objectives and target groups it was possible in certain cases that the regional funds, the specific funds under the national fund of funds and the national CO₂ fund could have financed the same SME, notwithstanding compliance with State aid rules and excluding double funding.



Figure 2: Overview of investment strategies for the 2014-2020 programming period

	Regional funds	National fund of funds	National CO ₂ fund
Purpose	Capital in the early stages of growth (SME) Catalyst to establish a regional structure of private investors SMEs obtain expertise, working procedures and networks Public - private risk sharing	Capital in the early stages of growth (SME) Establishment of new venture capital teams SMEs obtain expertise and networks Public - private risk sharing	Capital in the early stages of growth (SME) Opportunity to invest in business ideas with long lead times SMEs obtain expertise and networks Public - private risk sharing
Product and target group	Venture capital for SMEs from investors with regional presence	Investment in venture capital funds. These will in turn invest in SME equity.	Venture capital for SMEs with plans to reduce CO ₂ emissions
Phase (seed, start-up, expansion)	All phases, with stronger emphasis on start-up	All phases, with stronger emphasis on start-up	Start-up and expansion
Investment amount	EUR 317 000–529 000 (SEK 3–5 million) on average	EUR 2.1–3.2 million (SEK 20–30 million) on average	EUR 2.1–3.2 million (SEK 20–30 million) on average
Possible asymmetry, i.e. potential advantage in favour of private capital	Primarily <i>pari passu</i> . Option to increase the public funding for small value investments during the seed phase.	Primarily <i>pari passu</i> . There may be an uneven sharing of risk and/or profit between public and private investors.	Primarily <i>pari passu</i> . There may be uneven sharing of risk and/or profit between public and private investors.
Implementation and governance	Co-investment fund with a steering group	Fund of funds with a steering group	Co-investment fund with a steering group
State aid at the level of final recipients	In accordance with the GBER	In accordance with the GBER	In accordance with the GBER

Source: reproduced from Tillväxtverket (2015), 'Förhandsbedömning för stöd till finansieringsinstrument inom den Europeiska regionala utvecklingsfonden 2014–2020', p.13.



The managing authority will **continuously monitor** changes in market conditions, regulations and policies to verify whether an update of the ex-ante assessment is necessary. It also plans to carry out an evaluation report for all financial instruments, similar to the one carried out for the previous programming period⁹, to assess if objectives are being achieved. This evaluation report for the eight regional ERDF programmes and the national ERDF programme is expected to be carried out by an independent evaluator.

Article 37(2)(f) Expected results

The financial instrument is expected to support SMEs in their early stages of growth when banks and other lenders are reluctant to invest, as well as to help them grow and obtain expertise and business networks.

6

Article 37(2)(g) Provisions for the update and review of the ex-ante assessment

The managing authority:

- Will perform continuous monitoring and business intelligence in the development of supply and demand of venture capital, loans and guarantees, to see whether an update of the ex-ante assessment is necessary;
- Envisages an ongoing evaluation of the three suggested funds.

7

⁹ The report is accessible at: <http://publikationer.tillvaxtverket.se/ProductView.aspx?ID=2069>.



4 Successes and shortcomings

The ex-ante assessment proposed financial instruments to address the venture capital gap for SMEs and stimulate new companies in the clean technology sector. It built on a previous evaluation of financial instruments and an assessment of the need for venture capital during the 2014–2020 programming period.

4.1 Main success factors

Previous experience with financial instruments provided a basis for expectations concerning key aspects of the proposed financial instruments, such as the likely capacity and conditions to attract private investors. The availability of an on-going evaluation of financial instruments during the 2007-2013 programming period and the Background Report produced by RMC were key components underpinning the ex-ante assessment. This process involved many stakeholders, which allowed them to bring their views and experience into the process as well as increase awareness about plans for financial instruments in the 2014-2020 period.

Sufficient time to carefully assess and review the data was crucial for the ex-ante assessment. This ensured an accurate analysis where all important aspects could be fully considered.

4.2 Main shortcomings

Accurately quantifying a venture capital financing gap was a challenge for the managing authority due to the lack of quantitative data on supply and demand for financing and because different stakeholders used different definitions of enterprise development stages. The gap was assessed by looking at past investments and the decline in venture capital since the financial crisis, as well as by analysing requests for funding during the 2007-2013 period.

The OPs had not been approved when the ex-ante assessment drafting started. Nevertheless, the two processes were coordinated and the ex-ante assessment's objectives matched the rationale of the OPs.



5 Lessons learned

One of the main lessons learned during the ex-ante assessment process was also one of its success factors: the importance of **maximising the involvement of stakeholders** from the private and public sector. This was done through interviews with 138 venture capital stakeholders. The results helped in estimating the funding gap and made it possible to propose an investment strategy tailored to the needs of stakeholders that was also consistent with programme objectives.

The managing authority team responsible for the Swedish ex-ante assessment recommend that other managing authorities should start the process as early as possible. In planning the time frame for preparing an ex-ante assessment, the managing authority highlights the importance of **dedicating sufficient time** to successfully complete the exercise.

Planning the process in advance is important. If the drafting process has not been well-thought through, this could result in additional time and effort being needed later on to successfully complete the process. Planning may for example consider different alternative approaches in the initial stages (such the managing authority procuring a consultant, or carrying out the ex-ante assessment itself). It is also important to identify the most suitable way of processing material and data, as well as possible risks in the entire process.

When procuring a consultant for the elaboration of the Background Report, the managing authority had to **define what information and analysis was needed** to ensure the contractor provided relevant data and evidence.

www.fi-compass.eu
contact@fi-compass.eu
© EIB (2018)

European Commission
Directorate-General
Regional and Urban Policy
Unit B.3 "Financial Instruments and IFIs' Relations"
B-1049 Brussels

European Investment Bank
Advisory Services
fi-compass
98-100, boulevard Konrad Adenauer
L-2950 Luxembourg