EIF’s Impact Assessment (ImA)

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EIF Research & Market Analysis
**OBJECTIVE**
To support **smart, sustainable** and **inclusive** growth for the benefit of European SMEs.

**HOW**
By offering a wide range of **targeted products to support SMEs and mid-caps**, ranging from venture capital to guarantees and microfinance.

**WHERE**
Working with financial intermediaries across the **EU-28 and EFTA countries, candidate and potential candidate countries**.

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**Shareholders**
- 59.8% European Investment Bank (EIB)
- 28.1% European Union*
- 12.1% 31 public and private financial institutions

**Strong capital base**
of EUR 4.5bn

**AAA-rated**
by the three major rating agencies

**Over 20 years**
of market experience in SME financing

*Represented by the European Commission
EIF
Support for different development stages

SME Development Stages

Higher Risk

Development

Higher Risk

Pre-seed Phase

Seed Phase

Start-up Phase

Emerging Growth

Portfolio Guarantees & Credit Enhancement

VC Funds, Lower Mid-Market & Mezzanine Funds

Social Impact Funds

VC Seed & Early Stage

Microcredit

Business Angels, Technology Transfer

Public Stock Markets

Lower Risk
### EIF
Key figures & counterparts

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### Overall commitments
- EUR 3.3bn (2014)
- EUR 7 bn (2015)
- EUR 9.4bn (2016)

### Leveraged volumes
- EUR 13.9bn (2014)
- EUR 42.7bn (2016)

### SMEs supported
- over 1.8 million since 1994
- 175,000 in 2016

### Partners
- 600 private equity funds
- 400 banks, guarantee and promotional institutions

### Resources and mandators
- European Investment Bank
- EIF own resources
- European Commission
- Member States/regions
- Managing authorities
- Corporates/private
- Public institutions
- Other third parties

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### micro-enterprises, SMEs and small mid-caps
The recent increase in business volumes led to the need to know more about our impact to:

- show and justify our raison d’être
- answer questions from different stakeholders
- learn from the past – for new products, new mandates.

However, ELF is very specific: to properly perform ImA, there needs to be in-depth knowledge of:

- ELF’s products and markets
- available data and data issues
- necessary econometric tools and methodologies.

ELF’s solution: the Research & Market Analysis team has started an ImA work stream:

- 2.5 years in the making, the work stream produced 4 WPs covering a significant share of ELF’s policy toolbox (guarantees, microfinance, VC). Current focus is VC.
- Studies are based on state-of-the-art methodologies, facing in-depth internal review processes and discussions with top-level academics. Freely downloadable as PDF.
Background:
- Despite their recognised importance, credit guarantees have rarely been the subject of rigorous research.
- In the context of the Vienna Initiative 2 (focussed on CESEE*) EIF and EC undertook a quantitative study aimed to assess the impact of SME Credit Guarantees.

Research questions:
- How to estimate the economic additionality of Credit Guarantees?
- What is the economic additionality of the MAP Facility in CESEE?

Main findings:
- Significant increase in employment by beneficiaries compared to counterfactuals.
- Significant rise in turnover within the first five years after signature date.
- Temporary setback in productivity, partially absorbed in the medium run.
- Smaller and riskier businesses were positively impacted the most.
- Development of a consistent methodology (next slide)

*CESEE : Central Eastern and South-Eastern Europe
Data

16,051 Transactions guaranteed to 14,400 SMEs in 12 CESEE Countries

EIF Database

BvD Orbis

# of FIs per country

Final Dataset
Combines internal data (loan amounts, signature years, etc.) with company financials from Orbis

Methodology: propensity-score matching and difference-in-difference

1. First difference: performance before vs after
2. Second difference: treatment vs control
3. Difference-in-differences: impact
The EIF VC Portfolio, as at end-2014

- **13,800+ REGISTERED PATENTS** fostering drug discovery, Hi-Tech etc.
- **2,900+ INVESTED COMPANIES** the majority of EIF PE investments
- **150+ IPO COMPANIES** in more than 20 intl. stock exchanges
- **41 WORLD COUNTRIES** significant focus on EU28
- **85,000+ HIGH-SKILL AND HIGH-TECH JOBS CREATED** (net job creation)
- **UP TO 11 BN EUR SUPPORTED INVESTMENTS** channeled through 320+ VC funds

**Seed and Start-Up stage only, excl. Expansion**
What have we learnt about EIF-backed hubs?

- VC hubs communicate: we observe consistent cross-investment routes, especially among hubs with a longstanding tradition.
- VC hubs originated 83% of all invested amounts. Of these, 63% is invested within national borders, while 37% is cross-border.
- Through promotion of cross-border oriented VC firms, EIF supports the build-up of an European VC market.
ImA VC (4/4)
Data and Methodology

Data

3,600 EIF-backed investments into 2,900+ start-ups in 41 countries

Final Dataset
Combines internal data (investment type, amounts, multiples, etc.) with company financials from Orbis

Methodologies:

1. **Estimation of population parameters**: re-weighting strategy based on missing-at-random (MAR) assumption

2. **Estimation of crowding-in impact**: dynamic panel data estimation based on NUTS2-aggregated inv. volumes

3. **(Forthcoming) impact assessment at start-up level**: counterfactual analysis based on propensity-score matching
Key findings and further work

Main findings:
 EIF’s activities supported the build-up of vibrant, interacting VC hubs...
 … supporting in particular cross-border investments and the internationalisation of VC markets.
 Results of the econometric model show that EIF activities had significant crowding-in effects, particularly in areas with less developed VC markets (proxied by tertiary education levels).

Further ImA work:
 Growth patterns of EIF-backed startups (published Dec-2016), Exits & IPOs (H1-2017), EIF supported innovation, VC market ImA (with Invest Europe), etc.
 Expand ImA activity to other EIF business lines.
 Cooperation with EIB ECON regarding Rhomolo.

EIF’s ImA is mostly based on micro-data: opportunities and challenges
 Micro-data allows for more flexibility when choosing the most suitable methodological approach...
 … but data availability and timeliness becomes a critical factor in the set-up of ImA projects.
Thank you …

… for your attention

EIF is establishing an “impact culture” and “impact” as core competency for EIF

Dr. Helmut Kraemer-Eis
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