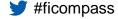


Case study Financial instruments for Research, technological development and innovation for Romanian SMEs

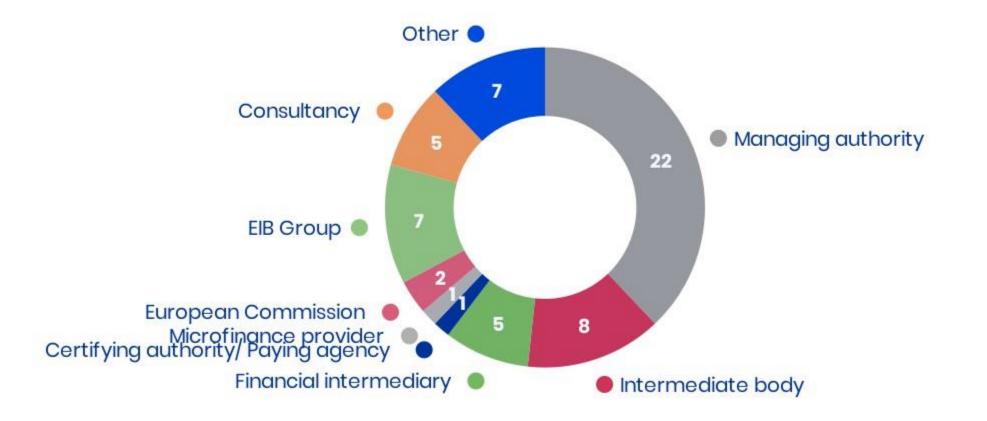
Brussels, Thursday, 30 November 2017







## Tell us which type of organisation you represent

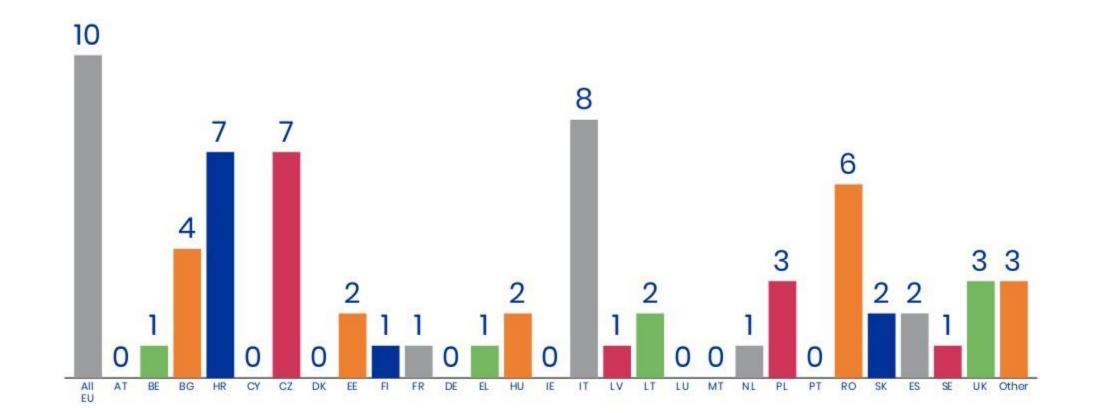




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Which MS does your organisation cover (or collaborate with)?









#### Competitiveness Fund of Funds, Romania under the COP

Lucian Coman, General Directorate Competitiveness Programmes, Ministry of Regional Development, Public Administration and European Funds, Romania







#### Innovation in Romania



#### **2017 EUROPEAN INNOVATION SCOREBOARD**

EU MEMBER STATES' INNOVATION PERFORMANCE



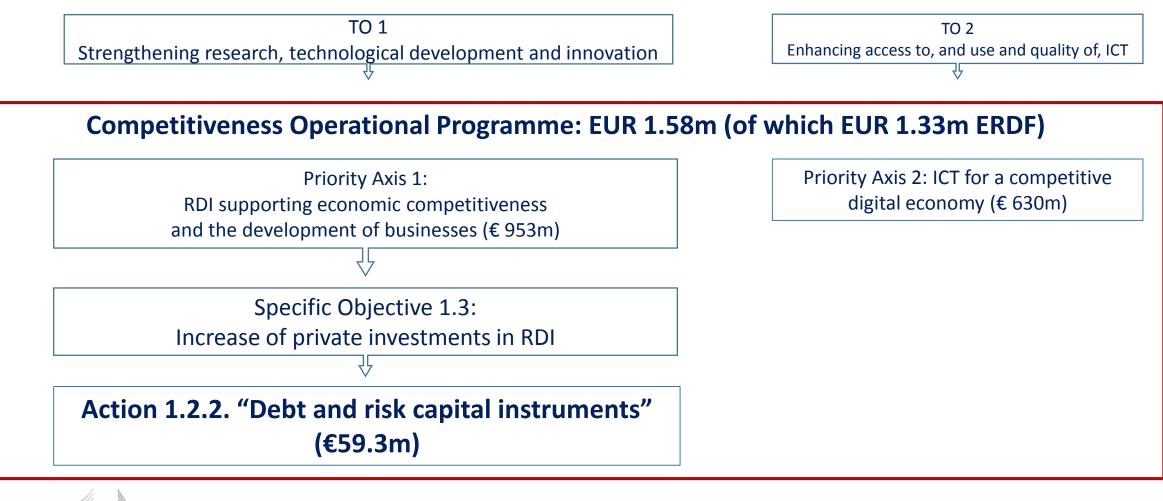
- 20 million inhabitants
- GDP growth 2016: 4.8%
- European Union member since 2007
- 8 development regions, of which 7 less developed and one more developed (Bucharest-Ilfov)
- ESIF allocation 2014-2020: EUR 31 bn
- 426,000 enterprises, of which 99.6% SMEs
- "Romania is a Modest Innovator."\*





#### Competitiveness OP 2014-2020











# Financial instruments for Research, technological development and innovation for Romanian SMEs

Aneta Stoica, General Directorate for Programming, System Coordination, SMIS and Evaluation European Programmes, Ministry of Regional Development, Public Administration and European Funds, Romania

European Commission



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## Strategy for RDI 2014-2020 Why?





- Ex-ante conditionality
- Build competitive advantage by developing and matching research and innovation own strengths to business needs
- Address emerging opportunities
   and market developments in a
   coherent manner
- **Prioritise and decide** on resource allocation
- Focus policy support and investments on key national priorities





Ministerul Dezvoltării Regionale, Administrației Publice și Fondurilor Fliropene

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## Stages of elaboration of the NSRDI 2014-2020



Analyses and Evidence Base of the RDI Market in Romania JASPERS project ( November 2012-February 2013) Project for the Elaboration of the National Strategy for Research, Development and Innovation implemented by the Executive Agency for Higher education and RDI Funding) December 2012-December 2013

Public Debate of the Strategy and the implementation instruments (National Plan for RDI and PA RDI from OP Competitiveness)

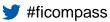
> December 2013-February 2014

Approval of the National Strategy for Research, Development and Innovation,

by GO 929 from October 21, 2014









#### Strategy for RDI 2014-2020 How?



### Vision of Romanian RDI in 2020:

Romania become competitive at the regional and global level through research-development-driven innovation, generating wealth for citizens.

Then: Participative process in three steps Steps:

Selection of a set of candidate strategic domains and associated subdomains.

Exploring and refining the 13 candidate areas

Selection of the final list of priority areas









# I. Selection of a set of candidate strategic domains and associated subdomains



#### Steps:

- Analysis and Evidence Base of the R&D&I Market in Romania - elaborated by JASPERS/ARUP-provided a national view and an analysis of the regional context and potential for innovation.
  - Analysis of Romania's scientific competences based on data concerning publications and institution's performance over time and across scientific fields
  - Preparation of knowledge maps complex graphs for visualization of the relationships between economic operators and Romanian RDI ecosystem

#### Result: a list with 13 candidate strategic areas









# II. Exploring and refining the 13 candidate areas



- 13 panels of experts were set up on Candidate Specialization Areas.
- Each panel elaborated 6-8 fiches for subdomains based on next criteria:
  - The challenges represented by the subdomain of the horizon 2020
  - Relevance for RDI activity
  - The current capacity of RDI in the subdomain Romania
  - The resources needed to reach the critical mass of RDI
  - Relevant economic results and perspectives
  - Expected results from subdomain by 2020







## **III. Selection of the final list of priority areas**



- A **Delphi real-time complex questionnaire**, comprising 13 domains and 90 subdomain sheets, was sent to approximately 44,000 potential respondents. More than 4,000 people responded, in average 161 respondents for a subdomain
- The data obtained were analyzed and processed according to a set of criteria for subdomain hierarchy with higher weight to the economic dimension.
- The smart specialization subdomain set has been further refined with the help of relevant specialists to eliminate redundancies, clarify or improve formulations, clustering similar proposals.







### **SMART SPECIALIZATION AREAS**



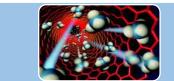


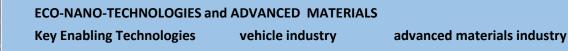


ICT, SPACE and SECURITY	1			
SoftwareHardware	Spatial infrastructure	National security	Information security	



ENERGY, ENVIRONMENT and	d CLIMATE CHANGE		
New sources of energy	Smart grids	Environment protection	Smart cities







### Strategy for RDI 2014-2020



#### **Implementing actions**

- Creation of a stimulative business environment for private sector: fiscal measures, access to finance, intellectual property
- Supporting smart specialization: centers of competence, incubators for innovation, infrastructure for knowledge transfer
- Clusters of innovation
- Fundamental research
- Institutional capacity
- Education
- Internationalization









# Ex-ante assessment for IF for SMEs



- Prepared according to the requirements of the Regulation 1303/2013.
- Approved by Government Memorandum on April 6, 2016.
- Investment strategy for each OP (Competitiveness OP, Regional and Human Capital).
- Financing gap:
  - For bank lending: Results of the "Ex-ante Evaluation of the SME Initiative" using the "viable SMEs" method for the NACE sectors B to N have been extrapolated, excluding the agricultural sector.
  - For risk capital investments, the financing gap was estimated based on the difference between supply and demand, based on the comparative assessment with other countries, of investment data as% of GDP.
  - For microfinance, was calculated the gap between existing supply and potential demand, based on the average micro-credit reported by IFNs to the European Microfinance Network.







#### **Total financing gap**



 The total financing gap evidenced by the ex-ante assessment was as follows:

Type of instrument	Financing gap (mEUR)		
	up to 2020		
Bank financing (guarantees, risk sharing loans)	Up to 1,893		
Microfinance	Up to 940		
Equity investments	Up to 544		
Total	Up to 3,377		











## Why should we finance innovative SMEs?

Commissio



 Romania is a modest innovator European Innovation scoreboard • target for R&D - 3% of the EU's GDP to be invested in R&D. • Romania's commitment to reach 2% of the GDP by 2020 (1% EU 2020 private, 1% budget) Strategy • Access to finance is a challenge for Romanian SMEs CSR and PA Administratiei Publice S #ficompass Fondurilor Europen Europear

#### Identification of the financial instruments for innovative SMEs: Market difficulties and stage of business development

### General difficulties for SMEs in accessing funding:

- the cost of the loan or too high interest rates
- lack of guarantees
- too many documents needed or too complicated, compared to other sources of financing
- **lack of certainty** regarding the financial situation of the company
- **financing solutions** are not accessible or inappropriate to the needs of the company
- relative instability of the national currency
- difficult access to credits





i fi compass



- Returns to innovation uncertain and thus make innovation riskier to finance
- Failure rates are often high, making innovation an inherently risky activity
- The skills needed to evaluate innovative investments may be different from those for other types of SME lending and investment and may be highly sector specific.
- SMEs lack the scale to invest in multiple projects and so risk their entire activity
- Large firms are able to field more diverse portfolios and, even if they have more failures, they are also more likely to achieve at least one highly profitable innovation.



2

5



#### Accelerators and seed-fund



Accelerators assist with **fine-tuning the idea** and **mentoring the business from idea**, **prototype**, **through product development** 

- This type of two-stage equity instrument is recommended:
  - due to many SMEs' low ability to provide the necessary collateral to secure the level of financing required to start their businesses
  - need for mentorship support in launching their business.
- The use of the equity fund as financial instrument will provide added value to Final Recipients that have difficulties to find other financing sources either because it was not available, or because they did not meet the eligibility requirements of other financing options.
- The equity and seed fund could also meet the needs of start-ups, and had certain advantages, compared to other instruments, such as being able to receive both resources and expertise.

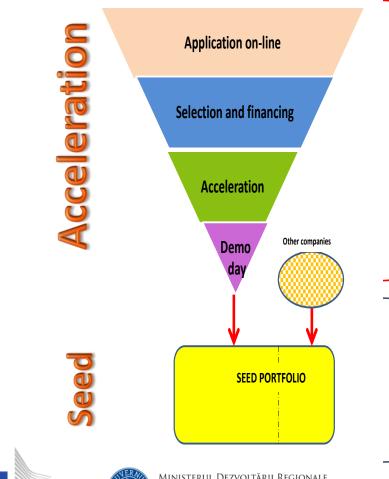






#### What do accelerators do?







Ministerul Dezvoltării Regional Administrației Publice și Fondurilor Europene

- Application online open and competitive
- Investment: Euro 25,000-50,000 in exchange for equity (de minimis)
- Focus on small team
- Cohorts or classes of startups rather than individual companies.
- Time limited support comprising events and intensive mentoring (3-6 month)
- Objective: prototype

- Investment: raising additional venture capital (according to GBER)
- Period: 12-24 month
- Objective: commercialization, internationalization



### Portfolio Risk Sharing Loan (PRSL)



PRSL combines resources from the ESIF programme and the financial intermediary (50% -50%)

Financial intermediary:

- build up a portfolio of newly generated loans to SMEs,
- participate in the losses/defaults and recoveries on the SME loans in this portfolio on a loan by loan basis and in the same proportion as the programme contribution

#### Advantages:

- **Cost reduction for SMEs**, up to 50%, because the ESIF loan-by-loan co-financing is provided free of charge (as allowed by state aid rules) and is matched by intermediary's co-financing at market price.
- Lower collateral requirements for SMEs, depending on risk sharing rate.
- Leverage on resources allocated
- Effective implementation, as the co-financing is provided automatically by the bank to the SME.







## Summary of proposed instruments



Financial Instrument	Rationale for instrument	Proposed allocation EURm (EU contribution (1)	Proposed allocation EURm (EU funds + national) (2)	SME financing supported EURm (estimate) (3)	Leverage effect (estimate) (4)= (3)/(2)		
COMPETITIVENESS OPERATIONAL PROGRAMME Thematic Objective 1 "Strengthening research, technological development and innovation"							
Equity Funds for start-ups and early stage SMEs (Accelerators & seed funds)	Investments in start-up and early stage innovative SMEs	34.0	40.3	44.3	1.1x		
Portfolio Risk Sharing Loan for Innovative SMEs	Provide 50% cost reduction and partial risk coverage to innovative SMEs	16.0	19.0	38.0	2x		
Total Competitiveness Operational Programme (figures do not consider management costs)		50.0	59.3	82.3	1.38x		







### **Final recipients eligibility**



SME not in

difficulty

NACE

Activity/pro ject in

smart

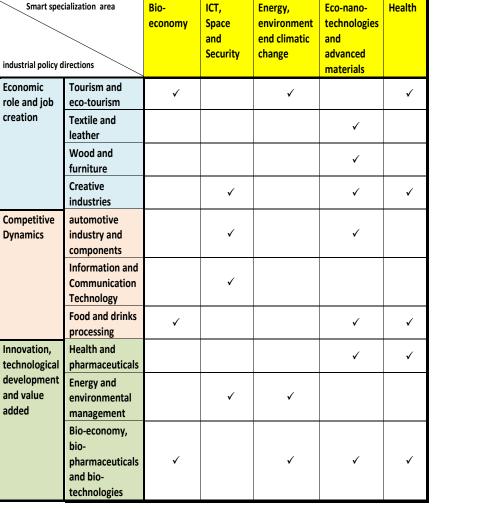
specializati

on area

Eligible final recipient

Innovative

SME











#### Examples of selection criteria for innovative enterprises proposed in ex-ante



Ex-ante identified selection criteria respecting the principle that "*it is necessary to have reasonably broad eligibility and selection criteria in order to facilitate absorption of the funds.*"

Indicatively, final beneficiaries may be an SME and may fulfill at least one of the following criteria:

- The Beneficiary or one of its shareholders has registered or is in the process of registering at least one technology right (such as patent, utility model, design right, software copyright, etc.)
- The Beneficiary or one of its shareholders has been awarded an R&D or Innovation prize provided by an EU institution, or a competent EU/national/regional body
- The Beneficiary is a "**fast-growing enterprise**", operating for less than 6 years following its establishment date and with an average annualised endogenous growth in employees or in turnover greater than 10% a year, over a three-year period.
- The Beneficiary's **R&D costs** represent at least 10% of its total operating costs in at least one year; or in the case of a start-up enterprise without any financial history, as evidenced on the basis of the documents of its current fiscal period
- The Beneficiary intends to use the financing under this instrument to invest in producing or developing new or improved products, processes or services .

The abovementioned eligibility criteria for final recipients were only indicative and were refined in collaboration with the Managing Authority in the process of preparing implementation!!!!

The final eligibility criteria in the next presentation!!









#### Indicators



The implementation of the financial instruments shall contribute to the achievement of several <u>indicators</u> established in the OP to assess performance under action 1.2.2 (which includes, but is not limited to, the contribution to financial instruments):

Indicator	Measurement unit	Target value (2023) for action 1.2.2., including financial instruments, less developed and more developed regions
CO03 – Number of enterprises benefitting from financial support other than grants	Number of entreprises	50
CO05 – New enterprises supported	Number of entreprises	30
CO27 – Private investment matching public support in innovation or R&D projects	EURm	18







### Key messages from the MA

- **fi** compass
- Financial Instruments: a new way of spending effectively structural funds
- Innovation makes money out of knowledge
- Facilitate access to finance for innovative SMEs!
- Find solutions, learn from the international experience!
- Be open to new ideas and action SMART!!!









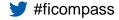




# Financial instruments for Research, technological development and innovation for Romanian SMEs

**Camelia Dragoi**, Mandate Manager European Investment Fund





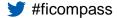




# Development of eligibility criteria









## From smart specialization domains to NACE codes

Smart spec	ialization area	Bio- economy	ICT, Space and Security	Energy, environment end climatic change	Eco-nano- technologies and advanced materials	Health	
Economic role and job	Tourism and eco-tourism	✓		✓		~	
creation	Textile and leather				~		
	Wood and furniture				~		
	Creative industries		~		~	~	
Competitive Dynamics	automotive industry and components		~		~		
	Information and Communication Technology		~				
	Food and drinks processing	✓			~	~	
Innovation, technological	Health and pharmaceuticals				~	~	
development and value added	Energy and environmental management		~	~			
	Bio-economy, bio- pharmaceuticals and bio- technologies	~		✓	✓	~	



• Each Industrial policy direction is linked to at least one smart specialization area

Thus, eligible activities must be one in of the those industries

• NACE codes list, enclosed to to Funding Agreement and Call for Eol\*

> \* See for instance at http://www.eif.org/what\_we\_do/resources/esif\_com petitiveness\_Romania/call/cfof\_ro\_ceoi\_2016\_01.pdf







## From Oslo manual to eligible expenses

"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."

"Four types of innovations are distinguished: product innovations, process innovations, marketing innovations and organisational innovations."

(Oslo Manual - Guidelines for Collecting and Interpreting Innovation Data", 3rd Edition, Chapter 3)



- Patent or research award holder
- **OR** the declared intention to use the financing for innovation (signed commitment of the SME)
- **OR** compliance with GBER 651 definition of innovative enterprises:
  - "(a) that can demonstrate, by means of an evaluation carried out by an external expert that it will in the foreseeable future develop products, services or processes which are new or substantially improved compared to the state of the art in its industry, and which carry a risk of technological or industrial failure, or
  - (b) the research and development costs of which represent at least 10 % of its total operating costs in at least one of the three years preceding the granting of the aid or, in the case of a start-up enterprise without any financial history, in the audit of its current fiscal period, as certified by an external auditor;"



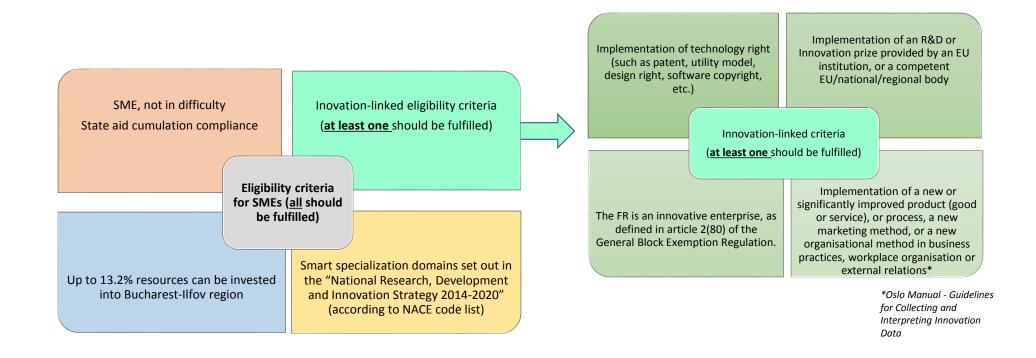
• List of potential eligible expenses (examples/guidance) e.g. relevant staff expenses, acquisition of patents and rights, relevant consultancy costs such as market research and branding, cost of prototypes, working capital linked to innovation etc.





## ... resulting into the following specific eligibility criteria:









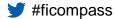




# Financial instruments implemented





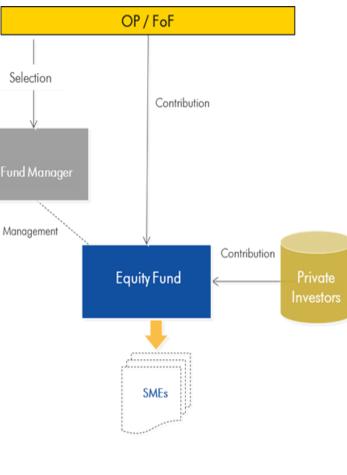




## Equity instrument



- accelerator and seed fund (1)

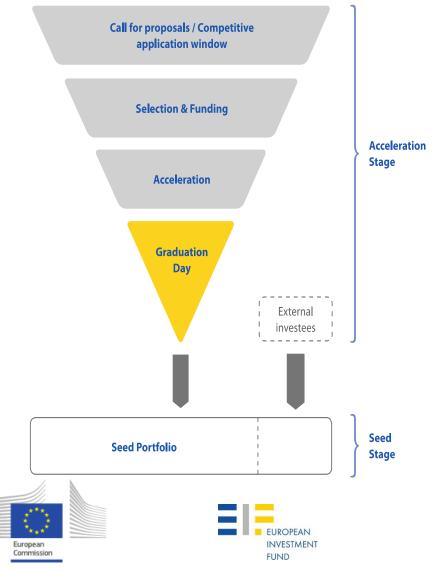








#### Equity instrument - accelerator and seed fund (2)





Acceleration: Initial financing indicatively (but not restricted to) up to a maximum Euro 50,000 by the selected Financial Intermediary supporting the entrepreneurs (eligible SMEs) to research, assess and develop an initial concept. In order to attract a critical mass of eligible applications for receiving financing in the acceleration stage, the Financial Intermediary shall envisage holding competitive application windows. Upon closure of any such procedures, approved SMEs (according to pre-defined eligibility and quality assessment criteria by the Financial Intermediary) could receive initial financing.

• Seed Fund: In this stage, the Financial Intermediary shall provide:

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- follow-on financing to eligible SMEs supported in the Acceleration stage, upon successful graduation of each eligible SME from the Acceleration stage;
- financing to eligible SMEs which have not participated in the Acceleration stage, i.e. with an initial concept developed.



#### Equity instrument - accelerator and seed fund (3)

## i fi compass

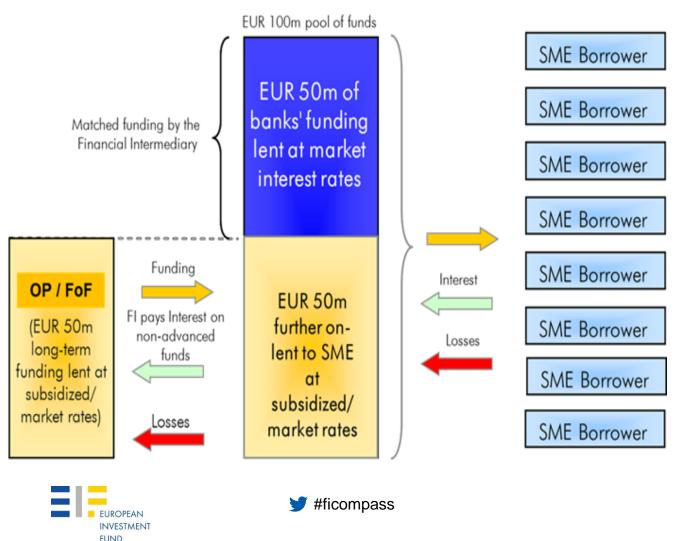
#### State aid regime (proposal):

- The amount of the investment constitutes state aid or de minimis aid
- The investments in accelerator stage are small, eg under 50k EUR, and may be governed under a de minimis aid scheme (considering also other de minimis aid received by same single entreprise). No private participation is required for de minimis investment, and thus the accelerator can begin to operate immediately.
- Investments which are not de minimis compliant may be done under the conditions of the GBER art.21 "Risk Finance Aid", including various private participation requirements which can be fulfilled at the level of the fund or of the final recipient:
  - Total investment up to EUR 15m;
  - Private participation: 10% for start-ups, 40% for companies "operating in any market for less than 7 years following their first commercial sale", 60% in other cases.
- Prior to start of funding, the EU Funds Ministry will issue a de minimis and state aid scheme describing the method
  of calculations and eligibility criteria



#### PRSL instrument - portfolio risk sharing loan (1) Example for EUR 100m loan portfolio with 50% risk sharing rate

European Commission

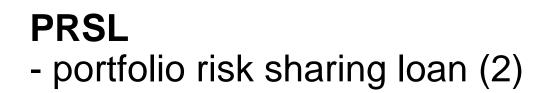


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**fi** compass

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Aim of the Instrument	<ul> <li>To provide SMEs with easier access to finance by providing the Financial Intermediary with a funding contribution and credit risk sharing and thereby offering SMEs increased access to loans at preferential conditions in terms of interest rate reduction and, if relevant, collateral reduction.</li> </ul>
Advantages	<ul> <li>Cost reduction for SMEs, eg up to 50%, because the ESIF loan-by-loan co-financing is provided free of charge (as allowed by state aid rules) and is matched by intermediary's co-financing at market price.</li> <li>Lower collateral requirements for SMEs, depending on the loan-by-loan risk sharing rate.</li> <li>Leverage on resources allocated. For instance, for risk sharing rate of 50%, the SME loan portfolio created is 2 times higher than the allocated resources.</li> <li>Effective implementation, as the co-financing is provided automatically by the bank to the SME.</li> </ul>









- portfolio risk sharing loan (3)



#### State aid regime (proposal):

- De minimis aid in the form of loans
- Gross grant equivalent (GGE) should not lead to the beneficiary exceeding the de minimis ceiling (EUR 200,000 over 3 years) considering also de minimis aid received through other sources
- GGE will be calculated according to the de minimis aid Regulation 1407/2013, art. 4 (3)
   (c), i.e. on the basis of the reference rate applicable at the time of the loan
- Prior to start of funding, the EU Funds Ministry will issue a de minimis aid scheme describing the method of calculations and eligibility criteria







### **Design and set-up**



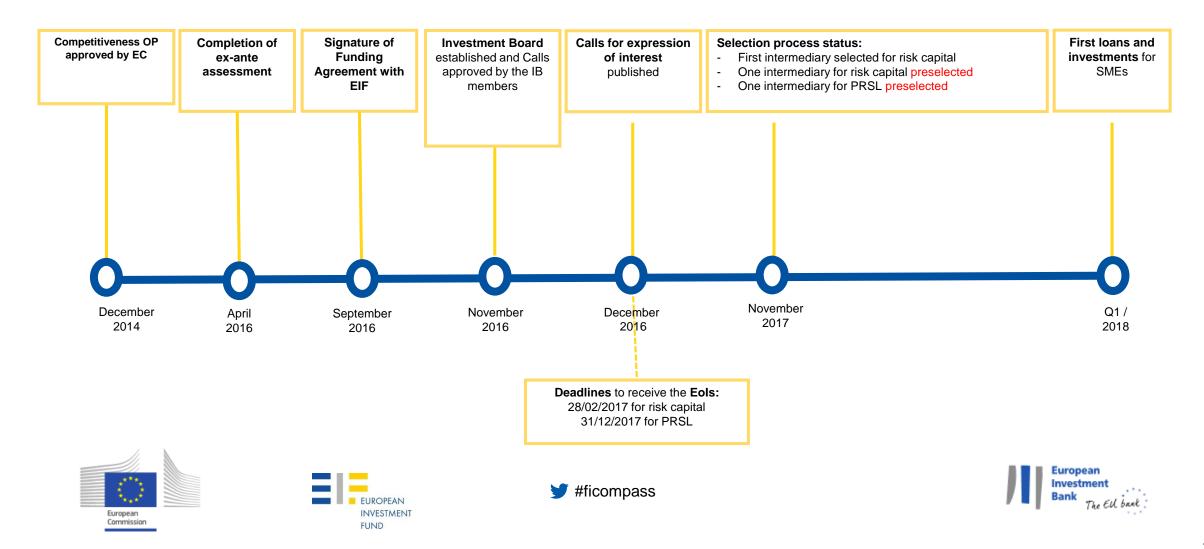






### Strategic context - *Timeline*



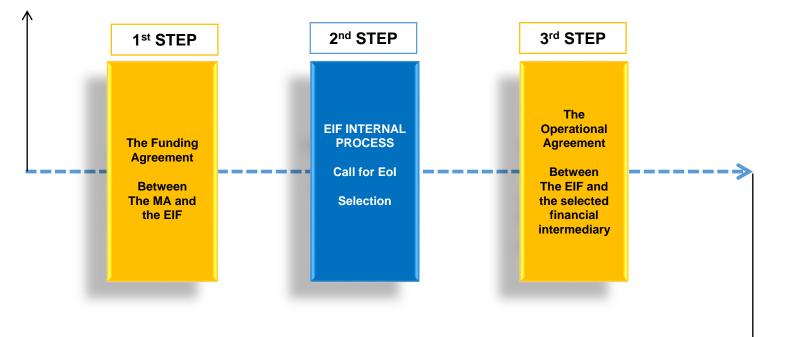


### **Design and set-up**



#### Preparatory work:

e.g. input to ex-ante assessment



Implementation:

monitoring, progress reports, payments etc.









Legal basis: Article 38 CPR + Annex IV of CPR

The Overall aim is to define the rules between the Parties (i.e. the MA and the EIF)

Fundamental & very comprehensive text split into Core text and the Annexes

**Core text** (main elements 1/3):

- Mandate and functions of the EIF (the MA appoints EIF as FoF manager and body implementing the guarantee instrument pursuant Article 38.4.b.i)
- What EIF is authorised to do by the MA? (e.g. manage the bank account, pursue the Investment Strategy, select the Intermediaries, perform due diligence (DD), negotiate the Operational Agreement, audit, monitoring, etc.)
- What is the process to fund the FoF bank account (phased payments, etc.)?
- How to use the proceeds? (e.g. new investments into financial intermediaries, management fees (MF) payment, preferential remuneration, etc.)







#### **Core text** (main elements 2/3):

- How the FoF Bank Account is managed? (separate block of finance, clear flow of money, which type of bank [min rating requested] can be appointed by the EIF, etc.)
- What is the Governance? Investment Board set up by the MA, the MA appoints the chairman, the members, the observers, IB members express the position of the Region, tasks and responsibilities of the board, etc.) EIF acts as the Secretariat
- Management fees within the eligibility period [based / performance / cap]









**Core text** (main elements 3/3):

- Section on what the Operational Agreements shall include [pursuant articles 6/7 DA for e.g. transparent selection, annex IV of CPR]
- Section on State Aid
- Section Monitoring & Reporting: progress report to be provided by the EIF to the MA [at least comply with Article 46 CPR ]
- Section on Effective date / Termination







#### Annexes:

- **Investment Strategy** (i) how to invest: ex-ante main recommendation, mode of implementation, description of the underlying financial instruments, (ii) who are the Final Recipients, State aid, how to disinvest for each instrument, how to use the proceeds, (iii) Business plan
- **Risk policy of the FoF** (detailed explanation of the risk for the MA linked to the respective underlying financial instruments (equity as well as debt)
- Section related to the selection process of the financial intermediaries (ref. article 7 of the DA)
- Comprehensive and detailed section on the Progress Report (from EIF to the MA) coherent with Article 46 CPR report
- Other sections : treasury management, governance, etc.







## Design and set-up - Selection of bodies implementing the FI



Call for expression of interest + selection process

Once the Parties (MA & EIF) agree on the Funding Agreement, the next steps are:

- EIF prepares the Call(s) documentation
- IB members approve the Call(s) + Publish the Call(s)
- EIF to carry out the selection process + revert to the IB members
- EIF negotiates the OA and signs the OA with the selected Financial Intermediaries
- See <u>http://www.eif.org/what\_we\_do/resources/esif\_competitiveness\_Romania/index.htm</u>







## Design and set-up - Selection of bodies implementing the FI



Main formal/selection criteria

- Legal capacity of the Financial Intermediary to carry out the tasks of implementation of the financial instrument under national and EU law
- The economic and financial capacity of the Financial Intermediary to carry out the work
- Organizational capacity of the Financial Intermediary: organisational structure, governance framework, internal control system, accounting system
- Experience of the Financial Intermediary with the implementation of "similar" financial instruments







### Design and set-up - Selection of bodies implementing the FI



#### Main qualitative/award criteria

- Track Record (before)
- **Offer** in terms of implementation (after): origination strategy, marketing/visibility, duration, type of SMEs, maturity, amount,...
- Experience of the Financial Intermediary (especially for Equity type of instrument)
- Advantage pass onto the Final Recipient: especially for Loans type of instrument
  - An important point to take into account in the selection process as referred also in the DA
  - Key element for the EIF in its selection process
- Ability of the Financial Intermediary to raise resources for investments in final recipients
- Level of management costs and fees
- Other specific requirements, for e.g. financial start-ups, quarterly report requirements, audit, ...





#### Design and set-up - Operational Agreement(s) OA



- Legal basis: Article 38 CPR + Annex IV of CPR;
- The overall aim is to define the rules between the Parties (i.e. the EIF and each Financial Intermediary selected);
- Shall be in line with the main concept & principals agreed with the MA in the FA;
- Regulates in a (very) detailed way all the features of the each instrument of the IS (for e.g.
   o investment strategy of the intermediary for this instrument,
  - $\,\circ\,$  advantage pass onto SMEs,
  - o implementation/communication strategy,
  - $\circ$  exit strategy



50

### Monitoring, control and reporting



Managing Authority **Financial Intermediary European Investment Fund** Intermediary Based on the information received information The Based on the received from EIF, the MA is provides on from the intermediary and its а accounting of the FoF, EIF build up the able to build up the report to the quarterly basis some information on each Progress Report to the MA : **European Commission** loan inserted in the 1. Qualitative data each on Portfolio. (specified in instrument (ramp up/ performance operational /AV the 2. Quantitative date (the MA can agreement) individual each access to loans/investment) Financial statement of the FoF 3. Treasury report 4.





# Recommendations and lessons learned



- The design and set-up have to be based on market conditions (importance of ex-ante assessment)
- Find how best to translate policy objectives set in the OP in market instruments
- Permanent dialogue between FoF manager and financial intermediaries (objectives, characteristics of the instrument, Q&A during set-up, communication,...)
- Align different interests between public and private sector
- Channel the public contribution to the final recipients







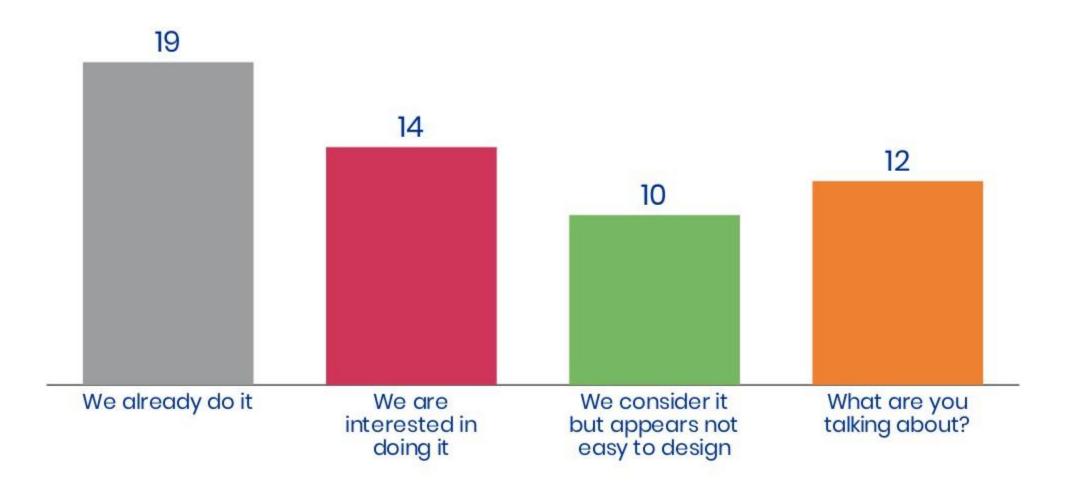
# Recommendations and lessons learned



- Ensure a transparent and competitive selection process
- Timing is very important. The process takes time (ex-ante, market testing, financing agreement, selection process, negotiating conditions, risk analysis for guarantees,...)
- Aim for a win-win involving all parties:
  - Managing authority: leverage, revolving funds, OP objectives, visibility, job creation,...
  - Financial intermediary: funding, risk-reduction, fast default settlement, guarantee free of charge,...
  - SME: preferential and easy access to finance (lower interest rate, reduced guarantees) improving investment capacity, ...



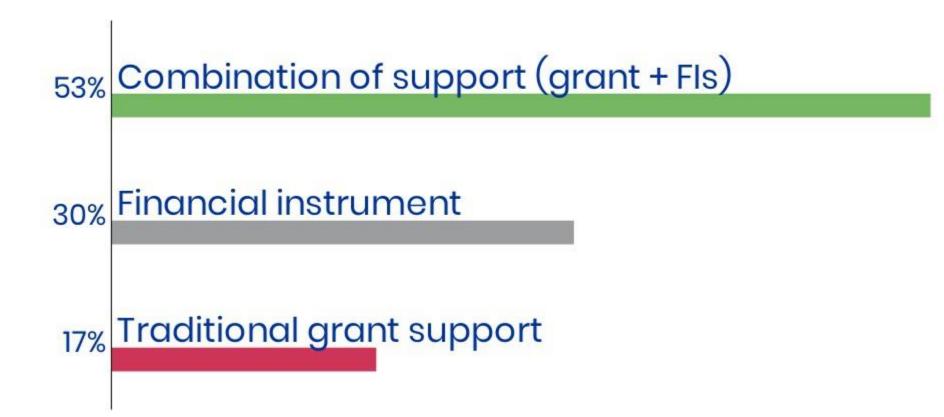
### Supporting RD&I with ESIF financial instruments





ficompass

### Most suitable type of support for RD&I

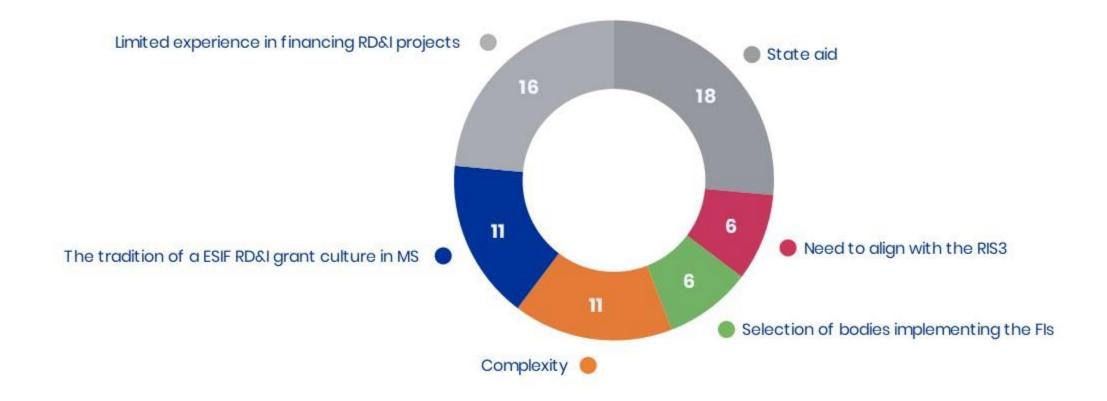




Compass

### Two main challenges for using RD&I financial instruments





₿ 38