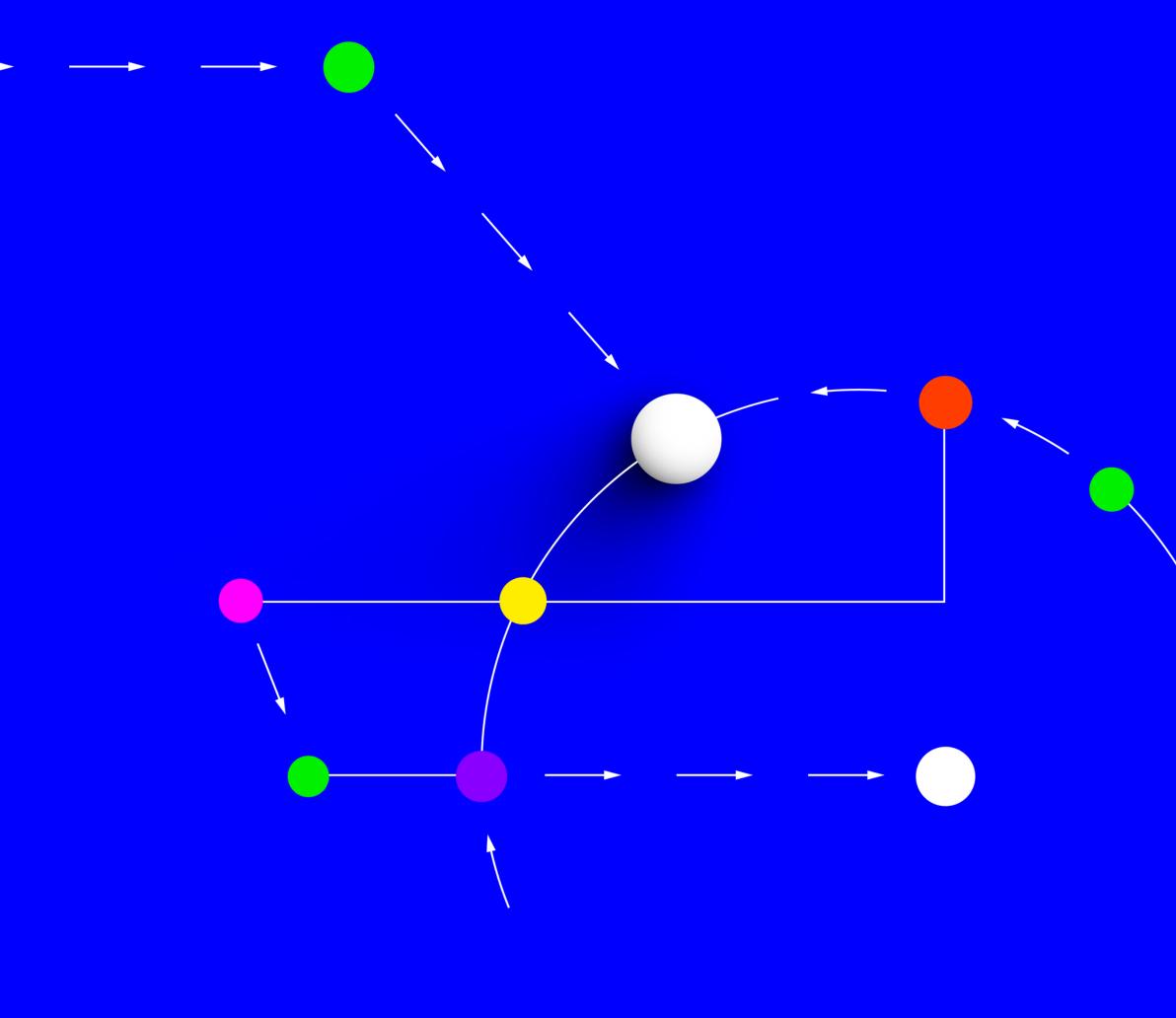
Measuring the impact of financial instruments

Lucian Luca, Policy Officer, DG REGIO, European Commission
Giovanni Familiari, Partner, T33, Italy
Iliana Ivanova, Financial Instruments Senior Officer, FMFIB, Bulgaria
Anna-Maria Fontana, Head of Division, Ministry of Enterprises and Made in Italy
Eng. Michele Diaferia, CEO, Linearbeam, Italy



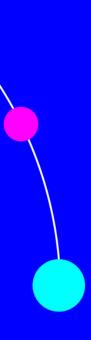






European Commission





Findings & lessons learned from the evaluation of 2014-2020 Cohesion Policy support to SME competitiveness

Lucian Luca,

Policy Officer, DG REGIO, European Commission



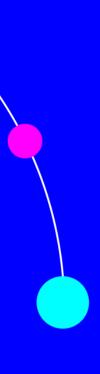






European Commission

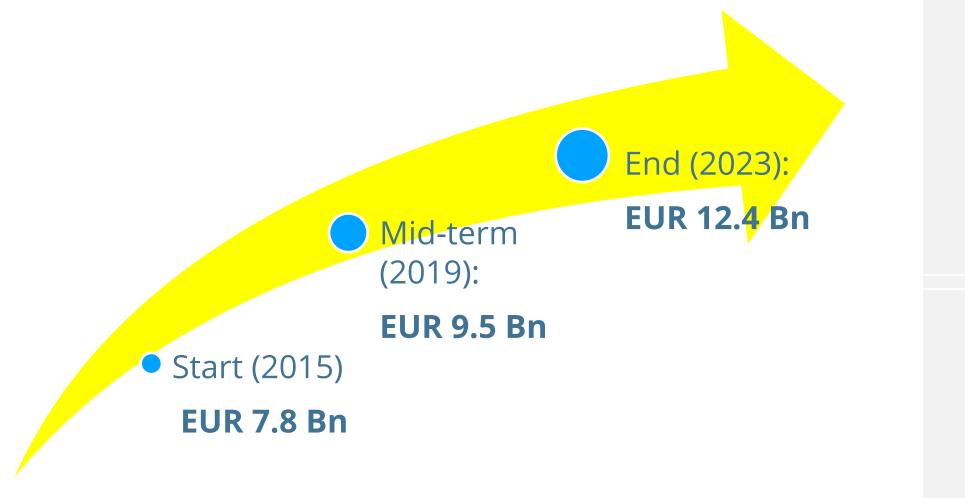




Scope of the evaluation

The relative importance of financial instruments increased continuously:

EUR 1.2 billion in 2000-2006, EUR 9.7 billion in 2007-2013 and EUR 12.4 billion for 2014-2020





Policy in

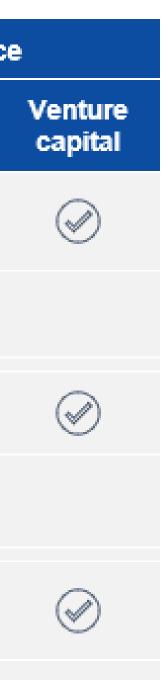
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Financial instrument explored

	EU Member State / region	OP measure/ action analysed	Form of finance		
nstrument			Loans	Guarantees	
oort to y creation	Bulgaria	Seed/ Acceleration and Start-ups Funds & Venture Capital Fund			
	Spain (Andalucia)	Guarantees Creation Companies		\bigotimes	
	Slovakia	Risk capital programme			
	Germany (Thuringen)	Thuringen Invest/ Dynamic	\bigotimes		
ort to uction nsion,	Netherlands (West)	Participation fund ROM Region Utrecht			
tivity and nisation	Poland (Wielkoposkie)	Sub-measure 1.5.1 "Financial instruments increasing the competitiveness of SMEs" (Jeremie2)			
	France (Ile-de- France et Seine)	Prêt Rebond Fund	\bigotimes		
dity and g capital oport	Italy	Reserve of the national OP Enterprises and Competitiveness under the Guarantee Fund for SMEs		\bigotimes	
	Greece	COVID-19 Business Guarantee Fund		\bigotimes	



Thematic Objective 3 – SME competitiveness, main achievements

A strong increase in the ERDF budget planned for TO 3 over the programming period, from 30 to 45 billion EUR





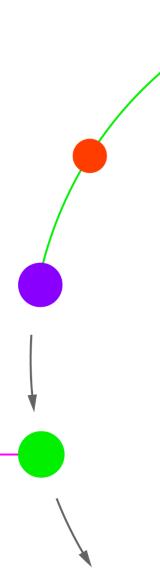


ERDF measures reached **almost 1.8 million SMEs** (7% of total active SMEs;

About **30%** of the support provided was done through **financial instruments**.

Support provided to around **500,000 newly established enterprises** (3% of

Creation of more than 320,000 jobs (<1% of total SME employment).





Evidence from case study indicates good performance of SMEs supported

Financial instruments are perceived by SMEs as less burdensome

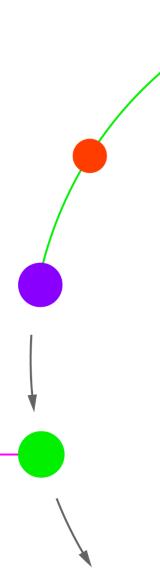
Better results are observed when financial instruments are targeted to more promising projects and SMEs

<u>BUT</u>





- Lack of end beneficiary data (microdata)
- Data limitations do not allow for a systematic analysis of heterogenous effects across different forms of finance (grants vs financial instruments)



Lessons learned

amid the Covid-19 crisis.

grants.

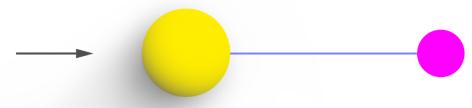
wider range of financial products.

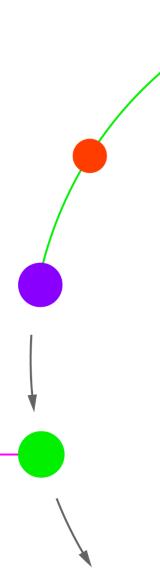
needed to substantiate the cause.

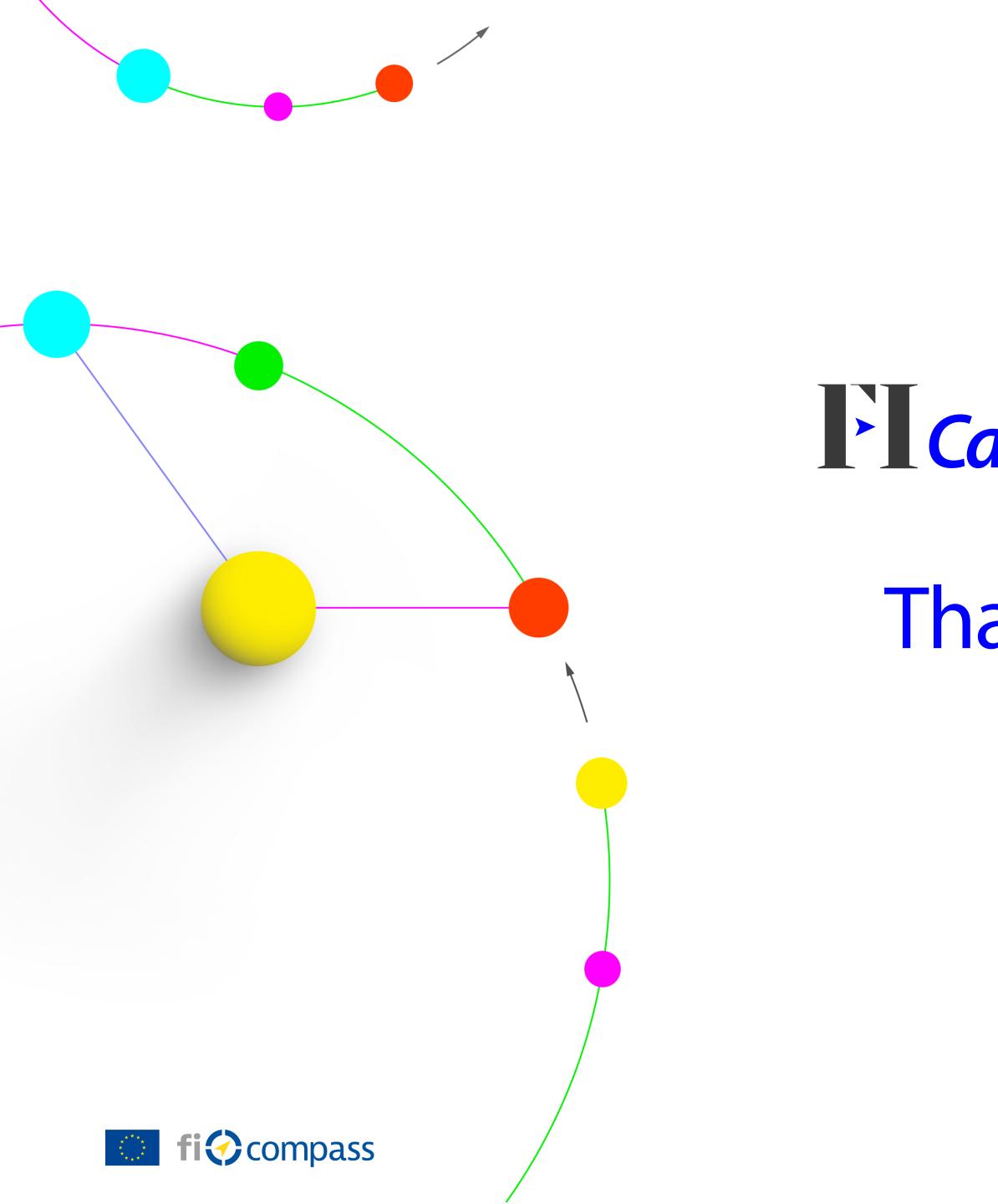


Campus 2024

- A distinct role between financial instruments and grants in supporting liquidity and working capital
- The **risk of a deadweight** effect can be mitigated by utilising financial instruments instead of
- Managing authorities adopted **different organisational arrangements** to provide support, opting for either fund of funds or single-tier structures. Single-tier structures were used to offer guarantees and loans, while fund of funds structures were preferred when providing equity or a
- While outcomes for enterprises were positive for all the case study financial instruments, this assessment could only be based on initial quantitative or qualitative evidence, more analysis







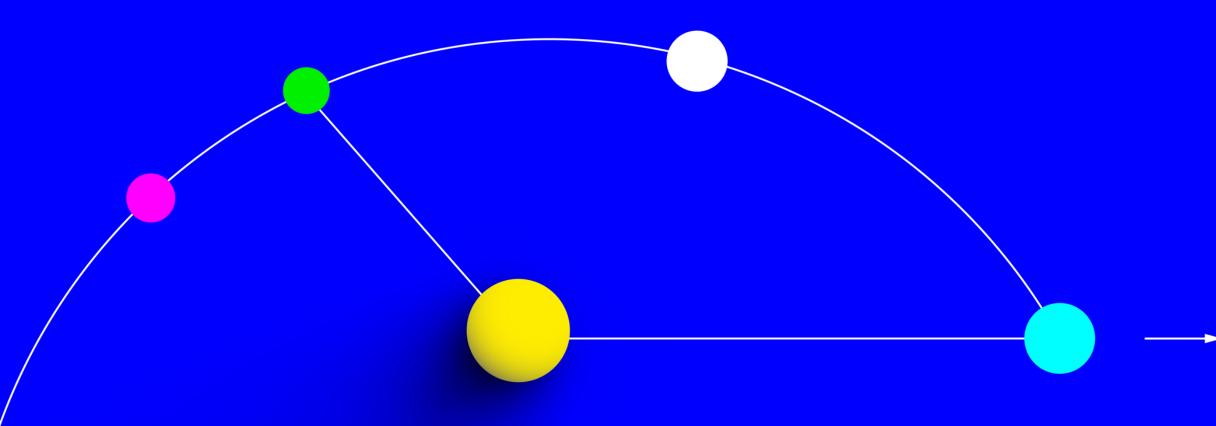


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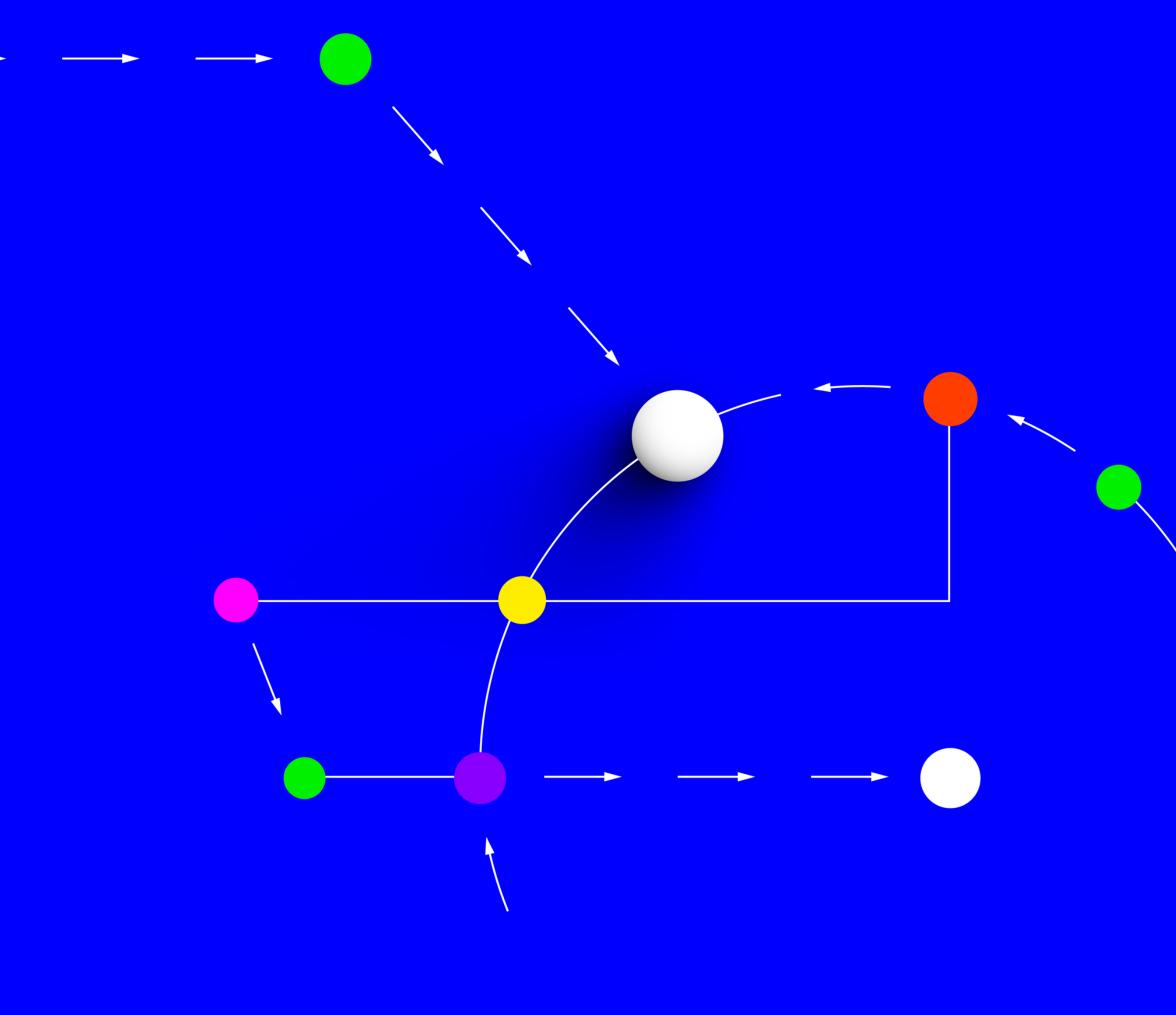
Measuring the impact of financial instruments

Giovanni Familiari,

Partner, T33, Italy









European Commission





ERDF SME FI impact study - Literature review

Objective

Collect findings on the impact of financial instruments and grants on SME competitiveness and growth from relevant pieces
of academic and market research

Work carried out

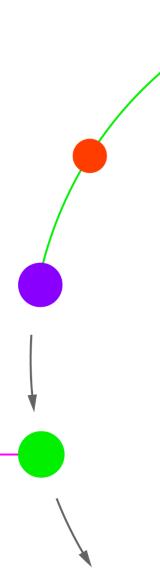
• 91 reports across the EU reviewed and key findings reported in a structured dataset

Main findings

- Guarantees:
 - \odot Greatest impact on younger and smaller firms
 - Lasting gains in turnover / employment short term impact on productivity and profitability
- Loans (relatively under-researched area):
 - o Available studies suggest generally positive impact on employment, mixed on other outcome variables
- Equity:
 - Effective in contributing to start-up performance when considering total assets, revenue and employment, and significant catalyst to the patenting output
- Comparison of financial instruments and grants (under-researched area):
 Available studies suggest financial instruments were a more cost-effective way to deliver impact







ERDF SME Fl impact study – Pilot impact assessment

Objectives

- Compare the performance of the enterprises benefiting from the SME Initiative guarantees between 2016 (pre-support) and 2022 (post-support) with:
 - Enterprises beneficiaries of grant support under the Romanian Regional Operational Programme 2014-2020
 - Non-beneficiary enterprises

Work carried out

- Almost 11 000 enterprises considered across the treatment and control groups
- Beneficiaries of grants included more interventions with different stated objectives
- Considerable differences in the two groups of supported enterprises and the programme resources committed per enterprise (grants about x7.5 SME Initiative guarantees)

10

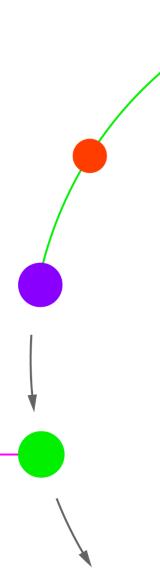
• Pilot counterfactual impact evaluation using:

• Propensity score matching

• Difference in difference







ERDF SME Fl impact study – Pilot impact assessment

Key findings

- Impact of SME Initiative guarantees:

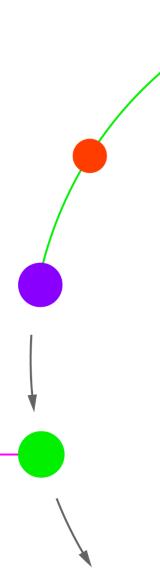
 - Positive but not significant on employment
- Impact of grants:
 - Positive and significant in terms of employment and total assets • Generally negative on productivity, significant for profit-based measures
- Key to read the results keeping in mind the logic of the interventions

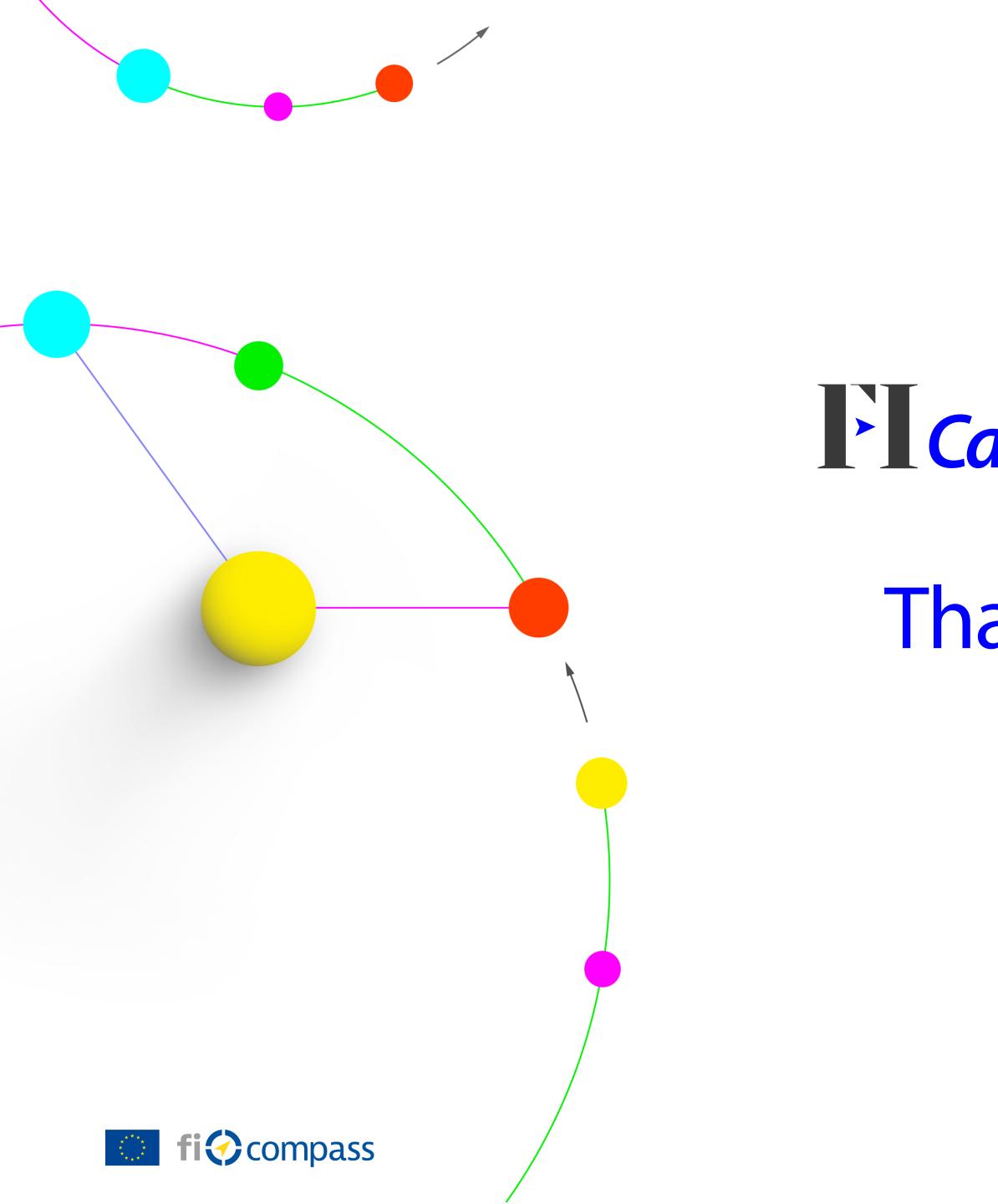
Outcome variable	Fl vs non beneficiaries	Grant vs non beneficiaries
Turnover	Positive and significant	Positive not significant
Total assets	Positive not significant	Positive and significant
Number of employees	Positive not significant	Positive and significant
Labour productivity	Positive and significant	Negative not significant
ROA	Negative not significant	Negative and significant
Operating profit / number of employees	Positive and significant	Negative and significant
Sales/number of employees	Positive and significant	Negative not significant
Unit labour costs	Negative and significant	Negative not significant
Debt ratio	Positive and significant	Positive and significant





• Positive and significant for turnover, most productivity measures (both turnover and profit-based) and debt ratio







Thank you







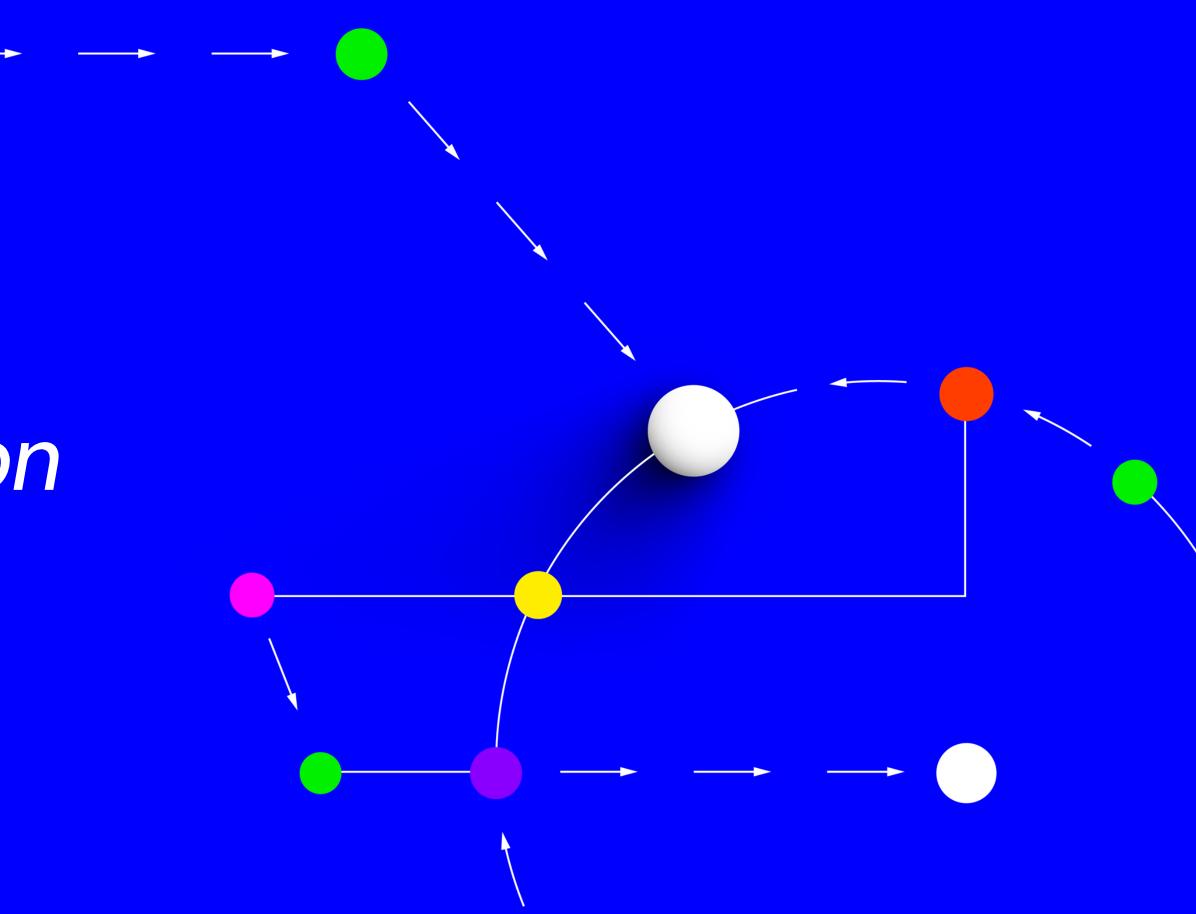
Impact of the implementation of 2014-2020 financial instruments on the Bulgarian economy

lliana Ivanova,

Deputy Head Debt Financial Instruments Department, FMFIB, Bulgaria



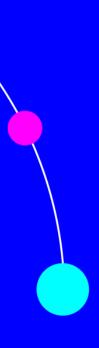






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Assessment methodology

- following methods:
 - Desk research; -
 - Meta-analysis; -
 - Benchmark analysis; —
 - Financial Analysis of indicators and financial implementation; —
 - SIBILA econometric model; —
 - Financial data from the National Statistical Institute regarding the supported final recipients. —
- socio-economic development evaluation guidelines.
- needed to measure mid and long-term effects).

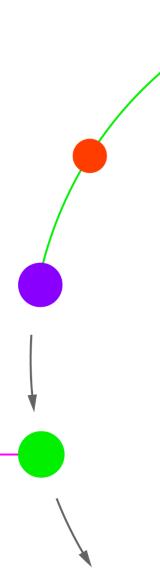




The assessment of the impact of the FIs has been done in-house by the FMFIB data analytics team based on the

The methodology is based on the evaluation framework of the operational programmes and the EVALSED

The analysis is a snapshot of the situation as of the end of the eligibility period - 31.12.2023 (a longer period is



Main results and effects on micro level

FUND MANAGER OF FINANCIAL INSTRUMENTS IN BULGARIA (FMFIB)

INVESTED IN FINAL RECIPIENTS

EUR 550 M

INNOVATION & COMPETIVENESS

5 VC Funds /First Loss Portfolio Guarantee for SMEs (Covid-19)

RESULTS & EFFECTS

- 100% financial implementation;
- 100% fulfilled indicators;
- 3 out of 5 companies in the country which have received equity funding in the period are financed from FMFIB;
- Improved access to finance during COVID-19 (≈10% of the new loans granted in the period are guaranteed by FMFIB).
- Supported innovative and highgrowth start-ups (regional leader in equity)

HUMAN RESOURCES

EUR 18 M

DEVELOPMENT

Risk-Sharing/Portfolio Guarantee for start-ups/social enterprises

RESULTS & EFFECTS

- 100% financial implementation;
- Improved access to finance, incl. vulnerable to groups (unemployed,<29Y, etc.)
- 100% from the supported final recipients are still in business;
- 1500+ new jobs created.





Campus 2024

MANAGING AUTHORITIES

EUR 24 M

ENVIRONMENT

Funded risk-sharing for Water Operators

RESULTS & EFFECTS

- Financed 5 water operators;
- Combined financing of Fls and grants of 205 M EUR;
 - Improved access to finance (≈15%)
- of the funding granted to companies in the sector).

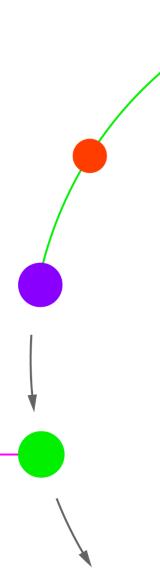
EUR 275 M

REGIONS **IN GROWTH**

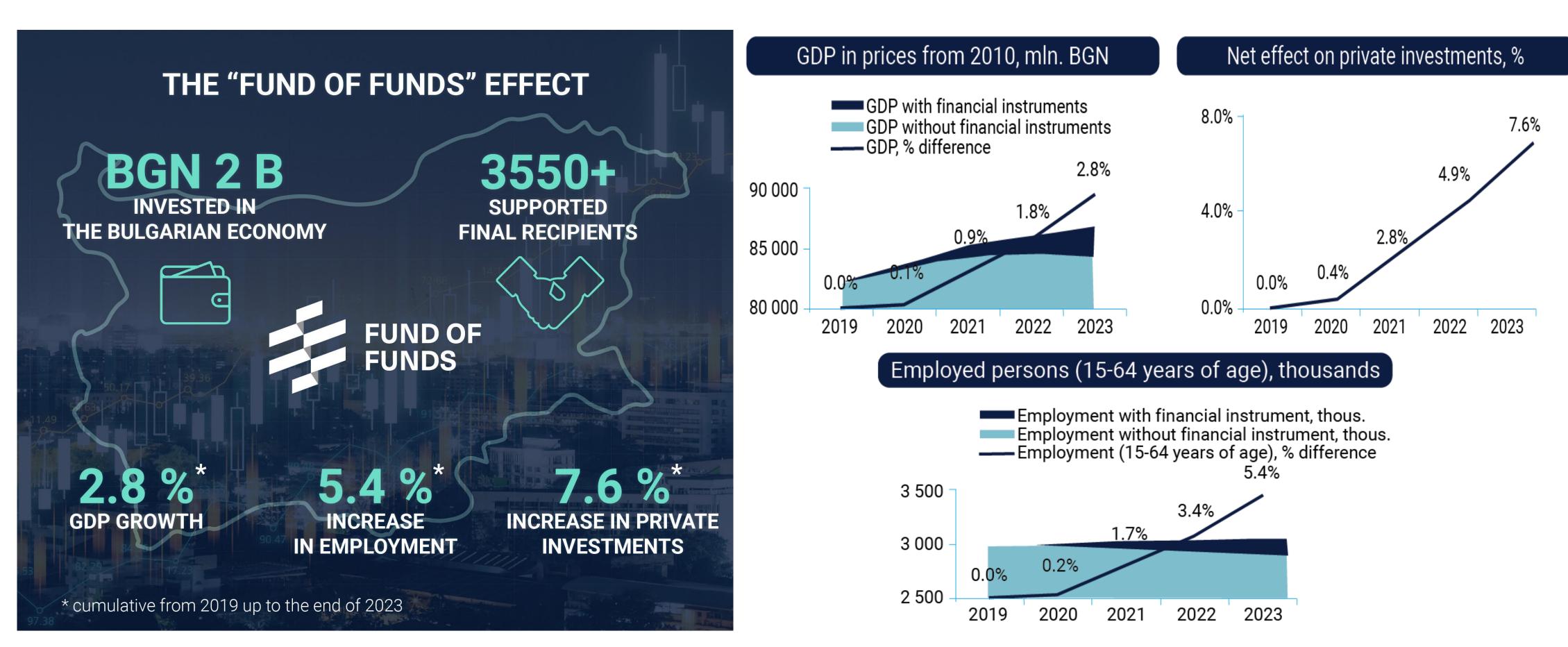
3 UDFs - funded risksharing/portfolio guarantees

RESULTS & EFFECTS

- 100% financial implementation;
- 100% fulfilled indicators;
- Significant of share the activity/capital investment expenditure of the supported municipalities is due to UDFs (i.e. > 20 %)
- Contribution to the regional cohesion in the country.



Macroeconomic effects of Fls

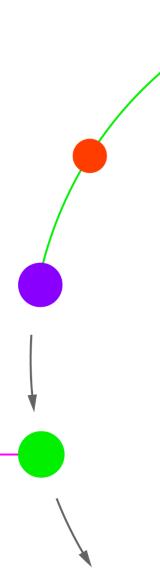


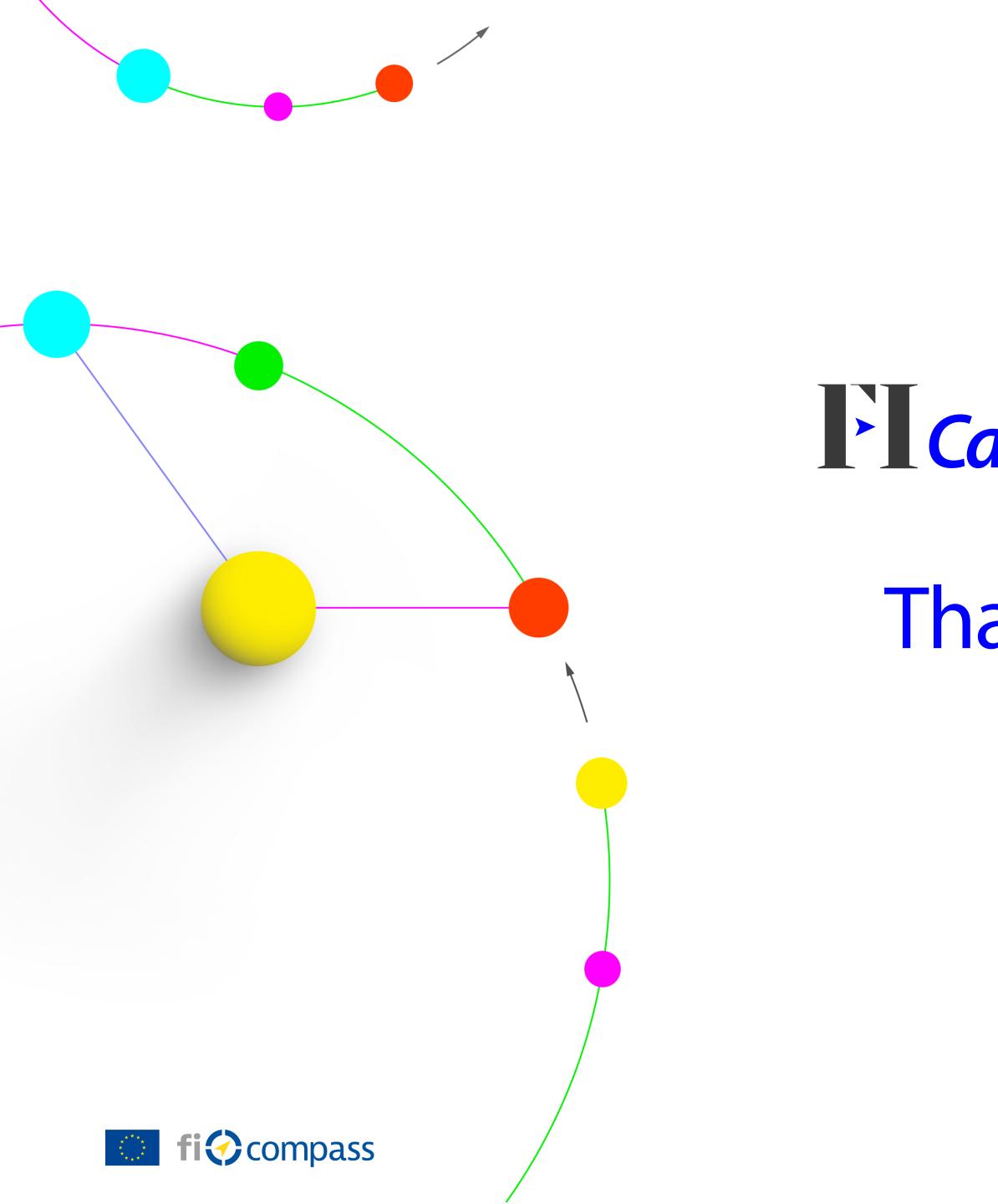
- Impact assessment through an econometric model (scenario with Fls vs scenario w/o Fls), performed by the Council of Ministers of Bulgaria;
- The impact assessment includes short-term effects (i.e. up to the end of 2023). For mid/long-term effects a longer period to examine is needed.
- Supported final recipients from different sectors (SMEs, incl. start-ups, municipalities, water operators)





Source: SIBILA 2.0







Thank you







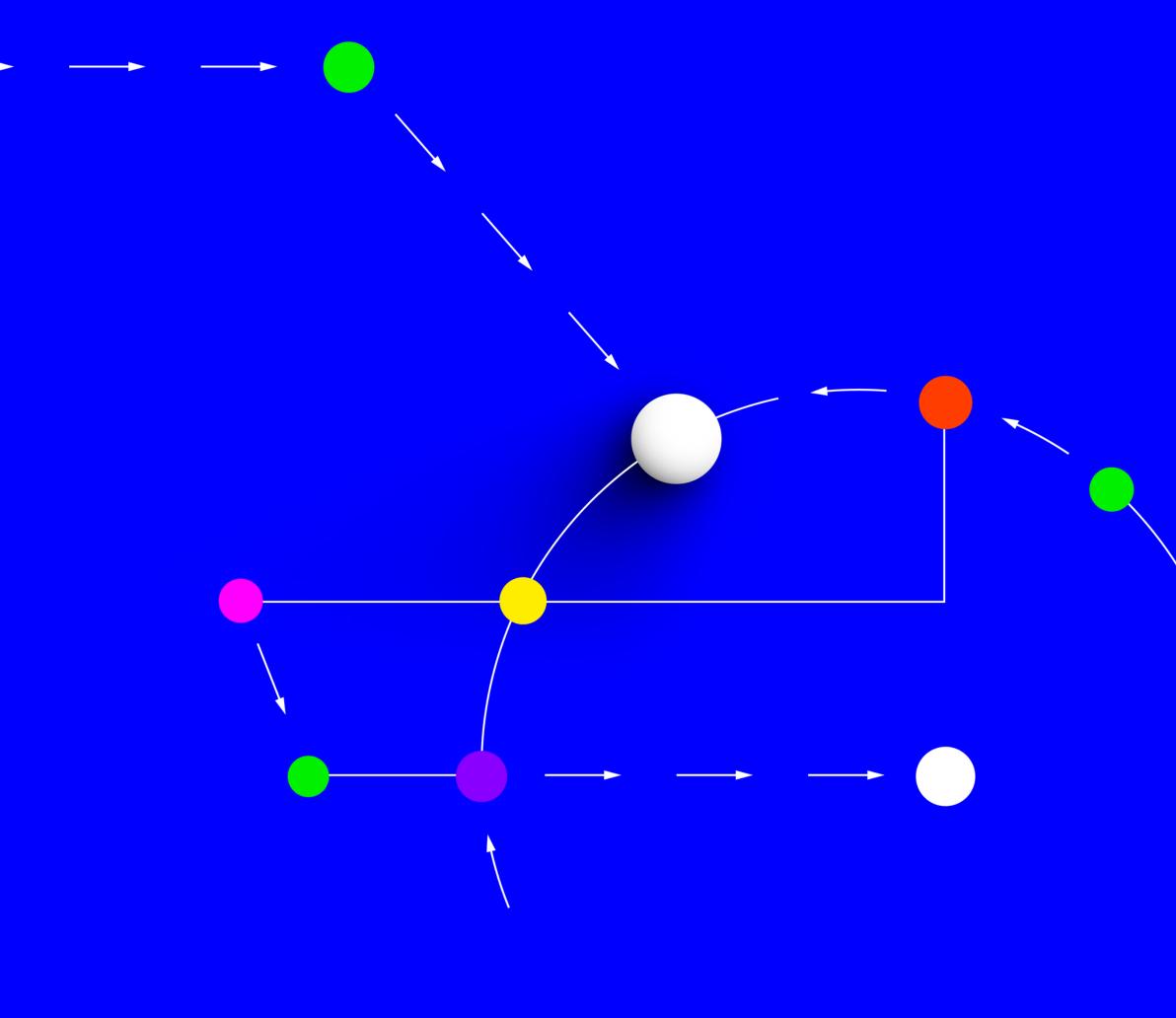
Regional evaluations of FI the impact of FI in Italy, general perspective

Anna-Maria Fontana,

Head of Division, Ministry of Enterprises and Made in Italy



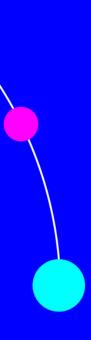






European Commission





Overview of regional evaluations

PIEMONTE

Fondo innovazione MPMI (a) e Sezione speciale Piemonte Fondo di Garanzia (b)

Scope of the measure: (a) investment support for innovation e (b) access to credit

Type of FI: (a) loans (b) guarantee

Year: 2023

Methodological approach: qualitative

Data source: desk analysis of documents and analysis of balance sheet data, stakeholder interviews

Focus of the evaluation: functioning of the measure and first evidence from stakeholders

LOMBARDIA

Agevolazione - Valorizzazione Investimenti Aziendali

Scope of the measure: investment support

Type of FI: loan guaranteed by the Fondo di Garanzia

Year: 2023

Methodological approach: qualitative

Data source: survey

Focus of the evaluation: impact analysis of the financial instruments







Regional cases selected through desk analysis (not exahustive of regional evaluations)

MARCHE

Fondo Rischi

Scope of the measure: access to credit *Type of FI*: counter-guarantee and reinsurance of Confidi operations Year: 2021 Methodological approach: quali-quantitative Data source: desk analysis of documents, simulation in order to compare the added value of several alternatives Focus of the evaluation: analysis of the implementation, added value analysis for different types of financial instruments

CAMPANIA

Fondo Artigianato (a) e Basket bond (b)

Scope of the measure: investment support (a) e support for development programmes (b) *Type of FI:* loan (a) e mini bond (b) Year. 2022 *Methodological approach:* qualitative Data source: survey Focus of the evaluation: impact analysis of the financial instruments



Main findings of the desk analysis

- and credit market contraction.
- the effects of the pandemic crisis.
- effectiveness of financial instruments.
- financial instruments compared to other forms of funding (e.g. grants).



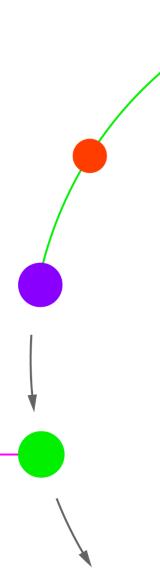


> The evaluations indicate that the financial instruments have contributed to improve the ability of beneficiary enterprises to access credit, supporting the productive fabric in a period of severe crisis

> In particular, the surveys carried out within the evaluations concerning Lombardia and Campania report positive effects in terms of improved competitive positioning, increased turnover and employment, acceleration of the digital transformation of enterprises, and support in overcoming

> With reference to the analysis of effectiveness, most of the evaluations adopt qualitative methodologies (desk analysis of documents and surveys), highlighting the lack of sound quantitative analyses (e.g. theory-based or counterfactual approaches) aimed at investigating the

> With limited exceptions, little attention is paid to evaluations investigating the added value of

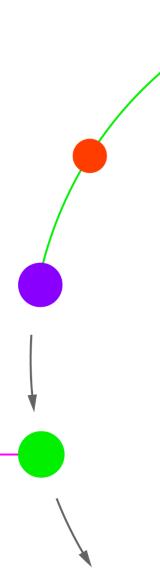


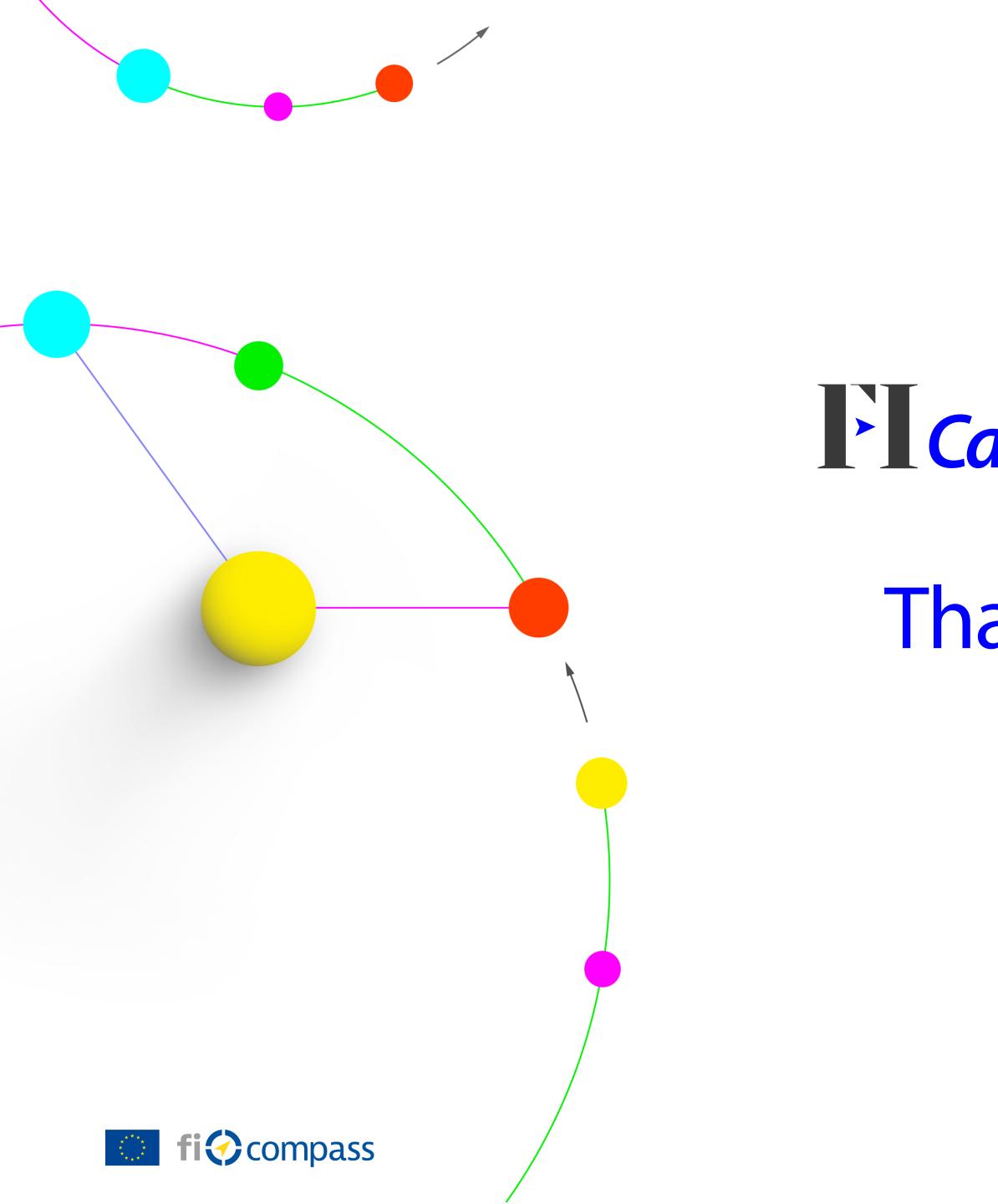
Outlook from the National Operational Programme Enterprises and FI Campus 2024 Competitiveness 2014-2020 (NOP EC)

- > Financial instruments played a fundamental and increased role in the NOP EC. In the post-pandemic phase and within the REACT-EU framework, they have been mainly implemented through:
 - Guarantee Fund Reserve to support companies during liquidity crises;
 - Subsidised loans to support digital and green investments.
- > Both instruments were evaluated, highlighting their fundamental role in alleviating the impacts of the crisis and supporting the recovery process.
- \geq Regarding the role of these financial instruments, some elements were emphasized:
 - ability to promptly activate a large number of additional resources (including from other public authorities);
 - **immediate availability** of the entire amount to the beneficiary;
 - **G** fostering an **entrepreneurial culture**;
 - minimisation of irregularities.
- added value of financial instruments and increase this awareness among evaluators.



> From an evaluation point of view, more effort needs to be made to perform robust statistical analyses of the





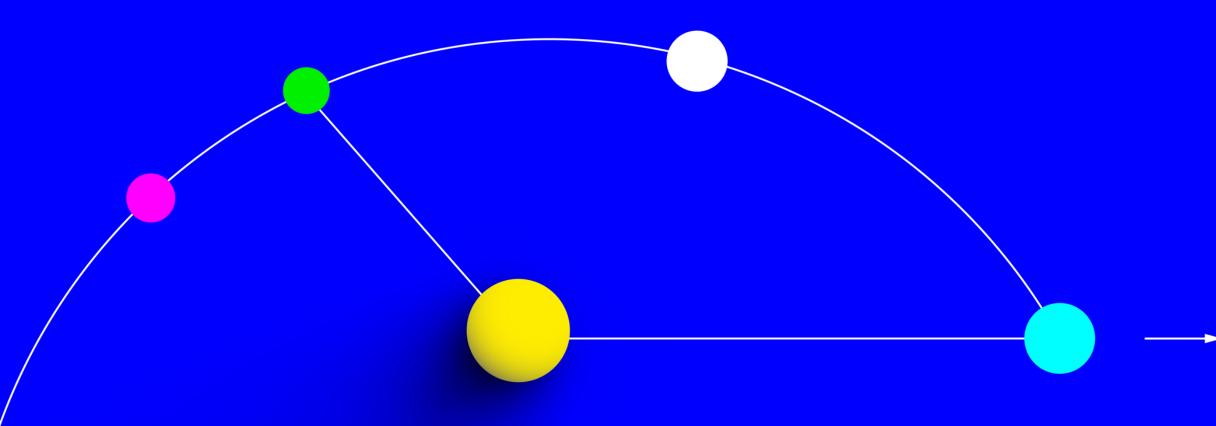


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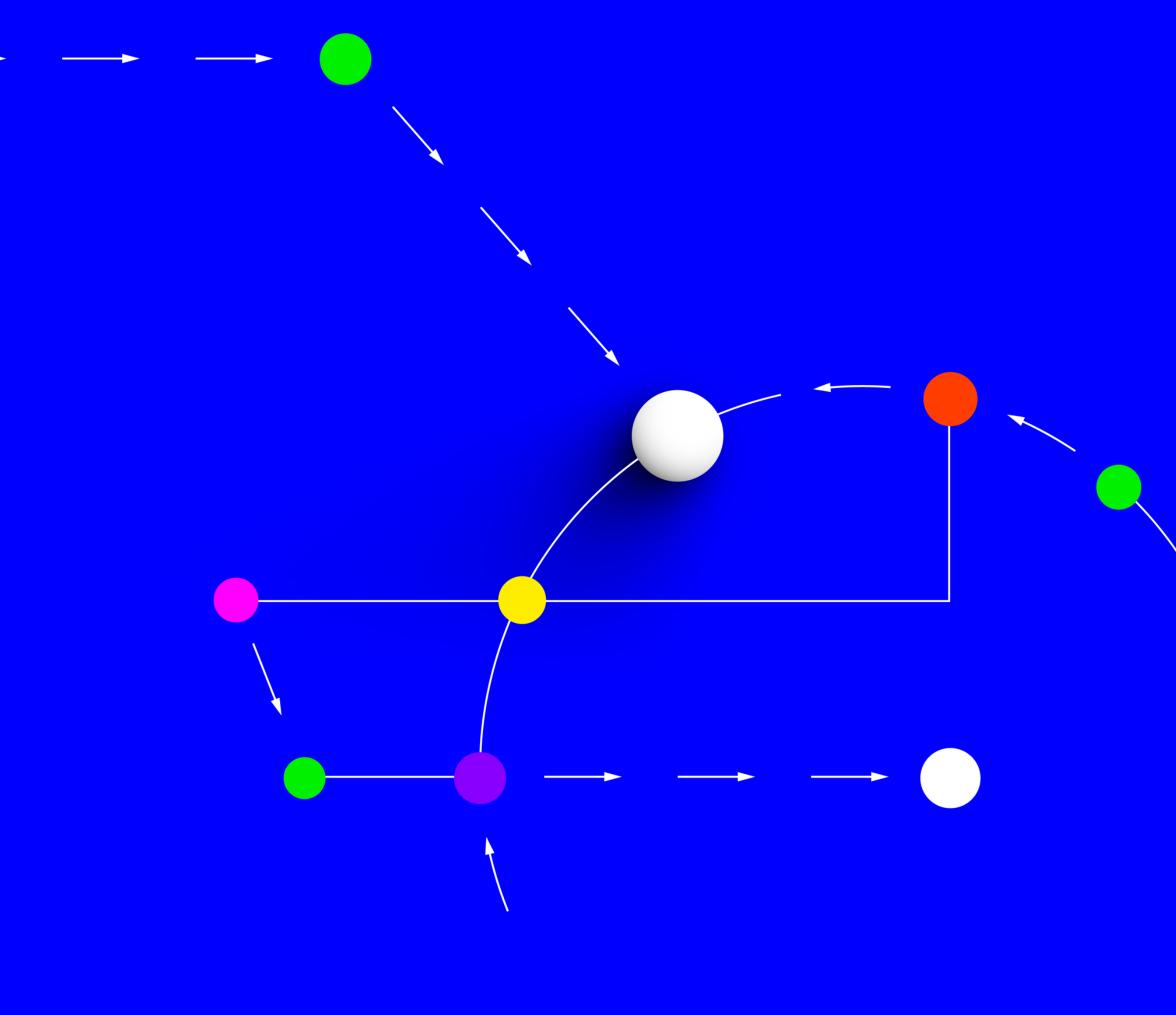
Measuring the impact of financial instruments

Eng. Michele Diaferia, CEO,

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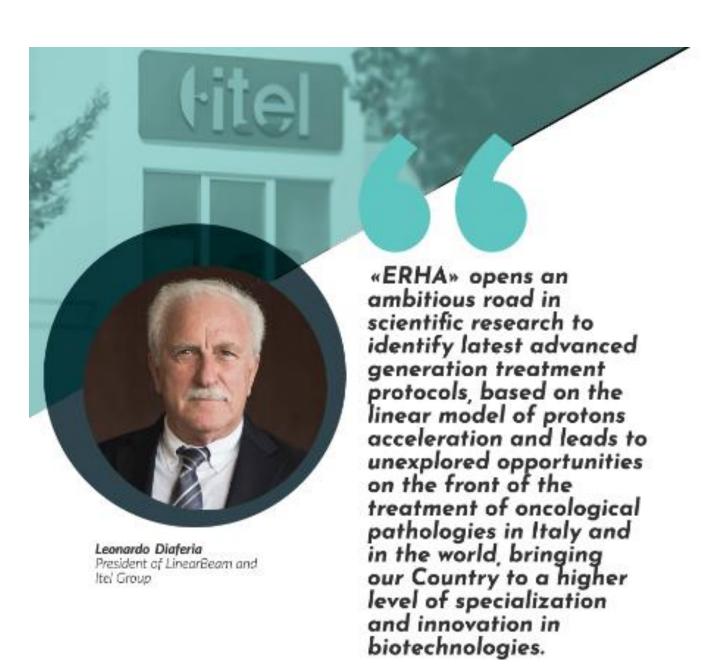
European Commission





LINEARBEAM AND THE ERHA PROJECT

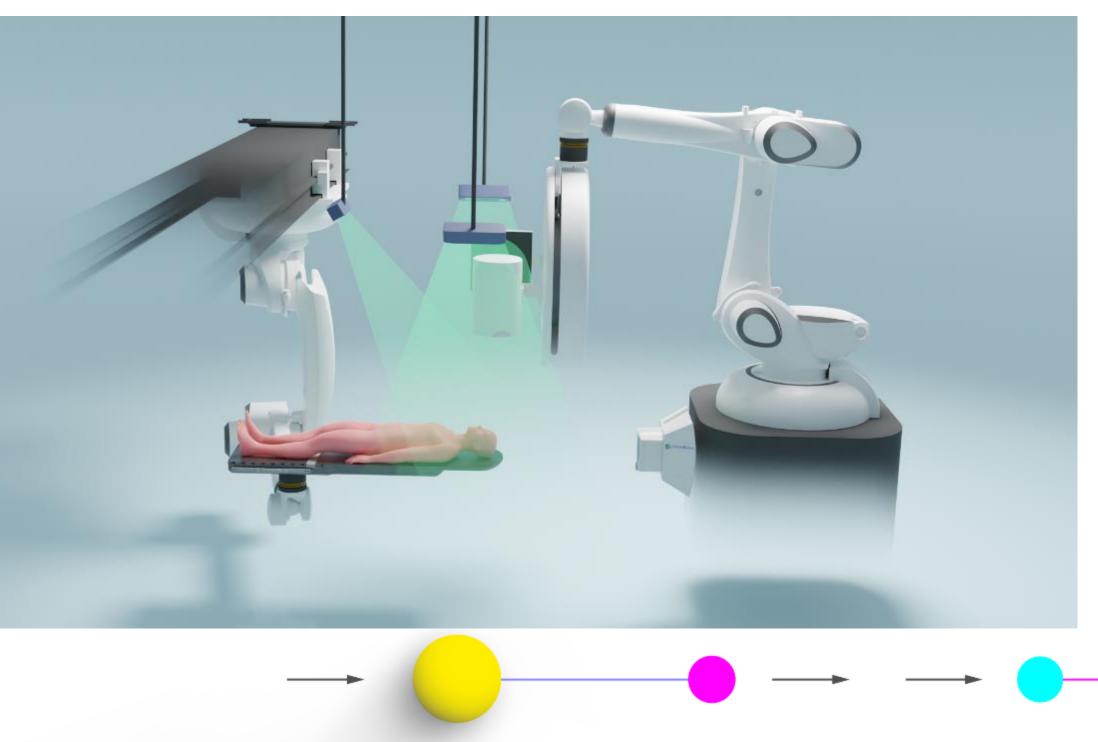
positioning system and a software for treatment simulation.

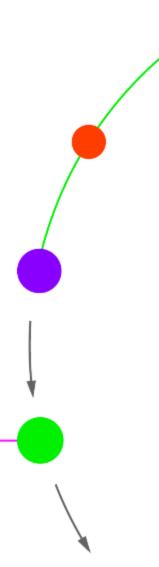






• LINEARBEAM team of engineers, physics and scientists is developing in Italy, through the **Erha** (Enhanced Radiotherapy with HAdrons) project, the first proton therapy system based on a *linear proton accelerator* (*p*-*Linac*) for the treatment of tumors. This next generation technology aims to treat cancer in a safer and more effective way. The system also includes a robotic patient





THE FI INVESTMENT SUPPORT

- ERHA project was supported with €14.9 million equity investment
- accelerator (p Linac) for the treatment of tumor diseases.
- acting as HF as part of the National Operational Programme "Research and Innovation".
- given to an Italian company ever. ERHA has been defined as a 'best practice' model.



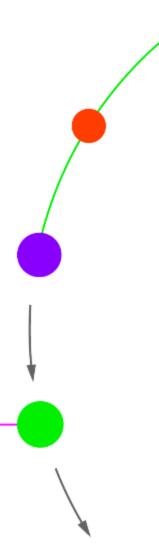




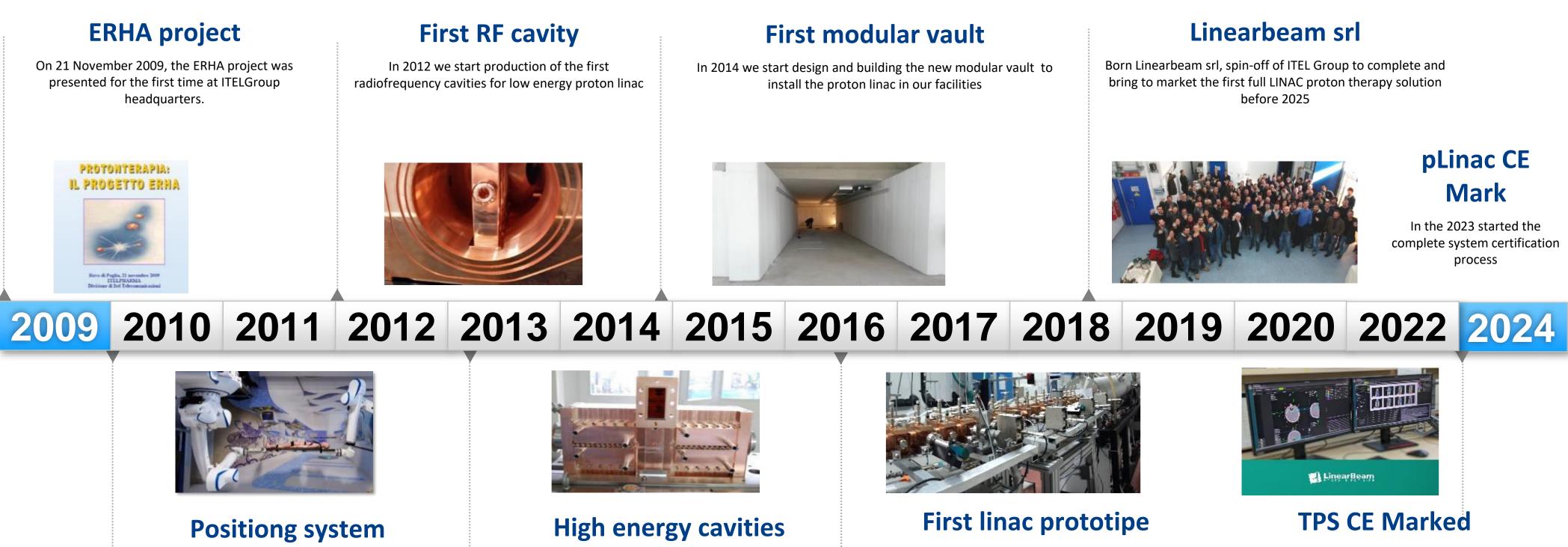
On February 14, 2019, the company Linearbeam Srl was established as a Spin-off company of the Itel (Itel Telecomunicazioni Srl) Group dedicated to the "ERHA" (Enhanced Radiotherapy with HAdrons) Project for the development of the first proton therapy system based on a linear proton

• The financial partner was Equiter Spa investor, through the Research and Innovation Fund of the Italian Ministry of University and Research (MUR), together with the European Investment Bank

• It is one of the greatest and most significant investment for research and development projects



ERHA HISTORY: *A GREAT SCIENTIFIC CHALLENGE*



European Patent released on July 13th 2010 n° EP 2279833 "Sistema robotizzato per il posizionamento di un paziente rispetto ad almeno una sorgente di particelle".

At the end of the EU-funded Amiderha project, the first European Patent n° EP 2283706 "Mattonella acceleratore, in 50 MeV prototype of proton Linac is released particolare per moduli di accelerazione lineare" acquired in INFN tecnology trasfer agreement



Campus 2024

Linearbeam srl

Born Linearbeam srl, spin-off of ITEL Group to complete and bring to market the first full LINAC proton therapy solution before 2025



pLinac CE Mark

In the 2023 started the complete system certification process

First linac prototipe



TPS CE Marked

ITH 2459334 1

ISO 13485 Certification

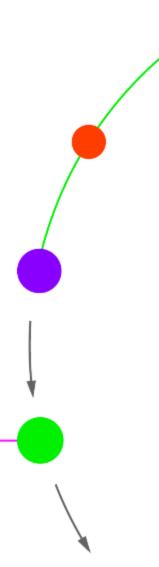
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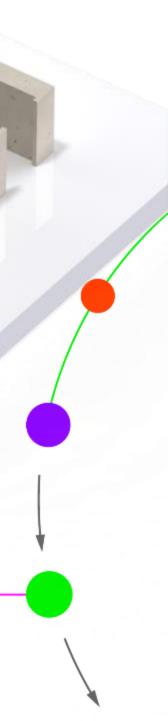


FROM TECHNOLOGY TRANSFER...





HOW FAR WE'VE COME



WHAT'S NEXT?









...TO THE CLINICAL STAGE

