

# THE ANALYSIS OF GUARANTEES EXTERNAL IMPACT STUDIES

PANEL 2 – AECM SEMINAR – 15TH JUNE 2018

WARSAW



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EUROPEAN ASSOCIATION OF GUARANTEE INSTITUTIONS

## PANEL 2 – THE ANALYSIS OF GUARANTEES – EXTERNAL IMPACT STUDIES

### WHAT WE WILL TALK ABOUT.....

#### Panel 2: The analysis of guarantees: External impact studies

- **Moderator and introductory speaker: Kurt Leutgeb**, Head of Guarantees – Equity, aws, Austria
- **Doris Neuberger**, Department of Economics, University of Rostock, Germany
- **Vasco Rodrigues**, Department of Economics, Universidade Católica Portuguesa (UCP), Portugal
- **Beatriz Freitas**, Chairwoman, SPGM, Portugal
- **Pablo Pombo**, Secretary General of REGAR, Founding President of AECM
- **Horacio Molina**, Department of Statistics, Econometrics, Applied Research, Business Management and Applied Economics, University of Córdoba (Spain)

- **Short introduction on the role of external impact studies**
  - aws example
  - input by the panel
- **Discussion**
  - with the panel
  - with the audience

# aws example

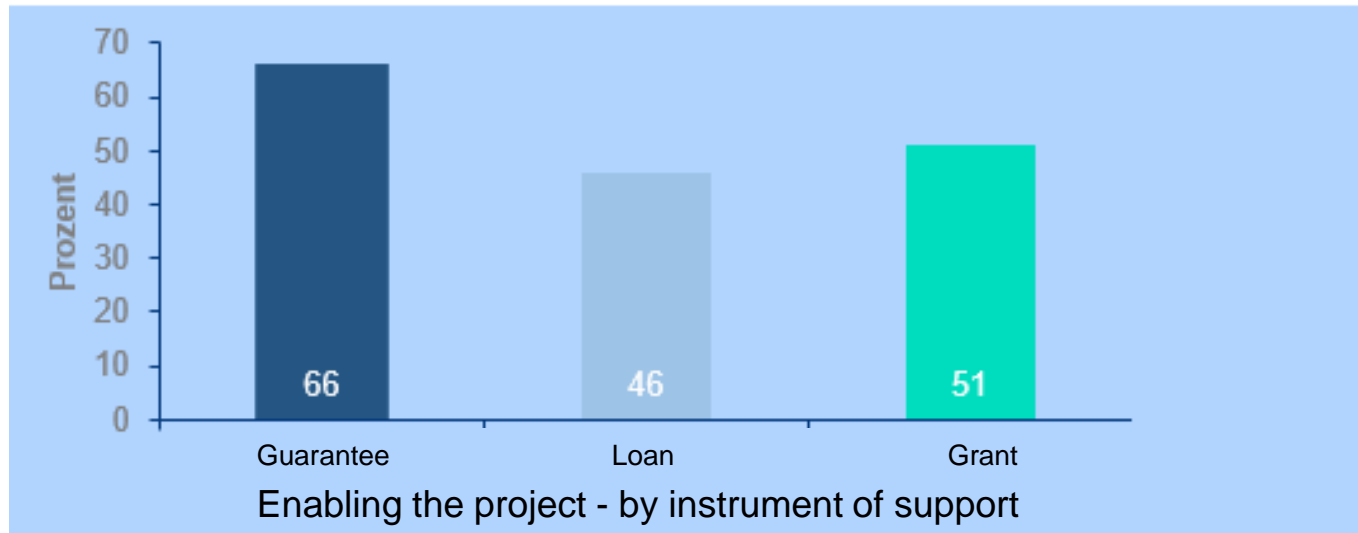
- The role of evaluation in aws
- Guarantee evaluation 2016 – methodology and results

## **The role of evaluation in aws**

- Inherent in nearly all aws-programmes
  
- Special service unit for Strategy Development and Evaluation
  - Internal evaluations
  - Monitoring of external evaluations
  - Client feedback analysis
  - Evaluations sometimes contracted by the principal/ministry

## aws example

### **guarantees are more effective**



Source: aws

66 % of SMEs say that without aws guarantees the realisation of the project would not have been possible.

# **aws guarantees for innovation and growth**

November 2017

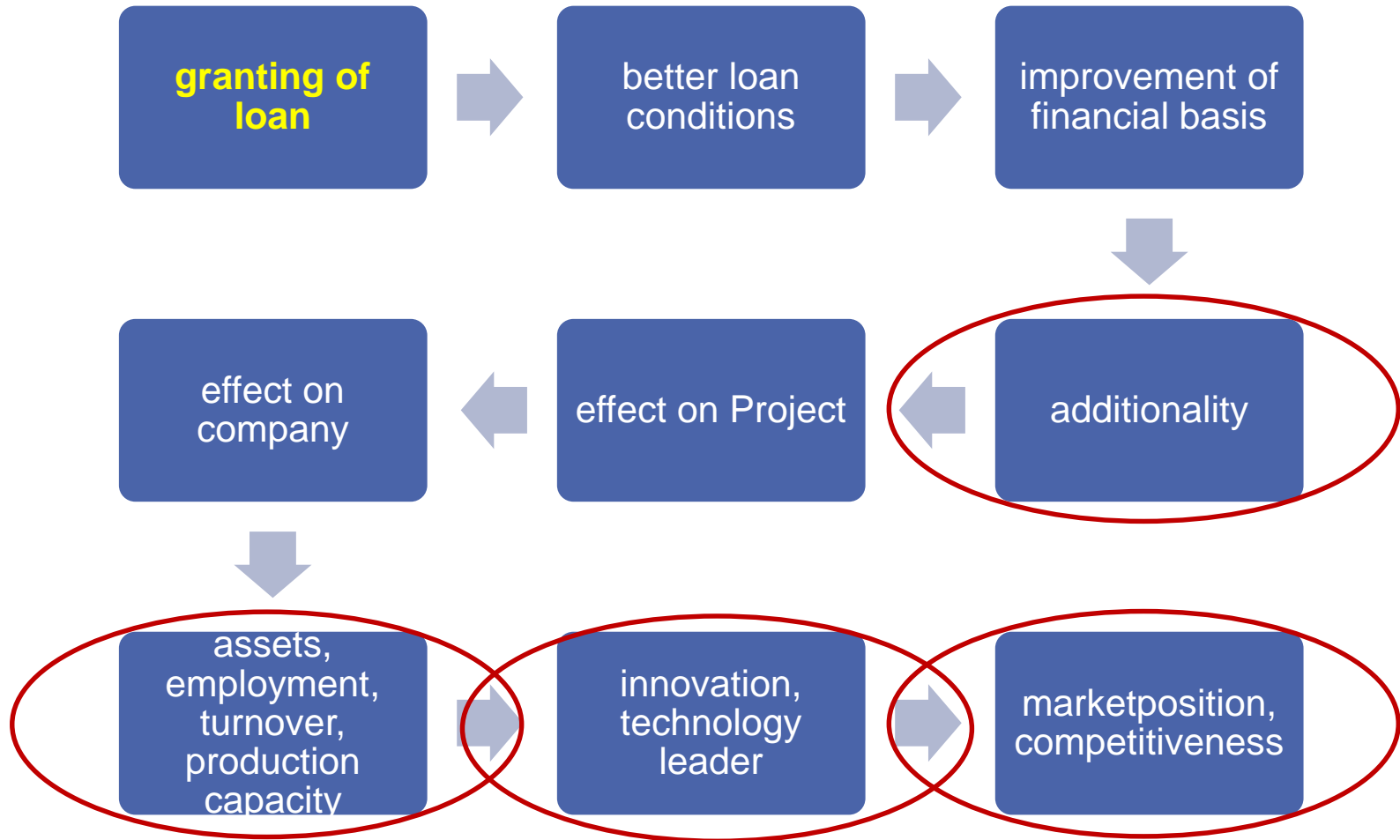
*Results of the evaluation of the guarantee activity  
of aws*

Sascha Ruhland, M.A.

## Methodology of the Evaluation Study

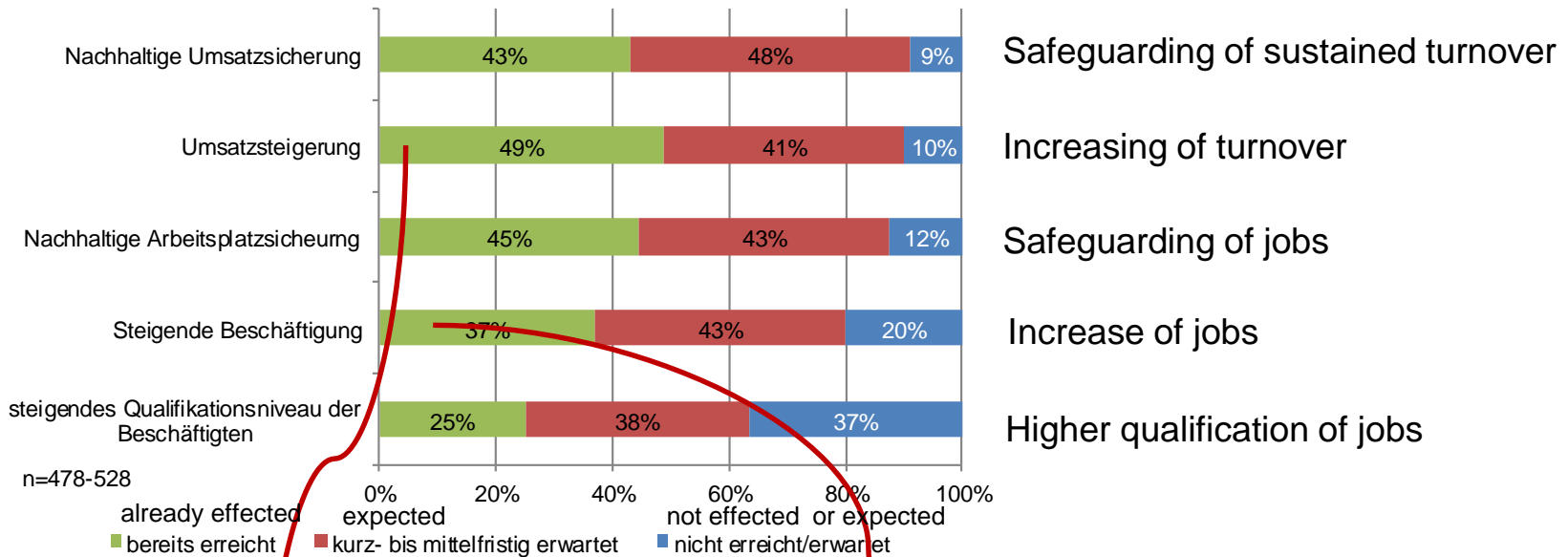
- **Multiple method approach**
  - qualitative
  - quantitative
  - primary data
  - secondary data
- **Perspective of groups involved (interviews + survey)**
  - supported SMEs
  - banks
  - aws
- **Analysis of detailed monitoring data (including rating data)**
- **Control group analysis**
  - Supported vs. non-supported twins
  - CRUCIAL: data base of research institute (annual accounts of nearly all Austrian companies)

# aws-guarantees provide multi impact because of a wide ranging functional chain

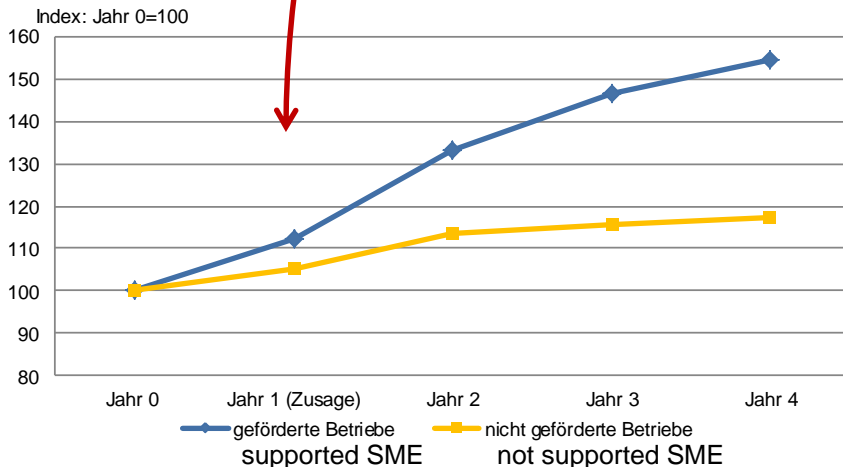




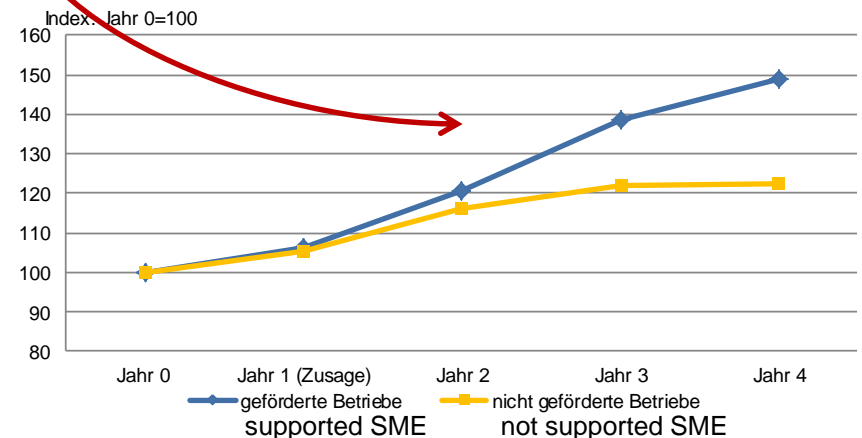
# aws guaranteed projects have positive effects on turnover and employment of the company



## Control Group Analysis (Annual Turnover)



## Control Group Analysis (Staff)



# aws guarantees have

InnovFin  
SME Guarantee



## Clear positive effect on the company's



**Investment**



**Innovation**



**Turnover**



**Employment**

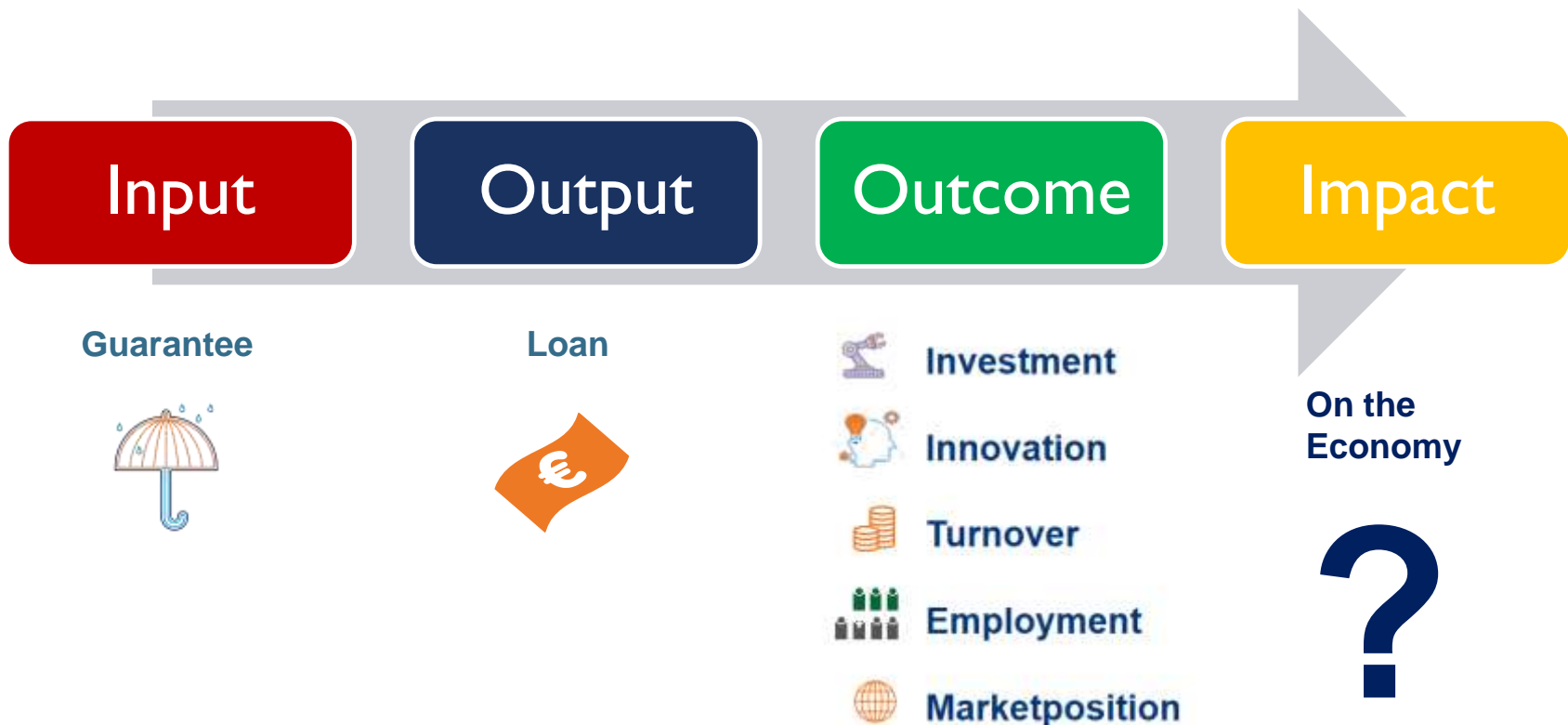


**Marketposition**

Companies with aws-guaranteed financing grow faster than not supported companies



# EXTERNAL IMPACT STUDIES



# Macroeconomic impact studies for German guarantee banks

Authors (region, period)	Finance additionality	Project additionality	Economic and fiscal benefits
<b>Hennecke et al. (2018), Hebebrand et al. (2017) (East Germany, 1991-2015)</b>	<b>63% (89%) add. loans to SMEs (start-ups)</b> <b>85% (78%) cheaper loans to SMEs (start-ups)</b>	<b>72-75% of credit sum add. investments</b> <b>70% of SMEs add. sales</b> <b>1-2 new jobs and 3-5 saved jobs per company</b>	<b>GDP-multiplier: 1.15-1.22</b> <b>Fiscal net benefit: &gt; 4 billion euro</b>
Brautzsch et al. (2015) (whole Germany, extended guarantee program 2008-2009)			GDP-multiplier: 1.3-1.5
Schmidt/Elkan (2010) (whole Germany, forecast 2009-2015)		71% (60%) add. investments at SMEs (start-ups) 31% add. sales	Growth of GDP, employment, state budget (7 times the costs of counter-guarantees)
Schmidt/Elkan (2006) (whole Germany, 1996-2002)	60-82% (95%) add. loans to SMEs (start-ups) 43% add. information	67% (72%) add. investments at SMEs (start-ups) 60% add. jobs 5 new jobs and 2.5 saved jobs per guarantee	Multipliers (scenario 75% project additionality): - investments: 2.14 - GDP: 3.2 - state budget: 0.65 - jobs: 12.66

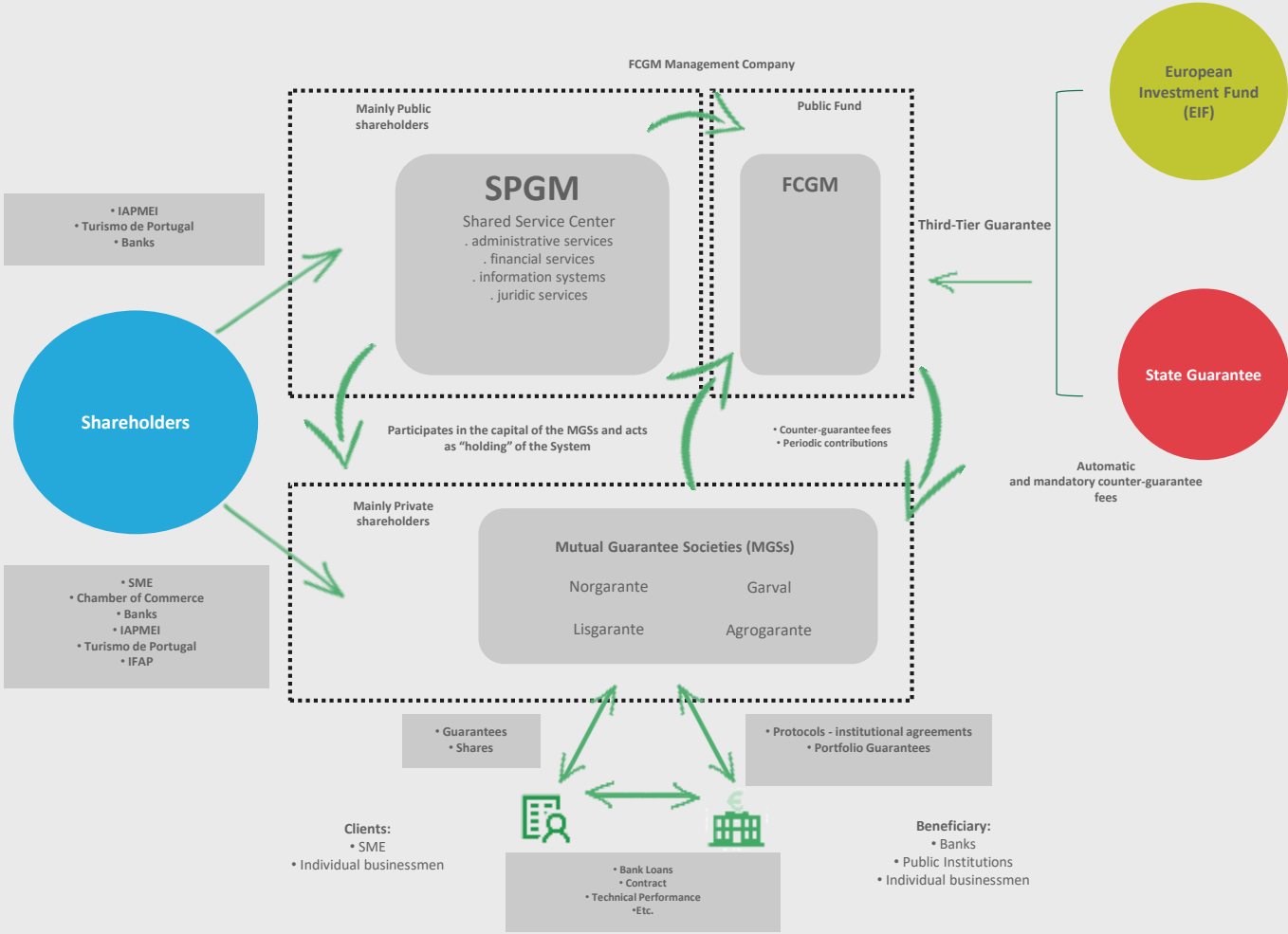
## Impact study 2017

### Data set and methodology

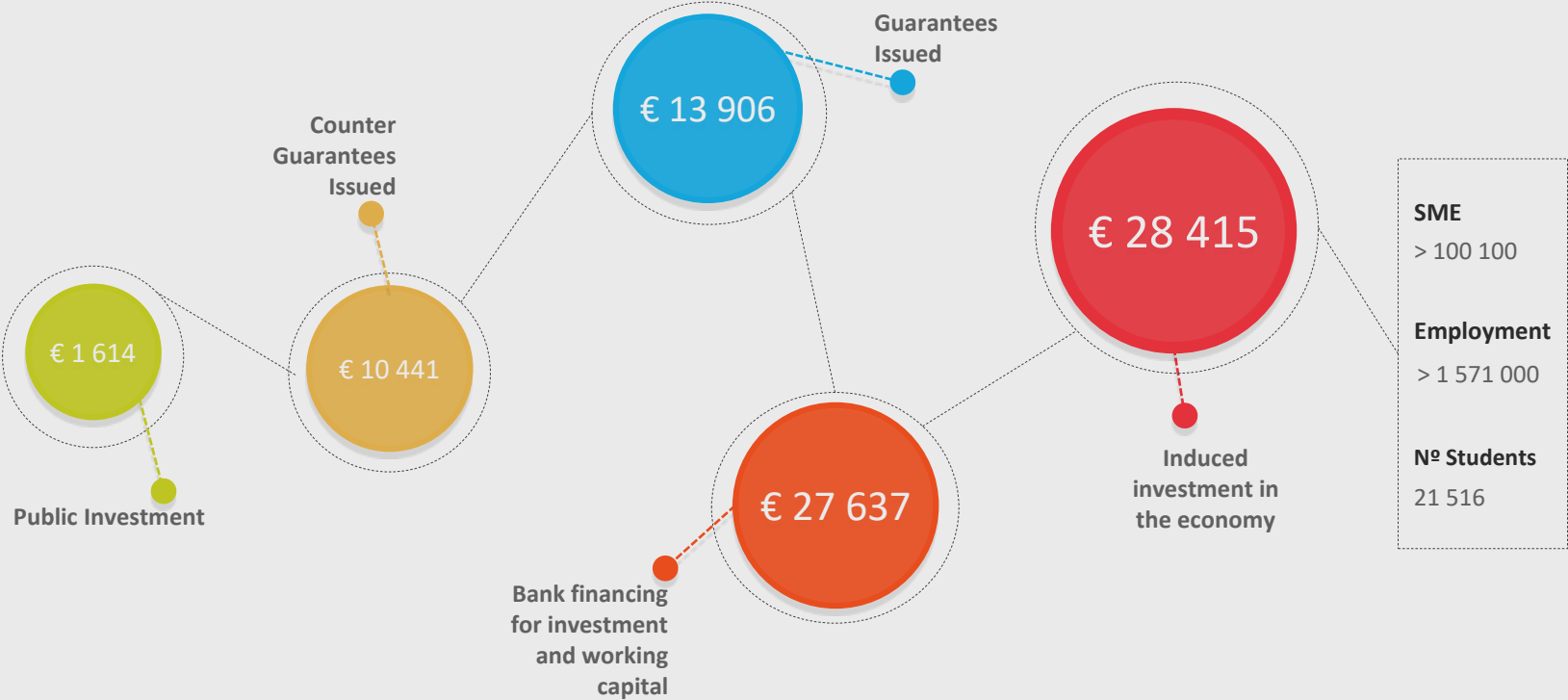
- **Internal data** from 5 guarantee banks in East Germany, 1991 – 2015: 40,000 loans of 32,000 firms
- **Survey** among **firms** having obtained a credit guarantee to assess finance and project additionality
- **Survey** among **banks** to assess finance additionality and windfall gains (finance done without guarantee)
- **Data about non-supported enterprises** from a credit bureau to compare firms with and without guarantees
- **Multipliers** from **macroeconomic models** to estimate the economic and fiscal net benefits
- Regional **national accounts** and **tax** data

# PORTUGUESE GUARANTEE SCHEME MODEL

The Portuguese Mutual Guarantee Scheme is a **public and private partnership**



# MULTIPLYING EFFECT OF FUND ALLOCATION

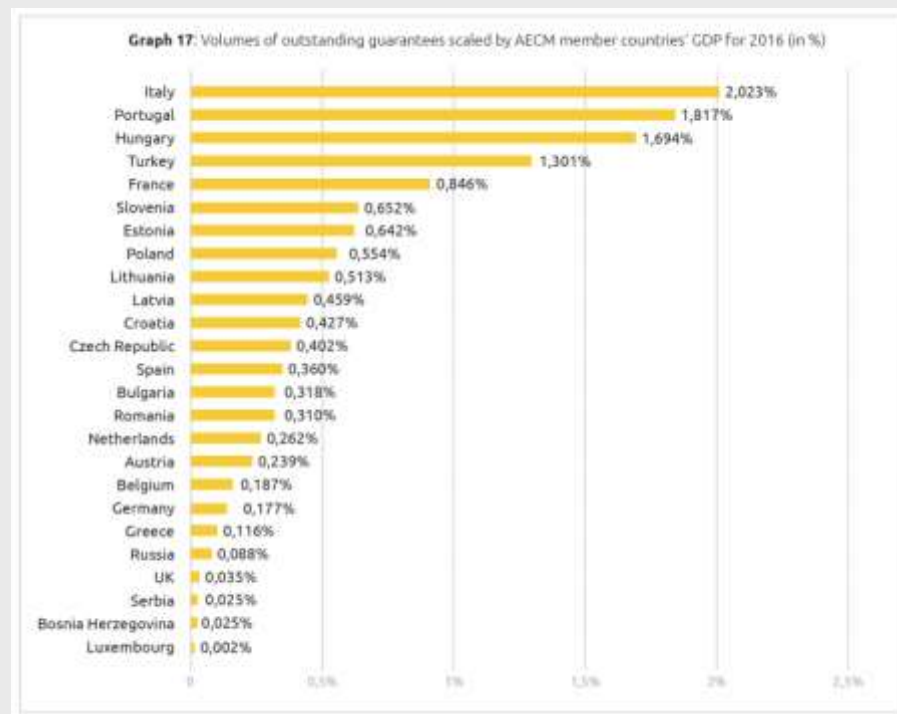
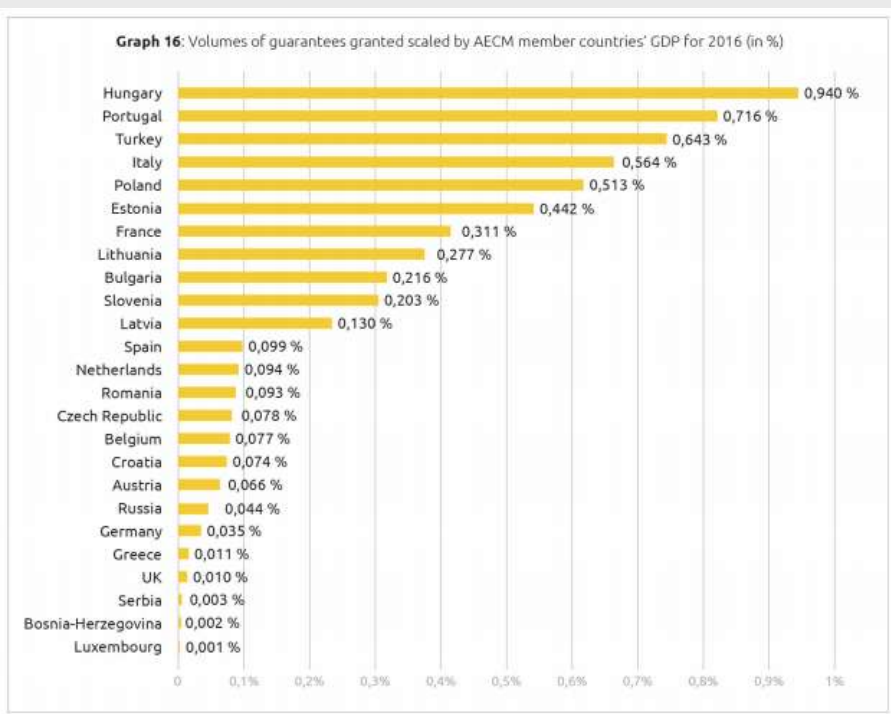


VALORES EM MILHÕES DE € EUROS  
DADOS A 31.12.2017

# ACCUMULATED ISSUED GUARANTEES AND OUTSTANDING GUARANTEES PORTFOLIO

Volume of guarantee activity compared to the value of economic activity

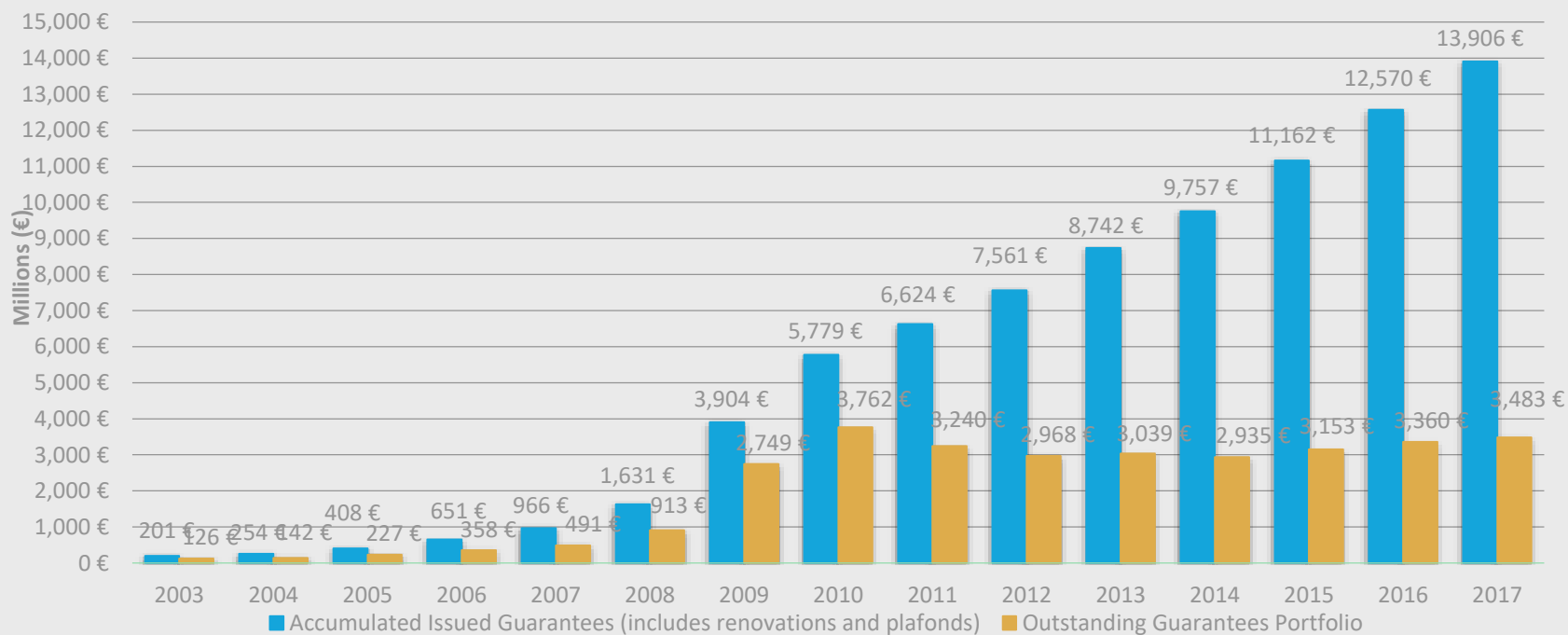
Volume of outstanding guarantees in portfolio scaled by GDP



From: [AECM facts & figures AECM members figures 2016 may 2017](#)



# ACCUMULATED ISSUED GUARANTEES AND OUTSTANDING GUARANTEES PORTFOLIO



# The Portuguese evaluation experience

## Four rounds

- 2008: 2000-2007
- 2011: 2000-2009
- 2016: 2009-2014
- Ongoing: 2011-2016

## Questions

### **Impact on users of mutual guarantees**

- Financial additionality: Cost and amount of debt
- Economic additionality: Investment and exports

### **Impact on the aggregate Portuguese economy**

- GDP
- Employment



# The most recent evaluation (2016)

## Data

- SPGM: list of guarantees and its beneficiaries
- BvD: accounts for every Portuguese firm
- Sample: 168 thousand firms

## Methods

- Micro effects: econometrics, differences-in-differences
- Macro effects: input-output analysis

## Results

### **Impact on users of mutual guarantees**

- Average cost of debt down by 0.5 p.p. (60 million €)
- Debt up by 5 p.p. (3 billion €)
- Investment up by 4.3 p.p. (2.6 billion €)
- Small but positive impact on exports

### **Impact on the aggregate Portuguese economy**

- GDP up by 0.3 to 0.8%, depending





On 27.09.17 the founding charter of the Ibero-American guarantee network association was signed in Bogotá (Colombia)



Open to new incorporations of both partners for the guarantee activity, as well as adhered and / or strategic partners from which the activity of REGAR will be financed and financed.

The Association will be governed by its Statutes approved with date of December 5, 2017 in the city of Porto, Portugal, according to registration with the Number 233-A of the Notary Public of Ana Filipa Ferreira Maio de Menezes Falcão, for its Regulation of Regime Internal and by all those rules that are applicable to it.



On 05.12.17 it was constituted in Porto (Portugal) with 10 Founding Members from seven countries

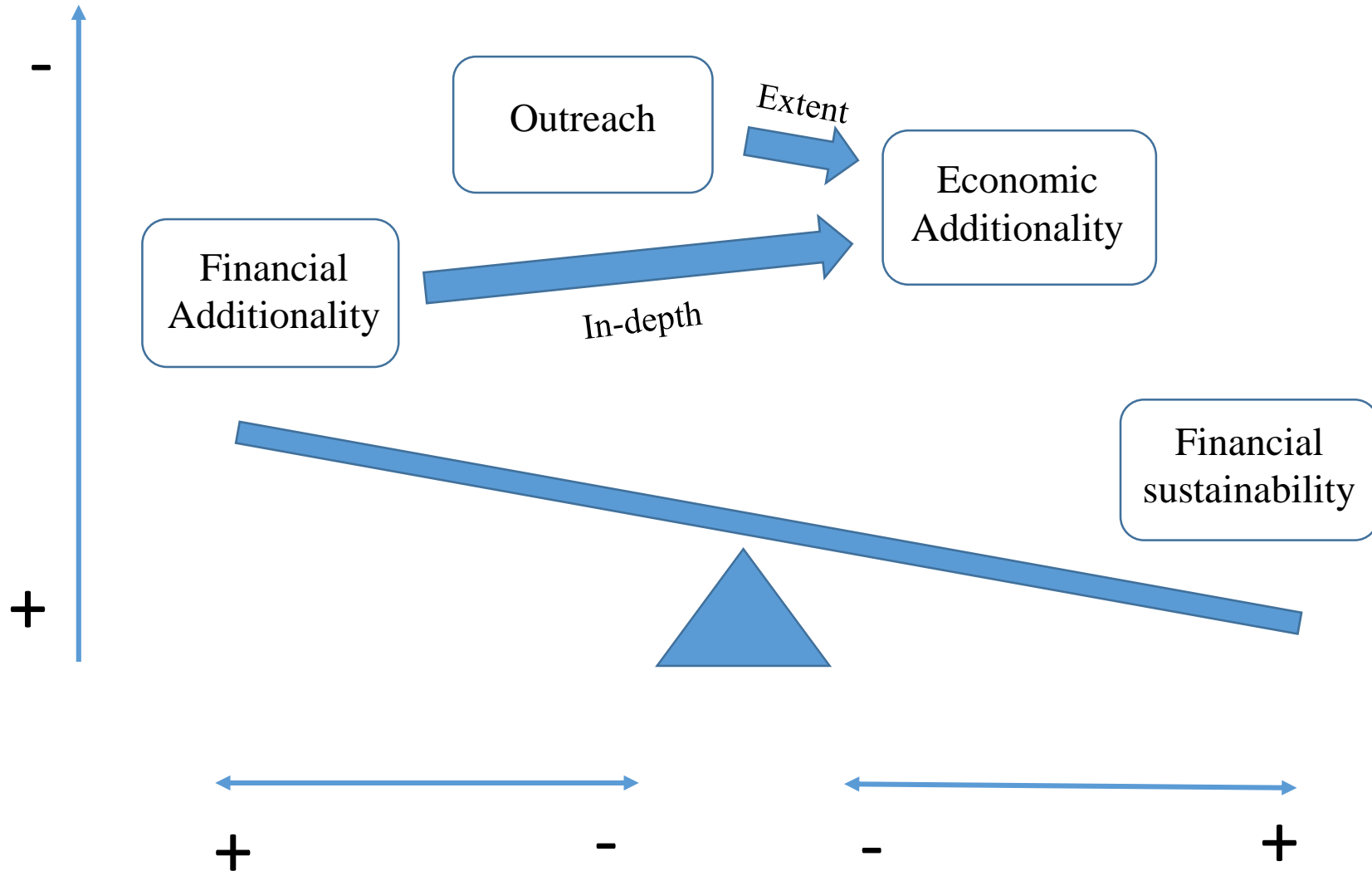
Argentina



## Honor Associates



# ADDITIONALITY WHAT?



# FINANCIAL & ECONOMIC ADDITIONALITY & MACROECONOMIC IMPACT

# ADDITIONALITY WHAT?

**Different approaches to public policy: The guarantee instrument of public policy**  
What level? What objectives?

**Heterogeneous guarantee operators**

*Exceptional or permanent?*

**Macro level**

- ✓ Market does not ensure an efficient credit to economy
- ✓ The international rules of the financial system produce unintended negative effects on the financing of SMEs
- ✓ Malfunction of the institutions
- ✓ Reduction of banking activities in the context of the crisis

**Intermediate level**

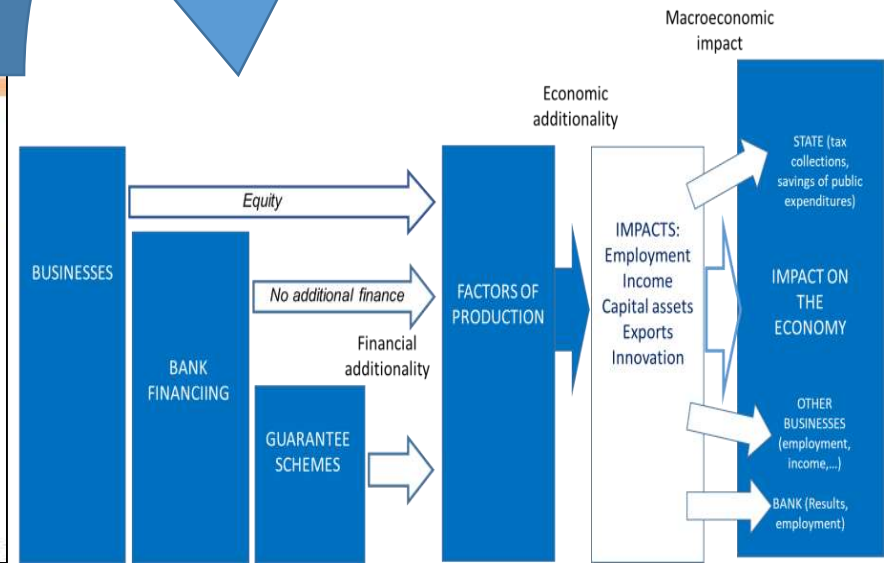
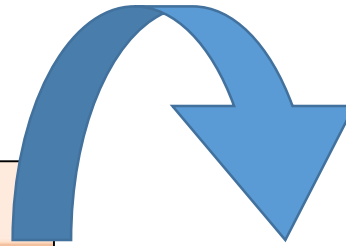
- ✓ Incomplete offer in less attractive segments
- ✓ Disadvantaged regions
- ✓ Weak sectors
- ✓ Emerging activities

**Micro level**

- ✓ Needs of improvement in credit conditions
- ✓ Access Factor Dimension - microcredit
- ✓ Lifecycle phase - entrepreneurship - growth
- ✓ Nature of the business - intangible assets
- ✓ Profile of the operation - medium-long term

**The right access to credit**

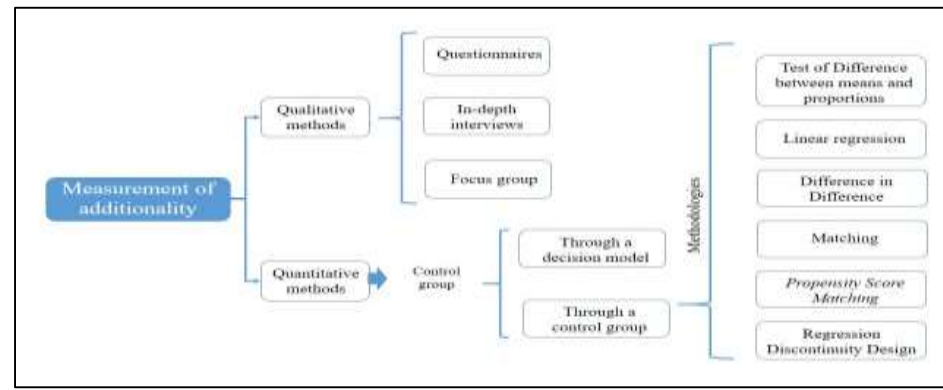
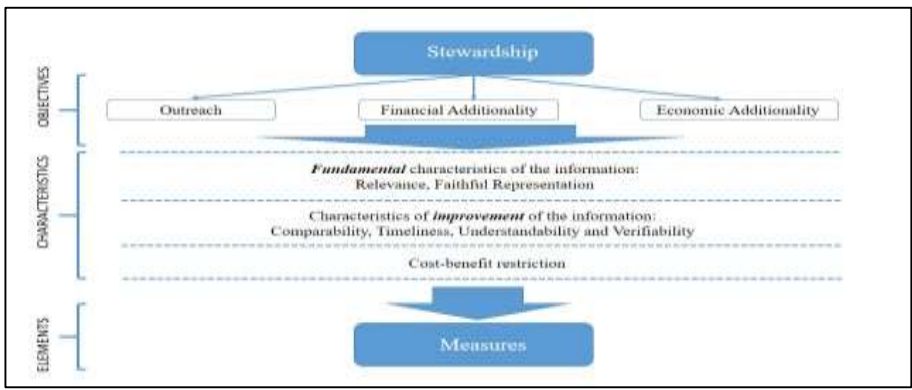
© Pablo Pombo



Approve concepts

Data access

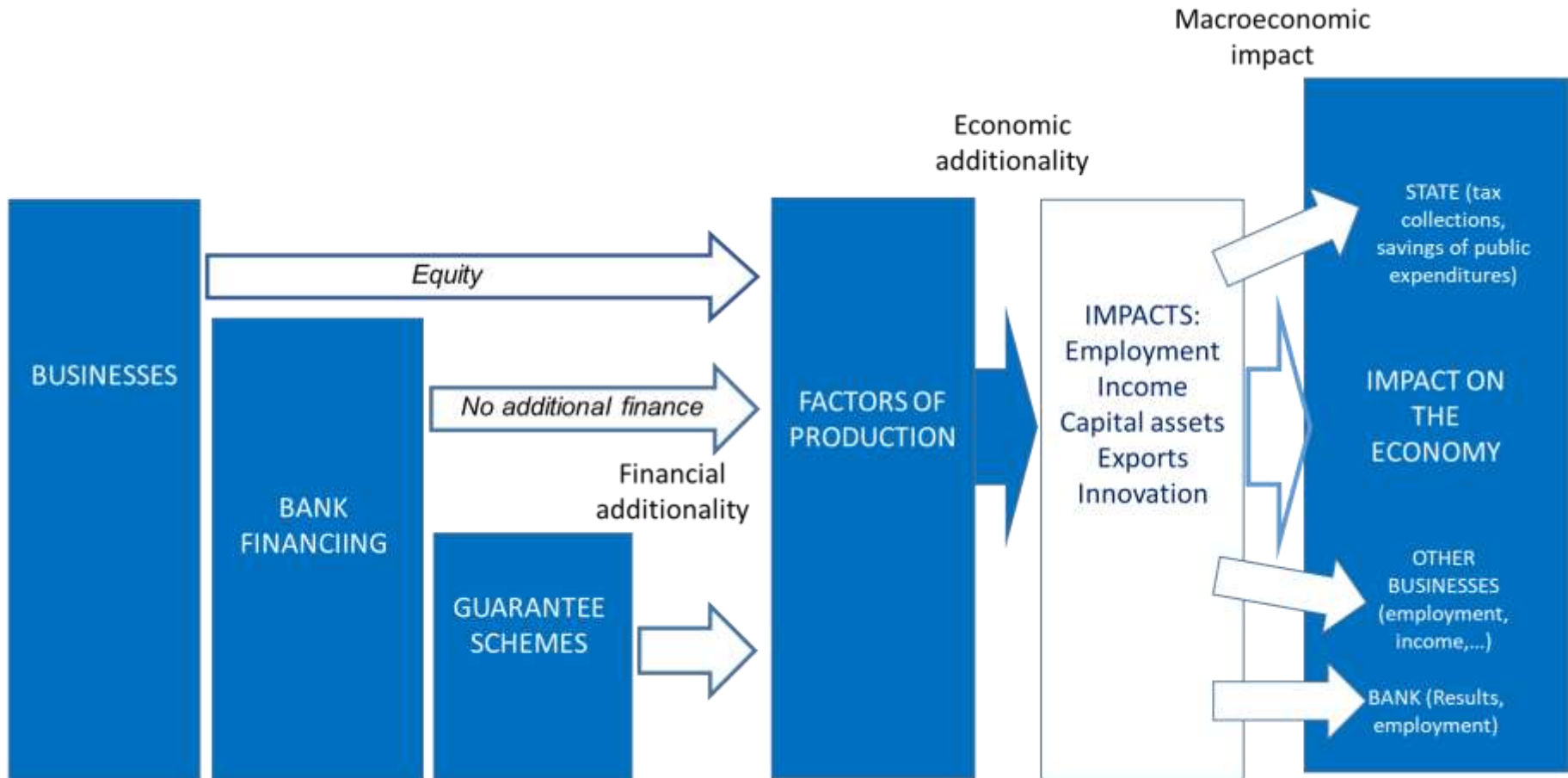
Measurement methodologies



## IMPACT EVALUATIONS OF CGSs IN LATIN AMERICA

PAIS / ENTE	INFORME DE EVALUACION	REALIZACION	ALCANCE / AMBITO	METODOLOGIA
Argentina SGRs	CASFOG & ECONWES (2017) "Additionality Report: the Credit Guarantee System in Argentina: Reciprocal Guarantee Companies and Provincial Guarantee Funds"	ECONWES Consultant	Financial Additionality Economic Additionality (sales & Employment), Fiscal impact	Econometric approach Regressions
Chile FOGAPE	Larrain & Quiroz (2006) "Study for the guarantee fund of small entrepreneurs" Benavente, JM (2006) "FOGAPE: an economic analysis"	Chile University	Financial Additionality Economic Additionality (Sales and results)	Matching methods
Chile FOGAPE	Mullins, W., Toro, P. (2017) "Additional report from FOGAPE"	1 University of Maryland 2 Central Bank of Chile	Financial additionality & Increase in the number or bank relationship	Empirical strategy (Fuzzy Regression Discontinuity): allows to obtain an adequate control group for the treated companies (which obtained the guarantee).
Chile IGRs	Quiroz & Asociados (2017) "Impact of IGRs on mipyme financing"	Quiroz & Asociados Chile University	Effect on divisibility and mobility and intensive financial adtionality	Quantitative
Colombia FNG	Arráiz, I., Meléndez, M., Stucchi, R. (2014): "Partial credit guarantees and firm performance: evidence from Colombia"	BID	Economic Additionality (Employment, Income & Exports) 1997-2007	DID / PSM econometric
México Guarantee program of the Secretary of Economy	Benavente, JM (2006), "Impact evaluation BBVA-Bancomer business card guarantee programs"	Chile University Mexico University	Economic Additionality (customer & employment),	Difference Difference Estimator - Matching





### Concepts & Objectives:

- Financial Sustainability (FS)
- Outreach
- Financial Additionality (FA)
- Economic Additionality (EA)

### Level of decision:

- **Tactical decisions:** Management of FS, Outreach & FA?
- **Strategical decisions:**
  - *Identification of the credit market failures*
  - *Assessment of the social benefits if credit market failure is solved*

Outreach & FA  EA

### Methods for FA & EA:

- Decision support tools
- Impact evaluation analysis (micro & macro)
- Qualitative analysis (cost-benefit restriction)

**Ex ante FA** measures whether a specific credit would have been rejected without the CGS guarantee

**Ex post FA** measures the volume of incremental credit or the better conditions of access to credit (extensive & intensive FA)

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