Toolkit for Impact Evaluation of Public Credit Guarantee Schemes for SMEs

Draft Consultative Document

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Background

- In **2015** a Task Force headed by the World Bank and the FIRST Initiative adopted the ***Principles for the Design, Implementation and Evaluation of Public Credit Guarantee Schemes for SMEs***. Task Force members included:
    - Arab Monetary Fund (AMF);
    - Asian Credit Supplementation Institution Confederation (ACSIC);
    - Association of African Development Finance Institutions (AADFI);
    - European Association of Mutual Guarantee Societies (AECM);
    - Ibero-American Guarantee Network (REGAR); and
    - Institute of International Finance (IIF)

- Principles are a set of good practices along **4 dimensions**
    - Legal and Regulatory Framework
    - Corporate Governance and Risk Management
    - Operational Framework
    - Monitoring and Evaluation

Impact Assessments for Credit Guarantee Schemes (CGS)

Following a 2016 survey of CGS practices for self-reporting of observance of the Principles, one area that emerged as needing further development is **evaluation.**

- CGS can play an important role but poor design and implementation have significant consequences
  - Limited value
  - Costly
  - Inefficient
  - Create Distortions

- Principle 16 – calls for systematic and periodic evaluation that should be publicly disclosed

- Apparent that the objective, scope, and tools of impact vary widely

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What is Impact Evaluation?

Evaluating the impact of a CGS involves evaluating the changes in the outcomes of interest that can be attributed to the CGS itself.

- *Outcomes of interest are specific to each CGS but almost always fall within the three main categories of <u>outreach, additionality and financial sustainability</u>*
- *Outcomes of interest are the key determinants of the evaluation questions that drive the impact assessment*

The Toolkit is intended to provide guidance to CGS managers, policymakers and stakeholders on how to design and implement effective and efficient CGS system.

The Need for Impact Evaluation

- To account for use of public resources

- Measure achievement of the CGS policy objectives

- Improve performance

- To encourage impact evaluation to become a fundamental component of any public CGS

- Not necessarily a cost-benefit analysis

Purpose of the Toolkit

- To identify a set of <u>uniform methodologies for assessing the financial and economic impact</u> of public CGS as systematically and objectively as possible

- To ensure *comparability* across time and countries; a global reference

- Measure whether the CGS is achieving its intended results

- Toolkit reviews a variety of existing impact evaluation techniques

- Proposes a **selection process** – rigorous, credible but also practical, straightforward and relatively inexpensive

Structure of the Toolkit

Comprises two parts:

1. Overview of impact evaluation and introduces the different modalities
   - Provides guidance to select the modality to the question the evaluation is trying to answer
   - Advantages and disadvantages of different methodologies

2. Roadmap for designing and implementing a CGS Evaluation
   - Guidance on the evaluation questions that form basis of evaluation, a hierarchy of appropriate methods and the operational process

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Analytical Methods

Two basic options – with advantages/disadvantages

- Quantitative – comparison of outcomes between groups receiving the CGS and some "control group"

- Qualitative – commonly based on opinions of program participants and stakeholders about the policy, successes and limitations

The Toolkit includes elements of both methods with emphasis on the methodologies for the quantitative approach – issues on data availability, collection and the how to identify "control group"

The Counterfactual Problem

Biggest challenge with impact evaluation is **the causal inference problem**

- Main objective is to assess the causal effect of the policy on the outcome of interest
- In almost all CGS SMEs the question is the difference in the outcome of interest with or without the guarantee
- Yet can't measure the same firm in two different states at the same time

"Counterfactual" Problem – how to delineate the control group

Solving the counterfactual problem requires identifying a duplicate that is close to the treatment group
- Who has the data on control group?
- Costs of the data?
- Observability?

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Toolkit Techniques to Identify Control Group

Experimental approach –
- randomized control trials (RCT) – requires larger pool and need data from before the program's beginning, and participation must be easy
- While the "Gold standard" it tends to be costly

Non-Experimental approaches –
- regression discontinuity design (RDD) – need a continuous eligibility index – comparing firms just above and below the line of the selection criteria due to similarities
- Can be used as a retrospective evaluation
  RDD estimates average impact around the eligibility cutoff

Propensity score matching – requires large data set

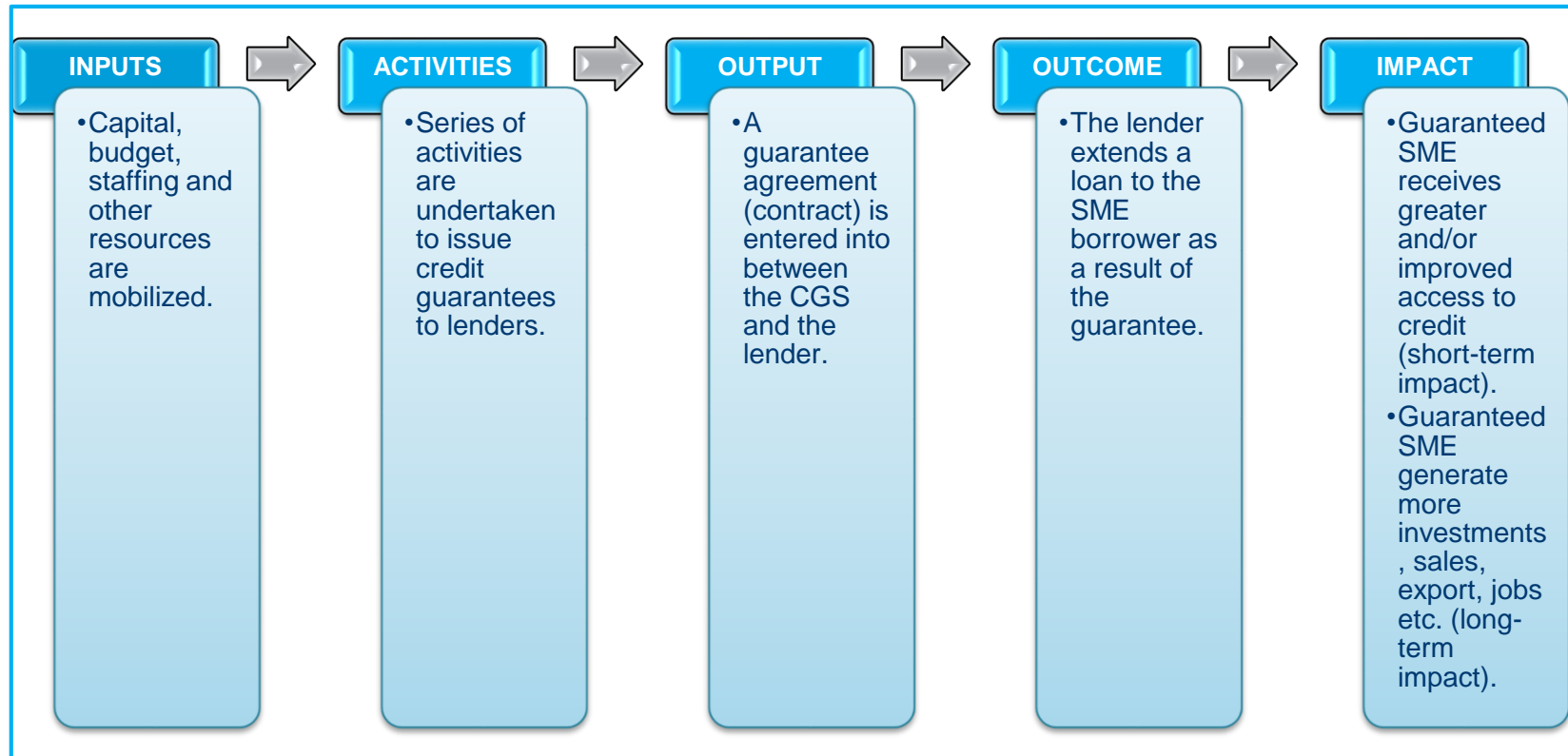Difference-in-Difference – measures outcomes of interest over time – requires baseline data

Implementing Evaluation

The starting point is formulating the set of study questions tailored to the public policy interest:

- From the mandate and policy objectives – identify the outcomes of interest

  - *What is the effect of the CGS on access to finance for SMEs?*

  - *What is the effect of the CGS on economic development?*

Results Chain for CGS

INPUTS		ACTIVITIES		OUTPUT		OUTCOME		IMPACT
•Capital, budget, staffing and other resources are mobilized.	⇒	•Series of activities are undertaken to issue credit guarantees to lenders.	⇒	•A guarantee agreement (contract) is entered into between the CGS and the lender.	⇒	•The lender extends a loan to the SME borrower as a result of the guarantee.	⇒	•Guaranteed SME receives greater and/or improved access to credit (short-term impact). •Guaranteed SME generate more investments, sales, export, jobs etc. (long-term impact).

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The Selecting an Impact Evaluation Method

The key to estimating causal impact is finding a valid control group.

The overarching principle is that the operational rules of the CGS determine the evaluation methodology and not vice versa:

- targeting rules

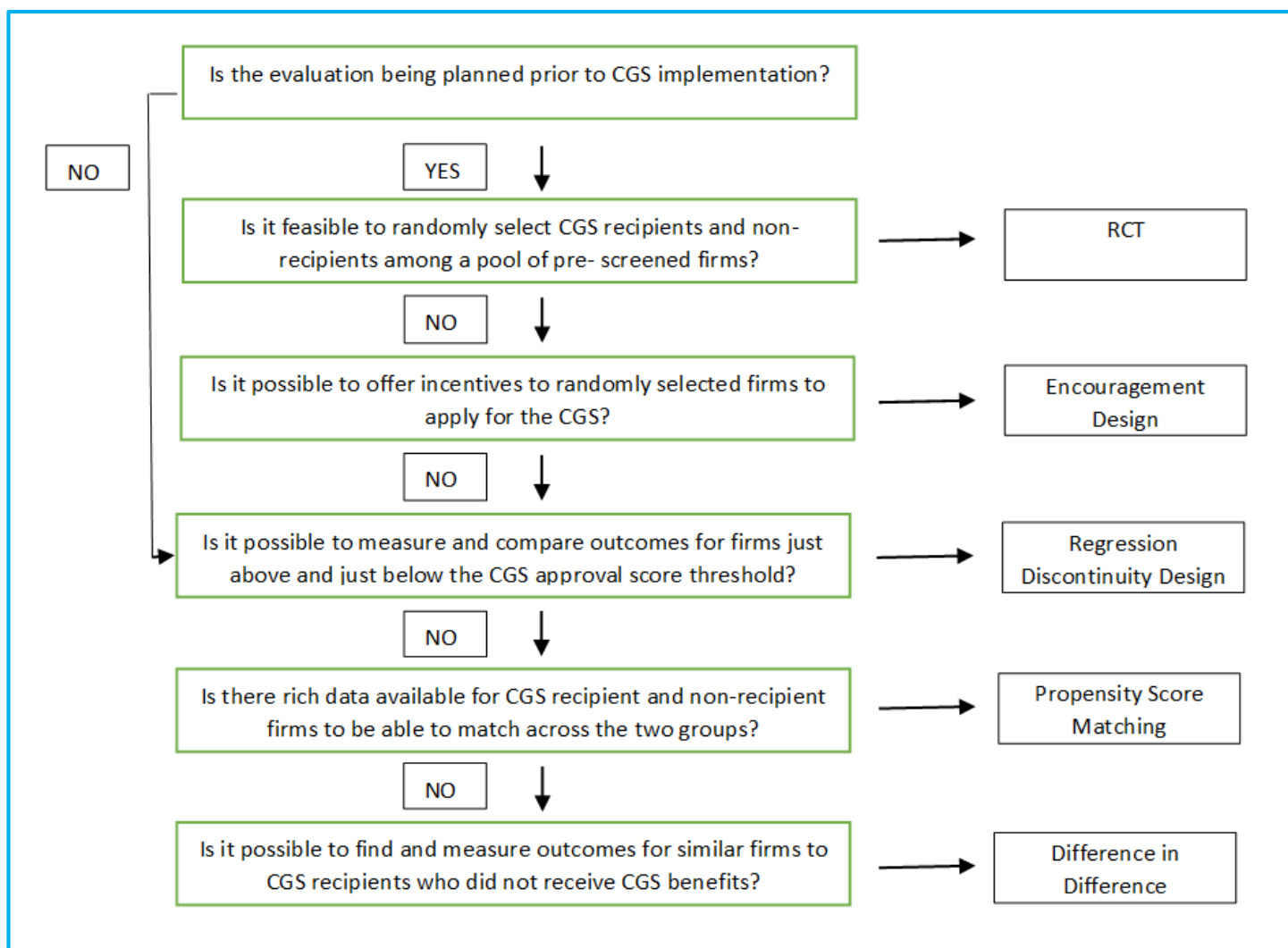- financial capital

- timing

Hierarchy of Evaluation Methods

Operational Rules suggest the hierarchy

For prospective evaluations – RCT is the method of choice; ED appropriate where CGS is underused by firms

Retrospective evaluations – RDD – based on thresholds/continuous eligibility rules

DID/PSM – where RDD not feasible, usually because of limited data availability around cutoff point – but require baseline data

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Evaluation Methodology Decision Matrix

Is the evaluation being planned prior to CGS implementation?

NO

YES

Is it feasible to randomly select CGS recipients and non-recipients among a pool of pre- screened firms? → RCT

NO

Is it possible to offer incentives to randomly selected firms to apply for the CGS? → Encouragement Design

NO

Is it possible to measure and compare outcomes for firms just above and just below the CGS approval score threshold? → Regression Discontinuity Design

NO

Is there rich data available for CGS recipient and non-recipient firms to be able to match across the two groups? → Propensity Score Matching

NO

Is it possible to find and measure outcomes for similar firms to CGS recipients who did not receive CGS benefits? → Difference in Difference

Data and Sampling

Next step – determine the data needed and sample required

- Questions of how to collect data from non-recipients – access/cost and sufficiency issues

- Challenge with portfolio approach – where CGS does not have direct relationship with borrower – need contractual provisions with lenders

- Complement monitoring data with administrative data or other data sources (public agencies and private actors)

- Recommend that CGS explore options to <u>systematically access and obtain relevant administrative data</u> in a <u>standardized format</u>; alternative is survey data

- Supplement with qualitative data

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Setting Up The Evaluation Team

- *Credibility of impact evaluation depends on quality of data analysis*

- All relevant stakeholders should work together – government, CGS management, and evaluator

- External or internal evaluator?

- Toolkit recommends that CGSs establish independent evaluation units reporting directly to the board of directors

  - Mix of CGS staff, university academics, local/international consultants

  - Responsible for evaluation plan, guidelines, impact measures, minimum data requirements and confidentiality

Time and Budget/Dissemination

- **Time and Budget -** when can results be measured meaningfully?
  - Fit within CGS implementation cycle
  - Need to account for time after guarantee is granted for results to become apparent
  - Toolkit recommends, generally, to measure financial additionality after 1-2 years and economic additionality after 2-3 years
  - Timing should also inform budgets, program expansions and policy decisions
  - Budgeting – generally a small fraction of the overall CGS budget; largest cost is data collection. Source of budget varies.

- **Production and Dissemination**
  - Main impact evaluation report should present the results and provide answer to all policy questions; need a well-thought dissemination plan to all stakeholders

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Public consultation

- Public consultation is an integral element of the Task Force's process.

- Consultative Document is available for comments through September 30, 2017 on the World Bank Groups' website.

- For further information, contact:

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Thank You