



How Evaluation can Help the Design of S&T Policies

Design And Evaluation of Innovation Policy in Developing Countries
Montevideo, April 3 2009

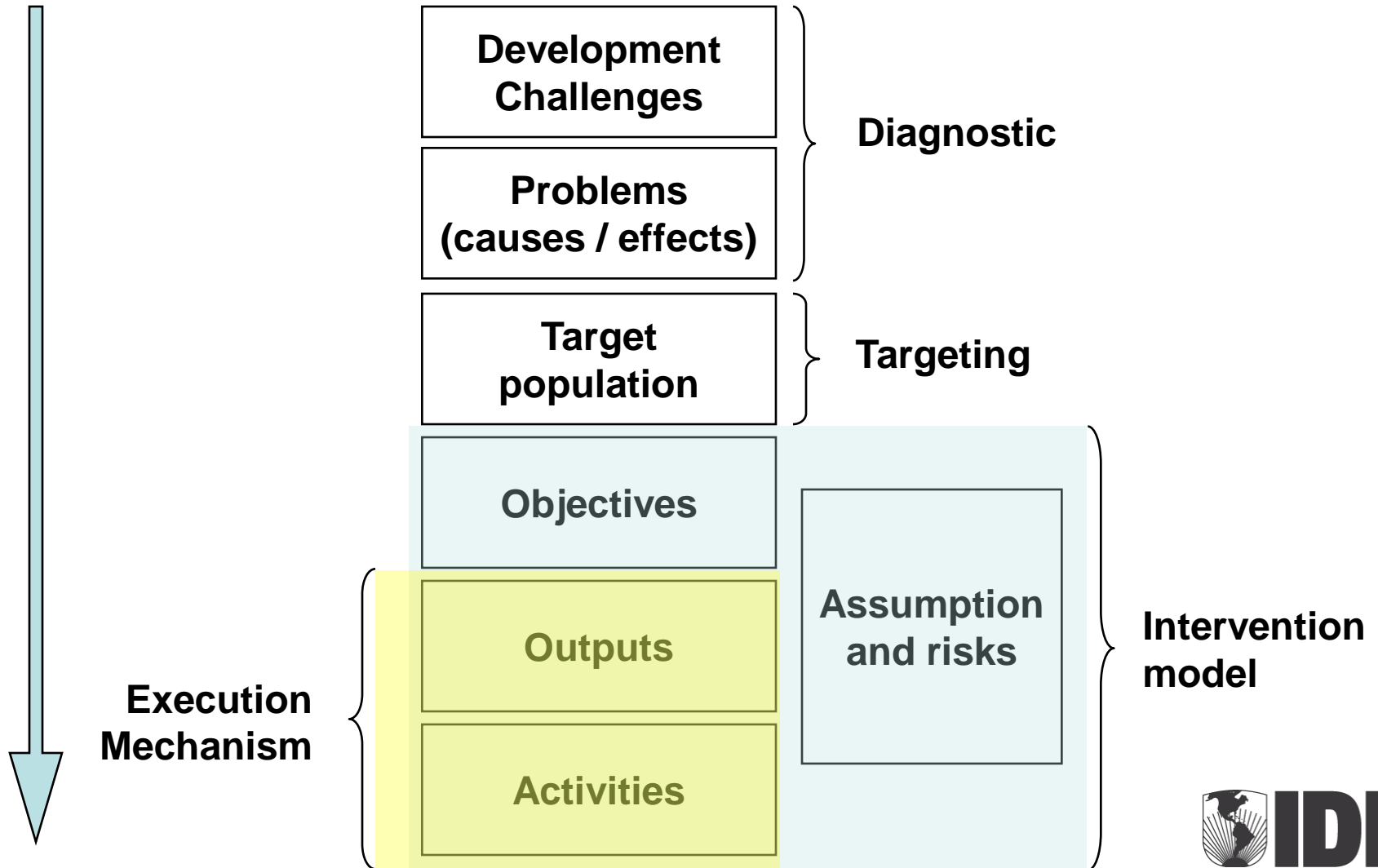
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Lecture Overview

- I. Ex-ante – Project's evaluability
 1. The design logic
 2. The evaluation logic
 3. Evaluability as quality control of project design
- II. Ex-post – Evaluation's inputs for the project design
 1. Introductory remarks
 2. Estimating the potential benefit of the project
 3. Targeting the project
 4. Selecting the instruments
 5. Dimensioning the intervention
 6. Potential externalities

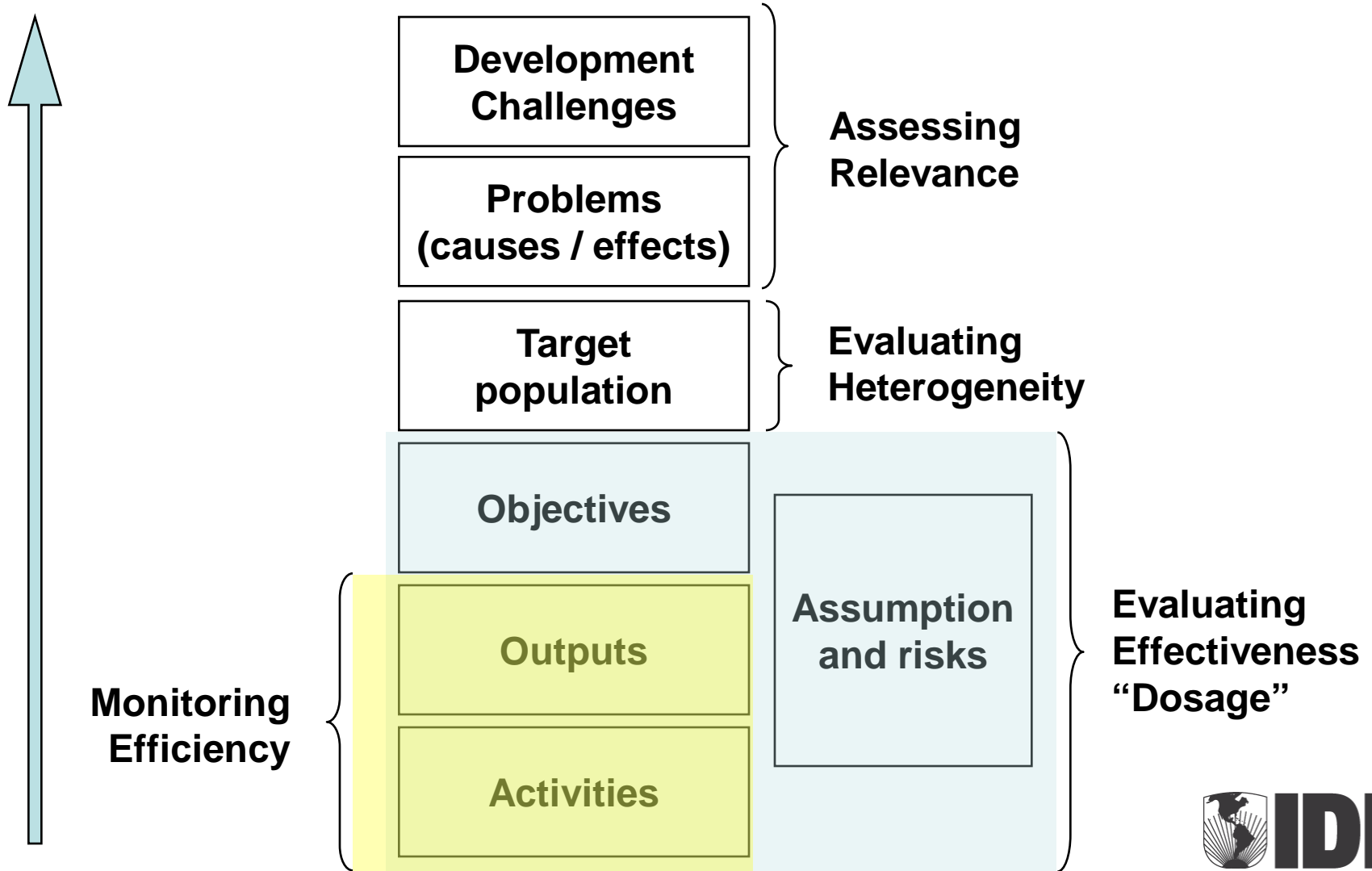
The Design logic



The Design logic

<u>Objectives & activities</u>	<u>Indicators</u>	<u>Means of verification</u>	<u>Assumptions</u>
Goal (Impact)			
Purpose/ (Outcome)			
Outputs			
Activities	Means	Cost	
			Pre-conditions

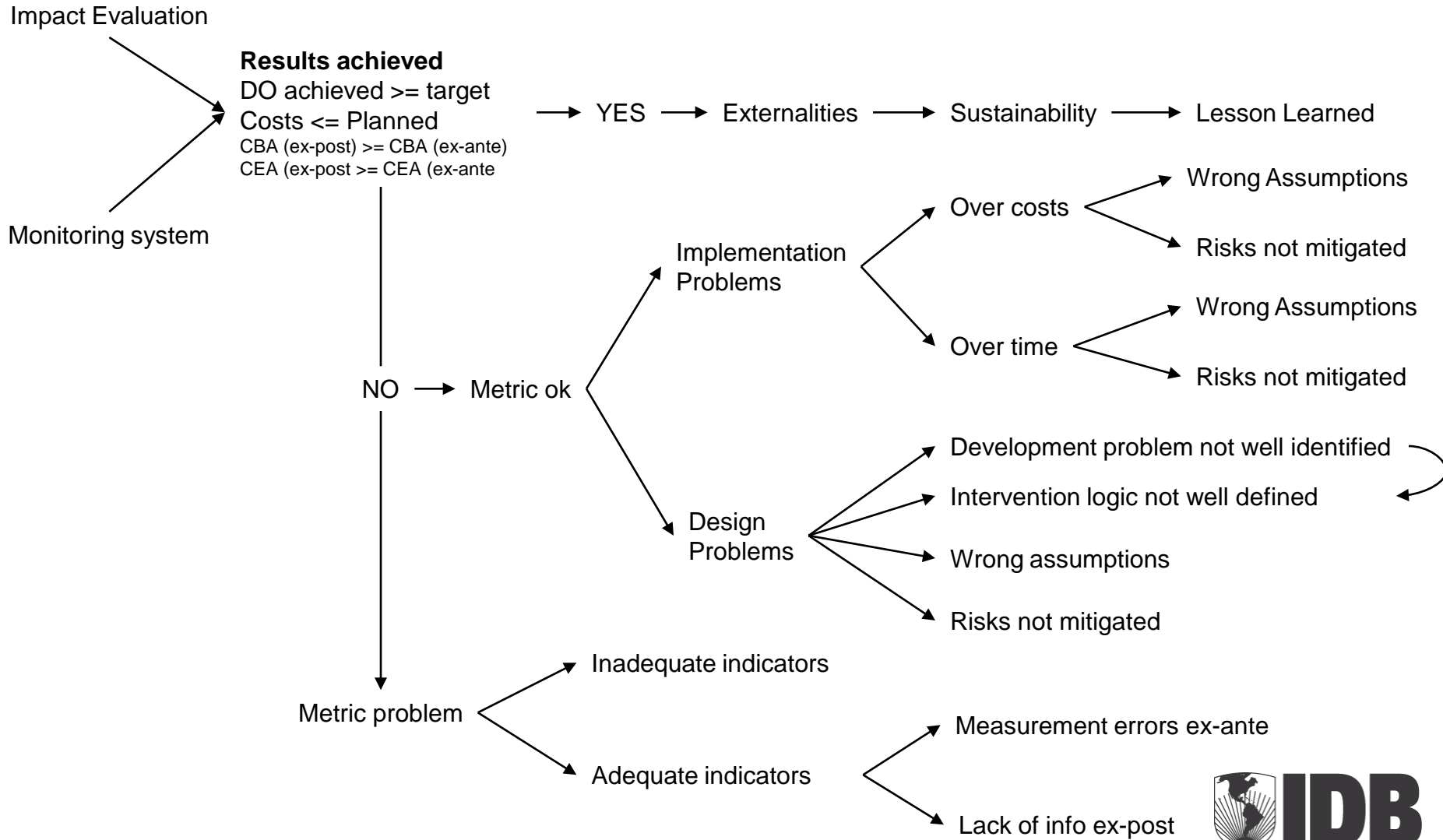
The Evaluation logic



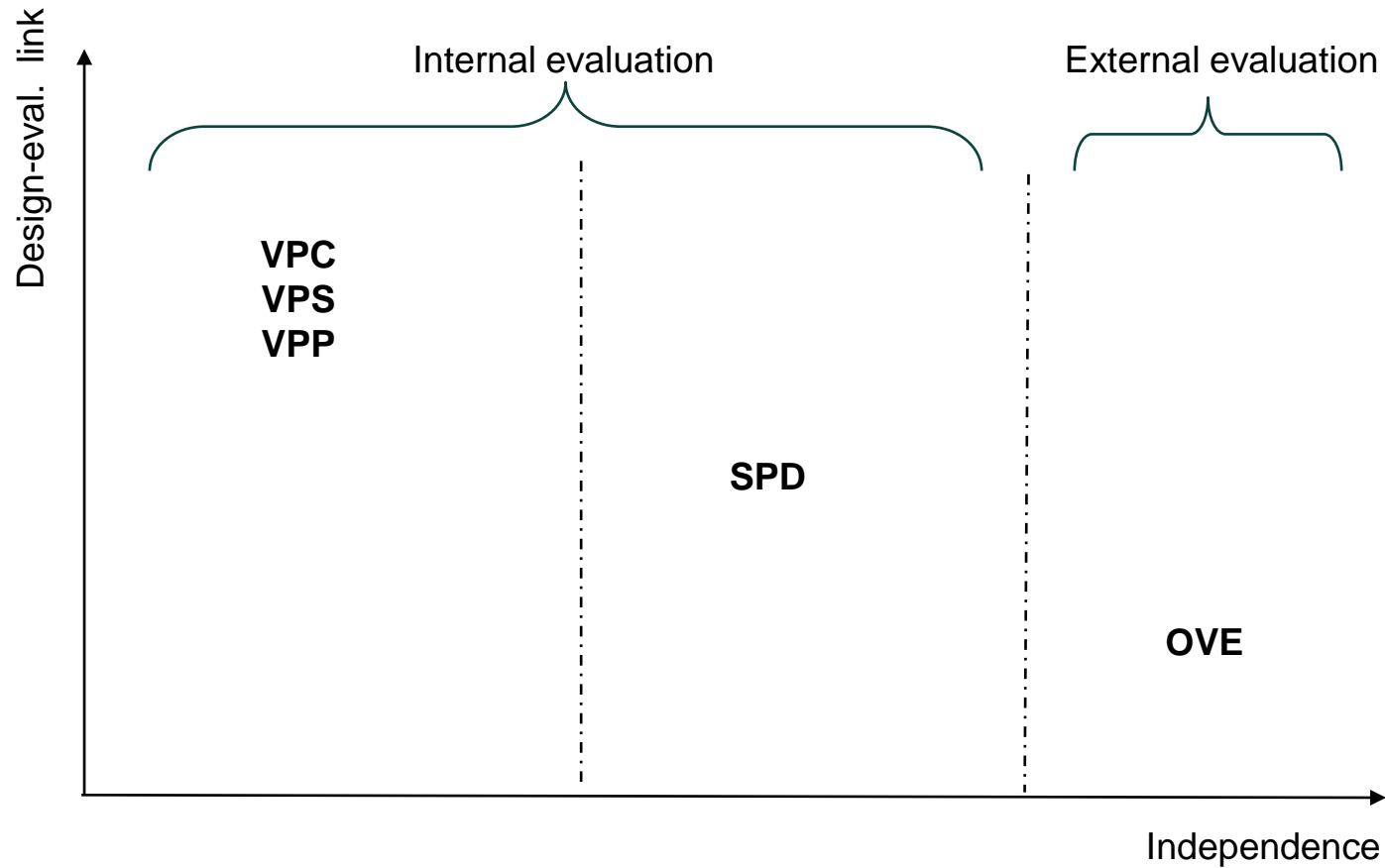
Evaluability exercise during the design

- Adopt ex-ante an evaluation logic
- Quality control on the project's metric (indicators and means of verification) needed to go through the M&E stages
- Overall quality check of the project → a project that cannot be evaluated is most likely poorly designed
 - A “innovating” project needs a even stronger design

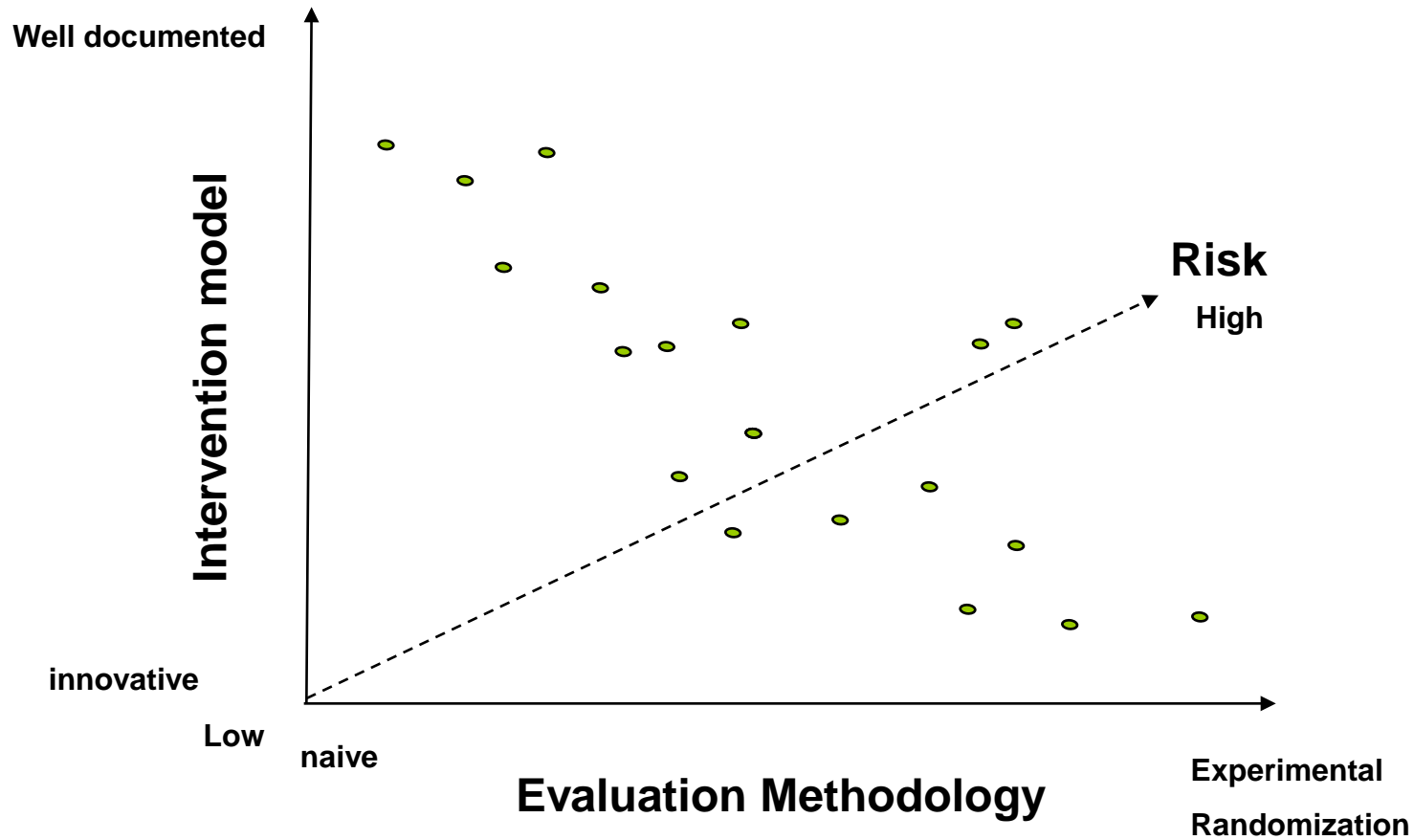
Evaluation process at project completion



Institutionalization of the Evaluation in the IDB



Institutionalization of the Evaluation in the IDB



Ex-post: Introductory remarks

- To use an impact evaluation for the design of a new project, the two projects have to be comparable in terms of:
 - Problems they are tackling
 - Intervention model they adopt
 - Targeting
 - Dimensioning

Why we need impact evaluation?

Estimate the **causal relationship** between the public intervention and the results achieved



Attribute the benefit of the results



Estimate the **cost/benefit** and the **cost/effectiveness** of public policies



Effectively **allocate** public resources

Why we need impact evaluation for policy design

- Identify what works and what does not work and test different intervention model
- Compute the potential benefit of the project
- Define the targeting of the project
- Selecting among different mechanisms
- Dimensioning the input to be provided
- Estimate potential externalities

Estimating the potential benefit of the project

- Replicate what works and terminate what does not work
- Take advantage of pilot projects
- To compute your CBA or CEA we need an estimation of the potential benefits:
 - Micro-simulations → precise structural model
 - ATE from impact evaluation

The replication of the CCT projects

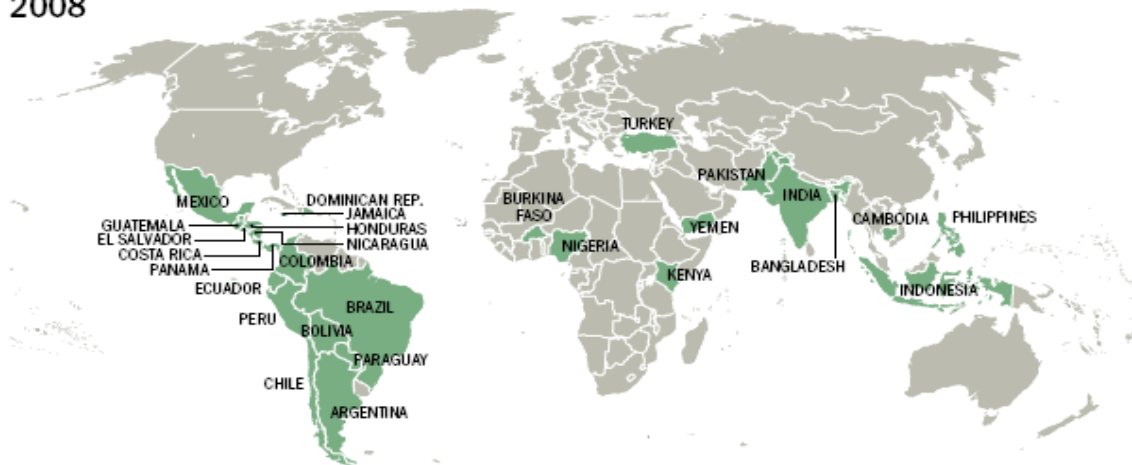
1997



“Credible impact evaluations are global public good” (Duflo & Kremer)

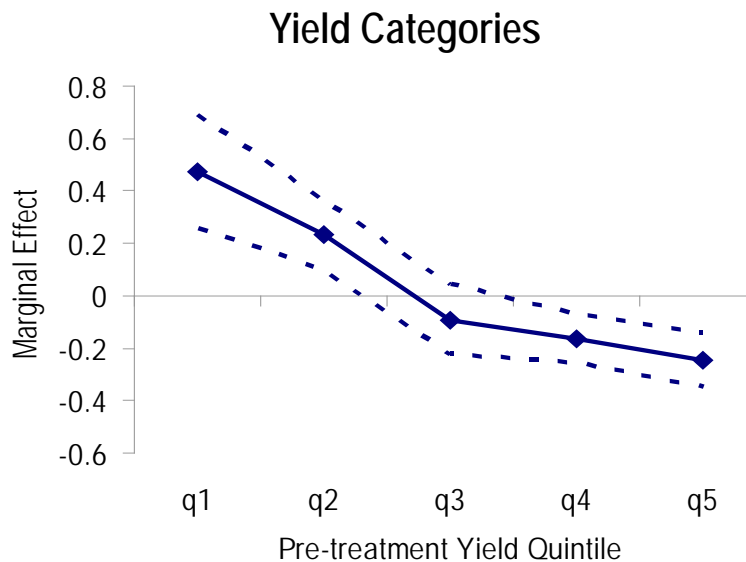
They allow to replicate what works (example CCT) and terminate what does not work

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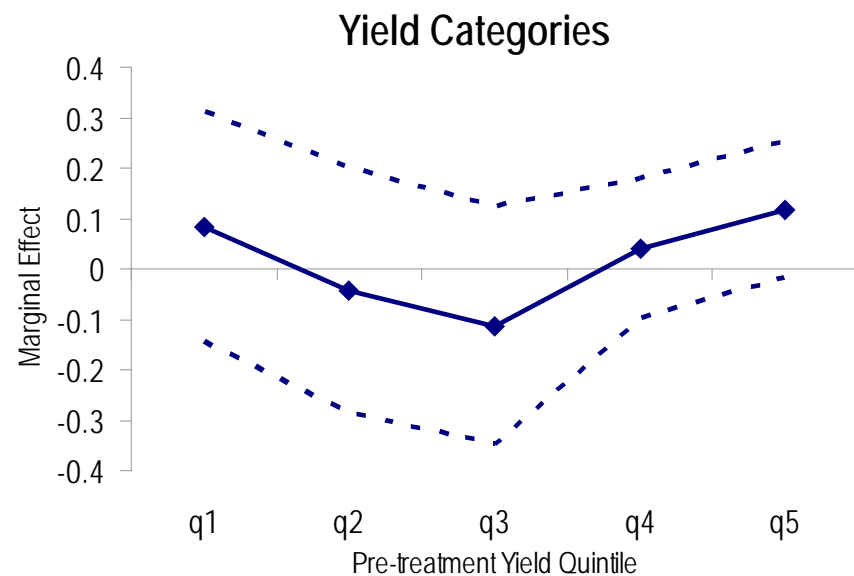


Targeting the project

- Identification of the target population:
 - Diagnostic analysis
 - Previous impact evaluations: everybody should get what he needs (example LPP and PROSAP)



Impact of productivity



Impact on new varieties

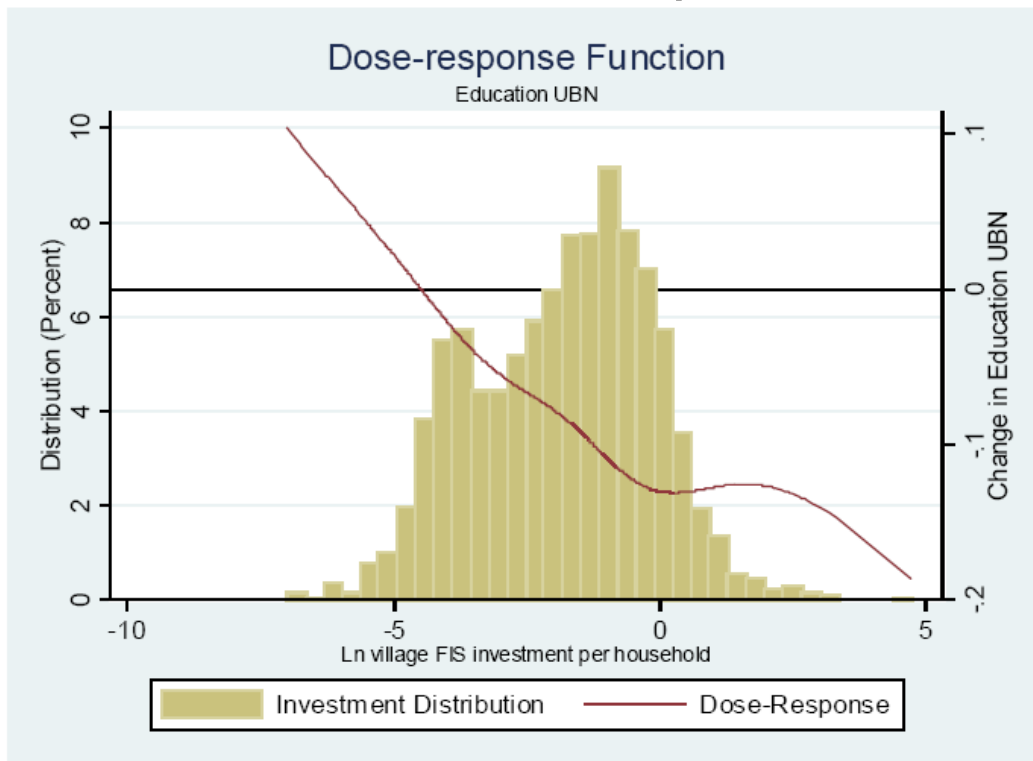
Selecting the instruments

- Most of the time the projects include different components and instruments
- The instrument may work differently with different kind of beneficiaries

FONTAR	0.148**
Credit	0.143*
No Credit	0.151**
Credit	0.143*
ANR-Pilot	0.036
Fiscal Credit	0.133**
** significant at 5%, * significant at 10%	

Dimensioning the intervention

- Identification of the proper size of the program:
 - Micro-simulation (need info to calibrate the models)
 - Dosage analysis from impact evaluation: example of the LPP scale up



Example FIS:

A dosage under 100 QZ per household has no impact

A dosage over 1,300 has no additional impact

Estimating potential externalities

- Identify the potential indirect effect of the project
 - Micro-simulation (GEM – calibration problems)
 - Use of multiple control groups to estimate the potential spillover effect (Example of irrigation problem in El Salvador)

THANK YOU





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