

# Framework for Evaluating the Impact of SME Programs

Kris Hallberg  
Operations Evaluation Department  
The World Bank

SME Evaluation Workshop  
Mexico City  
September 23, 2004

# Preview of Main Messages

1. Use a logical framework to clarify program objectives, target population, and how the program is supposed to work.
2. Choose indicators -- specific to the program -- that are relevant, valid, reliable, and practical.
3. Choose an appropriate evaluation method based on the significance of the program as well as constraints of data availability, time, and budget.
4. Take the counterfactual into account (establish attribution or causality) to determine the net impact of the program.

# Understanding the Chain of Logic from Intervention to Outcomes

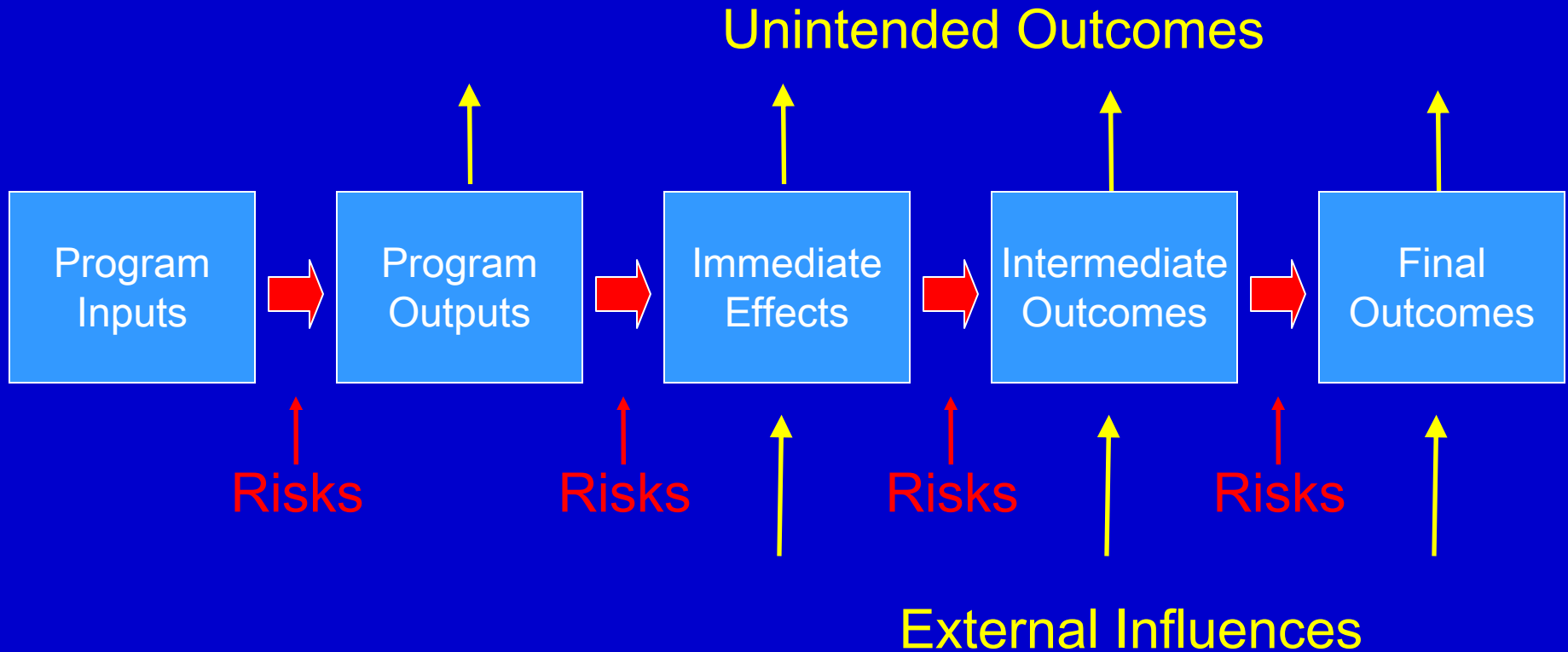
## Why is this step so important?

- Helps clarify program objectives and target population
- Helps in understanding how the program is supposed to work
- Helps identify important assumptions and potential risks
- Helps define the units of analysis and choose indicators to measure
- Helps in asserting causality (attribution)

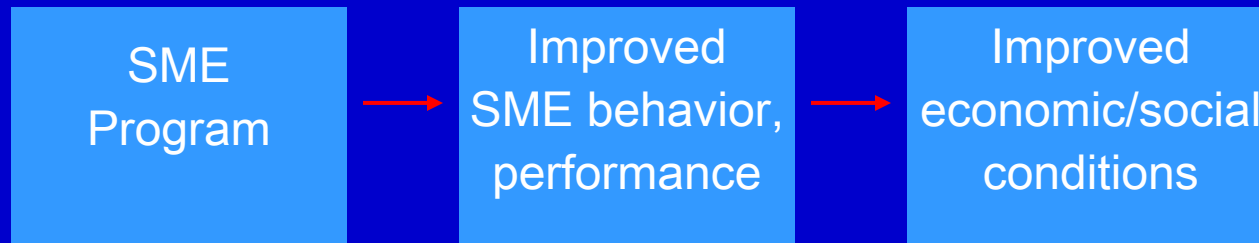
# The General Program Logic Model (Logical Framework)



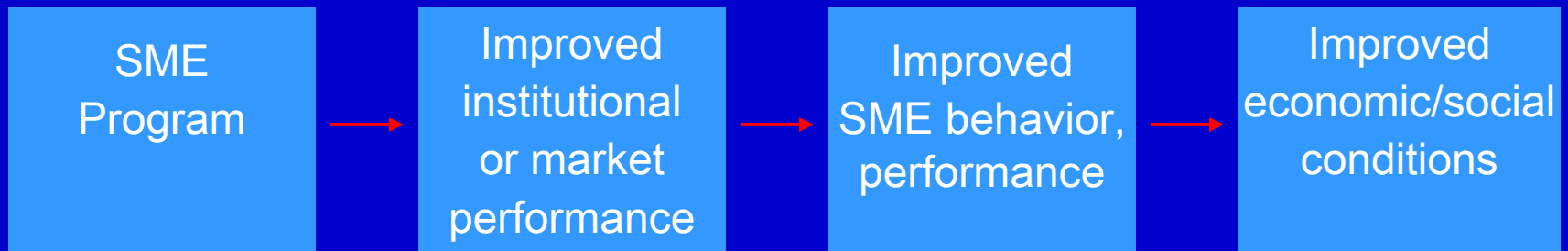
The Program Logic Model also helps identify potential risks, unintended outcomes, and external influences on outcomes



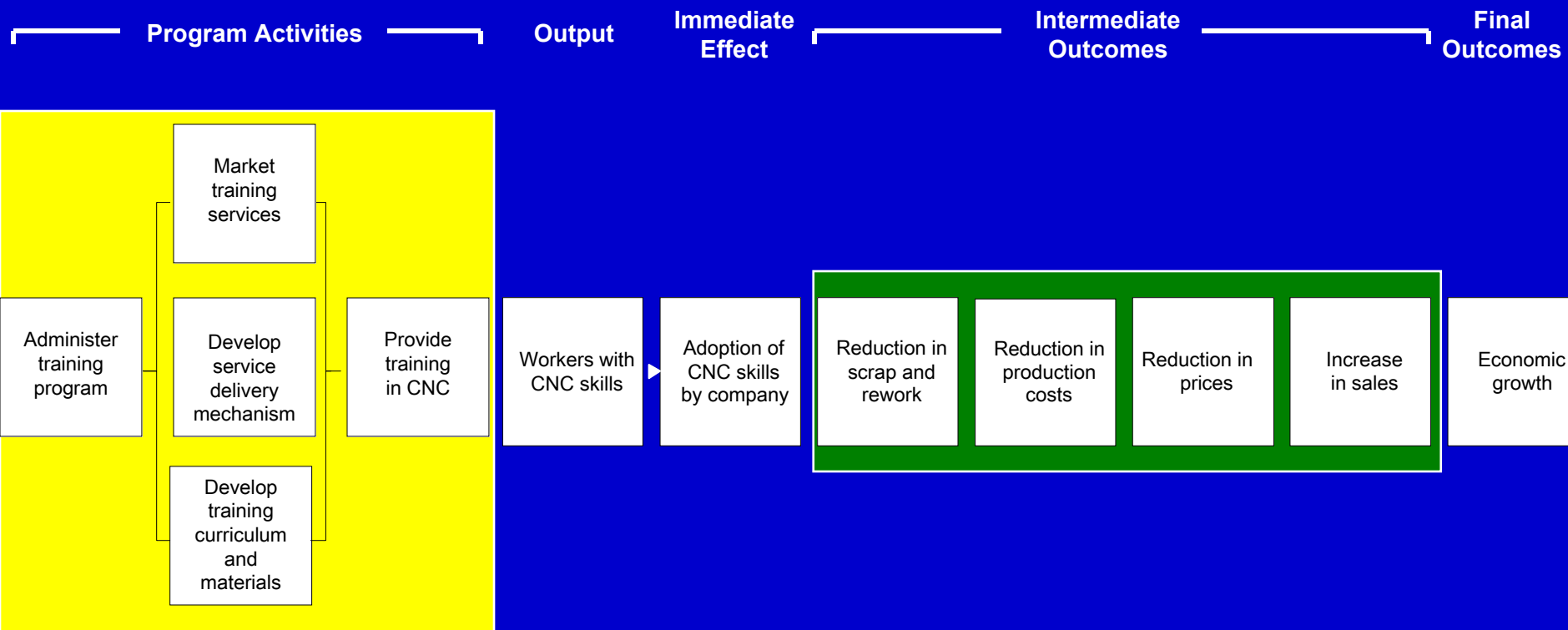
# Basic Program Logic Model for Small Enterprise Initiatives



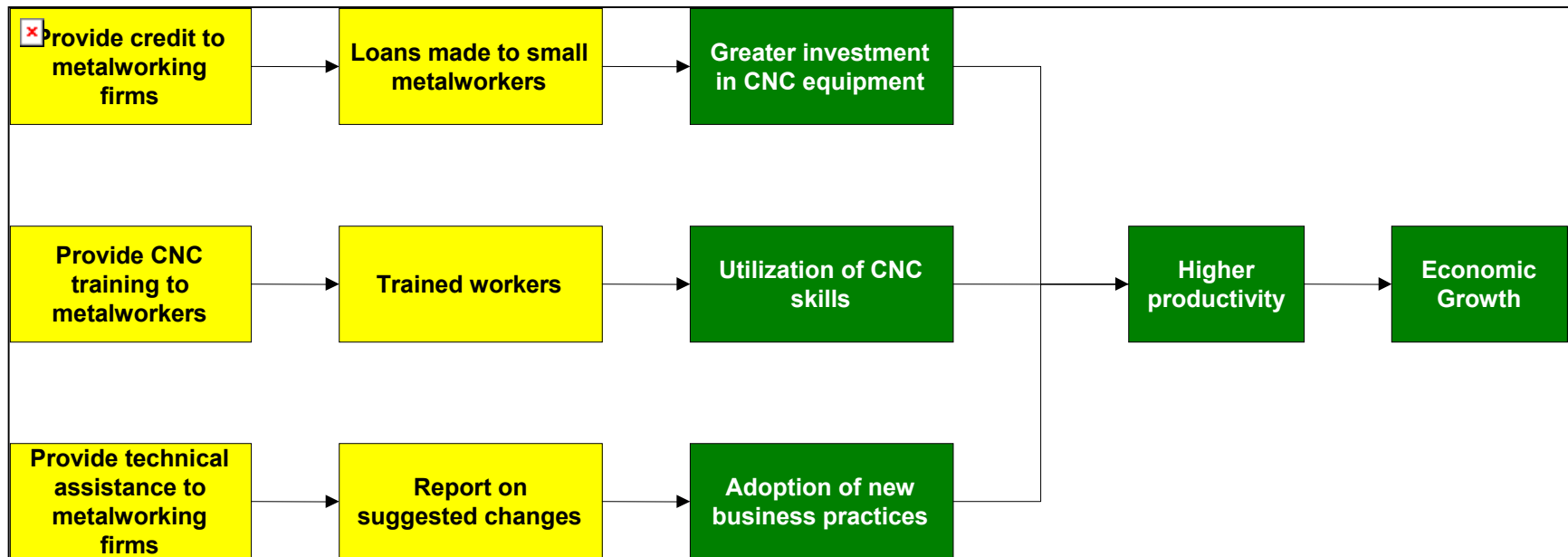
# Program Logic Model with Intermediate Institutional or Market Development Outcomes



# Example: Labor Training in Computer Numerical Control Skills



# Different programs may have the same intended outcomes



Source: Oldsman (2004)

# Suggests indicators specific to the program...

- SMEs: sales, labor productivity, profit, employment, exports
- Institution(s): sales, profit, subsidy dependence, customer satisfaction
- Region: economic growth, unemployment rate, incidence of poverty, index of income distribution

....for which baseline data can be collected at the initiation of the program (“before”) and at the time of the evaluation (“after”)

# Desirable Properties of Indicators

- **Relevant:** Germane to the program being evaluated
- **Valid:** Accurately reflect the underlying concept
- **Reliable:** As little measurement error as possible
- **Practical:** It's possible to obtain the data

Note: No one set of indicators will fit all SME programs

# Monitoring vs. Impact Evaluation

- Monitoring: tracking the performance of institutions and participants for purposes of program management (Storey Steps I, II, and III)
  - What types of enterprises have participated in the program?
  - To what extent has the program reached enterprises in the target population?
  - What is the nature and magnitude of activities that participating enterprises have undertaken through the program?
  - Are the resources committed to the program being used in an efficient manner?
  - Is the program likely to be financially sustainable over time?

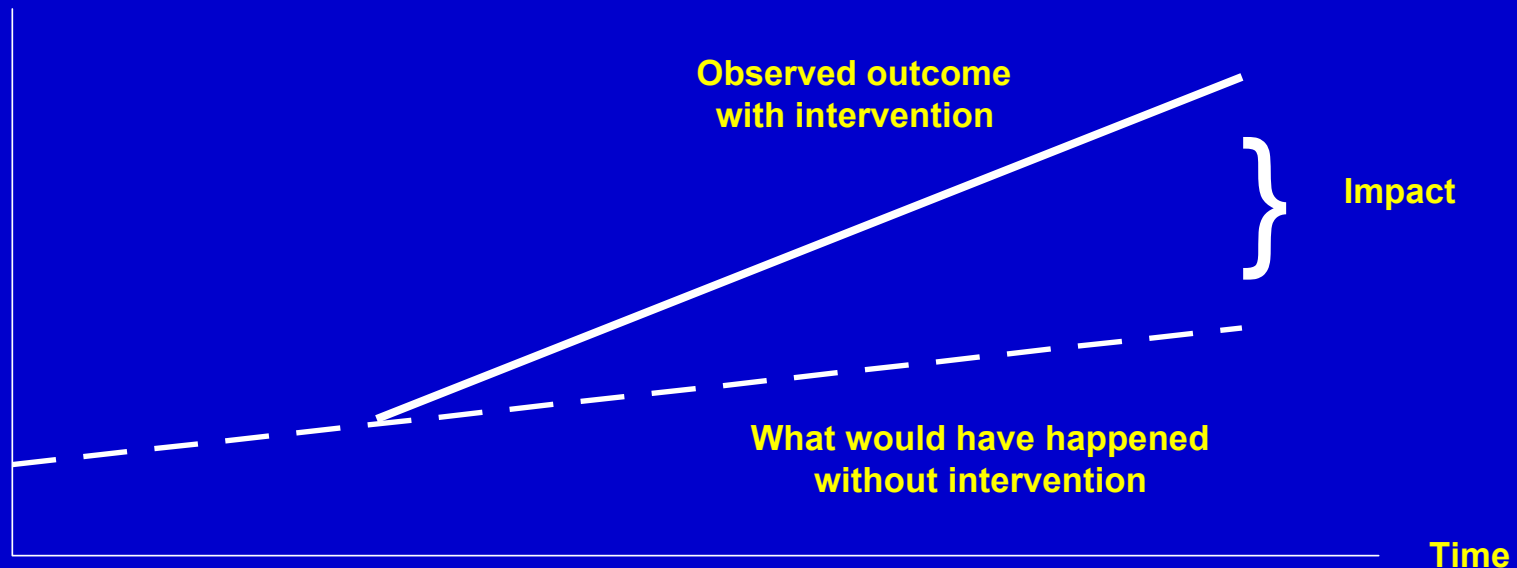
# Monitoring vs. Impact Evaluation (continued)

- Impact evaluation: determining the net impact of the program on intended outcomes (Storey Steps IV, V, and VI)
  - Did participating enterprises change their behavior as intended?
  - Did participating enterprises improve their performance, beyond what would have happened in the absence of the program?
  - Did the program have any unintended negative impacts?
  - Did the program have its intended effects on employment and economic growth in the targeted region?
  - Was the program a worthwhile use of public resources? (comparing program outcomes with program costs)

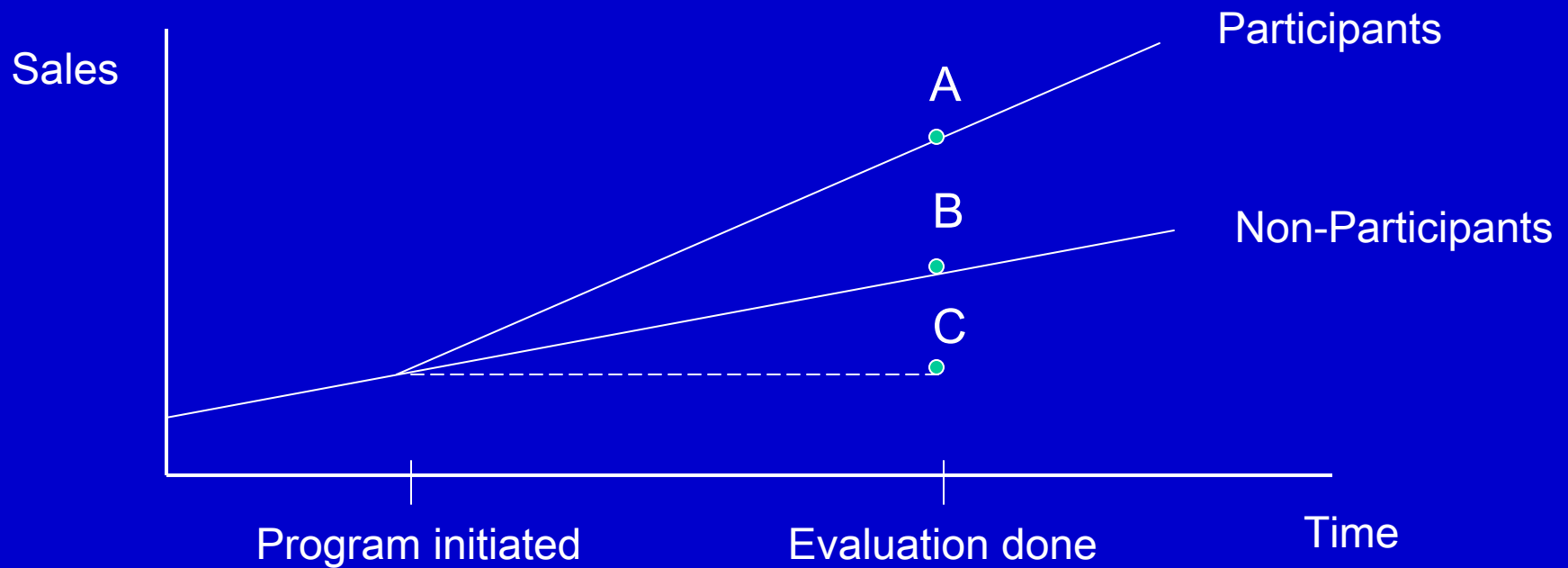
# Determining the Net Impact of the Program (establishing the counterfactual)

- Did the intervention cause the outcome?
- Compare the observed situation with the intervention to what would have been in the absence of the intervention

Outcome



# Comparing the performance of participants (“treatment group”) with the performance of non-participants (“control group”)



$A - C$  = change in sales of participants (due to all factors: “before and after”)

$B - C$  = change in sales of non-participants (due to factors other than the program)

$A - C - (B - C) = A - B$  = change in sales of participants due to the program  
 (“difference in differences”)

# Comparing the Performance of Participants and Non-Participants: Alternative Methods

- Experiments with random assignment:
  - Participants are the same (on average) as non-participants, due to random selection
- Quasi-experimental designs
  - Statistical techniques that deal with selection bias: regression discontinuity, propensity score matching, Heckman 2-Stage
  - Regression models that include variables thought to affect performance (e.g., size, age, location, industry)
  - Comparison with constructed control group of non-participants matched according to the same set of variables
  - Comparison with “typical” enterprise in target population

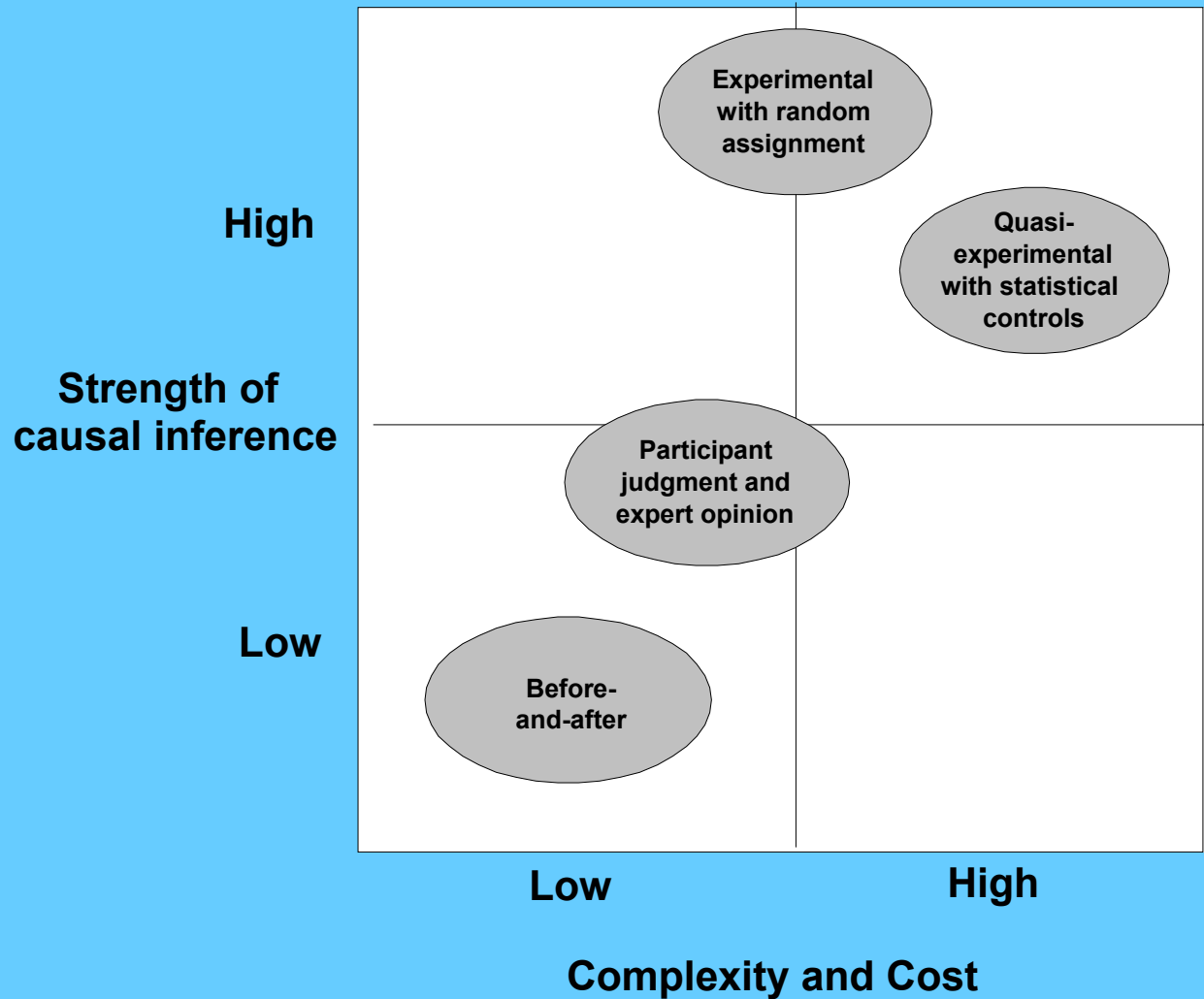


Strength of Causal Inference

# Less “Sophisticated” Quantitative and Qualitative Methods Can Sometimes be Used

- “Before-and-after” performance of participants (no control group): when there is a clear and close relationship between the program and outcomes
- Participant judgment and expert opinion
- Structured case studies

# Trade-offs in Evaluation Design



# Recommendations for Evaluating SME Programs

- Plan the evaluation before the program is initiated
- For large or pilot programs, devote sufficient resources to evaluation when designing the program
- Collect baseline data on program participants and the control group
- Use multiple methods: qualitative methods (e.g., structured interviews) can complement quantitative methods (e.g., regression analysis)