MILLENNIUM CHALLENGE CORPORATION

REDUCING POVERTY THROUGH GROWTH

Results-Based Aid at MCC

Quantitative Analyses from Investment to Impact

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Outline of Remarks

- Aid Effectiveness and Results-Based Aid – what are we looking for?
- The “Cold Chain” of Program Results
- Using Cost-Benefit Analysis to enhance Aid Effectiveness

The Search for Aid Effectiveness

- What are we looking for?

  "Aid effectiveness is the effectiveness of development aid in achieving economic development (or development targets)."

- Lack of clarity over "development" part of the problem
- "Reducing poverty through growth" creates a different context at MCC
- But economists have looked for relationship between aid and growth or poverty and often found little
  - Burnside and Dollar
  - Easterly
  - Pritchett, KSG, "Everything I know in one hour"
  - Skepticism is fairly widely held except among implementers

Project Effectiveness and Aid Effectiveness

- Is this skepticism surprising?

  "At a micro level, all donor agencies regularly report the success of most of their projects and programs."

- One explanation: fungibility erodes impact of donor assistance

- Another explanation: donor agencies not as effective as reported

- What do we mean by "successful" aid programs?
  - Having "some" impact? Aiming for non-zero impact too low a bar.
  - Too often, programs have poorly-defined multiple objectives that can never be proven to have been met or missed
  - *Rarely* are projects scrutinized according to cost-effectiveness
  - Evaluators are reluctant (loathe?) to identify failure unequivocally

- Aid Effectiveness can be determined by whether donor-funded programs generate more benefits for society than they cost

The "Cold Chain" of Aid Effectiveness at MCC

- Constraints Analysis
- Cost-Benefit Analysis
  - Pre-decision estimate of expected impact
  - MCC looks at increases in income
  - Monetization allows comparison across sectors
- Monitoring and Evaluation
  - Baseline surveys
  - Implementation performance against expectations
- Rigorous Impact Evaluations, as appropriate

Constraints Analysis: The Economic Foundation for MCA Compact Proposals:

- Objective: Shared understanding of the fundamental impediments to private investment (domestic and foreign) that would generate growth, increase incomes and reduce poverty

- Methodology: Based on Growth Diagnostics
  - Local team of economists review data
  - Search for evidence of market disequilibria
  - Emphasizes evidence over opinion on barriers to growth

- Product: A document critically assessing the evidence and describes conclusions that:
  - Is discussed with the MCC and made public
  - Serves as the conceptual foundation for the Consultative Process and – critically – for proposal development

Cost-Benefit Analysis as Pre-Investment Estimate of Impact

- Private sector looks at profitability given the interest rate
  - Don't invest if expected returns are negative
  - Governments and donors rarely look at the bottom line
- Cost-benefit analysis helps guide public sector investment decisions – like those made by the MCC
- MCC's focus on economic growth also a "bottom-line"
  - Net Present Value is similar to profitability, using an interest rate: decision rule is ***invest when positive***
  - ERR calculates the interest rate at which profitability = 0: decision rule is ***invest when ERR is above discount rate***
  - MCC uses a country-specific hurdle rate of 10-15%

Example 1 Cost and Benefit Data:

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Costs	20	20	20	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Benefits	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Net Benefit	-15	-15	-15	-15	-15	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Total Costs = 100

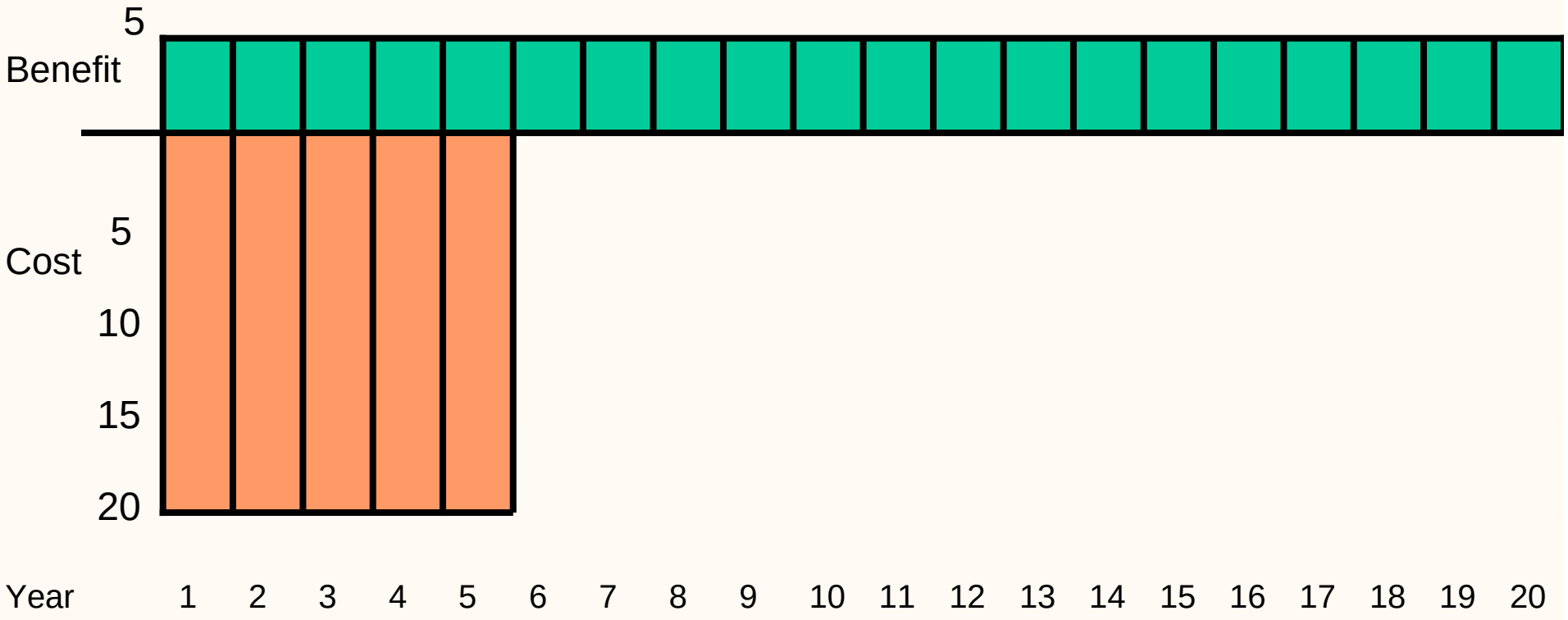
Total Benefits = 100

Net Benefit = 0 *if* Discount Rate = 0%; so

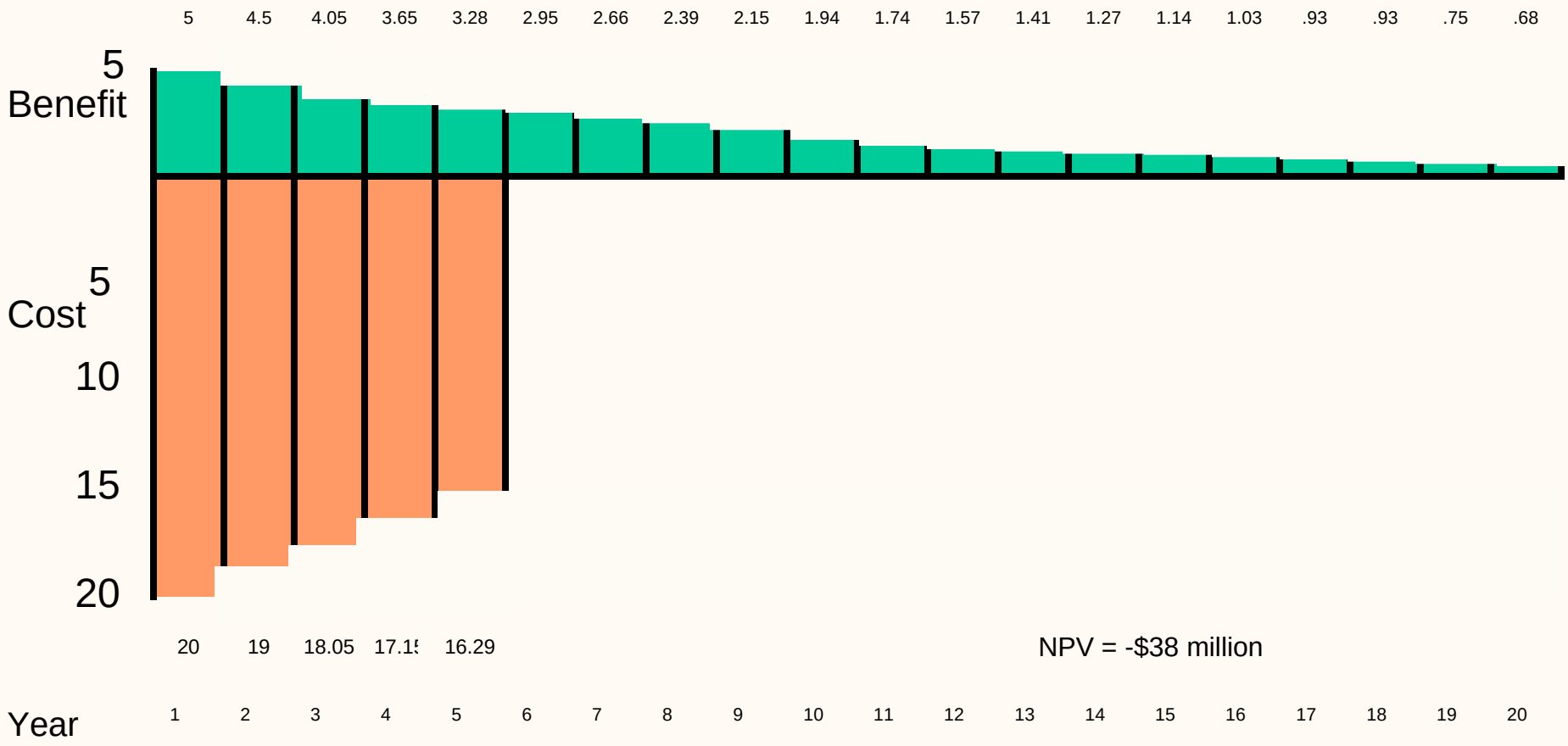
ERR = 0%

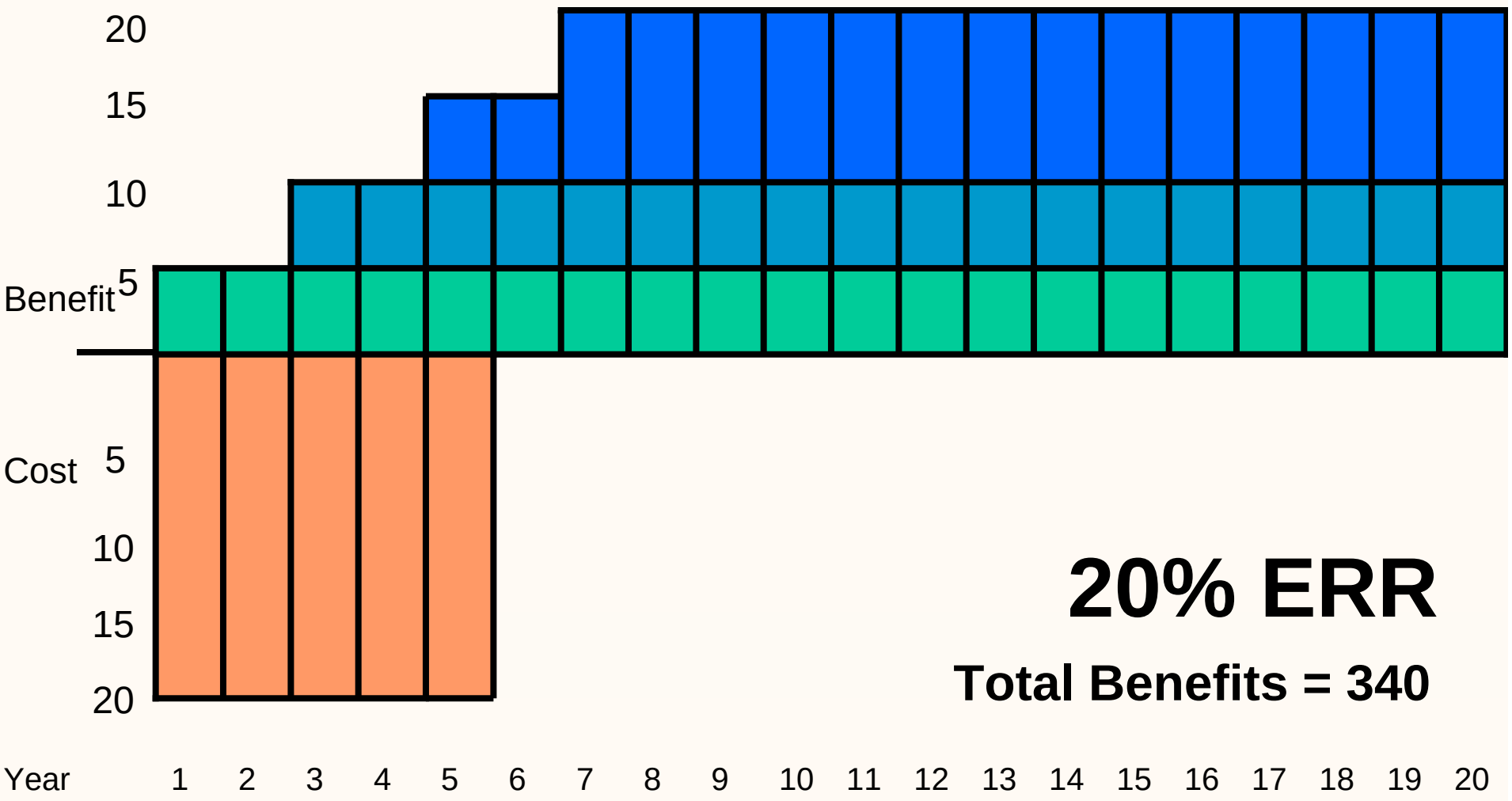
Schedule of Costs and Benefits:

This is what 0% looks like – equal area on top and bottom



When a discount rate is used, the value of costs and benefits dwindle over time. With a 10% Discount Rate, the earlier schedule of costs and benefits schedule looks like this:




20
15
10
5
Benefit
Cost
5
10
15
20
20% ERR
Total Benefits = 340
Year
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Why MCC expects acceptable ERRs

- Higher ERRs = more benefits shared by society: for $100m project :
  - 0% ERR project generates only $44 million in discounted benefits (loses $38m)
  - 10% ERR project generates $84 million in total discounted benefits (NPV = 0)
  - 20% ERR project generates $136 million in total discounted benefits (NPV = $52 m)
  - 30% ERR project generates $352 million in total discounted benefits (NPV = $168m)

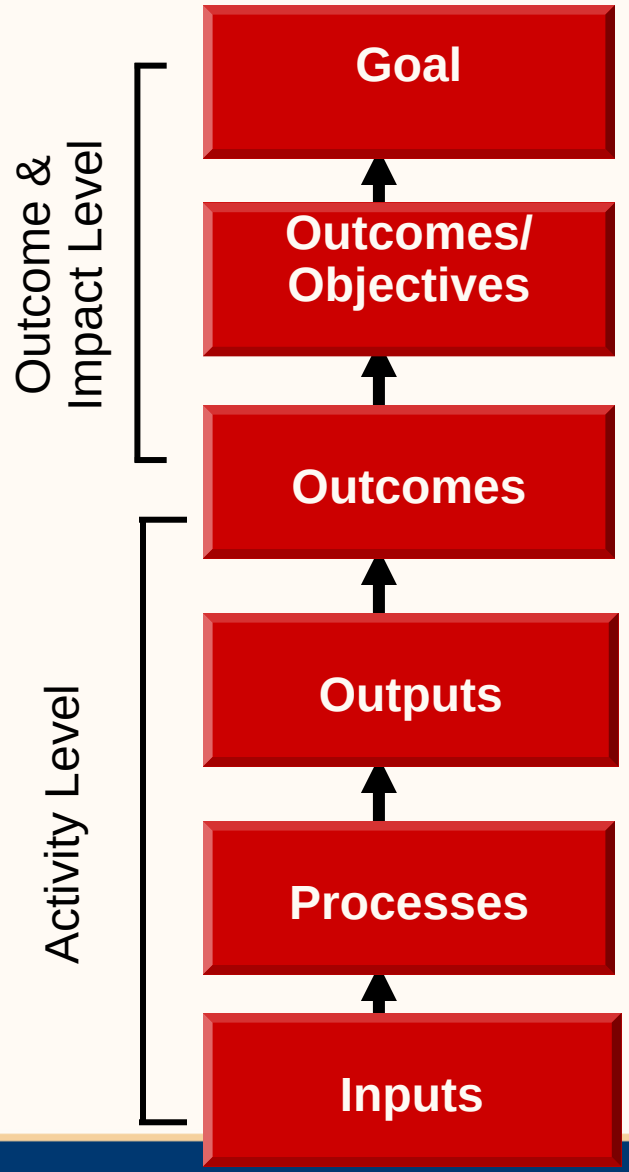
- ERRs silent on poverty, but more benefits *usually* = more for the poor
  - Countries target poverty in proposals, so distribution generally positive
  - Due diligence avoids perverse result of growth without poverty alleviation
  - Currently investing effort in enhancing Beneficiary Analysis to document better

- ERRs neutral on sectors
  - Social sector projects *can and have had* high ERRs – long-term exponential growth
  - Investments in physical infrastructure *can and have had* low ERRs

BCA Role Continues …

- Primary role is to inform investment decisions
  - Represent *ex ante* statement of the results we anticipate
  - Posting analyses on public website enhances transparency and invites external review
- ERRs also play role in implementation
  - Serve as a starting point for M&E plans
  - Inform restructuring or re-scoping efforts
- ERRs may also help identify opportunities for impact evaluations

M&E Plan for Every Activity



- Same for all MCA Programs: Economic Growth and Poverty Reduction
- Higher order effects of outputs on beneficiaries
- Immediate effects of outputs on beneficiaries
- Products and services produced
- Major milestones achieved
- Financial, human and material resources

- Income
- Yield
- # of farmers adopting new technology
- # of farmers trained in new technology
- Curriculum developed
- Training service provider mobilized

Program Assessments Complement Routine Monitoring

- MCA Supervision of projects/activities
- 3rd Party process evaluations
- MCC Implementation Progress Assessments
- MCC conducts post-implementation assessment of *every* project

Role of Impact Evaluation

"Everyone wants to ensure that donor and public monies are spent on programs that work, but measurement of impact is rare – and good quality measurement is rarer still. As a result, there is an evaluation gap."

-Center for Global Development

Impact Evaluation at MCC

- For measuring the ultimate impact of poverty reduction programs, monitoring alone is often not sufficient
- Provides independent and rigorous measurement of MCC-funded programs.
- Highly credible evidence for
  - testing implementation approaches,
  - scaling up programs that work, and
  - making future funding decisions
- MCC contracts 3rd party IE for roughly 20% of projects

Targeting Evaluation Resources

- Learning potential: What information will the evaluation generate? How will the results be used?
- Need: Is there established evidence for the project? (Some methods are better than others)
- Feasibility: Is it possible to create or identify a control/comparison group? Will the evaluation have sufficient power?

Key features of good impact evaluations

1. Clear identification of the "treatment" and "control" groups (methodology for dealing with sample-selection *and other sources of bias*)

2. Clear statement and understanding of the criteria for selecting who gets the treatment.
   e.g., targeting of farmer training program is well-defined and can be implemented in a variety of locations

3. Clear strategy for dealing with "spillovers"
   e.g., if neighbors can easily copy farming techniques, then this should be included in evaluation design

4. Good data (baseline and other data for both groups, including key control variables), measurable indicators

Quantitative Analyses enhance Aid Effectiveness

- Impact Evaluation results linked directly into BCA
- No existing evidence from credible, rigorous assessment? What is the basis for the investment?
  - Fund an extension?
  - Try again elsewhere? On what basis? What was the ERR?
- ***Donors need to stop funding things that aren't working!***

Quantitative Analyses help identify needed reforms

- Almost all infrastructure investments require appropriate maintenance for positive ERRs
  - Many developing countries under-invest in O&M
  - Leads to highly inefficient reliance on donor funds for rehab
  - Countries that propose roads know reforms may be needed
    - MCC doesn't require reforms
    - Logic of investments, aid effectiveness demands it
- Projects in distorted sectors (agriculture, finance) may need policy reforms to work as planned

Conclusions

- Aid effectiveness cannot be improved if it is impossible to objectively determine impact-defined failure
- Yes, development is complex, mutilfaceted process, but multiple objectives make it very difficult to say when programs have failed
- Quantitative analyses force planners (donors and governments) to:
  - Describe how projects will raise incomes
  - Use parameters and models that can be reviewed
  - Explain why they invest in projects w/o economic rationale
- Raising welfare of poor not *just* about raising real incomes, but raising real incomes raises welfare *and* success/failure can be determined