

## Learning what works: the research challenge

Cash on Delivery Aid (COD Aid) is a new approach to foreign assistance that could have a profound impact on the practices, commitments, and strategies of both funders and recipients. If COD Aid were implemented, funders would pay only for results—not for inputs, not for promises. Recipients would have complete responsibility for progress—for the design and execution of programs, and for their ultimate success or failure. COD Aid thus changes the dynamics of incentives, control, and accountability for all the major players in a foreign aid agreement.

Undertaking such a significant innovation in foreign aid without documenting and evaluating the experience would be irresponsible. Indeed, a COD Aid program provides many opportunities to better understand what works in foreign aid. Merely knowing whether progress toward a goal was achieved will not tell us whether COD Aid was essential to that progress. Just knowing that progress was slow will not tell us the cause—whether the underlying concept of COD Aid, the contract for a particular COD Aid program, the recipient’s chosen policies and strategies, or external factors. Each COD Aid initiative is an opportunity to learn from experience and to design better policies for transferring aid and better programs for advancing specific development goals.

COD Aid provides an opportunity to learn about the influence of its distinctive incentive structures on the decisions and practices of both funders and recipients. Does COD Aid’s emphasis on verified outcomes, recipient discretion, and transparency help funders and recipients align their interests? Does it alter relationships of accountability between funders and their constituents, between recipients and their constituents, and between funders and recipient governments? Does it improve the flow of foreign aid

through lower administrative costs, greater coordination among funders, or more consistent and predictable funding streams? Does it release more resources for recipient progress, whether in the form of freedom to explore innovative strategies rather than fulfilling funder requirements, or greater involvement and commitment from a civil society that has more information for holding officials accountable?

Systematically addressing this range of potential research questions is better achieved by designing the research framework simultaneously with the negotiation and design of the COD Aid agreement itself. This chapter explores the multiple purposes and levels of research with any COD Aid program and further research questions to explore usefully. It then reviews some methodological issues to ensure that the research is rigorous and systematic, discussing the process approach as a particularly relevant mode of research. The chapter closes with some practical suggestions for the composition and qualifications of the research team.

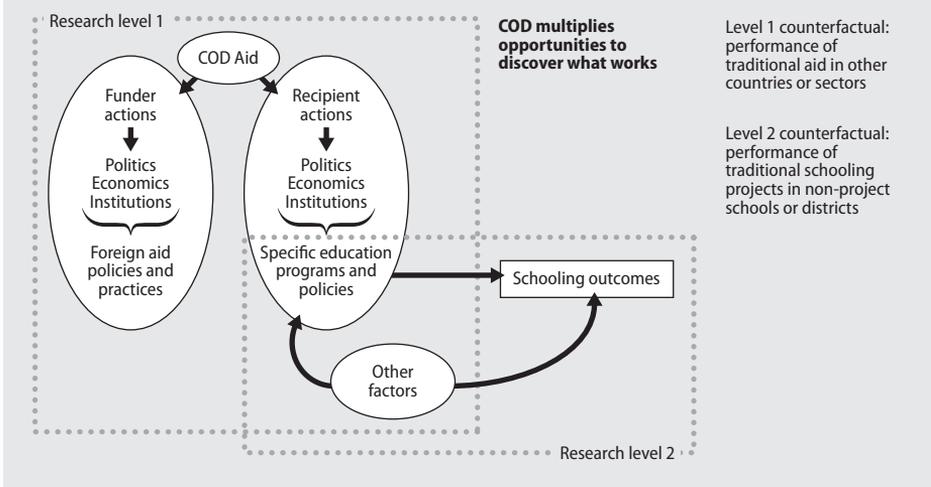
### **Purpose of the research**

The main purpose of the research that should accompany any COD Aid initiative is to assess whether it is an effective way to use foreign aid to achieve development goals. Answering this question requires an explicit distinction between two levels of analysis: how the COD Aid approach affects funder and recipient behaviors and how the recipient's resulting actions affect actual outcomes (here, increased schooling and learning). The relationship between these two distinct levels of analysis is illustrated in figure 5.1.

The northwest box of the figure displays the impact of the COD Aid agreement on funder and recipient actions—the causal link of interest in determining whether COD Aid is more effective than other forms of foreign aid. Funders and recipients would be expected to respond to the COD Aid agreement by reorganizing institutions, changing policies, realigning political interest groups, reallocating funding, or expanding investments. Since we know something of the nature of the agreement and the participating actors, it is possible to outline a basic methodology for this first level of research and analysis.

The second level, illustrated in the southeast box, addresses the link between the recipient's actions and the outcome—that is, between changes in government policies and educational outcomes. Appropriate methods for analyzing this second level cannot be identified until the recipient chooses how to respond to the challenge posed by the COD Aid agreement. Because research for this level of analysis cannot be designed until after the recipient chooses strategies for accelerating progress, it is critical to establish a mechanism for assessing the research opportunities the recipient's actions presents. For example, the funder and recipient could establish a working group—at

FIGURE 5.1  
**Two levels of research for assessing COD Aid**



a minimum to include representatives of the funder, the recipient, and the group researching the first level of analysis—to monitor the country’s responses and propose additional evaluations or research when appropriate in light of a new intervention.

In some cases, the recipient might respond with programs that can be tested in a small number of schools or introduced at different times across the country. Such initiatives include school feeding programs, special payments to induce teachers to stay in rural areas, conditional cash transfers to encourage parents to keep their daughters in school, improvements in infrastructure, greater autonomy for schools, changes in personnel management, and linking managerial promotions to performance indicators. For these kinds of initiatives, the ability to apply the intervention in one place and not in another makes it easier to establish a counterfactual in the impact evaluation design and generate strong evidence on how and why the programs achieved what they did.

In other cases, government action in response to the COD Aid agreement might be national and indivisible. For example, it might negotiate a new relationship with a national teachers’ union, establish an interministerial working group to assess policies across sectors that affect education, or appoint a new minister of education with different qualifications. In these cases, it may be more difficult to identify appropriate counterfactuals. The scope for good quantitative analyses of government programs, however, has been shown to be wider than previously believed, as demonstrated by a new generation of impact evaluations, and should not be dismissed without concerted effort.<sup>1</sup>

**Monitor the country’s responses and propose additional evaluations or research when appropriate in light of a new intervention**

Try the COD Aid approach in a few places and then carefully and rigorously assess the results

The distinction between the two levels of analysis is significant. The success of COD Aid (relative to other forms of foreign aid) is not the same thing as the success of the recipient's education programs. The COD Aid approach could be very successful in inducing the funder and recipient to change their behavior and undertake promising innovations that, for any number of reasons, fail to accelerate the expansion of primary education. Similarly, primary education might expand more rapidly for reasons unrelated to COD Aid. The separation of an evaluation of COD Aid from an evaluation of specific policy innovations introduced by the recipient must be maintained in the research design. Box 5.1 summarizes the research strategies appropriate to the two levels of analysis.

The rest of this chapter addresses primarily the first level of analysis, with greater emphasis on the response of the recipient government. The focus is on the recipient government because that is where the underlying premise of the COD Aid approach can be tested directly: does introducing an incentive tied to outcomes encourage the recipient to innovate in pursuit of improved outcomes? How the agreement affects the behavior of funders is also addressed, because one of the objectives of introducing COD Aid is to facilitate fulfillment of the commitments in the 2005 Paris Declaration. These include recipient ownership, alignment of incentives, coordination among donors, and the predictability of aid flows. We fully recognize that governments are not monolithic and that competing interests, intertemporal considerations, and

#### BOX 5.1

#### **Summary of research strategies at two levels of analysis**

The research strategy at the first level should include collection and analysis of baseline information on both the funder and recipient. For the funder, this entails studying its prior experience with foreign aid, the context for developing its foreign aid programs, its relation to other funders, and very importantly its relationship with recipients. This contextual information is also important to assess the generalizability of the findings. The first funder or funders to enter into a COD Aid agreement may not be typical of other funders, given their demonstrated willingness to experiment with a new aid modality.

For the recipient, baseline information includes political economy, bureaucratic relationships, sectoral governance, interactions with aid bureaucracies, expenditures by different levels of government on schooling, past and current aid-financed expenditures, school system issues (teachers, unions, absenteeism), government structure (allocations between different levels of government, relation of executive and legislature), and accountability relationships.

This baseline information is followed by process monitoring and tracing over the period of the funder-recipient contract (five years) and developing quasi counterfactuals in the form of systematic assessments of how other aid modalities are operating in similar settings. Attention to the incentives and the responses they elicit would be a major emphasis of those comparisons.

historical factors complicate predicting the behavior of either funders or recipients. This is exactly why it is essential to try the COD Aid approach in a few places and then to carefully and rigorously assess the results.

The research strategy at the second level depends on whether the recipient government decides to undertake new interventions and is willing to implement them in a way that permits rigorous evaluation. More governments are interested and willing to assess the impact of interventions through programs that compare outcomes across population groups, taking advantage of differences in implementation across regions or over time. It is commonly agreed that impact evaluations are likely to generate better quality evidence if they accompany a program from its earliest stage of development.

### **The principal-agent model and the model of change**

Chapter 1 described a core problem underlying the relationship between any funder and any recipient in the principal-agent model. The funder and the recipient share an interest in some development goal that provides the basis for foreign aid, but they also have independent interests that are not aligned. Attending to the interplay of shared and divergent interests generates important questions and hypotheses to guide the investigation. The example of foreign aid for education can be examined within the framework of the principal-agent model—recognizing, of course, that any model necessarily simplifies reality and will be useful only insofar as it improves the rigor of empirical analysis and frames conclusions that are relevant to public policy.

#### ***Funder behavior***

The starting assumption is that the funder (or principal to the contract) wants to see more children educated and is willing to transfer resources to the recipient (or agent) to get that job done. The funder may have other objectives as well. It may want to support developing countries with good diplomatic relations or cultural or linguistic ties. It may also seek increased demand for its goods and services (tied aid). For private philanthropies, another objective may be to generate visibility for their causes to leverage their own contributions. Some funders may be highly concerned about their reputations and particularly careful to avoid the waste or theft of the funds they provide. Any of these divergent objectives could induce the funder to interfere in the way aid money is used. The overarching question for this research would be whether COD Aid limits the tendency for funders to interfere with the recipient's autonomy.

Within the framework of the principal-agent model, the following questions arise:

- With the focus on verified outcomes, does the funder reduce the resources allocated to monitor inputs, compared with other funders, or its own past behavior?

**A core problem underlying the relationship between any funder and any recipient in the principal-agent model**

- Do the funder's administrative costs fall relative to its other forms of aid?
- With transfers linked to verified outcomes, does the funder focus more on reporting of outcomes to their own constituents than other funders or than it did in the past?
- Once the COD Aid agreement is started with one recipient, does the funder try the COD approach elsewhere? Do other funders become interested and try COD Aid?
- Does the COD Aid approach improve recipient ownership, alignment of incentives between funder and recipient, and coordination with other funders?

### *Recipient behavior*

The recipient (agent) also has objectives besides the one shared directly with the funder. It may seek to minimize political difficulties with unions and opposition parties, to ensure ethnically diverse children all learn the national language, to reward provincial politicians in particular districts, or to extend the textbook contract of a supporter. Furthermore, the recipient cannot be treated as a unitary entity. The recipient is a composite of many actors who give different weights to the range of objectives, with expanding education as only one. The various actors on the recipient side can also be presumed to have more information than the funder about their relationships to each other and their influence on other actors in their political or social system, whose behavior will advance or deter progress toward the agreed goal.

The implicit model of change is that, because COD Aid payments are linked to achieved and verified outcomes, the recipient will give greater weight to schooling progress relative to its other objectives. Given the complex character of the recipient, it might be better to think of the COD Aid agreement as changing the weight given to schooling by some actors and increasing the leverage of actors who have a strong interest in reaching universal primary completion. A key aspect of this research is to ascertain whether the COD Aid approach significantly changes the political-economy of policy formation—by modifying institutions, shifting power, or changing accountability relationships at the government level—and whether those changes improve the provision of education.

**The recipient has objectives besides the one shared directly with the funder**

Current theories of development focus on institutions and governance. Many aid critics have expressed concern that the influence of traditional aid modalities on institutions and governance can be harmful. The research proposed here would ascertain whether similar problems arise with COD Aid or whether our expectation that COD Aid would actually improve institutions and governance is realized.

## Method

The methodology for the research accompanying the COD Aid agreement should be as rigorous and systematic as possible as to substantially confirm three fundamental and related issues: attribution, causation, and external validity. The relevant questions can be articulated as follows.

- On attribution, what is the net impact of the COD Aid agreement?
- On causation, through what mechanisms does the COD Aid agreement cause that net impact?
- On external validity, to what extent can the answers to the first two questions be generalized to other contexts?

The unit of analysis for this research is the COD Aid agreement between the funder and the recipient. As COD Aid begins to be introduced, the initial number of observations will be limited to one or a few cases. Statistical methods that rely on a large number of observations relative to the variables being studied will therefore be unsuitable. Nonetheless, researchers should still begin by looking for ways to use statistical comparisons—say, by taking advantage of differences across subnational governments in a large country. The goal is to generate quantitative evidence that can plausibly attribute changes in schooling to the COD Aid agreement.

Research methods other than statistical approaches can also provide reliable evidence on attribution, causality, and external validity if they are conducted systematically and rigorously. Comparisons across countries, provinces, or sectors will be significant sources of information, as will careful longitudinal analyses. In particular, researchers are most likely to learn about the actual conditions and the dynamic responses of organizations through a process approach.

## A process approach

A process approach traces events in context and analyzes how strategic decisions advance or hinder a reform initiative.<sup>2</sup> It identifies the path from idea to policy proposal and then to a place on the policy agenda. The next steps to be traced are program design, including input from and negotiations among various actors, then approval and adjustments. Implementation—or failure to implement—is the next phase of the path. The kinds of questions relevant in a process approach include:

- Who took the initiative to set up a meeting, to write a policy proposal, to suggest a change, and so on?
- Who was involved in this discussion?
- When was the decision made to take a particular action?
- Why was that decision made rather than another one?
- What followed?

The answers to these questions can be turned into a meaningful narrative of what happened and why. This narrative can be tested against alternative explanations by

A process approach analyzes how strategic decisions advance or hinder a reform initiative

Such research focuses on political processes embedded in historical and cultural contexts

comparing it with accounts of what happened in other countries, in other sectors, or in other time periods. To be complete and rigorous, the narrative needs to be tested against independent data on expenditures, inputs, outputs, and especially outcomes.

Experience with conducting such research provides four practical lessons. First, researchers need to establish a complete baseline, including initial data on expenditures, inputs, outputs, and outcomes. The baseline should also include relevant information about the political and institutional features of the country and its education system. In addition, the research should establish a baseline of initial expectations about the new initiative. This requires interviews prior to implementation of the COD Aid agreement with important actors in the policy process, such as the minister of education, the minister of finance, various vice-ministers, lead administrators, the technical and bureaucratic units formulating policy and regulations, the leadership of the teachers' unions, and even a small sample of teachers. The interviews should be open-ended—to explore the actors' understanding of and expectations about the initiative. Questions at this stage might include: Do you think the COD Aid agreement is a good way to improve education? Does it seem feasible to you? What problems would you expect this approach to encounter? How would you anticipate your government, staff, and citizens to respond to this new initiative? This kind of research will provide valuable information on the goals, motivations, and understandings of key actors at the start, as well as insights into their subsequent actions. It might also provide information on how the way a COD Aid initiative is introduced influences initial expectations and the understanding of incentives.

Second, because such research focuses on political processes embedded in historical and cultural contexts, researchers must be well acquainted with the country. This does not mean that researchers must be from the country, but they should be very familiar with its general political economy, institutions, and history.

Third, a process approach requires that researchers have access to decisionmakers and implementers. Such access should be negotiated in advance of the program, or the researcher should have enough prior credibility and connections in the country to ensure access. Often, academics in a country have a good appreciation of the general political economy and the specific policy area and can be valuable researchers and informants. Technical teams that work on policy design in particular ministries may also be good informants, because they have observed many local policy initiatives move from the design through the implementation.

Fourth, judgments about attribution and insights into causality will be more convincing if comparisons are with analogous situations without a COD Aid agreement. Such situations may be found in the country's recent history, in parallel programs within the same sector (say, in secondary or tertiary education rather than primary

education), simultaneously in other sectors (such as health or welfare programs), or in the same subsector in another very similar country. In each case, researchers would have to document how the comparator is similar to and different from the COD Aid agreement for assessing the internal and external validity of any conclusions derived from the comparison.

Such comparative work entails isolating one or two other relevant policy reform initiatives and then, through interviews with the principal actors and review of relevant documents, reconstructing the process of policymaking and policy implementation. Relevant tasks are identifying who was involved in the earlier initiatives, who made the important decisions, with whom they worked and consulted, what actions they took, what procedures they observed, and how they sought to manage opposition, mobilize support, and encourage effective implementation. Such comparisons provide a basis for demonstrating that the COD Aid agreement generated a distinct policy process.

In the education example, a comparative case approach might make it possible to test such hypotheses as:

- The COD Aid agreement encouraged the government to involve ministries from outside the education sector (finance, infrastructure, health) in developing the strategy for reaching education targets.
- The COD Aid agreement encouraged the government to implement institutional changes, such as increasing autonomy for schools or decentralizing budget and disbursement authority.
- The COD Aid agreement encouraged the government to reform personnel management, such as different forms of evaluation, amount of pay, pay incentives, and new modes of teacher training and support.
- The COD Aid agreement encouraged the government to improve administrative information systems, data collection, and analysis.
- As a result of published test results, public attention focused on districts or groups of students whose learning outcomes were lowest and linked these outcomes to budget decisions or policy choices at the national or state level.
- As a result of the publication of data, civil society organizations engaged at the grassroots level, for example, by designing and disseminating school report cards.
- The COD Aid agreement encouraged the government to request technical assistance—and, if so, of what kind?
- The COD Aid agreement encouraged the funder to relate differently with the recipient country—and, if so, in what ways?
- The COD Aid agreement led to negative consequences, such as lower standards for completion or interference with completion data.

**Researchers would have to document how the comparator is similar to and different from the COD Aid agreement**

The implementation phase will be the most difficult part of the process to trace

Process tracing can then follow the four initial steps outlined here—collecting the baseline data along with interviews regarding expectations, researching the context, ensuring access to key actors, and establishing one or more comparative cases. Researchers would acquire information about who is involved in discussions, what decisions are made in what arenas, how information is being conveyed, and a variety of other process-related issues that would make it possible to reconstruct the unfolding of the reform initiative.

This kind of information is best acquired through interviews with important actors in the process. Researchers would need access to these individuals and should be in contact with them frequently to monitor the process as it occurs. Interviews with several different actors will provide multiple perspectives on events and should be checked against documentation, data, and events to ensure the validity, coherence, and plausibility of the individual accounts.

The implementation phase will be the most difficult part of the process to trace. Effective implementation of education policies involves many actors (administrators, teachers, teachers' unions, teacher training institutions) at many different levels (national government, state and local government, school district, schools, classrooms, communities). Any of these actors at any of these levels can be responsible for how policy intent is or is not translated into actions and outcomes.

To study the implementation of a policy, researchers may need to adopt distinct methodologies. They should continue to follow the implementation process at each level—for example, from the central government, to a subnational government, to a program office, to school directors, to teachers, and finally to community engagement. In addition, surveys of school directors and teachers should be conducted at the beginning and end of the study. Surveys would reveal how these actors understood and acted on their understanding of the new education strategy, as well as how their attitudes and behaviors changed over the course of the program.

The research at this stage properly focuses on policy actors at the center who make decisions and determine how policy changes are introduced and implemented. Other stages of the research will address how stakeholders are affected by new policies and programs. While in some situations stakeholders may also have a policy role, they often do not. In education, children and parents are key stakeholders, yet in many countries they are absent from the policy process. Individual teachers are also stakeholders but not necessarily actors in the policy process, while teachers' unions may be both stakeholders and actors. At this stage, research rightly examines the decisions and actions of those with the leverage and capacity to shape the policy process, while also noting those absent from the table when important decisions are made and how this reflects existing power relationships.

A final caveat is in order regarding extrapolation from the first few COD cases. Researchers have documented ways that pilot experiences differ from subsequent efforts to replicate a program. Early experiences are likely to attract countries more comfortable with innovations or having a greater urgency to make progress. Early experiences are also likely to get much more managerial attention and staff time than subsequent efforts. Even the existence of a sophisticated research project, with key actors being contacted from time to time by external figures, may influence the course of events. Any conclusions on the generalizability of COD Aid will have to be qualified by this potential source of bias.

In sum, a process approach with comparative material is the most promising

In sum, a process approach with comparative material is the most promising method for addressing the attribution, causation, and external validity of the net impact of the COD Aid agreement. This approach requires researchers to:

- Thoroughly investigate and understand the context.
- Have easy and informal access to key actors.
- Document and analyze one or more relevant comparative cases.
- Conduct initial interviews regarding expectations with key actors.
- Trace processes and the course of events during implementation through interviews and surveys.
- Analyze data on expenditures, inputs, outputs, and outcomes.

### **Team qualifications**

The research team conducting this research should be properly qualified. First, the team needs experience in analyzing policy reforms, probably with expertise in political science, sociology, economics, and international relations. Second, the team should be knowledgeable about the history, institutions, and debates on foreign aid. Third, the team needs a thorough understanding of the recipient history, politics, society, and institutions. Finally, the team has to be well regarded domestically so that it can maintain access to policymakers and other actors—and well regarded internationally so that its findings will be credible.

For almost any COD Aid agreement, the composition of the research team is likely to be stronger if it includes both foreign and domestic researchers. Foreign researchers can bring important perspectives and experiences from investigations in other contexts. Domestic researchers bring important insights and experience from their in-depth knowledge of their country.

In presenting this proposal for COD Aid, we have taken the time to detail the research component because we accord it great significance. It would be irresponsible to undertake such a profound innovation as COD Aid aims to be without carefully preparing to evaluate its impact. And making progress and achieving outcomes are the whole point of this proposed reform—not satisfying reporting

requirements, maintaining a certain mix of inputs, or meeting ancillary objectives. A key ingredient to achieving outcomes is taking advantage of every opportunity to learn what works and how.

**Notes**

1. See Savedoff, Levine, and Birdsall (2006); Banerjee and Duflo (2008); and Shadish and Myers (2004).
2. This section draws heavily on a background paper by Grindle (2008) commissioned for this project.