



Thinking about Aid Predictability

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Effectiveness and aid predictability

Researchers are giving more attention to aid predictability. In part, this is because of increases in the number of aid agencies and aid dollars and the growing complexity of the aid community (World Bank 2008). A growing body of research is examining key questions: Is aid unpredictable? What causes unpredictability? What can be done about it? This note draws from a selection of recent literature to bring some clarity to the basic story emerging.¹ We start by presenting evidence from the literature on various problems with aid flows. Then we discuss how researchers use terms like *volatility* and *unpredictability* when discussing aid predictability; we suggest that these concepts can be sharpened by introducing two new concepts—*expectations* and *reliability*. These new concepts are particularly useful in conceptualizing the problems of unpredictable flows in government budget processes. This approach allows a basic analysis of how timing and different types of aid affect predictability, and the implications for policy making.

Is aid unpredictable? Some evidence

Recent research finds that the predictability of overall aid and of various types of aid is a significant and potentially costly problem in aid-dependent countries. Donor com-

mitments are not good predictors of aid disbursements and long-term commitments by official lenders are unreliable. The studies measuring the predictability of aid include work by Bulíř and Hamann (2003, 2007); Celasun and Walliser (2008); Fielding and Mavrotas (2005, 2008); Gemmel and McGilivray (1998); Pallage and Robe (2001); SPA budget support surveys; and OECD-DAC surveys on monitoring the Paris declaration. For example, the results of the latest OECD-DAC survey (OECD 2008) show that on average only 45 percent of aid is delivered on schedule. Celasun and Walliser (2008) find disbursements are not always less than commitments but that the “absolute deviation in per cent of GDP of committed and disbursed aid” in sub-Saharan Africa was greater than three percent of GDP over the 1990–2005 period.

Predictability varies by type of aid and is associated with the recipient country’s environment. Fielding and Mavrotas (2005) find significant deviation of aid flows from trend and note that programmatic aid flows less smoothly than project aid. They also note various influences on aid stability, including the quality of the recipient country’s institutions. Celasun and Walliser (2008) find that the predictability of aid increases with the length of coverage under IMF programs, a factor that is seen as a proxy for a stable country environment. A recent World Bank study (World Bank 2007) confirms the gen-

eral finding that aid flows deviate more from trend than domestic revenues. The Bank study also notes that IDA flows have lower deviations than other aid—and domestic revenues—presumably because these flows are committed on the basis of improvements in the institutional quality of recipient governments.

Poor predictability is costly. In his recent work, Kharas (2008) estimates the cost of aid flow deviations at about 22 percent of the value of aid itself—a large number by any account. In other work (Kharas 2007) he discusses how the “new reality of aid” creates further challenges and may imply further costs. New players—including the Millennium Challenge Corporation (MCC), the Chinese, the Global Fund, and private foundations—are providing aid in large amounts that lack detailed planning, can enter budgets quickly and unexpectedly, and lack transparency. Kharas attempts to estimate some of these new flows (especially from middle-income bilaterals and private funders) using “guesses,” a reflection on the challenge fiscal planners must have in recipient nations. He states that, “The new reality of aid is one of enormous fragmentation and volatility, increasing costs and potentially decreasing effectiveness.”

Volatility and predictability

Volatility is a prominent word in the literature on aid predictability. Frequently it refers to the standard deviation of the change in aid with a specific time horizon and therefore does not imply direction (World Bank 2008a). More volatile aid is likely to increase or decrease in value more than less volatile aid. OECD (2005) specifies that “aid is volatile when fluctuations in aid flows are large, relative to the volume involved.”

Volatility in aid flows does not always equate with unpredictable flows, however. Aid is predictable when recipient countries can be confident about the amounts and the timing of aid disbursements (OECD 2005, p. 20; World Bank 2008a, p. 1). In other words, even where aid amounts fluctuate year by

year, they can be predictable. In these cases the aid is based on expectations (related to a hard commitment tied to a meaningful schedule or rule for disbursement, which allows budgetary authorities to plan around the expected revenues). Expectations are then met in a reliable fashion (where the aid disburses according to the schedule or the rules specified in the commitment, such that budgeted revenues actually flow as planned). This type of aid flow can be used to smooth business cycles, and it might reflect lumpy investment requirements or come in the form of emergency or disaster relief (expected in times of disaster and reliably triggered by such).

The joint concepts of expectation on the part of the aid recipient and reliability are important in better understanding the aid predictability problem—especially how volatility relates to predictability—and in thinking about appropriate policy responses to this problem. Figure 1 combines the two concepts in a basic matrix with four aid-flow types in the quadrants. Quadrant I suggests the ultimate goal of predictability—aid that is expected and reliable. In this case, fiscal planners working in budgetary authorities in developing countries have the ability to predict (based on schedule and rule-based disbursement information provided with commitments) and can be confident in the prediction (disbursements actually follow the schedules and/or rules outlined in commitments). Aid in this quadrant could be volatile but is predictably so, thus not forcing any ill-advised or policy-defeating fiscal adjustments on governments.

Quadrant II shows aid that budgeters expect (and program) but do not receive in a reliable fashion. In simple terms the expectation upon which budgeters base their predictions proves weak, evidenced in a gap between commitments and disbursements. Celasun and Walliser (2008) measure exactly this issue, finding significant absolute deviations between commitments and disbursements. This creates a hole in the budget in some periods (where commitments are

Figure 1. Thinking about Aid Volatility and Predictability

	Reliable aid	Unreliable aid
Expected aid	Aid is expected and reliable I	Aid is expected but unreliable II
Unexpected aid	Aid is unexpected but reliable III	Aid is unexpected and unreliable IV

under-resourced) but can also create revenue spikes (where more money is provided than committed). In both cases the lack of reliability can lead to volatility and undermine the allocative efficiency of budgets in developing countries. Celasun and Walliser show, for example, that unreliable flows can lead to cuts in investment spending during times of aid deficiency and increases in payments on domestic debt and/or government consumption in times of aid excess.²

Quadrants III and IV relate to aid that is unexpected by budgetary authorities, either when being off budget altogether (and not coordinated with budgetary authorities) or entering into the budget without being explicitly programmed into budgets. Aid that is not programmed is, by definition, a source of volatility (causing flows that budgeters did not forecast). The volatility may not be negative, however, in that the unexpected aid might relate to some kind of countercyclical flow. Disaster relief is an example, as is food aid. Apart from being countercyclical, these unexpected flows can also be reliable—meaning that they sometimes flow according to established commitments and rules, fitting into quadrant III. Disaster relief is sometimes provided on the basis of agreements that trigger flows on certain conditions: when an earthquake exceeds 6 on the Richter scale, for example, certain amounts of aid are provided in specific time periods. The relief may be unexpected by budgeters (as is the disaster) but once it is triggered, its quality should be judged by whether it flows in accordance with the commitment.

Quadrant IV is where aid is both unexpected and unreliable, meaning there is no basis for predicting the aid in budgets. This includes aid that is provided off budget and without any coordination with budgetary authorities as well as aid that enters into budgets unexpectedly and in a haphazard fashion. Examples include certain kinds of food aid that are provided without any kind of preexisting commitment and with no set schedule for provision.

Timing is important in thinking about volatility and predictability. This is reflected in recent work by the Strategic Partnership for Africa (SPA 2007), which finds that 92.5 percent of budget support committed in 2006 was actually disbursed in-year—the budget support being expected and reliable.³ In contrast, SPA finds the same budget support programs less predictable over the medium term, with only 69 percent of these programs even providing commitment details (the basis of expectation) for 2008 and only 35 percent for 2009. In terms of figure 1, this budget support fits into quadrant I in the short run in a good-performing country, accommodating annual budgeting. However, the same budget support is a quadrant III or IV candidate for the medium term, because it does not allow clear expectations of when money will enter medium-term fiscal frameworks (the research does not show whether the funds flowed according to any reliable rules once actually released).

The basic observation is that aid predictability is time sensitive because expectations are time sensitive. In contrast to the budget

support example, some aid flows (like disaster relief) may be negotiated over the medium term and expected to flow when disaster hits (actually programmed into a four-year, medium-term budget in some countries). However, there is never an explicit short-term expectation for such aid flows written, for example, in annual budgets. Thus, when disaster hits aid may be unexpected in the short run (not included in the budget) even though it is reliably following the rules (especially those triggering the aid) negotiated for the medium term. In the medium term, therefore, disaster aid may fall into quadrant I while in the short run (within a budget year) it might fall into quadrant III (unexpected to the budgeters but reliably provided, according to trigger clauses).⁴

Aid type also matters

This brief discussion alludes further to the importance of aid type in the discussion of predictability. The examples show that general budget support might have different short-term and medium-term predictability effects compared to disaster aid, largely because the two have very different commitment modalities⁵ (on which expectations are based). Such differences in aid effectiveness and volatility are commonly found in the literature, with regard especially to project aid and budget support.⁶ Although different studies use different terms for the two types of aid, they all commonly find budget support more volatile than project-based aid (see, for example, Bulíř and Hamann 2003, 2007; Fielding and Mavrotas 2005, 2008). This should not be surprising because different aid types are argued to have different effects in general: The different aid predictability effects of different aid types emerge, it appears, because of differences in the processes underlying the aid types. These aid types are discussed below and summarized in table 1.

Budget support: In the medium term, donors program budget support in the context of their own internal planning processes.⁷ These programs result in multiyear commitments that are no more than indicative,

however. Budget departments thus have less certain expectations to build on when developing multiyear budget frameworks, making budget support a quadrant III or IV type aid in the medium term. The longer the planning horizon the less certain are expectations and the more problematic the aid.

Budget support is scheduled with certainty only on an annual basis, when donors can assess political conditions and those conditions do not change dramatically (that is, the country is considered a stable performer). Budgeters can program current-year commitments with a fair degree of confidence⁸ as a result, and research shows that annualized commitments are well serviced. Budget support, at least in a good-performing country, falls into quadrant I in the short term. In a fragile environment, however, large shares of budget support can be unreliable even in the short term, and would therefore fall into quadrant II.

Even in a stable environment, however, the primary concern is that the lack of budget support predictability over a multiyear period minimizes governments' ability to allocate funds for investment spending (generally multiyear in nature). This increases the likelihood that budget support will be used to fill short-term holes in consumption and to pay off domestic debt, as suggested in Celasun and Walliser (2008).

Project aid: Project aid is provided over multiple years, according to specified plans and schedules. The multiyear plans allow for clear expectations, both annually and over the medium term. Project supervision requirements, monitoring and evaluation timetables, and other donor-driven rules for these projects generally result in fairly reliable disbursement over their lifetime.⁹ In the medium term, therefore, these projects often fall into quadrant I in figure 1.¹⁰

Nevertheless, there are many reasons why annual project aid may flow in an unreliable fashion, such as aspects of project commitment and design. Disbursements committed for the first year of a project might not materialize because the conditions for such

disbursement are not met—either because donors do not follow their own administrative procedures and rules (a quadrant II scenario) or because there are government delays due to capacity constraints and lagging speed in implementation (a quadrant I scenario if disbursement delay is not the donor’s responsibility).

These delays can cause project-related aid flows to falter in the short-run—meaning that annual budgets routinely might include project allocations that do not materialize in that year. Projects that fall behind schedule in one year might catch up in others, creating bunching. These predictability issues are short term in nature and make it difficult for fiscal planners to set budgets with any kind of certainty; where funds deviate from expected amounts they result in the misallocation of resources (especially skilled personnel) across government.¹¹

Vertical funds: Vertical funds are provided either by single donors or by combinations of donors, to flow to specific policy areas. Prominent examples include funding for HIV/AIDS (PEPFAR and the Global Fund, for example) and the environment. These funds are committed and disbursed in many ways, so it is difficult to provide a standard discussion. However, a basic characteristic of many vertical funds is rapid disbursement following commitment. This is seen in Global Fund support in particular, which is committed after the approval of proposals (a process that can take years) and disbursed shortly after commitment.

The final commitment and initial decision points often fall in the middle of budget years, implying an inability to plan for such funds in the annual government budget. Principal recipients in many countries struggle to allocate any of the disbursed funds in the first year (and even longer in many cases) of the program because of poor up-front planning (weak execution, procurement, and supply management plans, for example). In a short-run perspective, therefore, such aid can create quadrant III and even quadrant IV problems, where unexpected money flows

into a budgeted environment without signal and does not have a schedule of its own (thus potentially being unexpected and unreliable). These programs tend to settle down over the medium term, with most principal recipients managing disbursements better in the second and third years.

Multiyear commitments from entities like the Global Fund also allow solid expectations for fund flows, and these are generally reliable over the medium term (most programs disburse above 90 percent of the committed amounts in the medium term). These interventions thus might be quadrant I funding sources (predictable) over a four- or five-year period.¹²

Private giving: Private giving has not been captured in studies on predictability and is still subject to “guesses” (Kharas 2007). It is provided to many parties including quasigovernment entities and nonprofits (like vertical aid) and is generally off budget. This type of aid is increasing in size and has implications for public resource allocation (especially people, who can be displaced from budgeted government programs to off-budget NGO-type interventions, for example). Thus, the flow of private giving is important in any discussion on predictability.

As with vertical funds, one expects private giving to disburse quickly after commitment. The commitment of such funds is often not very transparent or reflected in government fiscal timetables—and is thus not conducive to short- or medium-term budget development. Private giving thus generally classifies as unexpected aid and falls in quadrants III and IV of figure 1.¹³ The essential issue is difficulty in predicting how, when, and in what amount these funds will enter into any development setting, which makes it difficult in the short and long run to allocate resources. Private funds might unexpectedly result in a school being built, for example, with no current or future plans to staff the school (or even to fund an inspection of the school). Private funds might support the purchase of drugs that cannot be dispensed because of lack of infrastructure.

Concluding thoughts: Clear thinking and clear policy?

Increases in aid and changes in aid architecture, including ramped-up private giving, suggest that problems of aid predictability will continue and worsen. Unpredictability potentially undermines the effectiveness of aid, as quality of spending is threatened and the true value of aid quantities is reduced.

Studies reviewed here suggest unpredictability is already significant. However, one needs to separate findings about volatility from those about predictability to really understand the issues. A simple attempt at separating findings identifies aid flow problems arising because of two dimensions: expectation and reliability. Where flows are expected and reliable, they may be volatile but are still predictable and do not undermine fiscal planning and allocation. Where aid is unexpected and/or unreliable, aid predictability is threatened and one can expect costs in the form of forced resource adjustment. The problems and costs differ for different kinds of aid and in the short and medium term, as summarized in table 1.

Note that table 1 is highly simplified. The impacts of timing and aid type on predictability are largely contingent on other contextual factors. For example, countries enjoying strong institutions, transparent processes, and well-coordinated government structures are likely to see more predictable aid in all forms. The basic message for policy makers is, however, that predictability problems differ from volatility problems, and that not all predictability problems look the same—some are about unexpected aid and some about unreliable aid. The problem cannot be understood through general analyses and solved through general solutions, but will always be best understood in context of the types of aid in the aid portfolio of specific countries and related problems.

A country having problems with medium-term predictability of budget support might pressure donors to strengthen the medium-term commitment of donors (for example, by locking in funds for three years,

depending on slower-moving conditions). A country having problems with short-term predictability of vertical funds and project funds might seek to establish budgetary “buffers” (as recommended by Eifert and Gelb 2006). The influence of significant off-budget funds from private foundations and other donors could be mitigated by coordination forums, or even rules whereby all donors have to register their intended interventions prior to action. Crucial for all countries, however, is balancing different types of aid in the aid portfolio, which is a significant step toward smooth aid flows and enhance overall predictability—in the short and medium term (IMF 2007a).

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Table 1. Different Types of Predictability Problems

Aid flow characteristic	Budget support	Project aid	Vertical funds	Private giving
Predictable aid				
Q1: Expected and reliable	In the short run for good performers, because of clear annual commitments and uncomplicated disbursement mechanisms	In the short and medium term, because of defined multiyear commitments and project length limitations	In the medium term, because of defined multiyear commitments and program length limitations	Potentially in the medium term, if funding is provided transparently and within general allocation discussions, and according to a clear schedule
Unpredictable aid				
Q2: Expected and unreliable	In the short run for fragile states and poor performers	In the short run, because donors do not follow “due process,” causing delays	n.a.	Potentially in the medium term if funding is not provided within general allocation discussions, and according to a clear schedule
Q3 + Q4: Unexpected and reliable/unreliable	In the medium term (potentially) because of unclear multiyear commitments; and because annual reviews allow policy and political adjustments	n.a.	In the short run, because programs are developed outside of resource allocation processes, and are often poorly planned in early periods	Presumably in the short run and medium term, because resource commitments are not scheduled within the government allocation process, thus creating perpetual “surprises”

n.a. Not applicable.

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3. Note that budget support is also being provided earlier in the budget year than previously, which gives budgetary flexibility in using the money (as opposed to receiving money in the final quarter and being forced to make adjustments in budgetary plans to that point).
4. It logically follows that differences in the quality of short- and medium-term commitments undermine fiscal planners’ abilities to connect annual budgets to medium-term plans. The 2007 SPA report identifies this issue more effectively than other studies, in which it is difficult to see whether measured deviations are between disbursements and short-term (annual) commitments or disbursements and medium-term commitments. The difference matters, however, in a practical sense, as it potentially distorts different strategic processes—annual budgeting in the short-term sense and medium-term planning otherwise.
5. The term modality refers to the organizational rules and processes governing the different kinds of aid flows.
6. There are also studies on other aid types, including food aid.
7. The World Bank Country Assistance Strategy is an example, but bilaterals and other multilaterals have equivalents.
8. See the 2007 SPA report. Kharas (2007, p. 5) cites the GAO finding that only 59 percent of committed Millennium Corporation Funds were disbursed to nine compact countries by 2007 (with the other 41 percent still uncommitted and thus unscheduled).
9. Adjustments to the time frame of projects are often made, but these too are generally scheduled, transparent, and thus facilitate clear expectations.
10. Studies finding these flows more reliable than budget support seem to take a medium-term perspective—analyzing whether medium-term disbursements match medium-term commitments in both types.
11. If project funds do not disburse, then project employees are underutilized. If project funds disburse more quickly than expected, then employees are overutilized, and either project quality suffers or personnel is drawn from other areas.

Endnotes

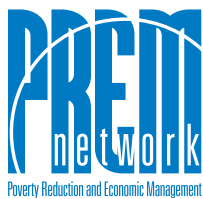
1. The core papers reviewed for this note were presented at a recent workshop: “The Delivery of Scaled Up Aid: Does Predictability Matter?” For a workshop report, go to: <http://go.worldbank.org/OI5S2XXNU0>. Other papers are referenced at the end of this note.

2. See also Mavrotas and Nunnenkamp (2007), who discuss government responses to various aid issues.

12. However, concerns about these funds go beyond predictability. Concerns include the degree to which funds are off budget (in many cases) and whether they draw resources from other policy areas of the government budget (for example, when the funds are earmarked for specific donor-defined policy areas). These concerns are heightened in countries like Rwanda where earmarked funds for HIV/AIDS exceed the government health sector budget by multiples. In these situations continual short-term disruptions,

arising from continuous new donor commitments (by different donors), could undermine long-term institutional and policy actions of government.

13. This may not be the case if private foundations coordinate their flows with budgetary authorities. A foundation building a school, for example, could inform government budgeters of its intentions and allow the budgeters to modify their own programs accordingly.



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