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THE OPERATIONAL DIMENSIONS OF RESULTS-BASED FINANCING

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Abstract

As part of a growing focus on the effectiveness of development assistance from the World Bank and other agencies, new efforts are being made to relate development finance more closely to outcomes achieved rather than to inputs used—the Results-Based Financing (RBF) approach. We provide a framework for analyzing the *operational dimensions* of RBF, including the conditions which suit this approach, and how best to define, measure, and report results. We review some of the early World Bank experience with this approach, and highlight strengths and challenges in the range of techniques adopted so far. We also discuss how best RBF can be evaluated and used to greatest effect over the coming years.

* Corresponding author, sk145@cornell.edu .The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent. We thank Rumana Abubeker for her helpful research support.

1. Introduction

The object of development assistance is, should be, or is claimed to be, the achievement of good outcomes in development. And yet much if not most development assistance processes are focused on inputs rather than outputs and outcomes. This is seen most clearly in the procedures for disbursing funds for investment projects financed by bilateral and multilateral development agencies. The disbursement is tied to expenditures on inputs—road building materials rather than kilometers of road built or transport time reduced, school buildings and teacher recruitment rather than learning outcomes for children, hospitals rather than reduced infant and maternal mortality. Accompanying the focus on inputs is the huge attention paid to procurement protocols and their monitoring. While "value for money" in purchasing inputs is the rationale for specific procurement conditions, this approach does not forcefully focus attention on what the investment is for and how it should ultimately be judged, namely, development outcome per unit of finance.

Dissatisfaction with the input focused perspective of development assistance has led to an evolution of experimentation with mechanisms which link disbursement of funds more closely to outputs and outcomes than to inputs. Results-based development assistance has thus continued to gain conceptual acceptance through the accumulation of ground level experience in implementation. Most official development agencies, and many non-governmental organizations, claim to do results-based assistance.[1] In agencies like the World Bank this evolution has even resulted in the development of a new lending protocol called Performance for Results (P for R)[2]. Outside official aid agencies, the Center for Global Development (CGD) has proposed and has experimented with mechanisms under the heading "Cash on Delivery" (COD). A common label sometimes used to describe this range of instruments is "Results-Based Financing" (RBF).

However, despite this acceptance at the policy level, the operational dimensions of this strategy for financing development projects are still being clarified and developed. The disbursement of development assistance on the basis of results raises a number of operational questions. Which results exactly? Which indicators for these results? How is information on indicators to be generated? How precisely is disbursement of finance to be tied to results? Over what time frame? And how is non-achievement of results to be assessed and handled in the design of conditionality? The object of this paper is to take a closer look at some of these operational dimensions of implementing results-based development assistance in large multilateral development agencies, with a special focus on the World Bank. We provide a framework for analyzing the operational dimensions of RBF, including the conditions which suit this approach, and how best to define, measure, and report results. We review some of the early World Bank experience with this approach, and highlight strengths and challenges in the range of techniques adopted so far.

[1] See for example the review by de Hennin and Rozema (2011) of a range of agencies which are basing disbursement on results of some sort. Examples include multilaterals such as the European Union and bilaterals such as USAID's Pay for Performance (P4P). See also Hecht (2004). For an NGO example, see Van de Looij (2009).

[2] The World Bank's Operational Policy OP9.00 http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:23101116~pagePK:64141683~piPK:64141620~theSitePK:502184,00.html

We conclude with guidance on how best RBF can be evaluated and used to greatest effect over the coming years.

2. The Theory of Results-Based Development Assistance

As implied in the introduction, almost anything can be labeled as results-based financing, since it all depends on what is counted as results. In the case of road construction, for example, if purchasing road building material is classified as a result, then conventional financing of inputs through investment projects is a results-based operation. This is a far cry from conditioning finance on kilometers of road built, or impact on travel time. Thus a discussion of RBF needs to be framed in the context of a chain of causality from inputs to outputs to outcomes, and we begin with setting out a simple theory of RBF which allows such distinctions to be incorporated into the discourse.[3]

Consider a development financing agency and a country working on the design of a development project. Suppose there is agreement between the two that with input x we can get outcome $z = f(x)$. Suppose there is agreement on the value of z, on the cost of x, and that the value of z exceeds the cost of x. Development finance is then to pay for the input x, which will lead to outcome z, whose social value will exceed the opportunity cost of x.

When all of the above is agreed and clear, we are in the pure idealized case of an enclave investment project[4]. The finance can be conditioned on the input x. As the input is provided, finance can flow. For example, as the cost of materials and manpower to build the road are incurred, they can be reimbursed by the financier (and presumably the kilometers of road are built). There are no issues here of conditioning finance on results. There is an agreed one to one relationship between inputs and outcomes—financing conditional on inputs is akin to financing conditional on outcomes. It would come to the same thing, in this case, to disburse finance conditional on kilometers of road rather than disburse against expenditures to build that road.

But suppose now that one or more of the following holds, to some degree:

- There is no agreement on the relationship between input and outcome i.e. on $z = f(x)$.
- There is no agreement on the value of z, the cost of x, or on whether the value of z exceeds the cost of x.

[3] A more detailed discussion from a number of different perspectives is to be found in O'Brien et. al. (2012). Terminology in this literature can be quite varied as well. For an attempt at a glossary, see Musgrove (2011).
[4] By enclave project, we mean a specific pre-defined set of activities, with accompanying procurement and other fiduciary arrangements, which are financed by a development partner and ring-fenced from the broader government spending program in that area.

First consider the case where there is not a firm agreement on the relationship $z = f(x)$, but that there is agreement on the value of z. An example would be where there is agreement on the value of raising children's test scores, but there is disagreement on whether this is best achieved through investing in school infrastructure or improving teacher training. In this case conditioning finance on x is clearly unlikely to elicit agreement. However, since both parties agree on the value of z, and that the value of z exceeds the cost of x, they may be able to reach agreement on finance conditioned on the outcome z.

Now suppose that there is no agreement between the development agency and the country on the value of z—specifically, suppose the agency puts a higher value on z than the country. In this case the development agency can incentivize outcomes by offering financing in return for achieving targets in z. If the agency was very confident in the relationship $z=f(x)$, it could equally well specify x as an indicator for disbursement (because it is sure that x will get you z). But if the agency is not confident about $f(x)$, this is all the more reason to focus on z as an indicator. This is closely related to the issue of "client ownership" of the operation. One of the advantages of RBF is that whether or not there is agreement on $z=f(x)$, focusing on z puts the client in the driver seat. He can use creativity, innovation and has the incentive to deliver z with whatever array of inputs x works best. This creates potentially better incentives than just conditioning directly on x. Further, there is arguably less indirect pressure from inside and outside the country (for example on behalf of contractors who can provide particular types of inputs) when finance is tied to z rather than to x.

Let us now complicate matters by considering one more link in the chain, where input x leads to output y which in turn leads to outcome z in the following manner:

$$y = g(x); \qquad z = h(y); \qquad \text{Hence, } z = h(g(x)).$$

The question now arises; should the indicator for disbursement be x, y, or z? Applying the logic developed earlier, we would move further up the results chain if:

- There is disagreement/uncertainty about the causal chain
- The financier values the final outcome more than the recipe
  On the other hand, we should stay at lower reaches of the results chain if
- There is agreement/certainty about the causal chain
- There is no disagreement between financier and recipient on the value of the final outcome.

This still leaves open the question of how much to disburse and how to set the disbursement standards. Once we move beyond a standard enclave project, how much to allocate to a project is not immediately evident, since the financing does not purchase the inputs that lead to outcomes. It then has to be the value that the financier places on the outcome (relative to the use of these funds in other projects or other countries) that determines the total project allocation. If the financier is in agreement with the recipient to on the valuation of the outcome, that simplifies matters, of course.

A specific illustration of a "pure" results-based approach is given by the following proposal for a COD project by CGD:

"Under our proposal, the unit of progress would be an "assessed completer," a student enrolled in the last year of primary school who takes an approved standardized assessment exam. The funder would agree to pay $20 for each assessed completer up to the total enrollment in the base year and $200 for each assessed completer in excess of that number. The recipient would commit to disseminating its information on student enrollments, assessed completers, and test scores. The funder would commit to contracting a third party to verify the accuracy of the recipient's reports. Payments would be offered for assessed completers regardless of their test scores to limit incentives to misreport progress—a recurring problem associated with high-stakes testing worldwide. Public dissemination of student achievement would equip governments and civil society with information about schooling quality and help them learn which schools work."[5]

The above is a simplified account of the theory of results-based development assistance. Even in the COD example, which highlights an important feature of RBF—results rather than the inputs—we begin to tease out the difficulties at an operational level, for after all it is the well-educated students we are looking for rather than simply an "assessed completer" (which is not quite at the outcome end of the spectrum). In subsequent sections of this paper we delve into operational issues in implementing this theory. Some of these issues can, however, can already be flagged at the theoretical level.

- The final outcome indicators e.g. test scores for children, could be less reliable in the local context than more robust administrative input indicators like teacher qualifications. This suggests particular focus in the medium term on improving testing, through perhaps a conventional investment project.

- Outcomes such as education test scores or mothers' health take a long time to improve in response to inputs such as better trained teachers or better staffed health posts. However, if some improvement cannot be shown over a six year project lifecycle, serious questions can be raised about how results focused the operation is.

- Final outcomes depend on lots of things other than government actions. One might ask, is it not better to reward government on what it can actually do, based on mutually observable indicators? But this requires agreement on actions that will lead to the outcomes. If there is no agreement on this, it might be better for the agency to focus on the higher end of the results chain, and let

[5] Birdsall, Maghoub and Savedoff (2011), p. 4.

the government figure out (with help as needed) how to achieve those outcomes.

- There are initial financing needs for a program, and waiting for outcomes before disbursement will create difficulties for the government. If this is the case, we are closer to a conventional project, in the sense that financing is needed to purchase specific inputs and that logic applies. However, we could also make an initial financial allocation to be neutralized by results later.

The basic point is that in reality there cannot be "pure" results-based financing. Rather, operations can be interpreted as more or less RBF depending on their choice of disbursement strategies. We turn now to a review of such actual projects for one development agency, the World Bank.

3. The Adoption of Results-Based Financing in the World Bank

As noted in the introduction, a number of development projects and agencies have now adopted the approach of results-based assistance. The approach can be applied to policy reform operations, where the conditions of disbursement are often changes in policies on trade or public sector ownership. Here the term "results" can be used to describe changes in tariff rates, or the passing of decrees and protocols for privatization. To the extent that the operations disburse on the basis of indicators further up the results chain, touching on actual development outcomes, they come closer to RBF in the pure sense as identified in the last section. Our focus in this paper is on RBF in investment operations, where there are no major policy reforms, but within a policy framework there is support for the government's expenditure program across a sector or a subsector, with disbursement conditioned upon sector wide outcomes. Again, as we shall see, the "results" can be identified at different points along the causal chain—perhaps not fully at the input end, but neither are they fully at the "pure" outcomes end.

The pure RBF approach in the COD proposals is still at the pilot stage. The bulk of development assistance, or at least a significant portion of it, will however continue to be provided through large scale projects financed by bilateral or multilateral development agencies. In particular, the World Bank's evolution over the last decade has been interesting, and will be examined in this section. The World Bank has been moving towards some of its investment projects linking disbursement to outcomes or outputs rather than to inputs. Table 1 below summarizes the number of projects (since 2006) which may be judged to have moved some distance towards a results-based finance framework, and indicates how they have been distributed across regions and sector. The full list of these projects is included in Annex A. Almost 30 projects are identified in Table 1, and the numbers of have been accelerating increasing over time. Between them these projects embody a commitment of over $10 billion. This is a significant commitment of funds to the RBF approach to investment projects and perhaps the largest in the global development community.

Table 1: Recent World Bank supported projects using features of a results-based financing framework

Number by Region, Sector, Time of approval

Region	#	Sector	#	Time of approval	#
Africa	5	Education	5	2007 and earlier	3
East Asia and Pacific	4	Health	4	2008	2
Europe and Central Asia	3	Social Protection	8	2009	4
Latin America and Caribbean	10	*(sub total) Human Development*	*17*	2010	2
Middle East and North Africa	1	Transport	4	2011	6
South Asia	6	Urban Development	2	2012 (and 2013Q1)	12
		Water	1		
		Social Development	1		
		(subtotal) Sustainable Development	*8*		
		Public Sector Governance	3		
		Finance and Private Sector	1		
Total	*29*		*29*		*29*
Total value	*$10bn*				

A key feature of these projects is the development of "disbursement linked indicators" (DLIs)—a set of indicators and criteria based on these indicators for disbursement. The number of indicators used in each individual project is given in the Annex. The indicators vary in number, type, and definition across the variety of operations which have deployed them. While we have discussed above as to how such indicators might be framed, the following provide good detailed examples in practice of that variation:

The India PMGSY Rural Roads Projects (Bank support of $1,500m) employs three (3) DLIs:

- **Increasing the extent of habitation connectivity**. This is measured in the targets for the number of habitations connected by a road constructed to all-weather standards;

- **Effective execution of maintenance works on the core rural roads network**. This is measured by growth in the share of the identified road network for periodic maintenance under signed contract, with intermediate steps regarding budget allocations and management disciplines to ensure effectiveness.

- **Improving the effectiveness of public expenditures** through cost-effective and socially and environmentally responsible provision of all-weather access to habitations. This is measured through a set of actions enhancing good practice in budget planning, procurement, citizen monitoring, and management reporting.

The Pakistan Punjab Education Sector Project (Bank support of $350m) is aimed at improving participation in, and the quality of, education (especially for girls). Towards this end it employs ten (10) DLIs, including:

- **Improving teacher performance**. This is measured inter alia by student outcomes (examination results) and school performance (increased enrollment and reduced drop outs), connected to a teacher incentive program;

- **Enhanced stipend program for girls**. This is measured by a streamlined and more effective delivery of stipends to a growing share of the eligible target group;

- **Better public school teacher recruitment**. This is measured by a growing number of teachers appointed following use of an agreed merit-based recruitment system.

The Ethiopia Health Millennium Development Goals Program-for-Results operation (Bank support of $100m) is to improve the delivery and use of a comprehensive package of maternal and child health services. It employs eight (8) DLIs, a combination of outcome and process indicators, including:

- **Deliveries attended by a skilled birth provider**. This is measured as increasing share of target group whose child birth is assisted by a doctor, nurse or midwife.

- **Children immunized with pentavelent 3 vaccine**. This is measured straightforwardly.

- **Development and implementation of a Balanced Scorecard** approach to assess facility performance and related institutional incentives. This is measured by the developing and testing of the scorecard, and its adoption in an increasing number of locations.

As can be seen from the data table and these examples, results-based financing is already encapsulated in large and high profile projects with significant amounts of financing, running into approaching billions dollars across a range of sectors. In fact with the trend towards and demand for results-based financing options, the World Bank has recently established a new instrument tailored to such opportunities—the Program for Results (P for R).

The World Bank's new P for R instrument was approved by its Board in January 2012, is now under implementation, and will be the subject of a progress report after two years. This instrument is seen as expanding the range of development finance instruments at the Bank's disposal. Project Lending, through Investment Loans (ILs), provides funds for specific expenditures, subject to procurement and other rules. Policy Lending, through Development Policy Loans (DPLs), provides funds to the budget conditional on policy reform, with minimal restrictions on categories of expenditure. The new instrument of Program for Results (P for R) can in one sense be thought of as a hybrid, it provides funds for a designated expenditure program, conditional on results of that program. The key feature of this instrument is indeed that it disburses upon achievement of program results, not upon the purchase of inputs for the program. However, certain high risk categories of projects, for example those activities that pose a risk of potentially significant and irreversible adverse impacts on the environment and/or affected people (so-called Category A projects) are excluded for the moment, and furthermore, purchases above a certain threshold[6] are also excluded—these will have to go through standard World Bank procurement procedures. There are also careful assessments which have to be carried out to ensure that fiduciary, environmental and social factors, risks, and governance issues are being properly dealt with[7]. Given the outlay to date of around $10 billion in RBF operations, the World Bank is an important lens through which to examine the operational dimensions of results-based development assistance and the next sections take up these issues, first under the heading of measurement and verification, and then under the heading of financing.

4. Results Measurement and Verification

4.1 Which Results and Indicators?

It is a truism, but nevertheless useful, to say that results-based development assistance requires first and foremost agreement on the results being aimed for. A prior requirement is agreement on outcomes along which the results are being sought. There may well be agreement on the final development outcomes. For example, outcomes that are, or are close to, the globally agreed Millennium Development goals (MDGs) should command agreement in the country as well as in development agencies. However, aiming for these final outcomes as results may not be practicable in the context of specific projects. And once we move to the realm of intermediate outputs that can support the achievement of outcomes, there is scope for greater disagreement.[8] This is a reason why a results focus

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6 Currently $15m for consultant services, and $50m for works

7 World Bank Program for Results Overview : http://siteresources.worldbank.org/EXTRESLENDING/Resources/7514725-1313522321940/ PforR_ Overview_12.2011.pdf

8 For a detailed discussion of measurement and indicator issues in the specific case of HIV projects, see Hallett and Over (2010).

may be more productive in the dialogue between development partners. But the dialogue may need to focus on an intermediate point in the results causality chain on which agreement can be reached.

Consider the example of the Nepal Bridges Improvement and Maintenance Program[9]. This is a case where the outputs of the project, the repair and extension of Nepal's extensive system of bridges across its highways and roads, especially in rural mountainous and hilly areas, are probably some distance from final outcomes of the MDGs. Ultimately, more and better quality bridges will lead to higher rural economic growth and through that an impact on the first MDG, of halving the incidence of poverty. They may also lead to shorter travel times to health care centers and hospitals and through this to lower infant mortality and maternal mortality rates thereby supporting other MDGs. But these causal chains will be difficult to establish with confidence, and thus using these outcomes as results does not make sense. In a project such as this, the end of the results chain can reasonably be that the bridges attain a certain quality standard, duly established, measured and verified. In India's PMGSY rural project, for example, the results included the percentage of rural population with access to all season roads, and the condition of roads, measured by an appropriate road quality standard.

In some cases and some sectors, the inputs, outputs and outcomes chain takes us much closer to MDG results. For example, in Pakistan's Punjab Education Sector Project, the results included overall enrollment rates at the primary level, and the female to male enrollment ratio in rural areas, which align closely with the second and third MDGs. However, whether the final point in the results chain as envisaged by the project is close to or far away from a universally agreed outcome such as an MDG, operational issues arise in specifying the intermediate outputs relative to the results objective of the project. For example, a number of inputs are required to improve enrollment rates, especially of girls. These include improving facilities such toilets, availability of textbooks, reducing teacher absenteeism, etc. If in addition to enrollment the objectives of the project include improvement of test scores for children, then intermediate outputs such as merit-based recruitment of teachers come into play. And, further down the results chain, would be a number of process outputs such as setting and dissemination of standard for teachers, for facilities, etc.

In any of the above settings, a fundamental question arises as to why there should at all be any focus on levels of the results chain lower than the highest level that is consistent with the practicalities of the project—enrollment for the education project, accessibility and quality of roads for the rural roads project, etc. In CGDs vision of COD aid for education, for example, a payment is made upon achieving the enrollment targeted—no other intermediate inputs are considered in the results framework. How the outcome is brought about, through this or that improvement of facility, or this or that method of improving teacher performance, is not in the picture. In World Bank projects, however, these intermediate outputs, even down to various process measures, are very much part of the results matrix. The reasoning has to be that this provides a framework and a guidepost for

[9] World Bank Project P125495 : http://www.worldbank.org/projects/P125495/results-based-bridges-improvement-maintenance-project?lang=en

the achievement of the desired final outcome, that it is a method of transmitting technical expertise and supervision of the project at all stages, and this will better serve the overall objective of results-based assistance.

4.2 A Verification System

A results-based system of development assistance clearly depends crucially on being able to verify results in an open and transparent manner. This means in effect that the indicators chosen to monitor results must be verifiable. CGD's discussion of verification for their COD programs is interesting in this regard. First, they expect that the recipient would produce results reports, but that an independent third party would verify. Second, in excluding test scores from the results frameworks (for education projects), relying instead only on enrollment and completion results, they recognize the "incentives to misreport progress." These concerns and stipulations in turn raise some fundamental issues on monitoring and verification.

Based on World Bank experience to date, there is a variety of approaches being adopted, tailored to country and sector conditions. Some of the features which are illustrated in specific experiences, and provide pointers for principles that can be built upon going forward, are drawn together below.

- ***Proper monitoring and evaluation can be particularly valuable when it is embedded within the program, ideally owned/driven by the key client counterpart agency***. The project can rely upon program's established systems if an assessment has been made confirming that the implementing and/or oversight agencies have the experience and capacity to produce objective, quality and reliable data in a timely manner. Such an assessment is itself an important part of project preparation. In the Nepal Bridges Improvement and Maintenance Program, the monitoring, evaluation, and subsequent verification are underpinned by a new Bridge Management System (BMS) which is implemented by the sponsoring Government agency, the Department of Roads (DOR). That system builds in safeguards including geo-referencing of work, available historical records of work, design documentation, and photographs. The overall verification of aggregated results, to unlock DLIs, is undertaken by the National Planning Commission of Nepal. To buttress that capacity, the NPC will hire independent consultants to validate BMS results. And results will be uploaded on to the DOR website, providing an opportunity for the general public to review and lodge complaints.

- ***Third party monitoring may be useful, where external verification mechanisms are assessed as having experience and capacity of ensuring credible verification***. The National Initiative for Human Development 2 Program, in the Kingdom of Morocco, employs nine (9) DLIs, and the primary information base will be the management information system of the *Initiative National de Développement Humain* (National Initiative for Human Development) INDH (implementing agency). For the main six (6) DLIs, an external firm to be contracted by the World Bank, based on terms of reference agreed with the authorities, will make an independent verification. (For the three (3) of the DLIs, which are "process" type, the verification will be done by the Inspector Generals-- IGAT/IGF). The World Bank will further review the evidential base for disbursement-linked indicators during implementation support.

- ***However, there is a balance to be struck between developing capacity of and trust in the government's own verification systems and effective verification***. After all, ultimately, it will not be practicable for results from each and every government project to be verified by a third party. It is best if openness and transparency becomes the norm for government results reports, with the country's own civil society acting as verifier through debate and discussion. Information must be published clearly, regularly and with sufficient frequency to enable effective monitoring. The State Health Investment Project in Nigeria is a multi-level engagement using different features of results-based financing at various levels—at individual and groups of health facilities; at local government; and at the state level. A common theme is that in each segment there will be techniques employed to ensure that information is clearly and regularly made available, in appropriate ways, to help with monitoring, evaluation, and verification. For example the performance of individual health facilities, on say child vaccinations, will include data available freely on-line, and community-based ex-post verification including through grass root organizations visiting homes of clients to confirm and assess service. At the state level, there will be a development of a Citizens Charter that provides greater information on an ongoing basis, and also State and Local Government annual scorecards—which indeed is a DLI for part of the Bank's financing.

- ***Not all DLIs need follow the same verification arrangements and the choice of DLI may itself depend on verifiability.*** Verification should take into account the ability of the verifying institution to provide credible information together with the results associated with a DLI. When there inherent difficulties in doing that, for example if the indicator for an outcome higher up the results chain is not easily verifiable, or easily manipulable, then a more robust indicator lower down the results chain may be preferable, even though ideally one would wish to target the outcome in releasing finance. The Ethiopia Health Millennium Development Goals Program-for-Results is, as its name suggests, focused on and driven by the MDGs in health. Consistent with the Government's own Health Sector Development Program, it uses a set of DLIs which are further down the results chain (as compare to the ultimate MDG measure) but which: (i) have evidence of their contribution to MDGs; (ii) are under the span of control of government; (iii) are achievable in the time frame considered; and (iv) are objectively measurable and verifiable. As well as (intermediate) outcome indicators (e.g. deliveries attended by skilled birth providers), there are also process indicators (such as improved transparency of the Pharmaceutical

Fund and Supply Agency) which are buttressing the results chain for long term impact.

More generally, a results-based approach to development assistance highlights the importance of credible information systems which tell the population at large about the outcomes of government expenditure in straightforward and understandable manner. While specific third party verification may be useful in the short run, over the long run it is public debate and civil society alertness in the country which is the best verifier. Countries including India have introduced right to information (RTI) laws which give civil society access to a swathe of governmental information. And India has also sought to provide more open data on performance management and results in the public sector, including with reports on achievements in results framework documents for major Government departments[10]. For RBF operations, such release of data on indicators and results should be pro-active, and be part of the inherent design of individual projects. Indeed for all World Bank projects, under the organization's Access to Information policy[11], the Implementation Status and Results Report (ISR), which typically reports on project progress twice a year, includes published information with general information on overall performance ratings and results.

5. Calibrating Finance to Results

5.1 How Much Finance?

In "traditional" investment lending, the development partner (e.g. the World Bank) contributes to meeting the cost of inputs, and indeed such costs should ideally be determined in a transparent, market-based way—as is the thrust behind good procurement practices required by the Bank's rules. So, for example, if after competitive bidding a contractor charges $10m to construct 10km of new road, then in an enclave investment project, the amount of Bank financing would be based on that calculation and disbursed against those inputs. But how much should be provided if the donor is "buying results", for example the increase number of rural residents having access to a health facility within one hour's drive of their home?

If there is a firm and agreed relationship between inputs and outcomes [i.e. $z= h(g(x))$] then one could in principle work backwards and use this relationship to calibrate the funding to be provided. So (to link to the COD example mentioned above) one way to systematize thinking may be to start with the final outcome indicator for the project and the target improvement for this indicator. Divide the total allocation by the target improvement, and this gives a useful benchmark—dollars per unit improvement in final outcome. Setting standards for lower level indicators then follows, in principle, if there is agreement on what unit improvement in input means for improvement in outcome. If there

[10] Government of India, Cabinet Secretariat – Performance Management : http://performance.gov.in/
[11] World Bank Access to Information:
http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTANDOPERATIONS/EXTINFODISCLOSURE/0,,menuPK:64864911~pagePK:4749265~piPK:4749256~theSitePK:5033734,00.html

is not an agreement on this, it immediately raises the question—why are we using it as an indicator?

However in many cases this condition of their being a firm, precise, quantified relationship between inputs and outputs will not hold, which appears to create a difficulty as to how to anchor the quantity of finance. But actually this puzzle occurs in other settings of development finance, with solutions which, be they more or less elegant, appear to work. For example for development policy lending (in which the Bank supports policy reform, and the flow of funds is to support overall government budget spending), the amount of finance is sometimes associated with "gap filling" where international development assistance is supporting prudent fiscal policy. And even in simple investment lending, the amount of finance provided by the Bank in any particular project varies greatly as a share of the total cost—with 100 percent financing being the exception rather than the norm.

So perhaps the best guide to how much to finance rests on three considerations. First, one can ensure consistency with the parameters of donor financing for the country. Take for example a low-income country that is a recipient of IDA, which in practice means (based on the IDA allocation formula) a targeted allocation of IDA $ over a three year period. The recipient and donor, by a process of negotiation, can determine what quantity of finance is appropriate for any given RBF operation in that period. A second consideration is, broadly, a "reasonableness" test on value-for-money. The donor would want to know that its funding does not exceed the overall spending likely needed to deliver the agreed results, and indeed precisely such a restriction in encapsulated in the Bank's P for R instrument. The donor may also wish to be assured that the funds are being spent effectively—and in this regard certain safeguards or standards can be established, as for example has been done with the P for R instrument. Finally a third consideration could be termed the "leverage effect"—that the donor would provide a relatively greater amount of finance (for example 75 percent as opposed to 25 percent of total program spending in the relevant area), to maximize the attention to, and incentive for, achieving the specific results.

Of course most RBF operations will not be restricted to a single DLI, but rather have several, which raises the question of how much finance should be tied to each DLI? A number of criteria could be taken into account—including simplicity, importance, and leverage. On simplicity, there is something to be said for giving equal weighting of the share of finance to each DLI. That approach tends to focus attention (among client and development financier) on the complete results framework and a collective approach to achieve all dimensions of it. For example the Pakistan Punjab Education Sector project used ten (10) DLIs each of which was weighed equally. It did, however, require the additional threshold that at least 80 percent of the DLIs had to be achieved in a particular year to allow disbursement to proceed.

Regarding importance, that approach would allocate a greater amount of finance to those DLIs to which the partners accord the greatest weight. Such an approach would make sense if, for example, there was clearly an indicator which encapsulated the aim of the investment and was measured reliably and timely. In the India Rural Roads program, for example, 50 percent of the financing is tied to a single DLI—the one measuring the enhanced connectivity for rural inhabitations, which is central to the whole program. By definition DLIs with lower weight would be less important, which may be reasonable but runs a perhaps unintended risk of adding too many less-than-critical DLIs to the results framework in response to particular pressures. In the Morocco National Initiative for Human Development, DLIs range from solidly outcome focused—the percentage of population provided with access to improved water supply, to then within the nine DLIs those focused on process, such as the percentage of provinces and prefectorates in the Program Area which have put in place a plan of action to address audit recommendations. The leverage criteria is akin to importance, but rather reflects more where the donor and/or government wishes or needs to incentive performance most.

5.2 Over What Period?

At first glance it might be appear obvious that since the approach is "cash-on-delivery" then that is exactly when the finance is paid over. But there are some practical difficulties. As we have argued earlier, in many development settings the ultimate results being targeted (for example a distinct improvement in educational outcomes among a targeted group, such as young girls) can take many years to come to fruition. Clients (i.e. recipient governments) may argue that they have a "cash-flow" problem in that they need funds from donors in order to make the on-the-ground investments to deliver improved results. They may also be concerned that they have too much at risk with end period/end result disbursement—all the funds riding on one horse and with other factors coming into play outside their control. The upshot is they may be reluctant to go for a RBF arrangement and rather prefer to stick with more traditional arrangements where the flow of funds is, in principle, earlier and possibly more predictable.

To the extent these factors are acknowledged by donors, that provides a rationale for more nuanced timing of delivering finance. To cope with the cash-flow problem, for example, it is quite possible to make an up-front investment, which can be recouped at later stages when results are delivered (that is exactly what is allowed in a provision of the Bank's P for R instrument, which allows for up to 20 percent of the total loan to be paid, in effect, as an advance). On the client preference/risk dimension, one can structure agreements which stagger payments based on intermediate or partial results. That makes particular sense if, for example; (i) results are cumulative in a linear pattern over time—for example if the target was increasing school enrolment, this may well be achievable in segments each year; and/or (ii) there is a clear and reliable link between intermediate indicators and ultimate outcomes, such that payment of substantial finance on the former will likely buttress final payments on the latter.

What might this mean in practice? It is interesting to look at the stylized practice in the Bank. Investment loans have typically been slated for a five year implementation period, with disbursement relatively low in years one and two reflecting the start-up period including the time taken to conduct procurement to buy the inputs against which finance is disbursed. In contrast policy loans commonly disburse upon effectiveness—so the period is one year or less. One might conjecture that the new P for R instrument could aim for disbursement periods within these poles, perhaps of three years or so duration, to maintain a degree of pressure among the partners involved to work quickly and deliver promptly. As a comparison, the horizon for, say, public service agreements (PSA) in the UK (matching funding to target) is three years, which would suggest possible advantages in emulating this in some RBF settings. There could also be "hybrid" models, whereby a proportion (e.g. 50 percent) of the donor financing is disbursed against intermediate achievements (thereby allowing funds to flow with some regularity in early years), and the remaining proportion is a "balloon" payment, paid at the end of the engagement when more full outcomes are demonstrated. It is interesting to note that the planned duration of the set of RBF operations (see Annex A) varied from a minimum of 2.5 years to a maximum of 6 years, and the average is around 4 years.

5.3 Managing Conditionality

When there is agreement between the client and development agency about the result (or intermediate result) to be targeted and used for disbursement, such a relationship would suggest that the oft-perceived problem of conditionality being imposed on countries would not arise. In practice, however, the arrangement is rarely with a single disbursement-linked indicator, but rather with a set of such indicators. Indeed in several Bank-sponsored RBF operations, 10 or more DLIs have been used, and in the Brazil Minas Gerais Partnership for Development II, there were 24 DLIs. Although formally all such indicators are agreed, it does perhaps open the door to the pushing of specific donor interest (or concern) by adding indicators for that purpose. A similar issue can arise when a program is being (results-based) financed by multiple donors. That raises the possibility of the results framework becoming larger and more diverse to reflect specific donor preferences. Lessons from the literature on donor aid would suggest this is not a healthy route to take—and rather it would be better practice to be firm in sticking to a manageable, uniformly agreed set of indicators (and measurement and reporting protocol) to which government and all donors adhere.[12] The Morocco National Initiative for Human Development provides an excellent example of this practice whereby the Government's agreement on a common set of DLIs is with both the World Bank and the European Union.

Another situation to keep under close review is the potential use of a "golden" DLI, by which we mean the setting of a specific DLI to which greater emphasis is given within a wider set. In its purest form, this could be a minimum-standard requirement which must be continuously met as a precondition for considering disbursements against other DLIs. For example the donor may require that a DLI of open publication of program finances and audits on a regular basis is needed at all times, or that other fiduciary, environmental, or other safeguards are met. In a graduated form, the approach would rather give a greater disbursement weight to such an indicator, rather than make it all or nothing. Using such an approach does somewhat shift the emphasis away from the end results to be achieved, and more towards the process by which the government is operating. Although such a position is defensible in some situations, care would need to be taken that it does not slip into conditionality by the back door.

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[12] The literature is large and diverse. But some examples include Kanbur (2005) and Welsh and Woods (2007)

Conditionality is sometimes viewed as a straightjacket, which raises the question of what if any flexibility there should be over time with DLIs, once an agreement has been reached? There is a tension between the benefits of certainty and the ability to react to changing conditions or indeed knowledge. To the extent that the DLIs are close to the "outcome" end of the spectrum, well-defined, robustly measured, and not susceptible to manipulation, one might argue that being fixed for the duration of the agreement (say 3 years or so) is a good thing. Such an arrangement provides strong and clear incentives to perform, and eliminates potential transaction costs (or distractions) which can come with renegotiation during the term of the contract. It also reduces a moral hazard problem which could occur if officials of both parties involved found it attractive to adjust DLIs ex post to make them easier to achieve. In contrast when DLIs are less easy to define precisely, or difficult to set reliable quantitative targets for ex ante, or calibrated in a rapidly changing or uncertain environment, then there are benefits to be gained in adjusting in response to new information as the program progresses. In such a situation it would be important to provide a priori an agreed protocol for how and under what circumstances the adjustment is to be made.

In respect of the Bank's experience on this last point, an interesting contrast emerges in the formal arrangements for adjusting 'results' in its main lending instruments. The least flexible is the development policy loan, which requires a formal Board-approved waiver for changing a policy condition—which is akin to the "result"—after initial Board approval of the operation. For investment loans, there is substantial flexibility in changing the nominal results (i.e. indictors in the formal results framework, and the targets thereof) which can be done at the discretion of management (in agreement with the client) in a fairly easy fashion. Underlying this, however, is considerably less flexibility in making adjustments to the factors to which financing is tied i.e. the inputs—which if adjusted substantially do require consultation with the Board. It happens that for the new Program for Results, there is the maximum de facto flexibility, in so far as the results framework (and more specifically the DLIs) can be changed according to the same (relatively easy) protocol as applies to an investment loan, and this directly changes then the basis on which disbursement is made.

6. Evaluating Results-Based Development Assistance

Since results-based financing is a new instrument, there is as yet little or no firm evidence as to its ultimate success, but it is important that evaluative evidence is gathered over time to assess its usefulness. That approach could sensibly ask two questions: how effective are RBF operations in delivering desired results ("do they work"), and how do they compare as against other instruments such as traditional investment lending ("do they work better")?

Regarding the effectiveness of RBF operations, there are several channels of information which should be gathered to support a broad evaluation. One is an assessment of the strength of the results framework of RBF interventions. A priori, one might expect such results to be more clearly and precisely defined than in a similar operation where disbursement is input-based. That is because there is greater attention given by both the donor and the client to the results framework, since in effect money is resting on it. The assessment will have to use some judgment, for example as to the relevance and clarity of the indicators, but it could also be complemented by reviewing more objective factors such as the existence of complete baseline data at the outset of the project, and the frequency and reliability of progress data across time.

A second dimension of the assessment would be to review the "self-regulating" aspect of RBFs. In those "pure" cases where the disbursement is tied directly to the end outcomes being sought, then the pace and scale of disbursement is a simple proxy for overall success (unlike an input-based investment operation, where disbursement only conveys that the funds have been spent). So if, for example, the experience shows that across RBFs disbursement is regular and complete, that is prima facie a good sign—and if disbursement is erratic, that is a concern. That said, disbursement performance would be essentially a necessary but not sufficient condition for success, and indeed would have lower informational content in those operations where DLIs were closer to intermediate outputs rather than outcomes.

So the third dimension would be thorough independent evaluations of performance, as for example at the World Bank is the purview of the Independent Evaluation Group[13]. The methodology for such evaluations is well established (as used to date for investment lending and DPLs) and should be applicable for RBF operations.

They could and arguably should be complemented by a fourth dimension, the judicious use of impact evaluations. It is very noteworthy that a great many of the existing RBF operations supported by the Bank, including operations for Pakistan Education, Nepal Bridges, Ethiopia Health, and Brazil Bolsa Familia (cash transfer program) have built impact evaluations into the design, and so a significant body of knowledge is being assembled and what emerges from this will be of interest.

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[13] Nancy Birdsall, Center for Global Development, called for some form of independent evaluation to be a condition of US support for the Bank's P for R instrument: http://blogs.cgdev.org/globaldevelopment/2011/11/world-bank-results-initiative-the-u-s-should-support-it-%E2%80%93-but-with-independent-verification-please.php

Even with such information being gathered, we will still be left with the question as to whether the RBF was better than the alternative? In practice we are not likely to have specific evidence on the counterfactual, but we can nonetheless get close to a meaningful answer through several routes. The degree of client uptake of RBF instruments conveys at least something about their perspectives on effectiveness. In the case of the Bank's P for R, two operations were approved in June 2012, just a few months after the instrument was established, and as of March 2013 the total has now reached seven with a commitment value of around US$1 billion, and is expected to grow further through 2013 and beyond. That is broadly in line with what had been expected by the scheme's proponents—although it currently remains a small share of the Bank's overall financing. Another signal can be observed in the relative pace of disbursement between RBF and IL operations, which if faster in the former might be suggestive (but by no means a guarantee) of good performance.

Finally it should be possible, as more operations reach fruition and a bigger data set becomes available, to make some comparisons between P for R operations and similar investments, ideally in the same sector and country grouping. That would be particularly valuable, as it will shed light on the characteristics associated with the success or failure of RBFs. For example take the sector of intervention: are RBFs better suited to human development (including education and health), or selected infrastructure, where more tangible and well accepted indicators are available, as compared to say governance or public sector reform? Are they better suited to country conditions which have strong starting capacity (even if in an enclave)? Do they operate better when the country or sector has a tradition of open data publication and/or external, robust verification of results? And in answering these questions, guidance will also emerge as to how to adjust RBFs going forward to be more effective.

7. Conclusion

The logic of results-based financing seems compelling. Compared to more "traditional" approaches, it gets us to focus on outcomes (or at least outputs, i.e. further along the results-chain) rather than dwelling on inputs. It is also a natural entry point to more robustly measuring, monitoring and verifying outcomes, since upon that system money flows from the development agency to the client country.

This paper has set out the basic theory of RBF and related it to the actual evolution of World Bank projects in the direction of RBF. We find that there has indeed been an acceleration of movement in the direction of RBF over the last five to seven years, initially with the introduction of disbursement linked indicators in investment operations, and more recently with the use of the Bank's new instrument, P for R which is designed more specifically for this approach. With at least 29 operations using features of RBF, spread across a multiplicity of sector, regions, and country-types, and totaling over $10 billion in commitments, this is certainly part of the mainstream development agenda even if it may still be thought of as a niche business. Indeed the Bank's involvement at scale is among the largest, if not the largest, in the global development community.

Our review has looked at both the theoretical framework for RBF, and illustrated the practical experience within the World Bank setting, having reviewed operations to date. It is clear that the practicalities of implementation have meant that these projects are not "pure" RBF in the way some early proponents had argued. We find that the indicators on which disbursement is conditioned are on a range from those which come close to pure outcome indicators (such as test scores in education projects), through those which are more intermediate outputs (such a teacher recruitment), to some which are perhaps some way along the causal chain from final development outcomes (such as the development of protocols and agreement on procedures). It is notable that the number of indicators being monitored and on which finance is disbursed (which in the "pure" form might only be one or two) is actually quite large—ten on average. Regarding time horizons, the RBF project designs envisage disbursement over a four year period on average—less than the standard five or six years for Bank investment projects, but not dramatically so, and not free floating in time either. None of the projects elect for the purest form of cash on delivery—which would disburse only at the end of a program's life when the full results have been achieved; to the contrary most if not all select a "gradual" approach which envisages staged disbursements as intermediate outputs and outcomes are built up.

Our assessment also looked at the critical issue of results verification. The call for third party verification in each and every case may not be a good fit, and our review finds that monitoring and verification is being done through a variety of techniques which certainly includes third party oversight, but also focuses on building in-country/in-sector capacity and management information, and gives a premium to making information on progress and results available to citizens on a regular basis. We also find that RBF operations in many cases are adopting (and helping to pay for) rigorous impact evaluations, which can buttress verification and provide insights for future longer term assessments. . Overall, then, what we see is a significant turn towards RBF orientation in World Bank projects, within the constraints faced by a multilateral organization engaged in projects with large financial outlays. We hope to see this trend continue as lessons are learnt from these projects, particularly from the growing number of projects under the P for R umbrella.

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Annex A

Table 1: Recent World Bank supported projects using features of a results-based financing framework

Country	Project ID	Project Name	Sector	Year of Approval	Commitment ($)	Number of DLIs
Latin America and the Caribbean						
Argentina	P095515	Argentina Provincial Maternal -Child health Investment	HNP	2006	300,000,000	10
Argentina	P121836	Public Sector Strengthening	PSG	2011	30,000,000	9
Argentina	P113896	San Juan Social Inclusion & Development Project	HNP	2011	50,000,000	8
Brazil	P101324	Minas Gerais Partnership for Development II	PSG	2008	1,437,000,000	24
Brazil	P082142	Brazil Ceara Multi-Sector Social Inclusion Development Project	PSG	2006	149,750,000	13
Brazil	P087713	Brazil Bolsa Familia	SP	2004	561,675,669	17
Brazil	P126372	Recife SWAp-Education and Public Management	ED	2012	130,000,000	12
Brazil	P120830	Rio Grande do sul SWAp-Education, Private sector Devt, Transport	FPD	2012	480,000,000	8
Jamaica	P095673	Jamaica Early Childhood Development Project	ED	2008	15,000,000	9
Uruguay	P125803	Road Rehabilitation and Maintenance Program *	TR	2012	66,000,000	3
South Asia						
Pakistan	P102608	Punjab Education Sector	ED	2009	409,732,183	10
Pakistan	P107300	Sindh Education Sector	ED	2009	230,030,342	10

Country	Project ID	Project Name	Sector	Year of Approval	Commitment ($)	Number of DLIs
India	P124639	PMGSY India Rural Roads Project	TR	2011	1,500,000,000	3
Nepal	P125495	Nepal Bridges Improvement & Maintenance project *	TR	2012	38,700,000	6
Bangladesh	P118701	Bangladesh Employment Generation project	SP	2011	150,600,000	7
Sri Lanka	P118806	Sri Lanka Second Health development project	HNP	2013	129,800,000	9
Europe and Central Asia						
Romania	P121673	Romania Social Assistance System Modernization	SP	2011	710,400,000	20
Albania	P122233	Social Assistance Reform project	SP	2012	50,000,000	17
Moldova	P120913	Strengthening the Effectiveness of Social Safety Net	SP	2011	22,900,000	17
Africa						
Ethiopia	P103022	PROTECTION OF BASIC SERVICES	SP	2009	540,000,000	6
Ethiopia	P123531	Ethiopia health MDG Support project *	SP	2013	676,100,000	8
Nigeria	P120798	States Health Program Management	HNP	2012	96,400,000	12
Tanzania	P118152	Tanzania Second Local Government Support Project *	UD	2013	167,600,000	6
Uganda	P117876	Uganda Support to Municipal Infrastructure development *	TR	2013	160,000,000	7
East Asia						
Indonesia	P107661	Indonesia BOS-KITA	ED	2009	1,100,000,000	13

Country	Project ID	Project Name	Sector	Year of Approval	Commitment ($)	Number of DLIs
Indonesia	P111577	Indonesia Local Gov't and Decentralization (DAK)	UD	2010	220,000,000	9
Vietnam	P127435	Rural Water Supply and Sanitation National Target Program in the Red River Delta *	WAT	2012	131,500,000	3
Philippines	P082144	PH-Social Welfare and Development Reform	SP	2010	405,000,000	12
Middle East and North Africa						
Morocco	P116201	Morocco's National Initiative for Human Development *	SDV	2012	300,000,000	9

Key: * indicates a Program for Results (P for R) operation
Sector acronyms: HNP – Health, Nutrition, and Population; PSG – Public Sector and Governance; SP – Social Protection; ED – Education; FPD – Finance and Private Sector Development; TR – Transport; ARD – Agriculture and Rural Development; UD - Urban Dev; WAT – Water; SDV – Social Development.

Source: This information is publicly available on the World Bank's projects database, accessible at: http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0,,menuPK:41389~pagePK:95863~piPK:95983~targetDetMenuPK:228424~targetProjDetPK:73230~targetProjResPK:95917~targetResMenuPK:232168~theSitePK:40941,00.html

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