The New Role of the World Bank

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The World Bank was founded to address what we would today call imperfections in international capital markets. Its founders thought that countries would borrow from the Bank temporarily, until they grew enough to borrow commercially (NAC 1946, p. 312; Black 1952). The Bank could arguably address capital market failures if private banks would not lend to truly creditworthy projects in developing countries out of fear that they would not be repaid. In that case, a multilateral institution backed by the world’s governments might be able to secure repayment. Some critiques and analyses of the Bank are based on the assumption that this continues to be its role. For example, some argue that the growth of private capital flows to the developing world has rendered the Bank irrelevant.

We will argue that modern analyses should proceed from the premise that the Bank’s central goal is and should be to reduce extreme poverty, and that addressing failures in global capital markets is now of subsidiary importance. The overwhelming majority of Bank subsidies from its shareholder countries go to the International Development Association (IDA), its arm for making grants and highly concessional loans to the lowest-income countries, and other funding vehicles for the same countries. The Bank’s greatest impact comes from its role in the dramatic policy changes many developing countries have undertaken in multiple sectors that most economists would consider likely to reduce poverty, either by increasing growth or promoting equity. The Bank’s stated goal is reducing poverty.

Why might donor countries choose to work through an international organization to advance the goal of reducing poverty? Developing country government policy is a key factor influencing poverty, with an importance far greater than the direct impact of aid. Effective aid therefore often involves negotiating agreements with recipient country governments that include policy reforms. There are economies of scale in negotiating such agreements that can be realized by an entity such as the Bank, and pooling funds into such an entity may also improve donors’ collective bargaining position in negotiations with governments. Moreover, we argue that the World Bank’s status as a multilateral organization and its technocratic staff enhances its credibility and legitimacy in policy discussions with developing-country governments. This has allowed it tremendous policy influence relative to the explicit and implicit subsidies it receives, making it a bargain for those who value its mission of reducing extreme poverty and share its mainstream economic views on what policies best advance that goal.
Below we discuss what the Bank does: how it spends money, how it influences policy, and how it presents its mission. Based on this, we argue that the role of the Bank is now best understood as facilitating international agreements to reduce poverty, rather than more narrowly addressing international capital market failures. Finally, we examine implications of this perspective for the Bank and for assessing the performance of the Bank. For example, the Bank should not conceptualize its principal activity as capital investment, but instead should consider a broader range of activities and instruments. Moreover, attempts to measure the Bank’s success by regressions that use economic growth rates as the dependent variable and disbursements of aid as an explanatory variable will be misleading.

The Cost of the World Bank, and Its Focus on Poverty

The World Bank Group operates through divisions that have differing roles. Three of these groups can arguably be interpreted either through the narrow lens of addressing international capital market imperfections or through the broader lens of poverty reduction: the International Bank for Reconstruction and Development (IBRD), which lends to governments; the International Finance Corporation (IFC), which invests in commercial projects; and the Multilateral Investment Guarantee Agency (MIGA), which sells insurance policies to private investors against noncommercial—that is, political—risks. The IBRD, IFC, and MIGA work primarily in middle-income countries, with financial terms ostensibly close to market terms. Their books show them earning profits. However, they receive an implicit subsidy because they have the use of capital that shareholder governments have placed with the Bank, and IBRD shareholder governments also cover the risk that enough deals will go bad that the Bank would need to call on their pledged capital. As discussed below, academics have debated the extent to which those components of the Bank are solving international capital market failures, as opposed to simply providing subsidies.

Other parts of the Bank do not seem focused on addressing capital market failures, but are much easier to understand as contributing to poverty reduction. These include the Bank’s fourth arm, the International Development Association (IDA), and various Trust Funds that the World Bank administers on behalf of donors. IDA was established in 1960. Instead of requiring
market interest rates, IDA offers a combination of grants and of loans on such highly concessional terms that they amount to grants for very low-income countries, currently defined as those with per capita income of less than $1,215 per year (at market exchange rates). The World Bank Group also holds Trust Funds supported by donors and used for pre-specified purposes related to addressing poverty (broadly defined) such as fighting AIDS and malaria, immunizing children, or promoting access to education in the developing world. In general, Trust Funds are not intended to generate financial returns. Donors subsidize these poverty-focused parts of the Bank much more than the other parts.

Table 1 shows a breakdown of the opportunity cost of capital to shareholder governments. The first few rows show the paid-in capital from governments to the IBRD and the IFC, along with the amount of retained earnings that have been accumulated over time from past repayments of loans or liquidating other investments. The first row under “Flows” multiplies the stock of $64.8 billion by 3 percent to estimate $1.9 billion per year in opportunity cost in the foregone interest from investing in a riskless security—the 20-year Constant Maturity Treasury rate. This analysis exactly follows the methods of Meltzer (2000) and Gurría and Volcker (2001), updating their results.

In the second row under “Flows”, we estimate the cost of IDA at $8.0 billion, representing annualized donor replenishments over the last decade. The remaining flows describe disbursements from “trust funds”, with which Bank operations are financed directly and concessionaly by donor governments rather than from Bank capital. We exclude “financial intermediary trust funds”, which are simply pass-through accounts for operations outside the Bank, and include “Bank-executed trust funds”, which directly finance Bank operations. The remaining category, “recipient-executed trust funds” (RETF), mixes support for Bank and non-Bank activities. We thus provide estimates with and without RETF disbursements.

The last few rows of Table 1 show an extremely rough estimate for the risk that the Bank might call on its shareholders for additional capital. There is $218.8 billion in capital that could be called, according to the rules of the World Bank, although it never has been. The current outstanding World Bank loans total $152 billion. Thus, for example, if one-third of those loans default completely, representing a loss of $51 billion, $42 billion of this loss could immediately
be covered by the existing stock of IRBD capital, leaving $9 billion to be drawn from the callable capital. If the risk to callable capital is equivalent to a 5% annual risk of an event such as this, the implicit subsidy paid to cover the risk of such high losses would be about $0.5 billion per year.

The vast majority of the donor subsidy embodied by the existence of the Bank goes to very poor countries. Overall, Table 1 estimates that the total subsidy provided by the World Bank Group’s shareholders to clients overall is in the range of $11.0–14.2 billion per year, which includes a conservatively large allowance for risk to donors’ callable capital. The range in this estimate reflects uncertainty about what portion of recipient-executed trust fund disbursements support operations of the Bank itself. Of this total, aid given through IDA accounts for $8 billion, and most of the $3 billion from recipient-executed trust funds supports activities in IDA-eligible countries (Huq 2010). Further details, including our treatment of MIGA and callable capital, are described in the online Appendix available with this paper at http://e-jep.org. To be clear, this $11–14 billion is not an estimate of the degree to which the Bank benefits its client countries, nor an estimate of the Bank’s cost of capital. Rather, Table 1 estimates the opportunity cost to the Bank’s shareholders that arises from the existence of all parts of the Bank.

The World Bank’s Policy Role

The annual donor subsidy embodied by the Bank, on the order of $11–14 billion, is trivial relative to the economies and budgets of both recipients and donors. The total GDP of client-countries receiving IDA credits is $2 trillion; the total GDP of IBRD-only borrowers is $27 trillion. The total GDP of the Bank’s ten largest donor-shareholders is $47 trillion, and their total government budgets exceed $13 trillion.

Focusing on financial flows misses a key part of what the Bank does, for good or ill, in shaping developing-country and donor policy. Below are a few examples.

Agriculture. In the past many African farmers could only sell to agricultural marketing boards that operated state-run processing facilities and paid a fraction of the world price for
export crops. Ghanaian cocoa farmers shortly after independence were only receiving 55% of what the board received for selling their produce; Kenyan cotton farmers in the mid-1970s were getting only 48% (Bates 1981: 137–140). This was a common practice in African countries; nine of the ten countries examined by Kherallah et al. had created agricultural marketing boards (2002). The state also ran markets for inputs, such as fertilizer, often delivering them not at all, or only to politically connected farmers, or too late for planting (Lundberg, 2005; Lele and Christiansen, 1989). The Bank promoted liberalization of agriculture and policies have changed dramatically. Monopsonistic agricultural marketing boards, where farmers were only allowed to sell to a quasi-government organization at a predetermined price are now mostly gone. Seven of the nine countries surveyed by Kherallah (2002) have removed or reformed their state marketing boards.

**Health.** The World Bank promoted a shift in budgets away from tertiary-care hospitals in capital cities towards community health centers and rural clinics providing basic primary care (Ekman, 2004), for example through Ethiopia’s Health Extension Program and Brazil’s Family Health Extension Program. Health budgets are now substantially more oriented toward primary care. At one point the Bank pushed for charging fees to at least certain categories of patients, although it has now backed away from this (World Bank 2015a). It now frequently promotes the adoption of pay-for-performance programs within government health services.

**Education.** The Bank has been an important part of the movement for universal primary education. The number of out-of-school children and adolescents worldwide fell from 196 million to 124 million between 2000 and 2013 (UNESCO 2015), despite population growth over the period. Now that the vast majority of primary-school age children in the developing world are enrolled in school, the Bank is shifting towards focusing on improving learning.

**Social protection.** The Bank has played an important role in the spread of “conditional cash transfer programs”—in which cash transfers to low-income households are linked to children attending school or seeing health care providers. After promising results from Mexico’s PROGRESA in the 1990’s (now referred to as Oportunidades) and Brazil’s Bolsa Alimentação program, the Bank now supports conditional cash transfer programs in 26 countries (World Bank, no date). The Bank financially supported national programs and vigorously promoted
conditional cash transfer programs, including at international conferences convened for that purpose in Mexico in 2002, Brazil in 2004, and Turkey in 2006. The Bank’s researchers also played an important role in rigorously evaluating the impact of these programs, a factor in their rapid diffusion. Such programs have been found to reduce poverty and improve child health and education. (Fiszbein et al. 2009: 14).

**Regulatory policy.** The World Bank’s *Doing Business* reports, which provide objective and internationally comparable measures of how different countries regulate the private sector, have been very influential in motivating countries to reduce regulatory barriers to establishing new firms (Besley 2015).

**Tax policy.** While the International Monetary Fund (IMF) has played a bigger role, the World Bank has supported the dramatic worldwide shift to value-added taxes (VAT), which have replaced other taxes widely considered less efficient. Since 1960, a VAT has been adopted as the main consumption tax in over 140 countries (Norregard and Khan, 2007; Cnossen, 1998).

**Trade policy.** The Bank, along with the IMF, has supported shifts from rigid import quotas to more flexible tariffs, along with reductions in tariffs, and movements toward “unified” exchange rates in which the same exchange rates are applied to all types of trade. From the 1980s to 1990s, most World Bank adjustment operations were made conditional on trade liberalization (Edwards 1999). Tariffs and statutory barriers to business creation have declined dramatically. In India, for example, the weighted tariff rate has fallen from 54% to 7% between 1990 and 2009 (World Bank, 2015b).

**Conflict recovery.** In post conflict situations, the Bank has supported community-driven development programs and procedures for demobilizing and providing transitional support to ex-combatants, for example, in Bosnia, Cambodia, El Salvador, Lebanon, and Uganda (Kreimer et al., 1998: 28).

**Property rights.** Since the 1960s, the Bank has supported land demarcation and titling programs in Armenia, Bolivia, Guatemala, Indonesia, Malawi, and elsewhere across the developing world (World Bank 2011). Thailand used World Bank support to partition and
distribute land to rural residents (Bowman, 2004). Whereas governments once regularly appropriated private assets, they are now more likely to privatize state assets.

This long list of policy areas where developing countries have dramatically changed policies following Bank involvement suggests that an important way to judge the Bank is a) the extent to which the Bank played a causal role in these changes and b) whether these policy changes were appropriate and effective in reducing poverty. Below we discuss some of the evidence on the extent to which the Bank had a policy role and the methods through which its influence works. However, this is not the place for a detailed examination of the appropriateness of all these policies. We do not agree with all of them, or believe they were all well implemented, but we agree with the general thrust of most of them and believe that they reflect mainstream views within the economics profession.

It is, of course, very difficult to assess precisely the extent to which World Bank actions played a role in the policy changes listed above. No doubt global changes in international relations and in ideology played a role, as well. But there is reason to believe that the Bank caused substantial increases in the extent and speed of the changes above. Take the spread of Conditional Cash Transfers (CCTs). While CCT’s were a Brazilian and Mexican innovation, early World Bank evaluations and promotion of CCT policies gave them greater credibility and legitimacy before a worldwide audience (Fiszbein et al., 2009; Borges, 2011; García and Moore, 2012; Ancelovici and Jenson, 2013). The Bank also directly financed and helped design CCT programs in Colombia, Jamaica, El Salvador, Panama, Guatemala, Chile, Senegal, Eritrea, Burkina Faso, Cape Verde, D. R. Congo, Ethiopia, and many others (Handa and Davis 2006; García and Moore 2012; Pena 2014).

Gavin and Rodrik (1995) conclude that “the Bank is the single most important external source of ideas and advice to developing-country policymakers”. There is empirical support for this view from a survey of 6,731 government officials and development practitioners, from 126 low- and lower-middle-income countries, who were asked for subjective ratings of 57 different aid agencies (Custer et al. 2015: 48). The World Bank ranked first out of 57 for “agenda-setting influence”, and fifth for “usefulness of advice”. The Bank’s lending operations undoubtedly play an important role in its influence, as Gavin and Rodrik point out. But in our view, the Bank’s
influence is much larger than what the $11–14 billion effective subsidy, taken in isolation, might be expected to purchase.

The World Bank magnifies its policy influence through a variety of mechanisms. For example, at the national level, the World Bank normally chairs groups of bilateral donors that negotiate with recipient-country governments. When the Bank withdraws support from a particular government ministry, other donors often follow. This pattern gives the Bank considerable power to influence overall donor flows, and additional leverage in negotiating with client governments.

Beyond this, the Bank plays an important role in the process by which ideas move into policy by collecting data, generating ideas, bringing ideas to a wider policy audience, and turning the ideas into specific policies. At the global level, the Bank sets agendas with publications such as the Doing Business reports and the annual World Development Report. Such reports can be influential; many national leaders, including Narendra Modi in India and Vladimir Putin in Russia, have aimed to improve their standings in the Doing Business reports by removing barriers to business investment (Besley, 2015).

Like the World Health Organization (WHO), the Bank’s influence derives in large part from its “soft power.” Politicians may have a huge interest in which districts get new hospitals and which firm gets the contract to build the hospital, but they may be happy to defer to the health ministry on the proper regimen for treating malaria, and the health ministry may be influenced by WHO recommendations on international best practice. Similarly, the World Bank can have huge influence on decisions regarding conditional poverty alleviation programs.

In many countries where the Bank operates, it fills an important void of independent policy discussion. Often, political competition is focused on patronage or ethnic and cultural issues rather than economic policy; there has not historically been a large role for think tanks as brokers of ideas to policy makers; and the senior civil-service is stretched thin. This creates an environment in which Bank staff can have tremendous influence. The World Bank recruits internationally and pays salaries higher than those in most civil services, allowing it to attract staff who often have very strong academic qualifications. Staffers come from a variety of countries, including developing countries, and are not seen as promoting a single national
perspective. Bank staff have access to policymakers and often build strong relationships of trust with key civil servants. When civil servants debate policy options, those who can argue that their preferred position complies with international norms may be less likely to be seen as merely advocating a position designed to advance their personal and bureaucratic interest (Mukand and Rodrik 2005).

A considerable channel of Bank influence, and a measure of the Bank’s prestige, is the flow of Bank staff to senior policymaking positions in their home countries (Krueger 1998). Frequently-mentioned recent examples include Ngozi Okonjo-Iweala in Nigeria, Luisa Diogo in Mozambique, Montek Ahluwalia in India, Kemal Derviş in Turkey, Richard Webb and Luís Miguel Castilla in Peru, Ellen Johnson Sirleaf and Antoinette Sayeh in Liberia, Moeen Qureshi in Pakistan, Vittorio Corbo in Chile, Ashraf Ghani in Afghanistan, Benno Ndulu in Tanzania, and many others. Former World Bankers Suman Bery, Shankar Acharya and Jayanta Roy played key roles in enacting India’s 1991 reforms (Sengupta 2009), contributing to one of the largest reductions in poverty on record.

The Role the Bank Has Come to Fill

The founding rationale for the Bank, in sharp contrast to the activities above, was explicitly to address failures in capital markets. But it has been clear for some time that the Bank has evolved far beyond that role.

Some clues to what the Bank itself thinks it should do today can be found in its iconography. The motto “Our dream is a world free of poverty” is carved in stone at the Bank’s entrance. A three-storey-long red HIV ribbon hung on the Washington headquarters of the World Bank in recent years. The bright atrium of the Bank’s headquarters features only one monument—not a scale model of an infrastructure project financed by Bank capital, but a commemoration of the Bank’s first health project, in which its central role was one of convening and coordination. It is a sculpture honoring the effort to control river blindness, portraying a young African boy leading by the hand an older man afflicted by the disease.
The Bank’s rhetoric conveys a similar purpose. In a speech decades ago President Robert McNamara (1973) set the central goal of eradicating absolute poverty, and proceeded to reshape the Bank’s operations around interventions that included massive support for smallholder agriculture. The current President Jim Kim, more than 40 years later, describes the dual mission of the Bank as ending extreme poverty by 2030 and boosting prosperity among the poorest 40 percent in low- and middle-income countries.

Providing grants and subsidies to the poorest countries through IDA can clearly be seen as furthering this mission. Even within the IBRD, many projects are focused on poverty. For example, 72 percent of current Brazilian IBRD projects are in the relatively impoverished Northeast and North regions, home to only 36 percent of Brazil’s population (World Bank, 2015c). Conditional cash transfers are an example of the World Bank’s interest in explicitly poverty-focused programs within middle-income countries.

World Bank lending to middle-income countries that can borrow internationally like Brazil seems more difficult to justify based on the original view of the Bank as addressing failures in international capital markets. China provides an extreme example. In mid-2015, China owed the World Bank $13 billion, but held $3.7 trillion in cash reserves. Bank clients including Brazil, Thailand, Indonesia, and Mexico could easily self-finance all their IBRD loans without meaningfully depleting their international reserves. For the many countries that borrow both from the Bank and on purely commercial international capital markets, it is not at all clear that the Bank is helping improve access to capital. As Bulow and Rogoff (1990) point out, this is true even if the Bank lends at cheap rates due to its superior ability to secure repayment. To the extent that Bank loans are senior to commercial loans, countries’ ability to borrow from the Bank may simply drive up their cost of borrowing commercially, leaving their overall cost of lending unchanged. This insight has led many researchers to suggest summarily ending most Bank operations in middle-income countries (for example, Bulow and Rogoff 1990, 2005; Meltzer 2003; Einhorn 2006).

If one sees the key rationale for the World Bank as addressing extreme poverty, however, then there is a different rationale for the Bank’s continued work in middle-income countries. In 1990, only one-quarter of the world's extreme poor, those living on less than $1 a
day at purchasing power parity exchange rates, lived in middle-income countries. Today, with more countries in the middle-income category, about three-quarters of the extreme poor live in middle-income countries (Sumner 2012a). Even as poverty reduction in middle-income countries proceeds in the next decade or two, the majority of the world’s extreme poor will continue to be found there (Sumner 2012b). Furthermore, the poor within many middle-income countries are concentrated in specific geographic areas. Since some of the countries with the most poor people are organized federally, the Bank can arguably target its loans to poor areas, such as by lending to poor states in India. The Bank could also target sectors of particular importance to poverty reduction, such as social protection.

However, this rationale for World Bank lending to middle-income countries raises the question of whether Bank lending to low-income areas of middle-income countries increase the total funds going to the poor. One could easily write down a model in which World Bank lending reduces the amount of its own resources that, say, Brazil transfers to poor areas. In an equally plausible model, the Bank could negotiate with the Brazilian government and provide lending only if the government also increased spending. This would be an international version of the “flypaper effect” in public finance, in which federal grants fail to fully “crowd out” local-government expenditures. Such effects have certainly been observed in various public-finance settings (in this journal, Hines and Thaler 1995), but research is needed on the extent to which it occurs in the development lending-and-aid setting. Defining the Bank’s role in middle-income countries will become more pressing as about half of IDA’s member countries are on course within a decade or so to reach the threshold of per capita GDP where they will graduate to IBRD status (Moss and Leo 2011).

It is worth noting that the subsidy element in Bank financing is small enough that the transfer element could make only a very modest impact on poverty on its own. An estimated 2.7 billion people live on less than $2 per day (measured using purchasing power parity exchange rates), so if Bank lending had a donor-subsidy element of $11–14 billion, and was perfectly targeted to the poor with no administrative costs, it would increase incomes of the poor by only about $4–5 per year at market exchange rates.
As we have argued, the Bank’s policy role is a critical part of what it does, and this seems much more closely related to its poverty reduction mission than to a narrow focus on addressing international capital market imperfections.

While we have focused on the Bank’s articulated mission of reducing extreme poverty, clearly influential World Bank member countries also use the institution to advance their interests. From the beginning, the World Bank had a political mission as well as a narrower economic mission. The original political purpose of the Bank was to use aid to keep countries in the Western political orbit and to compete with the USSR for economic and political influence in third world countries. The political nature of the institution continues today. World Bank policy is influenced by the political objectives of the major powers, and in particular of the United States, which has effective veto power. Bank lending tends to follow the commercial and financial interests of the United States (Faini and Grilli 2004; Fleck and Kilby 2006; Kilby 2009), behavior that US officials explicitly demanded long ago in recently-declassified documents (McKeown 2009). Countries temporarily on the UN Security Council receive more Bank loans (Dreher et al. 2009), and Bank projects may be used to reward clients’ General Assembly votes for priorities of the US and other high-income countries (Dreher and Sturm 2012). The United States has successfully intervened to limit lending to some countries, including Iran.

And the Bank’s choice of which anti-poverty policies to focus on also reflects the interests and domestic politics of shareholders that are most heavily represented in its governance. For example, the Bank has played a much more active role in arguing that countries should have more open trade policy than in arguing for more open migration policy. This likely arises from reasons of politics more than from reasons of relative effectiveness in reducing global poverty. One of the Bank’s technical assistance projects for an agreement on seasonal labor migration from poor South Pacific islands to New Zealand (Luthria and Malaulau 2013) underwent rigorous impact evaluation and was called “among the most effective development policies evaluated to date” (McKenzie and Gibson 2010). But projects of this kind have not received much attention, nor has it been followed by major new Bank investments in labor
mobility. Of course this may also reflect Bank staff’s judgment about the areas where it may have scope to be effective.

**Why a Multilateral Organization?**

Consider a context in which a number of high-income countries each put some value on certain outcomes in low- and middle-income countries. These low- and middle-income countries also have preferences and make decisions affecting those outcomes. For example, high-income countries may value alleviating extreme poverty or addressing other, more specific needs in the developing world, such as education of girls or provision of treatment for those infected with HIV. That value could arise through two separate channels. First, policymakers in high-income countries may believe that conditions in low- and middle-income countries will generate externalities for high-income countries through mechanisms such as terrorism, disease, or migrant flows.

Second, policymakers and citizens in high income countries could directly value certain outcomes in poorer countries. Recent experiments suggest that altruism is an important driver of charitable giving, including in international settings (Cox et al. 2008; Null 2011; DellaVigna et al. 2012). If Canadian giving reduces infant mortality in Bangladesh, and if Swedes value reductions in infant mortality anywhere in the world, then Canadian giving generates benefits not only for Canada, but also for Bangladesh and for Sweden. Thus theorists from Becker (1974) to Coate (1995) explicitly classify poverty alleviation, under altruistic preferences, as a public good. The development literature frequently considers poverty alleviation itself as a public good with worldwide reach (Azam and Laffont 2003; Torsvik 2005; Bourguignon and Platteau 2015).

Global public goods that cause and result from poverty alleviation can make multilateral giving efficient. For each high-income country acting individually, the optimal rule is to spend on development assistance until the marginal benefit to each particular high-income country of expenditure abroad equals the marginal domestic benefit. The low-income country would set the marginal utility of expenditure on the internationally valued good (such as girls’ education) equal to that on other goods valued by the developing country policymaker. But the standard
Samuelson (1954) rule suggests that for public goods, it is collectively optimal to spend until the total marginal benefit to all countries of expenditure equals the benefit of alternative expenditures. Individual countries have a strong incentive to free-ride on the poverty-alleviation caused by others, resulting in inefficiently little provision of poverty alleviation from the standpoint of each donor individually. This insight suggests large potential gains from coordination.

However, even if one accepts that global public goods will be undersupplied if countries make decentralized decisions, there remains the question of why there should be a global institution to manage public good provision. Clearly, public goods will be undersupplied by individuals, and this creates a potential role for donor coordination. IDA is an example of this type of coordination. Contributions are set according to an agreed formula. Once the formula is established an increase in the US contribution is linked to an increase from others. But does such coordination need a multilateral organization? Could it not be achieved with a treaty among donors? There are a number of ways in which treaties on donor coordination would necessarily be incomplete.

*Enforcing mutually beneficial and hard to monitor coordination*

Consider first the example of “tied aid,” in which countries create policies requiring that part of their aid spending be spent on goods and services supplied by their own firms. For example, in 2009, 67% of Greece’s aid required the use of Greek contractors (OECD 2011: 12). Suppose that when a donor ties aid, a fraction of any aid spending comes back to the donor country, but aid effectiveness declines. Donors might be collectively better off joining a pact in which they promise to untie all their aid. For example, if donors are symmetric, in equilibrium each donor’s firms will get just as much business—they can get hired by other donors no longer tied to their own firms—but the resulting increased efficiency of aid raises utility for all donors. Indeed the 2005 Paris Declaration on Aid Effectiveness (OECD 2005/2008) seeks to reduce tying of aid. However, such an agreement may be hard to enforce. For example, donors may still choose to fund sectors in which their own firms are well-placed to bid on contracts. To take another example, agricultural exporters like the United States could decide to give aid in the form of food thus promoting their commercial interest. China could give aid for transport
infrastructure that facilitates trade with China. A collective agreement to pass their funding through a multilateral organization which does not have tied aid may be a more enforceable move away from tied aid.

Similarly, action on their own, individual donors may want to give preference in hiring to their own citizens through their own bilateral development organizations. Just as with tied aid, in a symmetrical system, all citizens would be no worse off and aid effectiveness would improve if all bilateral organizations opened their hiring to all nationalities. It would be hard, however, to enforce such a policy of no national preferences in hiring in all bilateral organizations. It would be much easier to enforce such a policy in a multilateral organization.

Individual incentives among donors also lead to excessive fragmentation of donor effort relative to what would be collectively optimal for donors. Bilateral donors will engage in “flag-planting”—that is, they will want to have identifiable and specific aid projects of their own which raise the profile of their individual agency, even though it comes with an efficiency cost.

Avoiding duplication and achieving economies of scale

There are important economies of scale and scope in multilateral institutions’ production and financing of the goods they produce (Sandler 2002; Kanbur 2004; Martens 2005). For example, it would be pointless and wasteful for each individual donor country to undertake their own version of the World Bank’s macroeconomic due diligence and poverty-mapping work. It is more efficient for them to pool their resources and purchase one product they can all share.

The Bank is able to attract talent in part because it recruits internationally, which typical bilateral development agencies do not or cannot. It is useful to have someone in the room for policy discussions who brings personal and professional experience of the issue and place at hand. For any given type of global public good, the World Bank has greater embodied experience like this than most bilateral agencies. Further economies of scale arise if one takes into account the problems that arise when staff in aid recipient countries need to comply with different procedures that many different donors impose as a condition of their aid. For example, aid programs in Tanzania are hampered by quarterly accountability reports that the Tanzanian government must submit for over 2,000 donors (Ritzen, 2005). For aid recipient countries,
handling accounting so as to comply with the requirements and fiscal years of many different national systems can divert substantial resources from other tasks.

*Exploiting gain from policy trade*

When donors control some instruments and national governments control others, there will in general be opportunities for gains from negotiations between donor countries and recipient governments to reach the Pareto frontier. Imagine that there are two parties, $A$ and $B$. Party $A$ has full control of the instrument $a$, and party $B$ has full control over instrument $b$. Thus, for example, party $A$ may be Ghana and instrument $a$ might include domestic policies like Central Bank independence, tariffs, legal requirements for transparency in procurement, free speech, girls’ education, transfers to the extreme poor, employment for youth subject to radicalization, and the content of the curriculum in teacher training colleges. Party $B$ might be Sweden and instrument $b$ is the amount, sector, and financing terms of Swedish aid offered to Ghana. Clearly both parties have preferences over both instruments.

The potential for gain can be represented in the Edgeworth Box of Figure 1. Moving left from the upper-right origin means that domestic policy more closely follows donor preferences, while moving right from the lower-left origin means that domestic policy more closely follows recipient preferences. Moving down from the upper-right origin means that aid structure more closely matches donor preferences, while moving up from the lower-left origin means that aid structure more closely matches recipient preferences. Donor and recipient make tradeoffs according to the indifference curves shown. Without negotiation, donor and recipient could start at point $A$, with the donor in full control of aid structure and the recipient in full control of domestic policy. But both parties could achieve higher utility at point $B$, with the donor making concessions on aid structure and the recipient on policy.

This claim of potential gains does not rest on paternalism, that is, on a claim that donors’ preferences are superior to recipients’ preferences. For example, the Government of India presumably cares more about the welfare of the representative citizen in its states of Punjab and in Bihar than does Germany, but Germany likely puts greater relative weight on a dollar of extra GDP for (poorer) Bihar than for (richer) Punjab than does India. This does not mean that Germany’s preferences are superior; it is natural and legitimate for India to value the welfare of
its citizens in Punjab. Rather, the opportunity for Pareto improvement arises from the combination of divergent, legitimate preferences and different control over different instruments—such as policies that would help those in Bihar more or less than those in Punjab.

**Reducing negotiation costs of policy trade**

Do we need a multilateral organization to achieve this deal? A deal could potentially be struck at any point between the curves in Figure 1. What point within that area is chosen (or even whether the parties reach an agreement) will depend in part on the relative bargaining strengths of the two parties and how efficiently they bargain. Reaching an efficient bargain likely requires a lot of work. Ideally, negotiations between (say) Ghana and Sweden would look at every policy instrument under Ghana’s control and figure out which potential policy changes are most valuable to Sweden and lowest cost for the Ghanaian government to change. Ideal negotiations would simultaneously look at how the amount and composition of Swedish aid to Ghana could most effectively be tweaked to make it more attractive to the Ghanaian authorities while diminishing its appeal to Swedes by as little as possible. That is a costly and time consuming process and requires skilled professionals.

This suggests that it can be efficient for donors to empower a relatively technocratic institution such as the World Bank to negotiate rather than to do so themselves. To the extent that there are multiple donors, an efficient agreement will require bringing all of the donors and the host country together at a single bargaining table. If there are significant costs of bargaining on a case-by-case basis, it may simply be more efficient to create an institution with shared governance among the donors, such as the World Bank, and to have that entity negotiate with the recipient country.

A multilateral institution can reduce asymmetries of information, increasing the chance of an efficient bargain. Negotiations are likely to go much better if the authorities in the recipient country believe what the donors say and vice versa. If the donors have information that a change in policy in a direction preferred by the donors might be very low cost or even beneficial from the point of view of the recipient country authorities, they would want to find a way to credibly transmit this information. Suppose, for example, that the donors are trying to persuade an oil exporter to drop domestic gasoline subsidies. Donors might want to produce surveys and
analyses showing that the incidence of the subsidies is not particularly pro-poor. They might want to produce evidence from other countries on the impact of reducing subsidies. However, the recipient government may be reluctant to trust an official arguing from a bilateral aid agency, given both the incentives inside national aid agencies and the typical level of technical knowledge within those agencies. They might be much more willing to trust a Brazilian World Bank official with a PhD from Berkeley who has been involved in similar reform efforts in eight other countries. They might likewise be more willing to trust a World Bank publication that reviews the literature on the impact of petroleum subsidies in general; discusses the experience of different countries that removed petroleum subsidies; discusses the political and administrative trade-offs between removing the subsidies in one go, versus gradually phasing them out; discusses retaining limited subsidies for certain groups where targeting is useful; and so on. If these materials are seen as credible, finance ministry officials may even be able to use them in internal discussions with politicians, or in the case of politically less sensitive and high profile issues, with civil servants in other ministries.

Many pathologies are possible in a decentralized game with many small donors. For example, in a decentralized game, a recipient country government might respond to donor spending in a sector by cutting back their own spending. For example, Pack and Pack (1993) find an inverse correlation between changes in domestic expenditure on health and education and new donor aid to those sectors, in the Dominican Republic. Donors may well obtain much better outcomes if they collectively negotiate with the national government, with the implicit threat point of taking their spending to another country. They may well be able to crowd in additional government spending in areas of mutual interest. International organizations that bargain with many recipient governments may find it easier to move aid flows to other countries if a government is inflexible. Bilateral aid agencies may not be able to credibly commit to walk away from countries where their government has a foreign policy interest.

Engaging in dialogue with the government and exploring options may be particularly helpful in reaching the Pareto frontier. Exploration might reveal some forms of expenditure that might advance the interests of the government and of multiple donors. For example, the World Bank supported a land titling program in Rwanda and, based on a pilot study, realized that women in common-law marriages were losing land titles (Ali et al., 2014). The Rwandan
government changed the program to rectify the problem. This was probably a move to the Pareto frontier for the Rwandan government, for donors who believed property rights were important, and for donors who focused on gender issues—relative to a model in which the government and different donors acted independently. This process of exploration and dialogue will of course be more difficult if the government believes that the donors want to topple the government.

This too may be an advantage of a multilateral organization. Depending on the circumstances, there could be situations in which donors might want to pre-commit not to get involved in certain “political” areas because if national governments suspect their motives, they might be less likely to accept certain types of deals. The World Bank’s operating directives specifically prohibit it from attempting to exert political influence, whereas there is strong evidence that bilateral donors attempt to influence elections (Faye and Niehaus 2012). In other cases, of course, donors might want to focus exactly on these types of political issues. It might conceivably be possible to draw some distinctions, for example between countries with elected governments and unelected governments with different rules for each.

The role of legitimacy

So far, we have discussed the advantages of working through a multilateral body in language familiar to economists—such as suggesting that there may be room for Pareto-improving trades among donors and between donors and country governments, and that the role of the Bank is to facilitate these trades. But in thinking about the Bank’s success in influencing the global consensus on development policy, it is also important to think in terms of the concept of legitimacy from political science (Backstrand, 2006). No small amount of the Bank’s influence stems from the fact that while some see it as a tool representing the national interests of powerful shareholders, many others see it as a source of relatively disinterested professional information.

An advantage of delivering aid through international organizations such as the World Bank (or the World Health Organization) is that staff are less likely to be seen as representing the parochial interests of one particular donor, which gives them more legitimacy with the host country government (Rodrik 1996). Markets in policy advice function very poorly, as there are incentives to tell policymakers what they want to hear and what will bring in more consulting
contracts—for example, advising countries on how they can use industrial policy to set up an information technology hub, rather than to promote free trade. There is little reason to believe that outcomes would be better if countries simply hired consulting firms, for example, to provide policy advice. That is not to say that there are not advantages of competition in aid provision, as in other areas of the economy (Easterly 2002), or that we have any reason to believe that the current balance between the World Bank and other development-focused organizations is optimal. We claim only that a fully decentralized market in advice would be problematic.

What should the Bank do, and how should it be assessed?

Should the World Bank focus exclusively on investment, or also support raising current consumption of the poor? When the World Bank was founded, it may have seemed that low-income countries were stuck in poverty indefinitely and that financial flows might help them escape this trap. It is harder to make that argument now. Over the past decade, average annual real GDP per capita growth has been 9.4% in China, 6.2% in India, and sub-Saharan Africa’s long period of decline or stagnation in GDP performance has been replaced by a solid, if modest, 2.0% growth. Poorer countries in the same period have grown faster than richer countries: 3.3% for low-income countries, as defined by the World Bank, and 0.8% for high-income OECD countries. Some countries may be trapped in conflict or in truly dystopian oppression, but for these countries, a lack of access to capital markets is not their main problem. Indeed, run-of-the-mill bad governance is no longer enough to prevent growth. Current growth patterns may or may not persist, but over long periods the evidence for national-level poverty traps is not strong, as Kraay and McKenzie (2014) discuss in this journal (see also Easterly 2006).

If low- and middle-countries are not stuck in a poverty trap, and if donors care about goals such as ensuring that all children have access to basic education or reducing infant and maternal mortality, then it makes much more sense for them to conceptualize foreign assistance around poverty alleviation than around helping countries escape from poverty traps by addressing imperfections in international capital markets.
Indeed, one can make a case that the appropriate use of development assistance should be to raise current consumption, rather than investment. Consider a benchmark model in which the optimal path of consumption over time is determined by permanent income (that is, income over time) and world interest rates. In the benchmark case of this model, development assistance adds to permanent income, and thus would simply increase consumption uniformly in the current and all future periods, with the growth rate of consumption unchanged. One can easily write down models along these lines with different sets of constraints in which aid could lead either to more current consumption, or less. For example, if current consumption is low and credit constraints prevent the country from consuming more in the short run, then the optimal response to receiving aid would be to increase current consumption by more than future consumption, which would imply that the country would experience an immediate boost of consumption immediately following the transfer of aid but slower growth of consumption afterwards. Alternatively, in a model in which both consumption and domestic investment are constrained initially, aid flows could lead to an immediate jump in consumption and thus slower growth of consumption, but also to stimulating investment and a higher growth of GDP.

However, all of these models imply that the gains from development assistance will not make a substantial difference to national growth rates. For example, considers an example in which a country saves 20 percent of its income. In this case, a transfer of 5 percent of GDP through aid will lead to a 1 percent of GDP increase in saving and investment. If the rate of return on that additional investment is 10 percent per year, GDP will be greater in subsequent years by one-tenth of 1 percent. Without exotic mechanisms, there is thus little reason to expect effects of aid to be large or significant in cross-country regressions that use level or growth of GDP as a dependent variable (Swift 2012). Insofar as World Bank aid is a subset of aid overall, it would be even harder to pick up its effects on GDP.

Our view of trade in policy as a major function of the Bank has implications for its internal structure, since this will influence how it bargains with governments. For example, to the extent that the Bank is structured on a country-level basis or donors allocate funding on a country-level basis, the Bank bargaining position vis-à-vis national governments is weakened. Conversely, to the extent that the Bank and/or donors within a country can negotiate separately with various ministries or with various levels of government in a federal structure, donors’
bargaining power may be strengthened, because ministries and sub-national government may compete for donor support.

If one interprets the role of the Bank as reducing extreme poverty, then the Bank may want to consider supporting NGOs or research institutions rather than simply providing capital to governments and firms, and it may want to use grants more widely than at present. The Bank may be able to most effectively fight poverty by spending on areas where both markets and governments have suboptimal incentives to spend, such as on global public goods. Individual developing countries may not want to borrow, even on favorable terms, to finance activities that have a large global public good element.

Areas where the bank is already involved in production of international public goods include the Bank’s support to the Consultative Group for International Agricultural Research (CGIAR); the creation of the pilot Advance Market Commitment for pneumococcus vaccine; and frameworks for cross-border negotiation of water management (Briscoe 2001) and regional labor mobility (Luthria and Malaulau 2013). Many of the Bank’s infrastructure projects through the Global Infrastructure Facility have the potential for broad cross-border spillovers, such as support for fiber-optic Internet cables, mobile phone towers, export-processing zones, and airports (World Bank, 2015d). Another promising area of Bank activity lies in its efforts to fight money laundering for organized crime and tax evasion through its Financial Markets Integrity unit. The Bank’s provision of data—such as through its Living Standards Measurement Surveys and other survey work and its impact evaluation work—has cross-border benefits. The work of the World Bank’s research department is also a global public good. A review of the Bank’s research department by 28 leading development economists (Banerjee et al. 2006) found that the department had produced “some outstanding work” that has been “hugely influential on global ideas about development”—though it found visible works “where balance was lost in favor of advocacy”.

This reassessment of the role of the Bank suggests that it may want to undertake additional activities beyond lending to governments. The Bank could fund scientific research to develop products the poor need, or innovation in ways to deliver development finance—including by strengthening remittance transmission and exploring opportunities for direct and
unconditional cash transfers (Blattman and Niehaus 2014). It could potentially make transfers directly to the poor. We have argued that the Bank will typically get bigger bang for the buck through trade in policy, but in some cases this will not work, and the Bank may want to have the option to support the poor directly.

Some have argued for a Bank that is focused on international public goods, and in particular around international public goods that involve externalities other than those that are preference-based, such as focusing on climate change, rather than poverty alleviation. While we agree that a multilateral institution in general may be an appropriate place to address the provision of these global public goods, clearly some global public goods are not ones that have particular relevance to the poor (for example, protection of arctic biodiversity or planning to reduce the risks of an asteroid striking Earth). Those focused on poverty alleviation, including low-income countries, might resist a redirection of existing Bank resources to global public goods in general, as opposed to global public goods of particular importance to the poor, such as research on cassava or sleeping sickness.

If one believes that the primary impact of the Bank comes from its investments, then one might reasonably evaluate the Bank by assessing what proportion of its investments yield, for example, a 7% annual rate of return. If one believes, as we and many other observers do, that the biggest effects of the World Bank arise through its role in influencing developing country policy, then one’s assessment of the overall impact of the Bank will hinge primarily on one’s beliefs about the impacts of these types of policies. A regular bank hopes to get a positive return on the vast majority of its investments. If it fails in that, it fails in its core institutional role. In contrast, the Bank could potentially have achieved a high social rate of return through a few big wins. If one has a sufficiently favorable view of the regulatory reforms inspired by the Bank’s Doing Business work, or its role in replacing patchworks of patronage-ridden social programs with conditional cash transfers, then one might believe that the Bank has paid its way, even if the financial performance of Bank loans overall was mediocre. By the same token, the Bank could also have an impact much more negative than wasting its funds if it produced harmful policy change. The “fifty years is enough” protesters who sought to close the Bank in the 1990s clearly felt that the Bank’s “neoliberal” agenda is harmful, and some conservatives may not support the
idea that rich-country governments should tap their citizens to provide aid at all. Others take the view that aid, including aid from the Bank, keeps bad governments in power.

Clearly, if one believes that the Bank has reduced poverty primarily by promoting a few important policy reforms, measuring the Bank’s impact becomes difficult. Running a regression with country-level outcomes as the dependent variable and World Bank lending as a key explanatory variable will miss the point if a substantial share of its impact came from the spread of conditional cash transfers or Doing Business reforms or the impact of former Bank officials on Indian economic reforms in the 1990s.

Reasonable people can disagree over the impact of each of the policies promoted by the World Bank. Each of us is skeptical about some policy initiatives promoted by the Bank, and even when we agree with the overall thrust of the policy, there were often problems in implementation. The devil is often in the details: corrupt or poorly run privatizations may amount to giveaways of state assets, and charging fees at health clinics might be a false economy. But the thrust of most policies promoted by the World Bank has been in line with the mainstream thinking of the economics profession, and our judgment is that overall, these changes have promoted both equity and efficiency. To put it another way, few economists would advocate a return to the old ways: the agricultural marketing boards, focusing a large share of health care spending on tertiary-care hospitals in the capital city rather than rural clinics; higher barriers to business creation; using a sprinkling of obscure fees and taxes rather than a basic value-added tax; and so on.

One could ask whether the Bank’s policy role could be disconnected from its financial support and from the legitimacy provided by the Bank’s status as an international organization. We agree with many observers’ judgment that World Bank financing is essential to the Bank’s policy influence, both as a pure carrot and as a signal of credibility (Rodrik 1996; Gilbert et al. 1999; Gurría and Volcker 2001; Banerjee and He 2003). Many of these arguments apply independently of whether such financial support is provided as grants or loans. Our analysis is that the Bank’s choice of country-partners should take into account the extent to which it can influence policy. In some cases, such as today’s Zimbabwe, policymakers may be resistant to influence. However, donors may sometimes be able to promote poverty reduction by engaging
with difficult regimes such as Myanmar that can be nudged in a good direction. Kenya’s Daniel arap Moi is often portrayed as having been the paradigmatic example of a corrupt dictator with whom donors should not have engaged. Yet donors’ pressure helped encourage him to accept term limits that eventually led to his peaceful departure from office. Judgment calls are inevitable. In some cases, selecting the margin of influence must proceed ministry by ministry rather than country by country.

Finally, our analysis also suggests that the legitimacy of the World Bank may play an important role in its effectiveness in influencing policy. This has a few implications. First, the Bank gains legitimacy from its wide membership. The Bank has taken modest steps in reforming its shareholding structure: IBRD shares controlled by developing and transition countries rose from 43% in 2010 to 47% today. Maintaining the Bank’s legitimacy will require further steps including opening up the possibility for non-US citizens to hold its presidency (Rajan 2008), and continuing to adjust its shareholding structure to reflect the relative importance of countries in the world economy. Second, the perceived professionalism of the staff may be quite important. This has a variety of implications, but as one example, a professional research department may have important indirect influences on the culture of the Bank that may play a role in its overall legitimacy. Staff with background from the research department often put together the World Bank’s World Development Report and provide various types of mission support to other Bank staff and also generate documents that may be useful in interacting with the clients. The existence of a research department that publishes in journals may also attract staff, similarly to how Stern (2004) finds that the opportunity to publish is important in attracting staff to biotech firms.

We believe that the World Bank is, and should be, primarily focused on poverty reduction rather than addressing capital market imperfections. While it is impossible to precisely identify the Bank’s policy influence, our judgment is that Bank donors are getting a tremendous amount of policy influence with their limited funding. This influence comes both through deals that link Bank finance to policy reform and through the Bank’s soft power. For this reason, allocating more resources to the Bank would be desirable. Other institutions could potentially play a role similar to that of the Bank, but we believe that the Bank has considerable organizational and reputational capital, and a remarkable track record of policy influence. So we
see no reason for donors, for example, to withdraw their funding from the Bank and reallocate it to regional institutions.

**Conclusion**

Development advocates often claim that a one-time infusion of capital can generate “sustainable impact,” in the sense that after a one-time infusion of funds, the project or investment will generate a stream of income into the future without additional funding. The notion that to be desirable expenditures must be sustainable is politically seductive: for example, the idea of increasing growth and addressing poverty solely by “teaching a man to fish” has comforting appeal. The idea that a temporary infusion of capital would put countries on the path to sustained growth was important for the creation of the World Bank and it has a continuing influence in the Bank.

However, this “illusion of sustainability” can distort aid and policy decisions (Kremer and Miguel 2007). For example, it can lead to a lack of support for programs that require an ongoing investment in maintenance or management over time, because the requirement for future funding means that it is not a one-time investment. At a deeper level, the sustainability argument views the justification for aid solely in terms of facilitating escape from poverty traps. But the rapid growth in low-income countries means it is socially efficient for them to consume more now, at least as long as marginal utility is diminishing in consumption and the welfare of the poor has a weight anywhere above the infinitesimally small.

That justification for aid does not rely on capital market failures or whether a temporary infusion of capital will suffice. Instead, it is based on poverty reduction. The World Bank is an aid institution. As a multilateral institution it is well-placed to facilitate Pareto-improving and politically-legitimate deals among donors and between donors and developing-country governments. The World Bank has evolved into a role that rests on economic justifications that are sound and defensible, but are profoundly different from those underlying its original stated role. Assessments of the achievements of the Bank and decisions about the Bank’s future should be guided by the role the Bank has evolved to fill, and the ways in which the Bank can fulfill that role.
References


reconstruction-project

http://siteresources.worldbank.org/EXTANNREP2013/Resources/9304887-
1377201212378/9305896-1377544753431/Remuneration.pdf


http://siteresources.worldbank.org/EDUCATION/Resources/ESSU/EducationStrategyUp-
date_April2012.pdf


ortname_exact=Brazil


Table 1: The World Bank Group’s opportunity cost to its shareholders

<table>
<thead>
<tr>
<th></th>
<th>US$bn</th>
<th>Line</th>
<th>Calculation</th>
<th>Source</th>
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<tbody>
<tr>
<td><strong>STOCKS</strong></td>
<td></td>
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<tr>
<td>IBRD</td>
<td></td>
<td></td>
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<tr>
<td>Retained earnings</td>
<td>28.3</td>
<td>a</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total IBRD</strong></td>
<td>42.3</td>
<td>(1)</td>
<td></td>
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<tr>
<td>IFC</td>
<td></td>
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<tr>
<td>Paid-in capital</td>
<td>2.5</td>
<td>b</td>
<td></td>
<td>IFC Annual Report 2014, p. 103. Note: IFC has no callable capital.</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>20.0</td>
<td>b</td>
<td></td>
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<tr>
<td><strong>Total IFC</strong></td>
<td>22.5</td>
<td>(2)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Total IBRD and IFC</strong></td>
<td>64.8</td>
<td>(3)</td>
<td>(1)+(2)</td>
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<tr>
<td><strong>FLOWS</strong></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Annual opportunity cost, IBRD+IFC</td>
<td>1.9</td>
<td>(4)</td>
<td>(3) $ \times 3%$</td>
<td></td>
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<tr>
<td>Annual trust-fund disbursements</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bank-Executed Trust Funds (BETF)</td>
<td>0.6</td>
<td>(6)</td>
<td></td>
<td>World Bank (2013), 2013 Trust Fund Annual Report, Concessional Finance and Global Partnerships Vice Presidency, p. 38. We exclude “Financial Intermediary Trust Funds”, which pass through the Bank but are not controlled by it.</td>
</tr>
<tr>
<td>Recipient-Executed Trust Funds (RETF)</td>
<td>3.3</td>
<td>(7)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Annual total cost to donor countries</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>without RETF</td>
<td>10.5</td>
<td>(8)</td>
<td>(4)+(5)+(6)</td>
<td></td>
</tr>
<tr>
<td>with RETF</td>
<td>13.7</td>
<td>(9)</td>
<td>(8)+(7)</td>
<td></td>
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<tr>
<td><strong>RISK</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Stock: IBRD callable capital (never called)</td>
<td>218.8</td>
<td>(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow: 20-year annual called capital if 1/3 of World Bank loan portfolio never repaid</td>
<td>0.5</td>
<td>(10)</td>
<td></td>
<td>Current outstanding World Bank loans US$152bn; 1/3 loss means $51bn one-time loss; $42bn of this could be covered with current IBRD paid-in capital and retained earnings; thus $9bn must be drawn from callable capital. Loan maturities range from 8 to 30 years, thus loss spread over approximately 20 years. $9bn/20yrs = $0.5bn/year in ongoing subsidy to offset risk.</td>
</tr>
<tr>
<td><strong>TOTAL DONOR SUBSIDY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Annual donor subsidy including risk</td>
<td>11.0–14.2</td>
<td>(8,9)+(10)</td>
<td></td>
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</table>

*Sums of numbers appearing in table may not exactly equal sums shown due to rounding.*


*b* IFC *Annual Report 2014*, p. 103. Note: IFC has no callable capital.


*e* Current outstanding World Bank loans US$152bn; 1/3 loss means $51bn one-time loss; $42bn of this could be covered with current IBRD paid-in capital and retained earnings; thus $9bn must be drawn from callable capital. Loan maturities range from 8 to 30 years, thus loss spread over approximately 20 years. $9bn/20yrs = $0.5bn/year in ongoing subsidy to offset risk.
Figure 1: Pareto-improving deal between a donor and recipient
Appendix: Calculations in Table 1

The ‘stocks’ section of the table takes the stock of donor resources tied up in IBRD capital, IFC capital, and donor Trust Funds held at the Bank and values the flow of income that could be earned from investing that capital in some other near-riskless asset. (Trust Funds are assets held in trust by the Bank but controlled by outside donors, not used for loans or credits but used to grant money for activities both inside and outside the Bank.) We estimate that this flow of opportunity costs is approximately US$1.9 billion per year excluding Trust Funds. The ‘flows’ section adds in the flow-cost of partner grants to replenish IDA, annualized over the last 12 years.

We generally follow the method of Meltzer (2000) and Gurría and Volcker (2001) to value the Bank’s cost. Like them, we ignore the cost of MIGA which is relatively small (its current loss reserve, greatly exceeding plausible losses on claims, is roughly US$0.4 billion). We differ in four substantial ways:

1) We include the cost of IFC capital. We include Trust Fund disbursements. The previous studies do not.

2) They use an interest rate of 7%, reflecting the 20-year Constant Maturity Treasury rate at the time they were writing; the same rate at the time of this writing is under 3%.

3) Meltzer (2000: Tables 3-3, 3-5) value the risk cost of the Bank’s callable capital as if there is a 4.6% probability in any given year that all callable capital will be both called and forever lost. Gurría and Volcker (2001) argue that this is exorbitant, given the Bank’s conservative lending practices and the fact that no IBRD capital has ever been called—much less lost—in the Bank’s 70-year history, a history that has included multiple major financial crises in client countries. A more realistic worst-case scenario might be that a financial catastrophe necessitate writing off a third of the Bank’s currently outstanding loans ($152bn), which would absorb the current $42bn of paid-in capital and retained earnings (the risk of whose loss is already accounted for) and would require $9bn more in called capital. Given loan maturities of 8–30 years this $9bn might be spread out over 20 years, thus $0.5bn per year in losses from called capital. This is a rough and speculative calculation, but suggests that a reasonable consideration of called-capital risk would not greatly alter the foregoing opportunity cost estimates. This conclusion is robust to considering past debt relief for World Bank clients: IDA debt forgiven through the Heavily Indebted Poor Countries (HIPC) initiative and the Multilateral Debt Relief Initiative (MDRI) was financed through IDA replenishments and is thus included in the flow portion of this table.

4) Meltzer (2000) values the cost of IDA funds as the annual opportunity cost of the stock of all money ever paid into IDA since it was created. We model partner grants to IDA credits as a form of consumption, a current purchase of utility value from poverty reduction. The cost of these is simply the current flow of resources to replenish IDA. For the same reason, the current-period opportunity cost of a consumer’s expenditure on food is simply that expenditure, not the interest that could have been earned on the cumulative amount she spent on food since birth.