

An End to the Investment Project?

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Abstract

For many donors throughout most of their history, the major assistance model has involved the tool of the investment project. This is based on a theory of aid and development that the key constraint facing developing countries seeking rapid growth is lack of investment and that donor financing to overcome that ‘investment gap’ can be overseen through the project process to ensure that it is efficiently spent to generate high returns. In reality, filling an ‘investment gap’ is neither an empirically well justified nor a practically well-implemented aid strategy. Furthermore, procurement oversight mechanisms appear to be doing a poor job at ensuring the average effectiveness of an investment portfolio in a country is significantly enhanced, or transferring knowledge, or building institutions. The procurement-focused project investment model should be limited in use to in cases where (i) a project design is significantly innovative and/or delivers regional or global public goods and/or aid is a large percentage of country investment and no agreement can be reached between donors and government on overall investment priorities in that country and (ii) alternate project approaches like output-based or cash on delivery models are deemed inappropriate.

¹ Thanks to Owen Barder and Amanda Glassman for comments.

Introduction

For many donors throughout most of their history, the major assistance tool has been the investment project.² In (closer or looser) collaboration with governments, donor agencies identify an investment (a school, a road) which they will finance. Alongside funding, agencies usually play a role in oversight of the design, procurement and rollout of that investment –the ‘project’. Investment lending still accounts for nearly three quarters of World Bank commitments and a considerable proportion of the other Multilateral Development Banks (MDBs) –although many bilateral donors use other models. Yet this assistance model is based on a decades-old and decades-discredited model of aid and development.

Frustration with what could be delivered through the standard investment project has led to innovations like technical assistance projects, ‘structural adjustment’ and ‘development policy’ lending, ‘sector-wide approaches,’ and output-based lending. For all that these innovations have relieved the constraints imposed by the investment project model, that model remains the paradigmatic assistance vehicle, at least for the MDBs. It is time for a paradigm shift. Except in a few circumstances –for example, where there is real evidence of innovation and learning, or when the investment involves global public goods—there is no real justification for the survival of the investment lending model. Even in most of those cases, the model should be adapted to focus on outcomes not procurement process steps.

The rest of this note lays out the case for change. The critique is around two areas: investment as a focus for aid and the project as a focus for delivery. The initial arguments for an investment model appear dated. And the current project model might be poorly designed to deliver development outcomes through other channels –potentially even distracting both donor agency staff and client country officials from a focus on such outcomes. Reform efforts could better align financing practices with a results focus and a long-term institution-building agenda which is central to sustainable development.

The next four sections make the following arguments: (i) the traditional justification for investment project model looks dated, and does not fit with what the effectiveness literature suggests about aid; (ii) a ‘revised’ model for project lending based around technology and knowledge transfer, in particular with regard to project design, makes more sense –but there is evidence to suggest the current investment lending system is not well designed to deliver that; (iii) the current procurement system is skewed towards process monitoring, making it poorly designed to ensure development outcomes; all of which suggests (iv) reforms based around

² The World Bank Articles of Agreement that Bank lending should normally be “for the purpose of specific projects of reconstruction or development.” With the very first loan the Bank made –to France, in 1947-- came conditions which required that every contract for purchase of equipment and materials would be submitted and approved by the staff of the Bank against certified bills of the suppliers.

monitoring outputs and results rather than processes for investment projects while using more appropriate (non-investment lending) tools to support institutional development respond well to the problems suggested above. In part because of better data availability and existing analysis, the paper relies heavily on examination of World Bank investment lending practices, but the lessons derived are likely to apply to other MDBs and some aid agencies as well.

Revisiting the Traditional Justification for Investment Aid

The justification for a model of development assistance driven by investment projects was built up around two arguments, one about the nature of economic growth and one about the potential role for donors:

1. The key constraint facing developing countries seeking rapid growth is lack of investment. But there are insufficient domestic resources to finance required levels of investment, and foreign private financing is excessively expensive. Donor finance can be used to fill this gap and so speed growth.
2. The financing can be overseen through the investment project process to ensure that it is efficiently spent on investments that will generate high returns (rather than consumption or investment with low returns).

It is not clear that aid flows follow the patterns that would be expected were this justification for aid used as the criteria for allocation. Not least, data from the World Development Indicators for 2008 suggests that only 42 percent of aid flowed to countries where net development assistance was equal to or greater than one third the value of international reserves. And only 31 percent of total ODA flows went to countries where ODA accounted for a third or more of Gross Fixed Capital Formation (excluding Afghanistan, this number drops to 23 percent).³

In part, a disconnect between the original justification for aid and today's assistance patterns may be because the original justification is not as convincing as it once was:

³ 50 percent of ODA flows to countries where ODA was greater than or equal to 20 percent of the value of reserves and 52 percent of ODA flows to countries where ODA was equal to or greater than 20 percent of the value of GFCF. Data from WDI, sample is all countries with positive net official development assistance and official aid received. This lack of investment focus is particularly true of the World Bank. The considerable majority of World Bank investment lending has not focused on countries where that lending might most reasonably be expected to fill an 'investment gap,' suggesting that the original paradigm is no longer driving financing decisions. Not least, in most of the countries where the World Bank operates, it is a comparatively minor source of investment financing and foreign exchange (an example: China). See Kenny, 2008, for a review.

1. The investment to growth linkage is weak --the evidence points to a stronger causal link from growth to levels of investment than the other way around. Recent analysis points instead to the role of technology, ideas and institutions in underpinning both economic expansion and broad-based development.⁴
2. It is very difficult to find a link between levels of aid and levels of investment across countries or sectors within countries, and aid may in some cases be associated with a lower tax effort. All of this suggests a considerable element of fungibility in aid flows. If aid finances a particular investment, governments will divert resources to another project which may have low returns --or to consumption or lower taxes.⁵

In this regard, it is enough here to repeat the now clichéd quote from Bill Easterly that if the traditional model had worked and “Zambia had converted all the aid it received since 1960 to investment and all of that investment to growth, it would have had a per capita GDP of about \$20,000 by the early 1990s. Instead, Zambia’s per capita GDP in the early 1990s was lower than it had been in 1960, hovering under \$500.” It appears that aid for investment in general may be only rarely funding a ‘marginal but still high-impact project’ that would have gone unfunded absent financing, then.⁶ Overall, filling an ‘investment gap’ is neither an empirically well justified nor a practically well-implemented aid strategy.

Does Donor Oversight Improve Quality?

This is not evidence to suggest that the average aid-financed project is anything but high-return --and the second underpinning for the original justification of the project model was that donor oversight ensures the quality of particular investments. Repeated World Bank Evaluation Department *Reviews of Development Effectiveness* suggest World-Bank financed aid usually generates significant economic returns, and there are numerous projects that donors have *not* supported precisely on the grounds they would have low returns (suggesting it does filter for higher impact).⁷

⁴ See Kenny, 2011, for a review.

⁵ See Kenny, 2008 for a review.

⁶ Devarajan et. al. 1997

⁷ Some remarkably bad investments that aid agencies would not or did not support: (i) in 1983, ODA did not fund the \$300 million Basilica of Our Lady of Peace in Yamoussoukro, which doubled Cote d’Ivoire’s national debt. It is the largest church in the World, commissioned by then-president Félix Houphouët-Boigny and contains a stained glass window of his image to be placed beside a gallery of stained glass of Jesus and the apostles; (ii) ODA did not support the Bataan Nuclear Power plant in the Philippines. Construction began in 1976 and was completed in 1984 at a cost of \$2.3 billion. But the project was mothballed because of inadequate construction --4,000 defects, made more serious by the fact the plant had been built on an earthquake fault line; (iii) nor did ODA support the Enron-managed Dabhol Power Plant in India which produced power at a price seven times higher than other

Furthermore, at least with regard to World Bank oversight policies, these do appear to play a role in supporting improved delivery of these investments. For example, evidence of cost and time overruns suggest that, while these are common in Bank-financed projects, they may be even more common in projects financed from other sources. For a sample of Bank-financed road contracts in twelve African countries, seventeen percent of contracts saw overruns of more than fifteen percent. For a sample of Bank-financed water contracts around a quarter of the contracts analyzed saw contract cost overruns of 20 percent, and time overruns of over 30 percent.⁸ But this compares, for example, to a sample of largely non-Bank financed roads contracts in India where forty-four percent of roads projects see cost over-runs of greater than 25 percent, and 56 percent of projects take more than fifty percent longer than planned.⁹ Anecdotal evidence suggests that some countries and companies at least see MDB procurement procedures as easier, faster and fairer than domestic procedures.

Nonetheless, even if aid-financed investment projects do finance the 'above margin' project compared to projects financed from domestic sources, and better ensure that projects deliver, this may still often suggest a marginal improvement on a marginal investment contribution, hardly grounds for expecting dramatic development returns.

Again, there is some evidence to suggest that donor oversight is only a partial insulation at best against the influences that appear to reduce returns to government investment in general in many developing countries. An extreme example is provided by Lant Pritchett, who studied one African country involved in 31 World Bank-financed projects in the period 1973-1991 and found that the median rate of return on these projects was zero.¹⁰ This is far from the usual case, of course, but rates of return for Bank projects in environments of weak governance are consistently lower –despite the fact that these are the very weaknesses that donor-imposed oversight and transparency procedures are in part designed to protect donor-financed projects against.¹¹ For example, World Bank projects in countries with the weakest protection of civil rights generate economic rates of return 8-22 percentage points lower than projects in countries with the strongest civil rights (the mean rate of return in their sample is 16 percent).

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electricity costs in India; (iv) finally, ODA did not support the \$4.5 billion Ajaokuta steel project in Nigeria, which took two decades to complete, and uses technologies from the Soviet Union in the 1970s.

⁸ Kenny and Musatova, 2010

⁹ World Bank, 2007.

¹⁰ Pritchett, 2000

¹¹ The first was Pohl and Mihaljeck, 1992, later examples are cited in the text.

¹² Isham et. al. (1997). Similarly, Dollar and Levin (2005) find that a property rights/rule of law measure is strongly correlated with World Bank investment lending outcomes.

Again, general levels of surveyed corruption in a country are associated with higher costs on World Bank transport projects. The average cost paid per square meter for rehabilitation of a two lane highway across eighteen countries for which we have good data on both bribes and costs was \$36. In countries where the average bribe for a government contract was reported to be below two percent of the contract value, this cost was \$30. For countries where bribes for government contracts were reported to be larger than two percent of their value, average costs were \$46.¹³

It appears that the standard procurement oversight model in particular is only a partial protection against the impact of local governance weaknesses, then. This is further suggested by analysis of procurement outcomes. A first issue regards the limited influence of procurement rules in ensuring real competition. International competitive bid (ICB) and national competitive bid (NCB) procurement procedures are the most commonly used for the selection of contractors to build infrastructure financed by the World Bank. Both demand advertising and selection on the basis of price (after bids have demonstrated a technically satisfactory response to the specifications laid out in the bid documents). ICB is used for larger contracts and demands the bid opportunity is advertised and open to non-national bidders to ensure even greater competition of technically qualified firms. Despite the rules being designed to maximize effective competition, analysis of World Bank financed ICB and NCB procurements in infrastructure between 1995 and 2007 suggests low and declining competition (Figure One). Over the entire 1995-2007 period, large ICBs did attract more bids than similarly sized NCBs would, but that the peak predicted difference in number of bidders between the two processes is about 0.5 bids. More than a third (37 %) of all ICB- and NCB- procurements are held with 3 or fewer bidders, and 12% are held with a single bidder. The average number of bidders on ICB contracts fell from 6.4 to 4.3 between the two year period 1995-6 and the period 2006-7.¹⁴

These numbers include bids that were not technically compliant, suggesting they considerably overestimate the real level of competition in bids. In a recent sample of road contracts in Africa, fifteen percent saw only one or two bidders. 28 percent saw only one or two responsive bidders. While the average number of bidders across the sample was 5.2, this dropped to 3.9 responsive bidders.¹⁵ And even a good number of bids labeled technically qualified still may not indicate strong competition. An analysis of Bank infrastructure contracts in Africa found a weak correlation between 'competitive' bidding --measured as three or more technically qualified

¹³ Kenny, 2009. Adding to concerns that World Bank oversight mechanisms appear to be only a partial defense against governance weaknesses is the fact that a number of projects declared satisfactory by staff and evaluators appear in hindsight to have been less than completely successful over the long term.

¹⁴ Kenny and Musatova, 2009

¹⁵ Alexeeva et. al., 2009.

bidders-- and cost overruns.¹⁶ On the other hand, it found a strong correlation between high overruns and fewer than two other bids falling within ten percent of the lowest bid. Only half of the contracts that they analyzed saw a level of competition which included the three lowest bidders being within ten percent of each other.¹⁷

Even with sufficient bidder interest, for competition to work as a tool to produce the most cost-effective outcomes, it has to be accompanied by a clear upfront understanding of the exact nature of what will be paid for and (then) oversight to ensure the competitively procured works are delivered to quality. Otherwise a version of Gresham's law (that 'bad money drives out good') might apply to lowest-cost procurement outcomes.¹⁸ Good contractors bid a reasonable price. Bad contractors can bid low despite the fact that work cannot be completed to standard at that price. If we fail to monitor outcomes, such firms can get away with delivering poor quality. If needed, they can further obfuscate actual quality through the judicious use of bribes. In corrupt regimes in particular, 'successful' competition may merely shift where corruption takes place –from bribing to win the contract at a high price to bribing to cover up substandard works.

This is a major problem for development outcomes. Collusion, bribery or incompetence that raises contract prices is as a rule significantly less damaging to development outcomes than incompetence, inadequate oversight or corruption that means the wrong thing is built, or it is built badly, or it is poorly utilized and maintained. Despite that, the current model of investment aid focuses considerable resources and attention towards monitoring procurement processes at the cost of more time devoted to innovative design (which provides the strongest rationale for an investment operation) or monitoring implementation (which, combined with good design, is the strongest guarantor of returns at the project level).

There is some evidence of this weak ability to measure or monitor quality in World Bank financed procurements. World Bank –financed consulting service procurements using Quality and Cost-Based Selection of consultants (QCBS) score proposals both on the quality of the firm, team and proposed work program as well as on cost. A recent analysis of such procurements

¹⁶ Africon, 2008. Note this analysis did involve a very small sample of contracts.

¹⁷ It is likely that the plausible number of competitive firms will rarely rise above four or five, however, given the expense of participating. Firms spend between 0.5-1 percent of contract values on bid preparation. Estimates from the 1980s suggested international firms see profits in the region of four to five percent of turnover, and are unwilling to bid if they expect more than four other competitive bids (Strassman and Wells, 1988). For consulting contracts, the median value of a QCBS contracting assignment was \$432,000. Proposal preparation for shortlisted firms can cost \$30,000-\$60,000. Given an average shortlist of five, this suggests total preparation costs of between 35 and 70 percent of final contract values (Casartelli and Wolfstetter, 2007). This problem is obviously reduced for larger contracts. Nonetheless, even for large goods and works contracts, preparation costs can be a considerable burden.

¹⁸ Thanks to Giovanni Casartelli for this observation

found no evidence of a correlation between cost and quality scores and limited presence of sector specialists in evaluation committees (only 38 percent of evaluators across all contracts were sector experts).¹⁹ Both findings suggest that the quality of consultants being hired to design many of the contracted works may be difficult for client countries to judge. This may account for the lowest bidder winning QCBS contracts in 67 percent of cases.

On the side of goods and services contracts, the evidence is less clear-cut, but a number of factors suggest that limited attention to quality is limiting the impact of procurement procedures and apparently competitive bidding processes to ensure positive project outcomes. Anecdotal reports suggests that many international firms are withdrawing from Bank-financed bidding processes because they feel that their chances of competing on a level, competently refereed, playing field is limited (and thanks to the OECD anti-bribery convention, the risks of playing on a tilted field have increased).²⁰ A survey of firms that bid on international contracts found that only fifteen percent of respondents thought that tender rules were an obstacle to corruption.²¹

Certainly the great majority of ICBs in infrastructure are won by local firms and non-borrower OECD firms covered by the bribery convention account for a declining percentage of those won by foreigners (Figure Two). Across sectors, non-borrower OECD bids and wins on ICBs has dramatically declined over the past few years –in 2009, there were fewer than 20 bids from the OECD on all World Bank financed ICBs that year, down from an average of around 100 in the last years of the 1990s (Figure Three)

And the drain on resources created by the current procurement model at the heart of the investment project can be considerable for clients and donor staff alike. The analysis of World Bank financed consulting procurements might help to illustrate this case. The average selection process took 17 months in total (equivalent to 64 percent of the average contract duration), including 131 days between proposal submission and transmission of evaluation reports to the World Bank. Negotiation times vary between 401 days in East Asia to 561 days in

¹⁹ Casartelli and Wolfstetter, 2007

²⁰ With regard to ICB goods and services contracts, declining bidder interest might be a result of Gresham's Law interacting with recent OECD efforts to stem corruption. International anti-corruption initiatives such as the OECD Anti-Bribery Convention raise the potential global cost of corrupt activities. In countries and sectors where the perceived norm is to bribe, international firms have the choice to exit or face an increased risk of home country prosecution and global blacklisting. The Confederation of International Contractors Associations and the World Economic Forum report anecdotal evidence that companies which have adopted strict anti-corruption procedures have, as a result, lost business in some markets. Additional anecdotal evidence from World Bank staff suggests an increasing reluctance of international contractors to bid on World Bank projects in countries perceived to be corrupt. There is evidence that the 1977 Foreign Corrupt Practices Act had this impact on US firms, with US foreign direct investment diverted from countries perceived to be corrupt towards those perceived to be less so (Hines, 1995).

²¹ Soreide, 2006.

South Asia, and there does not appear to be a clear pattern by income level.²² Similarly, analysis of World Bank financed infrastructure contracts suggests that contract features, policy and institutional variables, as well as GDP per capita and GDP growth, are able to explain less than ten percent of the variation in procurement outcomes including the average number of bids, negotiation time and average number of amendments (See Table 1).²³ This suggests it is not merely a question of capacity, but the design of the procurement process itself that often produces protracted outcomes. Given that, there is the risk of a negative spillover effect as local procurement staff concentrate on MDB procurements to the detriment of non-donor-financed procurements that usually account for a considerably larger percentage of total domestic investment.

The burden of process management both on client counterparts and donor staff can be exacerbated by the need to oversee procurement steps for a large number of contracts which are comparatively small using similar methods and tools as for far larger contracts. Using data from the World Bank Business Warehouse on the size of World Bank financed contracts in FY05 gives an indication of the magnitudes involved. Larger Bank-financed contracts are subject to review by Bank staff before signature. 7,772 such contracts were signed in FY05 with a total value of USD8.6bn. Out of this universe of contracts, only 1,218 contracts, or 16 percent of all contracts, had a value of above USD1m –but these contracts accounted for 83 percent of the total value of all contracts signed. World Bank staff are spending significant amounts of time reviewing these smaller contracts. It should be noted that, the more considerable issue regarding small contracts here is with consulting services. Prior review goods and works contracts financed by the World Bank in infrastructure have a median size of a little over \$1 million (see Figure Four).²⁴ Nonetheless, for both consultant and goods and works contracts a considerable burden is placed on implementing agencies and task teams to comply with detailed multi-step procurement processes for comparatively large and comparatively small contracts alike.

Of course, a simple solution to this problem would be to discourage task teams from designing investment projects with multiple small contracts. But these are often included because the activities and goods they support are prerequisites to the main investment financed under a project. They are necessary, then, in order to ensure timely and quality delivery of the project as a whole in an environment of limited local capacity.

²² Casartelli and Wolfstetter, 2007.

²³ Kenny and Musatova, 2010

²⁴ The World Bank's Second Sulawesi Urban Development Project in Indonesia (41 participating local governments, 150 implementing agencies, carried out in the midst of a rapid and ambitious decentralization program) suggests the increased vulnerability of complex projects to corruption –more than 100 firms and individuals have been debarred as a result of corruption in the project (World Bank, 2006).

Sadly, this only emphasizes that the investment project lending model is poorly designed to support the development of sustainable institutions within countries. The financing prioritization within a project is not designed with that in mind, and frequently involves the creation and support of units, personnel and equipment that may have a very short life after the project closes. Exacerbated by the considerable burdens of the procurement process, the drive to complete an investment under a short project cycle can detract from task teams' abilities to focus on longer-term and broader development objectives within the sector as they concentrate on 'getting the job done'.²⁵

Indeed, even in the usual cases where donor-supervised projects deliver a quality output, this output is transferred into the hands of institutions which operate and maintain infrastructure in ways that may significantly reduce development impact. A recent estimate for Latin America suggested road maintenance expenditures in the region were approximately half of the level that they should be, at one percent of GDP.²⁶ This shortfall will dramatically reduce road quality and lifetime. In Bangladesh and Orissa, in India, around 55 percent of generated power is paid for, the rest is lost to technical and commercial losses. Of this, perhaps 15-18 percent is accounted for by 'true technical' losses, suggesting leakage due to illegal connections or underbilling accounts for as much as thirty percent of generated power.²⁷ This siphons away money that should be used for maintenance and system expansion. Again, the return to building schools in India might be reduced by daily teacher absentee rates of 25%, for example,²⁸ especially when a recent survey suggests that only half who bothered to turn up were actually making any apparent effort to teach.²⁹

The importance of local institutions to the quality of investment and (in particular) the quality of use is perhaps the only way to reconcile often high economic rates of return estimated at the project level and the low returns to overall investment recorded in a number of aid-dependent countries. Two dozen African countries receive aid worth more than 50 percent of total public expenditures, for example. The problem with these cases is that public investment has

²⁵ Despite issues with the model, there is a fear that in the face of direct and circumstantial evidence of corruption in donor-financed contracting, we will move even further towards a compliance regime based around procurement transactions. It is not clear that this would necessarily work to reduce corruption, it does appear likely that it would reduce the development impact of donor financing, by further distracting task teams and client officials from a focus on outcomes. A systems and innovation approach based around programs of engagement rather than a transactions and compliance approach based around project contracts is more likely to deliver development impact, in part by reducing the overall impact of corruption on development outcomes.

²⁶ Rioja, 2003

²⁷ Gulati, M. and M. Rao, 2006. Similarly, Davis (2004) suggests that unaccounted for water accounts for 35 percent of total flows in India.

²⁸ Rogers and Vegas, 2009

²⁹ Kremer et. Al., 2005

apparently remained largely unproductive –the countries involved are still very poor, some as poor as they were fifty years ago.³⁰

If donor-financed investments are usually a fairly small part of a country's total investments and (even where they are a large part of total investment) usually generate returns that may be dominated by the strength of sector and country governance even in the presence of significant and costly donor oversight, this suggests high direct returns on physical investment financed by donors is not a source for considerable development impact in most cases.

Investment Lending as a Tool for Technology and Knowledge Transfer

If not for significantly enlarging a productive capital stock, is the current investment project model a powerful one for spreading ideas –knowledge and technology transfer through projects that increase returns to subsequent investments across the sector and beyond? Or might it play a major role in strengthening institutions? Investment aid certainly *has* played this role on occasion –not only financing technologically advanced investments such as Japan's Bullet Train or green revolution technologies in India, but also innovations in investment design including output-based aid (OBA), conditional cash transfers and experimentation in what works including randomized trials.

At the same time, aid financing under the current model may not necessarily be well focused to directly support technology transfer through investment. Possible problems with the project approach to technology and institutional transfer begin at the design stage, where World Bank-financed consulting work, at least, is not always carried out by firms with global leadership in design and innovation. Casartelli and Wolfstetter report that only 14 percent of the top 100 consulting engineering firms or their subsidiaries were represented amongst bidders for recent World Bank consultant contracts, and 4 percent of the World's top fifty management consulting firms were included (with quality as measured by global surveys). When these firms do participate in bidding "they win a minimal proportion of contracts" note Casartelli and Wolfstetter.³¹

Similarly at the construction stage, it appears the minority case that investment projects are bringing in global or regional expertise that might provide for a transfer of technology or knowhow to local firms. Again, we have seen that most contracts are awarded to local firms. Out of a sample of World-Bank financed Goods and Works ICB contracts in infrastructure, 27 percent of total contract values went to foreign (non client-country) firms between 1995-

³⁰ Moss, 2005.

³¹ Casartelli and Wolfstetter, 2007.

2007.³² It is true that foreign firms win more bids in poorer countries perhaps most in need of technology transfer. Moving from a GDP per capita of \$1,000 to a GDP per capita of \$10,000 (a little more than a standard deviation change) would be associated with an 18 percentage point decline in the share of ICBs being won by foreign firms. Dividing the 97 World Bank client countries represented in our sample into income deciles, however, the proportion of ICBs won by foreign firms drops below forty percent in the second income decile –this is the income group that stretches in wealth from Rwanda to Lesotho (see Figure Five). This compares to a dated estimate that ten percent of all construction in the 1980s was international.³³ While the proportion is higher amongst Bank-financed projects, the considerable majority of Bank financing in infrastructure, even in poor countries, is going to support construction by local firms.

Furthermore, when international firms do win World Bank-financed contracts, it is not always clear that they do so on the basis of a competitive advantage in technological solutions. We have seen a declining share of OECD contractors in World Bank financed contracts, for example. And 2.6% of all infrastructure ICB contracts over that time went to the top 100 contractors ranked by size of overseas business worldwide –less than one in ten of all contracts awarded to foreign firms.³⁴ If aid is about the transfer of global best practice technologies and practices yet most contracts are being won by local firms most of the time and by non-leading foreign firms much of the rest of the time, it may be hard to rely on World Bank-financed goods and works contracts to provide that transfer. There is little reason to assume that the World Bank performs more poorly than other donors in this regard.³⁵

Perhaps instead the technology and knowledge transfer might come through donor oversight itself? Not least, environment and social safeguard policies have sometimes been of value in helping to design operations that reduce or reverse negative environmental impacts and favor the disadvantaged. Again, in the case of the World Bank we can be fairly confident that its oversight and procurement systems have such a demonstration effect --procurement regulations based on the Bank's model have been widely adopted around the World. However, if after sixty years of World Bank operations, procurement and oversight processes in many

³² Kenny and Musatova, 2009

³³ Strassman and Wells, 1988.

³⁴ Related to this, it is not the case that better governed countries see a larger foreign or OECD share in ICBs once income is taken into account. The CPIA measure of public sector management is statistically insignificantly related to foreign share in ICBs. Similarly, the average share of foreign firms in ICB contracts is 18 percent in countries where less than 20 percent of firms report that they are expected to pay gifts to receive a government contract compared to a 39 percent foreign share of ICBs in countries where more than 20 percent of firms report the need to give gifts for a contract (Kenny and Musatova, 2009).

³⁵ Of course in some cases the best technology transfer may be from other developing countries using different but more appropriate techniques and approaches. Nonetheless, the large share of domestic firms in ICB wins suggests not even this technology transfer is occurring in the majority of contracts.

client countries apparently remain inadequate, another approach other than demonstration through investment operations may need to be tried.

A final direct channel for knowledge transfer might be through overall project design that itself suggests a new institutional technique for how to get things done. As noted, a number of innovative approaches to delivering government services have been supported under donor operations including community-driven development, conditional cash transfers and output-based aid. This 'piloting benefit' does seem to be a comparatively persuasive reason for investment lending, not least because it suggests that a donor-financed project really will be considerably different from projects financed from elsewhere. It will be discussed at greater length later in this note. At the same time, it may be fair to say that the majority of aid-financed investments are not for a project that is considerably innovative, and that an 'innovation filter' to project aid would significantly reduce its volume.

Related to this last 'direct' channel for the impact of investment lending, one indirect channel frequently highlighted is that of leverage. If donors were not supporting investments, technical and policy advice would go unheeded. But if donors need to incentivize client countries to take their advice with regard to reform or policy change, the more effective route might be to provide financing on the basis that they have taken it –the Development Policy Lending model for aid.

It is worth repeating: the recognition that the original paradigm for investment projects may have some weaknesses in terms of ensuring broad development impact has been an important spur to innovation in donor financing models. This innovation includes technical assistance, programmatic aid, and sector wide approaches, all predicated on the idea that overall policy and institutional status are likely to have a considerable impact on the development return to aid financing. It also involves a growing focus on institutional development within investment lending operations.

Nonetheless, most aid (including three quarters of total World Bank financing) is still provided through an investment lending model which was not designed for the purpose of experiment, innovation, policy or institutional development. Progress through the investment project cycle is related to the needs of the major investment(s) under the project, not by the often notably different cycle of institutional reform, and the capacity building under investment projects is usually prioritized on the basis that it will improve the potential development impact of those investments rather than it will most considerably improve the long term performance of the relevant agency or sector.

What might reform look like?

An investment project model only makes sense in cases where there are strong reasons to think that absent projects the total investment pattern would look considerably different from the investment adopted with donor financing under the project. That suggests ‘traditional’ project aid should perhaps retain a role for innovative projects testing a new technology or approach and cases where fungibility is less of an issue (in that these projects would be unlikely to occur in the absence of aid). Two examples are delivering global or regional public goods at the local level and countries where the Bank and cofinanciers provide a considerable proportion of total investment.

But even where projects remain the better option, it is not clear that a procurement-centered investment project is the necessary approach. A process of procurement rule reform and a refocusing on outcomes would be an important part of strengthening the development impact of the model. If we ensure a high quality of delivery of services with a known development impact at a reasonable price, the scope for corruption or mismanagement to dramatically impact development outcomes is reduced, and the likelihood of honest and competent firms bidding is increased. Output Based Aid is one model to achieve this. It pays for the delivery of services at competitive prices which are of direct benefit to consumers and are themselves indicators of development progress. Thus, even if corruption or mismanagement does occur in OBA projects, the risk that it significantly reduces the positive development impact of the project is lowered.

Furthermore, the outputs of an OBA project are easily monitored. Unlike the efficient operation of a power plant, for example, the presence or absence of a working electricity connection is directly experienced by households and easily monitored by civil society, donors or other interested parties. And efficiency gains from competitive OBA tenders can be very high, perhaps suggesting that more competent firms are willing to bid when the fear of competing against firms willing to deliver substandard outputs is reduced. In a rural water scheme in Paraguay, the required government subsidy for the OBA schemes was in some cases 25 percent less than in similar non-OBA schemes.³⁶

Cash for results can be paid to recipients as well as suppliers. Numerous randomized evaluations of paying students for attendance and scores as well as parents for ensuring their children get basic health care, suggest that such payments can have considerable returns. As

³⁶ Kenny and Mumsen, 2008. The results-based model need not only apply to final service delivery. The latest (proposed) World Bank Sao Paulo Water Recovery Project makes payments to water service providers on the basis of results –a payment for each additional cubic meter per year of recovered water, a payment for each additional cubic meter per year of water that is returned to selected watersheds in conformity with environmental standards and so on.

with supply-side payments, comparatively simple survey methods can be used to track development outcomes in these cases, suggesting considerably less need for active direct engagement in the 'procurement process' of cash handouts. A further innovation would be to transfer cash directly to poor people without strings attached, again an approach that has been proven to have significant development impacts.

An approach that moves even further along the chain from financing to outcomes is cash on delivery aid –which pays *governments* on the basis of development outcomes achieved (although note this only applies in cases of concessional finance). The government is paid on a pro rata basis for each additional student that completes schooling and takes a test, or each additional eighteen month old given a full course of vaccines and immunizations, as it might be. The payments are based on an independent survey-based evaluation of progress. DfID is financing such an approach in Ethiopia with education.

In the (hopefully few) cases where direct procurement monitoring is still seen as necessary, a regime that refocused on publicizing and tracking general procurement indicators (details of goods/works to be procured, number, name and ownership of bidders, winner, initial and final contract price and completion schedule) might have a greater capacity to spot 'problem contracts' than one that attempts to define precise process steps. Donors should also focus on empowering the multiple people who are involved in project design and execution to spot and report concerns --third party oversight, whistleblower protection, confidential hotlines and the like.

Of course, such comparatively direct support for investments in human and physical development do not help countries deal with the vital issue of institutional development. But such support is perhaps more suitably provided through a combination of technical assistance and development policy lending or sector-wide approaches where partial financing is provided in support of a complete sector investment program. Recent World Bank financed development policy operations have fostered institutional reform at both the national and sectoral level. Some examples from infrastructure include applying semi-e-procurement to all national roads works contracts (Indonesia); introducing construction plus long-term performance-based maintenance contracts for roads (India), and ensuring that electricity tariffs are adequate to cover supply costs (South Africa).³⁷

³⁷ In these cases, a number of studies of World Bank project outcomes have suggested that more careful project appraisal is associated with considerably better project outcomes (Vawda, Mook and Gittinger and Patrinos, 2001, Belli and Pritchett, 1995). An up-front understanding of the sector based on considerable, quality economic and sector work (ESW) –the programmatic equivalent of careful appraisal-- is likely to be a key to successful programmatic interventions

Conclusion

Efforts towards reform are already ongoing and much to be welcomed. For example, the World Bank's recent proposal for investment lending reform notes a number of issues with the current model of investment lending as the major instrument for World Bank support for development. It points to a disconnect between the input-based model of current investment lending systems and the move towards programmatic or framework-based project models based on development outcomes. It suggests that the current model diverts focus from results monitoring and reporting which should be a key part of the implementation and supervision effort. It also notes that investment lending implementation is often far slower than planned and that countries complain that these delays are often associated with the need to comply with the Bank's procedural, reporting and documentation requirements.³⁸

The traditional investment project instrument focused on procurement is a powerful tool for development. At the same time, it is currently being utilized to attempt to achieve outcomes that were hardly envisaged when it was first developed. The model is bureaucratically complex and has a mixed record in promoting the outcomes for which it was designed –competitive delivery of goods and services at low cost and high quality.

As a result, the traditional investment project with a strong focus on procurement oversight should not be a donor or lender's default approach to funding. Indeed, it should be the last resort, limited to cases where (i) a project design is significantly innovative and/or delivers regional or global public goods and/or aid is a large percentage of country investment and no agreement can be reached between donors and government on overall investment priorities in that country and (ii) alternate project approaches like output-based or cash on delivery models are deemed inappropriate.

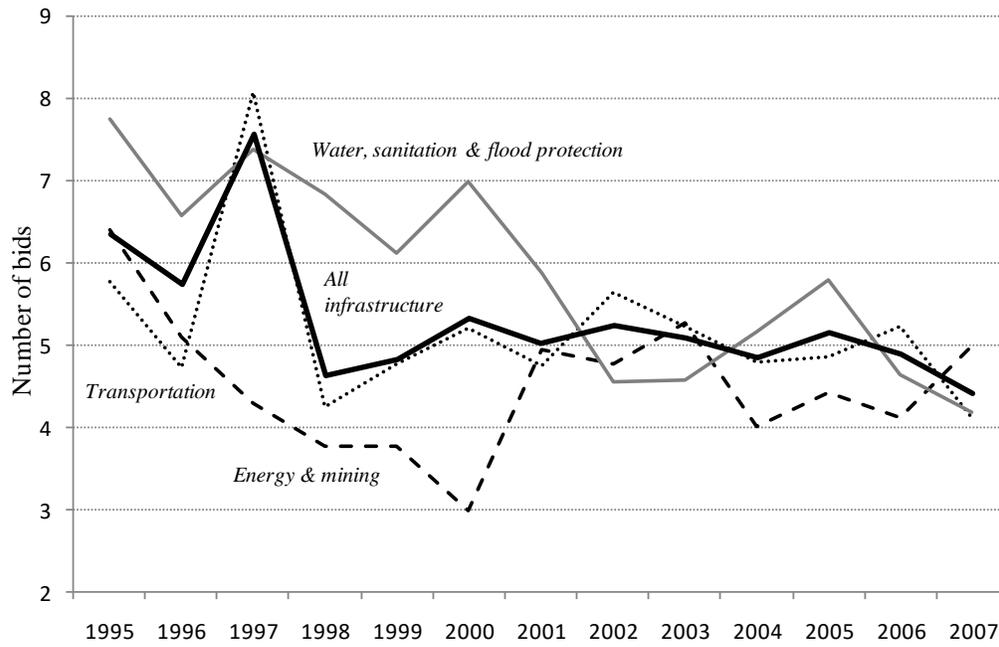
³⁸ OPCS, 2009

Table1: Regional breakdown by sector of World Bank Infrastructure ICB/NCB bids, finalization time and amendments: average numbers 1995-2007

World Bank Region	Procurement Type	Average Number of Bids	% of Contracts with <3 bids	Average Days of Finalization	Average Number of Amendments
Sub Saharan Africa	ICB (638)	4.82	27.9	67	0.577
	NCB (314)	4.49	32.8	61	0.494
East Asia Pacific	ICB (491)	4.92	12.9	42	0.326
	NCB (1047)	5.81	15.5	32	0.173
Europe and Central Asia	ICB (581)	4.75	18.1	39	0.515
	NCB (463)	3.89	28.7	27	0.093
Latin America and Caribbean	ICB (422)	6.47	21.5	65	1.460
	NCB (272)	6.08	22.2	62	0.470
Middle East and North Africa	ICB (126)	5.0	15.1	63	0.468
	NCB (127)	5.17	15.2	30	0.173
South Asia	ICB (183)	5.63	18.1	75	0.514
	NCB (583)	4.77	25.8	47	0.099

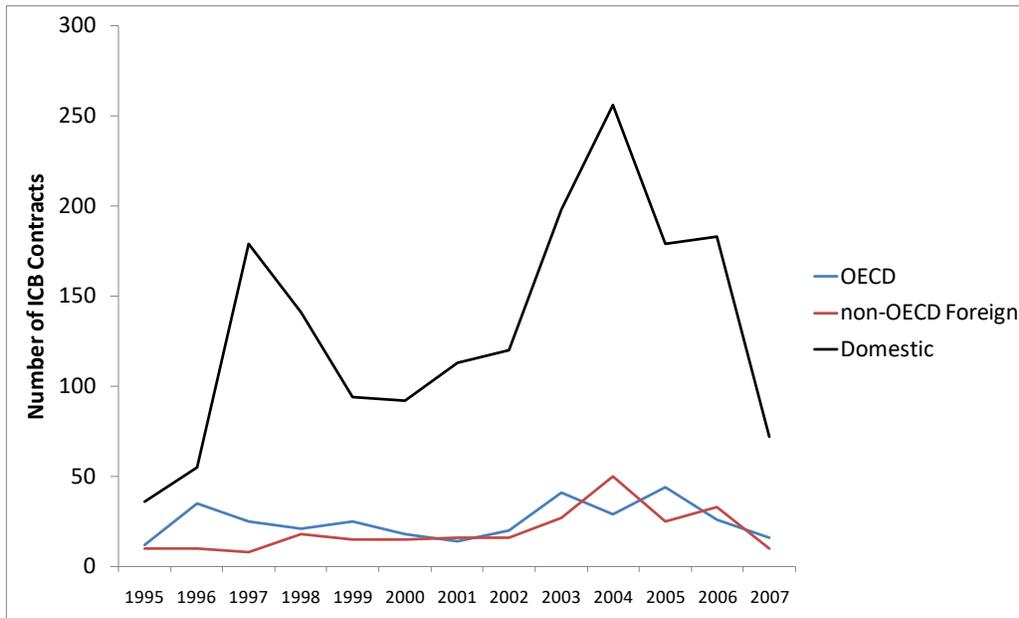
Source: Kenny and Musatova, 2010

Figure 1: World Bank Civil Works Infrastructure Procurement Bids By Sector



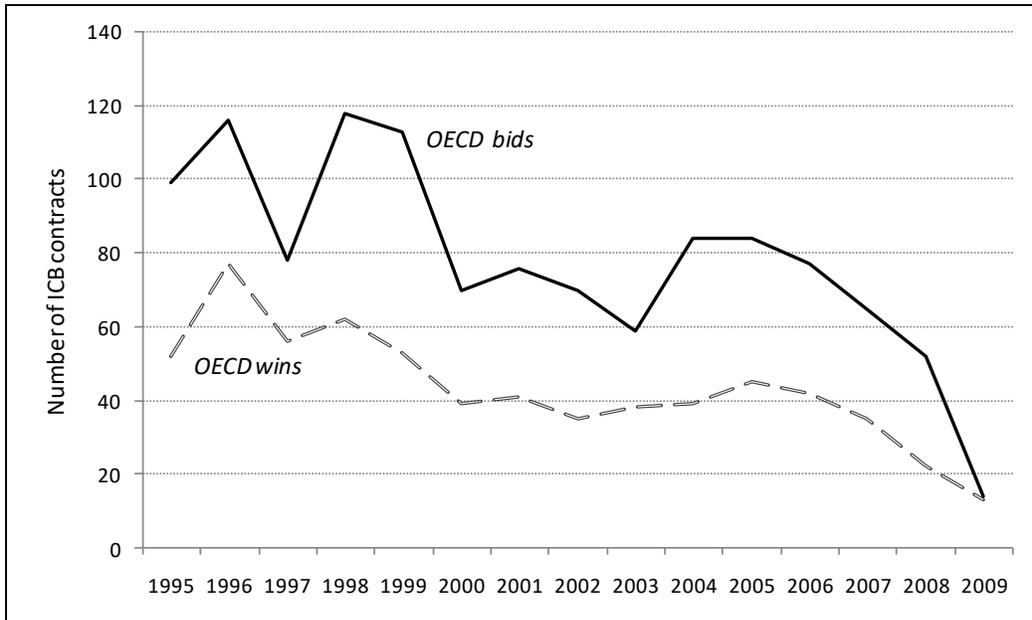
Source: Kenny and Musatova, 2010

Figure 2: Number of ICBs Awarded to OECD, Other Foreign and Domestic Firms in 'Pure' Infrastructure Contracts 1995-2007



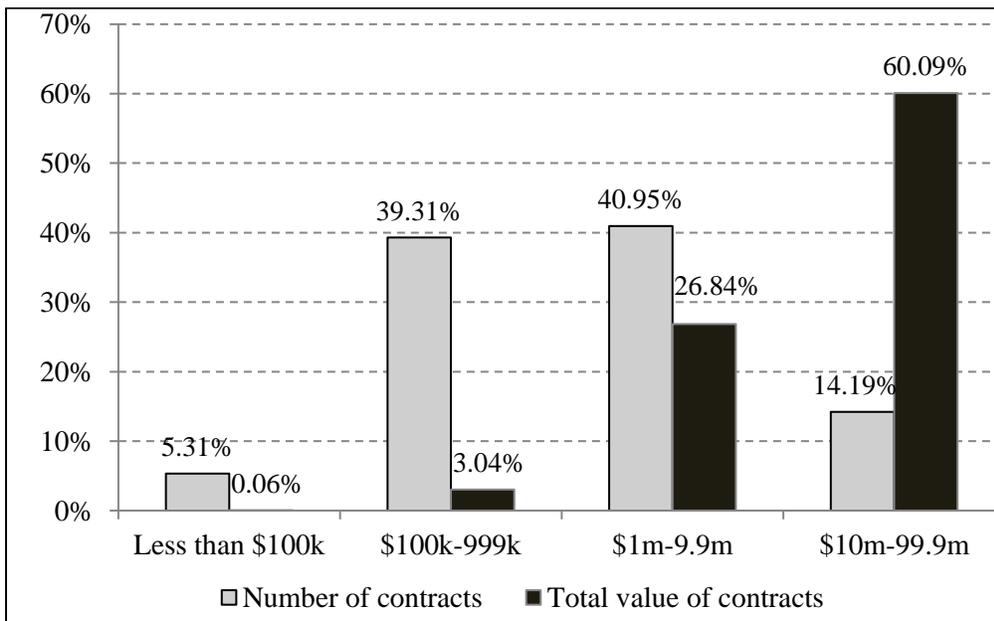
Source: Kenny and Musatova, 2010

Figure 3: Proportion of All ICBs Won or Bid On by OECD firms Over Time



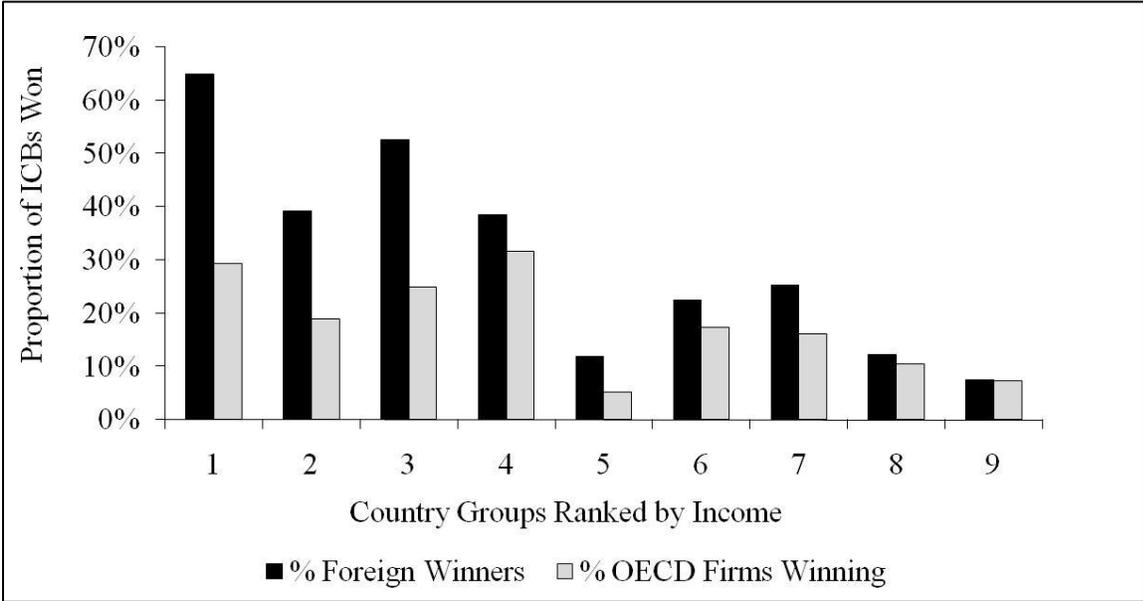
Source: Kenny and Musatova, 2010

Figure 4: Distribution of Size of Bank Financed Civil Works Contracts in Infrastructure 1995-2007



Source: Kenny and Musatova, 2010

Figure 5: Proportion of Infrastructure ICBs Won by Foreign and OECD firms by Client Country Income



Source: Kenny and Musatova, 2010

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