Beyond "Grants versus Loans" :
How to use ODA and debt for development.

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Abstract :
This paper looks at the « grants versus loans » controversy. It questions the claim sometimes made that development institutions should refrain from making loans and should instead distribute ODA as outright grants only. It discusses various reasons why developing countries do not have full access to international capital markets beyond the traditionally invoked problem of weak governance and institutions and beyond their own responsibility. There are market failures that justify ODA, and there is a priori no overall superiority of grants as compared to loans. To the contrary, we believe that loans may provide a superior solution, provided that they focus on the really key issue of maintaining debt sustainability. Finally and beyond the loans-versus-grants controversy, the paper also proposes to revisit the traditional paradigm of ODA and to increase its remit and further develop its instruments.

The developing country debt crisis has marked a dramatic watershed in Overseas Development Assistance (ODA) as it brought home that ODA loans had accumulated into unsustainable debt thus questioning the use of loans to finance development. Moreover, it also suggested that development institutions had indulged in "defensive lending" by using ODA loans to finance the repayment of earlier loans thus feeding spiraling debt. Against this background, a major grants-versus-loans controversy has developed since 2000. An unlikely alliance emerged between conservative academics such as Meltzer or Bulow and "anti-globalization" NGOs such as Attac or Friends of the Earth to recommend a switch from concessional loans to outright grants as a natural lesson to learn from the debt excesses of previous decades. These recommendations were echoed in the Meltzer report on international financial institutions (IFIAC, 2000) and in President Bush's proposal in 2001 during the negotiations for the 13th IDA replenishment that 50% of IDA financing to poor countries should take the form of direct grants.

In the face of it, as observed by Nunnenkampf et al. (2005), this is a somewhat surprising controversy. Most ODA currently already takes the form of outright grants. They represent 70% of total gross ODA and more than 85% of total net ODA disbursements. Bilateral ODA is almost exclusively channeled through grants, with the exception of Japan where loans still

[1] Respectively: Ecole normale supérieure and OECD Development Center; French Development Agency (AFD); OECD Development Center. The authors thank Mike Chen and Sebastian Linnemayr for excellent research assistance.

account for more than half gross ODA and to a lesser extent Italy and a few other bilaterals (in France, for example, ODA loans represent about 15% of total gross bilateral ODA in 2004). The share of loans expanded between 1960 and 1980 but has substantially declined since the 80s in the wake of the debt crisis. The World Bank admittedly stands out as a major ODA lending institution, while other multilateral institutions also tend to make outright grants. This is due to IDA lending. IDA is admittedly a crucial ODA provider for the poorest countries (it contributes 8.5% of total net ODA disbursements) but what has emerged as a widely debated global ODA question in fact rather touches on the policy of one multilateral institution. Looking from Sirius, it would seem that a relevant question might be why the share of loans in total ODA is so small indeed.

This papers explores the grants-versus-loans controversy beyond the IDA debate, looking more broadly at whether and how the debt instrument still has a role to play in development finance. In a first section, we review some of the pro and con arguments for loans and grants developed in the literature. Second, we link the debate with the debt crisis and suggest that there are constructive ways to think about debt solvency in an ODA loan regime. Finally, the paper revisits ODA instruments and calls for a modernization in the way ODA is delivered.

The grants versus loans controversy

The very notion of foreign assistance implies some generosity as compared to resources raised on markets[2]. A proper metric of ODA should therefore be the amount of taxpayers' money that is involved in any ODA instrument. However, this is not how the OECD Development Assistance Committee (DAC) defines ODA, and that very fact may well contribute to explaining why there ever was a debate between loans and grants. Instead of counting ODA as the actual budgetary cost for donor countries, the DAC defines it as the sum of grants and concessional loans (i.e. loans carrying an element of subsidization[3]). In a steady state when ODA loans are stable and identical over time, the two definitions are equivalent in net terms, since the difference between new loans and capital reimbursements on all former loans is

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[2] This was not always the case. For example, Lewis (1955) uses "foreign assistance" in relation to all foreign capital inflows.

[3] To qualify as ODA, a loan must include a 25% "grant element", in comparison with a loan of similar nominal amount and duration carrying a 10% interest rate. The rate of 10% has no relation to the current market interest rate, but was chosen arbitrarily as an estimate of the opportunity cost of public investment for donors.

equal to the embedded subsidy. But in general, the two notions will be different, and the current definition of ODA lacks economic meaning[4]. In itself, this casts some doubt over the relevance of a number of results derived from econometric analyses that take the ODA statistics as an explanatory variable. While this paper is not primarily interested in ODA measurement as such, it is not an unimportant issue. Measurement choices have a significant political economy impact on donor governments keen in communicating about their ODA commitments and results.

The Grants versus Loans debate is concerned with a comparison between ODA instruments. There is a temptation to discuss this comparison at constant (as currently measured) ODA. Obviously, keeping gross ODA constant would rather create incentives for donors to resort to concessional loans and for beneficiaries to prefer outright grants. If the focus is on net ODA, however, donors interested in maximizing the net ODA to budgetary cost ratio will still prefer increasing concessional loans, as net ODA is computed by subtracting amortization of past loans from current gross flows : increasing concessional loans therefore appears as a superior option if the objective is to communicate on the increase in a net ODA figure while minimizing budgetary costs. There is little to draw from such a comparison, except from a pure political or political economy vantage point. The preference for grants will be unsurprisingly supported by a number of NGOs, but also possibly by donor governments interested in checking the expansion of multilateral institutions : loan making allows them to expand faster than having to rely on grant resources committed by member governments. And monitoring debt service payments also increases their remit.

However, a comparison between, say, a $ one million grant and a $ one million concessional loan would not make sense, even both produce exactly $ one million of gross ODA. To be meaningful, the comparison should take place at constant budgetary cost for the donor. Supposing that the donor would be willing to earmark $ X million of tax payers' money to ODA, an interesting question to ask is how to use X : as an outright grant, or in combination with a market loan of $ Y million to produce a concessional loan with a percentage grant element of X/(X+Y). There are several lines of analysis :

(i) What are the incentive structures involved in the use of each of theses instruments ?

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[4] For an alternative measure, see Chang et al. (1998)

(ii) Is there any sense in which the X solution is to be preferred to the (X+Y) one or vice-versa ?

(iii) Do technical aspects of the X+Y combination matter (e.g. using X to lengthen the maturity, reduce the interest rate, lengthen a grace period, provide for indexing mechanisms, etc.) ?

(iv) Should anyone be responsible for making the X+Y combination, or should it be left to the market and the X beneficiary ? Or, to put it differently, is there any role for financial engineering and for multilateral and bilateral development agencies in the conception of ODA instruments ?

(v) Are there meaningful differences between the political economy implications of the two combinations from a donors' perspective?

We discuss some of these questions below.

Incentives and differential impacts

Can the way in which equivalent amounts of aid are delivered influence results ? Answering that question calls for looking at the different incentive structures of ODA loans and grants. We review below some of the results from the literature.

Lerrick and Meltzer (2002) as well as Radelet (2005) consider that loans carry perverse incentives whereas grants generate positive incentives. Contrary to loans, grants do not contribute to the debt overhang. Moreover, Bulow and Rogoff (2005) note a tendency to practice "defensive lending" in pushing new loans notably in order to finance the repayment of older ones : "multilateral development banks sometimes have their own internal pressures to pump out loans, inducing politically fragile developing countries to take unwanted debt". These remarks, however, seem to relate to an inefficient use of the loan instrument rather than to an intrinsic problem with the instrument. Radelet's suggestion that the allocation of IDA grants as opposed to loans should be based solely on the receiving country's income may have some practical appeal but should not be construed as a theory. There is in fact evidence that loans may help borrowers from escaping poverty: microfinance provides interesting examples to that end. It allows liquidity constrained poor households to access (high interest) loans that allow them to engage in highly productive activities. There is no a priori reason to rule out that ODA loans to countries could produce similar results. The objections thus made against

the use of loans should rather in fact call attention to the challenge of using ODA loans under a tight debt solvency constraint. While there would be no sense in further increasing the current debt of HPIC countries at present, refraining from further lending to them as long as solvency remains an issue is an appropriate but contingent response. Surely, a powerful rationale for restoring solvency is precisely to restore the capacity to borrow. One of the shortcomings of past loans was that risks were insufficiently taken into account and that the typical ODA instrument was too archaic to adapt to a poor country solvency constraint that is highly dependent on external shocks.

What this literature therefore points to is a specific problem with managing debt. Still, it gives no clue at the respective effectiveness of grants versus loans. The jury is still very much out, but a number of recent studies shed some light on the impact on the beneficiary country of the ODA instrument that is used.

First, it is interesting to ask how ODA relates to local fiscal discipline. Since grants do not call for reimbursement, there is a potential disincentive on the mobilization of public receipts and on the quality of public spending. An increased dependency on external aid may result. In principle, loan repayments should help build financial discipline and promote the efficient use of funds. Before moving to empirical results, however, the whole theoretical argument needs to be qualified. In a dynamic framework in which beneficiary countries rely on the continuation of grants and in which development institutions are keen in producing a given level of ODA, the incentive structure is more complex. For example, if it is possible to credibly tie the renewal of a grant with a given level of financial discipline in the recipient country, then the aforementioned disincentive is compensated by the positive incentive of having the flow of grants renewed. However, a possible behavior of “grant pushing” from development institutions might again weaken that incentive.

In a WIDER study, Odedokun (2003) uses yearly panel data from 1970 to 1999 for 72 ODA beneficiaries and finds that concessional loans are typically associated with higher fiscal receipts, lower public consumption, higher investment rates and a lower dependency of the public deficit on external financing. In poor countries, a higher level of grants in total ODA is associated with a lower tax effort. Gupta et al. (2004) look in an IMF study to another set of 107 countries that have benefited from ODA between 1970 and 2000 and assess the differential impact of grants and loans on the domestic fiscal effort. They find that an increase

in global ODA (sum of grants and concessional loans) leads to a decline in fiscal receipts in the beneficiary country. McGillivray (2002) and Sugema et al. (2005) reach similar conclusions using data from the Philippines and Indonesia repsectively. But Gupta et al. (2004) also look at the differential impact of grants and loans. They find that an increase in grants translates into lower receipts: 28 cents of each additional $1 grant are compensated by a lower fiscal effort. Conversely, loans tend to be associated with increased government revenue. In weak institution countries additional grants are completely offset by a reduction in domestic revenues (see also Clements et al., 2004).

A second set of questions relates to the differential impact of grants and loans on economic growth and on poverty reduction. Nunnenkamp et al. (2005) conduct a simple correlation analysis to explore whether loans and grants have different impacts on economic growth. They look at the relation between total net ODA, total net loans, total grants and the grant element in ODA commitments (computed as the product of the grant element as defined in DAC statistics and ODA commitments) with average per capita growth in gross national income over the subsequent five years. Their analysis does not point to any substantial difference of the distribution of ODA through grants or loans for economic growth. However, the aid effectiveness literature has largely ignored the question of whether the way in which aid is delivered (between loans and grants) matters. Clemens et al. (2004) explore precisely that question, by distinguishing various ODA motives: humanitarian purposes, that cannot be expected to promote short term growth; longer-term-impact aid to support democracy, the environment, or building up human capital, which should contribute to long term growth, an effect that will not be observable in short to medium term analyses of the impact of aid on growth; and shorter-term-impact aid such as infrastructure finance. They do find a positive relationship between this latter category (53% of aid flows) and economic growth, notwithstanding governance indicators. They do not differentiate between grants and loans. However, grants are clearly more adapted than loans to provide humanitarian assistance and to finance longer-term impact expenditures, at least in countries with a still limited fiscal base. Hence, the question would seem to come down to whether potentially productive investment should be financed through grants or through loans.

Equivalence between grants and loans

The heart of the Lerrick-Meltzer (2002) argument is that all concessional loans should be thought of as an arithmetic combination between a grant and a market loan (see annex 1 for further elaboration). ODA should rather be made of outright grants, and markets or financial intermediaries would provide loans. This would occur at no extra cost either for the donor or for the beneficiary.

This is a worthwhile discussion. Its merit notably hinges on the unbundling of a concessional loan into its basic components: not only does it contribute to greater transparency, but it also highlights the use of taxpayers' money (less visible in a concessional loan) and invites greater focus on the rationale for using subsidies in the first place. One of the crucial question about ODA is why, when and how to use subsidies. With concessional loans, there is a risk that the subsidy is simply justified by the quest for market share under competition with other donors and with financial institutions. Unbundling thus contributes to greater efficiency.

Lerrick and Meltzer's argument, however, calls for qualification. It is based on the assumption that developing countries have a perfect access to international capital markets. Their spending capacity is then determined by their wealth and international interest rates. Grants and concessional loans are in that case fully equivalent. There can therefore be a grants-versus-loans controversy only when developing countries do not have full access to international capital markets. Under liquidity constraints and for any given willingness on the donor's side to commit taxpayers' resources, many developing country governments will lose in terms of overall resource availability if ODA is available through grants only. If a liquidity constrained country lacks access to capital markets, then lending through a development agency relaxes the constraint. The argument thus comes down to whether or not developing countries suffer liquidity constraints and why, and also whether development institutions are legitimate in moving in. The first question is an empirical one. There is an ample literature showing evidence that these countries do suffer pervasive liquidity constraints.

A first explanation at the core of Bulow and Rogoff (2005) hinges on the idea that developing countries are insolvent due to a lack of credible institutions that would back their commitments to repay the debt. Concessional loans in that case make sense only if multilateral (as in Bulow and Rogoff) or bilateral development institutions are in a better position than private markets to get repaid despite local institutional weaknesses. While there is no empirical evidence to that effect, it remains plausible that development institutions have

a better knowledge of local institutions and have established long term relations that can provide a significant leverage.

Another explanation relates to the so-called “Lucas paradox” (Lucas, 1990). Lucas asked the question of why capital does not flow from rich to poor countries. In a neoclassical framework with standard constant return-to-scale production functions the return to capital should be higher in capital scarce countries and developing countries should receive massive capital inflows. The preceding explanation, based on sovereign risk, provides a possible answer. But Lucas opened further insights based on human and physical capital externalities that in fact question the validity of the neoclassical model.

Basically, the profitability of a (private or public) capital investment depends on the presence of complementary (notably public) capital assets: roads, ports, airports, telecommunications, high degree of education, etc. This market failure provides a powerful justification for ODA as a way to support primitive capital accumulation to reach a critical level of the capital stock beyond which further investment will be profitable. To finance such primitive capital accumulation, grants are possible, but loans provide in theory a superior instrument precisely because there is an eventual return to investment. The characteristics of concessional loans (grace period, long maturities, low interest rates) allow them to fit those of the considered investment.

Cohen and Soto (2004) and Causa and Cohen (2005) call attention to another explanation, based on an insufficient integration of poor countries in international trade. They in fact question the validity of the claim that capital is scarce in developing countries. More precisely, the claim is valid in volume terms (which matters from the developing countries point of view and growth prospects), but not in value terms. The comparison in volume terms is based on PPP prices and exchange rates (*à la* Summers and Heston, 1988 and 1991). But what matters from an international investor’s point of view is the return to capital in value, that is in dollar terms. Lucas’ paradox in fact dissipates when the calculation is done in dollars. In other words, investments in developing countries might be socially profitable, but the local relative price of capital is too high. This discussion relates to the grants versus loans debate to the extent that a lack of integration in world markets widens the afore-mentioned difference and means that a developing country might not have the desired access to outside private market finance. In addition, international loans need to be repaid in foreign currency,

which affects the country's repayment capacity. To the extent that socially profitable investment imply imports of capital equipments, grants are then to be preferred to loans (unless the considered investment builds the country's export capacity and appears likely to generate enough foreign currency resources to service the debt).

A fourth explanation for the insufficient access of developing countries to international capital markets relates to volatility in their resources. High volatility translates into higher spreads as the perceived risk on investment increases. In turn, high spreads limit the borrowing capacity. Karroubi (2005) shows how volatility tends to exclude poor countries from international financial markets. Here, the reason is not related to poor governance or to a low average return to capital, but from imperfections in financial markets, namely the relation between the lack of an effective and credible mechanism for debt problem resolution and the level of spreads. Another imperfection is that private loans tend to increase the volatility of consumption (Reisen and Maltzan 1999). Information asymmetries also generate herding behavior with a risk of excesses both in terms of over- or under-investment.

This discussion illustrates that when countries lack access to international capital markets, it is not, or not only, due to poor governance and poor institutions. There may be socially productive investments that are not naturally financed (see annex 2). This is one of the market-failure-type of justification for ODA. There is no a priori reason why a grants-only approach should be appropriate. We in fact claim, to the contrary, that a strategy of making loans makes more sense provided that it focuses much more than in the past on the issue of debt solvency and carries automatic responses to the risk of insolvency and that development agencies are better place than markets to make these loans.

Concessional loans, grants and debt solvency

The case for restoring debt solvency through debt reduction and debt cancellation has been overwhelming. However, this does not imply that debt instruments should be discarded. Indeed, one of the rationales for restoring debt solvency should be to allow overly indebted countries to restore access to the debt market. Kapur (2002) emphasizes that shocks rather than an insufficient reliance on ODA grants explain the debt crisis. The idea that poor over-indebted countries should from now on receive outright grants only would risk signaling them as countries dependent on international generosity, bound to be under assistance and unable to

restore access to international financial markets. For example, Hernandez and Katada (1996) find in a study of 32 poor African countries over the 1984-1993 period that grants crowd out private investments. Conversely, loans from multilateral development institutions have been found to crowd them in (Ratha 2001, a point however debated by Rodrik 1995). A crucial question lies with the possibility to use ODA loans more efficiently than they have been in the past.

Here, we focus on external shock vulnerability as a major factor behind the developing country debt crisis. Natural resource price volatility has long been recognized as a major source of vulnerability for developing countries. There is ample evidence of the negative impact of export instability on economic growth and of economic volatility on growth (Ramey and Ramey, 1995). An important question for donors is how ODA can help reduce vulnerability (for a discussion, see Guillaumont et al., 2005). Our claim is that well conceived development loans are superior to outright grants (and complementary to grants) in trying to address that issue and alleviate the costs. In a nutshell, there is a two-fold objective : putting to productive use the profitability linked to good states of nature, while reducing debt repayments when the debtor faces a negative shock. Loans can be conceived to achieve both objectives and can be shown to be superior to grants (see the streamlined model in the appendix). Indeed, the larger the volatility of a country's resources, the larger the superiority of subsidized loans over grants, provided specific clauses are attached to these loans.

While the problem has been long known and understood and despite several attempts, the international community has so far failed to provide a practical solution. Measures to stabilize natural resource export prices have failed in the face of the high and persistent costs of the distortions thus created given the evolution of markets. Mechanisms such as the Stabex had been conceived to provide countercyclical relief. In practice, however, they worked rather pro-cyclically and did not achieve their objectives. There are several reasons. The Stabex automatic stabilization principle was weakened by the decision to target stabilization funds to agricultural sectors affected by price shortfalls, which led to cumbersome delays as the Commission was keen in monitoring the use of Stabex funds (Collier et al, 1999). But the nature of the shocks has also rendered the instrument rather inadequate. Instead of being cyclical, price shocks have tended to be permanent. This is also one of the reasons why ad-hoc debt rescheduling has often left debtor countries with an increasing debt burden that

eventually became too heavy, as they were based on the false hope that higher prices and a more lenient economic environment would eventually bail out overly indebted countries.

Guillaumont et al. (2003) discuss several ways to use ODA to dampen the impact of price shocks. A first option consists in explicitly linking yearly repayments to the state of nature by automatic adjustment of the public debt service to the evolution of export prices: reduced debt service during crises, faster repayment during booms. Such schemes raise several questions about the nature and calculation of the reference indicator, the modalities of indexation of the debt service (canceling or delaying installments), the triggering mechanism, and the financing necessary for such instrument. A key problem lies with making a difference between short term (within one-year) volatility for which market based solutions apply, medium term year to year instability, where ODA can provide some cushion, and a longer term market trend that calls for an adaptation of the output structure and cannot be dealt with by stabilization measures. Cohen, Fally and Villemot (2004) propose a medium term solution that consists in smoothing out export revenues across a moving average of the previous five years, thus providing cushion without opposing any trend. Such ideas could easily be applied toward adding a price indexation formula into concessional ODA loans. For example, creditors might monitor the difference between previous price averages and current prices. Above a given level for that difference, loan repayments could either be accelerated or reduced. In a similar spirit, Gilbert and Varangis (2005) call for explicit loan indexation on prime material prices[5].

An interesting idea, also explored by Guillaumont et al. (2003), consists in using the subsidy element embedded in concessional loans to finance cushioning. The central repayment scheme might be based on constant annuities, but the loan would be associated with contingent grants raised to respond to an exogenous temporary negative shock that would partly cover debt service. Such grants would be financed by a reduction in the primary loan concessionality, which means that the implied subsidy on the loan rate would be lower, or amortization would be shorter. If no shock has occurred during the period of amortization, the associated grant might be used in part or in totality to cover the last payments under strict economic policy conditionality (to provide for some incentive to soundly manage possible price booms).

[5] Donors are currently experimenting with similar ideas. For example, the French Development Agency (AFD) recently made a loan to a Cotton company in an African country whose maturity depends on cotton prices.

Toward sustainable ODA debt

This discussion leads to a more ambitious scheme, through which the ODA subsidy involved in any concessional ODA loan would be used to adapt the debt stock to the shock pattern that debtor countries face so that debt solvency is maintained[6]. Such an idea, further developed below, faces several institutional constraints, both in terms of the rules currently governing ODA and with regard to accounting standards such as the new IFRS ones.

Under such a scheme, multilateral (and bilateral[7]) development institutions would build up reserves against bad and doubtful debt. Such reserves would be calibrated to cover risks related to shocks in natural resource prices and to natural disasters facing developing countries. They could use the grant element to finance the build-up in reserves. The key to the scheme would be an automatic cut in any unsustainable debt resulting from such shocks toward a sustainable debt level. The mechanism should be implemented through a careful auditing process. To give a practical example, one could conduct a detailed country risk analysis and classify developing countries in four groups respectively calling for a 25%, 50%, 75% or 100% of provisions. In the first group, considered as exceptional, a provision of 100 units would allow to make a loan of 400 units. In the second group, the same provision would allow for a loan of 200 units; in the third group, 125; the fourth and last group would call for outright grants. Countries with poor institutions and governance would belong to that group, for which the arguments presented by Bulow and Rogoff (2005) are valid.

What debt level could be considered sustainable? Experience with the HIPC initiative gives some clues. Initially, it targeted a 200% debt to export ratio. According to Cohen (2001), this still corresponds to a 60% risk of a financial crisis. At the Köln summit, this ratio was lowered to 150%. But even with that further concession, all HIPC countries having reached their completion point with the exception of Mali and Senegal failed to stabilize their debt ratio. After an initial improvement, the ratio deteriorated. Against a disillusion with the impact of the Köln initiative, the London summit eventually decided to cancel the totality of the multilateral debt of 18 HIPC countries. Picking up a target for a "sustainable" debt to export ratio requires a careful debate, but it would seem that 150% provides a ceiling, at least for the poorest and most vulnerable countries.

[6] The following paragraphs draw on Cohen and Reisen (forthcoming, 2006).

Moral hazard, however, stands as an important issue. Any debt cancellation scheme introduces a bias in favor of debtor countries. The risk is that of transferring resources from properly managed countries that honor their debt commitments toward those who failed to do so. Indeed, experience with debt reduction under the HIPC initiative illustrates that risk. ODA flows seem to have benefited the most indebted countries rather than the neediest ones (Powell, 2000); and there seems to be no correlation between debt reduction and either the level of poverty (Cohen and Vellutini, 2004) or the quality of governance. Our scheme, however, offers a possibility to significantly reduce the level of moral hazard involved. First, provisioning corresponds to an explicit and transparent assessment of the country risk and thus calls attention to country specifics and policies. Second, such provisions should be counted as ODA as their cost is not born by debtor countries. By putting aside a chunk of the volume of ODA available to any debtor country, the scheme actually encourages virtue since required provisions would be lower in less risky countries. Overall, it would provide a powerful incentive for sound fiscal management and a springboard toward full access to international capital markets.

Such a scheme also calls for a much tighter coordination between multilateral and bilateral donors. There is a collective action problem in dealing with debt reduction, since it is in no creditor's interest to move first lest its move might facilitate repayment to other creditors. It is interesting to compare our proposal with IDA 14 provisions for 2005-2008. IDA plans to use one third of its resources to outright grants rather than highly concessional loans. A country might qualify for IDA loans provided its debt remains within preset debt sustainability criteria established by the World Bank and the IMF. These criteria identify debt thresholds of 100%, 200% or 300% of exports depending on the institutional risk as measured by the World Bank CPIA ("Country Policy and Institutional Assessment"). When the debt is too high, the country qualifies for grants instead. In order to avoid penalizing a solvent country as compared to an insolvent one, IDA14 has decided to cut its grants by a discount factor of 20% (or 9% in a major post conflict situation). Such discount is supposed to limit moral hazard to the extent that it penalizes a country that would purposely let its debt grow astray.

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[7] Bilateral loan making development institutions (such as AFD) already provision the country risk.

Our scheme is based on similar principles, but proceeds in a more systematic fashion. The leverage factor that loans are allowed to achieve is grounded on building provisions who directly correspond to the grant element of international aid. The more solvent a country (i.e able to build its institutions to honor its debts), the higher the possible leverage. Instead of a fixed discount, our proposed solution resorts to a progressive scale, function of the country's good governance.

Beyond grants versus loans: toward modern development finance

The previous discussion has highlighted that adopting a "one-size-fits-all" approach to development finance is likely to be sub-optimal. Instead, we propose to adapt ODA financial instruments to specific situations and development objectives. We have in the previous sections focused on the traditional government to government approach to ODA. Here, we propose an extension of this traditional paradigm. More specifically, we believe that development agencies should usefully focus on the three following issues : an efficient use of subsidies; local capacity building; leveraging private resources.

Subsidies for development

Subsidies are of course the very foundation of official development assistance. Yet, when they are hidden in concessional loans, not enough attention is paid to justifying their use. We suggest here that development agencies develop good practices with respect to subsidies. A first approach could be to argue that ODA simply pursues an international redistribution objective. In that case, the best strategy would be to provide unconditional grants calibrated either by GDP per head or by the prevalence of poverty in any given receiving country. As Naudet (2005) discusses, however, ODA also pursues an objective of promoting development and economic growth, which suggests that redistribution from donors to recipients should also be targeted to improving economic and social efficiency. From public finance theory, we know that there are two broad justifications. One is to correct market failures, such as providing for a local or global public good that the market will fail to produce. The second one is to achieve specific social objectives, such as bringing basic services to poor people. In the latter case, subsidies also contribute to redistribution through goods and services rather than direct income.

So far, the global ODA apparatus does not lend itself easily to such clarity. For example, formalizing an international redistribution objective would call for specifying not only how much each donor should give, but also how much each country is entitled to receive. We are of course far from such international coordination. Another difficulty is that bilateral ODA also legitimately serves donor countries' interests. It somehow buys services from recipients. This is legitimate since ODA is financed by donor countries' taxpayers. However, it would also be very useful to specify the nature of these interests, be they genuinely altruistic or based on diplomatic or other gains (for example, compensation for the legacy of history, or global public goods provision[8]). Here, international coordination does exist, since DAC donors, for example, have agreed to refrain from seeking direct commercial interests through tied aid. Once the price has been set up, however, the question of how to use the subsidy efficiently still remains.

Engaging the private sector

Most current ODA policies are based are based on the following paradigm[9]: There is a widespread and extreme poverty in developing countries and in many of them insufficient growth; This points to inadequate public pro-poor growth policies and poor governance; In response, the public aid apparatus focuses on government-to-government relations. While actions based on this paradigm are both necessary and useful, this paradigm provides only part of the story. Much progress can be made in the role and effectiveness of development aid by moving to a more ambitious and more modern paradigm.

It is useful to recall a crucial limitation of ODA: even after a very substantial increase in volumes, it will remain small compared to international private capital flows and domestic savings. In addition, the total volume of resources available to finance investment in developing countries, namely the combination of ODA, private and other public capital flows, various donations, workers' remittances, is endogenous. One can fix the volume of ODA, but not the global volume of financial resources available. Investment needs themselves are endogenous, and it is a mistake to neglect the strong link between profitable investment

[8] For a discussion of the link between ODA and GPG provision, see Jacquet and Marniesse (2005)
[9] For a wider discussion, see Severino and Charnoz (2005)

opportunities and resource availability, and to focus, instead, about providing resources to meet abstract needs.

In a renewed paradigm, there still is indeed widespread poverty and insufficient growth, but the diagnosis points to a failure of coordination between a number of stakeholders: the public sector, both domestic and foreign, but also municipalities and local governments, private companies, both of the formal and informal sectors, foreign firms, local populations. Development is the extraordinary mechanism through which all these stakeholders join forces to produce growth and poverty reduction In particular, the recent focus on poverty reduction, with a strong emphasis on social spending, has underestimated the role that the private sector, both domestic and foreign, is bound to play if we wish to reach the Millenium Development Goals. This approach invites us to think of ODA as a potential catalyst rather than as a provider of ultimate resources. This is coherent with a vision of development in which ODA does not produce development and growth, but helps parts of the process to start up.

What are the operational consequences of this new paradigm? It invites us to consider development aid as the combination of two crucial components. The first one, which one could call “development project engineering” is a specific expertise and savoir-faire in helping to conceive complex programs and projects associating multiple stakeholders in productive activities that are geared toward reaching both domestic and international public good objectives: reaching the poor and giving them access to essential services, to health and to education, advancing energy efficiency, fighting climate change, protecting biodiversity, etc. The second component of modern ODA is the capacity of donors in using a wide range of financial instruments from direct subsidies to market loans, guarantees, participation in private firms and venture capital. Each of these financial instruments is fit to serve specific beneficiaries and objectives, but more importantly to offset some of the risks that the private sector would not directly take. The key and the originality, there, lies in mixing taxpayers’ money with a number of other market-based financial instruments, in a flexible and innovative manner. That is, of course, a major departure from the conventional way to conceive ODA instruments as either direct grants or concessional loans. The interest of such innovative “public-private partnerships” (PPPs) is not only in infrastructures and in the provision of basic services as traditional PPPs tend to be concentrated on. They also hold many promises in the areas of health, education, empowerment of poor communities, and many other uses.

Implementing this renewed vision does not come easily. As argued above, donors need to think harder on how to use taxpayers' money. A number of development operations do not need subsidization (some examples below). But subsidies may be desirable and necessary in order to engage the private sector into achieving social or public good objectives, such as combining the requirement of cost recovery in the provision of basic services with granting access to the poor to those services, or yet "buying" with the subsidy specific environmental services from the private sector. A second obstacle lies with the current statistical definition of ODA, that conditions, because of the necessity to communicate on the ODA figure, both the nature of the ODA instruments that can be used and their destination. The time has come to open up the statistical definition so as to fully use the potential of ODA and to increase its efficiency. The debate is only starting to take place and needs to be pursued within the donors' community, notably within the DAC coordination framework. A third obstacle consists in a better understanding of what makes Public- private partnerships (PPPs) work or fail. It is a fact that the record of past PPPs, in a number of areas such as water adduction, has been rather sobering and gives us some pause as to their capacities to contribute to poverty reduction and reaching the MDGs. A key difficulty lies with conceiving a pricing and regulatory framework that will work in the specific local, legal and institutional environments of developing countries. PPPs are not a new recipe for development assistance, but a complex set of interactions that need to be fully thought out in a context and country-specific way.

A number of examples[10] illustrate the potential benefits of such an approach. A first example shows how there can be development finance without subsidization. This is an example from Kenya, and concerns FAULU, a large microfinance institution in Kenya, that plays a prominent role in financing local entrepreneurship. Faulu benefited from a guarantee of 75% of its KS 500 million (€ 5.5 million) 5 year bond issue on the Kenyan Stock Exchange, launched in early 2005. The bond was successfully closed a few weeks later and was oversubscribed by 150 %. A development bank is often better placed than other market players to provide such guarantees as it may have better information than some of the local actors and the ability to take more risks than the market. In this case, Faulu was able to raise longer and cheaper resources than it would have through bank credit. Moreover, this operation

[10] Drawn from the 2004-2005 operations of the French Development Agency

contributes to establishing partnerships with the local institutional investors and thus also to the institutional sustainability and expansion of microfinance in Kenya.

A second example highlights the potential of a similar approach in the area of continuing education. Development assistance was used to help coordinate the objective of giving university access to historically disadvantaged salaried students in South-Africa, the willingness of the university to offer a substantial rebate in teaching fees in exchange for a possibility to increase the number of enrolled solvent students, the capacity of a private company, Eduloan, to assist more than 70,000 students every year in accessing higher education, and the willingness of a South African bank to grant a loan (in rands) to Eduloan. The key to this interesting and innovative PPP is again a guarantee provided by the donor agency on the loan of the bank to Eduloan. What allows the system to work is that the rebate in teaching fees is given back to students through the very competitive interest rate they pay to Eduloan when compared with market rates.

A third example, again in South Africa, shows how it is possible to integrate low income household in a social housing program through the local banking system. The program is based on ownership accession loans granted to households with an income between 2,500 and 7,500 rands. A concessional ODA loan was made to a local bank with an important grant element. An equivalent amount to the grant element in rands is used by the bank to subsidize the loan installments for the low income households who otherwise would not be able to take part in the program. This is a good example of Output based aid. In this case, there is also a further incentive for the bank to demonstrate that it is making significant contributions to social objectives as the government can bar banks from participating in government programs if certain social targets are not met.

There are many other examples that show the potentialities and the diversity of this approach, again based on using ODA to coordinate multiple stakeholders into making meaningful development projects feasible and sustainable. In short, there is a huge potential of innovations to tap if, however, donors are willing to take more risk than by working only at the sovereign level. This would lift ODA from the current, old-fashioned, government-to-government subsidy story to modern development finance and bring a very crucial contribution to sustainable growth and poverty reduction.

Concluding remarks

Our basic message in this paper is that the grants-versus-loans debate as it was cast during the IDA13 replenishment has been misleading and largely irrelevant. It came in a context where most multilateral and, even more, bilateral ODA is already delivered as outright grants. It broadly disregarded financial and economic analysis and reached one-sided conclusions that do not fit well with empirical observations. By helping focus on ODA instruments, however, it has contributed to raising awareness about the link between them and aid effectiveness. Our main conclusion in this paper is that there is a rationale for loans as effective ODA delivery mechanisms, that there is a rationale also for development institutions to provide concessional loans, but also that a key aspect of any effective ODA loan strategy has to be the issue of debt sustainability. We have discussed various options in the paper and we recommend that this becomes a central question to address in donor circles worldwide.

Finally, the issue is not to chose between grants or loans as a question of principle, but to ask on a case by case basis how best to use taxpayers' money. Once this questions has been answered, there is no convincing reason to deprive development finance from the innovations that have taken place on financial markets or to restrict it to either loans or grants. We also believe that given their field presence and experience, development agencies, both multilateral and bilateral, are in a privileged position to "engineer" development finance. We therefore voice our dissent with claims that the necessary mix between rich countries' taxpayer resources and market-based finance should be left to markets alone. Development institutions have a role to play as providers of financial solutions mixing grants and market instruments tailored to specific development needs.

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Annex 1: the equivalence between grants and loans

Let us consider a highly concessional loan of 1,000 units made by a development agency to a poor country at a 1 % interest rate. For simplicity, we consider that there is no grace period, and that the loan is repaid with constant annuities, that therefore amount to 38,75.

Suppose now that a private or institutional investor is able, with a AAA credit rating, to borrow on international capital markets at a 4% interest rate. Suppose also that the management of the very concessional loan mentioned above (monitoring, management, disbursement, repayment, etc.) costs the equivalent of a 0.5% interest surcharge. Experience from past defaults suggests that a substantial risk premium must be added for the investor to be willing to invest in poor countries. Taking 15% as a standard risk premium and under international competition, the investor will be willing to lend to the poor country at a yearly rate of 19,5%.

In such a context, the investor will be willing to buy the initial concessional debt title at a price of 198, which corresponds to the amount of a loan made at a 19.5% interest rate and serving annual installments of 38,5. We therefore conclude that the initial concessional loan involves a subsidy element close to 80%.

DAC statistics, however, use a discount rate of 10% (not 19.5%), which corresponds to a grant element of 63.5%. This example shows how important the discount factor is. It also reflects time preference and might thus be very different from a poor country and a rich country perspective. Short term “needs” of poor developing countries imply a high rate of time preference. Suppose, for example, that it might be 30%, meaning that the country is indifferent between having 100 today and 130 in a year. With such a discount factor, the present value of a stream of 38.75 during 30 years is 129. From the country’s perspective, the subsidy element is thus perceived to be more than 85%. Such preference for the present, in poor developing countries, might lead them to underestimate the debt service burden, to consider that any immediate loan is grant-like and to indulge in over-indebtedness.

Annex 2 : a theoretical analysis of contingent loans versus grants[11]

The setting

Consider an open country in a two period framework. The country considers an investment I_1 in period 1. We suppose there are two states of nature in period 2. In the favorable state, the return to the investment will be Q_+; in the unfavorable state, Q_- (with $Q_+ > Q_-$). We suppose further that the unfavorable state occurs with probability p >1. The risk-free interest rate is r.

In such a framework, the investment will be socially profitable if and only if :

$$I(1+r) \leq (1-p)Q_+ + pQ_-$$

In what follows, we assume that this condition is satisfied.

Financing

The country finances I through its own financing capacity Q_1 in period 1 and through a debt D_1 contracted in period 1 from outside investors, so that :

$$Q_1 + D_1 = I_1$$

Let's assume that the country suffers from weak institutions and governance problems and that these translate into an institutional capacity $\lambda \in [0,1]$ to repay the debt. λ can be interpreted as the recoverable part of any investment by the foreign investor.

The debt can be repaid (on average) if :

$$D_1(1+r) \leq (1-p)\lambda Q_+ + p\lambda Q_-$$

[11] This annex draws on Cohen and Portes (2005)

Let us call ρ the risk-adjusted interest rate on debt D_1. Foreign investors will thus require a payment of $R = D_1(1+\rho)$ in period 2.

If $R \leq \lambda Q_-$, the country is solvent and can borrow at the risk free rate ($r = \rho$).

If $\lambda Q_- < R \leq \lambda Q_+$, the country will not be able to repay the debt should the unfavorable state of nature occur. We suppose that in such a case the country defaults. Investors will be willing to finance D_1 at a rate ρ such that :

$$D_1(1+r) = (1-p)D_1(1+\rho)$$

Implying $(1+\rho)(1-p) = (1+r)$, and $\rho \cong r + p$.

Finally, let us suppose that the country has no financing capacity in period 1 ($Q_1 = 0$). The investment will be possible if and only if :

$$I_1(1+r) \leq \lambda Q_+(1-p)$$

Given l and p, it is thus perfectly possible that a socially profitable investment (verifying (1)) will not be possible.

In the following, we assume $I_1(1+r) > \lambda Q_+(1-p)$ so that I_1, which we suppose socially profitable, will not be undertaken spontaneously. We ask how development aid can help solve this inefficiency.

Grants, loans and contingent loans

A first option consist in making a grant G_1 to the country. G_1 will finance part of the investment (thus contributing to the country own financing capacity) and is chosen so as to make I_1-G_1 possible. ;

The grant G_1 will thus be chosen such that : $(I_1 - G_1)(1+r) \leq \lambda Q_+(1-p)$, hence

$$G_1 = I_1 - \frac{\lambda Q_+(1-p)}{1+r}$$

A second option consists in making a loan I_1, knowing that the country defaults in the unfavorable state of nature. Such a loan will thus repay $\lambda Q_+(1-p)$ and will therefore cost an amount equivalent to G_1. In such a setting, the loan and grant solutions are fully equivalent.

Suppose, however, that donors tailor the subsidized loan to the unfavorable state of nature and therefore ask for a repayment $R=\lambda Q_-$. In such a scenario, the country will be solvent in both states of nature. The subsidized loan will cost G' such that:

$$G' = I_1 - \frac{\lambda Q_-}{1+r}$$

It follows that if $Q_+(1-p) < Q_-$, *a subsidized loan is to be preferred to a grant.*

What role for development agencies ?

Let us know consider the arguments developed by Lerrick and Meltzer (2002) and by Bulow and Rogoff (2005). Consider the case when a development agency makes a grant to the country, and compare the situation in which the market finances the complement to I_1 through a market loan with the situation in which the development agency finances I_1 directly using the original grant as a subsidy for a concessional loan. Our discussion above shows that the development agency solution will be superior if it accepts to *abandon its debt* in the unfavorable state of nature. This opens a new way to think about subsidized loans, as discussed in the text.

Loans versus grant neutrality, however, is restored if development banks or private creditors know how to make contingent loans. Suppose again that the country receives a development grant G_1. The loans-grants equivalence is restored if creditors devise a loan $D_1=I_1-G_1$ such that :

$R_+ = D_1(1+\rho)$ when Q+ occurs, and $R_- = \lambda Q_-$ in case of Q-

Again, developing agencies may be in a better position than markets to assess risks and devise such contingent loans.