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Incentives, Institutions, and Development Assistance

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Forum 1 Session on NIE Applications

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Abstract

Current thinking in development emphasizes institutions and their impact on incentives. This paper argues that a similar perspective is needed in examining development assistance. The approach is illustrated in four case studies. First, the country-based nature of much development assistance leads to an under-emphasis on global public goods. For example, there is inadequate research and development on the health and agricultural problems of developing countries. To the extent that aid agencies do support this research, they do so by paying for research inputs rather than research outputs, leading to inappropriate selection of projects and diversion of resources. An alternative approach would be to commit in advance to pay for research outputs that constitute global public goods, such as a malaria vaccine. Second, information on the effectiveness of various types of development projects is also an under-supplied global public good, with much development assistance currently based on weak evidence. In many sectors, it may be worth considering an alternative approach in which pilot trials would first be conducted with treatment and comparison groups, allowing rigorous evaluations as in medical trials. Additional funding could then be made conditional upon demonstrated effectiveness as evaluated by independent monitors. Third, current international institutions create incentives for dictators to run up debt and bequeath it on successor regimes. On the other hand, attempts to declare debt illegitimate *ex post* could create a slippery slope. It is worth exploring the scope for a new international institution that would rule on the legitimacy of debt *ex ante.* This could create a self-enforcing equilibrium in which banks

would refuse to lend to looting dictators, knowing that successor regimes would refuse to repay such loans and that the international community would support this refusal. Fourth, international policy toward refugees creates incentives to maintain refugees in camps indefinitely, leading to dependency and political extremism. It is worth considering the alternative of providing incentives—in the form of voucher payments—to countries that accept refugees and allow them to integrate into the host country society.

Incentives, Institutions, and Development Assistance

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1. Introduction

The development community now appreciates the importance of institutions and the incentives they create. Indeed, the most recent *World Development Report* (2002) opens with the following quote from Douglass North: "We must create incentives for people to invest in more efficient technology, increase their skills, and organize efficient markets. Such incentives are embodied in institutions" (North 2000, qtd. in *World Development Report* 2002).

Following Coase's (1960) insight that institutions matter when transactions are costly, economists such as Williamson (1971) developed a theory of transaction cost economics that explores efficient governance structures under imperfect institutional conditions. Economic and legal institutions provide property rights, enforce contracts, and limit corporate liability, facilitating development by lowering transactions costs (Williamson and Masten 1999). The political economy branch of the new institutional economics, for instance Olson (1965), provided the tools for economists to model the influence of institutions on policy outcomes. Much important research now focuses on the relationships between institutions and economic development in the developing world, showing that the quality of a country's institutions is a principal determinant of its economic performance (e.g., North 1990, Bates 1984) and examining the characteristics of institutions that successfully foster growth (e.g., Evans 1995).

While much work examines the impact of institutions and incentives within developing countries, the institutions that craft development policy and administer development aid in developed countries could benefit from similar examination. This paper extends the focus on institutions to the design of development assistance institutions and, more broadly, international institutions affecting developing countries. In particular, this paper will discuss four case studies. Each case identifies a problem of perverse incentives created by current institutions and then discusses a potential alternative set of institutions that might address the problem. Section 1 argues that the country-based nature of much development assistance leads to an under-emphasis on global public goods, in particular research and development (R&D) on the health and agricultural problems of developing countries. To the extent that aid agencies do support R&D on such problems, they do so by paying for research inputs rather than research outputs, leading to inappropriate selection of projects and diversion of resources. This section looks at institutions to encourage research on diseases that primarily affect poor countries and argues that a commitment to purchase R&D outputs that constitute global public goods such as vaccines could better stimulate research into their development. Section 2 argues that because evaluating the effectiveness of development interventions is also a global public good, much development practice is currently based on weak evidence of effectiveness. This section advocates an alternative institutional approach in which pilot trials would first be conducted with treatment and comparison groups, with additional funding conditional upon demonstrated effectiveness as evaluated by independent monitors. Section 3 argues that existing international institutions create incentives for dictators to impose large debt burdens upon the populations they rule. It contends that *ex post* cancellation of such debt would also create perverse incentives, but that an institution that ruled *ex ante* on the legitimacy of debt would have much better incentives to make appropriate decisions. Section 4 argues that current international policy toward refugees creates perverse incentives, and that an alternative approach, based on the model of housing vouchers, could provide much better incentives.

1. Incentives for R&D on Diseases of the Poor

Many development assistance institutions are organized on a country basis. This institutional structure leads to an under-emphasis on assistance for global public goods.[1] One such global public good is knowledge; since many countries share its benefits, no single country or development assistance institution has sufficient incentive to encourage knowledge development. This section looks at the consequences of the under-provision of the global public good of knowledge on the health and agricultural problems of developing countries and the following section examines the global public good aspects of evaluating aid policy and program effectiveness.

Given that development of a malaria or AIDS vaccine would be a global public good in which no single country has adequate incentive to invest, R&D focused on vaccines seems like a natural candidate for development assistance. However, the world

[1] Moving away from this country-oriented structure would not only help focus assistance on global public goods, but would also help address the problem of agents within development assistance organizations becoming captured by the countries with whom they are working and having career incentives to provide assistance to those countries whether or not those countries are genuinely committed to reform. A return of influence to technically oriented personnel with expertise in disciplines such as epidemiology, agriculture, engineering, and economics and a shift away from country directors would be desirable.

currently lacks appropriate institutions to encourage research and development on vaccines for diseases of the poor.[2]

The World Health Organization (2001) estimates that malaria, tuberculosis, and the strains of HIV prevalent in Africa kill over five million people each year, overwhelmingly in poor countries. Yet relative to this enormous burden, very little research is directed towards these diseases, especially towards vaccines. Potential developers of vaccines appropriate for poor countries fear that they would not be able to sell enough of their product at a sufficient price to recoup their research investments. This is both because these diseases primarily affect poor countries and because vaccine markets are severely distorted and current institutions provide inadequate incentives to overcome the distortions. This section examines the reasons for underinvestment in vaccine R&D, the problem with incentives under existing institutions, and the potential for a purchase commitment to address the joint problems of providing access to products and incentives for the development of needed products.

Many developing countries have historically provided little or no intellectual property rights protection for pharmaceuticals. This is in part because once developers have sunk resources into developing vaccines, governments find it attractive to use their powers as regulators, major purchasers, and arbiters of intellectual property rights to obtain products at prices which cover manufacturing costs, but not research costs. The recent debate over pricing AIDS drugs in Africa provides an example of this dynamic.

Moreover, since research and development on vaccines for malaria, tuberculosis,

[2] This section focuses on institutions that would provide incentives to develop vaccines for diseases such as malaria, tuberculosis, and AIDS, but the same institutional design could be used to address the distinctive agriculture problems facing poor countries. For more information on the latter, see Kremer and Zwane (2001).

and HIV/AIDS is a global public good that benefits many small countries, no single country has an incentive to encourage research by offering higher prices. Consequently, there is a huge gap between the returns that potential vaccine developers could expect and the benefits the vaccine, if developed, would provide for society. Indeed, most vaccines sold in developing countries sell for a fraction of their social value. The cheap, off-patent vaccines that about three-quarters of the world's children now receive through WHO's Expanded Program on Immunization (EPI) are estimated to save 3 million lives per year (Kim-Farley 1992), but cost pennies per dose.[3] Newer, on-patent vaccines, which at a dollar or two per dose still sell at prices below their social values, do not reach the poorest countries. For instance, only a small fraction of children in poor countries receive Haemophilus influenzae b (Hib) vaccine, though the Global Alliance for Vaccines and Immunization's (GAVI) efforts to improve distribution of existing vaccines are likely to help. A malaria vaccine would be cost-effective relative to other developing country health programs even at $40 per person immunized (Glennerster and Kremer 2001). The gap between the $40 at which a vaccine would be cost-effective and the $1 or $2 that the historical record suggests a vaccine developer would be likely to obtain implies that under current institutions, potential vaccine developers would not have incentives to pursue socially valuable research opportunities.

In practice, very little research is oriented toward diseases that primarily affect poor countries, which include tropical diseases such as malaria and tuberculosis. Pecoul *et al*. (1999) report that of the 1,233 drugs licensed worldwide between 1975 and 1997, only 13 were for tropical diseases. Two of these were modifications of existing medicines, two were produced for the U.S. military, and five came from veterinary research. Only four were developed by commercial pharmaceutical firms specifically for tropical diseases of humans.[4]

Even if development assistance is reoriented towards the global public good of encouraging R&D on problems of developing countries, the form such support takes will be critical. Institutions to encourage vaccine development could take two broad forms. "Push" programs subsidize research inputs, for example through R&D tax credits or grants to researchers, while "pull" programs reward the development of an actual vaccine. Economic theory suggests that push programs will be subject to moral hazard and adverse selection, where asymmetric information allows people seeking funding and even those within funding institutions to hide relevant information or alter their behavior for personal gain. Under a system of grant-financed research, researchers may have incentives to report overoptimistic assessments to their superiors or to devote effort to other activities, such as publishing articles, rather than to focus on development of the desired product. These problems with push programs are illustrated by the U.S. Agency for International Development's (USAID) efforts to develop a malaria vaccine. USAID overcame the problem of being focused exclusively on individual countries and correctly identified one of the most pressing needs of the developing world, but the incentive structure it adopted was not suited to the goal of developing a marketable vaccine.

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[3] Vaccination rates are uneven around the world, but the 74% worldwide vaccination rate does not just reflect rich country experience: of the 118 million children born each year, 107 million are born in developing countries.

[4] Note, however, that the definition of tropical disease used in their assessment was narrow, and that many of the other drugs licensed in this period were useful in both developing and developed countries.

In 1984 the agency claimed that there had been a “major breakthrough in the development of a vaccine against the most deadly form of malaria in human beings. The vaccine should be ready for use around the world, especially in developing countries, within five years” (Desowitz 1991, p. 255). During the USAID program, external evaluators suggested that additional funding should not be provided to two of the three research teams on which USAID’s funding efforts focused. However, as a result of overoptimistic information provided by the project director, USAID provided substantial new resources to all three teams and was sufficiently confident that vaccines would be developed that it even arranged to purchase monkeys with which to test a vaccine. Monitoring difficulties also manifested themselves in the form of corruption. Two of three researchers transferred grant funds into private accounts and the project director received kickbacks for the contract to purchase monkeys. By the end of the project, USAID had spent $60 million on its malaria vaccine effort with few results. Though the criminal activity is unusual, this example illustrates the vulnerability of push programs in general to overoptimism and monitoring problems. A pull approach would better align researchers’ incentives with USAID’s goals.

Under pull programs, the public pays nothing unless a viable product is developed. These programs have several attractive features relative to traditional push programs for encouraging the later stages of vaccine development. They give researchers incentives to self-select projects with a reasonable chance of yielding a viable product rather than to oversell their research prospects to research administrators and the public. They allow politicians and the public to be confident that they are paying for an actual product rather than supporting a development effort that might not be warranted scientifically. Pull programs also provide strong financial incentives for researchers to focus on developing a marketable product rather than pursuing other goals, such as publishing articles. Finally, appropriately designed pull programs can help ensure that if new products are developed, they will reach those who need them. For example, developed countries or private foundations could commit to purchase malaria vaccine at $5 per immunized person and to make it available to developing countries either for free or in return for a modest co-payment.

A commitment to purchase vaccines if they are developed is probably the most attractive way of designing a pull program to encourage vaccine development. For instance, an alternative design of rewarding developers with extensions of patents on other pharmaceuticals would inefficiently and inequitably place the entire burden of financing development on patients who need these other pharmaceuticals. For example, giving a patent extension on Prozac for developing an HIV vaccine could prevent some people from getting needed treatment for depression. Another alternative is purchasing more existing products at higher prices in order to signal an intention to provide a market for future products and thus encourage research on desired technologies. While purchasing products such as childhood vaccines might be a highly cost-effective health intervention in its own right, it is unlikely on its own to convince potential developers of vaccines for malaria, tuberculosis, or African clades of HIV that historically fickle international aid donors will provide funds to purchase vaccines for these diseases ten or fifteen years from now. Explicit purchase commitments would also be needed.

Designing a Purchase Commitment

The design of a purchase commitment will be a critical determinant of its effectiveness. If potential developers are to invest in research, they must believe that once they have sunk funds into developing a desired product, the sponsors of a purchase program will not renege on their commitments by paying a price that covers only the cost of manufacturing, and not research. Courts have held that similar public commitments to reward contest winners or to purchase specified goods constitute legally binding contracts and that the decisions of independent parties appointed in advance to adjudicate such programs are binding. For example, in the 1960s the U.S. government pledged to purchase, at a minimum price, domestically produced manganese. After the world price of the commodity fell and the General Services Administration (GSA), the U.S. executive agency in charge of administering the program, attempted to renege, U.S. courts forced the GSA to honor the commitment (Morantz and Sloane 2001). The credibility of a purchase commitment can be enhanced by clearly specifying eligibility and pricing rules and insulating decision makers from political pressure through long terms of service.

If donor governments, international organizations, or private foundations commit to purchase a future vaccine, they should set out in advance the principles for determining the eligibility of candidate vaccines for purchase and the price they would be willing to pay for a vaccine. Eligibility conditions for candidate products would likely include some minimal technical requirements that would ordinarily include clearance by a regulatory agency, such as the U.S. Food and Drug Administration (FDA). They might then be subject to a market test: nations wishing to purchase products might be required to provide a modest co-payment tied to their per capita income. Requiring countries that receive vaccines to provide co-payments in exchange for the product would give countries incentives to carefully investigate whether candidate products are appropriate for their local conditions. Any product meeting the technical requirements and attracting requests from developing countries would be eligible for purchase.

> A purchase commitment could also include a system of bonus payments. To provide potential developers with a credible commitment, the program would need to specify a base price which would be paid for vaccines meeting the technical requirements and the market test. However, it would be desirable for developers to have incentives to develop products that exceed such a minimum threshold. To some extent, this incentive will be provided by the threat of competition from superior products being developed by other companies. However, it would also be useful to have a system of bonus payments that would depend on the quality of the product. Guaranteeing a base price for products which met a basic standard would provide the necessary reassurance to potential developers, while a system of bonus payments for products which exceeded this standard would preserve the benefits of flexibility. For more detailed information on the design of a purchase commitment, see Kremer (2001).

Pricing and Cost of a Commitment

Given the enormous burden of diseases such as malaria, tuberculosis, and HIV/AIDS, it is important to provide sufficient incentive for many researchers to enter the field and to induce major pharmaceutical firms to pursue several potential leads simultaneously so that products can be developed quickly. Moreover, given the limited cost-effectiveness of current products for these diseases and the difficulty of improving prevention through behavioral change, there is little risk that payments made as a result of a purchase commitment could exceed the cost of saving the equivalent number of lives using today's treatments or expanded prevention programs.

Prior work by the author and others suggests that a $250 to $500 million real annual market is needed to motivate substantial research (Kettler 1999; Kremer 2001; Mercer Management Consulting 1998). The nominal size of a purchase commitment made now should be larger, perhaps beginning around $330 million per year to accommodate inflation, given that vaccines may not be developed for some time. A commitment at this level would be extremely cost effective, costing approximately $4 per year of life saved. Over ten years about 1.9 billion discounted disability adjusted life years (DALYs)[5] could be saved (which is equivalent to saving the lives of around 63 million thirty-year olds) at a cost of approximately $4 per year of life saved. In comparison, anti-retroviral treatment of AIDS is estimated to cost $1100 per person per year and, since treatment would not be perfectly effective, the cost per year of life saved is likely to be considerably greater.

The purchase commitment approach has attracted interest from policymakers internationally. The UK's Chancellor of the Exchequer Gordon Brown has also supported the creation of an advance purchase fund (Elliott and Atkinson 2001; Brown 2001), and the UK Cabinet Office recently published a report proposing an advance purchase commitment as part of a package of measures to fight disease (PIU 2001). The concept of a vaccine purchase commitment has also received support from other European political leaders, including the German foreign minister and the Dutch development minister.

In the U.S., a tax credit for sales of vaccines for AIDS, tuberculosis, and malaria to nonprofit and international organizations has been proposed both by Senators Frist and Kerry and Representatives Pelosi and Dunn. This approach was also advocated by the Clinton Administration and included in Clinton's 1999 budget. The program would match every dollar of qualifying vaccine sales with a dollar of tax credit, effectively doubling the incentive to develop vaccines for neglected diseases. Qualifying vaccines would have to cover infectious diseases that kill at least one million people each year,

[5] DALYs are a measure of the burden of diseases and can be used to make comparisons between diseases. They take into account not only the lives lost through disease but also the number of years of disability caused. For a more complete discussion of DALYs see Murray and Lopez (1996). For reference, in the

would have to be approved by the FDA, and would have to be certified by the Secretary of the Treasury after advice from USAID. To qualify for the tax credit, sales would have to be made to approved purchasing institutions, such as the United Nations Children's Fund (UNICEF). Although this proposal is structured as a tax credit, it would have effects similar to an expenditure program that matched private funds spent on vaccines.

The details of which vaccine sales would qualify would be worked out by USAID under this program, and the details of their procedures will be quite important for the effect of the program. Biotech and pharmaceutical firms are more likely to find the commitment credible if, once the tax credit legislation is passed, USAID quickly specifies guidelines for how it will allocate credits. In particular, USAID would need to specify how it will address issues of vaccine pricing (presumably, it would not approve credit allocations for a small quantity of vaccine sold at tens of thousands of dollars per person immunized), how much of the fund could be spent on a vaccine that is currently far along in research, such as the pneumococcus vaccine, and what procedures would be used to allocate credits if multiple versions of a vaccine were available. The current Senate Bioterror Countermeasures legislation also includes a purchase commitment for vaccines and other products effective against potential biological and chemical agents.

The World Bank president, James Wolfensohn, has also said that the institution plans to create a $1 billion fund to help countries purchase specified vaccines if and when they are developed (Financial Times, 2000). However, the World Bank has yet to act on this commitment. Some within the Bank have advocated a more general program to combat communicable diseases of the poor. However, for a general program to stimulate

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1993 World Development Report, the World Bank treats health interventions in developing countries that cost less than $100 per DALY as cost effective (World Bank 1993, page 64).

research, it must include an explicit commitment to help finance the purchase of new vaccines if and when they are developed. Without an explicit commitment along the lines proposed by Wolfensohn, it is unlikely that the large-scale investments needed to develop vaccines will be undertaken.

Private foundations could also play a major role in creating markets for new vaccines. Foundations may find it easier than governments to commit credibly to future vaccine purchases, given their greater continuity of leadership. For instance, the Gates Foundation, with $22 billion in assets and a focus on children's health in developing countries and vaccines in particular, is well placed to forward a vaccine purchase commitment. While continuing to fund its other priorities, a foundation could put its principal to use in encouraging vaccine research simply by pledging that if a vaccine were actually developed, the foundation would purchase and distribute it in developing countries.

Thus, any of several organizations—including national governments, the World Bank, and private foundations—have the ability to create a credible purchase commitment to stimulate vaccine research. If such a commitment fails to induce the development of the needed products, no funds would be spent. If it succeeds, millions of lives would be saved each year at a cost of a few dollars each.

2. From Fads to Evidence: The Need for Randomized Trials

In their study of foreign aid provision in a changing institutional environment, Dollar and Pritchett (1998) found that the

> generation and dissemination of knowledge is one of the biggest contributions that development assistance can make. In tandem with the old rationale for aid, in

which donor financing addressed market failure in capital markets, donor activities need to address the market failure in "knowledge" markets (Stiglitz 1988). But serious, rigorous evaluations that generate solid knowledge are expensive, and no one government has the incentive to undertake evaluations that will benefit other countries.

Information about what types of development projects work is another global public good. Ideas that are thought to work in one place—such as microfinance—are often tried in others. Unfortunately, there is little rigorous evidence on the impact of many types of development programs. Even microfinance, for example, has never been subject to a rigorous randomized evaluation with treatment and comparison groups.

While development projects typically include an evaluation component, these often consist simply of audits, interviews with stakeholders, or before-and-after comparisons. Audits do not measure effectiveness, stakeholder satisfaction is no guarantee of effectiveness, and before-and after comparisons can be problematic because changes external to the project can influence the measured effectiveness of the project. For example, if a drinking water program were implemented shortly after a health education program, improvements in health after the programs were implemented could be due to either intervention. Or, if a change in a country's agricultural tax policy were enacted between the pre- and post-project evaluation of an agriculture project, measuring the impact of the project would likely be confounded by the tax change. At other times, programs are evaluated by examining correlations of inputs and outcomes. Yet, these can also be misleading. For instance, researchers might observe that schools with more textbooks typically have better educated children. However, the greater educational achievement might reflect other factors correlated with textbooks, such as income or parental interest in education, rather than being a direct causal effect of the textbooks. On the other hand, if compensatory programs provide textbooks to problem schools, then retrospective studies may underestimate the effect of these programs.

One approach to address these concerns is to conduct randomized prospective evaluations. In these evaluations, before the project is implemented, all sites suitable for the project are randomly assigned to one of two groups. In the treatment group, the project will be implemented, and in the comparison group, it will not. With random assignment and sufficient sample sizes, the two groups should be comparable in all aspects other than the effect of the project. In practice, a development agency would likely want to implement a good project in all suitable sites. In this case, prospective randomized evaluations could be accomplished by phasing in the project over time to all suitable sites, with the order of phase-in determined randomly and in advance. The sites where the project is due to be phased in later serve as the comparison group to sites where the project is implemented first. With prospective randomized evaluations, the effects of the program can be measured directly, and the results will be transparent to policymakers.

While it is not feasible to undertake randomized evaluations in some fields (for example when providing technical assistance to a country to implement a VAT), in fields such as health, education and microfinance, randomized evaluations are feasible. However, current institutions create inadequate incentives for rigorous randomized evaluations of development programs. Pritchett (2002) argues that in the current institutional environment, public sector programs cannot be implemented without the work of advocates who are already convinced of the benefits of the intervention.

Prospective evaluations revolutionized medicine and they could have a similar impact in other fields. For example, LaLonde's (1986) study of job training programs found that a field experiment produced strikingly different results than a retrospective econometric analysis of inputs and results. Randomized evaluations are standard practice in medicine largely because such evaluations are required by regulatory agencies before new pharmaceuticals can be legally placed on the market. This institutional requirement leads to a great deal of useful research. If foreign aid institutions could likewise set up institutional requirements to rigorously evaluate programs, it would produce more information on which programs are most effective. This could inform future policymaking.

A development assistance organization could establish a special fund, comprised of a certain percentage of its overall budget, with which to fund pilot trials with treatment and comparison groups and programs that had proven effective in such trials. An independent committee would evaluate results from the trials, just as the FDA reviews clinical trials before approving drugs. In the strong version of this approach, projects would not go forward unless the external evaluation supported the project. In the weak version, the external evaluators would simply issue a public report on the effectiveness of the project, but would not have final authority. The external evaluation committee should include program evaluation experts as well as people from within the field. For example, a committee reviewing a microfinance program should include economists and statisticians who had not worked in the area.

An organization implementing these reforms would be able to spend its resources more effectively. Moreover, by producing rigorous evidence about what works, the organization could influence other policymakers, multiplying its influence. Lastly, the public might support foreign assistance more if there were more evidence of success. Many public opinion polls show little public support for foreign aid. Much of the public fears that foreign aid funds are wasted; indeed, polls show that many would support foreign aid if they saw evidence of its effectiveness (PIPA 2001). Some policymakers feel the same way: when U.S. Treasury Secretary Paul O'Neill was recently asked by his British counterpart, Gordon Brown, to launch a new $100 billion foreign aid plan aimed at the world's poorest countries, he declared that the Bush administration "would like to see evidence of what works before making new commitments" (AP 2001).

3. Odious Debt

Sovereign debt is another area where it may be beneficial to review the current norms and institutional structures. This section argues that current institutions provide incentives and opportunity for dictators to borrow internationally, loot the funds, and leave the debt to be repaid by successor governments and ultimately their people. It then argues that simply allowing countries to renounce debt *ex post* would also provide inappropriate incentives, but an international institution that ruled on the legitimacy of debt *ex ante* would provide better incentives.

When the United States gained control of Cuba in 1898 after the Spanish-American War, it repudiated the debt accumulated by Cuba under Spanish rule. The arguments made by the U.S. during peace negotiations are the origins of the *doctrine of odious debt*. The U.S. claimed that the U.S. and/or Cuba should not bear the obligations because, first, the debt had been "imposed upon the people of Cuba without their consent"; second, it had not "been incurred for the benefit of the Cuban people"; and, third, "the creditors, from the beginning, took the chances of the investment," (Moore 1906). Spain never accepted the validity of the U.S. arguments, but the U.S. implicitly prevailed, with Spain taking responsibility for the Cuban debt under the peace treaty.

Legal scholars have elaborated a doctrine of odious debt, using definitions that parallel the U.S. arguments quoted above. They argue that sovereign debt is *odious* if (1) its purpose does not benefit the people and (2) it is incurred without the consent of the people. Some scholars argue that odious debt incurred by one government should not be transferable to a successor government (Feilchenfeld 1931). Others hold that debt should remain transferable unless (3) creditors were aware in advance that (1) and (2) held (Sack 1927, cited by O'Connell 1967). Just as an individual does not have to repay if someone borrows in her name, the argument is that the population is not responsible for illegitimate loans taken out by the government.[6] The doctrine would give banks a disincentive to lend to odious governments in the first place, since the loans would not be recognized and repaid by successor regimes.

Loans to the apartheid government in South Africa are an interesting recent case. The apartheid regime borrowed from abroad in part to build up its military and police and otherwise repress the African majority. Private banks continued to lend to the South African government during the 1980s.[7] The Archbishop of Cape Town has since campaigned for apartheid-era debt to "be declared odious and written off," and South Africa's Truth and Reconciliation Commission also questioned whether the post-

[6] There is also an analogous principle in corporate law that a corporation is not bound by a contract that the CEO (or other agent) entered supposedly on its behalf but without authority.
[7] "Banks reschedule $8 billion in S. African debt; foes of apartheid had urged more stringent terms to force concessions by Pretoria," *Washington Post*, 10/18/89.

apartheid government was responsible for repayment of the “odious debt.”[8] The South African government, however, has not endorsed this position. When apartheid was being dismantled in 1993, future-President Nelson Mandela called for the world to normalize economic relations with South Africa, and three days later the finance minister announced at an investor conference in New York that South Africa would repay its sovereign debt.[9] It seems that the new leadership of South Africa was concerned about building a reputation for playing by the rules of capitalism, and it worried that defaulting on debt would hurt its chances of attracting new foreign investment.

There are other cases in which corrupt dictators borrow from abroad, expropriate the funds for personal use, and leave the debts to the population they had ruled. For example, under Mobutu Sese Seko, the former Zaïre accumulated over $12 billion in sovereign debt, while Mobutu diverted public funds to his personal accounts (his assets reached $4 billion in the mid-1980s) and to his efforts to retain power (e.g., payments to cronies, military expenses) (World Bank 2001; Wrong 2000).[10] Similarly, when Ferdinand Marcos lost power in 1986, the Philippines owed $28 billion to foreign creditors, and Marcos’ personal wealth was estimated at $10 billion (World Bank 2001; Adams 1991).[11] Lending to governments without regard for their odiousness thus seems

[8] “Business accused of helping sustain apartheid,” *Financial Times*, 10/30/98; “A jubilee celebration,” *Financial Times*, 4/25/97.
[9] “SA to begin loan payback next year,” *Financial Times*, 9/28/93.
[10] All figures are in current dollars. The *Financial Times* reports the $4 billion figure as the estimate of the United States Treasury and International Monetary Fund. An *FT* investigation found that Mobutu’s wealth peaked at this value (“Mobutu built a fortune of $4 billion from looted aid,” 5/12/97). Others report his 1997 wealth as $9 billion (“Superstar eclipsed by greed,” *Times* (London), 5/5/97).
[11] Other examples: Sani Abacha was reported to have $2 billion in Swiss bank accounts in 1999 after 5 years as Nigeria’s ruler. Nigeria’s debt increased to $31.4 billion during his regime (“Going after ‘Big Fish,’ new Nigerian President trawls for corruption,” *International Herald Tribune*, 11/25/99). Nicaraguan leader Anastasio Somoza had a $100 to $500 million fortune, and his successor government inherited $600 million in debt (“Somoza legacy: plundered economy; after Somoza’s asset stripping, an economy in shambles,” *Washington Post*, 11/30/79). Jean-Claude Duvalier’s successors in Haiti claim he took $900

to be the status quo of international lending. Under the existing system, banks lend to governments including those of apartheid South Africa and Anastasio Somoza in Nicaragua. Some odious regimes such as that of Charles Taylor in Liberia do not receive loans from commercial banks, but this seems to be because the regime is following policies that make lending risky, and not because of odiousness *per se*.

Under the status quo, successor governments typically accept responsibility for debt, even if the predecessor regime is regarded as odious. Looting is not a valid excuse for failure to repay. Countries are deterred from default either through sanctions such as seizure of assets or through loss of reputation (Eaton and Fernandez 1995), and governments fear that they will face these penalties even if their non-repayment is made from the high moral ground. For example, South Africa has not repudiated the apartheid-era debt. In Nicaragua, the Sandinista government came close to repudiating Somoza's debt but reconsidered when their allies in Cuba advised them that doing so would alienate them from Western capitalist countries and was unwise.

One reason that the doctrine of odious debt has not gained wide recognition under international law is a concern that it would create a slippery slope.[12] Governments lie on a continuum in the extent to which they do or do not have the consent of the people and do or do not spend for their benefit. A leading legal scholar writes, "the concept of odious debts tends to be expanded as States seek a pretext for avoiding obligations which otherwise would be imposed upon them, and for this reason it is essential strictly to limit it," (O'Connell 1967). It seems difficult to avoid the danger of shutting down

million with him when he left power in 1986. Haiti's debt was $700 million at the time ("Haiti in life and debt struggle," *Guardian*, 6/17/00). Debt figures from Hanlon (1998).

[11] The United Nations Convention related to sovereign debt under state succession makes no mention of odious debt, for example. (United Nations 1983).

international capital flows entirely if it is left to the debtor country to determine *ex post* whether debt qualifies as odious. The Mexican government could disavow debts run up during the era of PRI domination, or a future U.S. government could renounce debts incurred before the passage of the Voting Rights Act of 1965. If, instead, the creditor assesses odiousness, it will tend to find governments non-odious. An outside judge also might falsely label previous governments as odious if it values the welfare of indebted countries. Once a loan has been granted, the judge could shift part of a country's debt burden to creditors by calling the debt odious. This creates a time-consistency problem, since sovereign lending would dry up if creditors anticipated that their loans would be branded odious.

Thus, while the status quo creates inappropriate incentives for dictators to borrow even when this is not in the interests of their people, and for foreign creditors to lend to them, an alternative in which debt was ruled odious ex post might also create inappropriate incentives. While an institution biased in favor of either poor countries or their creditors might tend to judge dishonestly *ex post* (i.e. when it rules on existing debt), it is more likely to judge honestly *ex ante* (i.e. when its rules on futures loans to a particular government). An institution that ruled *ex ante* would be robust to biases that were in favor of either creditors or the population as a whole. If the institution favors the population of the country, it would wish to allow appropriate loans, but not inappropriate ones. Even if the institution favored creditors, it would not have a particularly strong incentive to permit inappropriate loans *ex ante*, because in a competitive capital market, creditors do not make substantial profits ex ante.

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[12] "UK warns Croatia it risks losing aid," *Financial Times*, 7/31/97.

The institution could work in one of two ways, either with no formal power other than declaring regimes odious, or it could have the power to block seizure of assets. If the institution assesses and publicly identifies regimes as odious, lending to odious regimes could be curtailed because successor governments who repudiate odious debt face no reputational loss. It is possible that just announcing this might create a new equilibrium in which nobody lends because they know that it would not be repaid. If somebody did lend to an odious regime, then failure to repay would not be interpreted by the international community as a negative mark against the country, and its reputation would be intact to borrow in the future. The ability of an institution to curtail lending to odious regimes may be strengthened if the institution has greater formal powers, such as the power to disallow seizure of assets for non-repayment of odious debt. (Domestic laws could be amended so that they depend on the institution's announcement.) Also, countries could be given explicit incentives to repudiate such debt. Foreign aid to successor regimes could also be made contingent on non-repayment of odious debt. For example, the International Monetary Fund (IMF) and World Bank could adopt a policy of not providing assistance to governments who are simultaneously repaying creditors for illegitimate loans. Certainly, if the institution contained these enforcement measures, they could cut off this type of lending.

> This type of sanction is self-enforcing and thus might be more effective than trade sanctions as a weapon against dictators. Third countries have incentives to break sanctions, and smugglers have incentives to evade them. In contrast, banks would not have an incentive to lend to a ruler who had been declared odious, since a successor government would face little danger of seized assets or loss of reputation if it refused to honor the debts of the odious regime. Such an institution might also have favorable incentive effects on dictators and would-be dictators. Dictators might choose to cut back on their looting rather than risk being

> declared odious and losing borrowing privileges. Moreover, there might be fewer coups and odious regimes in the first place if potential dictators expected to be spurned by creditors.[13]

However, this institutional design is not robust to biases in favor of or against governments. A bias in favor of a government, i.e. a reluctance to deem it odious, might arise if the government is an ally or an important trading partner of an institution member's home country or could threaten retaliation. For example, it is unlikely an institution would blacklist Saudi Arabia or China, regardless of its misdeeds. Note that deeming an odious regime non-odious would restore the status quo of indiscriminate lending. A more serious problem is if the institution is biased against a particular government for ideological reasons. In this situation, the institution might term the government odious even if in fact it is not. This would lead to inappropriate denial of loans. It would therefore be important to design an institution in a way that protects against dishonest judgments due to bias against particular non-odious governments.

The voting rules of the institution could act as safeguards against such bias. In particular, if the voting rule required a supermajority among the members is required to judge a regime odious, the decisive voter is less biased against the government than under a simple majority rule. The cost of this rule is that there will be more false negatives, since odious regimes favored by a minority of judges will be cleared by the institution. Another provision to safeguard against biased judgments is to have an institution composed of professional jurists with lengthy tenure. Such judges may be less beholden

[13] Once a government is declared odious, a bank that has outstanding loans that it issued to the government will not have an incentive to prop up the government and ensure it is repaid. Existing debt is not considered odious and, in fact, may be more likely to be repaid by a new, non-odious government; the odious government is not able to draw on the country's reputation to borrow so would not mind tarnishing it, but a non-odious government would care about reputation.

to the political agendas of the their home countries.[14] One also may want to tie the institution's hands by using a narrow definition of odious. Lawyers define debt as odious if, first, it is not for the benefit of the people and, second, it is incurred without their consent; arguably one would want to prevent all loans that meet the first condition, but adding their second condition has the practical benefit of narrowing the definition.

There certainly are examples when creditor countries widely condemned a particular regime yet commercial banks continued to lend to the regime. These would be the instances in which an institution could publicly declare the regime odious, even under the narrow definition of odiousness, and discourage commercial lending to it. Franjo Tudjman of Croatia was arguably such an odious ruler. In 1997, the IMF cut off aid that was earmarked for Croatia, at the behest of the U.S., Germany, and Britain. The reason cited was the "unsatisfactory state of democracy in Croatia". By this time, Tudjman was thought to be suppressing the media and looting public funds.[15] Meanwhile, commercial banks lent an additional $2 billion to the Croatian government between the IMF censure and Tudjman's death in December 1999 (World Bank). If an institution had publicly declared the regime odious at the time of the IMF freeze and enforcement mechanisms were in place (i.e. non-repayment of subsequent loans to Tudjman was a condition for foreign aid to future Croatian governments and non-repayment could not be punished with seizure of assets), the $2 billion in debt that probably was not beneficial to the Croatian people who now bear the debt, might not have been lent.

[14] We do not discuss the composition of the court, but it is likely to include representatives of major donor countries if foreign aid is contingent on the court's actions. If domestic laws in creditor countries regarding seizure of assets are amended, representatives of the creditor countries presumably would sit on the court.
[15] "UK warns Croatia it risks losing aid," *Financial Times*, 7/31/97.

The system proposed could be implemented solely using domestic courts and policies. For example, a U.S. court could rule on the odiousness of regimes; the Foreign Sovereign Immunities Act could be amended so that it applies to seizure of a foreign government's assets when the government repudiates odious debt; and the court's ruling could guide how the U.S. voted on IMF or World Bank aid packages.

A similar approach could be used to address a common criticism of multilateral organizations, namely that the expectation of World Bank or IMF bailouts creates moral hazard for commercial banks and bondholders. In this view, banks make loans that could not be repaid absent the World Bank or IMF because they believe the IFIs will give foreign aid or new loans to the borrowing country. If the IFI declared a government as not creditworthy and announced that it would not provide future aid if the country was simultaneously repaying debt issued after the announcement, commercial banks would not lend solely in anticipation of IFI loans. When the IMF or World Bank made that announcement, it in effect could prevent private lending to the country motivated by desire for a bailout. (If creditors thought foreign aid would be unnecessary, they would continue to lend.) The IFIs would be able to continue to give aid packages to countries that followed good policies but suffered bad luck, but would not assist those that followed risky policies and to whom creditors opportunistically lent.

To summarize, an institution could deter lending to governments that do not have the consent of the people and spend against their interests, such as that of apartheid South Africa. The people ruled by an odious regime would be better off, since they would not be saddled by debts that were illegitimate in the first place. With enforcement mechanisms, such as an IFI policy of withholding foreign aid if a successor does not repudiate debt declared odious by an institution or if the institution blocks seizure of assets for odious debt, one potentially could eliminate lending to governments deemed odious. If the institution is sufficiently concerned about justice and rules constrain it to err on the side of assessing regimes as non-odious, some undesirable lending would still occur, but any deterrence of odious debt would be an improvement over the status quo. The type of sanction described is self-enforcing—banks would have little incentive to circumvent it and lend to an odious regime. Also, governments might decide to loot less to stay off the blacklist, and would-be dictators might be discouraged from seeking power if sovereign borrowing is not one of the spoils of office.

4. Vouchers for Refugees? Rethinking the Refugee Question

The institutional approaches to refugee policy are also worth reevaluating. Existing international policy focuses on refugees in camps, creating financial incentives for refugees to stay and be kept in camps indefinitely, which creates a host of social pathologies. It is worth considering an alternative approach that would compensate host governments for accepting refugees and allowing them to integrate fully into society.

The international community currently provides a great deal of assistance to refugees in camps through, for example, the United Nations High Commission on Refugees (UNHCR). These institutions set up and administer the camps, deliver social services there, and provide goods to people who are in camps. Much less is done for refugees who are not in camps, which creates incentives for people to stay in camps. There are two reasons for this institutional arrangement. First, camps are easier for bureaucrats to administer. Second, the host countries sometimes prefer for refugees to be in camps either because they do not want them integrating with the local populations or for political reasons governments want to keep refugees in camps to maintain pressure on the source country. For example, some argue that Arab countries prefer Palestinians to stay in refugee camps rather than integrate into host county societies in order to maintain pressure on Israel.[16]

The problems of the current system put refugees in a position where they have difficulty earning a living and are dependent upon the international community. Camps can also create political problems. In camp environments, refugees often have little else to do but conduct political activity, as options for work and migration are severely curtailed. The Taliban government was born in the madrassahs of Afghan refugee camps in Pakistan (Moore 2001), and those camps continued to provide soldiers for the Taliban in the war against the United States and its allies (Kenna 2001). The Afghan situation is far from unique: refugee camps have created international insecurity on numerous occasions. Palestinian camps in Lebanon, for example, are active recruitment and organizational grounds for terrorist groups (Shadid 2001). The perpetrators of genocide in Rwanda also were able to benefit from the assistance and protection provided by the international community to siphon aid and regroup militarily.

It may be worth radically rethinking international policies toward refugees. The current practice of focusing resources on refugees in camps is reminiscent of the failed attempts to build large-scale housing projects for the poor in the U.S. Housing vouchers allowing inner-city residents to move to the suburbs, as in the Moving to Opportunity

[16] Of course, it could be argued that a voucher program, by reducing the potential to apply political pressure on the source country, could decrease the source country's cost of producing refugees and could thus increase the number of refugees.

program, have proven successful (Katz *et al*. 2001). Similar institutional mechanisms for assisting refugees may be worth considering.

Instead of focusing assistance on refugees in camps, it may be better to compensate host countries that accept refugees and accord them certain rights, such as allowing them to work and to move freely within the host country. Host countries should also take responsibility for policing refugee political organizations to prevent the spread of insecurity. A voucher program with such conditions would help protect the international community from the consequences of violent political organization among refugees.

With this mechanism in place, countries would compete to offer refugees decent conditions to attract the voucher payments. Even if some countries would prefer refugees to stay in camps for political reasons, if the international community compensated countries that took in refugees, other countries in the region would likely accept refugees. For example, Congo may have had strategic reasons for wanting to keep the Hutu refugees from Rwanda in camps, but Kenya may well have accepted some of the refugees if it were compensated for doing so. Syria may have refused to take Palestinian refugees because they wanted to maintain pressure against Israel, but if Morocco had been compensated it might have accepted Palestinian refugees.

Many countries might require considerable voucher payment to accept refugees. However, this new institutional approach would likely be less than the costs of maintaining refugees jobless in squalid camps for decades and dealing with the conflict and terrorism that result from the existing refugee regime.

5. Conclusions

The importance of incentives and the institutions that create them in the development process has long been recognized. This article has argued that it is worth applying similar institutional and incentives-based analysis to development assistance policy and more broadly to policy toward the developing world. It has also briefly outlined steps that a development assistance organization such as USAID can take toward enacting such policies.

For instance, there are several intermediate steps that a development assistance organization could take in building up to a legally binding purchase commitment. The organization can begin working out the details of implementing a purchase commitment, for example by crafting eligibility conditions for vaccines. The organization could also make purchasing vaccines against malaria and other diseases a policy priority. The organization could then make both this priority and the eligibility conditions public, which may help persuade potential vaccine developers that there will be a better market for vaccines in the future than there was in the past and thus encourage vaccine R&D.

A development assistance organization such as USAID can encourage rigorous, randomized program evaluations by funding pilot trials with treatment and comparison groups and by supporting external evaluation of the projects under trial. It could next move forward by funding programs that had proven effective in such trials and by institutionalizing requirements for rigorous program evaluation before projects are fully funded and implemented. USAID and other organizations can also study the scope for implementing mechanisms to limit odious debt and to provide voucher payments to host countries that accept refugees. By taking a lead role in studying the opportunities for institutional and incentives-based approaches to development policy, and by moving forward with implementing such institutional and incentives-based reforms, USAID has an opportunity to redefine the concept of development assistance.

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