How to assess the needs for aid?

The answer: Don't ask.

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Financing Development: What Are the Challenges in Expanding Aid Flows?

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I. Introduction

The aid community is awash in plans, strategies, and frameworks to meet the very real needs of the world's poor, complete with cost estimates of "the need for aid." This paper contends these exercises only make sense in a central planning mentality in which the answer to the tragedies of poverty is a large bureaucratic apparatus to dictate quantities of different development goods and services by administrative fiat. The planning mindset is in turn linked to previously discredited theories, such as that poverty is due to a "poverty trap," which can only be alleviated by a large inflow of aid to fill a "financing gap" for poor countries. The aid inflow is of course administered by this same planning apparatus.

This is bad news for the world's poor, as historically poverty has never been ended by central planners. It is only ended by "searchers", both economic and political, who explore solutions by trial and error, have a way to get feedback on the ones that work, and then expand the ones that work, all of this in an unplanned, spontaneous way. Examples of searchers are firms in private markets, democratically accountable politicians, even non-democratic politicians who take a pragmatic, gradualist, and experimental approach to policy making with local feedback, and front-line aid workers who adapt solutions to local demand.

II. The Night of the Planners

The desire of the international aid community to estimate "needs" itself reflects how planning has taken over foreign aid. The terminology of "planning," along with its synonyms of "framework" and "strategy" increasingly dominates aid discourse. The direct inspiration for this seems to be the Millennium Development Goals (MDGs) exercise. Lest you think I exaggerate, consider the following quote from Jeffrey Sachs and the UN Millennium Project on how to assess aid needs for the MDGs:

a needs assessment is a key input to... a policy *plan*... The second stage of the *planning* process will be for each country to develop a long-term (10-12 year) *framework* for action for achieving the MDGs... This MDG *framework* should include a policy and public sector management *framework* to scale up public spending and services, as well as a ... financing *strategy* to underpin the *plan*. The third stage of the *planning* process will be for each country to construct its medium term (3-5 year) poverty reduction *strategy* (PRS) based on the long term MDG *plan*. The PRS {poverty reduction *strategy*} is a more detailed, operational document, and should be attached to a Medium Term Expenditure *Framework* (MTEF). (emphasis added)

It is perhaps understandable that aid officials would turn to complicated plans, strategies, and frameworks in order to try to meet 54 Millennium Development Goals by 2015. (Wait, some will object that there are only 8 MDGs. Apparently embarrassed at just how baroque the MDG exercise is, the designers of the MDGs have grouped the 54 goals (called "indicators") into 18 groups of "targets", which are in turn aggregated into the 8 MDGs.) Sachs and the UN Millennium Project offer a package on how to achieve the 54 goals that makes 10 key recommendations (which are actually 36 recommendations when you count all the bullet points), "a bold, needs-based, goal-oriented investment framework over 10 years," 17 Quick Wins to be done immediately, 7 "main investment and policy clusters," and 10 problems to be solved in the international aid system. For 2015, they propose 449 separate interventions to meet the 54 MDGs in a 451 page main report with 3,300 pages of technical annexes. Jeffrey Sachs recommends that the UN Secretary-General personally run the Plan, coordinating the actions of

thousands of officials in six UN agencies, the UN country teams, the World Bank, and the International Monetary Fund.²

For their part, the IMF and World Bank are fervent advocates of free markets for prosperity, not statist strategizing – but some unlucky countries are so poor that they face the requirement to do statist strategizing anyway. This is in the form of what is called a Poverty Reduction Strategy Paper (PRSP). The preparation of the PRSP requires planning that would overwhelm the most sophisticated government bureaucracy anywhere, much less the under-skilled and under-paid government workers in the

poorest countries:

The sector ministries prepare medium-term strategic plans that set out the sector's key objectives, together with their associated outcomes, outputs, and expenditure forecasts (within the limits agreed upon by the Cabinet). These plans should consider the costs of both ongoing and new programs. Ideally, spending should be presented by program and spending category with financing needs for salaries, operations and maintenance, and investment clearly distinguished.³

If they have any time left after all this planning (not to mention time left after their

meeting with the hundreds of donor missions that arrive every year to check up on the

plan), they can also come up with a plan for those same donors, namely:

an external assistance strategy in the context of the PRSP process that explicitly identifies the priority sectors and programs for donor financing... More detailed external assistance strategies can then be developed for key areas through sectoral working groups in which representatives of major donors and line agencies participate...Agreeing on financing priorities for individual donors within the framework of a global external assistance strategy, rather than through bilateral agreements...⁴

² See Jeffrey Sachs, *The End of Poverty: Economic Possibilities for Our Time*, Penguin Press: New York, 2005, p. 285and the UN Millennium Project, *Investing in Development*, January 2005.

³ Poverty Reduction Strategy Paper Sourcebook, Jeni Klugman, editor, World Bank: Washington DC, 2002.

⁴ Ibid.

At least the PRSP requirement is relaxed for failed states; it is instead limited to such peaceful, politically stable, abundantly-staffed, well-governed poor countries like Cambodia, Democratic Republic of the Congo, and Sierra Leone.⁵

The planning nightmare deepens further when we consider how each separate aid agency actor is offering its own plan, which it can only disguise by claiming that its plan is necessary for achieving the overall MDG plan. So we get such mixed-species curiosities as the World Bank's 2003 Comprehensive Development Framework Progress Report, whose main title is Getting Serious About Meeting the Millennium Development Goals. The Comprehensive Development Framework (CDF) of the World Bank (conceived by former President James Wolfensohn in 1999) still needs to be integrated into the MDG plan although it has since been superseded by the IMF and World Bank's Poverty Reduction Strategy Paper (PRSP) plan. Not to be left out of the planning race, even such unrelated organizations as the World Trade Organization offer an "Integrated Framework for Least Developed Countries (IF)" which of course will connect to everybody else's plans. The IF should "incorporate prioritized Action Plan (Action Matrix) into the country's national development plans such as PRSP."⁶ The World Bank's admirable report on excessive red tape for private business in poor countries, called *Doing Business*⁷, has yet to turn its attention to the Gordian knot of CDF/ PRSP/ IF/ MTEF/ MDG planning.

Who is motivated to effectively implement all of these plans? Who will be held accountable if the plans fail? Apparently, nobody. The Secretary General of the UN

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http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPRS/0,,contentMDK:2024 0478~pagePK:210058~piPK:210062~theSitePK:384201,00.html

⁶ http://www.wto.org/english/tratop_e/devel_e/teccop_e/if_e.htm

⁷ World Bank (2005), Doing Business in 2006: Creating Jobs, Washington DC.

issued a progress report on the MDG plan for the UN World Summit on the MDGs in

September 2005. Along with some successes in regions where foreign aid has little role

(India, China, and East Asia), the report recited a litany of failure:⁸

"in sub-Saharan Africa, which already had the highest poverty rate in the world, the situation deteriorated further and millions more fell into deep poverty." (p. 6)

"The decline in hunger is slowing" (p. 7)

"Almost half of all deaths among children under age 5 occur in sub-Saharan Africa, where progress has slowed owing to weak health systems, conflicts and AIDS." (p. 19)

"A safe, effective and relatively inexpensive vaccine has been available for over 40 years. Still, measles strikes 30 million children a year, killing 540,000 in 2002 and leaving many others blind or deaf. Global coverage of measles immunization has risen slowly, but is lagging in Oceania, sub-Saharan Africa and Southern Asia, where about a third of all children are still unprotected." (p. 20)

"there was no change in sub-Saharan Africa, where maternal mortality is highest." (p. 23)

"Forests are disappearing fastest in the poorest regions" (p. 30)

"The growth in the number of slum-dwellers is outpacing urban improvement" (p. 35)

The UN Secretary-General's report documents that the MDG plan is failing. Yet

it never occurs to the UN to take responsibility for failure of the plan the UN conceived,

sponsored, and publicized. Instead, our attention is directed again to the question of "aid

needs":

"If all new commitments are honoured, aid is expected to exceed \$100 billion by 2010. Still, this falls short of the amounts widely considered necessary to achieve the MDGs."

The IMF and World Bank's reports on the MDGs obey the same logic of failure

without responsibility. We are first told of failure: "For the poorest countries many of the

goals seem far out of reach" and then told of the need to expand aid: "Many of the

poorest countries will need additional assistance and must look to the rich countries to

provide it." ⁹

⁸ I am grateful to William Duggan of Columbia, who has his own articulate take on the paradox of UN highlighting failure while disavowing any responsibility, for calling this report to my attention.
⁹ http://ddp-ext.worldbank.org/ext/GMIS/gdmis.do?siteId=2&menuId=LNAV01HOME1

In other words, the aid community should increase further the scale of the plans that are currently failing. The reason for pointing out failure is not to hold anyone accountable, but to document the continuing "aid needs," i.e. to give a rationale for further expansion of aid. The UN and the World Bank reports do not explain why the poor have a need for more of the same thing that previously failed to address the needs of the poor.

Of course, the failure to meet goals could occur not just because of the poor effectiveness of the UN, the World Bank, and other international organizations in delivering services to the poor, but also because the goals were too optimistic or depend on factors beyond the control of the UN and the World Bank (this excuse is less applicable for something so measurable and doable as measles vaccination). Far from absolving the aid community, however, this only raises the question of why so much energy is devoted to a campaign (the MDGs) that does not create any positive incentives for any actors because it is over-promising on things that the actors cannot control. The World Bank itself cautions poor countries against setting targets in the PRSPs that are too optimistic for exactly this reason:

Most often {the PRSP targets} are overambitious; they are technically and fiscally unattainable, which defeats their role as effective incentives to action.¹⁰

While the same PRSP Sourcebook of the World Bank also warns:

it must be possible to disentangle the effects of poor performance by the implementing actors from the effects of external shocks.¹¹

¹⁰ Luc Christiaensen, Christopher Scott, and Quentin Wodon, Chapter 4: Development Targets and Costs, in Poverty Reduction Strategy Paper Sourcebook, Jeni Klugman, editor, World Bank: Washington DC, 2002.

¹¹ Ibid.

While international organizations hold the poor country governments to this standard, the international organizations that design the Millennium Development Goals are apparently themselves exempt from these same sensible rules.

The international organizations also seem oblivious to the problem of multiple goals and multiple agents for the incentive structure facing aid agencies. Having multiple goals (54 in this case) is equivalent to having multiple principals. It is well known in principal-agent theory that having multiple principals weakens overall incentives for the agent to deliver to any one principal. Indeed the optimal strategy for each principal is to try to penalize the agent for effort towards other goals in favor of effort towards the principal's own goal. In the aggregate, all the principals' incentives cancel each other out and the agent is left with little or no incentive. An agent with multiple tasks gets credit for doing some tasks, so he is not as motivated to complete any one task as an agent would be whose sole responsibility was that one task. To put this in everyday intuitive terms, a worker with multiple bosses can tell each one that he is too busy to work on their task because he is working on the other bosses' tasks (I speak from personal experience as such a worker).

Having multiple agents creates the obvious problems of collective action and free riders. If everyone is to blame if something goes wrong, then nobody is to blame.

Operating in the Bolivian mountains are the International Monetary Fund, the World Bank, the Interamerican Development Bank, USAID, the US Drug Enforcement Administration, the British Department for International Development (DFID), just about every other rich country's aid agency, multiple NGOs, and Bono. None of the agencies is responsible for a particular outcome. They jointly affect what happens to economic development in Bolivia. When something goes wrong in Bolivia, like the economic and political crisis in 1999-2005, after years of effort by these agencies, which one is to blame? We don't know, so no one agency is accountable. This weakens the incentive of agencies to deliver results.

Introductory economics explains why cultivators with individual property rights (individual responsibility) get much better results than collective farms (collective responsibility). The Chinese economic miracle started with the realization of this principle in the Chinese countryside.

Jeffrey Sachs scorns these principles:

Although introductory economics textbooks preach individualism ... our safety and prosperity depend at least as much on collective decisions to fight disease, promote good science and widespread education, provide critical infrastructure, and act in unison to help the poorest of the poor. (p.3, The End of Poverty)

Of course, there are public goods, like those mentioned by Professor Sachs, in which collective action problems must be solved. Rich societies do this through democratic accountability of individual politicians and bureaucrats to the voters. Voters want roads, so they vote for politicians who set up specialized Road Ministries who are responsible for providing good roads. Rich country bureaucracy does not have collective responsibility of the Health, Foreign Affairs, Treasury, Defense, Pensions, and Sports Ministries for good roads. Rather, each one of these ministries is accountable for specialized tasks in its own area to the politicians, who are in turn accountable to the voters. That is why I can usually get a pothole in a road outside my house fixed with one phone call to a public official. Alas, the foreign aid system has neither democracy, nor accountability to the poor beneficiaries, nor specialized responsibility. The IMF and World Bank have many well-trained economists aware of introductory economics textbooks, yet they still produce documents with statements by their respective leaders like

"How to generate momentum? This report sets out an agenda spanning the responsibilities of all key actors."¹²

Instead of promoting individual agency accountability for specific tasks, the aid community engages in such fantasies of collective responsibility as the following.

The Paris High Level Forum on Harmonization, Alignment, and Results brought together developing countries, bilateral donors, global funds, UN agencies, civil society, and international financial institutions to assess progress and chart the way forward, including through monitoring of agreed indicators of progress.¹³

With such fatal defects, why is the Millennium Development Goals exercise so widely embraced? The political economy of aid in the rich countries tends to reward grand gestures and utopian promises rather than piecemeal efforts to gradually improve the well-being and opportunities of the poor. The former attracts Bono, Angelina Jolie, and Tony Blair; the latter attracts only hard-working front-line aid workers who toil in the field mostly unnoticed by the rich country public and media. In other words, rich country politics rewards those who make the largest promises, particularly in a situation where there will be only be weak monitoring years later of whether the promises were kept (and even then the collective responsibility system will protect any one actor from being singled out to blame for failure.)

More prosaically, the MDGs are perhaps appealing to many aid agencies as they offer some hope for answering the question in the title of this paper: how to assess the need for aid. Unfortunately, the models that allow one to calculate costs from goals are

¹² IMF and World Bank, Global Monitoring Report 2005, Washington DC, p. xi.

¹³ Ibid., p. 235

themselves vestiges of the long-since-discredited planning mentality that dominated the early days of development economics, as I will explore in the next section.

However, even it were possible to estimate costs from goals, it only begs the question of how the goals were determined. Millennium Development Goal #1 is to cut in half the proportion of people living in extreme poverty (as well as halving the proportion of hungry people, with six indicators altogether, so as usual Goal #1 is actually six goals). Why half? Why not cut by two-thirds or three-quarters? Why does Jeffrey Sachs plan to achieve the end of poverty only by 2025, rather than 2020, or 2015? Even if we ignored the already fatal modeling problem, the only hope for pinning down "aid needs" is to pin down goals.

The PRSP Sourcebook that guides the IMF and World Bank PRSPs gives some crucial insight into what is going on with the Millennium Development Goals. The World Bank authors say:

Mobilizing resources is without doubt a primary function of targets set by the international donor community such as the International Development Goals.¹⁴

There is something to admire in the World Bank so brazenly stating that the whole thing was circular all along. The increased aid is required to reach the Goals. The Goals are required to increase aid. Although this circularity destroys any last shred of hope to determine at what number the "aid needs" reach closure, mathematical indeterminacy is nothing compared to the public relations genius of the whole exercise.

¹⁴ Luc Christiaensen, Christopher Scott, and Quentin Wodon, Chapter 4: Development Targets and Costs, in Poverty Reduction Strategy Paper Sourcebook, Jeni Klugman, editor, World Bank: Washington DC, 2002.

III. The Ghosts of Models Past

If Rip Van Winkle were an aid policymaker, he could have gone to sleep in 1955 and woken up in 2005 without too much discomfort. The same models that were used in the 1950s to justify foreign aid are used today in 2005 to justify foreign aid, unfortunately distracting attention from the real problems of creating incentives to make aid effective. These models give undeserved and spurious precision to "assessing the need for aid" today.

There are three models, all of them now discredited in the literature, that underlie the estimates of "aid needs":

(1) The "financing gap" or "two-gap" model of aid, investment, and growth

(2) The "poverty trap" model of underdevelopment

(3) The expenditure to outcomes model in health and education

I turn to these three models in turn.

1) The Ghost of Financing Gap

One of the most widely cited papers estimating the costs of meeting the Millennium Development Goals is by Devarajan, Miller, and Swanson (2002), all World Bank researchers.¹⁵ One has to feel some sympathy for the contortions these wellregarded authors had to go through to arrive at an estimate, which they pretty much say they do not believe themselves. The central exercise in the paper is to use the "financing gap" or "two-gap" model of aid, investment, and growth to estimate aid requirements.

According to this model, economic growth is proportional to investment, which in turn is financed by domestic saving plus foreign aid. To reduce poverty rates by half

¹⁵ Shantayanan Devarajan, Margaret J. Miller, Eric V. Swanson, Goals for Development: History, Prospects, and Costs, World Bank Policy Research Working Paper 2819, April 2002.

(Goal #1 of the MDGs), you calculate a "required growth rate." This in turn determines a "required investment rate." If domestic savings is not adequate to finance "required investment," then there is a "financing gap" – the difference between required investment and available savings. The role of aid is to fill the financing gap. (Another variation on this model was the "two-gap model," which had a foreign exchange gap in addition to the investment-saving gap. However, at this point the less time we waste on exposition of these gaps, the better.) The model thus predicted that investment would increase one for one with aid and that an increase in investment would have a predictable, stable, immediate effect on growth. Thus aid seemed to be a panacea for creating economic development. The development economics literature had discarded these simplistic predictions after the 1960s and 1970s in the face of evidence to the contrary.¹⁶

In case there is any doubt that this is exactly the model the authors are using, they say,

To estimate the additional ODA {overseas development assistance} needed to reduce poverty rates to half of the 1990 levels, we begin with a simple, "two-gap" growth model in which growth depends upon the level of investment and the efficiency with which investment is turned into output.

In a footnote, the authors note that the gap model suffers from some defects,

namely being outdated and wrong:

"The workhorse development model of the 1960s and 1970s, the two-gap model has been criticized as being inappropriate for projections (Easterly [1999]) and for analyzing policies (Devarajan et al. [1997]) and poverty (Devarajan et al. [2000])."¹⁷

¹⁶ See discussion in W. Easterly, The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics, MIT Press: Cambridge MA, 2001, chapter 2.

¹⁷The references are Devarajan, Shantayanan, *et. al.* 1997. "Simple General Equilibrium Modeling." In J. Francois and K. Reinert, eds., *Applied Methods For Trade Policy Analysis : A Handbook*. New York: Cambridge University Press; Devarajan, Shantayanan and Delfin Go. 2000. "A Macroeconomic Framework for Poverty Reduction Strategies." Washington, D.C.: World Bank (processed); Easterly, William. 1999. "The Ghost of Financing Gap: Testing the Growth Model Used in the International Financial Institutions." *Journal of Development Economics* 60(2): 23-38.

In other words, the authors themselves give no reason to believe in the model (including their own previous research). Still the estimates made in this paper on the basis of this lack of conviction became the benchmark for much of the discussion about the "aid needs" for the MDGs. Coincidentally, the calculation was that aid should approximately double, the same increase that World Bank President James Wolfensohn had called for publicly before the paper was written (simultaneously embraced by Tony Blair, Gordon Brown, Bono, and other dignitaries).

2) The Poverty $Trap^{18}$

The second model assumes that the poorest countries are in a *Poverty Trap*, from which they cannot emerge without an aid-financed *Big Push*, involving investments and actions to address all constraints to development, after which they will have a *Takeoff* into self-sustained growth and aid will no longer be needed. This was exactly the story that gave birth to Foreign Aid in the 1950s; it is exactly the story that the advocates of a massive aid increase are giving today.¹⁹

According to Jeffrey Sachs and the UN Millennium Project (for example), the Big Push of massive aid increases is supposed to get poor countries out of a "poverty trap," which automatically prevents very poor countries from growing. As Jeffrey Sachs explains it in his 2005 book "The End of Poverty" (pp. 56-57):

When people are ... utterly destitute, they need their entire income, or more, just to survive. There is no margin of income above survival that can be invested for the future. This is the main reason why the poorest of the poor are most prone to becoming trapped with low or negative economic growth rates. They are too poor to save for the future and thereby accumulate the capital that could pull them out of their current misery.

¹⁸ This section is based on W. Easterly, "Reliving the 50s: Poverty Traps, the Big Push, and the Takeoff in Economic Development," NYU Development Research Institute Working Paper, 2005

¹⁹ The classic references are Paul Rosenstein-Rodan, Sir Arthur Lewis, and Walt Rostow.

Sachs also argues the poverty trap stems from increasing returns to capital:

An economy with twice the capital stock per person means an economy with roads that work the year round, rather than roads that are washed out each rainy season; electrical power that is reliable twenty-four hours each day, rather than electric power that is sporadic and unpredictable; workers who are healthy and at their jobs, rather than workers who are chronically absent with disease. The likelihood is that doubling the human and physical capital stock will actually *more* than double the income level, at least at very low levels of capital per person.(p. 250)

Under these circumstances, Sachs argues, "foreign aid ... would enable the economy to break out of the poverty trap and begin growing on its own." (p. 250)

We can check this story out. We have data on per capita income from 1950 to 2001 for 137 countries from a statistical compilation done by the economist Angus Maddison (I exclude Communist economies and Persian Gulf oil producers as special cases). We rank countries according to their per capita income in 1950. Did the poorest countries in 1950 remain stuck in poverty over the next half century? Well, no. The poorest fifth of countries in 1950 increased their income over the next five decades by a factor of 2.25 times. The other four-fifths of countries increased their incomes by a factor of 2.47 times. The difference in growth rates between the two groups is not statistically distinguishable from random fluctuation. We can statistically reject that the growth rate of the poorest countries as a group was zero. Examining all periods, only the 1985-2001 period fits the "poverty trap" story; I will return to this period shortly.

Testing the poverty trap for long periods					
Per capita growth per year		1950-		1980-	
for:	1950-2001	75	1975-2001	2001	1985-2001
Poorest fifth at beginning of					
period indicated	1.6%	1.9%	0.8%	0.5%*	0.2%*
All others	1.7%	2.5%**	1.1%	0.9%	1.3%**
Reject stable income for					
poorest fifth	Yes	Yes	Yes	Yes	Yes
Fail to reject unstable					
income for poorest fifth	Yes	Yes	Yes	Yes	Yes
*Poorest fifth not statistically	y distinguisha	ble from z	ero		
**All others's growth statistically distinguishable from poorest fifth					

**All others's growth statistically distinguishable from poorest fifth Sample: 137 countries. Statistical tests exclude 12 transition economies and Gulf oil states

There are further statistical tests we can do to assess the poverty trap hypothesis. If the poverty trap hypothesis holds, then the poorest countries should have stagnant income at a very low level. Income will fluctuate randomly around this level, but will always tend to return to it. There are two ways we can test whether low income countries have stationary income. We can assume stationarity and see whether the data reject that assumption, or we can assume nonstationarity and see whether the data fail to reject nonstationarity. When we do a test for the stagnation of income over the subsequent half century for the poorest fifth of countries in 1950, we decisively reject the hypothesis of stationarity. When we assume nonstationarity – such as positive growth -- the data provide no evidence against that assumption.

Perhaps it was aid that enabled poor countries to break out of stagnant income? When I break the sample in half into those poor countries that had above average foreign aid and below average foreign aid, I find identical results 1950-2001 in both halves as with the above tests of stationarity. Over 1950-2001, countries with below average aid had the same growth rate as countries with above average foreign aid. Poor countries without aid had no trouble having positive growth.²⁰

To be sure, there were individual poor countries that failed to grow among the poorest countries. Chad had zero growth from 1950 to 2001. Zaire/Democratic Republic of the Congo actually had negative per capita growth over this period. Aid still has a role to help those unlucky enough to be born into a stagnant economy.

The stagnant economies were offset by such success stories as Botswana, which was the fourth poorest in 1950, but increased its income by a factor of 13 by 2001. Lesotho was the fifth poorest in 1950, but increased its income by a factor of 5 over the half-century. Other subsequent success stories who were among the poorest in 1950 are China and India.

Let us keep looking for confirmation of the two main predictions of the poverty trap story: (1) that growth of the poorest countries is lower than other countries, and (2) per capita growth of the poorest countries is zero or negative. The poorest did have lower growth in an earlier period, 1950-75, than the others. However, this was not a poverty trap, as average growth of the poorest during 1950-75 was still a very healthy 1.9 percent per year (roughly the same as the long-run growth rate of the American economy, for example).

There is no evidence of lower growth for the poorest countries for recent periods, like 1975-2001 or 1980-2001. Their growth was disappointing – much worse than in the previous period – but so was growth in middle income countries. The poorest fifth of countries at the beginning of those periods had growth performance over the subsequent

²⁰ More systematically, a large literature on aid and growth fails to find a robust causal link from aid to growth or to investment. See Rajan and Subramanian (2005) for a survey of where this literature stands now, and for their own tests of the aid and growth relationships.

period that was statistically indistinguishable from the other four-fifths of countries. Only when the starting point is put in 1985 does there finally appear evidence that the poorest did worse.

The evidence that Jeffrey Sachs adduces for the poverty trap in his book *The End of Poverty* is from this later period. So over 1985 to the present, it is true that the poorest fifth of countries have significantly lower per capita growth than other countries, about 1.1 percentage points lower over. Even for this period, we reject the hypothesis that all of the poorest countries had stable per capita income for 1985 to the present.

The numbers in the table don't seem to add up. The poorest countries did not have lower growth in the whole period 1950-2001, but they had slightly lower growth in 1950-75 and much lower growth in more recent periods. The solution to the conundrum is that the identities of the poorest countries at the start of each period show keeps changing. It doesn't help the poverty trap story that 11 out of the 28 poorest countries in 1985 had NOT been in the poorest fifth back in 1950. They had gotten into poverty by declining from above, rather than being stuck in it from below, while others escaped. If the identity of who is in the poverty trap keeps changing, it must not be much of a trap.

To make things worse, the poorest countries were getting more in foreign aid as a percent of their income in the last decade, compared to the previous decades (as we saw for Africa above). Foreign aid is supposed to be helping the poor countries escape from the poverty trap; hence the poorest countries in the recent decade should have been LESS likely to be stuck in poverty than the previous decades with lower foreign aid. (I can also separately test whether aid raises economic growth, which I will do next.) All told, there is not very strong evidence of a poverty trap snapping shut on the poorest countries.

Other scholars have also failed to find any evidence for a "poverty trap."²¹ Aart Kraay and Claudio Raddatz in a January 2005 paper studied the saving rate and found that that saving *does* not behave the way the poverty trap requires at low income. The reasons countries stay poor must lie elsewhere.

What about the period of lower growth and stagnation in poor countries in 1985-2001 shown above? The UN Millennium Project and Jeffrey Sachs argue that it is the poverty trap rather than bad government that explains poor growth of low income countries and the failure to make progress towards the Millennium Development Goals (MDGs). Sachs says "the claim that Africa's corruption is the basic source of the problem {the poverty trap} does not withstand practical experience or serious scrutiny."²² Likewise the Millennium Project says "Many reasonably well governed countries are too poor to make the investments to climb the first steps of the ladder."²³

Why does it matter whether it is bad government or a technological poverty trap? The case for planning is even weaker if planners must deal with the complexities of bad government. Jeffrey Sachs worries in *The End of Poverty*: "If the poor are poor because ... their governments are corrupt, how could global cooperation help?"²⁴ Unfortunately, whether poor country governments are corrupt must be determined by evidence, not by hopes for global cooperation.

Let us test bad government against the poverty trap as a story for poor economic growth. The earliest rating we have on corruption is from 1984, from the International

²¹ Aart Kraay and Claudio Raddatz, Poverty Traps, Aid, and Growth, World Bank mimeo, January 2005 and Bryan Graham and and Jonathan Temple, 2004. "Rich Nations, Poor Nations: How much can multiple equilibria explain?," mimeo, Harvard University, 2004

²² Jeffrey D. Sachs, The End of Poverty: Economic Possibilities for Our Time, The Penguin Press: New York, 2005, p. 191

²³ UN Millennium Project Report, Investing in Development: A Practical Plan to Achieve the Millennium Development Goals: Main Report, p. 34.

²⁴ Sachs 2005, p. 226

Country Risk Guide. We have a rating on democracy for the same year from a research project at the University of Maryland called Polity IV. Let's take countries that have the worst ratings on both corruption and democracy, and call these countries "bad governments." While poor countries did worse, it's also true that the 24 countries with bad governments in 1984 had significantly lower growth 1985 to the present: 1.3 percentage points slower than the rest. There is some overlap between these two stories, as poor countries are much more likely to have bad government. So which is it, bad government or the poverty trap? When we control for both initial poverty and bad government, it is bad government that explains the slower growth. We cannot statistically discern any effect of initial poverty on subsequent growth once we control for bad government to corruption alone. The recent stagnation of the poorest countries appears to have more to do with awful government than with a poverty trap, contrary to the Sachs hypothesis.

3) Expenditures to Outcomes in Social Sectors

Returning to the Devarajan et al. (2002) paper, they also report an attempt to derive aid needs for the MDGs based on the costs of inputs to the health and education outcomes covered by the MDGs. Of course, it is one thing to estimate the cost of providing a health service as being say \$1 per drug dose, and a completely different thing to assume that an additional \$1 of foreign aid will result in a drug dose being given to a sick patient. Much as they did with the "gap model," Devarajan et al. themselves explain that they see no reason to believe their own calculations: "empirical evidence from developing countries suggests only a weak link between public spending on education and school enrollments, or between health expenditures and mortality or disease."²⁵

The authors cited, Deon Filmer, Jeffrey Hammer, and Lant Pritchett (also World Bank researchers) point out such stories as the results of a survey at government health centers in the Mutasa district of Tanzania. In the survey, new mothers reported what they least liked about their birthing experiences assisted by government nurses. The poor mothers-to-be were "ridiculed by nurses for not having baby clothes (22 percent)...and nurses hit mothers during delivery (13 percent)."²⁶ Because of the insistence on working through governments, aid funds get lost in patronage-swollen national health bureaucracies (not to mention international health bureaucracies). In countries where corruption is as endemic as any other disease, health officials often sell aid-financed drugs on the black market. Studies in Guinea, Cameroon, Uganda, and Tanzania estimated that 30 to 70 percent of government drugs disappeared before reaching the patients. In one low-income country, a crusading journalist accused the Ministry of Health of misappropriating \$50 million in aid funds. The Ministry issued a rebuttal: the journalist had irresponsibly implied the \$50 million went AWOL in a single year, whereas they had actually misappropriated the \$50 million over a three-year period.

Jeffrey Sachs suffers from the same fallacy of aid service costing implying aid service delivery in the Millennium Project's *Investing in Development* (2005), *The End of*

²⁵ Devarajan et al.(2002). The research they cite is Filmer, Deon. 1999. "A Note on Public Spending and Health and Education Outcomes." Washington, D.C.: World Bank (processed); Filmer, Deon, Jeffrey S. Hammer, and Lant H. Pritchett. 2000. "Weak Links in the Chain: A Diagnosis of Health Policy in Poor Countries." World Bank Research Observer 15(2): 199-224.

²⁶ Filmer Hammer, and Pritchett 2000. Bureaucracies in rich countries where clients don't have much voice could be equally oppressive, like Customs or Immigration in the US. The US government during the Clinton Administration tried to make various agencies more client-friendly. According to an anecdote by John Nellis, the response of Customs officials to this initiative was "we don't have clients; we have suspects."

Poverty (2005) and in the earlier *Report of the Commission on Macroeconomics and Health* (2001).²⁷ Each of these exercises has elaborate costing exercises based on unit costs of multitudinous inputs, but each fails to address the issue of how will be motivated to deliver these inputs to the poor in such a way that they produce better outcomes. Devarajan et al. (2002) cite the Commission on Macroeconomics and Health's estimates as support for the estimates in their paper, estimates based on the same flawed methodology that their paper disqualifies on evidentiary grounds.

IV. Conclusions

The exercise of estimating "how much aid is needed" shows a planning mentality at odds with elementary principles of economics. That foreign aid by itself could accomplish the Millennium Development Goals was always a delusion. Most of the hope for reduced poverty and human suffering comes from the self-reliant efforts of the poor themselves in free markets. While the aid community planners were dithering about whether to increase foreign aid by a few tens of billions for all poor countries, the citizens of just two large poor countries – India and China – were generating an increase in income for themselves of \$715 billion every year.

Aid can still do much good for the poor, but only when individual aid agents have the incentive to deliver tangible services for which they can be held accountable. The bad incentives created by top down planning, collective responsibility, and multiple goals can be replaced by individual accountability for aid agents, based upon independent evaluation of aid outcomes, which will motivate a search for what works in the field under the varied circumstances of each time and place.

²⁷ World Health Organization, *Macroeconomics and Health: Investing in Health for Economic Development*, Report of the Commission on Macroeconomics and Health (Geneva: World Health Organization, 2001).

The best aid plan is to have no plan. Just reward aid agencies for doing more of what works, and less of what doesn't work. It is not possible to say how much aid "is needed." However, when the rich country public sees aid delivering the many things that do work to create more opportunities and less suffering for the poor, then public support for more aid will increase accordingly.