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The Case for Increased Aid

Final report to the Department for International Development

Volume 1: Main Report

Mick Foster
With Andrew Keith

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Final Report

9 Admirals Walk
Chelmsford CM1 2XS
Essex
England
Office: (44)(0) 1245 355031
Mobile: (44) 07968 190907
Email: mickfoster@btconnect.com

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Remaining faults are the responsibility of Mick Foster.

Glossary

DAC	Development Assistance Committee of OECD
DFID	Department for International Development, UK
DRC	Democratic Republic of Congo
GDP	Gross Domestic Product
GNI	Gross National Income
HIPC	Highly Indebted Poor Country
IFF	International Financing Facility
IMF	International monetary Fund
IDA	International Development Association
LICUS	Low Income Countries Under Stress
MDG	Millennium Development Goal
OECD	Organisation for Economic Co-operation & Development
OED	Operations Evaluation Department of World Bank
PPP	Purchasing Power parity
PRSP	Poverty Reduction Strategy paper
UPE	Universal Primary Education

Executive Summary

This is the final report of a study commissioned by the Department for International Development to explore whether a case can be made for a substantial ($50bn) increase in aid flows, to finance the incremental costs of achieving the Millennium Development Goals. It is based entirely on review of secondary sources.

The balance of evidence strongly suggests that Aid has been a good investment. Econometric studies, project evaluations, and country case studies find typical rates of return above 20%. Aid has also contributed to a doubling of school enrolments and halving of infant mortality since 1970. Returns have been higher in better- managed economies, though recent studies suggest positive results are also achieved in weaker environments.

Poor performance of most African economies reflects a wide range of negative shocks including conflict and political instability, associated governance problems, climate shocks, terms of trade losses, and the burdens of HIV/AIDS and other diseases. Recent econometric research suggests that performance would have been worse without aid, while the example of Uganda and Mozambique shows that aid can help reasonably well- managed African countries to achieve rapid poverty reduction.

Donor imposed policy conditions have had little success in improving policy, whereas there is strong evidence that interruptions to aid flows have been very damaging to economic performance. There is some evidence that institutional effectiveness may be a better predictor of aid effectiveness than specific policy choices that can be unstable. We propose that population and poverty should mainly determine aid allocations, but taking account of institutional effectiveness as a constraint on the quantity of aid that countries can make good use of. Where key institutions are missing or weak, capacity building support may need to precede expansion of aid transfers.

In extreme cases of weak institutions or conflict, donors may be unable to work with Governments, but should stay engaged by working with civil society and possibly with local Government. The most important role may be to support those who are pressing for peace and for fundamental reform, bringing knowledge of what has worked elsewhere and facilitating discussion. Donors can also play a limited role in helping to maintain or even develop some vital services using mainly non-Government channels, but sustainability will not be feasible, and coverage will not be consistent with achieving the MDGs.

The proposed $50bn increase in aid is intended to match international estimates of the cost of achieving the millennium development goals. Though useful as a starting point, these estimates need qualification. They are based on average costs, but there are big differences in the efficiency with which

Governments spend money, and marginal costs are likely to rise as services are extended to hard to reach groups.

The main concern with such a large increase in aid flows is the risk that the marginal benefits of aid will reduce as the amount of aid increases. High levels of aid may strain the capacity of Governments to manage it, reduce the international competitiveness of the economy by appreciating the real exchange rate, make macroeconomic management more difficult, and can damage the development of domestic institutions of accountability. Some studies have found empirical evidence of the benefits of aid eventually reducing and even turning negative, though the critical threshold varies between studies, with most finding negative returns do not set in before aid reaches 25-50% of GDP.

These empirical findings of diminishing returns in the past are not a basis for predicting what will happen in the future . Although economic theory predicts that, if nothing else changes, diminishing returns will set in at some point, this will be very context specific, and there is ample scope for offsetting actions. Some studies have found that countries with a good policy and institutional environment are able to sustain good marginal returns to aid even at very high aid: GDP ratios. Problems of diminishing returns can be overcome through improvements in Government policy. Key reforms include sound management of the macro-economy, good allocation and management of public expenditure and aid to overcome supply constraints, and improvements in the management of aid, requiring increased donor willingness to reform their own aid practices. Making good use of large aid flows relative to the size of the economy requires a substantial shift away from projects in favour of more programmatic forms of aid, using Government institutions and reducing the burden that donors place on Government capacity.

Low-income countries receive less than half of global aid. A $50bn increase targeted on achieving the MDGs would need to be concentrated on low-income countries, and would imply tripling their aid receipts

To explore the implications of an extra $50bn, we looked at the scope for increased aid in countries that together represent 80% of the population living on less than $1 per day For several major African countries that would be candidates for receiving a large share of the proposed increase in aid, there are major issues of fiscal sustainability. In order to absorb even a doubling of aid ($13bn) in Africa, the proposed increases would imply aid financing the majority of public expenditure, including a significant share of recurrent financing. Governments may well shrink from the prospect of rendering themselves so vulnerable to future donor policy, since public expenditures once increased are politically difficult to cut in an efficient manner. Further work on the demand side and political implications of higher aid flows is needed.

However, the majority of the world's poor are in South Asia. India alone has more poor people than Africa, and this will still be the case in 2015 even if the MDG target is met. India receives less than 1% of GDP in aid, compared to

10% in the median sub-Saharan African country. The size of the Indian economy, and the capacity of Indian administration, mean that a rapid increase in aid could be readily absorbed. If focused, together with Government funds, on meeting the MDGs, it could achieve a significant global impact. For example, India accounts for over 20% of out of school children, but the 2% of GDP increase in spending required to achieve UPE is within reach if India receives a reasonable share of increased aid funding. Other populous countries in Asia have also been under-aided in the past, and could make good use of significantly increased funding. Bangladesh in particular is very under –aided and has faced long-term decline in aid flows, yet has achieved a performance in economic management and poverty reduction that would merit a very large increase.

The case for the proposed $50bn increase thus comes down in part to the willingness of the donor community to allocate higher funding to South Asia.

The IFF proposes to borrow funds in order to increase aid in the medium term, with the expectation that future aid levels can be reduced. India and Vietnam will both be middle-income countries by 2015. A boost to aid today will accelerate achievement of the MDGs, but the aid requirements should reduce rapidly from 2015 as rapid growth shrinks the population of poor people and increases domestic financing capacity. Other fast growing countries will also see their financing needs diminish over time, though others in the core group that accounts for 80% of the non-China poor population will still be in the low income group by 2015, even with rapid growth, and will continue to need and merit substantial aid flows.

On plausible assumptions, if Africa uses aid to increase public spending, the continent as a whole should be able to sustain the increased per capita spending levels from domestic revenues within 8-10 years if aid is doubled, and within 12-15 years if it is tripled. Unfortunately, this reassuring conclusion needs to be modified in the case of several of the major recipients of increased aid. A combination of low domestic revenue, high public spending following the aid increase, and relatively rapid population growth, implies that it will be many years before revenue growth in countries like Tanzania and Ethiopia catches up with and begins to overhaul the annual increases required simply to maintain the higher per capita spending levels.

The increased level of per capita spending could only be sustained if the higher aid levels are maintained for 20 years or more in the case of Ethiopia and Tanzania, with the absolute aid need continuing to grow for several years even though the percentage of spending financed from domestic revenue is falling. This creates a major challenge for donors- the MDGs are a long-term goal for the international development community, and require predictable long-term flows if they are to be met and then sustained.

Provided the good historic benefits from aid continue to be enjoyed, there is a strong case for an arrangement like the IFF that increases aid to benefit the current generation, even at the cost of lower aid available for the next, and hopefully wealthier, generation. However, unless donors can improve the

reliability of their commitments, especially very long term ones, limits may need to be placed on the increased aid to at least ensure that the increased per capita spending levels can be maintained. This may imply constraining aid to levels below those that would be implied by aid allocation models, and may have implications for the size of the fund that is required or can be absorbed. More detailed country level assessments are needed.

Of course, there will still be serious poverty in many countries when the IFF comes to be repaid, even though the absolute numbers as well as the proportion of the world population living below the poverty line should have reduced. The population requiring aid should thus be smaller, the wealth of the aid givers will have increased, and new countries will become donors as they join the ranks of the wealthy. The IFF proposal makes clear that it should be possible to service the IFF obligations while maintaining aid flows for those that continue to need them.

1. Introduction

This is the final report of a study commissioned by the Department for International Development to explore whether a case can be made for a substantial increase in aid flows. It contributes towards the further development of proposals for an International Financing Facility[1], by analysis of: -

i. The benefits that would be required in order to justify significantly expanding aid from present levels.
ii. Evidence on the benefits from aid in the past and how they have changed, keeping in view the objectives of reducing poverty and achieving the millennium development goals.
iii. The effect of increasing aid on the benefits achieved, and the scope for increasing or at least maintaining the effectiveness of aid.
iv. The aid needed to achieve the millennium development goals.
v. How additional concessional aid should be allocated and managed in order to produce sufficient benefits to justify the expenditure.

The report only discusses benefits to the population of developing countries, and the value placed upon such benefits by the donor countries. More overtly self-interested commercial or political rationales for aid are not discussed. The paper also takes as given the underlying distributional and market failure rationales for aid to low- income countries[2]. Though the paper does not discuss the theoretical rationale for aid, the case studies and the main text do contain a wealth of material demonstrating that the world will only achieve the millennium development goal targets for poverty reduction and improved health and education if countries' own efforts and private capital flows are supplemented by significantly higher levels of development assistance.

The report is based on a literature review, and a series of country examples of varying depth, but all based on secondary sources. Volume 2 includes country case studies for 13 of these countries; briefer material is included in the present volume for the others. Excluding China, which is likely to reach the international targets without the need for significant aid flows, our country examples cover over 80% of the global population living on less than the $1 per day international poverty line (**Table 1**). If there is a case for increased aid in order to reach the internationally agreed millennium development goals, the included countries are those in which the majority of that increased aid would need to be spent.

[1] UK Treasury and DFID, 2003

[2] For discussion of the underlying rationale for aid see Riddell, Roger C. *Foreign Aid Reconsidered*. Baltimore: Johns Hopkins University Press, 1987; Mosley, Paul, *Overseas Aid: Its Defence and Reform*. Brighton, England: Wheatsheaf Books, 1987. For analysis of why concessional flows are needed, see Lensink, Robert and Howard White,(1998), Does the revival of international private capital flows mean the end of aid? An analysis of developing countries' access to private capital, World Development 26(2) 1221-34.

Table 1: Rough % of global poor covered by country examples

Country	Population living on less than $1 per day	
	Millions	% of World Total
Africa	290.87	24.0%
Burkina Faso	7.71	0.6%
DRC	44.16	3.6%
Ethiopia	21.19	1.7%
Ghana	9.05	0.7%
Kenya	8.24	0.7%
Madagascar	10.10	0.8%
Mali	8.2	0.7%
Mozambique	7.43	0.6%
Niger	7.12	0.6%
Nigeria	91.19	7.5%
Tanzania	7.40	0.6%
Uganda	9.06	0.7%
Zambia	7.2	0.6%
Asia		
Bangladesh	38.88	3.2%
India	463.88	38.2%
Nepal	9.01	0.7%
Pakistan	44.49	3.7%
Vietnam	29.49	2.4%
Total of above countries	800.62	68%
Global Total	1214.18	100%
China	222.73	18%
% of total excluding China	800.62	83%

Source: World Bank, calculated from Global Poverty Monitoring web site, Vietnam & DRC from national source (see Vol. 2 case study). Population estimates relate to different years: the table is only indicative of order of magnitude.

2. The benefits of overseas aid

2.1 What level of benefits is needed - and how can we assess them?

The International Financing Facility envisages that donor countries would borrow on international capital markets in order to increase aid over the next few years, with the implication that subsequent repayments would imply a reduction in future aid flows compared to the level they might otherwise have reached. A minimum criterion for this to be beneficial is thus that the marginal rate of return on the aid increase must be higher than the interest cost of the borrowed funds. Annex 3 further argues that the rate of return needs to be at least as high as the returns expected on public investment in both the donor and the recipient country, normally determined by what economists call the social time preference rate. Based on estimates of the various rates, Annex 3 concludes that the minimum **necessary** rate of return on additional aid expenditure is likely to be in the region of 6%.

The **necessary and sufficient** rate of return will depend on how donor countries value poverty reduction relative to other domestic uses of public expenditure, which is in the end a matter of political judgement. Several points can be inferred on this: -

- If we assume that Governments in the past broadly succeeded in matching the marginal costs of aid to the marginal benefits, if follows that an increase in the benefits per dollar spent on aid should, other things being equal, provoke an increase in aid budgets.

- The priority now accorded to poverty reduction and to the millennium development goals implies that the unit benefits derived from aid will be higher if more of it is devoted to poverty reduction. For the UK, the Treasury use weights implying that benefits to someone living on $1 per day should be regarded as twice as valuable as benefits to someone on $2 per day.

- The money value that the population of rich countries attach to removing someone from poverty can be assumed to increase as the wealth of the rich countries increases, and it may even increase more than proportionally with donor country per capita incomes.

- The benefits placed on aid spending are likely to respond positively to improved information about the plight of those living in developing countries, reducing the perceived distance between the welfare of the donor and that of the recipient.

Although these points are suggestive, they do not lead towards a definitive answer to the benefit per pound of aid that must be achieved in order to justify increased spending. Many of the benefits are also in forms not easy to quantify in monetary terms (increased school enrolment, reduced infant mortality). The report tries to indicate the likely benefits from expanded aid expenditure, but leaves it to political judgement whether the benefits are sufficient to make the case for increasing it.

Sources of evidence

The evidence on the benefits of aid comes from a variety of sources and approaches. Though each has limitations, the combined weight of evidence from the different approaches provides a compelling case that aid has been a worthwhile investment in reducing poverty and improving living standards, and that the returns to that investment have increased over time.

The evidence considered here includes: -

- Cross-country analysis, using econometric techniques to search for statistically significant relationships between aid and fundamental objectives such as economic growth, poverty reduction, and improvements in social indicators. The complexity of the relationships and the large number of other effects influencing the observed patterns make this a complex and technically challenging field of research.

- Evaluation of specific aid interventions, looking at measured costs and benefits, and the extent to which objectives were achieved. The main

problem with this approach is the issue of fungibility: the projects that the donors directly financed might have been financed anyway using Government resources, and the main impact may have been to release Government funds for other purposes possibly yielding lower returns.

- Country case studies, looking at the historical experience of past and present aid recipients with more contextual information on how aid affected development progress.

2.2 Summary of the literature

Impact of aid on economic growth and poverty

Hansen and Tarp (2000) review the literature on cross-country econometric studies of the link between aid and economic growth. From a careful review of studies that have looked at these relationships, they conclude: -

- There is consensus that aid has a significant and positive impact on the level of investment in the recipient economy, with only one early study finding no significant effect. It is less clear whether it has positive effects on private investment (**Box 1**).

- Of 71 studies examining the impact of aid on economic growth, 40 find it to be significant and positive, with only one study finding a significant negative impact. Hanson and Tarp point to smaller samples and identify weaknesses in methodology to account for the minority of studies finding no impact or negative impact of aid

- More recent studies have confirmed the evidence of a strong positive link from aid to economic growth, but have also found evidence of diminishing returns as the aid to GDP ratio is increased[3].

Unfortunately, 'aid works' is not a very newsworthy message. The iconoclastic negative studies have attracted more professional and media attention, despite the fact that positive results have been in the majority from the beginnings of this research in the 1960s.

[3] Though a recent paper by Gomanee et al (2003) uses a less restrictive test and finds no evidence that the returns to aid decline at high aid:GNP levels.

Box 1: The effect of aid on private capital investment

The World Bank claim that private investment increases $2 for each $1 of WB spending, reflecting the impact of aid on improving the policy environment, overcoming infrastructure constraints, and signalling confidence in policies. Although aid does have an overall positive impact on total investment, most studies have not found evidence of a direct positive impact on private investment flows.

Most studies find that World Bank lending is if anything negatively associated with private capital flows (Rodrik 1996, Bird and Rowlands 2000), or they fail to find a statistically significant relationship (Dasgupta and Ratha, 2000)[4]. Clemens finds IDA credits are not significantly related to private flows in either the short or long term. Both IMF flows and bilateral aid are negatively and significantly associated with private capital inflows. He also finds that IBRD financing is associated with a sharp decline in domestic financing of investment. Everhart and Sumlinski (2001) reviewed 20 empirical studies from 1984 to 2001, and found that half find that public investment encourages private investment in LDCs, while half find the opposite. An earlier study by Sera and Solimano in 1993 found similarly contradictory results. This is not surprising: increased aid-financed public investment may squeeze out private investment, and may reduce public sector reliance on private finance, but also has positive effects by overcoming infrastructure bottlenecks to private investment. The net effect will depend on circumstances.

The average rate of return on additional aid implied by these results is high. Hansen and Tarp find that a 1% of GDP increase in aid, for a country with average aid receipts, adds 0.25% p.a. to the GDP growth rate, equivalent to a 25% rate of return on the aid investment. If aid is poorly distributed at present, then a carefully targeted increase in aid should be capable of achieving higher than average returns by focusing on those countries where the benefits are greatest. The World Bank has calculated that returns to IDA, again based on econometric analysis, may be as high as 40%. IDA is distributed according to a formula that favours poor and relatively well-managed countries, and avoids small country bias- but with the important exception of India, which has its share capped, and China, which is excluded from access. It is plausible that IDA may achieve significantly higher than average returns.

The extra economic growth has reduced poverty. Most recent studies of the relationship between economic growth and poverty reduction have found that, for the majority of countries, people benefit from growth in proportion to their income. The absolute gaps increase, but proportionate shares are remarkably persistent over time. Based on the assumption that incomes of the poor will continue to grow in line with overall per capita income, Ravallion and Chen (2001) estimate that each 1% increase in per capita income results in a 2% reduction in the population below the poverty line. Applying this to the existing distribution of aid flows, the World Bank estimate that an additional $1bn of

[4] Review by Clemens (2002).

aid would permanently lift 284,000 people above the $2 per day absolute poverty line targeted by the MDGs. The effectiveness would be increased if aid were targeted on poor countries: an additional $1bn of IDA flows, which are more concentrated on poor countries, is estimated to lift 434,000 people above the line (**Box 2**). Verschoor and Kalwij go further, presenting panel data regressions that lend some support to the hypothesis that aid supports more pro-poor policies, finding that aid increases the growth elasticity of poverty both directly and through a positive effect on the budget share allocated to social services. Some care is needed on this last point: - Zambia may be an example where increased budget shares for social sectors, with donor encouragement, led to deep cuts in spending on rural infrastructure, probably with negative net impact on poverty[5].

Box 2: - The aid cost of reducing poverty

Based on the extra growth generated by aid, and the impact of that growth on the population below the $2 per day line, World Bank[6] estimate it will cost: -

- $3500 to permanently lift one person above the poverty line, if aid is distributed on the current average pattern;
- $2300 to permanently lift one person above the poverty line, if aid is distributed according to the more poverty-focused IDA pattern.

The positive evidence from the econometric studies reinforces project level evidence that the average rates of return to individual aid investments are very high. The 1994 study by Robert Cassen included a wealth of case study evidence. The most comprehensive recent source is the project evaluations of World Bank activities carried out by the Bank's Operations Evaluation Division. OED has been peer reviewed by other donors, and has a strong and deserved reputation for the quality and independence of the evaluation studies it carries out. Project evaluations covering nearly half (47%) of World Bank lending, show projects closing 1996-2001 achieved average economic rates of return of 23%[7]. All sectors achieved over the 10% test discount rate: agriculture 13%, water and sanitation 23%.

Project rates of return are not calculated for the health and education sectors, but OED rated over 80% of projects satisfactory or better when evaluated 2-3 years after completion- implying most of the development objectives are (or are expected to be) achieved efficiently with only minor shortcomings.

Aid effectiveness is not only high, but is improving. WB average economic rates of return have increased from 16% in the 1980s to 23% 96-2001. Satisfaction rates are up from 60% to 80%- with more rigorous measurement of performance. Within DFID, evidence from Project Completion Reports indicates that between 70 and 80% of projects have achieved satisfactory outcomes since 1990, with at least some evidence of an improvement over

[5] WDR 2004 discussion draft.
[6] Goldin et al, 2002
[7] Goldin et al, 2002

this period, particularly since 1995 (DFID, 2001)[8]. SIDA (99) and USAID (01) also report high satisfaction scores on completed projects[9].

Of course, economic rates of return considered in isolation could be misleading. Governments may seek donor funding for their better projects in order to release their own funds for less justifiable expenditures. Evaluations are usually conducted 2-3 years after project completion, too soon to judge sustainability. For 70 projects where separate estimates were made 2-3 years after completion and 5-8 years after completion, Ishan and Kaufman found that the later figures typically calculated rates of return 3-4% lower than the earlier ones[10].

The GDP figures may flatter the extent of real growth in sustainable output because the largest part of public sector 'output' is simply measured by what it costs, and because the costs of natural resource depletion are not deducted from GDP. The sample of projects for which evaluation figures are available may be untypical, and the estimates may again fail to capture environmental costs. On the other hand, not all aid is intended to contribute directly to investment and to growth; indeed some estimates suggest that only one third or so of aid has this objective. For example, some aid is aimed at welfare improvement via improvements in health and education, and may achieve its objectives while having at best an indirect and longer-term effect on growth. Taking account of both the macro and micro research, there is a strong body of evidence to support the view that the benefits of aid have been significantly higher than the costs, with the overall returns comfortably exceeding plausible estimates of the minimum level required to make the case for increased aid.

Impact on health and education outcomes

Mehrotra[11] points out that less than 20% of ODA goes to health and education, and only 10% goes to basic social services (primary and preventive health, primary education and basic water and sanitation), with no tendency for overall shares to rise during the 1990s. Within the health sector, basic health takes 63% of health sector ODA, but in education only 15% goes to primary education plus a further 6.5% to non-formal education. It appears that ODA to the social sectors is not especially targeted towards poverty reduction, at least judging by data from the 1990s.

Gomanee et al (2003) in a 38 country cross-country regression for the 1980-98 period examine directly the contribution of aid to welfare via both the infant mortality rate and the UN Human Development Index. They conclude that higher aid to GDP ratios are associated with higher expenditure on health, education and sanitation, and that this higher expenditure is in turn associated with lower infant mortality and a higher HDI. Infant mortality is closely correlated with the absolute income poverty measure, and their results are

[8] DFID results quoted from Beynon, 2002
[9] World Bank, Global Development Finance, 2002
[10] Ishan and Kaufmann, 1999
[11] Mehrotra, Santosh (2001)

further evidence suggestive of a direct association between aid expenditure and poverty reduction[12].

The impact of social sector spending on welfare indicators is found to be quite low, and the impact of spending on primary health and education (which we might expect to be correlated more with welfare enhancement) is insignificant. There are a number of good reasons for this. The weak relationship between spending on both health and education and the outcomes achieved reflects massive differences between countries in the efficiency of expenditure[13]. Within the health sector, Filmer, Hammer and Pritchett have pointed to the problem that much public expenditure, even on curative primary services, substitutes for private spending by the non-poor, resulting in little overall increase in health spending[14]. Much donor direct expenditure on health and education is off budget and escapes being captured in public expenditure figures, though the benefits of the expenditure will be reflected in the HDI and infant mortality data.

It also seems plausible, in the light of stated donor priorities, that countries in receipt of high aid levels also receive donor support and encouragement not only to spend more on social services, but also to reform the allocation and management of such services to benefit the poor. The resource transfer makes it easier for them to do so without unacceptably high political costs from reducing subsidies to the less poor. This argument may seem to be undermined by the small share of direct donor spending on basic services, but conditionality requiring increased Government expenditure on the social sectors has been prominent in policy dialogue for both structural adjustment programmes and HIPC debt relief. The World Bank, which is more influential in policy, does spend a significantly larger share on basic services than most bilateral donors (around 13-14% of IDA).

Though not all attributable to aid, there is evidence of improved outcomes in:

- Education[15]: -
    - Illiteracy rates have halved since 1970,
    - Benefit cost studies consistently show strongly positive social returns to education especially primary, including evidence from Uganda that informal sector earnings are increased[16]
    - Each year of schooling on some estimates raises earnings by 5-10%
- Health: -
    - Infant and child mortality rates halved since 1970, 20 years added to life expectancy before AIDS started to reverse gains in some countries

[12] Verschoor and Kalwij report similar results.
[13] Roberts, 2003 provides a good review of the linkages between aid, public expenditure, and health and education outcomes.
[14] Filmer Hammer and Pritchett, 2002; Filmer and Pritchett, 1997.
[15] See Roberts (2003) for exhaustive discussion of health and education.
[16] Appleton, 2001. See also Volume 2 case study for similar evidence on Vietnam.

- Hugely varying levels of efficiency and equity mean there is no clear relationship between Government health spending and the health status of the population, but there have been major contributions from aid supported interventions, e.g. EPI vaccination raising immunisation rate from 5% in 1977 to 70% by 1990 was a major contributor to halving infant mortality.

Aid effectiveness and recipient policy

What is 'good policy?'

The World Bank argue that experience and analysis shows that countries reduce poverty fastest when they create a good investment climate for firms and farms both small and large; and empower and invest in poor people, giving them access to health, education, infrastructure, financial services, social protection, and mechanisms for participating in the decisions that shape their lives. Creating an investment climate that sustains economic growth requires macro-economic stability, trade openness, good governance and effective institutions (including a good education system, an effective legal and judicial system, a professional bureaucracy, a strong and well regulated financial sector, and vigorous competition); and adequate infrastructure (Goldin et al, 2002).

There is broad consensus on most of this agenda, though less clarity on how to build the necessary institutions to deliver it, and a continuing debate on the pace and sequencing of reforms. A review of the growth evidence by Jonathan Temple[17] concludes there is support in the literature for the importance to economic growth of macro-stability, financial intermediation, research and development, Government spending on infrastructure, and the extension of economic freedom and of property rights, though democracy per se has no significant impact. Openness to trade is also positively associated with higher growth, though he argues we know too little about the conditions under which this is the case, one reason for continuing controversy. Inequality lowers growth rates, as well as lowering the impact on poverty of such growth as does occur. There is no clear evidence of the expected negative effect of population growth on economic growth, and ambiguous evidence on whether big Government and high taxation reduce growth rates. Overall, Temple's conclusions on what the growth literature tells us about the determinants of economic growth are remarkably similar to the indicators on which the Bank focus in their country policy and institutional assessments (Box 3).

Nevertheless, there is as much that is not understood, as Rodrik reminds us: - 'How has China managed to grow so rapidly despite the absence of full-fledged private property rights? What happened in India after the early 1980s to lift its growth rate by approximately three percentage points? How have Mauritius and Botswana managed to avoid the problems that other countries in the rest of Sub-Saharan Africa have succumbed to? Why did countries like

[17] Temple, 1999

Brazil, Mexico, or Venezuela do so well until the early 1980s and so poorly thereafter? How did Indonesia manage to grow over a thirty-year period despite weak institutions and highly distorted microeconomic policies--and why did it collapse so spectacularly in the aftermath of the Asian financial crisis of 1997? Why do the Philippines and Bolivia continue to stagnate despite a sharp improvement in their "fundamentals" since the 1980s? What explains the very sharp divergence in the performance of the former socialist economies since the early 1990s? It would be fair to say that neither the cross-national growth literature nor existing country studies have made adequate progress in answering these and many other fundamental questions. '[18]

How does policy influence aid effectiveness?

There has been intense debate on the question of how the quality of policy influences the effectiveness of aid. The influential 1997 study by Burnside and Dollar led the World Bank to conclude that aid is only effective in good policy environments. They also argue that donors are ineffectual in using aid to promote improvements in policy, referring to the substantial body of literature that shows that imposed conditionality has been unsuccessful in attempting to persuade reluctant Governments to reform. Their study was the main research foundation for the current orthodoxy that aid should be more selectively allocated to countries implementing sound policies, and should follow rather than lead the reform process. Donors can best reinforce the domestic reform pressures by disseminating research and analysis and promoting opportunities for participation of domestic change constituencies in policy discussion[19]. The PRSP approach is in line with this model of change.

The strong version of these findings has been challenged by more recent work. Hansen and Tarp find that aid also achieves worthwhile benefits even where the policy and institutional context is less favourable. Nevertheless, there is little dispute that aid is more effective where the policy and institutional environment is strongest. Collier and Dollar found that country scores on the World Bank Country Policy and Institutions Assessments very strongly influence the benefits obtained from aid. Micro-economic and case study evidence supports the econometric work. A study by Ishan and Kaufmann (1998) of over 1300 evaluations of World Bank and IFC projects finds significantly higher rates of return to projects implemented in countries with realistic exchange rates, less distorted prices, a more open trade regime, and a lower Government deficit. Clemens and Radelet show that countries that have successfully 'graduated' from access to IDA funds had consistently lower average budget deficits, more consistent and often lower inflation (apart from a spike at the time of the oil crisis and a slightly higher average in the eighties), greater openness, and a consistently (though not statistically different) higher measure on the index of institutional effectiveness relative to low income countries and to the combined group of low and middle income countries. As we might expect, the graduates also perform better on not only

[18] Rodrik, 2001
[19] World Bank (1998), Assessing Aid: What Works, What Doesn't, and Why, Oxford University press, New York.

per capita income growth but in reducing infant mortality and improving educational attainment.

How does aid influence policy?

Although it has long been known that aid is more effective in good policy environments, aid allocations until the 1990s typically favoured weak policy countries. Although policy conditions were included in aid agreements, compliance with them was low in the 1980s, yet the aid was released anyway[20], partly related to cold war politics, and partly to prevent arrears to the multilateral agencies in the years before HIPC debt relief. Countries with bad policy in Africa received an additional 1.5% of GDP in aid; a phenomenon that Birdsall (2002) shows was caused entirely by transfers to countries with high levels of multilateral debt. The enhanced HIPC agreement should free donors from this consideration, and make a more policy related pattern of allocation feasible.

The end of the cold war and the removal of the multilateral debt burden have seen some improvement in aid allocation. Based on the World Bank country policy and institutional assessment, the distribution of ODA has moved from a situation in which countries with a poor policy environment got more aid to a situation where by the late 1990s, $28 per capita of ODA goes to better policy countries compared to $16 to those with weaker environments[21]. The improvement may not be sustainable given the implications of US efforts to combat terrorism.

Although research evidence suggests that conditionality is ineffective in promoting reform, the use of conditionality has nevertheless continued to grow, with the number and scope of conditions in IMF programmes having grown in the 1990s[22]. More recent 'streamlining' of IMF conditionality has reduced the number of 'structural' conditions in their programmes, but this has mainly reflected clearer definition of the boundaries between Fund and Bank responsibility, while there has been no reduction in macro conditionality. The Bank has reduced the number of conditions per loan from a 1988-92 peak, but the number is still higher than in the 1980s[23], and there has been a growth in implicit conditionality in the form of an intrusive role in shaping the content of PRSPs.

There is mixed evidence on whether there has been improved compliance with conditions[24]. Adjustment lending by the World Bank has shown particularly strong improvement in OED evaluations, with satisfactory or better outcome scores rising from around 60% in the 1980s to 86% in FY99-00 (97%

[20] Kanbur 2000 summarises the evidence and arguments.
[21] Nunnenkamp (2002) has challenged the extent of the improvement in IDA flows, finding no improvement when two outliers are excluded.
[22] Santiso, 2001
[23] *Adjustment Lending Retrospective: Final Report*. Washington: World Bank, Operations Policy and Country Services Department. June 15, (2001 (A)

[24] Killick (2004 forthcoming) discusses recent trends in the use of and compliance with conditionality.

when weighted by disbursements)[25]. A recent review of the performance of conditions in 24 IMF operations found that only 10% were not implemented, while 65% were fully implemented[26]. The increased focus on assessing ownership and on up-front reforms rather than buying future promises may be reflected in these improved results. On the other hand, Mussa and Savastino (1999: Table 2) show that the proportion of IMF programmes where actual disbursements are less than half of agreed amounts, an indicator of programme breakdown, rose from 29% in 1983-7 to 33% in 1998-92, and then leapt to 46% in 1993-97. Ivanova *et al* (2003, Table 1) show that in 1992-98 three quarters of ESAF/PRGF programmes were subject to some interruption and that nearly half (45%) experienced irreversible interruptions.[27] They also show an apparently more satisfactory 73% compliance with programme conditions, though the authors caution that this figure is biased upward. It is difficult to reconcile results suggesting improved compliance with those showing increasing rates of programme breakdown. It may be that statistics on compliance and programme completion are simply too crude a tool to capture the complexities of the relationships. Formal conditions are just one manifestation of an ongoing policy dialogue in which all partners are reacting to external and internal shocks and recognising needs to modify or drop conditions and modify or negotiate new programmes to reflect changed circumstances.

Case study evidence suggests that the wholly negative view of conditionality may be overstated, and that there are circumstances in which external conditions can be helpful in reinforcing an ongoing reform process and in strengthening the hand of pro-reform factions, while recognising that they cannot overcome entrenched opposition. For example, in Ghana World Bank argue that additional resources via programme aid helped to sustain the reform effort by containing opposition to manageable levels[28]. In Uganda, Ministry of Finance and Economic Planning have been able to use donor pressure to support their own push to both increase spending allocations to poverty programmes, and defend them from in-year cuts[29]. Looking at the three most successful African reform experiences of the last 20 years, Ghana Uganda and Mozambique each started on the reform path reluctantly after failed socialist experiments, each were pushed and persuaded initially to accept liberalising reforms, but adopted them with increasing enthusiasm as benefits were achieved. Had they had less luck and been forced to abandon their programmes, these experiences would have been examples of failed conditionality. Because each remained on track with their programmes, hindsight assumes that the success was built on domestic ownership and commitment, but in practice ownership was quite limited to begin with but broadened and deepened over time through increased trust as positive results were achieved[30].

[25] Beynon, 2002
[26] Quoted in Nestmann and Weder.
[27] See also Bird, 2002, for corroboration of declining IMF programme completion rates.

[28] Devarajan, Dollar and Holgren (2001).
[29] Foster and Mijumbi, 2002.
[30] Foster et al, 2002.

Aid effectiveness and recipient institutions and governance

Econometric studies and reviews of project performance both find that measures of institutional quality are strongly predictive of economic performance[31]. Easterly and Levine(2003) find that once an index of institutional quality is entered into the regressions, measures of policy lose predictive power in explaining GDP per capita (rather than growth). IMF (2003) in a survey of the literature report that 'recent work considering the role of both institutions and policies on economic performance has found that institutions are the dominant factor with little if any independent influence of policies'- though they go on to point out the difficulty of separating the complex interactions between the two, with institutions partly determining the likelihood of good policies being chosen, while good policies can also help build effective institutions by improving transparency and exposing institutions to competition and scrutiny. These findings fit well with the recent emphasis by donors on longer-term partnerships. A reasonable hypothesis with considerable support in the research is that good policies may prove unsustainable where institutions are weak, but that weak policies are less likely to be sustained where institutions are strong, because there are channels for them to be confronted and changed.

Rodrik finds that institutional reform does not need to be deep and extensive. A certain amount of ad hoc adaptation to fit political feasibility can still provoke a positive response from the private sector by signalling a direction of change. He makes the point with reference to China, but it also seems consistent with our case studies of Vietnam and India.

Some researchers have argued that high and persistent levels of aid are directly responsible for weakening Government institutions[32]. There are similarities between aid dependence and the situation of countries dependent on 'fixed point' mineral exports such as oil, where researchers have found that reliance on mineral revenues damages Governance institutions and lowers economic growth[33]. In the oil exporter cases, the ability of Government to obtain revenue from mineral exports without needing to tax and obtain the consent of the population has been associated with poor spending decisions, and increased risk of rent-seeking and corruption.

Brautigam argues that it is not just that aid is less effective in weak institutional environments, it actually contributes to that weakness by bypassing normal Government planning and budget functions, absorbing the capacity of Government officials, distorting accountability, and weakening budget constraints. She finds empirical support in a statistically significant

[31] See IMF (2003) for a survey of this literature and some additional regression results. Key references include Rodrik, Subramanian and Trebbi (2002), Sachs (2003),Santiso (2001), Easterly & Levine (2003), Kaufman & Kraay (2002), Dollar & Svensson, Kaufmann Kraay & Zoido Lobatan (1999), Isham Kaufmann and Pritchett (1997) , and Brautigam(1999).
[32] Kanbur, 2000; Brautigam.
[33] Sala-I-Martin and Subramanian, 2003.

negative relationship between aid:GDP ratios and the ICRG index of governance quality.

Box 3 - World Bank Country Policy & Institutional Assessment Criteria

A Economic management

- Management of inflation and economic imbalances
- Fiscal policy
- Management of external debt
- Management and sustainability of the development programme

B Structural policies

- Trade policy and foreign exchange regime
- Financial stability and depth
- Banking sector efficiency and resource mobilisation
- Competitive environment for the private sector
- Factor and product markets
- Policies and institutions for environmental sustainability

C Policies for social inclusion/equity

- Gender
- Equity of public resource use
- Building of human resources
- Social protection and labour
- Monitoring and analysis of poverty outcomes and impacts

D. Public sector management and institutions

- Property rights and rule based governance
- Quality of public administration
- Transparency accountability and corruption in the public sector

The ways in which donor aid undermines Government institutions are well understood and have been much discussed, but little progress has been made in addressing them[34]:-

- Aid makes Governments accountable to donors instead of their own population. For example, Poverty Reduction Strategy Papers are always approved by the Boards of the World Bank and IMF, but not always submitted to national parliaments. In terms of formal financial accountability, Tanzania is required to submit 8000 audit reports annually, just for the multilateral development banks, undermining the development of capacity to audit public expenditure as a whole rather than donor projects[35]. Public expenditure is fragmented between too many projects and donors, many of the projects are off budget and imperfectly reported to budget authorities, making sound budget planning and management impossible. The Development Gateway for example has records of 7000 projects in Tanzania, and over 80 donor

[34] Material here draws heavily on the discussion draft of WDR 2004.
[35] Brautigam. This figure seems implausibly high. Whatever the actual number, it is far too high given the level of capacity.

organisations, only two of which account for a significant share of the total. The problem of fragmentation has increased throughout the 1975-2000 period, according to an OECD fragmentation index, and is almost as bad within sectors as it is at country level. With a few honourable exceptions, such as the Netherlands, which now focuses on just 17 partner countries, donors have specialised neither by country nor by sector, resulting in crowds of donors in every sector in every country, with all the attendant problems of coordination. Knack and Rahman (2003) have confirmed econometrically the common sense observation that high donor fragmentation is associated with a decline in bureaucratic quality in Government, especially in Africa.

- Donors have attempted to overcome weaknesses in Government by administering their own aid through parallel structures such as Project Implementation Units (PIUs), though World Bank research shows that these had no positive impact on project outcomes, while sustainability suffered, as a result of by-passing Government structures and poaching Government staff on higher salaries to work in the PIUs[36]. Although efforts have been made to better coordinate donor funding via sector programmes agreed between Government and the donor community, SPA monitoring of African sector programmes shows that 75% of donor support to them is still provided as project aid, with only 8% as budget support plus 6% in other common basket arrangements, with no tendency for these more flexible categories to increase. A recent World Bank study based on country case studies found that lack of flexibility in donor procurement practices is still a major problem.

Brautigam argues against existing donor practices for managing aid, rather than arguing against high aid levels per se. She contrasts the dominance of fragmented project approaches, off-budget support, and technical assistance accountable in part to the donors with the approach taken by Botswana and Taiwan throughout their high aid years. Both countries established strong central planning and budget functions, created strong technocratic teams in line positions rather than relying on TA advisers, and ensured that Government prioritised public expenditure at the centre. High aid levels were used to put in place the infrastructure and build the strong institutions of economic management that formed the basis for high growth and reduced dependence on aid.

Diminishing returns to aid

The evidence

Most recent econometric studies of the impact of aid on economic growth have found diminishing returns to increasing aid beyond a threshold level of

[36] Boyce and Haddad 2001 study of 100 Latin American and Caribbean area projects, quoted in WDR discussion draft. Another World Bank study is quoted as finding similar results in Eastern Europe and Central Asia.

the aid to GDP ratio[37]. Hansen and Tarp find that aid is subject to negative returns above about 25% of GDP, as do Hadjimichael et al, whereas Durbarry et al, and Lensink and White, find negative returns above around 40-50% of GDP. Clemens and Radelet estimate a turning point of around 34% of GDP, based on an analysis of 20 countries that are likely to qualify for access to the US Millennium Challenge Account based on an assessment of their policy and institutional effectiveness. Returns would be likely to become unacceptably low before the point when they turn negative.

Collier and Dollar (2001)) look explicitly at the returns to aid in different policy and institutional environments, using the World Bank country policy and institutions assessments. These are available for all IDA countries, and provide World Bank staff assessments against the factors shown in Box 3. They are confidential to Bank staff, and hence not open to independent scrutiny. The Bank tries to ensure that consistent standards are applied across countries, though some judgements seem bizarre (e.g. Pakistan ranked above Bangladesh). Collier and Dollar find that aid dependent countries receiving nearly 30% of GDP as aid still achieve an excellent return to a 1% of GDP increase in aid in average policy environments, adding 0.2% to their GDP growth rate[38]. Only in poor policy environments with high aid dependence does their analysis suggest that marginal returns, though positive, are below the required rate of return, adding just 0.05% to GDP growth.

Country examples also suggest that well-managed countries can make effective use of aid flows that are large relative to the size of their economies. Average aid to countries that subsequently succeeded in raising their per capita income far enough to permanently exit from IDA eligibility peaked at 10% of Gross National Income, and was sustained for long periods, requiring 10 years to halve as a proportion of GNI[39]. Many of the most successful countries have received far higher relative flows:

- US economic and military assistance to Taiwan averaged 18% of GDP over 1953-63;
- Botswana received high levels of budget and project support after independence, approaching 20% of GDP;
- Uganda received around 20% of GDP in aid in the early 1990s;
- Mozambique received over 50% of GDP in aid in the 1990s.

Each of these countries was able to sustain high growth rates during their period of high aid dependence, and has subsequently been able to eliminate or reduce the relative importance of aid, while continuing to enjoy relatively rapid growth.

[37] However, Gomanee, Girma and Morrissey (2003), using a more general test of thresh-hold effects, find no evidence of diminishing aid effectiveness at high Aid: GNP levels.
[38] These Collier and Dollar results are based on a 1% of GDP increase in aid from a 6% level defined on purchasing power parity estimates of GDP. For countries in Table 1 (excluding DRC for which PPP estimates are not available), this would on average increase aid from 27% to 32% of World Bank Atlas GDP.
[39] Clemens & Radelet, op cit.

Causes of Diminishing Returns

There are a number of reasons why the returns to aid might fall beyond a certain point:-

- 'Dutch disease', whereby high aid transfers can have a negative effect on the competitiveness of the economy and hence on growth prospects.

- Falling returns to increasing Government expenditure. Assuming that Government implements projects or expenditure programmes in order of priority, it follows that the marginal project financed by additional aid will have lower returns than the average for those projects that have already been financed.

- Rising administrative costs and constraints on capacity to manage aid projects effectively.

It is important to recognise that the point at which aid experiences diminishing returns for any of these reasons is not an absolute, but can be influenced by policy and management actions by both Government and donors. It will also depend on country specific factors. Most countries are operating well within the theoretical production frontier, and judicious use of aid can help overcome supply barriers rather than just adding to excess demand and to inflation. Donors themselves often contribute to bottlenecks, and can improve results by reducing the demands that cumbersome procedures impose on capacity to administer aid.

Dutch Disease

'Dutch disease' describes a situation where increased aid transfers result in shrinkage in the relative size of the traded goods sector. It happens in two ways[40]. Firstly, if aid pays for imports that would have been purchased anyway, or is used to pay for non-traded goods and services, it increases the supply of foreign exchange without a matching increase in demand for it, causing exchange rate appreciation and a loss of competitiveness by traded goods producers. Secondly, if there is no capacity to expand supply of domestic goods and services in the short term, the increased demand for non-tradable goods financed by aid will only be met by shifting resources away from making tradable goods. How this occurs will depend on the actions of the monetary authorities. If the excess demand is unchecked, the adjustment will occur as a result of inflation and real exchange rate appreciation. Alternatively, the authorities may make room for higher Government demand for non-traded goods by tighter credit policy to squeeze private sector

[40] A third possible route occurs when tied aid imports substitute for domestic production. This may have happened with Ethiopian food aid imports, reducing relative prices of tradable food-grains and discouraging production for the market. (Volume 2).

demand, or may cause nominal exchange rate appreciation by selling the extra donor foreign exchange to mop up liquidity.

Arrellano[41] et al develop a general equilibrium model that suggests that aid is likely to significantly reduce the size of the tradable goods sector in the economy, and also present empirical evidence that the effect is significant in practice. Their econometric results suggest that each 1% increase in the aid: GDP ratio is associated with a 0.5% of GDP reduction in the size of the tradable sector relative to GDP. They also show that the effects are much more pronounced if aid is volatile, presumably reflecting the increased likelihood that it will not then be used to finance a planned increase in foreign exchange demand. They find that manufacturing exports are particularly affected.

Evidence of Dutch disease is not an argument for refusing aid. There is a trade-off between the positive growth and poverty reduction benefits of aid-financed expenditure and any negative side effects on competitiveness. Bulir and Lane point out that the shift of the economy towards non-tradable production is simply a reaction to an aid transfer that leaves the overall economy and welfare of the population unambiguously better off. The reduced share may even be good for poverty reduction, since non-tradable sectors tend to be more labour intensive. The concern with Dutch disease follows not from the impact of aid on the traded goods sector per se, but from worry that the traded good sectors may be particularly important for future growth because of external benefits such as increased technology transfer and 'learning by doing' from participation in trade.

Heller and Gupta (2002-2) quote country studies finding evidence of Dutch disease effects in Burkina Faso, C'ote d'Ivoire, Senegal, Togo, Malawi, Sri Lanka, and Ghana. In Uganda, where Adam and Bevan have not found evidence of Dutch disease, Heller and Gupta argue that the effect on the real exchange rate was masked by the offsetting trend of steep decline in the terms of trade due to falling coffee prices. The Government and Central Bank have nevertheless faced problems in absorbing the aid, requiring both foreign exchange sales and sale of Treasury bills, with Government having a negative domestic financing requirement yet still selling Treasury bills in order to mop up liquidity related to high aid flows. The high interest rates required in order to sell the necessary volume of T Bills have made them such an attractive asset that riskier private sector lending has been eschewed by the commercial banks. Bulir and Lane emphasise the difficulties of drawing clear conclusions from country level studies.

Dutch disease effects will be limited if aid is productive in overcoming domestic supply bottlenecks, or if the aid is used directly to finance additional imported goods and services. In the case of Mozambique, despite aid receipts in excess of 50% of GDP for much of the 1990s, the positive impact on competitiveness of aid-financed improvements in transport and other infrastructure appears to have outweighed any potential Dutch disease

[41] Arrelano et al, 2002

effects. The real exchange rate shows no consistent tendency to increase, and economic growth has averaged a remarkably high 8% per annum for a decade[42].

To the extent that Dutch disease is simply a manifestation of excess demand for specific goods and services, the policy implication is to take account of supply constraints when designing expenditure programmes. For example, both Malawi and Uganda experienced rising construction costs as they implemented expanded classroom construction programmes. Possible implications are to factor in rising costs in the budget estimates, design in capacity building measures, modify the sequencing or phasing, make more use of materials and skills not in short supply. The supply constraints may still result in increased costs, but the benefits of immediate implementation may outweigh the increased costs.

The existence of Dutch disease may reduce the net benefits of aid, but if the aid is highly productive (as our discussion suggests it often is), the aid may still be worthwhile. The short- term welfare benefits of the aid transfer, and the longer-term contribution to raising productive capacity, will usually more than offset any damage to growth potential as a result of real exchange rate appreciation. As David Bevan has pointed out for Uganda, careful monitoring of inflation and real exchange rate trends can alert Governments to emerging problems, and offsetting action will often be possible to restore competitiveness through adjustments in the tax or regulatory regime. Both the World Bank and the IMF have accepted this position, and have adopted an 'innocent until proven guilty' approach to the risk of Dutch disease.

Diminishing returns and aid-financed Government expenditure

Box 4 discusses diminishing returns to aid in the broader context of the returns to public and private investment and the returns to Government spending as a whole.

[42] Falck, 2000. Foster (2002) came to similar conclusions.

Box 4: Diminishing Marginal Returns: How does aid differ from other expenditures in the economy?

Economic theory suggests that investment, however funded, will eventually experience diminishing marginal returns, as the stock of capital increases relative to other factors of production such as labour or land. This might be delayed by measures to reduce the constraint on other factors of production (e.g. migration or skills training), or by economic reform measures to improve the efficiency with which factor markets work (easier to transfer labour and land to those able to use it most productively), or by technical change raising the productivity of new capital relative to the existing capital stock.

Private investment decisions are motivated by profit, and investment will only take place up to the point where the expected returns, adjusted for risk and uncertainty, exceed the cost of borrowing the funds and the returns those funds could earn in the best alternative investment. This is true of both domestic and foreign financed investment. One potential benefit of aid is that the participation of aid agencies can help to leverage in private investment, reassuring private investors that policies and programme design have met the standards required by the aid agencies, and hence reducing their perceptions of country, sector and project risks.

Unlike private investment, there is no market discipline to prevent the returns to public expenditure sinking to uneconomic levels. It is also difficult for Government to measure the benefits and costs of many of the activities that it funds, or to compare them with the benefits and costs of private sector expenditure.

At very low levels of Government spending, increased public sector expenditure is a necessary pre-requisite for higher private sector investment. Private individuals and firms will save and invest more in a country where Government is able to enforce law and order within a fair and transparent legal and regulatory framework, where the workforce is relatively healthy and well-educated, and where basic economic and social infrastructure is in place.

As public expenditure increases as a share of the economy, Government will need to employ increasingly costly means to raise the finance to pay for it, while a logical sequence for expanding spending implies that programmes with the highest returns will be selected first and the marginal benefit of each new spending programme will be below the average returns from the existing portfolio. There will come a point where rising costs and falling marginal benefits result in public expenditure at the margin squeezing out more valuable private sector spending.

Although studies such as Isham and Kaufmann, quoted in the main text, have looked at where such diminishing returns to Government have been experienced on average, it is clear that this will vary greatly between countries dependent on country context. Public expenditure should be higher where poor quality and availability of infrastructure are discouraging private saving and investment. Conversely, low public sector capacity to make good use of public moneys may argue in the other direction until that capacity can be increased. Higher public expenditure will be more productive where there is spare capacity in the economy. The optimal public sector share of GDP will be higher where finance is raised by non-distorting means and when public expenditure is allocated to high return activities that are well managed.

Although aid accrues initially to Government, it can be used to benefit the private sector, reducing taxation or Government borrowing if that is a higher priority than increasing public spending. The case for aid does not depend on making a case for increased Government spending, though in many low-income countries there is a case for such an increase. Conversely, aid can experience diminishing returns independently of the returns to public expenditure, due to the way it is managed or to impacts on the real exchange rate or macro-management (see main text).

Isham and Kaufmann find evidence of returns to public investment increasing up to a level of about 10% of GDP and 40% of total investment, before reaching negative returns at higher levels. As with the Dutch disease argument, the optimal level of Government expenditure will differ between economies. Additional aid can in principle be used to expand spending, reduce Government borrowing, or reduce taxation. The normal assumption is that aid will be used to expand Government spending, but there can be cases where the priority is to reduce the burden of high taxation and interest rates on private sector growth.

Governments can also take action to increase the effectiveness of aid financed public expenditure. Governments can build more effective planning and budget institutions, reform their civil services, increase training, recruit competent staff at home or abroad, outsource functions to the private sector, release management capacity by closing redundant functions. Donors can relieve management and financial constraints by simplifying their procedures, moving from project to programme approaches, coordinating better in support of Government programmes, reducing earmarking or tying of their support. Heller and Gupta point to the large discrepancy between EU commitments and disbursements as evidence of developing country absorption problems; most observers would ascribe a large part of this to the inflexible procedures and administrative inefficiencies of the EU as a donor.

The conclusion to draw is that diminishing returns have been found to reach critical levels only at very high aid: GDP ratios, and there are actions that Government and donors can take to improve the environment in which aid operates and hence delay or avoid diminishing returns[43].

2.3 Case study findings on the benefits of aid

Asia

Aid is a relatively small share of the financing of public expenditures or investment in our Asian case study countries, reflecting the bias in aid distribution against large countries. **Table 2** presents a mixed picture.

[43] Global Development Finance, 2002, discusses actions to avoid diminishing returns.

Table 2: Aid to selected countries in Asia: what have been the benefits, and what would increased aid achieve?

Country	Benefits of Aid in the past	Reforms necessary to maintain benefits with increased aid?	How much could aid be increased?	What could it achieve?
India	Insignificant in financial terms & limited impact on policy, but inter alia, aid had major impacts via green revolution & district primary education, now the model for national programme.	Poverty is falling & social indicators improving, but budget deficit needs to be reduced & reforms accelerated- including more & better spending on social sectors. For impact, focus a big increase on one or two targets, e.g. UPE.	No upper limit, but India has 36% of the global poor, over 20% of child deaths & out of school children.	An increase of $13 bn would finance the 2% of GDP increase in education spending GOI plans to allocate in order to achieve universal basic education by 2015**.**
Pakistan	Limited, appalling social indicators & poverty despite growth.	Address macro-debt problems & governance constraints on benefits reaching the poor- though solutions to elite domination at all levels are not obvious.	Aid has already increased following Gulf war, enabling unsustainable debt to be reduced. No case for further increase until evidence of improved delivery.	Fundamental improvements in institutions are required to ensure extra aid yields worthwhile benefits.
Bangladesh	Significant advances in poverty reduction & social indicators helped by support for irrigation, health & family planning, education, & support to strong service delivery NGOs.	GOB programme envisages higher revenue, reforms to improve infrastructure and banking, increased poverty spending, improved Governance and reduced corruption.	Restoring previous aid:GDP levels by 2007 implies $6.6bn, poverty efficient allocation merits $9.6bn if reform process continues. But, must be in programme form given project disbursement problems.	Potential to over-perform on MDGs, achieve sustained high growth.

Country	Benefits of Aid in the past	Reforms necessary to maintain benefits with increased aid?	How much could aid be increased?	What could it achieve?
Vietnam	Govt. has achieved high growth & startling improvements in poverty & good social indicators. Public spending (20% aid financed) has been effective in delivering improved infrastructure & services.	Govt reform has been cautious but continuous. Absorbing extra aid will require more flexible disbursement arrangements by donors. To reduce poverty & reach MDGs, increased aid should ensure larger share of public spending is focused on remote & poor provinces, help reduce contributions required of poor households.	PRS funding gap is $800mn p.a. to 2005, but assumes unrealistic contribution from poor communities. Increased spending should be in programmatic form to ease disbursement constraints. Continued fast growth would enable increased aid to be phased out over 5-10 years.	Though Vietnam is on track to reach the MDGs, the marginal cost of future progress will be higher as resources must focus on poor & remote mountain communities. Increased aid investment will enable Vietnam to meet the MDGs, reduce growing regional inequality.

Aid has achieved very worthwhile benefits in India, Bangladesh and Vietnam, and a strong case can be made for significantly increased support to all three countries, focused on investments in poverty reduction and achieving the MDGs, investments in which private sector capital is unlikely to be an option. The additional aid should be subject to Government also fulfilling its own obligations to increase funding for key social and poverty reducing programmes. Although it is undeniable that the pattern of Indian public expenditure includes a great deal of wasteful spending on subsidies that benefit the non-poor, there are real constraints to the speed at which these problems can be addressed in such a diverse democracy, and the scope for channelling extra aid to poverty spending is constrained by the need to bring down the unsustainable budget deficit. It would be reasonable to focus a major increase in aid to India on specific poverty programmes proposed by national or State level Government, provided Government resources are also increased. The national programme for expanding primary education would be a good candidate, and if successful would cover some 20% of the global total of out of school children. In both India and Vietnam, continued rapid growth gives a good prospect that increased aid would not be required beyond 2015.

Bangladesh has acquired a reputation for poor governance, and has suffered continually declining aid, despite a strong record of macro-economic stability, steady growth, and progress in reducing poverty and improving social indicators. Although there is a significant agenda of reforms to be implemented, the record compares favourably with Pakistan or Nepal, and with almost all African countries, and there is an overwhelming case for very much higher aid flows to accelerate progress towards the MDGs.

The picture in Pakistan is more mixed. The elite domination of Pakistan, and unstable and urban biased policy choices has resulted in a pattern of growth that has not significantly reduced poverty or improved social indicators since 1990. There is little to show for the substantial quantities of aid Pakistan has received. Although the Government is trying to implement a sound poverty strategy, it has a small majority in Parliament, and many of the constraints on reaching the poor represent deep-seated institutional problems that permeate all levels of society, and that may be beyond the power of the federal Government to address. Pakistan is already receiving substantially increased aid and debt relief, mainly for political reasons, though past precedent suggests that the increased aid could be terminated as quickly as it was started if political motivations change. There may be some cautious grounds for optimism that Pakistan may resume progress in poverty reduction and narrowing the gap in social indicators compared to other similarly poor countries, though a track record in implementation needs to be established before concluding that the conditions for aid to reduce poverty have been established.

Africa

The situation in Africa is far more heterogeneous. For the continent as a whole, the 46% of the population living on less than $1 per day has shown little change since 1987[44]. **Table 3** summarises the situation in 12 countries that together account for nearly 80% of the 290 million Africans living on less than $1 per day in 1998. The key points from this table are: -

- Past problems of conflict, and severe political instability, are significant parts of the explanation for high levels of poverty in more than half of these countries. More than half of the African population living on less than $1 per day are in countries where conflict or political turmoil makes normal bilateral aid relationships difficult.

- Many sub-Saharan African countries are especially vulnerable to climatic and commodity price shocks. Many of the African poor live in resource poor areas, face particular difficulty recovering from drought and other shocks that may be becoming more frequent, while Government and donors have struggled to find ways to ensure that the benefits of economic growth reach the more vulnerable populations. Assessments of the benefits of aid to Africa need to take account of the offsetting negative factors: climatic shocks, commodity price decline, and health problems (HIV/AIDS, malaria, TB). Africa has proved a more difficult environment in which to achieve sustained poverty reduction.

- There is a small but significant group of countries where Governments have achieved significant poverty reduction, and where Government is

[44] World Bank, Global poverty Monitoring site.

sufficiently effective to deserve continued and possibly enhanced support.

Table 3: Poverty trends in selected African countries

Country	Population below $1 a day (million)	% of Sub-Saharan African total	Comment on trends in % in Poverty
Africa	290.87		
Burkina Faso	7.71	2.6%	Static, growth not benefiting resource poor areas
DRC	44.16[45]	15.2%	Increasing over 40 years of declining GDP, accelerated 1998-02 war, may now be stabilising.
Ethiopia	21.19	7.3%	Static, growth continually interrupted by drought preventing sustained progress.
Ghana	9.05	3.1%	Poverty falling, but not for resource poor areas
Kenya	8.24	2.8%	Poverty increasing, weak economic growth, poor policy in 1990s, hopes of greater progress under new reform minded Govt.
Madagascar	10.1	3.5%	Little change since 93, but sharp increase in 2002 due to political crisis, now resolved following free elections.
Mali	8.2	2.8%	Grew 5.2% pa 94-00 after CFA devaluation, since slowed with cotton crisis, poverty remains high.
Mozambique	7.43	2.6%	Poverty falling with fast growth.
Niger	7.12	2.4%	Social & political upheaval, sharp decline in living standards.
Nigeria	91.19	31.0%	Govt. abuse of oil revenues, economic decline, poverty increasing.
Tanzania	7.40	2.5%	Possibly fell marginally in late 90s, -though inequality rising.
Uganda	9.06	3.1%	Poverty is falling, good policy, but concern over public administration & defence spending.
Zambia	7.2	2.5%	Poverty increasing, long term economic decline, Governance & copper industry problems.
Share of SSA Total	230.34	79.2%	Approximate share.

Table 4 provides a similar assessment for the African case study countries as has been made for Asia.

[45] Based on 80% in poverty (national poverty line gives 84%, not clear if comparable to international line, but clear that large majority of population are below it).

Table 4: Aid to selected countries in Africa: what have been the benefits, and what would increased aid achieve?

Country	Benefits of Aid in the past	Reforms necessary to maintain benefits with increased aid?	How much could aid be increased?	What could it achieve?
Burkina Faso	Negligible:- poverty high, health & education indicators appalling.	Weak institutions, urban bias in spending. At limit of absorptive capacity unless there is a distinct shift to programmatic aid forms.	Aid already 17% GNI, no case for major increase until stronger evidence of progress in improving allocation & management of public expenditure.	
DRC	Negligible under Mobutu, key role from 02 in stabilising economy, encouraging peace, and restoring economic growth.	Above all peace, but also sustain economic reforms & rebuild institutions.	From $250mn in 2001, IMF envisage $1.4bn by 2004, could push to $2.3bn by 07- or 30% of GDP- given 4 decades of neglect plus war damage.	Rapid poverty reduction & improvement in human indicators, based on experience of other post-conflict countries.
Ethiopia	Significant improvements in education & to some extent roads from very low basis attributable in large part to aid financed analysis, & investments.	More flexible program support needed, including recurrent cost budget finance. Capacity building needed in local Govt. Reduce defence spending.	Doubling to $1.7bn by 2007-8 but increase beyond that would make Ethiopia excessively dependent on aid to sustain services in long term.	A 60% increase by FY07 would enable public expenditure programs set out in PRS to be achieved even if optimistic GDP & revenue growth assumptions not met.
Ghana	Aid was a major factor in economic recovery & poverty reduction in the 1980s, & played a major role in health & education advances in the 1990s.	Address weak fiscal management that has limited growth, & undermined public expenditure management.	A 50% increase by 2006-7 would imply aid of 13.5% GNI, worthwhile if increase focused on programme forms & if sound budget management is maintained.	Improved public sector management, faster progress on education & health, faster economic growth by relieving burden of Govt fiscal deficits.

Country	Benefits of Aid in the past	Reforms necessary to maintain benefits with increased aid?	How much could aid be increased?	What could it achieve?
Kenya	Aid helped achieve rapid growth & improving social indicators in 1960s-early 1970s. Progress reversed under corrupt & vacillating Moi regime, reforms not sustained, poverty & social indicators worsened, poor project implementation & sustainability.	New Govt must address corruption, maintain macro stability, smaller & more effective public sector more focused on poverty reduction.	Return to 1990 peak in real terms by 2007 implies $2bn increase to $2.5bn.	With better policies, rapid growth could enable poverty target to be met, & rapid improvement in social spending including reducing user costs should permit rapid advance towards MDGs, though 2015 target may be too optimistic.
Madagascar	Aid finances 70% Govt spending, but little achieved: poverty & health indicators worsening, some improvement in school enrolment. Political instability, ownership & accountability weak.	New Govt sustains macro-economic & political stability & implements promised reforms to reduce role of SOEs, address corruption, prioritise rural poverty, improve private sector environment.	Increases proposed in Table 5 reasonable if political & economic reforms hold.	Help restore growth, address problems of high mortality & low school enrolments, though achieving the MDGs looks beyond reach.
Mozambique	Major impact. Aid largely financed the physical reconstruction, underwrote the costs of the transition to peace, including the costs of the successful demobilisation of the armed forces.	Aid needs to be better planned & coordinated, preferably within the Government budget, with credible longer-term commitments and predictable disbursement schedules to ease macro & budget management.	A 50% increase by 2010 would enable Government to maintain a constant share of public expenditure in GDP, or avoid the need for distortionary tax increases, or some combination of the two.	Increased aid could accelerate the physical integration of the country and help to more rapidly address the low levels of human capital development.

Country	Benefits of Aid in the past	Reforms necessary to maintain benefits with increased aid?	How much could aid be increased?	What could it achieve?
Nigeria	Oil resources squandered, poverty increased, aid benefits not sustained.	Macro stability, poverty focus , expenditure management, corruption, privatisation.	Needs are great, but WB argue better use of own revenues, should precede big aid increase.	Depends on commitment to reform, finance is not the main issue in short-term.
Tanzania	Benefits of high aid in 1960s-70s not sustained in weak policy environment. Policy based lending had little impact until 1995 Govt began to reform with more conviction.	Avoiding again building spending to unsustainable levels requires better revenue performance & sharper focus of spending on needs of the poor.	Doubling to 20% GDP by 2007 could be justified by poverty & to reverse previous decline. Would need to be as budget or sector support. To maintain higher p.c. spending level requires aid to be above starting level until 2022.	Spending on infrastructure & improving human capital would boost growth, boost private investment, help improve revenue & sustainability in medium term- and directly contribute to improved progress on the MDGs.
Uganda	Major role in recovery from conflict, analysis and finance supported successful reform programme, sustained poverty reduction, improved education enrolments (though quality poor).	Donors are concerned at increases in defence spending, key issue of political transition. Service delivery, capacity still weak.	There may be scope for absorbing a doubling of aid, though GOU may not want it given concern at unpredictability, consequences for macro-economic management, sovereignty and excessive dependence.	Faster progress on infrastructure & social services, good prospect of exit as continued growth generates higher revenues.

2.4 Conclusions: Have the benefits been worth the costs?

The overall evidence supports the common sense view that aid has achieved significant net benefits, but that the benefits achieved in any country depend heavily on the policy and institutional environment. The chosen case study countries are those with the largest numbers of poor people[46], and by definition are the less successful countries, but it is important to remember that aid also played a significant role in the successful development of countries such as Taiwan, South Korea, and Botswana. Aid has achieved most in countries with stable institutions and consistent and reasonably good policies:- India, Vietnam, Bangladesh, Mozambique, and Uganda. Even in countries with less consistent policies, significant benefits have been achieved:- restoring growth in Ghana, improving social indicators in Ghana, Ethiopia. Not surprisingly, little has been achieved beyond keeping people alive in those countries riven by conflict and political upheaval, though Vietnam, Uganda, Mozambique provide powerful support for the view that high levels of aid can promote a rapid return to sustainable development in the reconstruction phase. Donors need to be alert to the possibilities once a more stable position is reached, as may be happening in DRC.

The case studies confirm that absorbing high levels of aid productively requires better integration of aid within public expenditure plans, and more predictability of donor support. Aid could have a particularly important role in offsetting the impact of climatic shocks that appear to be increasing in frequency, and that have especially damaging effects on vulnerable and poor populations. Aid does not play that role effectively at present, and there is evidence from Ethiopia that the way in which food aid is provided may alleviate short-term crisis at the expense of aggravating long term food insecurity.

3. Making aid more effective

3.1 Issues to be addressed

At the March 2002 Monterrey Conference on Financing for Development , developing countries committed themselves to mobilizing domestic financial resources for development, implementing sound policies and promoting good governance. Donors committed to a significant increase in official development assistance in support of the implementation of nationally- owned poverty reduction strategies. This chapter addresses a number of challenges implied by this agenda and by our previous discussion.

3.2 The problem of volatile and unpredictable aid[47]

Aid is a far more volatile source of finance than domestic revenues. This volatility is most severe in those countries that depend most heavily on aid.

[46] Indonesia is a significant omission.
[47] See Annex 2 for a fuller discussion.

The variability of aid does not offset the impact of other shocks on the receiving economy, but actually seems to amplify them, increasing in good times, but falling when difficult conditions increase the need for external finance. The problem of aid variability is highest in countries suffering high levels of domestic revenue variability, compounding their problems.

Aid is not only very variable, it is also hard to predict. Donor commitment promises are so unreliable that predictions based simply on past trends are more accurate than those that make use of donor commitments. Average shortfalls in aid receipts relative to the budget were equivalent to nearly 2% of GDP in a sample of 28 countries, with no less than 24 of them suffering shortfalls. Moreover, the shortfalls were greatest on programme aid, the untied funds of most importance for macro and budget management. Even countries that met policy conditions experienced large shortfalls[48].

The uncertainty and unpredictability of aid has a statistically significant negative impact on growth. It also makes macro and budget management more difficult : In Pakistan, the interruption of aid flows after the nuclear tests in 1999 was the immediate (though not the only) cause of the balance of payments crisis that followed. When aid amplifies other shocks, it can create a vicious circle: aid is provided in support of sound policies including good macro economic management, but the unpredictability of aid in itself makes sound macro management harder to achieve, and increases the likelihood that donor conditions will not be met and aid will be withdrawn.

Shortfalls of the order of magnitude that countries are regularly experiencing make it difficult to plan effective public expenditure programmes with any confidence that the resources will be forthcoming to implement and sustain them. As donors rightly increase the proportion of their aid that is given in less tied form to finance Government budgets, they also raise the risks that Government is exposed to, since shortfalls now create budget deficits rather than simply delaying the start or implementation of donor projects.

Approaches to reduce the problem are set out in Annex 2. On the donor side, more transparent presentation and reporting of commitment and disbursement data to common formats would help, with donors peer reviewing each others performance in country[49]. Conditionality should act by reducing future commitments rather than suspending disbursements within the budget year, and the extent of donor reactions to policy shortfalls or other events should be measured and take account of the likely impact. Results based conditionality is best avoided, since it risks reinforcing shocks: progress on development outcomes should be a factor in longer term decisions on future aid levels, but should not be used as short term triggers for disbursement of existing commitments. Efforts should be made to build a reasonable level of reserves to manage aid and other shocks, and consideration could be given to fully disbursing programme funding at the start of the budget year. Simpler

[48] Bulir and Hamann

[49] Gerry Helleiner has proposed an independent expert panel be appointed for this purpose. (IMG Report, March 2003).

procedures and less tying and earmarking will help. Those donors with poor disbursement performance should especially review their procedures.

On the Government side, realistic budgets based on a conservative assessment of likely aid disbursements, and involving the donors in transparent discussions on issues that concern them, can help to build an aid relationship based on mutual trust, and reduce the likelihood of unexpected shortfalls.

3.3 What role for policy conditionality?

There is a potential conflict between the objectives of ensuring that aid supports sound policies and making aid more predictable. We also know that conditionality has been largely unsuccessful in achieving sustained policy change. Donors have therefore placed increased emphasis on prior actions and evidence of commitment, rather than buying future policy promises.

This intended shift in emphasis is easier to state than to achieve. Aid releases are still conditional on Governments implementing specific undertakings and staying on track with their macro-economic management, and we have seen that, contrary to the rhetoric, conditionality has increased. Poverty Reduction Strategy Papers have involved a lot of intrusive advice and direction from the donors to ensure that the content is acceptable to their boards and senior management. Even where there has been good ownership, it is in the nature of Government that policies change, that Governments get buffeted by events, or have to yield and compromise with different interest groups. Donors press for commitments to long-term plans, whereas recipients may need to bend to shorter-term pressures. The unpredictability of donor flows is itself one of the major causes of difficulty in managing the economy, and thus donors are themselves helping to bring about the problems of macroeconomic management that often trigger interruptions in aid flows.

The evidence suggests that a more radical rethinking of the approach may be needed. Key stylised facts include:-

1. The quality of policy may be less central to effectiveness than Dollar and Burnside claimed, while assessments of differences in the quality of policy are subject to wide margins of uncertainty[50], making them difficult to use for doing more than confirming extremely good or extremely poor policy environments. The bulk of countries are in the middle. Differences between them are unstable when weights change, and are error prone (e.g. why should Bangladesh have a worse CPIA rating than Pakistan, when the former has a far stronger record on poverty reduction).

2. Unpredictable aid definitely reduces economic growth and impedes poverty reduction, whereas there is little or no evidence that interrupting aid because of failure to meet conditions results in either

[50] Berg, 2002

better policy or better outcomes. Nevertheless, even with the application of waivers, we have seen that hare-trigger conditionality continues to be widely applied, especially with regard to interruptions in IMF programmes.

This suggests an alternative approach, closer to the spirit of the original thinking behind the development of poverty reduction strategy papers:-

1. Basic aid allocations would largely be determined by the size of the population and the per capita income of the country. The policy element would mainly be applied to outliers, countries where it is difficult to work effectively because of conflict, fundamental breakdown of law and order or macro-economic stability, or complete lack of Government commitment to poverty reduction.

2. To avoid undermining local accountability, Government needs to take the lead in framing and negotiating policies and plans, with a less intrusive donor role, especially in Africa. Technical support from donors should be untied and under Government management and control.

3. In deciding where additional aid should go, donors should shift the emphasis towards assessing the quality of institutions of governance and accountability, including in particular the machinery for planning, managing and accounting for public expenditure. The quality of institutions may be a better predictor of the likely success of aid than the specific policies of the current Government.

4. A focus on institutions should also be a basis for more predictable aid flows, less liable to short term interruptions due to non- performance of specific policy measures at specific times. Provided there is no fundamental breakdown of the sort described in sub-para 1 above. Aid should be irrevocably committed to the budget year in which it is promised.

5. Weak institutions may be a reason to limit the amount of aid a country is given in the short term, but the objective should be to work with Government to overcome those barriers and enable the country to make good use of the level of aid that is merited by its population and poverty. This might involve technical support to improve public expenditure management and build Government capacity, but should also involve improvements in donor practices.

3.4 What to do where policy and institutions are weak

The MDGs are global targets. The argument that aid is more effective in better policy and institutional environments leaves the uncomfortable question of what can be done for the 500 million people who live in the 28 countries the Bank describes as low income countries under stress. The problems are hard to overcome: only 2 countries escaped from the lowest category during the 1990s. DAC characterises difficult partnership countries as those in which

Government does not share the poverty reduction objective and lacks ownership. Characteristic features of such countries include human rights violations, political repression, corruption, and violent conflict[51].

There are few ideas on how best to work with such countries. The World Bank has taken the relatively hard line that little can be done through resource transfer and support should focus on policy dialogue and humanitarian support. DAC and bilateral donors argue for staying engaged, stepping up analysis of the problems and how they might be addressed, nurturing pro reform processes and groups, maintaining services for the poor where possible, and assessing the case for aid against a no aid scenario that recognises the potential costs of inaction including later humanitarian costs and the dangers of spill over effects. They stress the need for enhanced donor cooperation, and for using peer pressure and working with sources of domestic demand pressure for better Government.

The case for maintaining services is recognised by all groups including the Bank, though with some scepticism about the prospects for working with Government[52]. IDA have developed ideas for working through independent agencies, though they recognise that such agencies risk 'capture' by the same groups that render Government ineffectual, while any services established in such difficult environments can achieve only limited impact and may prove both high cost and unsustainable without aid. Other alternatives including working with local but not national Govt are recognised by the DAC paper which emphasises the scope for building structures at local level that will be important once national Government improves.

DFID[53] propose that in difficult policy environments, it will often be more practicable to choose reforms with quick pay offs to groups who may then form a nucleus of supporters of further policy reform. Finding ways to support the growth of a demand for change is seen as a way forward.

3.5 Improving donor practices

Paragraph 43 of the Monterrey Consensus specifically called on donors to "harmonize their operational procedures at the highest standards so as to reduce transaction costs and make ODA disbursements and delivery more flexible, taking into account national development needs and objectives under the ownership of the recipient country". The Development Committee, when it met in April 2001, requested that the World Bank and its partners, including the other multilateral development banks and the OECD-DAC Task Force on Donor Practices, work together to develop an overall framework (including time-bound action plans) to help guide and coordinate future work on harmonization.

From our earlier discussion, the critical problems are that aid is too often:-

[51] DAC 2002,2001
[52] World Bank, LICUS Report, 2002.
[53] DFID, better Government for Poverty reduction.

- Unpredictable in amount and timing;

- Off- budget, fragmented, and uncoordinated with Government or other donors;

- Using parallel systems for disbursing, managing and accounting for resources and the results achieved, bypassing and weakening Government systems by draining them of staff and reducing pressures to reform;

- Imposing heavy burdens on the Government administration;

- A contributor to weak domestic institutions of Governance, as donor views and requirements receive excessive weight in policy discourse relative to domestic stakeholders.

The poverty reduction strategy paper approach provides a framework within which these issues can in principle be tackled. The Uganda model, on which the PRSP approach was broadly based, has the key elements in place to achieve a more productive partnership between Government and donors (**Box 5**).

Box 5: How donors can support a Poverty Reduction Strategy: the Uganda approach

- A clear strategy for poverty reduction with broad ownership, and clear quantitative goals;
- Linked to resource estimates set out in a medium term expenditure framework, annually updated and rolled forward as part of the budget process;
- Clear commitment to strategic shifts in resource allocation in favour of poverty reducing expenditure programmes, with spending on those programmes protected from in-year budget cuts;
- A broad-based budget in which donor flows are in principle recorded, though donor cooperation in reporting expenditures still remains less than required;
- The overall budget is developed iteratively with line ministries, local Government and donor agencies, with Ministry of Finance and Economic Planning setting resource ceilings reflecting national priorities, within which sector working groups with donor participation prioritise Government and donor resources within a single, integrated sector strategy and expenditure programme.
- Donors have a right to be consulted alongside other national stakeholders, and help to shape overall and sectoral strategies and expenditure programmes, but largely accept the discipline of the planning and budget process, providing their funding in support of the defined Government programme rather than projects conceived outside of the framework of the MTEF.
- A clear framework for monitoring and evaluation and review, feeding in to future planning and budgeting via the Ministry of Finance and Economic Planning.

The approach, though still prone to incomplete donor reporting and some rogue donors going direct to line ministries, has achieved considerable success in Uganda. The expenditure programmes protected in the poverty action fund have doubled in the 5 years to 2002, reaching one third of the domestic budget. Increased spending on poverty programmes has contributed to the rapid poverty reduction, with major improvements in rural transport, primary school enrolment with improved access for girls and the poor, improved access to and utilisation of clean water and modern health services, with the ending of user charges resulting in big improvements in access of the poor to basic education and health services, particularly where staff are in post[54]. Monitoring information has been effective in changing policy and practice, most famously in the introduction of direct grants to facility level in response to information that resources were not reaching them, backed up with greater transparency to help communities hold officials to account.

Other countries where the same overall approach is being tried have also made progress, though Tanzania has faced lack of cooperation from donors, with 50% of aid still off budget[55].

The logical corollary of increased Government leadership focused around the annual planning and budget cycle is that donors should increasingly provide their aid as direct support to the Government budget. Where there are serious corruption and other fiduciary risks associated with Government systems, the solution is to support the development and implementation of effective approaches to improving them, possibly with some additional safeguards for donor supported expenditures, but avoiding parallel systems[56]. DFID is moving in this direction, with commitments of programme assistance having doubled to $439mn in 2000, mainly as budget support. The European Community is also committed to increasing budget support, while the World Bank has developed a form of adjustment lending, the Poverty Reduction Support Credit, that provides financial support in the context of discussions on budget priorities and management, though not directly accounted for as budgetary financing. The PRSC is intended to become an increasingly important instrument for financing poverty reduction strategies. Unfortunately, available figures in the DAC system do not identify aid provided as flexible budget support. Taken at face value, DAC figures imply that commodity and programme assistance as a proportion of total bilateral commitments were only 7% in 2001-02, less than the 10% share reached in 1980-81. However, most such support appears to have been classified according to purpose rather than aid form, and overall trends are unclear. What is clear is that project approaches continue to dominate, and the overall balance between programme and project approaches shows little sign of the change that will be needed if increased donor flows are not to overwhelm weak Government administrations.

[54] Foster and Mijumbi, 2002
[55] Foster et al, 2002
[56] Foster, The choice of financial aid instruments, has a fuller discussion.

The logic of the poverty reduction strategy approach is that policy conditionality and reporting requirements would be drawn from the PRS and would meet the needs of both Government and donors. However, even in countries that have completed their PRSPs, Governments still complain that donor disbursements are unpredictable and burdensome because they have not adapted their commitments and disbursements to correspond with the Government planning and budget cycle, and continue to impose excessively detailed conditions and reporting requirements, not drawn from the PRS or co-ordinated with Government or other donors.[57]

Coordination efforts at sector level have included the development of sector wide approaches, arrangements aimed at ensuring that Government and donor efforts support a common plan and budget. SPA monitoring of these shows that the bulk of finance for them continues to be provided in project form, with no tendency for sector budget support or pooled funding to increase in importance. The approach may have achieved some improvements in coordination of fragmented efforts and some sharper prioritisation, and in some cases has reduced transactions costs through more joint monitoring and less use of donor driven technical assistance. There is a need to further develop these approaches in the direction that Uganda has taken, with sector programmes integrated in national plans and budgets.

Where Government planning and budget processes are weak, or where donors are unwilling to give up project approaches or provide aid through Government budget systems, there may still be scope for improving outcomes by better Government--donor coordination and by harmonising and simplifying donor procedures. It can be helpful to specify a 'lead donor' for particular sectors, in order to take some of the coordination burden away from Government, though there are risks of donor 'ganging up' and of donor coordination becoming a mechanism for further ratcheting up the demands that donors place on Government. Donors rarely meet without hatching some new proposal that requires a response from a beleaguered Government.

It would also make sense to reduce significantly the number of donor agencies active in each country and each sector within each country. A more active brokerage role seems to be needed, persuading donors to move out of support for malaria or HIV if they are leaving too little room to accommodate global funds within the prioritised public expenditure ceiling. It might be worth going further. Countries with good management could be encouraged to seek agreements with a small number of agencies willing to jointly meet all of their financing needs via flexible budget support. More inflexible donors would in effect be squeezed out and obliged to either reform their ways, or focus their aid on less well managed countries or marginal sectors. Good aid would eventually drive out bad. Though radical and subject to a host of political constraints, the basic idea that aid with too many strings should be refused is surely correct, and there is no reason in principle why recipients should not exercise selectivity as well as donors. India's decision to reduce the number

[57] Amis Philip and Lara Green (2002) OECD-DAC Task Force on Donor Practices, Needs Assessment Survey

of donors in order to reduce transactions costs is an interesting and unprecedented example.

There can be no single model. Budget support is likely to be the best approach in aid dependent countries, and important for ensuring that increased aid does not run into diminishing returns as higher disbursements require even more projects and even more donor missions. It is not possible to achieve good returns to aid expenditures when they reach 20% of GDP and 50% of public expenditure unless some more flexible arrangements are in place for managing the flow. However, in the populous countries of South Asia, notably India, aid remains a small proportion of the Government budget, and Government may prefer to continue with project approaches, which it is well able to manage, rather than concede an intrusive donor role in policy dialogue.

A critical message, if we are to avoid undermining the effectiveness of Government through over-dominant donors, is that the donors need to stand back and leave Government more room to manage and lead. The example of Botswana shows that necessary technical assistance can still be provided without compromising Government leadership, but the technical assistance should be provided at Government request and under Government management, with none of the divided loyalties characteristic of so much technical assistance and policy advice, where the expatriate advisers often feel themselves to be more accountable to their donor paymasters than their Government employers. The movement towards budget support for PRSPs itself needs to become less intrusive: even where donors are providing forms of budget support or pooled funding, they have often continued to apply project style approaches, embedding themselves in inappropriate levels of detail.

The continued donor focus on trying to control and inspect what happens to the resources provided has reflected a lack of information on the outputs and outcomes being achieved. The PRSPs have begun to address the issues of monitoring poverty and other outcome indicators, but the shift in emphasis needs to go further. The EU approach of linking donor support to achieving outcome indicators probably goes too far, and risks amplifying shocks by cutting aid when things are bad. However, there is a strong case for ensuring that Government and donor dialogue focuses on what is being achieved, and that future commitments should be influenced by the seriousness with which Government monitors progress on outcomes and corrects course when expected results are not achieved. Present policy shortcomings matter less if institutions learn from their mistakes.

4. The case for more aid - and where to provide it

4.1 Financing needs for achieving the MDGs

There is no simple answer to the question 'how much extra aid will be needed to achieve the millennium development goals?' Most of the required resources will come from countries themselves. The biggest influences on the targets will be the economic growth that countries achieve, the extent to which the pattern of economic growth benefits the poor, the commitment of Governments to allocating increased resources to poverty reduction, and the efficiency with which those resources are used.

Two approaches have been taken in the various studies that have estimated the costs of the MDGs. Firstly, a costing of the additional external finance needed to boost economic growth sufficiently to achieve the poverty target; and secondly, a direct costing of the additional expenditures required to achieve universal primary education, access to clean water and sanitation, and the required improvements in health status. The target of reducing the share of population living on less than $1 per day will primarily be achieved through economic growth, which will also generate additional household income and public sector revenue from which the health, education and other targets can be financed. The two estimates therefore overlap. If aid is largely channelled into higher public expenditure, it is plausible to argue that the higher of the two estimates should be sufficient to achieve both types of objective.

Halving income poverty

A key question is whether the objective is to remove as many people as possible from poverty and deprivation, or to achieve the targets in as many countries as possible. On welfare and ethical grounds, improving the lot of as many people as possible is more appealing, but the World Bank estimates by Devarajan, Miller, and Swanson (2002) take the second approach. Their estimate of the additional aid needed for achieving the poverty reduction target is limited to the financing gap in those countries that would otherwise miss the target. On this criterion, India receives no extra aid, even though there will be more people still below the threshold in India in 2015 than in the whole of Africa. They estimate the additional aid required to be $39bn-$62bn. It would go to just 65 countries with a combined population of just 1 billion people, and would imply increasing those countries' aid receipts by 340%, to an average $80 per capita, a higher level than any low-income country currently receives. The lower figure of $39bn excludes 22 of the 65 countries from additional aid, on grounds of poor aid effectiveness. Even assuming that policy improves across all countries, it seems inevitable that such a huge increase to so few countries over such a short time horizon would run into severe problems of diminishing returns and absorptive capacity. The objective must be seen as a global one, to benefit as many poor people as possible.

Collier and Dollar (2001) look explicitly at how aid would be allocated in order to maximise the impact on reducing global poverty- though unfortunately they use the $2 per day poverty line rather than the MDG $1 line. The optimal distribution of aid is generated by maximising poverty reduction per dollar spent, taking account of their findings that aid has a bigger influence on growth where policies and institutions are strong, but that it faces diminishing returns if increased above threshold levels in relation to GDP. They assume that each 1% increase in per capita income in every country yields a 2% reduction in the population below the $2 poverty line. Ravallion and Chen(1997) found many countries clustered close to this median figure.[58] Sensitivity tests by Beynon (2003) found that the Collier-Dollar results are not in practice very sensitive to this simplifying assumption: applying estimated country specific elasticities results in the share going to Africa (mostly Nigeria) declining, and that to South Asia (mostly Pakistan) rising, by about 5 % points[59]. Although policy and institutional assessments influence their allocations, Beynon (2001) has shown that the dominant influences are per capita income (no country with PPP per capita income over $2500 gets any aid at al, hence excluding China), the size of the population in poverty, and adjustments to reflect the donor bias against large population countries. The 2001 version of the model that we looked at builds in an assumption of a continuation of the existing degree of donor bias towards smaller population countries[60]. It still results in India being allocated 27% of total aid, compared to about 6.7% of actual aid flows. With no population adjustment, India would be allocated two thirds of the total flow.

If aid is allocated efficiently according to their criteria, aid could increase by 50% without reducing the marginal impact of each dollar in removing people from poverty. The developing world as a whole achieves the poverty reduction target as a consequence of economic growth in China and South Asia, but there is no scenario in which Africa halves the share of population living in poverty. However, Africa comes reasonably close if the volume of aid grows continually to more than double the level in the 1996 baseline by 2015, combined with an improvement in policy in Africa to the average levels of South Asia as measured by the World Bank Country Policy and Institutional Assessments. The Sub-Saharan Africa percentage below $2 per day falls from a 72% baseline in 1996 to reach 41% in 2015, rather than the 64% that would be achieved with existing trends and aid levels. The improvement in policy is responsible for 8 percentage points of the reduction in the African region, aid accounts for the remaining 15 percentage point decline. Unfortunately, it is unclear whether the $1 per day target set in the MDGs would also be achieved under these scenarios.

The Collier and Dollar figures are based on 1996 baseline aid levels. Allowing for restoration of aid to 1996 levels, their estimates imply that aid would need

[58] For instance, between 1960 and 1994 the poverty reduction impact varied by a factor of four to five times per percentage point of economic growth per capita between different states in India, and similar differences can be found comparing East Asia and Latin America. '(Taken from DAC, ODA Demand and Supply: Current perspectives, Dec 2001.)
[59] Beynon, 2003.
[60] Collier & Dollar, 2001

to more than double, and would be higher by around $60bn p.a. in the 2003-2015 period. This is similar to the DMS estimates, but the allocations are very different, with a larger share to South Asia. Diminishing marginal returns require their efficient allocation of aid to limit receipts by poor countries with good policies to a maximum of 8-9% of PPP GDP (equivalent to around 40% of World Bank Atlas GDP[61]), but countries with good policy are estimated to achieve above average marginal efficiencies of aid even at these levels, e.g. the marginal cost of removing someone from poverty in Uganda is estimated at just $1336 even with aid set at 8.9% of PPP GDP[62]. However, a further feature of their model is that aid reduces quite rapidly as higher growth removes people from poverty: even with more generous aid giving, their assumptions imply that Uganda would cease to be an aid recipient by 2015, as a consequence of the speed at which poverty declines.

The direct cost of meeting the other MDGs

Acknowledging the severe difficulties involved in making estimates, the World Bank estimate that the total figure for meeting the non-income MDGs lies in the range of US$35-76 billion[63]. The additional costs of achieving universal primary education are estimated to be $9-$15bn, based on different estimates of annual average cost per pupil. However, marginal costs of reaching populations currently not in school are likely to be far higher, and indeed estimates based on the actual impact on enrolments of increased spending imply figures as high as $130bn. The health targets are still more difficult to cost, since many costs are shared between interventions, while the benefits of deaths averted by specific interventions cannot be simply added since children saved from dying of one cause may still succumb to another. They estimate costs of $20-$25bn, based on the cost of the specific interventions required to reduce avoidable deaths (about $30 - $40 per person per year), combined with an assumption that health spending as a proportion of developing country GDP will rise by 1.5%[64]. The costs of providing universal water and sanitation services vary widely, but they estimate a range of $5-21bn p.a.

It is difficult to know what if any meaning to attach to these figures. Public expenditure is not a good explanation of health and education outcomes, and there is undoubted scope for making better use of existing resources. If the poverty target is met, then economic growth will generate a significant share of the additional resources needed: the estimated additional costs do not all have to be met externally. Institutional capacity and consumer demand may be the binding constraints, and finance alone will not enable all countries to

[61] WDI database gives a ratio of 4.74 between PPP and Atlas estimates of low-income country GNI per capita in 2001. For countries in our Table 1, the unweighted average is 4.45.
[62] Collier and Dollar estimate the turning point at which marginal returns to aid become negative to be 10% of PPP GDP (Beynon, 2003, Table 2.1), but their recommended allocations are lower, increasing only to the point where marginal benefits fall below marginal cost, not the point where they turn negative.
[63] Devarajan, Miller and Swanson, 2002.
[64] Their estimates draw on those of the Commission on Macroeconomics and health (2001), which estimates $34 p.c. cost of essential health interventions, with required incremental donor costs rising from $22bn in 2007 to $31bn by 2015.

achieve all of the targets by 2015. The best way to approach the two estimates is perhaps to think of them as complementary, since improvements in social indicators are both a cause and a consequence of economic growth. The doubling of aid flows advocated by Collier and Dollar to boost economic growth and reduce income poverty should also be sufficient to generate domestic and foreign resources to finance the required level of public expenditure on the other MDGs.

4.2 Where should increased aid be provided?

The International Financing Facility envisages doubling aid flows by raising an additional $50bn per annum to help finance the millennium development goals, with the extra funds mainly benefiting low-income countries.
The risk of declining returns as aid levels are increased needs to be confronted by allocating aid to those countries able to use it most productively, while reforming the way it is given in order to minimise declining returns.

Aid fell by 7% between 1990 and 2000. It would require $23bn to simply restore aid to the same level in real per capita terms that it reached in 1990- a 45% increase. It is possible that part of the apparent improving trend in returns to aid during the 1990s may reflect rising returns as aid is reduced- though this is unlikely to be a major part of the explanation.

Most countries at present have aid receipts substantially below the 25-50% of GDP threshold where research has found evidence of negative returns. Indeed, the small sample of countries with high aid:GDP ratios should make us cautious in using estimates of the point at which diminishing returns reach critically low levels, since that is a part of the curve for which there are few observations. Exact comparisons between studies are difficult because some use PPP estimates of GDP to scale aid, whereas others use Atlas estimates.

Collier and Dollar argue that the threshold is higher in good policy environments: - Marginal returns are negative above 7.8% of PPP GDP in average policy environments, 10% of GDP in good ones, equivalent to a range of 35%-47% of Atlas GDP using the average conversion ratio for low income countries. The point at which marginal benefits dip below costs will be lower. In average policy environments, they have estimated that a 1% of GDP increase in aid to a level of 7% of PPP GDP (33% of Atlas GDP) still yields a 20% rate of return. For good policy environments, their highest recommended poverty efficient aid allocations are in the range 8-9% of PPP GDP, equivalent to 40% of Atlas GDP for Uganda, and 60% of GDP for Ethiopia- the latter reflecting not only poverty and policy but also a large difference between Atlas and PPP estimates of GDP.

Given the wide range between estimates, the limited experience of very high aid: GDP levels, and the likelihood that diminishing returns are more likely to be experienced if aid is increased very fast, it would seem safe to assume that aid of up to 20% of Atlas GDP should be able to yield acceptable returns in average policy and institutional environments. Some countries will be able to

make good use of significantly higher aid levels, but 20% of the economy would seem a prudent threshold to set as a screening device for analysis purposes, to ensure that we look at all countries where there may be a risk of inadequate marginal benefits to increased aid.

There are only 9 countries in 2000 where aid is more than 20% of GNIncome (down from 15 in 1995), but their total population is only 63 million. One of these countries is Mozambique- the fastest growing country in Africa (8% pa since 1992), and a country where our case study finds that aid has been put to good use. Average aid in 2000 was only 2.3% of gross national income in low-income countries, though median aid levels in Africa are far higher, around 10% of GNI.

Table 5 looks at the increases implied for major countries by the Collier-Dollar efficient aid allocation, and by the DFID aid allocation model, assuming that an extra $50bn is allocated entirely to low income countries, taking total low income country ODA to $72.9bn. The countries listed account for over 80% of the population living below $1 per day, excluding China. For the Collier-Dollar figures, it was assumed that 81.5% of the $50bn increase would be distributed between these countries, with their recommended aid: GDP ratios used to estimate the share that each country would get[65]. The implications of the DFID allocation were calculated by simply applying the percentage shares from the model to the $72.9bn new total for aid to the low-income group. The DFID model gives higher per capita aid to countries with lower per capita income and better policies and institutions as measured by the World Bank CPIA index. It allocates 84% of the total to the listed countries, with just over 40% for India in the 'unconstrained' version we have used. The totals differ between the two models because we allowed the Dollar-Collier approach to allocate only the increase, resulting in the listed countries receiving 73% of the new total of aid to the low income group, whereas we allowed the DFID model to allocate the total amount, permitting re-allocations of existing aid between the low income group.

[65] The marginal approach adopted by Collier and Dollar would be expected to produce different allocations depending on the size of the aid budget to be distributed. However, we are indebted to Jonathan Beynon for running the full model to test how an extra $50bn would be allocated, compared to the $32bn increase envisaged in the original paper. He found that the aid:GDP ratios are highly (0.97) correlated with those we have used. Our approximations are good enough for current purposes.

Table 5: How much extra aid for the countries with most poor people?

Country	CPIA Quintile	Current Aid level 2000	Allocation with Collier/ Dollar Poverty efficient aid $mn (% 2001 GDP)[66]	% Increase	DFID Model, India un-constrained, $50bn increase to low-income countries	Comment
India	1	1487	16868 (4%)	1034	29376	No absorptive capacity problem, can make major impact on the MDGs if provided alongside increased GOI spending.
Bangladesh	3	1171	9690 (21%)	728	3790	At least $6.9bn to restore unjustified reduction in aid GDP ratio. Higher DC figure reasonable with policy reform, DFID model over-influenced by harsh CPIA rating.
Nepal	2	390	1287 (23%)	230	875	Depends on peace & a sustainable political solution, and continued Governance improvement.
Pakistan	2	703	3755 (6%)	434	3790	No absorptive capacity constraint, effectiveness depends on improved Governance.
Vietnam	2	1700	4932 (15%)	190	2406	High DC figure is feasible with move to programme support, though GOV may not desire this level of aid dependence.
Burkina Faso		336	686 (28%)	104	656	Aid is already 40% of Govt spending & poorly coordinated.
DRC	5	184	558 (11%)	203	1458	With peace & reunification, $1.4bn in 2004, $2.3bn by 2007?
Ethiopia	3	693	2817 (45%)	306	3718	Maintaining public spending at p.c. levels facilitated by $2.8bn in aid would require further increases in aid to 2022. $1.7bn is the limit for Ethiopia to sustain higher p.c. spending while aid returns to starting level by 2027.

[66] These Aid: GDP percentages use Atlas GDP figures; hence the shares are not comparable with those in the Collier-Dollar article, which are based on PPP estimates.

Country	CPIA Quintile	Current Aid level 2000	Allocation with Collier/ Dollar Poverty efficient aid $mn (% 2001 GDP)[66]	% Increase	DFID Model, India un-constrained, $50bn increase to low-income countries	Comment
Ghana	2	609	1721 (32%)	183	510	Some increase after macro & policy improvement, but CD implied increase equals two thirds of public spending & seems excessive.
Kenya	3	512	1254 (11%)	145	1093	Very under-aided, policy improving under new Govt, could go further ($2.5bn?) if corruption & policy concerns are addressed..
Madagascar	2	322	706 (15%)	119	948	Need for support is clear, but using it effectively depends on improved political commitment and stability.
Mali		360	591 (22%)	64	583	
Mozambique	2	876	1315 (36%)	50	1239	Increase in proposed range is feasible given rapid growth & huge needs.
Niger		211	451 (23%)	114	583	
Nigeria	4	185	2532 (6%)	1269	3280	The continuing waste of substantial oil and gas revenues weakens the argument for increased aid.
Tanzania	1	1045	1236 (13%)	18	4374	Big increase merited by poverty & policy, but GOT still needs to improve revenue & prioritise better. DFID level would strain capacity & risk repeating 1960s cycle of building social expenditure that proves unsustainable.
Uganda	1	819	2044 (36%)	150	1895	GOU wishes to reduce aid dependence.
Zambia		795	697 (19%)	-12	802	
Total		**12233**	**53140**		**61377**	
% Global Aid		**21.7%**				

Under either approach to allocation, the table suggests that the bulk of the increase would go to populous Asian countries. Dollar-Collier increase aid to African countries included in the table by $9.6bn. These countries account for around 80% of the African population living on less than $1 per day. Assuming that African countries not covered receive additional aid pro rata to their share in poverty, the total increase to Africa would be $12bn, on 2000 baseline aid of $13.5bn. The DFID model provides 36% of low-income ODA to Africa, giving total aid to low income Africa of $26.2bn, roughly double the 2000 level. The implication of both models is to broadly double aid to Africa, but this would only absorb one quarter of the proposed $50bn increase, and nearly three quarters of the increase in aid to meet the MDGs would be allocated to Asia. The next section will look in more detail at the capacity for countries to absorb the implied increase in aid flows without benefits diminishing below the critical threshold.

Both of the aid allocations imply doubling aid to eleven of these 18 countries, and trebling it to six of them. If the implied aid increase had been in effect in 2001, then 9 of the countries would have had aid: GDP ratios above 20%. Even allowing for GDP growth and assuming higher aid disbursements are only reached in 2007, nine countries would exceed this thresh hold under one or other of the allocations (Burkina Faso, Ethiopia, Ghana, Mozambique, Niger, Uganda, Tanzania, Zambia and, if peace holds, DRC).

The Collier-Dollar model limits the share of India. If aid were to be allocated in order to maximise poverty reduction per dollar spent, some two thirds of the total would go to India, reflecting the large population of people living on less than $1 per day. India expects to achieve the target of halving the proportion of the population living on less than $1 per day, and therefore would get no additional aid if the objective were specified simply in terms of achieving the target in each country. However, in absolute terms, if both regions achieve the target, by 2015 India will still have more people living below the poverty line than will Africa. India also has low aid dependency and an effective administration, and would have little problem absorbing very much higher flows.

Table 6: Population on less than $1 per day: India and Sub-Saharan Africa

	Estimated, 2000		**MDG Target, 2015**	
	Millions	**%**	**Millions**	**%**
SSA	310	47	210	24
India	375	37	287	22

Source: calculated from UNDP progress report on the MDGs

4.3 Country assessments of absorptive capacity

An attempt was made to assess the feasibility of significantly increasing aid to some of these major countries while maintaining worthwhile benefits for each pound spent. The case study material is based mainly on brief reading of secondary sources, supplemented in some cases by seeking views from country experts. Nevertheless, some insights can be drawn from the material we have reviewed, and these are briefly summarised in Table 5, and summarised in more depth in matrix form at Annex 1, with fuller justification set out in Volume 2 case studies.

It should be stressed that the country assessments are based upon an implicit "ceteris paribus" type assumption that additional aid will indeed represent incremental resources , which can be used for additional poverty reduction. The baseline is usually the assumptions that have been incorporated within the PRSP or other country planning documents. In most cases, there is an implicit assumption of no significant changes in the terms of trade, no other significant macro shocks, no emergencies (floods droughts) to absorb these resources, no significant change in current integration of these economies into international export markets etc.

It should also be stressed that more detailed case study work is needed to investigate the potential for capacity building and other measures to ease absorptive constraints. There are potentially a wide range of institutional options that could be employed to ease the burden that increased aid places on Government capacity. This could lead to significant revision of some of the following assessments.

Although there is scope for making productive use of additional aid in most of the countries we have looked at, the scale of the increases implied by the model allocations, or by a commitment to double aid to Africa, seem to be close to the limits of what can be productively absorbed. Specifically:-

- Ethiopia certainly has the capacity to absorb significantly more aid, there is scope to raise capacity by new recruitment in a country that has a relatively small civil service, and there is a strong case for recurrent funding to permit the expansion of core services. However, the economy is smaller than that of Tanzania, and it will take time to build provincial and local Government capacity. A 300% increase to $2.8bn would raise aid to levels approaching 40% of GDP, likely to be beyond effective absorptive capacity, even if given in programme form. If the increased aid is channelled into increased expenditure, aid will represent 60% of public spending, and the higher per capita spending could only be sustained if the higher aid levels are maintained beyond 2022. This is a level of aid dependence and of long-term vulnerability that the Government are unlikely to countenance. A more modest increase to $1.7bn would enable Ethiopia to return to pre-increase aid levels by 2027 (**Table 7**). The implication is that Ethiopia could absorb $1-$2bn less than the Table 5 allocations propose.

- Policy and absorptive capacity constraints make it unlikely that good returns can be achieved from increases on the scale mooted for Burkina Faso, while similar considerations argue against a large increase for Ghana. Limiting aid to 20% of GDP would reduce the Table 5 allocations by $450mn.

- In Nigeria, oil revenues of $140 per head accrue to Government, and are expected to increase by 75% as gas is fully exploited. Problems of gross mismanagement of these revenues need to be addressed before making the argument for substantially increased aid. Necessary technical support could be delivered with $2bn less than DC implies.

- Mozambique and Uganda are both allocated large increases in both models, but their Governments may not welcome the proposed further increase in aid when both are seeking to reduce aid dependence.

- Kenya is under-aided, and has a diversified economy able to absorb significantly higher flows. If the new Government implements determined reforms, there would be a case for increasing aid to around $2.5bn by 2007, a $2bn increase on recent levels- still below 20% of GDP, less in per capita terms than proposed for richer Ghana, no higher in real terms than the previous 1990 peak, and worthwhile for boosting progress towards the MDGs, where progress was negative in the 1990s.

- Securing the nascent peace in DRC and financing reconstruction provide the opportunity for productively using large aid flows, if the past precedent of Mozambique and Uganda are any guide. The IMF programme envisages aid and debt relief of 20% of GDP, but the reconstruction phase may indicate the possibility of usefully absorbing still higher flows of up to 30% of GDP, implying an additional $1.7bn..

- Tanzania merits a large increase, dependent on continued good policy and on being provided in programmatic form to reduce transactions costs. A realistic aim would be to double aid by 2007, an $800mn increase on the DC allocation, which would return it to around 20% of GDP, reversing the cuts of the 1990s. It is questionable whether a faster increase, to well over 30% of GDP as proposed by the DFID model, would be justified, though there is certainly scope for higher public spending to ‘crowd in’ private sector investment by overcoming infrastructure and human capital constraints. However, too rapid an increase in resources risks weakening the incentive for Government to reduce excessive numbers of projects and expenditure programmes, and to focus resources on the highest priorities. With continuing weak revenue performance it also risks repeating the 1970s experience of inflating social spending to levels that prove unsustainable. The case study shows that, like Ethiopia, the large increase in spending possible under the DFID allocation could only be sustained with aid continuing at the increased level for 20 years or more.

- These offsetting adjustments imply capacity to increase aid to our case study Africa recipients may be somewhat lower than the DC allocations proposed in Table 5, by about $600mn, and very much lower than the DFID model, by some $5bn. Moreover, the allocations still assume sustained reforms in a number of high-risk countries, with no existing countries sliding backwards, and may therefore prove optimistic. The overall judgement that the upper limit to increased aid to Africa is to broadly double it over the next five years is strengthened by the country analysis.

- Within Asia, although absorptive capacity is less of a constraint, there are question marks over the extent to which Government institutions in Pakistan can be relied on to give priority to poverty reduction. In contrast, both the past track record and the current policies of Bangladesh do not appear to deserve the low reputation that has led donors to continuously reduce aid to the country, despite the continued steady progress towards the MDGs, and the continuing problems of a poor and vulnerable country.

Table 7: How soon could Ethiopia finance higher p.c. spending from domestic revenues?

	Actual	**Projections, constant 2007 prices**				
	2002	**2007**	**2012**	**2017**	**2022**	**2027**
GDP,$mn	5963	8364	10672	13618	17377	22173
Population, Mns	67.7	76.6	86.6	97.9	110.8	125.3
Revenue (22.4% GDP)	1293	1873	2390	3050	3892	4967
Public Expenditure p.c. $	30.73	61.06	61.06	61.06	61.06	61.06
Revenue p.c.$	19.1	24.5	27.6	31.1	35.1	39.7
Required aid p.c.$	12.78	36.6	33.5	29.9	25.9	20.4
Aid needed $Mn	865	2800	2898	2930	2871	2557

Source: Ethiopia case Study, in Volume 2

The conclusion to draw from this brief discussion is that an additional $50bn will make a major contribution to meeting the MDGs, but only if around three quarters of the addition is allocated to India and to the populous countries of South Asia. Several of the large countries that would expect to be allocated significantly increased aid make relatively poor use of existing public resources, and significantly increased aid disbursements should await evidence of improved commitment to use existing resources to benefit the poor (e.g. Pakistan, Nigeria). Others are close to the limit of absorptive capacity, especially major aid recipients in Africa. A large increase is certainly merited. Whether it should be as large as $50bn depends crucially on the share which the donors are prepared to see allocated to India.

4.4 Phasing of the aid increase- and subsequent reduction

We do not have the data to seriously model the future aid profile. The Collier-Dollar article suggests that Africa only comes close to meeting the MDGs if aid is not only increased, but is sustained on a gently rising path to 2015. Although the real level of aid in $ billions does not fall, the growth of recipient economies implies falling aid to GDP levels throughout.

The experience of well-managed countries in receipt of high aid flows suggests that aid has helped them to grow fast enough to reduce aid dependence over time. The experience of the countries that graduated from IDA is that aid to GDP levels typically halved over a 12-year period. Some still poor recipients such as Uganda and Mozambique, who are now among the fastest growing developing countries, have also begun to significantly reduce their aid dependence whilst maintaining rapid growth. These high performers are not typical however. Brautigam points out that high aid levels often become institutionalised rather than contributing to a country rapidly growing out of the need for aid:- more than half of the countries that were receiving more than 10% of GDP in aid in 1980 were still receiving more than 10% of GDP 17 years later.

Past experiences of the wasteful spending of sudden windfalls (e.g. the 1970s Nigerian oil revenues) argues for a measured build up in aid disbursements, especially where capacity is limited and the fiduciary risks are high. Doubling aid disbursements in 5-6 years implies real growth in aid disbursements at double-digit rates. Commitments to India could certainly be increased faster than this, absorptive capacity and policy constraints might require a slower build up in some other countries.

Both India and Vietnam are expected to become lower-middle income countries in or around 2015. A number of other rapidly growing countries are expected to reduce their high aid dependence. Given the size of India, the reduced aid requirement for India from 2015 is likely to exceed any net addition to meet the needs of countries currently in chaos but who might begin aid worthy reforms before 2015.

Within Africa, building and sustaining the institutions to deliver universal primary education, basic health services and access to clean water will take time to achieve, but will then require aid to maintain per capita spending at the higher level. **Table 8** provides a very crude illustration of possible scenarios for Sub Saharan Africa excluding South Africa, based on broadly realistic stylised figures for the key parameters, and plausible scenarios for how they might develop. The table compares either doubling or tripling aid by 2006, assuming that the higher level of public spending per head is then sustained until 2015. No price adjustments have been made, so the figures are in constant 2001 prices. If aid doubles by 2006, with economic growth of 5% p.a. and revenue increasing to 20% of GDP by 2015, then there is scope for maintaining the higher per capita expenditure levels from domestic revenues while also reducing aid below the initial level. This does not imply that aid

should be reduced of course, since there will continue to be high levels of poverty and unmet social needs. If aid is tripled in value, it takes longer for revenue growth to catch up, and maintaining the higher level of real per capita spending would require aid levels in 2015 some 50% above the 2001 baseline, though the higher spending level could still on these assumptions be maintained entirely from domestic revenue by 2020. The table assumes a sharp improvement in both growth and revenue performance from recent experience, and implies nothing about the extent of remaining unmet needs. It is useful simply as an illustration of the time horizons over which domestic revenue growth might take over responsibility for sustaining aid financed increases in public spending.

Table 8: Stylised illustration of possible phasing of aid and revenue growth in Sub-Saharan Africa, excluding South Africa

	2001	2006	2015	2020
SSA GDP $bn	203	259	402	624
Population, mn	640	734	916	1144
Revenues $bn	30	41	80	125
Revenues % GDP	15%	16%	20%	20%
1. Aid doubles				
Aid $bn	13	26	3	0
Spending $bn	43	67	83	125
Spending/Head	$67	$91	$91	$109
Spending % GDP	21%	26%	21%	20%
2. Aid triples				
Aid $bn	13	39	20	0
Spending	43	80	100	125
Spending/Head	$67	$109	$109	$109
Spending % GDP	21%	31%	25%	20%

Notes: Table 8 assumes population grows 2.5% p.a., GDP grows 5%pa, revenue increases from 15% GDP in 2001 to 16% by 2006, 20% by 2015. Revenue plus aid is assumed to equal public spending: public expenditure is therefore under-estimated by the amount of domestic financing of the deficit. Aid from 2015 is assumed at the level sufficient to maintain the 2006 per capita spending level.

The higher levels of public expenditure in relation to GDP would still be quite low by international standards. Median public expenditure:GDP ratios in major European OECD economies are 40% of GDP[67].

This reassuring picture for Africa as a whole is quite different from the experience of some of the major countries likely to receive additional aid receipts. The combination of much higher aid:GDP ratios with low domestic revenues implies that Ethiopia and Tanzania can not realistically aim to triple their aid receipts unless they and the donors are willing to accept that the increased aid flows will need to be maintained for 20 years or more[68].

[67] Calculated from Gemmell, Norman (2003), Fiscal policy, growth, and convergence in Europe, NZ Treasury Working Paper 03/14 (June).
[68] Table 7, more detail in Volume 2 case studies.

4.5 Financing increased aid flows: implications for the International Financing Facility

The $50bn extra estimated to be required to achieve the MDGs could be achieved by a gradual rise in the ODA/GNI ratio from the present level of 0.22% to 0.32% by 2010 which would, assuming real annual GNI growth of 2.5% in DAC Member countries, raise real ODA levels to low and middle income countries to $100 billion compared with $56 billion in 2000. ODA would double by 2012, at an ODA/GNI ratio of 0.34%. The potential budgetary effort of the G7 - and especially of the USA and Japan - would be decisive. If all of the ODA/GNI ratios of DAC Members increased by 0.1% between 2000 and 2010, $38 billion of the extra $46 billion would come from the G7.

The IFF proposes to borrow funds in order to achieve a faster increase in aid in the short term at the cost of reducing future aid when the funds have to be repaid.

The sources we have reviewed suggest that the average returns to investments in aid are above 20%. Moreover, the allocation of aid has moved in the direction of better-managed countries and towards poorer countries. Both effects should have raised the benefits of aid from the point of view of current donor objectives, and there is empirical support in both the macro and the evaluation literature to suggest that actual returns have increased. These increased returns have been achieved during a period of declining aid flows. If the level of aid in 1990 correctly reflected donor preferences, it is plausible to argue that the combination of higher benefits from each dollar spent plus rising incomes in the donor countries ought to imply a strong case for significantly higher aid today.

The main arguments against the IFF stem from concerns that increased aid will face diminishing returns. Heller and Gupta also argue that the future pensions and social security burden means that the opportunity cost of aid to most donor countries is rising, which would be an argument for financing aid from current revenues rather than incurring future liabilities to debt service on aid bonds. They therefore develop a proposal exactly contrary to the IFF: donors should spend today into trust funds, to be used to fund expenditures on behalf of poor countries over a longer time horizon as absorptive capacity increases. Annex 2 shows that it will in all but exceptional circumstances be preferable for donors and recipients if aid is provided from current donor income rather than paying in advance of need into a trust fund. This implies that the rate of increase in aid flows will need to be limited to the capacity of countries to utilise them effectively.

The key question is therefore whether the proposed rapid increase in aid flows will run into diminishing returns such that the benefits no longer justify the costs. This will depend on country and donor reforms, and on the allocation between countries. A $50bn increase focused on the low-income countries would more than triple their aid receipts, assuming that none of it is

used to increase aid to middle income countries. For many countries in Africa, aid already finances a large share of Government spending. For many African countries, the proposed increase in aid would carry them towards a level of aid: GDP where some studies have found evidence of low or negative marginal returns to aid, due to negative impacts on macro-economic management, competitiveness, institutions, and ownership. None of these constraints are immutable, as shown by countries such as Mozambique, but they will pose a significant challenge if aid increases very rapidly. A doubling of aid to Africa over a six-year period would require Governments to plan and implement double digit real growth in aid financed expenditures.

We have said too little in this study on the demand side of the aid equation: - do the countries that could use it actually want the massive increases in aid that are proposed for them? Several of the major recipients are concerned about the risks of current levels of aid dependence, partly because of the unpredictability of aid flows (Mozambique, Uganda). Others have resisted aid that carries any policy strings- notably India. We have shown that increases on the scale proposed for some countries would carry serious risks to the sustainability of the budget and the macro economy (e.g. Ethiopia). A further stage of the work should look in more detail at the demand for increased aid.

References

Adam Chris and David Bevan (2002), Uganda: Aid, Public Expenditure and Dutch Disease (mimeo), Department of Economics, University of Oxford

Amis Philip and Lara Green (2002) OECD-DAC Task Force on Donor Practices, Needs Assessment Report, Survey on practices, priorities and perspectives on Harmonising Donor practices, Final Report, School of Public Policy, University of Birmingham, October.

Appleton, Simon (2001), Education, incomes and poverty in Uganda in the 1990s, CREDIT research paper 01/22

Arellano Christina, Ales Bulir, Timothy lane, Leslie Lipschitz, (2002), Aid and Tradable Goods in Aid Dependent Countries, International Monetary Fund (September)

Berg, Elliot (2002), Increasing the Effectiveness of Aid: A Critique of Some Current Views, Paper Prepared for the Expert Group Meeting, Department of Economic and Social Affairs, United Nations, January.

Beynon, Jonathan (2003), Poverty Efficient Aid Allocations- Collier/Dollar Revisited, ESAU working Paper, ODI/DFID, London.

Beynon, Jonathan (2002), Aid works – the case for more aid, Contribution to DFID paper for Treasury (February)

Beynon, J.G. (2001), "Policy Implications for Aid Allocations of Recent Research on Aid Effectiveness and Selectivity", paper presented at the Joint Development Centre/DAC Experts Seminar on "Aid Effectiveness, Selectivity and Poor Performers", OECD, Paris, 17 January 2001 (revised version, June 2001, forthcoming in M. Arvin (edited collection)).

Bird, Graham, 'The completion rate of IMF programmes.' *World Economy.* 25(6), June, 2002.

Bird, Graham and Dane Rowlands (2000), "The Catalyzing Role of Policy-Based Lending by the IMF and the World Bank: Fact or Fiction?" *Journal of International Development*, 12: 951-973.

Birdsall, Nancy, Stign Claesson and Ishac Diwan, (2002), Policy Selectivity Forgone: Debt and donor behaviour in Africa. Centre for Global Development.

Boyce, Daniel and Atef Haddad (2001), Thematic Review on Project Implementation Units: An Analysis of Ongoing and Completed Projects in Latin America and the Caribbean. World Bank, A Study carried out on behalf of the Latin American and Caribbean Region Quality Enhancement team. Washington DC.

Brautigam, Deborah (1999), Aid dependence and governance. American University, Washington DC.

Bulir, Ales and Timothy lane (2002), Aid and Fiscal management, paper prepared for IMF conference on macroeconomics and Poverty, March

Bulir Ales and A. Javier Hamann, 'How volatile and unpredictable are aid flows, and what are the policy implications? IMF Working Paper WP/01/167.

Burnside, C. and Dollar, D. (2000a), "Aid, policies and growth", *American Economic Review*, September 2000.

Burnside, C. and Dollar, D. (1997), "Aid, Policies, and Growth", Policy Research Working Paper 1777, June 1997, World Bank, Development Research Group, Washington, D.C.

Cassen, Robert (1994), Does Aid work? Report to an intergovernmental task force. International Development Centre, Oxford. Oxford University press, June.

Chen, Shaohua and Martin Ravalion (2001), How did the world's poorest fare in the 1990s? Review of Income and Wealth,47:283-300.

Clemens, Michael A, (2002), World Bank capital neither complements nor substitutes for private capital. Centre for Global Development, Working paper.

Clemens Michael and Stephen Radelet (2003), The Millennium Challenge Account: How much is too much, how long is long enough?
Centre for Global development, Feb.

Collier, Paul (2002), Making Aid Smart: Institutional incentives facing donor organisations and their implications for aid effectiveness

Collier, Paul (2000), Consensus Building, Knowledge and Conditionality, Paper to Annual World Bank Conference on Development Economics, April

Collier, P. and Dollar, D. (2001), "Can the world cut poverty in half? How policy reform and effective aid can meet the International Development Goals", *World Development*, Vol.29 (11), pp.1787-1802.

Dalgaard, Carl-Johan, Hansen Hansen and Finn Tarp (2002), On the empirics of foreign aid and growth, CREDIT research paper 02/08.

Dalgaard, Carl-Johan, Hansen Henrik (2000), on aid growth and good policies, CREDIT research paper 00/17.

DAC Development Cooperation Secretariat (2001), Experts seminar on aid effectiveness, selectivity and poor performers- 17 January 2001, Summary of the main points of the discussions

DAC Secretariat (2002), Development cooperation in difficult partnerships.

DAC,(2001), ODA Demand and Supply: Current perspectives,(Dec.)

Dasgupta, Dipak and Dilip Ratha (2000), "What Factors Appear to Drive Private Capital Flows to Developing Countries? And How Does Official Lending Respond?" Policy Research Working Paper 2392, The World Bank, Washington, DC.

Devarajan, Shanta, Margaret Miller and Eric Swanson (2002), Goals for Development: History, Prospects, and Costs, World Bank Policy Research Working paper 2819.March 25

Devarajan, Shanta, David Dollar and Torgny Holmgren, Aid and reform in Africa. Washington: World Bank, 2001.

DFID, Better Government for Poverty reduction, what more could donors do?

Dollar, David and Art Kraay (2001), Trade Growth and poverty

Dollar David and Art Kraay, Property rights, political rights and the development of poor countries in the post-colonial period

Drazen Allen and William Easterly (2001), Do crises induce reform? Simple empirical tests of conventional wisdom. Economics and Politics (forthcoming).

Durbarry, R., Gemmell, N. and Greenaway, D. (1998), "New evidence on the impact of foreign aid on economic growth", CREDIT Research Paper 98/8, Centre for Research in Economic Development and International trade, University of Nottingham.

Easterley, W., Levine, R. and Roodman, D. (2003), "New Data, New Doubts: Revisiting 'Aid, Policies, and Growth'", CGD Working Paper No.26, June 2003, Center for Global Development, Washington, DC.

Easterly, William and Ross Levine (2003), Tropics, Germs and Crops: How endowments influence economic development, Journal of Monetary Economics, Vol. 50, January,pp 3-59

Easterly, W., 1999, The Ghost of Financing Gap, Testing the Growth Model of the International Financial Institutions, Journal of Development Economics (60)2, December.

Easterly William (2001), The lost decades: explaining developing countries' stagnation in spite of policy reform 1980-98, Journal of Economic Growth, Volume 6, issue 2, June.

Everhart, Stephen S. and Mariusz A. Sumlinski (2001), “Trends in Private Investment in Developing Countries: Statistics for 1970-2000 and the Impact on Private Investment of Corruption and the Quality of Public Investment,” International Finance Corporation Discussion Paper 44, Washington, DC: The World Bank.

Falck, Hans, Dutch disease in Mozambique? Swedish International Development Co-operation Agency, Country Economic Report, 2000:1.

Filmer D, Hammer J, Pritchett L (2002), Weak Links in the Chain II: a prescription for health policy in poor countries, World Bank Research Observer, Spring 2002

Filmer D, Pritchett L (1997), Child mortality and public spending on health: how much does money matter? World Bank policy research working paper No. 1864

Fisman Raymond and Jakob Svensson (2000), Are corruption and taxation really harmful to growth? Firm level evidence. World Bank.

Foster Mick, Adrian Fozzard, Felix Naschold and Tim Conway (2002), How when and why does poverty get budget priority? Poverty reduction strategy and public expenditure in five African countries, Synthesis paper. ODI Working Paper 168, May.

Foster, Mick and Peter Mijumbi (2002-2), How, when and why does poverty get budget priority? Poverty reduction strategy and public expenditure in Uganda, Case Study 1. ODI Working Paper 163, April.

Foster Mick (2002-3), Direct Budget Support to Mozambique, Report to the Department for International Development, November.

Gemmell, Norman (2003), Fiscal policy, growth, and convergence in Europe, NZ Treasury Working Paper 03/14 (June).

Goldin Ian, Halsey Rogers and Nicholas Stern (2002), The role and effectiveness of development assistance, Lessons from World Bank experience, in World bank, The Case for Aid: Building a Consensus for Development (June)

Gomanee Karuna, Sourafel Girma and Oliver Morrissey (2003), Searching for aid threshold effects; aid, growth and the welfare of the poor, CREDIT (paper presented at CSAE seminar 28 January 2003)

Gomanee Karuna and Oliver Morrissey (2002), Evaluating Aid effectiveness against a poverty reduction criterion (April).

Gomanee, Karuna, Oliver Morrissey, Paul Mosley and Arjan Verschoor, (2001), Aid, Pro-poor Government spending and welfare: Credit research paper 03/01.

Gomanee Karuna, Sourafel Girma and Oliver Morrissey, Aid and Growth: Accounting for transmission mechanisms in Sub-Saharan Africa, (date and where published unknown)

Hadjimichael, M., Ghura, D., Muhleisen, M., Nord, R., and Ucer, E. (1995), "Sub-Saharan Africa: Growth, Savings and Investment, 1986-93", Occasional Paper 118, International Monetary Fund, Washington, D.C.

Hansen, Henry and Finn Tarp (2000), Aid and growth regressions, CREDIT Research Paper no. 00/7

Hansen, Henry and Finn Tarp (2000), Aid Effectiveness Disputed. (Chapter 4 of Foreign Aid and Development: Lessons Learnt and Directions for the Future. London, Routledge.)

Heller, Peter S, and Sanjeev Gupta (2002-1), Making increased aid work for the poor, World Economics, Volume 3 No 4

Heller, Peter S, and Sanjeev Gupta (2002-2), Challenges in expanding development assistance, IMF policy discussion paper, PDP/02/5.

Independent Monitoring Group, *Enhancing Aid Relationships in Tanzania* ('the IMG report'). Dar es Salaam: Economic and Social Research Foundation. Final draft, March 2003.

International Development Association (2002), Linking IDA support to country performance, Third annual report on IDA's country assessment and allocation process, April.

International Monetary Fund (2003), Growth and Institutions, A Survey by the Staff of the International Monetary Fund. In World Economic Outlook, April.

Isham Jonathan, Daniel Kaufmann and Lant H Pritchett (1997), Civil Liberties, Democracy and the performance of Government Projects. World Bank Economic Review 11 (2): 219-42.

Isham Jonathan and Daniel Kaufmann (1999), The forgotten rationale for policy reform: the productivity of investment projects. Quarterly Journal of Economics 114 (1): 149-184.

Ivanova, A., W. Mayer, A. Mourmouras and G. Anayiotos, >What determines the success or failure of Fund-supported programs?= Washington: *IMF Working Paper WP/03/08.* January 2003

Kanbur, Ravi (2000), Aid, Conditionality and Debt in Africa, published in Finn Tarp (ed), Foreign Aid and Development: Lessons learnt and Directions for the Future, Routledge, 2000.

Kaufmann Daniel and Aart Kraay (2002), Governance indicators, aid allocation, and the millennium challenge account, World Bank, December.

Kaufmann D, A Kraay and P. Zoido-Lobatan (1999), Governance matters. World Bank Working Paper 2196.

Killick, Tony (2003), Politics, evidence and the new aid agenda, Development Policy Review 2004 (forthcoming)

Knack, Stephen and Aminur Rahman (2003), Aid intensity, Donor Fragmentation and the Quality of Governance. World Bank Research Working Papers, March 3 draft.

Lensink Robert and Howard White (2000), Assessing Aid: A manifesto for aid in the 21st century? Oxford Development Studies,(28), 5-17.

Lensink, Robert and Howard White,(1998), Does the revival of international private capital flows mean the end of aid? An analysis of developing countries' access to private capital, World Development 26(2) 1221-34.

Mehrotra, Santosh (2001), The rhetoric of international development targets and the reality of official development assistance, Innocenti working paper No. 85, Florence, UNICEF Innocenti Research Centre.

Mosley, Paul, *Overseas Aid: Its Defence and Reform*. Brighton, England: Wheatsheaf Books, 1987.

Mussa, Michael and Miguel Savastano (1999), >The IMF approach to economic stabilization.= Washington: IMF *Working Paper*, WP/99/104. July.

Nestmann Thorsten and Beatrice Weder (2002), The effectiveness of international aid and debt relief: a selective review of the literature, paper prepared for the 5. Limburg seminar on financing and development.

Nunnenkamp, Peter (2002), Shooting the messenger of good news: A critical look at the World Bank's success story of effective aid. Kiel institute of world economics, April.

Riddell, Roger C. *Foreign Aid Reconsidered*. Baltimore: Johns Hopkins University Press, 1987

Ritzen J, William Easterly and Michael Woolcock (2000), on good politicians and bad policies: social cohesion, institutions and growth

Roberts, John (2003), Poverty Reduction Outcomes in Education and Health, Public Expenditure and Aid, ODI Working Paper 210, Overseas Development Institute, March, ISBN 0 85003 654 2

Rodrik, Dani (2001), Institutions, Integration and Geography, In search of the deeper determinants of economic growth. Centre for International development, John F Kennedy School of Government, Harvard University, September.

Rodrik, Dani (1996), "Why Is There Multilateral Lending?" in World Bank, *World Bank Annual Conference on Development Economics 1995*, International Bank for Reconstruction and Development, Washington, DC, pp. 167-205.

Rodrik, Dani, Arvind Subramanian and Francesco Trebbi (2002), Institutions Rule: The primacy of Institutions Over geography and Integration in Economic Development, IMF Working Paper 02/189, Washington, International Monetary Fund

Sachs, Jeffrey (2003), Institutions Don't Rule: A Refutation of Institutional Fundamentalism, NBER Working Paper No. 9490 (Cambridge Massachusetts, National Bureau of Economic Research).

Sala-I-Martin, Xavier and Arvind Subramanian (2003), Addressing the natural Resource Case: An Illustration from Nigeria, IMF, Working paper 03/139 (July)

Santiso, Carlos (2001), Good governance and aid effectiveness: The World Bank and conditionality, Georgetown Public Policy Review, Vol. 7, number 1.

Servén, Luís and Andrés Solimano (1993), "Private Investment and Macroeconomic Adjustment: A Survey," in Luís Servén and Andrés Solimano, eds., *Striving for Growth after Adjustment: The Role of Capital Formation*, Washington, DC: The World Bank.

Temple, Jonathan (1999), The new growth evidence, Journal of Economic Literature, March.

UK Treasury and Department for International Development (2003), International Finance Facility.

Verschoor Arjan and Adriaan Kalwij (2002), Aid, Social Policy and Pro-Poor Growth, Department of Economics, DFID Research Programme on Risk, Labour markets and Pro-Poor Growth, Occasional Paper No.4, University of Sheffield.

World bank (2002), Report of the World bank Group task Force on Low-Income Countries Under Stress, 2002

World Bank, Adjustment Lending Retrospective: Final Report. Washington: World Bank, Operations Policy and Country Services Department. June 15, (2001 (A)

World Bank, 2002, Global Development Finance

World Development Report 2004, Discussion Draft, Making Services Work for Poor People

World Health Organisation (2001), Macroeconomics and Health: Investing in Health for Economic Development, Report of the Commission on Macroeconomics and Health , Chaired by Jeffrey Sachs (December)

Annex 1: Summary tables of Country Case Studies

Country	Burkina Faso	Mozambique	Ethiopia
1.1 Aid level & Trends	Fallen from 22.5% GDP in 1995 to average 16% GDP, $34 p.c.	$52 p.c., 26% of GDP, was 50% of GDP in mid 1990s.	End of Eritrea war, Aid increased from $10 p.c. to $17 p.c. in 2001, 18% of GDP. Very variable due to food insecurity.
1.2. Under (Over) Aided (allocation models)?	15th highest aid:GNI share reflects BF ranking as one of poorest 20 countries in world.	7th highest aid:GNI, reflects poverty & needs for post-war reconstruction, but relative share should fall as the economy grows.	Under (19th in Africa, yet in poorest 7 countries)
2. Development Effectiveness			
2.1 Govt Policy	Stabilisation & liberalisation since early 1990s, but weak institutional effectiveness, poor public service delivery. Primary education spending has been raised, efforts underway to reduce high unit costs (salaries?), improve efficiency, & boost demand by reducing costs to household. Govt services have strong urban bias.	Good performance on macro & structural reforms since 1992, but severe capacity constraints in Govt, weak service delivery. some corruption & governance concerns.	Good macro economic management in difficult circumstances, but resources wasted on war and defence, further improvements needed in private sector and agriculture policies. Central Govt fairly honest & effective, capacity constraints in Local Govt.
2.2 Recent Public expenditure: Health % GDP Education % GDP	Health 2.0% Education 2.5%	Health 3.0% Education 6.5%	Health 0.9% Education 2.9%
2.2 MDGs Progress & Prospects	Household survey data show increased poverty incidence 1994-98 despite 5%p.a. GDP growth. Poverty increasing in resource poor central regions. GPE marginally improved to 41%, still one of lowest in world, health indicators no improvement on appalling levels (169 from 174 on HDI). WB argue poverty target should be reached if GDP grows 5.8% p.a., UPE target unlikely to be met, BF could achieve rapid mortality	Rapid growth GDP since 1992 is reducing poverty, lack of household survey estimates before 1997 makes it hard to document. Primary enrolments and health indicators are improving from a low base, but MDG targets unlikely to be achieved.	GDP growth of 5.5% required to meet poverty target, actual growth averages 3% with big variations due to drought. Primary enrolment has increased 80% in 5 years with reduced gender gap, but still NPE is only 33%, no prospect of reaching targets. Health targets also out of reach, though big gains from current high mortality are possible & may be achieved e.g. immunisation coverage doubled in 5 years

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	reduction given high starting levels but needs big improvements in resource allocation & delivery performance.		to 40%.
2.3 Why is aid needed to finance MDGs?	One of poorest countries, small revenue base, private sector investment potential limited until infrastructure and human capital is improved, heavy debt burden, hence faster progress requires concessional resources.	Mozambique is raising Govt share in development spending with rapid GDP growth, & has attracted private investment in resource based industries, but remains a very poor country, existing PRS implies a falling share of public spending in GDP and continuing poor social indicators beyond 2015.	Poor, food insecure, private investment discouraged by poor physical & human capital & proneness to natural disaster & political insecurity.
3. Aid effectiveness			
3.1 Macro-economic impact of aid	Aid has exacerbated external shocks, e.g. net aid fell in 2000, & HIPC disbursements were held back for accountability & governance reasons, exacerbating fall in p.c. income & need for spending cuts in a year when BF was hit by external shocks. There is some evidence of Dutch disease, with slow export growth & inflation in high aid years, reflecting capacity constraints in small modern sector, though limited by high foreign content of aid spending. In longer term, aid focused on reducing high transport & other infrastructure costs, & improving education, should improve competitiveness.	Massive aid financed post-war reconstruction, no evidence of Dutch disease wit rapid GDP & export growth. Increased aid helpfully offset the impact of floods in 2000. Governance related cut backs in 2001 reduced public expenditure though poverty priorities were protected.	Some evidence of food aid damaging growth of commercial agriculture and longer-term food security, exacerbated by poor timing. Aid has not been effective in offsetting massive weather related shocks.
3.2 Policy dialogue	Good dialogue, & IMF regard BF as having good implementation track record. BF was chosen as pilot for new EC-led test of approach to conditionality based on performance.	Good progress on conventional structural adjustment agenda, but next stage reforms require clearer definition of PRS action plan, to focus GM and donor attention on a limited agenda of key reforms within Govt	Govt has determined the pace of reform, but with good dialogue in social sectors where development of sector programmes has made major contribution to improved social indicators. Macro stabilisation has

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Country	Burkina Faso	Mozambique	Ethiopia
		capacity to implement. Policy dialogue has been too low level; WB PRSC under development may improve focus.	been good, less consensus on the extent of reforms needed to encourage private sector development.
3.3 Institutional development	Govt is working closely with donors to build institutional capacity, but from low levels, especially in local Govt to which level responsibility for health and education has been decentralised. Structural problem of high salary burden squeezing operating budgets. Budget formulation & execution has been good in macro terms, but incremental budget, only the education programme is costed and related to targets. Reforms aim to introduce MTEF approach, more discretion to spending units. Strong grass roots accountability.	Multiple weaknesses are being addressed within limits of capacity, major programmes to improve financial accountability. Budget planning & management remains weak, PRS not costed & related to targets, ceilings repeatedly changed in-year, and donor & some local resources are off budget.	Govt is mainly honest & effective. Limited capacity below national level is the binding constraint on the rate of progress in developing social services. Participation in producing the PRS was good, but domestic institutions to challenge and hold Govt accountable for services are weak.
3.4 Aid management	Aid and debt relief disbursements not reliable, project approach has caused patchy development neither sustainable nor replicable, & has absorbed capacity in projects at expense of better overall planning & management. Benefits of conditionality experiment are unclear. PRSP is providing framework for better coordination, joint budget support & WB PRSC reviews are based on PRSP performance.	Project approach still dominant in Mozambique & strains limited Govt capacity, donor reporting of spending is weak. Some 40% of aid flows are non-project, mainly budget support, efforts are being made to improve predictability, though Governance concerns still resulted in in-year cuts. Sector wide approaches are being developed in key sectors, though still being supported mainly with project commitments.	Govt has good central co-ordination, development of sector programmes in education, health, roads is judged to have been successful. Govt project implementation rate better than donors', increased aid needs more flexible procedures, including program support for recurrent budget costs in social sectors.
3.5 Impact on poverty outcomes	Limited impact of aid, Govt sustained spending on social sectors & achieved above target immunisation and girls school enrolment in 2001 despite aid shortfalls 2000-01.	Major impact. Aid largely financed the physical reconstruction, underwrote the costs of the transition to peace, including the costs of the successful demobilisation of the armed forces.	Significant improvements in education & to some extent roads from very low basis attributable in large part to aid financed analysis, programme development processes, & investments.

Annex 1: Summary tables of Country Case Studies			
Country	Burkina Faso	Mozambique	Ethiopia
4Future Aid: How much, how long, what impact?			
4.1 Unchanged policies and practices	Aid finances 40% public spending, absorptive capacity using existing project modes is already over-stretched.	GOM plans to reduce aid dependence, assumes lower aid flows in 2010 than in 2001. To achieve this, Mozambique plans rapid increase in tax take that may damage private sector growth, while constraining public expenditure growth to a falling share of GDP despite massive unmet infrastructure and social spending needs. Even with unchanged policies, there is a strong case for at least maintaining aid levels, if necessary making active use of foreign exchange reserves to manage the costs of annual fluctuations.	Good capacity at centre, scope to increase civil service, undoubted needs. PRS assumes public expenditure will grow at nearly 7% pa. If expenditure plans are maintained but GDP grows only at 5%pa (still an acceleration) & assumed increase in revenue:GDP is not achieved (quite likely given past performance and loss of transfers if SOEs are privatised), then the financing gap for aid to the budget would reach $1370mn by 2006-7.
4.2 Specified improvements in Govt & Donor policy and institutions?	Increased support could be justified & well used if highly concessional, & given in predictable, longer term commitments to support of overall budget/PRSP and/or of coordinated sector programmes. Progress in MTEF & overall public sector management at overall & sector level is key to speed of increase in commitments. Aid should not be linked to performance indicators outside BFG power to control.	Increased aid could accelerate the physical integration of the country and help to more rapidly address the low levels of human capital development- but would need to be better planned & coordinated, preferably within the Government budget, with credible longer-term commitments and predictable disbursement schedules to ease macro & budget management. A 50% increase by 2010 would enable Government to maintain a constant share of public expenditure in GDP, or avoid the need for distortionary tax increases, or some combination of the two.	Aid allocation model total of $2.8bn would equal 34% of GDP, would exceed total planned Govt spending in 2004-5, & compares to currently planned poverty spending of 6.7% GDP in 2004-5. Higher spending to reach MDGs is justified, but this increase would imply aid financing 60% public spending, and would need to be sustained for 20 years to avoid a cut in p.c. spending. Speed will need to be linked to institutional reforms and capacity building at local level. A 75% increase in size of Govt & five fold increase in poverty spend will stretch absorptive capacity even if spent on recurrent costs and through budget channels, & risks Dutch disease.

Summary tables of Country Case Studies			
Country	Ghana	DRC	Nigeria
1.1 Aid level & Trends	$32 p.c., 11% of GNI.	$5p.c., 5% of GDP, but projected 20% of GDP 2004-5.	Aid $1.42 p.c., less than 0.5% GDP
1.2. Under (Over) Aided (allocation models)?	A little high. Ghana ranks 15th in Africa as % GNI & in $ p.c., but is 31st poorest on PPP basis, 19th on atlas methodology, poverty % is close to SSA average.	Increase merited if peace secured.	Under allocation given population & per capita income, but--
2. Development Effectiveness			
2.1 Govt Policy	Stabilisation has suffered from election cycles, structural reforms stalled with parastatals in energy imposing significant fiscal burden, weak public expenditure prioritisation & management, growing inequality, serious corruption problems. Govt PRS focus is on growth, but also needs emphasis on improving the poverty focus of spending & tackling the problems of North where poverty has increased.	After 40-year decline, Govt making good progress on stabilisation & structural reforms, but everything depends on peace & on behaviour of new transition Govt of national unity.	Macro instability, misuse of large oil revenues, gross inequality & corruption.
2.2 Recent Public expenditure: Health % GDP Education % GDP	Education 4.1% (2000) Health 0.8% (2000)	Spending very low, services collapsed in many areas.	Spending low, staff irregularly paid.
2.2 MDGs Progress & Prospects	Poverty is falling, but higher growth & focus on the problems of N Ghana needed to achieve the target. NPE has progressed rapidly with declining gender gap, survey estimates say 83% in 98/99, target is feasible but needs attention to constraints on the poorest. Infant mortality is falling, but not fast enough. UN say Ghana should achieve poverty & infant mortality targets others are within reach.	Will not hit MDGs, but prospect of rapid poverty reduction & improvements from appalling situation if peace endures.	Long term increase in poverty, fall in primary enrolment, some improvement in child mortality, unlikely to reach MDGs without major policy & governance improvements.
2.3 Why is aid needed to finance	Massive terms of trade losses, significant domestic debt problem, history of macro instability leave new	Aid can preserve peace by offering early peace bonus,	Nigeria has large oil revenues, likely to increase further in medium term. Main

Summary tables of Country Case Studies			
Country	Ghana	DRC	Nigeria
MDGs?	Government poorly placed to finance public spending or attract private investment- though the case for meeting the needs depends on maintaining macro stability & addressing structural problems.	needed to rebuild country & meet basic needs pending economic growth and revenue being rebuilt. Aid is especially valuable in post-conflict situation.	problem is mismanagement not lack of resources. Modest role for technical assistance.
3. Aid effectiveness			
3.1 Macro-economic impact of aid	Conditional programme aid did support reforms by an ambivalent President in 1980s & turned around the decline & reduced poverty. Gains not consolidated due to election spending pressures, growing corruption, domestic debt. Donor support mainly helped offset shocks, apart from 1999 when both GOG and donors faced budget pressures leading to cuts & debt problems. GOG has consistently adopted over-optimistic aid assumptions in the budget, leading to financing problems. Undiversified economy may be evidence of Dutch disease, Govt spending doubled in 1990s, squeezing private sector.	Disastrous waste of funds in Mobutu years, but dialogue & finance since 2001 has had major impact, macro stabilisation and 1st growth for 13 years, major reforms undertaken with WB/IMF advice.	Too small to have macro impact, though reform programme supported by IMF & WB in 1987-93 had leverage as gateway to debt relief, & achieved poverty reduction & reforms. Reforms & progress in poverty reduction both reversed under subsequent military misrule.
3.2 Policy dialogue	Heavy donor influence in 1980s, more democratic accountability in recent years, policy choices require more consultation & ownership. Good dialogue in sectors has weathered crises, e.g. regional hospital spending.	See above.	Little to show for heavy WB spending on economic and sector work. Donors (e.g. DFID) now work both with Govt at national & state level, & support groups outside Govt to articulate demand for reform.
3.3 Institutional development	Ambitious public sector reform process has stalled due to failure of stabilisation & over ambitious agenda. Good progress in health sector institutional development & financial management, building on long-standing capacity building efforts with donor support, has stalled recently with confusion over MOH/Ghana Health Service roles.	Govt trying to rebuild honest & effective institutions after 40-year history of neglect & corruption, not made easier by loose coalition Govt of previous warring parties.	Little has as yet been achieved in defining a credible programme to develop capacity & improve restraints on corrupt behaviour.

Summary tables of Country Case Studies			
Country	Ghana	DRC	Nigeria
3.4 Aid management	Most aid still in project form, GOG has been poor at making realistic forecasts of likely aid disbursements. Excellent coordination in health sector, less good in other sectors.	Only WB/IMF providing support to Govt & central bank, but need to support recurrent costs as well as reconstruction investment argues for significant budget support-albeit with fiduciary safeguards.	High corruption risk, small scale of aid, much of it at local level or through non-Govt channels argue in favour of continuing project approaches.
3.5 Impact on poverty outcomes	Aid financed imports & policy reforms were a major factor in economic recovery & poverty reduction in the 1980s. Aid played a major role in health & education advances in the 1990s. Weak fiscal management & crowding out of private sector have limited effectiveness in recent years, slowing growth, constraining social spending.	Aid under Mobutu was wasted by rapacious Govt. Peace provides opportunity to achieve rapid progress in reducing misery caused by conflict & long decline.	Good results in 1987-93 reform period but not sustained. WB rated 85% of projects unsustainable.
4Future Aid: How much, how long, what impact?			
4.1 Unchanged policies and practices	Aid should be increased broadly in line with GDP growth, little case for increased aid beyond that unless the Govt maintains fiscal discipline through the next election cycle, leaving room for private investment growth & permitting improved planning & prioritisation of public expenditure to help reach the MDGs.	If peace holds & improved policies maintained, IMF programme envisages aid of $1.4bn, 20% of GDP, 2004-05.	Little reason to believe additional aid is needed by Government given oil wealth, or could achieve much given the policy & institutional environment. Some modest increase in technical assistance and pilot projects might be merited if reforms are implemented.
4.2 Specified improvements in Govt & Donor policy and institutions?	Establishing secure stabilisation is necessary for effective expenditure programmes & renewed efforts at capacity & institution building. Govt also needs to focus more on poverty, especially in the North & other areas where poverty remains high. A 50% increase in aid to around $915 mn by 2006-7 would increase it to 13.5% of GDP, but would only offset part of the terms of trade losses, & would enable domestic debt burden to be addressed.	Up to 30% GDP possible ($2.3bn) if reforms & peace permit major investments in economic infrastructure.	Improved Governance would enable Nigeria to make better use of own resources, might then be a case for increased aid.

Summary tables of Country Case Studies			
Country	Kenya	Tanzania	Madagascar
1.1 Aid level & Trends	Net ODA declined in 1990s to $17/head, less than 3% of GNI.	Fell in real terms & from 16.7% GDP in 95 to 11.3% in 2000, recovered slightly to 13% GDP, $36pc in 2001	Aid flows highly unstable, falling from peaks of 18% of income in 1991 and from 24% (US$ 60 p.c.) in 1997 to 8% or US$ 21 p.c. in 2000.
1.2. Under (Over) Aided (allocation models)?	Under aided.	`$1.2bn in 2001 is close to Dollar & Collier implied level, but far short of DFID which implies $4.4bn.	At an average of 13% over 1990-2000, aid:GNI levels do not classify strictly as high, but poor policy environment is likely to limit rates of return.
2. Development Effectiveness			
2.1 Govt Policy	Weak macro management, continual reversals of policy reforms, severe corruption and governance issues may finally be addressed by new Govt elected on anti corruption policies, & which has concluded PRGF agreement with IMF.	Socialist policies proved disastrous for growth, & aid-supported improvements to basic social services could not be sustained. Hesitant reforms from late 1980s did not stabilise the economy nor tackle structural impediments to growth. Faster pace of reform from 95 has seen return to positive p.c. growth, with macro stability, SOE privatisation, improvements to planning and budgeting.	IFI-supported stabilisation & liberalisation undertaken since 1988, including trade and exchange rate liberalisation and public sector reform. However, privatisation process very slow and direct state involvement in economic activities retained. Political instability and poor macro management and public service delivery in the early 90s led to contraction of economy and deterioration in socio-economic indicators. Between 1996 and 2001, macroeconomic management improved, per capita growth was marginally positive and social sector spending increased. However, the return to political unrest in 2002 caused a severe recession. Corruption is a major problem and Madagascar ranks 98 of 102 countries in Transparency International's 2003 Corruption Perceptions Index.
2.2 Recent Public expenditure:	Health 2.4% Education 6.5%	Health 1.3% Education 2.1%	Spending on education and health as shares of GDP and total spending doubled

Summary tables of Country Case Studies			
Country	Kenya	Tanzania	Madagascar
Health % GDP Education % GDP			over 1995-99. In 1999, education spending was 3% of GDP (18% of total spending) and health spending 1.2% (7.6%). However, total public spending remains inadequate to accomplish necessary improvements.
2.2 MDGs Progress & Prospects	Poverty increased in 1990s, primary enrolment fell due to higher household costs, <5 mortality increased & life expectancy dropped, partly the result of HIV/AIDS prevalence rate of 14% of 15-49 population. Targets might still be achievable if new Govt succeeds in restoring rapid growth & effective services.	Poverty share little changed in 1990s, no improvement in health indicators, significant increase in primary enrolment s. UPE might be achieved, other MDGs not likely to be.	Household survey data show overall poverty incidence increased over 1993-99 from 70 to 71 per cent, although regional performance was varied, increasing in some areas and falling in others. Improved fiscal and monetary policy since 1996 led to positive per capita growth rates and declines in urban poverty, but rural poverty has been unaffected and increased throughout the decade. Trends in poverty are reflected in huge incidence of stunted under-5s (50 per cent). HDI ranks 147 of 174 countries, higher than GDP due to past social sector investment. Primary GER improved from 51 to 68 per cent in 1993-99, with rural-urban disparities narrowing due to greater rural access to schools. However, health indicators are appalling and worsened over the 90s (e.g. child mortality was 164 per 1,000 in 1997 and maternal mortality 488 per 100,000). Access to health care has not improved remaining constrained by large distances to health centres and high user charges. HIV/AIDS prevalence is extremely low for SSA at 0.15% of total population in 1999, reflecting country's island status. Access to services such as water, sanitation, electricity and housing, though

Summary tables of Country Case Studies			
Country	Kenya	Tanzania	Madagascar
			increasing over the decade, remain highly inadequate and inequitable (e.g. total access to drinking water supply at 24% in 1999 - 60% in urban, 10% in rural). Madagascar is highly unlikely to halve poverty by 2015 due to low growth and low transmission of growth to rural areas, which lack basic infrastructure and market access. Other MDGs also unlikely to be achieved.
2.3 Why is aid needed to finance MDGs?	Increased aid will enable Govt to reduce debt burden, raise social spending, maintain support for better policies, improve private sector confidence, and achieve fast progress, as Kenya demonstrated a capacity to do in the 1960s.	Very poor & vulnerable, limited revenue base and weak tax admin will take time to improve, policy and expenditure management has improved a lot since mid 90s, but private investment will not increase significantly until infrastructure & human capital are built, which needs external aid.	Despite abundant natural resource endowments, Madagascar is one of poorest countries in world. Average income declined by a third over 1960-99. Rapid deforestation and environmental degradation have undermined agricultural productivity and damaged infrastructure leading to high maintenance costs. The agricultural economy is vulnerable to adverse weather shocks and commodity price fluctuations, and the textile industry, subject to intense foreign competition, may be adversely hit by the expiration of the Multifibre Agreement in 2005. The tax base remains small at 10 per cent of GDP, and there is a large debt burden, as measured by nominal debt: exports ratio of 450% in 1999, or 108% of GDP. External debt servicing represents over 25% of tax revenue and 3% of GDP. HIPC Completion Point is expected in 2004, following a year's implementation of the PRSP. However, despite Madagascar's evident

Summary tables of Country Case Studies			
Country	Kenya	Tanzania	Madagascar
			needs, recurrent political instability is likely to preclude increases in donor commitments. Contested presidential elections were followed by a deep political crisis in the first half of 2002, in which extensive road blockades by the incumbent president's supporters seriously reduced industrial production and agricultural marketing, causing an estimated 12% contraction in real GDP, low revenue collection and suspension of many investment projects. As a result, there was a sharp rise in poverty. The conflict has been resolved and the new government has committed to advancing the reform programme, particularly in areas of governance. However, Export Processing Zone operators were driven away and the long-term impact on existing and potential foreign investment remains uncertain.
3. Aid effectiveness			
3.1 Macro-economic impact of aid	Stop-go aid relationship and frequent reversals of policies that GOK did not own were major causes of low and erratic economic performance in 1980s-1990s. Care will be needed to avoid real exchange rate appreciation if aid is increased, but there is ample scope for using aid & policy reform to improve the competitive environment through overcoming supply bottlenecks & reducing corruption & regulatory burdens.	Volatile aid has contributed to macro instability, though cash budget of recent years has protected the macro economy at the cost of severe disruption to budget, undermining the credibility of budget processes. Some improvement in budget forecasting recently, & poverty priorities protected from cuts- but at the cost of still more disruption of other spending.	Effectiveness of aid likely to be reduced by instability of flows and low predictability. External budgetary financing was 1% of GDP below commitments in 2001 due to delays in conditionality agreements. However, there does not seem to be any evidence of negative macroeconomic effects of aid. Significant nominal and real exchange rate appreciation between 1999 and 2001 occurred during a period of declining aid flows. IMF analysis and

Summary tables of Country Case Studies			
Country	Kenya	Tanzania	Madagascar
			continued export growth suggest that competitiveness of the economy has not declined.
3.2 Policy dialogue	Confrontational with frequent interruptions, non compliance & reversals in Moi era, but hopes of an improved relationship with new Govt that shares donor Governance concerns- though still risks from parts of the broad 'rainbow coalition' that forms the GOK.	Slow reform progress & loss of macro stability led to programme aid interruption 1992-94. New Govt from 1995 has had productive dialogue on policy & institutional reforms, & better co-ordinated donor support to overall budget, & to sector programmes, helped by improved expenditure management.	Crisis in early 90s in Government-donor relations but dialogue improved from 1996. IMF satisfied with programme implementation in 2001 and with steps taken to improve tax administration and governance in 2002.
3.3 Institutional development	After long period of decline in honesty & effectiveness, new Govt faces a long agenda of privatisation, downsizing, improving accountability transparency & effectiveness, and restoring predictable & impartial justice system & public sector compliance with ethical standards.	Surprisingly high WB CPIA rating of 1 reflects effort rather than attainment, despite e.g. SOE privatisation & improved budget & accountability, many key institutions for delivering Govt services remain weak, corruption is widespread, performance management has made little headway.	Governance is poor with weak transparency and accountability. Corruption control is limited, judiciary lacks credibility and public service delivery deficient, relating to inadequacies in budget planning and monitoring, accounting and internal auditing and poor targeting of programmes. Planning remains donor-driven and policy documents such as the I-PRSP are lacking in areas of prioritisation, costing and monitoring indicators. PRSP process includes participatory component.
3.4 Aid management	Under Moi, aid moved towards non-Govt routes for governance reasons. Kenya scores poorly on project effectiveness, only 3% of projects completed each year, low satisfaction & sustainability ratings. Currently reviewing project portfolio to see which should be retained, which closed. Need for strengthening Govt budget systems by using them, but huge governance risks.	Has been badly affected by too many donors, projects, procedures bypassing the budget- but improving with more funds on budget & better co-ordination of general budget support & joint sector programmes. Open PER process & donor involvement in sector working groups are helping achieve a single plan & expenditure program in core sectors.	PRSP framework should improve co-ordination by identifying priority sectors, medium term resource allocation and monitoring procedures. However, preparation of the PRSP has been slow, partly due to its suspension during the period of instability, and delivery of the final draft has been repeatedly postponed. Projected to reach HIPC Completion Point in 2004, although full PRSP still not delivered

Summary tables of Country Case Studies			
Country	Kenya	Tanzania	Madagascar
			by July 2003.
3.5 Impact on poverty outcomes	Little to show for aid in Moi years, but better prospects if new Govt meets reform expectations.	Tanzania is he classic example that billions of aid poured into a poor policy environment in 1960s had nothing to show for it, unless it impacted on building a nation that has at least been free of internal conflict. Improved policies since 1995 have generated higher growth, with the prospect that poverty reduction will follow.	Aid has financed a large proportion of central government spending (70% on average in 1990-2000), but impact on poverty and social indicators limited, as total public spending at 17% of GDP is inadequate.
4Future Aid: How much, how long, what impact?			
4.1 Unchanged policies and practices	IMF envisage 'base case' scenario with limited economic reform, donor aid $700mn, growth 4.6-4.7% p.a.	Public spending is very low & ineffectual due to dominance of salaries, poor performance management of civil servants, continuing project fragmentation yielding slowly to sector approaches. But massive unmet needs & Tanzania should be able to use at least 20% of GDP in aid by 2007-double current US$ total.	There is a clear lack of domestic ownership of structural reforms, although the Government elected in 2002 has pledged to accelerate efforts in improving governance.
4.2 Specified improvements in Govt & Donor policy and institutions?	High case: economic reform plus aid of $1.5bn by 2007-8 raises economic growth to 6% p.a. Higher levels possible: aid in 1990 peaked at $1.6bn, equivalent in real terms to over $2.5bn by 2007, still less than 20% of GDP.	It is not clear that levels of 30% GDP implied by DFID model would help GOT will to raise revenue & focus on prioritisation, though both are needed if increased aid is to avoid repeating the mistakes of the past. Doubling aid by 2007 is the effective limit if higher per capita spending is to be maintained without increased aid within 20 years.	More transparent administration and budgetary discipline necessary in line with increase in public spending and as signal of political modernisation. Decentralisation of public service provision essential to provide responsiveness to local needs. State needs to accelerate process of curtailing direct economic activity through privatisation, and create administrative and regulatory environment more conducive to private investment.

Summary tables of Country Case Studies			
Country	Bangladesh	Pakistan	Vietnam
1.1 Aid level & Trends	Continuous decline in relative terms, from 8.8% GNI in 1990 to 2.1% in 2001.	Erratic, recent increase to $13 p.c., from 1.2% to over 3% GDP	$11.75p.c., 2.9% GDP, has shown large annual variations.
1.2. Under (Over) Aided (allocation models)?	Grossly under-aided, for a country that has had stable macro economy and steady progress on poverty & social indicators.	Was relatively under aided, now more in line with average.	Under-aided relative to Sub Saharan Africa.
2. Development Effectiveness			
2.1 Govt Policy	Macro stability & some structural reforms have seen 3% p.a. growth in per capita income, but growth could have been far higher with: faster progress in improving infrastructure & banking by reforming/privatising SOEs, higher tax revenues, improved governance & law & order, unlocking potential for higher poverty spending. Govt elected Oct 01 shows signs of renewed commitment to reform process, PRGF agreed.	Long standing under-investment in social sectors, institutions of Govt. have served elite interest groups. Increased aid & debt relief related to support for USA is resolving major fiscal & debt problems. Military Govt since Oct 99 kept to IMF programme, started needed reforms to restore growth, decentralised to elected local Govt to try to improve responsiveness to interests of wider population, introduced programmes to improve accountability. Return to parliamentary Govt with small majority, high risks to speed & sustainability of reform process.	Cautious but continuous transition from centrally planned & state owned economy since 1986, most poverty spending decentralised to provinces. Further reforms needed to create fair & predictable competition, address SOE problems, and improve public expenditure management, including increased help to poorest provinces to improve services without imposing unreasonable burdens of community contributions on the poor. Though corruption is an issue & is being addressed, Vietnam has a good track record of turning increased public spending into improved service delivery.
2.2 Recent Public expenditure: Health % GDP Education % GDP	Health 1.1% Education 2.3%	Health 0.5% GDP Education 1.7% GDP	Education plus health: 5.8%
2.2 MDGs Progress & Prospects	Good progress in reducing poverty & improving social indicators, albeit from a low baseline: If progress were to continue at the levels achieved in	Little or no decline in poverty in 1990s, increased since mid decade. Social indicators are appalling, no progress on primary education, some	Vietnam has made spectacular progress in reducing poverty, due to sustained rapid growth, land reform, and a good record in using increased

Summary tables of Country Case Studies			
Country	Bangladesh	Pakistan	Vietnam
	the 1990s then the extreme poverty goal would be reached - but 16 million would still live on less than $1/day, and 40 million would be below the upper poverty line - universal primary education should be achieved by 2010 - but with grave doubts about its quality - the gender equality goal in primary education has already been reached - but on most other measures of gender equality such as higher secondary education, literacy, labour force participation women will fare worse than men - and child mortality reduction targets would be met. Maternal health and environmental sustainability targets would not be reached (DFID). Environmental sustainability of progress a big concern (salinity, soil erosion, flooding, deforestation).	on health but from v high levels. Social spending very low, previous attempt at donor-Govt compact to increase it failed as debt burden squeezed other spending. IPRSP assumes no significant social spending increase as share of GDP (debt problems).	public spending to deliver improvements in infrastructure and services. All regions and all groups have benefited albeit at different rates, social indicators are excellent given the income level. All MDGs are capable of achievement.
2.3 Why is aid needed to finance MDGs?	Poor country, highly vulnerable, with good track record, needs to increase spending in order to reach MDGs, yet has suffered low & shrinking aid receipts.	Increased aid & debt relief is making higher social spending possible. Needs deep institutional reforms and close monitoring to ensure service delivery improves, policy dialogue & policy lending from IMF/WB/ADB is helping Govt define approaches- though entrenched interests will resist changes.	Additional aid financed investment can boost resources available to Govt. to accelerate the pace of poverty reduction in remote mountain regions, where development is lagging due to poor infrastructure, high costs, & inability to attract private capital.
3. Aid effectiveness			
3.1 Macro-economic impact of aid	Though there are weaknesses in	Pakistan has experienced large	No evidence of problems, increasing

Summary tables of Country Case Studies			
Country	Bangladesh	Pakistan	Vietnam
	performance, the sharp decline in aid does not seem merited, and must have reduced economic growth, limited the improvements in social outcomes, and contributed to the need for expensive domestic debt finance.	variations in aid for political reasons. High indebtedness and low reserves following long standing inability to control fiscal deficits left Pakistan especially vulnerable to interruptions to aid flow, e.g. nuclear test aid sanctions were irrelevant to India, caused financial crisis in Pakistan.	aid offset revenue slowdown caused by Asian crisis. Most aid is in project form, fluctuations in financing matched by expenditure.
3.2 Policy dialogue	Donor judgements on Bangladesh performance seem harsh compared to African equivalents, sharp reduction in aid not merited. Good dialogue with new Government.	In 1990s, frequent Govt changes, vested interests, & problems for federal Govt in getting provinces to cooperate resulted in breakdown of IMF programmes & failure to raise social spending as required by SAP. Since 2000, military Govt has had good record in implementing IMF programme and related WB/ADB policy lending. Fiscal crisis and need to unlock debt relief gave strong incentive to keep on track. As crisis eases and future reforms require approval by parliament in which Govt has small majority, dialogue may get more difficult. Though the IPRSP is a promising start, there has been more progress on the agenda for restoring growth and stability and improving governance than on poverty issues.	Home grown reforms, Vietnam values information on experience of other countries (especially China), but resists formal conditionality, no policy lending 1995-2000. Good dialogue over PRS, 2001 PRSC from WB rewards prior actions.
3.3 Institutional development	Serious Governance concerns, burden of SOEs on growth & budget, & high corruption, but Bangladesh has achieved improved outcomes from public spending. Bangladesh	Past efforts, e.g. the social action programme did not go far enough in changing incentives & power relationships that exclude the disadvantaged. The Govt solution is	WB is leading support for major reforms to public expenditure management, national & local, including introducing medium term budget framework to which sector

Summary tables of Country Case Studies			
Country	Bangladesh	Pakistan	Vietnam
	also has renowned NGOs, operating on large scale & absorbing significant aid & delivering significant outcomes.	to challenge vested interests through devolution to elected local Govts, while continuing the process of privatisation to focus Govt on core functions. Donors are providing technical and financial support across the reform agenda, at national and province level, including planning and budgeting, financial management, the civil service, the reform & privatisation of the power sector institutions, and related institutional issues in social service delivery. High risk that reforms will prove ineffective, or will not get implemented.	programmes can be linked. Vietnam lacks many of the institutions of a market economy, accepts support with analysis and technical design, but will not be pushed on the pace of reforms that require political consensus building.
3.4 Aid management	Mostly project aid, big aid pipeline, disbursement problems. Increased aid requires significant move towards programmatic support, only likely if Government continues reform program in public financial management. New Govt is pruning development budget & seeking better balance between capital and recurrent budget.	Projects were failing in 1990s due to weak policy & Governance environment (one of bottom 25 WB performers). SAP programme, major vehicle for supporting social sectors, did not achieve expected impact. Single tranche adjustment operations have performed better than projects, though sustainability unclear.	Project Management Units within Govt are defined in Government directives as the means of managing aid. Disbursements lag commitments, absorptive capacity issues if expansion depends on PMUs. PRSC provides an alternative model for budget support. Sector programmes are WB policy, not liked by other key donors.
3.5 Impact on poverty outcomes	Much aid in 70s-80s wasted on supporting GOB SOEs, e.g. Dhaka Power, yet little sustainable improvement. But real achievements in agriculture, health, family planning, and micro credit through strong NGO sector.	Few significant benefits to poverty reduction, though some promising innovations in health have helped achieve improved services and outcomes, e.g. lady health workers.	Aid has not focused on poverty; Govt can claim the main credit for major achievements on the MDGs, though supportive role in some sectors.

Summary tables of Country Case Studies			
Country	Bangladesh	Pakistan	Vietnam
4Future Aid: How much, how long, what impact?			
4.1 Unchanged policies and practices	Bangladesh record is by no means bad, little reason why aid should not be built up to the 8.8% of GDP level of 1990- say $6.9bn in 2007-08.	Poverty reduction and social spending in IPRSP was constrained by debt crisis, though recent IMF review shows subsequent increases in resources have been channelled in part to increased social spending. New PRSP will justify the current increase in aid flows, provided additional resources beyond the initial IMF programme are focused on increased social service spending, and provided institutional and Governance reforms are closely monitored for their impact on service delivery and course corrections made as necessary.	PRSG implies aid of $1.8bn p.a. to 2005, compared to recent $1bn or so. With the economy likely to double in size in the next decade, and over 20% of GDP in revenue, higher aid flows would not need to be sustained beyond 10 years or so.
4.2 Specified improvements in Govt & Donor policy and institutions?	Might increase further with determined Govt reform, towards the $9.6bn implied by the DC allocation in table 5.	Massive increase in aid & debt relief has already taken place. How long it should be sustained ought to depend on progress in addressing fiscal and Governance problems, and on evidence that increased resources are being channelled to poverty reduction, and governance constraints on their effectiveness are being tackled.	CPRSG assumes financial contributions from communities that would cause real hardship in remote provinces. There would be a case for going significantly beyond $2bn p.a. with agreement to focus extra resources on the poorer mountain provinces linked to limiting the financing burden on the poor, implementing improved public expenditure management, and addressing maintenance issues. Absorptive capacity constraints require innovations in aid management, disburse via PRSC or

Summary tables of Country Case Studies			
Country	Bangladesh	Pakistan	Vietnam
			some form of budget support to provinces.

Summary tables of Country Case Studies	
Country	India
1.1 Aid level & Trends	$1.65/head.0.35% GDP
1.2. Under (Over) Aided (allocation models)?	Very under aided
2. Development Effectiveness	
2.1 Govt Policy	Large fiscal deficits squeeze growth and reduce social and infrastructure spending. Persistent but sluggish reforms, still a highly protected & subsidised economy, coalition Govts limit bold action. Reform competition between provinces. Inequality falling since independence, poverty falling in all states though rates differ.
2.2 Recent Public expenditure: Health % GDP Education % GDP	Health Education 4% GDP
2.2 MDGs Progress & Prospects	Poverty target on course to be met, but may need fiscal deficit reduction to restore 1990s growth levels. Education, health targets require accelerated progress, Govt plans to increase education spend by 2% of GDP.
2.3 Why is aid needed to finance MDGs?	There are political constraints on ability of GOI to both reduce fiscal deficit and increase spending on MDGs. Aid makes only marginal financial impact at current levels, but a strong case could be made for increasing aid to several times current levels, focusing it on e.g. meeting the education MDGs alongside matching GOI increases.
3. Aid effectiveness	
3.1 Macro-economic impact of aid	Too small to be detectable.
3.2 Policy dialogue	No impact on policy choices at federal level, limited impact at province level, mainly on 'nuts & bolts' design issues.
3.3 Institutional development	Limited impact, even at project level.
3.4 Aid management	Heavy use of PIUs, mainly project approach. Weak monitoring and evaluation, slow response to weaknesses in policy and institutions.
3.5 Impact on poverty outcomes	Some major achievements (green revolution, primary education), many good local impacts, but too infrequently scaled up, and sustainability problems where policy environment is weak.
4Future Aid: How much, how long, what impact?	
4.1 Unchanged policies and practices	Aid is marginal & thinly spread, while much Govt spending at federal and state level is dissipated on poorly targeted subsidies. Though India is under aided, the limited opportunities to influence policies and the likelihood that aid is fungible and contributes to an overall pattern of public spending that is not very efficient makes it difficult to argue for a big increase unless concentrated to achieve specific MDG targets alongside GOI.

Summary tables of Country Case Studies	
Country	India
4.2 Specified improvements in Govt & Donor policy and institutions?	India has 26% of the worlds out of school children. Big increase (3 or 4 times current total aid levels) could be absorbed, focused on a single target (education MDG) and, linked to increased Govt spending on education, would enable India to meet the education MDG. Increase could be reduced as fiscal adjustment enables India to allocate more resources to social sectors- say, phase out from 2010. Increase would need to be very large, focused, and matched to increased GOI contribution.

Annex 2: The problem of Volatile and Uncertain Aid Flows

Summary

This paper reviews the evidence of the volatility of aid flows, and the implications of uncertain aid flows for the economic performance of aid recipients. It finds that: -

- Aid is a highly variable source of finance, far more volatile than domestic revenues. This volatility is most severe in those countries that depend most heavily on aid.
- The variability of aid does not offset the impact of other shocks on the receiving economy, but actually seems to amplify them, increasing in good times, but falling when difficult conditions increase the need for external finance.
- Aid is not only very variable, it is also hard to predict. Donor commitment promises are so unreliable that predictions based simply on past trends are more accurate than those that make use of donor commitments.
- The uncertainty and unpredictability significantly reduces economic growth and the benefits derived from aid.

The paper goes on to discuss how volatile and uncertain aid impacts on the economy and on the Government budget, identifying the mechanisms by which shocks are transmitted to the economy, and the nature of the policy choices facing Government. The final sections make suggestions on actions that could be taken by Governments and their donors to improve aid forecasting, reduce volatility in aid receipts, and manage fluctuations in aid receipts with less cost to economic growth and poverty reduction.

Aid is significant

For many low-income countries, aid has become highly significant. In the year 2000 there were 34 countries in which aid represented more than 8% of gross national income, and 29 countries in which it represented over half of gross investment[69]. Excluding micro states with populations below half a million, Bulir and Hamann's study of aid volatility has 33 countries (from a sample of 72) where aid was equal to more than half the level of domestic revenues[70]. Aid dependency is especially high in sub-Saharan Africa: - in 1990-95, aid to countries in Sub-Saharan Africa averaged half of public expenditure and 71% of gross investment, compared to 20% and 31% respectively in South Asia[71].

Aid is volatile

Bulir and Hamann, with a large sample covering 72 countries, find that aid is subject to far higher annual variance than either total GDP or domestic

[69] World bank, World development Indicators.
[70] Bulir Ales and A. Javier Hamann, 'How volatile and unpredictable are aid flows, and what are the policy implications? IMF Working Paper WP/01/167.
[71] Bulir and Hamann (2001), quoting O'Connell and Soludo, 1999.

revenue. As a percentage of GDP, the variance of aid flows is four times as high as the variance of domestic revenues. For the 33 most aid dependent countries, with aid to revenue ratios of more than 50%, the variance of aid is more than 7 times as high as the variance of domestic revenues[72]. The finding that aid is more volatile than domestic revenue is true for more than 80% of the countries in this high aid dependency group.

Aid amplifies other shocks

The World Bank have argued that the positive impact of aid flows on economic growth may be underestimated in econometric studies if aid acts counter-cyclically, with donors responding to economic crisis by increasing their assistance. If aid acts in this counter-cyclical manner, an apparent association with deteriorating performance would mask the positive impact of increased aid. Unfortunately for this argument, most of the studies that have looked at this issue find that aid does not behave in this way. If anything, aid worsens the impact of external shocks, increasing in good times and being cut when the objective need is greatest[73]. This finding is true not only for the project and programme aid that account for more than 90% of total aid flows, but has also been found for PL 480 food aid, which would be expected to be allocated and disbursed to offset shortfalls in domestic food production[74]. This surprising result confirms that there may be a general pattern behind the many cases in country evaluations where delayed appeals and donor decision lags result in food aid arriving after the need has passed, and sometimes inflicting further harm on local markets.

Bulir and Hamann find that aid is not only mildly pro-cyclical, but that the volatility of aid is higher in countries where revenue is also highly volatile. The countries that suffer most from unstable domestic revenues have their problems compounded by also having the least stable access to aid, with the aid flows tending to accentuate rather than offset the variability in other revenue sources.

There are a number of reasons why aid may tend to be pro-cyclical. A country enjoying good economic performance will find it easier to implement donor conditionality, and will attract willing donors. Conversely, difficult economic circumstances will tend to be associated with aid interruptions while the reform programme is adjusted. Recent proposals to introduce more of an outcome based approach to conditionality risk further reinforcing this tendency.[75]

Aid is unpredictable as well as volatile

[72] The finding that aid is significantly more volatile than domestic revenue in aid dependent countries remains true if spending in US $ per capita is used instead of the ratio to GDP. The authors comment that, of the studies they reviewed, only Collier (1999) found aid to be less volatile than domestic revenue, for a sample of African countries.
[73] Gemmell & McGillivray; Pallage & Robe find grants and TA are pro-cyclical for sub-Saharan Africa; Bulir and Hamann (2001) find aid is mildly pro-cyclical overall. Collier (1999) is again the only study finding evidence of anti-cyclical aid flows.
[74] Barrett 2001, quoted in Bulir and Hamann (2001).

It seems reasonable to assume that variations in aid levels have more serious consequences when they are unexpected. If a Government can make reasonable forecasts of likely future aid levels, it can manage the economy and the budget in order to minimise the negative consequences of large changes in aid from year to year.

Bulir and Hamann compared actual aid disbursements with the predictions made in IMF projections one year in advance; and in the budget presentation at the start of the fiscal year.

Project aid assumptions in the budget were on average 15% higher than the disbursement outturn, partly a result of a tendency to make uncritical use of donor figures. The budget figures were actually less accurate than IMF projections made a year in advance. It is not surprising that project aid projections were over-estimated in both sources, since there are problems of ensuring full coverage of donor managed flows in disbursement data, especially for associated technical cooperation where donors may not disclose their spending. There is also an inevitable and universal tendency towards disbursement optimism.[76] What is far more alarming and surprising is that programme aid disbursements are over-estimated by much larger margins. Both the original IMF projections and the budget figures over-estimate programme disbursements by 30% on average. Countries where their IMF programme went off track received only one third of the expected programme aid on average, but even countries where the programme was implemented without interruption only received 75% on average of the programme aid anticipated in the budget. Of 28 countries receiving programme aid, disbursement shortfalls were experienced in 24, with the average shortfall equalling 42%. Projections of the quarter-by-quarter disbursement profile proved inaccurate by an average of 50% in any quarter.

These shortfalls in aid receipts relative to the budget are equivalent to nearly 2% of GDP, with aid disbursements averaging just 8% of GDP rather than the 9.9% that had been forecast.

A significant cause of over-estimation is the unreliability of donor commitment data. Not only do commitments exceed disbursements by around 20% on average, but the regression analysis by Bulir and Hamman found that commitment data makes no statistically significant contribution to the explanation of subsequent disbursements. Their sample includes several instances where spikes in commitments, following political or policy change, were not followed by any increase in disbursements. Only in one third of countries in the sample does commitment data make a significant contribution to explaining subsequent disbursements, with the significance of commitment data lowest in the most aid dependent countries.

Uncertain, volatile aid has a significant negative impact on growth

[76] The treasury ‘Green Book’ recognises this problem in the UK, and has introduced procedures designed to correct for it.

There are good a priori reasons for expecting highly volatile and unpredictable aid flows to have a serious negative effect on outcomes. Pallage and Robe (2000) say the negative impact of volatility in output on welfare in Sub Saharan Africa is 15-20 times that of the US. This reflects the shallow and incomplete capital and insurance markets, making it far harder for Governments, households and enterprises to smooth shocks.

Lensink and Morrissey attempt to quantify the impact of aid instability on economic growth. They find that the uncertainty of aid receipts has a statistically significant negative effect on economic growth, which is robust across different country groups and across different specifications of the growth equation. The negative effects of uncertainty are significant in scale relative to the positive impact of aid on economic growth: - aid is only found to have a significant positive impact on economic growth after the negative impact of uncertainty is stripped out.

The Lensink and Morrissey study distinguishes between deviations from a simple time trend and deviations from a simple model in which aid in the current year is a lagged function of aid in the two previous years. The variation around the simple time trend is not significant. It is deviations from recent aid experience that yield significant negative impacts on investment and growth. They interpret this to mean that it is not simply the variability of aid that is damaging, but the change from expected levels.

Most attempts to quantify the positive impact of aid flows on economic growth find that the main effect is through the level of investment in the economy. The negative effect of uncertainty appears to occur mainly (though not entirely) by undermining the positive impact that aid would otherwise have had on the level and quality of investment[77]. This occurs not only through the direct effect on Government spending. The World Bank claims that each $1 of IDA spending is associated with an additional $2 in private investment[78]. This results from a range of effects: - improvements in policy, improvements in economic and social infrastructure, and the confidence that stems from policies underwritten by the donors. Morrissey and Lensink find a positive impact on investment only after the effects of uncertainty are allowed for. This is based on a careful study that included comprehensive testing of the stability of the result, and is also intuitively plausible. The studies quoted suggest that aid is large and unpredictable enough to significantly increase the risk and uncertainty facing would be investors trying to anticipate future economic conditions. Governments faced with the loss of 2% of GDP in aid shortfalls will often find investment the easiest component of spending to cut.

Aid uncertainty and management of the macro-economy and the budget

The direct impact of a divergence in aid receipts from expected levels depends on the nature of the link between the aid finance and specific

[77] See Hanson and Tarp (2000) for a comprehensive survey of this literature.
[78] This result is not supported in other studies; see Box 1 of main report.

expenditures, and particularly on whether the aid is intended to finance foreign or local costs. The table sets out the main alternatives. The main points to note from this table are that: -

i. When aid directly provides goods and services from abroad, the impact of unexpected shortfalls is the loss of the benefits that would have resulted from the expenditures. If both the financing and the related expenditure are delayed, there is no macro-economic impact on the balance of payments, budget deficit or domestic inflation, other than relative price changes that might result from short supply of the goods the aid would have provided.
ii. A shortfall in aid not matched by a cut in expenditure will, other things being equal, create a situation of excess demand. If Government takes no action, adjustment will occur through the effects of higher inflation and exchange rate depreciation on real incomes. Alternatively, Government will need to reduce demand pressures through fiscal policy (cutting the budget deficit) or monetary policy (squeezing credit available to the private sector). Gemmell and McGillivray (1998) find that shortfalls in aid are most frequently followed by reductions in Government spending, and sometimes by increases in taxes, or both. Most aid recipients are unable to offset an unexpected non-disbursement of aid by borrowing, and have to resort to costly, inefficient fiscal adjustment. Incomplete adjustment would cause inflation or crowding out of private investment (Hadjimichael 1995). For this reason, IMF programmes often include provision for automatic adjustment of programme targets to sterilise the monetary effects of divergence of aid from programmed levels.
iii. If foreign exchange reserves are high enough, they can be used to offset the effects of temporary divergences of aid receipts from expected levels without requiring macro-economic adjustments, and without damage to growth prospects other than that caused by delays in physical implementation (as opposed to finance).

The main problems with using foreign exchange reserves as a buffer to adjust for unexpected divergences are that poor countries find it costly to build adequate reserves, while it is usually difficult to distinguish between a temporary shortfall and a more fundamental error in forecasting.

The problems of unpredictability of aid flows cause difficulties for the planning and management of the budget in the short, the medium, and the long term:-

- In the short term, Government and the central bank face serious problems in managing the consequences of fluctuations in aid receipts with implications for the ability to implement the budget, the management of the foreign exchange market and the exchange rate, and monetary policy and inflation. The uncertainty impacts on the effectiveness of public expenditure through unpredictable

budget releases, and on the private sector through uncertain access to credit, exchange rate volatility, and inflation.

- In the medium term, the uncertainties over the future level of aid receipts make it difficult for Government to prepare plans with confidence that the funds will be available to implement them effectively. The danger is that funding shortfalls will lead to higher costs, extended implementation periods, and reduced and delayed benefits as cuts fall on those items easiest to cut such as drugs and schoolbooks, while staff continue to be paid but lack the resources to do their jobs.
- In the longer term, Government needs to know the future level of aid and likely timing of any phasing out of aid in order to ensure that the infrastructure that Government builds and the services it intends to provide and finance can be sustained in the longer term.

Type of Aid	Example of Cause of shortfall	Consequences of unplanned shortfall
Foreign expenditure simultaneous with aid financing.	Delayed commitment, or implementation of projects, or of TA where donors manage procurement.	Reduced economic growth, lost benefits, but no impact on budget deficit, exchange rate, and inflation.
Foreign expenditure not simultaneous with aid financing.	Slowness in submitting reimbursement claims, spending ruled ineligible for procurement or other reasons.	If the shortfall cannot be fully covered by reducing foreign exchange reserves, then domestic demand (and hence growth & poverty reduction) will have to be reduced, either through orderly tightening of fiscal and monetary policy, or through inflation and exchange rate depreciation.
Local cost spending more or less simultaneous with aid finance	Slower than expected implementation progress on local cost construction programmes, e.g. rural roads.	If the economy can live with lower forex reserves, then the deflationary bias from lower Govt demand for domestic goods & services needs to be offset by allowing higher growth in private credit. If forex reserves without the expected aid are too low, then the scope for offsetting the net

		reduction in domestic demand will be reduced.
Programme aid not earmarked to specific expenditures	The forecast level of support on which budget plans were prepared does not materialise during the expected time period.	If reduced foreign resources with unchanged domestic demand cannot be fully met through running down forex reserves, then domestic demand must be reduced through fiscal & monetary policy, or will be forced through inflation and exchange rate depreciation.

What can be done?

Action by Donors

Discussions of aid policy in recent years have emphasised the importance of Government policy for achieving aid effectiveness. Imposing conditions on reluctant Governments is regarded as a failed approach[79]. The emphasis is to be on selectively supporting those Governments with a track record of commitment to sound policy. They will be supported with increasingly flexible aid forms, making more use of on-budget programme approaches and less use of earmarked donor driven projects. At the same time, Governance and human rights issues have been given more prominence and have been a cause of interruptions in aid flows, even where formal conditionality was not breached. Given the evidence that programme aid is less reliable than project aid as a source of finance, these trends may have increased the uncertainty to which Governments are exposed. The movement from ex ante conditions that were explicit, towards more general and output focused assessments of progress, makes it harder for Government to know what it must do to secure future funding, while the rhetoric suggests that relatively more aid will be given in programmatic forms that are vulnerable to being switched on or off at short notice.

The evidence discussed above suggests that the priority given to increasing the predictability of aid flows should be increased even if there is some consequent increased risk of disbursing in relatively weak policy environments. The finding that aid is more effective in stronger policy environments is supported by a wealth of project and sectoral evaluation evidence, and receives some support from econometric studies. Dollar and Burnside found evidence of a positive impact of policy on aid effectiveness, but this was not found to be significant by Durbarry et al (1998), Hansen &

[79] Though we agree with the current emphasis on ownership and track record, Section 3.3. of the main report cites some cases where donor conditionality has helped to sustain a reform process which initially had limited ownership.

Tarp 99; or Morrissey & Lensink. The evidence on the effects of uncertainty found by Morrissey and Lensink is suggestive that causality could run the other way, with erratic aid flows in part causing bad policy performance. Countries with predictable aid are better able to achieve good policy and sound macro management. This seems very plausible: The evidence that unpredictable aid flows have strong negative effects does seem to be robust, and it is easy to see that good economic management may be impossible to achieve in the face of a 2% of GDP shortfall in aid flows, at least not without appalling damage to growth prospects through squeezing private investment or Government spending.

Programme aid is particularly important, and ought to be easy to disburse. The causes of shortfalls are presumably related mainly to donor decisions rather than to administrative delays. A number of recommendations can be made for improvements that would improve predictability, without wholly giving up the focus on countries with a reasonable policy environment:

- Agreement to transparent rules on how commitments will be expressed. The commitments given at CG meetings are often deliberately designed to confuse and to flatter the donor, with additionality unclear. It is within the power of donors to move beyond the pointless donor beauty contest, and to impose common standards, and peer reviews of performance at country level to ensure that commitments are exactly that.
- Donors should base their own forecasting of disbursements for all types of aid on historical experience rather than optimistic expectation. This should as far as possible be disaggregated by type of aid. For major expenditures, the assumptions underlying disbursement forecasts should be shared with the ministry of Finance.
- Conditionality should increasingly be applied to future commitments rather than to commitments that have already been announced. The principles (if not always the practice) of the G10 donor group in Mozambique may be worth copying. Commitments for the next budget year are given in principle some 9 months in advance, at the time the Government starts the budget preparation process. Provided the Government reform programme remains on track, the commitments are confirmed when the Government budget is finalised. The intention is that the proposed funding will not then be interrupted so long as the programme remains on track. There has been discussion of making this commitment more secure by asking donors to pay the full amount into a common foreign exchange account at the beginning of the year, to be drawn down according to an agreed schedule as the budget is executed, without further discretionary decision by the donors.
- If donors must for political reasons react to short-term events by imposing aid cuts, limits should be placed on the share of aid that is vulnerable within the budget year. Alternative sanctions might be employed. Some judicious use of earmarking linked to Government commitments to maintain spending on poverty related programmes might be attempted, along the lines of the Uganda poverty action fund.

- If commitments can not in practice be insulated from political pressures, and if payment up front proves infeasible, there is a strong case for making more active use of higher foreign exchange reserves to smooth fluctuations in the level and timing of donor disbursements. This would require donors to be more relaxed in future than they have been in the past at seeing aid added to reserves rather than put to immediate use. The IMF can be asked for advice on the implications of aid volatility for the optimal level of reserves, based on budget management rather than purely balance of payments management considerations. The main problem with this approach is the moral hazard problem that Governments will be tempted to raid the reserves to finance spending above sustainable or prudent levels.
- Debt relief is a form of financing that yields a predictable future stream of 'saved' finance, assuming that relief is given on debts that Government would otherwise have serviced.

Longer term commitments and indications are useful in principle, although it is important to be mindful of the fact that even current year projections made on the eve of the budget have proved wildly inaccurate.

Actions by Government

The key actions that government can take in order to improve aid management include:

Improved Forecasting

- More realistic short-term aid (and domestic revenue) forecasting. Forecasts should be mainly based on past performance rather than future promises. Budget authorities often collude with donors in including unrealistic figures in the budget, in order to evade the need to make difficult choices on budget priorities. The inevitable result is ineffectual spending and macroeconomic problems, as the budget has to be re made during the year. Uganda has been able to improve the realism of short-term aid projections by using donor specific coefficients to adjust commitments to likely disbursement profiles.
- Realistic medium term aid forecasting requires informal indications from donors, since formal commitment figures will tend to underestimate the outer years, due to donors not reporting commitments they have yet to make.
- Reporting of both commitments and disbursements from donors can be improved by consulting donors on the format in which it will be required, ensuring that a single set of reports is asked for at specific points in the year and that donors can see how it is being used.
- Involve the donors throughout the budget preparation and implementation process. Transparency is helpful to building trust, ensures better communication, avoids surprise shortfalls, and may facilitate donors of last resort filling gaps left when promised contributions fail to arrive.
- Although little can be done about informal donor political or Governance conditions, it is important to ensure that formal undertakings are few in number, agreed to be of strategic importance,

and within the political and administrative capacity of Government to implement.

- Make explicit and realistic projections of future growth of domestic and foreign financing in the medium and long term, and base the design of public financed infrastructure and social services on explicit assumptions as to what can be afforded.

Managing Volatility

Governments can manage aid volatility using some combination of adjustments to tax and spending plans, domestic non-monetary financing, or smoothing out the fluctuations using foreign exchange reserves[80]: -

- It is normally quicker to alter spending than revenues, but in-year changes impose high costs of disruption, stretching out implementation periods and raising the costs of investments, reducing the productivity of staff as the operating budgets they need are withheld. Realistic budgets can help, with a margin allowed for contingencies, forecasting of monthly cash flow requirements, regular review of the timing of revenue receipts and implementation of expenditure plans, and identification of 'core expenditures' to ensure that any cuts that become necessary are focused on lower priorities. This is not a costless option: all spending programmes initially included in the budget presumably generate benefits, and protecting the highest priorities implies deeper cuts for all other programmes.
- Reliance on domestic bond financing has limitations in the thin capital markets of most developing countries, with dangers of squeezing out private investment and pushing up interest rates.
- The main constraints on building and using foreign exchange reserves to smooth fluctuating aid receipts are firstly that they tie up resources that might be put to more productive use, and secondly the usual problem of distinguishing volatility of aid receipts from a longer-term decline that needs to be adjusted to. Most IMF programmes include automatic adjusters to allow countries to maintain quarterly spending plans by drawing on reserves if aid receipts fall short in a given quarter, but with subsequent review of the targets to ascertain if the reduction is likely to be permanent.

[80] See Bulir and Lane (2002) for a fuller discussion.

Annex 3: Criteria for Increasing Aid Flows[81]

A note on Criteria for Assessing the Case for Overseas Aid

The Problem

The substantial literature which has been developed on the appraisal of aid projects since the 1960s has focused on how to make the most efficient use of a given volume of investment funds[82]. It has developed formal criteria related to maximising the welfare of the recipient population. There have been debates on whether the most appropriate discount rate should be based on opportunity cost of capital or on social time preference. There have been attempts to introduce income weights or other approaches to weighting benefits in favour of specific target groups[83]. However, there has been no attempt to link the investment criteria that the donor uses for domestic expenditure to the decision criteria relevant to the appraisal of foreign aid. This note is a first cut at developing some decision rules for foreign aid that enable comparison to be made with alternative uses of the funds within the donor economy. It also aims to develop some principles that can be useful in appraising the future time profile of development assistance. This is especially relevant in the context of discussions of the proposed International Finance Facility, which envisages tapping international capital markets to increase development assistance today, at the expense of lower aid in future when the donors have to repay the borrowing[84].

The Rationale for Aid

There are many potential rationales for providing aid, from naked self interest (promote commercial or political interests) to pure altruism (the reduction of poverty as its own reward). The present note is relevant only to those justifications for aid that are essentially altruistic, though the rationale may be linked to a form of enlightened self-interest that recognises that a world with less absolute poverty is likely to provide a safer, more stable environment with more opportunities for all of the world's population.

An altruistic rationale for reducing poverty within the UK is explicit in the HMT guidance on economic appraisal (the Green Book)[85]. This argues that the value that should be placed on an extra £1 of consumption falls as income

[81] A version of this paper appeared in Development Policy Review, Volume 21, Number 3. Copyright, 2003, Overseas Development Institute.
[82] The standard work for many years was Little, IMD and Mirlees JA (1974), Project Appraisal and Planning for the Developing Countries. London: Heinemann Educational Books. This is a substantially revised version of their Manual of Industrial project Analysis (OECD, 1969). Little and Mirlees revisited their earlier work in 'The costs and benefits of analysis: project appraisal and planning twenty years on' in R Layard and S Glaister (eds), Cost Benefit Analysis, 2nd ed, Cambridge University press.
[83] Squire Lyn and Van der Tak, Herman (1975), Economic Analysis of projects, World Bank Research Publication, Johns Hopkins University press.
[84] HM Treasury and department for International development (2003), International Finance facility.
[85] HMTreasury (2003), The green Book, Appraisal and evaluation in Central Government

rises, and uses this as the rationale for giving higher weight to the valuation of benefits to today's poor than today's rich, as well as giving lower weight to benefits to future generations, mainly on the argument that they will be richer than people alive today. However, HMT also apply a second principle of inter-generational equity. This argues that the present generation does not have the right to increase current consumption at the expense of future consumption. This is the rationale for HMTs principle that, over the economic cycle, Government should only borrow to invest, not to fund current consumption.

If we extend to overseas aid the principle of inter-generational equity and the assumption that £1 means more to a poor person than a rich one, then two important and useful conclusions follow: -

i. Borrowing against future donor income in order to increase the current consumption of the world's poor is not consistent with these principles, and should not be undertaken, but
ii. It is entirely consistent with both principles to borrow against future donor income if the funds are invested to reduce the future level and incidence of poverty.

The first conclusion follows from the principle of inter-generational equity, especially if we also assume that the extent to which donor countries value the welfare of poor communities diminishes with geographical and cultural distance- and with distance in time. If the present Government does not find it worthwhile to further tax the current population in order to raise the consumption of today's poor, then it has little justification for placing the burden on future generations who are removed in time from the interests of today's poor. The principle of inter-generational equity is not respected.

However, an argument can be made for borrowing in order to invest in sustainable poverty reduction. This benefits the future populations of donor countries to the extent that they continue to regard themselves as better off if there is less poverty in the world in which they live.

Decision rules: valuing benefits and costs of increased aid

The usual decision rule for deciding if public expenditure is justified is that it should yield positive net benefits when discounted at the appropriate rate for comparing current benefits and costs with those occurring in the future.

The decision on whether or not to make foreign aid available is made by the donor Government. In principle, the relevant criteria are the benefits and costs from the perspective of the donor, but in practice this could only be applied by making some explicit assumptions as to the value which the donor country places on £1 of benefits to target groups in poor countries relative to the cost of £1 of taxes paid by citizens of the donor country. This is a value judgement rather than an empirical question. There are two offsetting factors: - an extra £1 is worth more to a poor person than a rich one, but the value placed on that person's welfare by the rich donor diminishes with 'distance.'

Comparisons between donor countries suggest that the value placed on the welfare of the non-national poor is much higher in Scandinavian countries than in the USA, with the UK somewhere in between. The experience of appeals and response to reports of natural disasters suggest that the value can be increased with increased knowledge of the plight of the poor, effectively reducing the perceived 'distance.'

Paul Collier and David Dollar have recently suggested that the weight that donors place on benefits to recipients of foreign aid can be inferred from past budget levels and available evidence on aid effectiveness[86]. Collier and Dollar suggest that, if donors place a given value on removing one person from poverty, then changes that reduce the cost of achieving this should call forth a higher volume of aid, since the benefit to the donor will now exceed the marginal cost. If aid becomes more cost-effective at reducing poverty, for example as a result of improved policies, or improved allocation of aid to favour poor countries with good management, Ministries of Finance ought to respond by increasing the aid budget. This insight is very useful, but has limitations: to the extent that aid is motivated by other objectives, including political or commercial objectives or greater concern for those countries perceived as having most affinity with the donor even if less poor, the values placed on poverty reduction will differ by country, and the optimal allocation may not imply more aid. Indeed, the assumption they make in quantifying the marginal benefit of aid recognises the bias in aid towards small countries as one of the factors that lead donors to attach different weights to the welfare of equally poor people living in different countries. If not all poverty reduction is equally valued, then a more poverty efficient allocation of aid may fail to produce more valuable results when the poverty reduction in different countries is weighted by the weights that reflect the implicit values of the donors.

It may also be unwise to infer that past aid levels reflected the value that donors place on poverty reduction goals. Attempts to explain past allocation have generally found that geopolitical factors dominate, a point that Collier and Dollar recognise. It is widely believed that the end of the cold war has enabled development goals to become a more important factor in aid allocation, with strong emphasis now being placed on achieving the millennium development goals and on supporting Government poverty reduction strategies. However, the end of the cold war has also seen a sharp decline in aid spending, which has fallen by 17% between 1990 and 2000 (from $64bn to $53bn). This may suggest that a downward adjustment to aid levels has been taking place in response to the reduced importance of strategic objectives for providing aid[87]. The commitments to increase aid that the US and the EU made at Monterrey may suggest that this adjustment is now complete.

[86] Collier Paul and David Dollar (2002), Can the World Cut Poverty in Half? How policy reform and effective aid can meet the International Development Goals. World Bank, Development research group.
[87] Barthelemy Jean-Claude and Ariane Tichit (2002), Bilateral donors' aid allocation decisions: A three dimensional panel analysis TEAM, University of Paris, July

Even without estimating the weight that should be placed on the welfare of poor recipients, it is possible to derive some necessary (but not sufficient) conditions that the case for aid must satisfy.

A minimum criterion that must be met is that the test discount rate used for assessing the case for additional aid must not be less than the test discount rate used by the donor country for domestic spending. A numerical example can illustrate this. Suppose that the donor country uses a rate of 5%, but the aid investment yields only 3%. The donor test discount rate implies that the donor is indifferent between giving the recipient £100 this year or £105 next year. But an aid investment of £100 this year will only yield £103 next year. Both donor and recipient would be £1 better off if the aid investment is not made but the donor gives the recipient £104 in year 2. If the aid yields less than the donor's test discount rate, it will always be possible to negotiate an alternative to the aid investment that leaves both parties better off. It does not matter whether the donor test discount rate is based on social time preference or on opportunity cost.

It also does not matter if the recipient consumes or invests the aid, since the lower STPR implies that the recipient will choose to consume £104 in year 2 rather than £100 in year 1, and the aid should therefore be deferred. If the argument is taken to its logical conclusion, a formal case for aid can only exist when the STPR of the donor is lower than that of the recipient. If this condition is breached, both parties will always be able to agree a level of aid in year t+1 which both of them prefer to any level of aid in year t. Another way of looking at the same point is to argue that the recipient country would be better off investing in donor country treasury bills rather than either consuming or investing aid domestically.

In practice, both the social time preference rate and the opportunity cost of capital are likely to be higher in most developing countries. The opportunities for technology catch up and low level of existing infrastructure should imply higher returns to investment, while faster growth prospects, shorter life expectancy and greater uncertainty imply high social time discount rates. (See Box).

We can also show that aid investments must yield a rate of return at least equal to the relevant social time preference rate in the recipient country, with investment understood to include all expenditures that result in sustainable increases in future welfare, including for example recurrent spending on health and education that raises the productive potential of the economy and reduces future poverty. If the aid does not yield a positive net return at the STPR, the present value of the aid is higher if it is simply consumed. We have previously argued that increased aid financed by borrowing against future aid is only justified if it is invested in future poverty reduction rather than consumed. We can therefore conclude that such aid is only justified if the marginal return exceeds the STPR in the recipient countries.

Box: Social Time Preference Rates in Low-income countries: A rough estimate

We have not found a good source of analysis on social time preference rates in developing countries. There is also some controversy in the literature as to whether future improvements in well being such as improved health outcomes should be discounted at all, though discount rates of 3-5% are commonly applied (for example, the World Bank discounts health benefits by 3% per annum, while Arrelano[88] et al quote a time preference parameter of 0.95-equivalent to a 5% discount rate-as 'a standard value ' for developing countries). The World Bank uses a discount rate of 10% in appraising project investments, but this rate is based on an opportunity cost of capital concept rather than on social time preference. It is higher than most plausible estimates of the social time preference rate, reflecting capital market imperfections.

We have therefore made a crude estimate based on adjusting the formula used for deriving the discount rate in the UK Treasury Green Book. The HMT formula approximates to: -

R=A+BG

R is the discount rate, A represents pure time preference (composed of lower benefits attached to the welfare of future generations plus the risk that individuals will not survive or will be too ill to enjoy future benefits), G represents future growth of per capita income, and B represents declining marginal utility, the concept that an extra dollar of benefits means less to a wealthy person than to a poor one. HMT propose to set R at 3.5%, based on an estimated pure time preference rate of 1.5% in the UK, per capita income growth assumed to be 2%, and B set at 1, implying that benefits worth £1 to a person on average income are worth half that to someone on twice average income.

Adjusting A pro rata for the difference in rich country and African life expectancy, and assuming per capita growth in low income countries of around 4% per annum (broadly the level required to achieve the poverty reduction goal), the relevant discount rate would be of the order of 6-7% p.a. This is on the high side if applied to all developing countries, since the difference in life expectancy is far lower in non-African low-income countries, whereas the economic growth assumption is optimistic for many countries.

We conclude that the minimum **necessary** rate of return on additional aid expenditure is likely to be in the region of 6%.

[88] Arellano Christina, Ales Bulir, Timothy lane, Leslie Lipschitz, (2002), Aid and Tradable Goods in Aid Dependent Countries (September)

Finally, we should consider the relevance of the opportunity cost of capital. The opportunity cost of capital is commonly used in LDCs as a clearing device. The aim is to set the opportunity cost of capital at a level that just exhausts the supply of investment funds, allocating the available funding to the projects with expected rates of return higher than the test discount rate set by the opportunity cost of capital. This approach is not ideal, not least because it will tend to excessively favour projects with early benefits but deferred costs, and can lead to excessive depletion of environmental resources. If the opportunity cost of capital is above the STPR, it is an indication that there are more good projects available than funds to implement them, and is an indicator of a strong case for additional expenditure-assuming (optimistically) that the calculated net benefits can be realised in practice. Conversely, if the marginal projects were earning returns below the STPR, this would be an indication that public investment is too high relative to current absorptive capacity. The opportunity cost concept is not an independent criterion for assessing the case for aid, but when looked at alongside the STPR it may be useful as an indicator of the extent and direction of market failure in capital markets and as an indicator of the scope to productively absorb additional capital flows.

Conclusion: proposed decision rules for donors

From the point of view of the donor, this discussion enables us to propose the following decision rules: -

- A minimum test for any aid expenditure is that it must yield positive returns when evaluated at the test discount rate used by the donor for domestic spending.
- Aid investments in developing countries are only justified if they also yield positive net present value when evaluated at the social time preference rate for the recipient country.
- The principle of inter-generational equity requires that any aid financed by borrowing against future Government spending should be used for investment, and therefore must achieve positive NPV at the recipient country's STPR.
- Although it is a necessary condition that additional aid should achieve positive net present value when evaluated at the higher of the donor test discount rate and the recipient STPR, it is not a sufficient condition for concluding that the case for aid has been made. A further adjustment is needed to reflect the weight that donor countries place on improvements to the welfare of beneficiaries in the recipient country, relative to the opportunity cost of the alternative use of the funds in the donor country. The weight given to a £1 increase in the income of a poor recipient could either be higher than the equivalent cost (because the recipient is poorer and values the increase more) or lower (because the donor places a low value on the welfare of the recipient relative to their own citizens), but there is no reason to assume it will be the same. However, quantifying the relevant weights is difficult. The responses to

NGO appeals suggest that knowledge is a major factor influencing these weights, and the problems of information failure make it impossible to place much weight on formal techniques such as contingent valuation for quantifying them.

- However, if poverty reduction is now the central goal of donor spending, it follows that other things being equal aid budgets should increase (decrease) in response to changes that increase (decrease) the contribution that each £1 of aid makes to poverty.

Policy Implications

The test discount rate used in the donor's home country is relevant to aid decisions, and aid should not be given in support of projects yielding a rate of return less than this, nor for consumption support to countries with a lower social time preference rate. The balance of evidence from cross-country econometric studies, and from project evaluations, suggests that the returns from aid are on average substantially higher than any plausible estimates of the relevant social time preference rates, of the order of 20% rather than the 5-8% commonly estimated for STPRs in low income countries[89]. The minimum conditions for increasing aid are met on average, though substantial increases would eventually face diminishing returns.

There could be policy implications for allocation of aid between countries. It is possible to envisage countries where the returns to aid sink below the minimum levels, either because of poor investment opportunities relative to the funds available, or because of a weak policy and institutional environment. The criteria proposed are unlikely to be binding constraints on most countries, but could be relevant to high-aid, low absorptive capacity countries, in particular providing a more rigorous basis for challenging small-country bias which has on occasion resulted in aid levels at which marginal investment returns are below those available on domestic projects in the donor country. It may also be helpful in informing the debate on selectivity of aid, providing a floor for making decisions on when the policy and institutional environment is so poor that development aid should be cut- while making clear that the higher social time preference rate implies there can still be a case for humanitarian support.

One policy implication of this note is that it helps us to distinguish the implications of diminishing returns to aid for proposals on how to finance and use the large increase in aid flows to which donors committed themselves at Monterrey. Specifically, there are two opposing ideas in the literature: -

- The UK Government has argued that the urgency of poverty reduction in developing countries argues in favour of borrowing against future aid

89 **For cross-country evidence see Hansen, Henrik and Finn Tarp (2000), Aid Effectiveness Disputed. (Chapter 4 of Foreign Aid and Development: Lessons Learnt and Directions for the Future. London, Routledge.) For project evaluation evidence, Isham Jonathan and David Kaufman (1998), The forgotten rationale for policy reform: the productivity of investment projects.**

flows in order to increase aid expenditure today at the cost of lower future aid as the funds are repaid.

- Heller and Gupta have argued the opposite, that donors should put funds in trust today in order to finance increased aid in future when absorptive capacity allows[90].

The former proposal yields positive net benefits if returns exceed social time preference rates in the recipient, exceed the unadjusted donor test discount rate, and exceed the donor test discount rate after adjusting the benefits for the weight the donor places on the poverty reduction achieved. The IFF proposal to borrow against future donor aid can be justified for investment purposes (in the widest sense that includes expenditures that improve future health and education), but not for humanitarian aid or current consumption. It is the marginal benefits available in the countries in which aid would increase that need to be the focus of attention in deciding how any increase should be allocated.

The Heller and Gupta proposal is intended to be relevant to circumstances where increased aid in the short term leaves the recipient countries so awash with funds that they are better off investing in the donor country than either consuming or investing the resources in the domestic economy. It assumes that the donor is able to invest the funds to achieve a return higher than the donor social time preference rate. However, even in these circumstances, it will not be the preferred option. If the donor has the lower rate of social time preference, as we have suggested would normally be the case, the present value of the future returns to any investment in the donor country will always be worth more to the donor than to the recipient. Another numerical example can illustrate this. Imagine that the donor investments yield 5%, the donor has a 0% time preference rate and the recipient a 5% time preference rate. The recipient is indifferent between £100 this year and £105 next year, but the donor would pay any price up to £105 now in order to avoid paying £105 next year. Both parties will always be able to negotiate a mutually preferred bargain in which aid transfers are funded from current income. The Heller proposal is only preferred if the donors have a higher rate of time preference than the recipients, but high levels of poverty and deprivation make that most unlikely to be true. If absorptive capacity does not permit aid to be productively used, there is no case for paying in advance of need[91].

The important policy conclusion from this discussion is that the speed of any increase in aid flows needs to be moderated by absorptive capacity, to ensure that marginal returns do not sink below the minimum thresholds we have derived. This need not be a constraint on raising aid budgets, but might imply an increased focus on populous and under-aided countries such as India, in order to enable rapidly increased budgets to have maximum effect on poverty reduction.

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[90] Heller, Peter S, and Sanjeev Gupta (2002), Challenges in expanding development assistance, IMF policy discussion paper, PDP/02/5.

[91] This is not an argument against building sound levels of reserves against shocks, nor is it an argument against pre-funding aimed at reducing the impact of shocks caused by erratic aid flows: both are very necessary.

This argument, which is not new in the discounting literature (it has been drummed in to successive generations of DFID economists since the 1970s) provides an objection not just to the Heller proposal, but to all forms of support through foundations and other financing arrangements that involve paying in advance of need. The main justification for such arrangements is a pragmatic one, recognising that the dangers of an uncertain future income for the foundation outweigh the theoretical reduction in the present value of the costs. It would be difficult to sustain such an argument for a general increase in global aid flows.

The final point to make is that there is good empirical evidence and good a priori reasons to believe that aid has become more efficient at reducing poverty as a result of improved policies in developing countries, improved allocation of donor aid towards poor and better managed countries, improvements in donor procedures aimed at supporting Government policies and institutions rather than bypassing and undermining them[92]. The insight by Collier and Dollar suggests that Governments and donor agencies could use increases in the poverty efficiency of aid spending to argue the case for increased aid- and should publicise the returns being achieved in order to increase the weight that donor country populations place on poverty reduction.

[92] Goldin Ian, Halsey Rogers and Nicholas Stern (2002), The role and effectiveness of development assistance Lessons from World Bank experience