

### Human Development Report **2005**

Human Development Report Office OCCASIONAL PAPER

# Assessing rhetoric and reality in the predictability of aid

Vargas Hill, Ruth. 2005.



## Assessing rhetoric and reality in the predictability and volatility of aid

Ruth Vargas Hill University of Oxford

30<sup>th</sup> November 2004

#### 1 Introduction

Life is subject to all kinds of fluctuations. Some of these fluctuations are predictable while others occur in a way that cannot be predicted. All human societies have developed ways of mitigating the effects of these fluctuations - predictable or not - on the welfare of their members. Societies vary at how well they can do this, but moreover, they vary in the extent, frequency, and severity of fluctuations realised. Fluctuations in well-being are more prevalent in the third world than in developed economies. High health and income risk is part of life – high incidence of disease (such as HIV / AIDs and malaria), climatic risks, economic fluctuations and the presence of conflict make households in developing countries vulnerable to serious hardship.

Figure 1.1 shows output in sub-Saharan Africa is volatile. Pallage and Robe (2001) calculate that output fluctuations in African countries are about six times more severe than output fluctuations in developed countries. Volatility of output is a characteristic of less developed countries for various reasons: there is a larger degree of climatic instability affecting rural livelihoods on which much economic activity is focused; many LDCs depend heavily on the exports of a small number of primary commodities for which markets are extremely volatile - fluctuations in the price or output of these primary products represent massive macroeconomic shocks affecting the entire economy; the main sectors of the economy are highly covariate, and there is a greater tendency for conflict. Limited access to external financial markets and domestic financial market imperfections severely limit government options for dealing with fluctuations whilst weak social programmes constrained by small budgets limit the extent to which these fluctuations affect individual well-being.



#### Figure 1.1: Volatility of GDP, sub-Saharan Africa and OECD aggregates, 1962 – 2002

Developing countries are also recipients of aid flows. Total official flows (aid and debt financing) are 38% of total net capital inflows in Latin America and the Caribbean, 1% of inflows in South Asia and a staggering 74% of total net capital inflows in sub-Saharan Africa (Global Development Finance 2004). For sub-Saharan Africa Official Development Assistance (ODA) comprises 90% of net external flows received by governments.

For many low income countries aid is also a large share of economic output. In Africa the average fraction of net ODA receipts to GDP is 12.5% and the median is 10.3%. In developing countries outside of Africa aid is less important, on average 4% of GDP (Pallage and Robe 2001). For some of the poorest countries in the world ODA was a fifth of GNI in 2002 (Malawi, Ethiopia, the Democratic Republic of Congo, Rwanda), whilst for others ODA as a share of GNI is even higher – in Sierra Leone it is 46.6% and in Mozambique, 55.4%<sup>1</sup>.

This paper examines the question of how these significant financial flows of ODA affect the stability of least developed countries. It will look at the extent to which aid flows themselves fluctuate; whether aid flows are neutral to the output fluctuations so many of these countries experience; and whether changes in aid flows fluctuate in a predictable or unpredictable way. The implications of the nature of aid flows will be considered and policy suggestions to make sure the flows are more effective will be outlined. The paper will proceed as follows: section 2 sets out the reality and rhetoric on the volatility of aid flows; section 3 considers some of the costs of the stylized facts established in section2; section 4 considers some of the reasons for the volatility of aid flows, in particular the relationship between volatility and conditionality; section 5 presents four case studies; and section 6 concludes with policy implications.

<sup>&</sup>lt;sup>1</sup> Unless otherwise stated all figures reported are for 2002 and are from the OECD Development Assistance Committee Database.

#### 2 Reality and Rhetoric

#### 2.1 Rhetoric: Importance of Stability

Economic stability is important for ensuring development and this has been recognized in recent statements by the donor community. In the Monterrey consensus the donor community recognizes the importance of the stability of financial flows to developing countries and the problems caused by economic fluctuations. The consensus states:

"We recognize the need to pursue sound macroeconomic policies aimed at sustaining high rates of economic growth, full employment, poverty eradication, price stability and sustainable fiscal and external balances to ensure that the benefits of growth reach all people, especially the poor."

The onus on ensuring economic stability and the stability of financial flows is placed on the recipient country government and the private sector as the following two quotes from the Monterrey consensus show.

"Governments should attach priority to avoiding inflationary distortions and abrupt economic fluctuations that negatively affect income distribution and resource allocation."

*"While Governments provide the framework for their operation, businesses, for their part, are expected to engage as reliable and consistent partners in the development process."* 

And the emphasis is on the stability of private financial flows rather than the stability of public financial flows in the form of aid:

"We underscore the need to sustain sufficient and stable private financial flows to developing countries and countries with economies in transition. It is important to promote measures in source and destination countries to improve transparency and the information about financial flows. Measures that mitigate the impact of excessive volatility of short-term capital flows are important and must be considered.

"Strong coordination of macroeconomic policies among the leading industrial countries is critical to greater global stability and reduced exchange rate volatility, which are essential to economic growth as well as for enhanced and predictable financial flows to developing countries and countries with economies in transition."

However an important part of financial flows to developing countries, especially least developed countries are public financial flows in the form of ODA and the stability of financial flows that is stressed in the Monterrey agreement cannot be achieved without ensuring the stability of aid flows.

The only reference to the stability of aid flows made in the Monterrey consensus was with regard to the predictability of aid flows:

"Recipient and donor countries, as well as international institutions, should strive to make ODA more effective. In particular, there is a need for the multilateral and bilateral financial and development institutions to intensify efforts to ... promote the use of the most suitable aid delivery instruments that are responsive to the needs of developing countries and to the need for resource predictability, including budget support mechanisms, where appropriate, and in a fully consultative manner" The Brussels Programme of Action for the Least Developed Countries (LDCs) (2001) addressed the need for effective aid flows and also the need for financial and economic stability, both domestically and internationally, to promote the development necessary to achieve the targets set out in the Millennium Development Goals. The document recognized the vulnerability of LDC economies to external shocks and suggested policies for both LDC governments and development partners to mitigate the economic fluctuations.

The document states:

"The LDCs are structurally more exposed than most other developing countries to external economic shocks. LDCs also suffer the consequences of major global and regional economic and financial disturbances and increases in the prices of critical imports such as energy products. The typical export dominance of a single commodity or service sector makes their economies particularly vulnerable to adverse physical or economic shocks."

Actions by LDC governments that pursue "balanced policies that seek to limit transmission of external shocks into the domestic economy", develop safety nets to protect the poor against external shocks, encourage diversification in economic activities, and strengthen domestic financial systems were advocated and the following recommendations made to development partners:

*"Pursuing policies that aim at minimizing the risks of adverse external economic shocks and promoting a more predictable and stable international economic environment"* 

"Continuing to provide contingency and short-term emergency financial assistance, including balance-of-payments support through appropriate institutions, with a view to assisting LDCs to cope with the consequences of serious external shocks"

The last point is the place in which the role of external financial assistance in contributing to economic volatility is highlighted.

#### 2.2 Reality: Aid is Volatile

Given aid is such a large share of GDP and financial flows to the least developed, and given the recognition by the donor community of the need for economic stability to foster human development, it is surprising to find aid itself is highly volatile. Figures 2.1 and 2.2 show the percentage deviation in net aid receipts and the percentage deviation in GDP for sub-Saharan African countries. Figure 2.1 compares aid receipts to sub-Saharan African GDP and figure 2.2 compares aid receipts to OECD GDP. As can be seen from both figures aid is much more volatile that GDP. Aid fluctuates as much as 30% from a trended average, whilst GDP fluctuates less than 10% from a trended average. The comparison between aid and GDP in OECD countries is even more striking because GDP in OECD countries fluctuates less than GDP in sub-Saharan African countries. A shorter time period of data is available for the group of Least Developed Countries, but the same phenomenon is observed with aid fluctuations nearly reaching as high as 40% and GDP fluctuations lower than 10% (see figure 2.3).

Putting this volatility into numbers, the coefficient of variation of net aid disbursements to sub-Saharan Africa (allowing for a time-trend) is 0.21 – five times more volatile than the GDP of sub-Saharan Africa which has a coefficient of variation of 0.04, and seven times

more volatile than the GDP of OECD countries which has a coefficient of variation of 0.03.

A comparison of government receipts of aid and tax revenue in figure 2.4 shows that aid is a more volatile source of government financing than tax receipts, despite the volatility of tax receipts for sub-Saharan African countries. In fact variation in aid receipts is twice the variation in tax revenue receipts. Bulir and Hamman find that the volatility of aid is higher than the volatility of revenue for between 30 and 50 percent of the 72 developing countries in their sample (depending on whether aid and revenue are measured per capita or as a percentage of GDP respectively).

There are a number of reasons why aid might change from year to year. One reason might be that a country's economy is performing well which means their need for aid is falling over time. The aid going to this country might be reduced over time because of this. This is an example of an anticipated change in aid but changes in aid can also be unanticipated. For example if a country receiving aid suddenly experiences a natural disaster such as Hurricane Ivan in Grenada in 2004 or a famine such as in Ethiopia in 1984, the aid received by that country may experience an unanticipated increase. Sudden unexpected shortfalls in aid can also occur – for example if the recipient country and the donor community disagree about whether conditions for aid disbursement are met and as a result aid is withheld. We will now turn to look at whether changes in aid are expected, or whether the volatility of aid reveals an inherent uncertainty about aid flows on behalf of donor countries.



#### Figure 2.1:Volatility of Aid and GDP, sub-Saharan Africa 1960 – 2002





Figure 2.3: Volatility of Aid and GDP, LDCs 1982 – 2002





#### Figure 2.4: Volatility of Aid and Tax Revenue, sub-Saharan Africa 1960 – 2002

#### 2.3 Reality: Aid is Unpredictable

One way of determining whether aid changes in a way that is expected or not is to look at whether aid commitments made by donors are a good indication of the aid received. Aid commitments tend to be used in budgetary exercises in recipient countries mainly as a result of pressure from donors (Bulir and Hamman 2001), so it is important to look at whether aid commitments are a good indication of aid receipts. Even if a recipient country knows commitments made by donor countries are poor predictions of aid receipts there is still a cost to the poor predictive power of commitments in that a recipient country is forced to act on the predictions commitments make. Figure 2.5 shows that on average for sub-Saharan Africa the difference between commitments and disbursements can be as much as +/-20% of commitments and that on average over the period 1975 – 2002 disbursements were less than commitments by 4.9%.



Figure 2.5: Unpredictability of Aid sub-Saharan Africa 1975 – 2002

In their study of the volatility and predictability of aid flows, Bulir and Hamman find commitments systematically exceed disbursements (this was more pronounced for programme support than for project support: project aid was on average 94.9% and programme aid 68.5% of expected disbursement) and aid cannot be predicted reliably on the basis of commitments. They also found several episodes of spikes in commitments that were not generally followed by increased disbursement. They explained the spikes in commitments as coming from two reasons, one was a result of a positive change in recipient country and the other as a result of an unforeseen balance of payments crisis. Whilst in the second case increases in commitments were followed by increased disbursements. Examples of the first case are the Central African Republic following the end of Bokassa's regime in the early 1990s and the end of the civil war in Mozambigue in the mid-1990s.

A simple econometric analysis of the ability of aid commitments to predict aid disbursements was carried out. Because both series are non-stationary changes in aid disbursements were regressed on changes in aid commitments to analyse whether changes in aid commitments predict changes in aid disbursements. Bulir and Hamman look at this by estimating aid disbursements by their lagged values as much as possible and then determining whether adding data on aid commitments increases the ability to correctly predict aid flows. They find in most cases it does not. Here we look at whether commitments have any predictive power over disbursements without trying to explain current changes in aid disbursements by past changes.

We find that out of a sample of 112 ODA recipients (includes all ODA recipients with populations over 500, 000 for whom ten or more observations were available<sup>2</sup>), for 53 countries commitments do not predict disbursements. For 52 countries commitments

<sup>&</sup>lt;sup>2</sup> Territories were also not included

have predictive power for disbursements at the 5% level of significance and for one country (Trinidad and Tobago) the coefficient on commitments was negative and significant. For all but one of the countries for whom the coefficient on commitments was positive and significant at the 5% level, the coefficient was less than one, and the average of the coefficients was 0.5 suggesting that only half the changes in commitments are realised in changes in aid disbursements. *[Full regression results can be provided in an appendix if needed]* 

In conclusion, for many countries aid is unpredictable as well as volatile. Commitments nearly always exceed actual disbursements and commitments are a poor indication of what actual disbursements will be.

#### 2.4 Reality: Aid fluctuates in a pro-cyclical way

The fact aid receipts vary is not necessarily problematic – we would perhaps expect donors and multilateral institutions to change how much aid they give to a certain country based on how much a country needs aid at a given point in time. Perhaps even unexpected changes in aid can be considered acceptable when it is in response to unexpected changes in the economic situation in a country. If aid fluctuated such that it increased when output was low and decreased when output was high it could be see to be having a stabilising effect on the overall economic situation of a country. Here I consider how aid varies with regard to changes in a country economic situation, in particular with economic output, GDP. If more aid is given to a country in a time of need when its GDP is low and less aid is given when its GDP. However if this is not the case and aid rises and falls with GDP it compounds the volatility of GDP and is procyclical.

Studies by Pallage and Robe (2001), Gemmel and McGivillray (1998) and Bulir and Hamman (2001) have shown that aid increases precisely during those times when the economy is doing well and falls when the economy is doing badly, making it even harder for the people in the country to secure their livelihoods and access to public services during the low part of the business cycle. Only one study (Collier 1999) found that aid fluctuates in a way that is counter-cyclical. Revisiting the data used in this study and removing the weights imposed, so that each country observation has equal weight, shows aid is pro-cyclical. Pallage and Robe (2001) conducted a study in 2001 to determine just how aid increased or fell with national output. They found that for most African countries aid flows were strongly positively correlated to domestic output. Out of the 35 sub-Saharan African countries in their sample, 25 experienced pro-cyclical net ODA inflows. For only 2 countries was aid counter-cyclical. Outside of Africa there was a similar, although less pronounced, pattern of pro-cyclicality (pro-cyclical for 12 out of 25 countries in their sample and countercyclical for 4 out of 25 countries).

To determine whether the pro-cyclicality of aid came about as a result of delays in disbursement of aid commitments, Pallage and Robe also considered the pro-cyclicality of aid commitments to see if a lag in the disbursement of aid was causing the apparent mistiming of aid flows to recipient countries. They found that whilst aid commitments were less clearly pro-cyclical, they were not any more counter-cyclical than aid disbursements.

Bulir and Hamman (2001) look at how aid varies with domestic government revenue and also find support for the hypothesis that aid is procyclical, although there evidence is weaker. They find aid is countercyclical in only a small number of cases. They also look at how shocks to domestic government revenue are correlated with changes in aid allocation and find they are positively correlated across different samples of countries. Their evidence suggests that aid does not smooth out shocks to government revenue, instead compounding the shocks. Collier and Dehn (2001) also analyse the distribution of aid in response to export price shocks and find donors do not appear to have taken shocks into account when determining their allocations of aid.

It is not clear a-priori why one would expect aid to be counter-cyclical. Whilst it would benefit the recipient government to receive aid at times when output and government revenues are at a low, the purpose of aid is primarily for economic growth and development. Aid may tend to be pro-cyclical because countries performing well economically will find it easier to implement donor conditionality and attract donors whilst countries with difficult economic circumstances are more likely to experience aid interruptions as the reform package is adjusted. However, the case can be made, and will be below, that growth and development are fostered by ensuring aid receipts are at least acyclical if not counter-cyclical.

There is one type of aid we would expect to be counter-cyclical as it does act as some kind of insurance, to guarantee life to people when the country has suffered from a severe shock, and that is food aid. We would expect food aid to be given when the country is at its weakest and no food aid to be given when the country is stronger. Barrett (2001) looks at the case of US Food Aid (which comprises about two thirds of all food aid given globally) and finds food aid has not flowed to countries that are experiencing short falls in their food stability. For the full sample of countries, the hypothesis that food-aid flows are uncorrelated with deviations from recipient's trend per capita food availability cannot be rejected. When looking at each country separately, for over two-thirds of the countries considered food aid increases when food shortfalls increase, and in only 6.4% is food aid negatively correlated with food shortfalls. Box1 shows how this happened in the case of Ethiopia. Similarly, Uganda received entitlements to Stabex funds from the European Union as a result of the coffee price collapse in 1989. However, disbursement was so delayed that funds were not received until five years later when there was a boom in world coffee prices (Collier, 1999).

#### Box 1: Right Medicine, Wrong Time?

The inefficacy of food aid at stabilizing food availability can arise from mistiming as the case of Ethiopia shows. Ethiopia is currently and historically the leading food-aid recipient in sub-Saharan Africa. In 1984 the near total failure of food crops in the north of the country resulted in a famine which killed nearly a million people. However food aid deliveries increased only slightly in 1984 when food availability was at its lowest. Instead food aid shipments increased in 1985 and 1986 when recovery was already well under way. The all-time high of food aid deliveries to Ethiopia was in 1986 which was also the second most plentiful year of non-food aid food per capita in a 15 year span in Ethiopia.

Sources: Barrett 2001. BBC news (www.news.bbc.co.uk)

Although the Brussels Programme of Action highlights how important it is for financial assistance to be provided *"with a view to assisting LDCs to cope with the consequences of serious external shocks"* in reality aid fluctuates in a way that is pro-cyclical exacerbating the fluctuations in a country's GDP and government revenue. This is even the case for food aid which is given to try and smooth fluctuations felt by the most vulnerable as a result of severe negative shocks.

#### 3 The Cost of Volatile and Unpredictable Aid Flows

*"It is clear that large, unexpected shifts in the volume of aid can disrupt macroeconomic management and erode the effectiveness of aid-financed expenditures"* Global Development Finance 2004

The volatile, pro-cyclical and unpredictable nature of aid flows is costly and these costs are considered here.

Countries with a higher volatility of output have been found to have lower average growth (Ramey and Ramey 1995). Government spending fluctuations and fluctuations in output are positively correlated which suggests government spending increases in good times and falls in bad times. As a result we might expect aid, in as much as it compounds the volatility of output might result in lower growth. A recent study by Aghion, Angeletos, Banerjee and Manova (2004) shows that the relationship between volatility and growth is more negative for countries with a lower degree of financial development and that a low degree of financial development (a characteristic of most LDCs) makes growth more sensitive to shocks. This suggests the effect of the volatility of aid may be worse for countries at lower levels of development than for those countries with a greater degree of financial development.

A negative relationship between the volatility of aid and growth has, indeed, been found to exist (Lensink and Morrisey 2000). In particular, Lensink and Morrisey find unexpected fluctuations in aid receipts negatively affect growth. They show that whilst aid can have a positive impact on growth, when aid receipts fluctuate in an unanticipated way it has a negative effect on growth. Unanticipated fluctuations in aid receipts negatively affected growth among the least developed countries they looked at.

Much of the effect aid has on growth is posited to come from increased savings and investment. Aid allows the government to increase public investment by relaxing the fiscal constraint on investment the government faces. It is less clear whether aid increases private investment or not. Public investment may crowd out private investment, or it may crowd-in private investment by reducing infrastructure bottlenecks (Everhart and Sumlinski 2001). Empirical studies have shown aid to have both positive and negative effects on private investment and in reality the net effect may be positive or negative depending on the specific country circumstances. Uncertainty about aid reduces the impact aid has on increasing investment. Public investment is often the easiest part of government expenditure to cut when an aid shortfall is realised and as a result unanticipated falls in aid are often met with reduced public investment. Uncertainty about public investment reduces the positive impact it may have on private investment.

The instability of aid receipts thus weakens the positive relationship between aid and investment and as a result aid instability negatively affects growth.

Collier and Dehn (2001) show the positive effect of aid on growth when it fluctuates in a counter-cyclical manner to offset negative export price shocks. They found that although donors in general do not use aid for this purpose, targeting aid towards countries experiencing negative export price shocks appears to be even more important for enhancing aid effectiveness than targeting aid to countries with good policies.

Although the negative relationship between output volatility and growth might be contended, the welfare reducing effects of GDP volatility are not disputed. Fluctuations in aid contribute to GDP volatility as a result of their pro-cyclical nature and as a result, these fluctuations have significant negative welfare effects. Volatility of output and the volatility in incomes it entails have larger costs for poorer people who are less able to protect themselves against such shocks (Fafchamps 1999). Limited financial and insurance markets in less developed countries make it hard to deal with negative shocks. The median welfare costs of business cycles in low income countries ranges have been estimated to range from 10 to 30 times the welfare cost of business cycles in the US (depending on the model). In some low income countries the welfare gain from eliminating volatility may in fact exceed the welfare gain from an additional percentage point of growth forever. (Pallage and Robe 2003)

Fiscal response models attempt to address explicitly how aid may alter public sector behaviour, in particular fiscal behaviour regarding taxation and expenditure. In the standard approach, governments maximise their utility by attaining revenue and expenditure targets and aid is treated as exogenous (Mosley et al 1987, Gang and Khan 1991). However Franco-Rodriguez et al (1998) endogenise foreign aid inflows. They highlight the reality that governments have a target for aid revenue, and this expected revenue is incorporated into their fiscal planning. This means when revenue decisions and expenditure allocations are made aid revenue is taken into account. Many governments receive as much as 20% of their revenue from foreign financing and it would be irrational for them to plan revenue and expenditure without taking this into account. As Bulir and Hamman highlight there is often donor pressure for recipient governments to factor in aid commitments (however imperfect an indication of aid flows the donor government knows them to be) to their fiscal planning. However, when aid is volatile and aid commitments are poor indicators of aid receipts incorporating predicted aid inflows into fiscal planning can be costly.

The direct costs of a shortfall in aid depend on the link between aid finance and specific expenditures (Foster 2003). If aid was paying for the local provision of goods and services a shortfall will cause the government to have tighter fiscal policy. This will most likely be achieved by reducing government spending but sometimes by increasing taxes, (Gemmel and McGillivray 1998) or ad hoc borrowing from the central bank (Odedokun 2003) with associated implications for macroeconomic stability (e.g. higher inflation or crowding out of private investment). When aid shortfalls are met with reduced public expenditure cuts fall on items such as drugs and schoolbooks. Staff cuts are not made, but payment of staff may be delayed and it becomes harder for staff to do their jobs as they lack the resources needed (Foster 2003). In the long term, shortfalls in aid of the order of magnitude recipients experience make it difficult for them to plan effective public expenditure programmes.

#### 4 Untangling conditionality and volatility

This section will look at some of the causes of downward fluctuations in aid receipts. It will go some way to considering the extent to which downward fluctuations are a result of conditionality failures.

There are two main categories of reasons for downward fluctuations in aid. The first category refers to problems that can be grouped under the heading bureaucratic complications and the second can be grouped under the heading political complications or conditionality failures. Bureaucratic procedures can sometimes entail serious delays in the disbursement of aid money. Such problems are more likely to arise when there is little devolution of decision making authority, for example when donor country offices are required to clear decisions with their headquarters or when different donors need to agree and design arrangements there can also be substantial delays in disbursement. The case studies of Bolivia and Tanzania provide examples of when this can be a problem.

European Community aid money has been notorious for bureaucratic delays in disbursement of funds. Whilst it provides an extreme example, it shows how serious the problem of delays in aid disbursement can be. A report by the UK Parliament's *House of Commons Select Committee on International Development* on the problems of EC aid disbursement states:

"the backlog of outstanding commitments ... reached over 20 billion Euro by the end of 1999. In the last five years the average delay in disbursement of committed funds has increased from 3 years to 4.5 years. For certain programmes, the backlog of outstanding commitments is equivalent to more than 8.5 years' payments."

And also:

"The Committee was also concerned to discover, in the course of its visit to Brussels, that not a single penny of the 250 million Euro allocated for reconstruction in Nicaragua in the wake of Hurricane Mitch had been spent." (The visit was conducted in July 1999, Hurricane Mitch occurred in October 1998)

Late payments for the implementation of contracted work prejudice the survival of smaller NGOs who are waiting for this funding. One case was related of a community-based distribution programme in Karachi, Pakistan that was waiting for payment from the EC. The funding situation became so bad the Director of a local NGO in took out a personal loan to pay staff salaries using her residence as collateral.

Delays in disbursement can also result in the inter-year distribution of aid differing substantially from its programmed path. Bulir and Hamman (2001) analysed 23 countries for which quarterly disbursement data for programme aid were available and found that on average quarterly disbursements deviate by about 50% from the path estimated at the beginning of the programme periods. For only two countries were projection errors less than 20%. This means that if a country expects to receive 10 million dollars of program aid in a given quarter, on average it will get either 5 million or 15 million. This makes it very hard for the recipient country to plan expenditure.

Political delays occur when aid disbursement is withheld as a result of a country not achieving the conditions set out as a pre-requisite for aid allocation. Committed ODA is often disbursed in sections when specific conditions are met. If these conditions fail to be met the ODA is not released. Political delays can also occur as a result of elections as aid disbursement is often delayed until the outcome of an election is clear, as in the case of Bolivia (below). Although we are considering causes of shortfalls in aid, it is also worth noting at this juncture that political motives can also lead to large increases in aid dispersion. This was most recently evident in the case of Pakistan whose net aid receipts grew dramatically by 174% before and after 9/11.

The process of withholding large scale funding causes serious problems for recipient countries. Non-disbursement as a result of conditionality failures leads to a vicious circle. Because aid flows are reduced, government revenue is less than originally expected and governments have to find alternate ways to manage the budget. Few countries that receive large amounts of aid are able to manage the fiscal balance in the face of substantial shortfalls in expected revenue. As a result shortfalls in aid flows lead to a worsening of the fiscal deficit or a worsening of monetary policy as the government has to increase borrowing from the local bank. As the fiscal deficit and stable monetary policy are often themselves part of the condition for ODA disbursement, the government fails to reach the macro targets set out in the conditions and further payments are delayed. Instability in aid flows can result in economic instability as the case of Tanzania and Mozambique described below show.

Both program aid and project aid suffer from problems of delayed disbursements and commitments exceeding disbursements, but programme aid is more susceptible to conditionality than is project aid. A study of countries with IMF programmes showed that on average countries with programme interruptions receive 95% of projected project disbursements but only 34% of projected programme disbursements (as compared to 95% and 74% for countries without programme interruptions). Killick (2003) states the problem as:

"budget support tends to be geared to the fiscal cycles of the various donors rather than of the recipient, and gives rise to patterns of commitments and disbursements which do not fit with recipients cycles of budget preparation and execution. Even more serious, programme aid appears to be especially prone to volatility, political interference and unpredictability."

Failure to meet conditionality requirements is major cause of volatility in aid receipts, and this is illustrated in the case studies of the next section. However, it does not fully explain the fluctuations in aid receipts countries experience. This is illustrated by comparing the case of Uganda and Zambia over the last decade (for which data is available, 1993 – 2002). Uganda met macroeconomic conditions for the disbursement of aid during this period whilst Zambia failed to do so, and experienced programme interruptions as a result. We find that during this period, aid to Zambia was only slightly more volatile than aid to Uganda. The coefficient of variation of aid to Uganda during this period was 0.195 whilst for Zambia it was 0.206 (see figure 4.1).



Figure 4.1: Conditionality and Volatility Uganda and Zambia, 1993 – 2002

The causes of volatility in aid receipts are complex and are considered in further detail in the case studies below. The case studies will allow the causes and consequences of fluctuations in aid received to be analysed in more detail.

#### 5 Case Studies

#### 5.1 Mozambique

In 1992 Mozambique emerged from a long civil war, which had left the country one of the poorest in the world. Post-conflict Mozambique has received large amounts of aid that have made large contributions to rebuilding peace, reducing poverty, increasing growth and developing new infrastructure. Mozambique's recovery following the end of the war, has been impressive. GDP grew at an average of 8.4 percent annually from 1993 through 2001, after growing at an average of 0.1 over the previous decade. This included an increase in agriculture growth from 1.3 percent annually (1985–92) to 9.8 percent annually (1993–01). The gross primary admission rate rose 57 percent in 1995 to over 100 percent in 2000. Export growth went from being negative to positive and foreign direct investment grew by 500 percent in the 1990s.

However, although aid commitments and disbursements increased after the end of the war real flows of net official development assistance did not rise, actually falling until 1996 when they started to rise. Mozambique is now one of the most aid dependent countries in the world and as a result is dependent on the goodwill of bilateral and multilateral donors. Aid finances more than half of government expenditure and is equivalent to 17% of GDP. Aid finances the substantial difference between imports and

exports (49% and 19% respectively) as external borrowing is very limited. On the whole, the government has successfully maintained the conditions that have attracted the continued commitment of the international aid agencies. Liberalization, macro-economic stability and improvements in financial management have been matched by a shifting of public spending towards an anti-poverty focus. These conditions permitted Mozambique in 1999 to become the third country to reach the completion point in the HIPC process. Donor confidence has also been manifested in their increasing willingness to directly support the budget.

Volatility has characterised the aid disbursements since the beginning of the 1990s as figures 5.1 and 5.2 show. Recent instability in ODA financing has been caused both by increased aid in response to the floods, and reduced aid in response to donor's concerns about the government's handling of the banking crisis.

Aid from donors increased in response to flooding in 2000. The floods devastated Mozambique leaving nearly one million people without homes, destroying agricultural output and reducing private consumption. Donors responded with increased disbursements, helping to mitigate the shortfall. Gross disbursements increased by \$180mn, with total foreign financing boosted by debt relief increasing by \$240mn over the previous year. This meant that despite the external shock of the floods, Mozambique increased foreign exchange reserves in 2000. This is a case of aid proving to be counter- not pro-cyclical.



#### Figure 5.1: Volatility of Aid, Mozambigue 1975 - 2002



#### Figure 5.2: Unpredictability of Aid, Mozambique 1975 – 2002

In 2001 Mozambigue experienced a shortfall in project assistance that was equivalent to 2% of GDP and a reduction in expected budget support as a result of the bank scandals in 2001 and corresponding donor governance concerns. The confidence of international and donor agencies in the government was shaken by the collapse, and then recapitalization by the government, of two semi-public commercial banks accounting for more than half of the banking sector (Banco Comercial de Mozambique and Banco Austral) which had contracted bad debts when they were in full public ownership. The banks became insolvent as a result of a number of non-performing loans that had been made to politically connected individuals. Donor's were dissatisfied with the bank scandals and postponed payments that were due in May 2001 until the IMF and World Bank made their official declaration of satisfaction in September. By the beginning of 2002 Mozambique had received only US \$212 million in programme and budget support of the US \$300 million it had been promised for the 2001 year. Whilst this shortfall was explained in some part by bureaucratic procedures in donor countries (administrative delays on the part of the EC in Brussels) and some systematic problems in disbursement on the Mozambique side (bank delays, government reluctance to release funds until project expenditure had occurred) it was largely a result of donor dissatisfaction.

The shortfall in project assistance was reflected in an equivalent reduction in capital expenditure. The shortfall in budget support meant the Government had to introduce cash controls on Government expenditure, resulting in a 0.5% of GDP reduction in wage payments and a 0.6% of GDP reduction in expenditure on goods and services. Priority social expenditures were protected and were in line with the *National Action Plan for the Reduction of Absolute Poverty* targets. The shortfall nevertheless had a disruptive effect on the execution of spending programmes, and it would have been worse had the donor action not coincided with a year in which GDP recovered sharply from the previous year's floods and domestic revenues exceeded targets.

To ensure public expenditure was not reduced further as a result of the ODA shortfall the government was forced to borrow on the local market. This contributed to an increase in the money supply and inflation as the central bank strove to avoid slippage of the local

currency which was already feeling some downward pressure as a result of the banking crisis. Monetary growth accelerated sharply through 2001. The government had set a target M2- growth of 17 percent by the year-end consistent with the targeted inflation rate of 5–10%. Instead M2 growth was 22% and inflation rose from 9% in 2001 to 16% in 2002.

#### 5.2 Bolivia

#### [this case study is not completed yet]

Bolivia is highly dependent on aid flows. In 2000 aid was 5.8% of GNP, nearly two-thirds of which is in the form of bilateral assistance. Aid has comprised 50% of the public investment budget over the decade 1992 – 2001. This proportion would have been higher but for major problems of absorptive capacity, arising from a combination of donor conditionality and weak capacity in recipient institutions in Bolivia. According to Nickson (2002), the scale of financial and institutional aid dependency in Bolivia is more or less comparable to that of an average African HIPC country. Despite progress toward government-donor partnerships, cooperation remains scattered and fragmented. The government must still spend administrative time and resources on more than *850* separate programs or large projects funded by international agencies. It is hoped there will be greater co-ordination under Bolivia's Poverty Reduction Strategy.

Aid volatility is a problem for Bolivia with donors delaying the disbursement of funds sometimes as a result of the multiple technical and adjustment conditions imposed by different donor agencies and sometimes for purely political reasons. Conditionality requirements of multilateral agencies often cause delayed disbursements of aid funds in Bolivia. Funds are sometimes held up because of larger economic concerns and sometimes because of concerns about a relevant agency's budgetary and technical capacity. This has caused failure to meet implementation targets and also results in incurred interest charges. The government complained that failures to disburse funds have resulted in a worsening of the fiscal deficit which has subsequently made it harder for the government to meet conditionality, delaying further payments.

Bolivia has found itself unable to sometimes meet the conditions set out because compliance is beyond the government's control. For example in December 2001 one multilateral suspended financial support to the poverty reduction programme because a new income tax law was not approved by parliament.

During the first half of 2002 the overall disbursement rate of ODA fell by 80% of the expected level. The reasons for this substantial fall in disbursement was that there was a fear funds might be diverted for political campaigning and also that concentrating aid flows at the start of a new administration was seen as a way of signalling the importance of aid to the new administration and applying political leverage on fundamental policy issues.

#### 5.3 Tanzania

Aid flows to Tanzania have risen and fallen with the "condition" of donor – government relationships over the last 40 years. Aid flows have been highly uncertain (figure 5.3). Aid to Tanzania increased substantially through the 1970s as Tanzanian president

Nyerere received high praise from the international community for his policies of selfreliance and growth with equity. The World Bank and bilateral donors provided strong financial support for what seemed to be an exciting and visionary development effort. By the middle of the 1980s this support had waned and aid flows declined. During 1979 – 1985 the Tanzanian economy ran into severe macroeconomic and structural difficulties weakened by external shocks, policy mistakes and systemic inefficiencies. The Tanzanian government dissented with the IMF and World Bank's demands for structural change and the donor community criticised the government for not achieving its aims and supporting inappropriate domestic policies that limited aid effectiveness, and reduced aid.



#### Figure 5.3: Unpredictability of Aid, Tanzania 1975 – 2002

The crisis the country was swept into as a result of economic mismanagement and falling aid flows prompted the government to agree to an IMF structural adjustment plan (the ERP from 1986-89 and the ESRP 1989-91). The co-operation of the Tanzanian government with the international financial institutions resulted in growth and resumed increases in aid contributions from donors. Aid contributions reached an all-time high in the early 1990s. By 1992 Tanzania was reported as performing better than any other African country both for its "change in macroeconomic policies" and its improvement in GDP per capita (World Bank Adjustment in Africa, findings, Africa region, No.34, February 1995).

However programme aid was suspended between 1994-95 owing to poor fiscal discipline and fears of corruption relating to failure to raise domestic revenue collection. At this time, donors were showing fatigue to Tanzania as they felt aid had been given for 30 years without tangible results in terms of income poverty reduction and increased attainment of health and education. It was increasingly felt there had been some mismanagement of aid monies the Tanzanian government had been receiving. The situation was brought to a head in November 1994 when large scale corruption came to light. Considerable custom tax evasion was revealed with the loss of custom duties that should have been collected amounted to a shortfall in government revenue of 10% (3%

of GDP). Companies had been exempted for questionable reasons and the level of corruption was traced to high levels within the Ministry of Finance, even including the Minister of Finance himself.

The donor community responded swiftly and strongly. Most donors withheld balance of payments support for the coming year and pledged to withhold it and any further increases in aid to Tanzania for the following year if it was not clear these problems were being dealt with. The result was a substantial drop in aid flows in 1994 and 1995. The change of government and renewed commitment to fighting corruption and increasing governance as well as a changed attitude within the donor community has allowed relations between Government and donors to dramatically improve since 1995 and since then aid flows have increased.

There is a question as to whether the donor community was right in enforcing conditionality and withholding support. It is true that Government contributed to slow growth by proceeding slowly on critical reforms and it is clear that the underlying concerns over revenue losses and/or corruption were very real. However the Helleiner report, an independent report into the breakdown of the relationship between the Tanzanian government and donors at this time, made the following three points which suggests the response of the donor community may not have been entirely warranted, especially in light of its costs on the economy (detailed below):

- The report compared the fiscal performance of Tanzania to other countries, particularly with regard to revenue collection, and found that there was "no clear basis for singling out Tanzania as particularly lacking in revenue effort"
- Ironically it was the progress in the transparency of governmental activities achieved by a process of political liberalization that was being undertaken at the donor's behest that contributed to the sense the government was not functioning well. The detailed figures attesting to the existence of illegalities in the tax system and the likelihood of attendant corruption were themselves the product of reforms in the Tanzanian control and disclosure system. The report commented that although corruption is probably equally common in many other countries, and may have been just as common in Tanzania itself in an earlier period, it was the release of these figures in November 1994 that brought the crisis in the aid relationship in Tanzania to a head.
- Subsequent detailed analysis of the tax losses announced in November 1994 have revealed that of the 70 billion Tanzanian shillings 'lost', 50 billion were the product of legal exemptions, some of which could have been granted for improper reasons; and of the remaining 20 billion Tanzanian shillings, only 5 billion were definite tax arrears, half of which were collected in the following year.

Some Tanzanians and donor observers now feel that the initial reactions to the figures, on the part of both the government and the donors, may have been exaggerated.

In addition to these changes in aid flows and commitments there are serious problems of delays in disbursement of aid in Tanzania which also contributes to unpredictable aid flows. In response to an OECD survey on effective aid delivery the Tanzanian government raised complaints that donors were slow at delivering what was promised. The OECD report states:

"Donors are quick to make funding pledges, but as soon as one gets to the details of the intervention and the conditions for delivering funds, serious delays built up. At the preparation stage, examples of delays as much as five and ten years were mentioned in the water and road sectors, exacerbated by the fact that feasibility studies became obsolete and had to be redone. At implementation, the main complaint was excessive time taken to issue "no objection" in connection with procurement processes. One procurement operation usually involves 4-6 approvals by the donor, and any one could take a year."

It is the case that significant reductions in aid may have led to or certainly exacerbated economic crises. Aid flows to Tanzania have been highly pro-cyclical (see figure 5.4). During both periods of programme aid suspension in the early 1980s and in 1992-94, public sector investment fell, GDP growth was negative and there is evidence that socioeconomic development slowed and the poor suffered over 1990-96. The sudden shortfall of aid commitments in 1994 and 1995 meant the Tanzanian government was in a situation in which they had to find alternative means to balance the budget. The government borrowed extensively from the bank of Tanzania to try and do this, creating an increase in government bonds to finance the increased borrowing. Inflation and macro-economic instability ensued which the Finance Minister blamed on the donor community. This further incensed the donor community who felt the Tanzanian government needed to take responsibility for their actions which had led to the withdrawal of Balance of Payments support.

[I am trying to get more information on the human cost of aid suspension in Tanzania]



Figure 5.4: Volatility of Aid, Tanzania 1975 – 2002

#### 6 Conclusion and Policy Suggestions

Least developed countries are characterised by frequent output fluctuations and a heavy reliance on aid. We have shown that although the relationship between economic and financial stability and development is known, aid flows to least developed economies increase the volatility of output fluctuations experienced by these countries. Aid flows fluctuate unpredictably and in a way that compounds output fluctuations. This paper has shown that these unpredictable changes in aid flows occur as a result of bureaucratic

delays in disbursement and conditionality failures. The cost is lower growth, lower aid effectiveness and increased fiscal and monetary instability. And there is ultimately a cost on human well-being.

Aid flows are a scarce resource and it is important that they are distributed in a way that brings maximum benefit, and not cost, for human well-being. Reducing the volatility, unpredictability and pro-cyclicality of aid flows is one way to do this, and some policy suggestions are outlined here. As the case studies above show, donor action to reduce the volatility of aid flows may have implications for conditionality as there is a trade-off between conditionality and predictability of aid flows. While the balance between the two is not commented on here it is important that this cost of conditionality is clear. Some of the following policy suggestions are taken from Foster (2003) who offers a review of policy needed to make aid more effective – including reducing the volatility, unpredictability and pro-cyclicality of aid flows. The suggestions are split into two parts – suggestions for donors to improve timing and reliability of aid flows, and policy suggestions for recipient country governments.

#### **Policy Suggestions for Donors**

- Donors should make more realistic forecasting of disbursements when making commitments, taking into account their own historical experience. Expected error of the predicted disbursement could also be shared giving a realistic lower and upper bound of monies to be disbursed. Any assumptions underlying disbursement forecasts should be shared with the Ministry of Finance.
- Yearly publication of best and worst donor performers at correctly predicting aid disbursement may provide an incentive for accurate forecasting.

To reduce the problems of delays in disbursements donors can:

- Adapt arrangements for disbursement of funds to local context. The different traditions, mechanisms and arrangements determine the way donors operate these can be very different from donor to donor and inappropriate for local conditions. The greater the autonomy of the local country office the easier it is to make arrangements at the local level, according to local conditions.
- Make greater use of foreign exchange reserves to smooth fluctuations in the level and timing of donor disbursements. Foster states the pros and cons of this approach "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."

Aid is increasingly being given in programme as opposed to project form which is inherently less subject to administrative delays than project aid, however programme aid is more likely to be volatile than project aid as a result of conditionality failures. The following policy suggestions are made to enable donors to tackle the relationship between conditionality and the costs of the volatility of aid flows that implies:

 Increased agreement among donors for transparent rules and common standards for commitments and conditions.

- Conditionality should increasingly be applied to future commitments rather than
  to commitments that have already been announced. Quoting Foster: "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 need to react in the short term by not disbursing aid committed, limits should be placed on the share of aid that cannot be disbursed within the budget year. As much as possible it should be ensured that funding for Government spending commitments on poverty related programmes is protected.

Finally, some policy suggestions to reduce the pro-cyclicality of aid:

- Development of reliable early warning system to anticipate emergencies and allow donors to disburse aid quickly when it is needed most.
- Program aid could potentially respond to shocks but rapid increases are currently constrained by the design of IMF programs. Programs are set for a three-year period and increases in aid beyond those planned into the program are supposed to be accumulated in foreign exchange reserves rather than spent (Collier and Dehn 2001). This constraint could be relaxed to allow donors to provide shock responsive aid.

#### Policy Suggestions for Recipient Country Governments

The link between conditionality and volatility suggests that a higher degree of compliance with conditions attached to aid is likely to lead to a smoother path of aid disbursements. However not all conditionality failures result from circumstances over which donors have control and not all volatility in aid flows results from conditionality failures. Actions a recipient country government can take to reduce the problem of volatile, pro-cyclical and unpredictable aid flows include:

- More realistic short-term aid and domestic revenue forecasting can be conducted. As much as possible forecasting of aid disbursements can be used to weight donor commitments. Uganda has been able to improve their short-term aid predictions by using donor-specific coefficients to adjust commitments to likely disbursements. This can only be done as much as the donor governments allow recipient country government's budget figures to deviate from their commitments.
- Develop budgets 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.

#### First Draft

#### References

Aghion, P. G-M Angeletos, A. Banerjee and K Manova. 2004. *Volatility and Growth: Financial Development and the Cyclical Component of Investment*. Working Paper, Harvard University.

Barrett, Christopher, 2001, "Does Food Aid Stabilize Food Availability?" Economic Development and Cultural Change, Vol. 49 (January), pp. 335–49.

Bulír, Alex, and A. Javier Hamann, 2001, "How Volatile and Unpredictable Are Aid Flows, and What Are the Policy Implications?" IMF Working Paper 01/167 (Washington: International Monetary Fund). <u>http://www.imf.org/external/pubs/ft/wp/2001/wp01167.pdf</u>.

Bulír, Alex, and Timothy D. Lane, 2002, "Aid and Fiscal Management," paper presented at the IMF Conference on Macroeconomic Policies and Poverty Reduction, Washington, March 14–15, 2002. *http://www.imf.org/external/np/res/seminars/2002/poverty/abtl.pdf.* 

Collier, Paul, 1999, "Aid 'Dependency': A Critique," *Journal of African Economies*, Vol. 8 (December), pp. 528–45. Gang and Khan 1991

Collier, Paul and Jan Dehn. 2001. *Aid, Shocks and Growth. World Bank Working Paper October 2001.* 

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.

Fafchamps, Marcel. 1999. *Rural Poverty, Risk and Development.* Report Submitted to the Food and Agriculture Organisation, October 1999.

Foster, Mick. 2003. *The Case for Increased Aid*. Final report to the Department for International Development, December 2003.

Franco-Rodriquez, S, M McGillivray and O Morrisey, 1998. *Aid and the Public Sector in Pakistan: Evidence with Endogenous Aid*. World Development 26 (7)

Gemmell, Norman, and Mark McGillivray, 1998, "Aid and Tax Instability and the Government Budget Constraints in Developing Countries," CREDIT Working Paper No. 98/1 University of Nottingham Center for Research in Economic Development and International Trade.

Killick, Tony. 2003. "Macro-Level Evaluations and the Choice of Aid Modalities". Conference Paper. Overseas Development Institute, London. July 2003

Lensink, Robert, and Oliver Morrissey, 2000, "Aid Instability as a Measure of Uncertainty and the Positive Impact of Aid on Growth," *Journal of Development Studies*, Vol. 36, No. 3 (February), pp. 31–49.

Mosley, Paul, John Hudson, and Sara Horrell, 1987, "Aid, the Public Sector and the Market in Less Developed Countries," *Economic Journal*, Vol. 97 (September), pp. 616–41.

——, 1992, "Aid, the Public Sector and the Market in Less Developed Countries: A Return to the Scene of the Crime," *Journal of International Development*, Vol. 4, No. 2, pp. 139–50.

Nickson, Andrew. 2002. 'Bolivia: A country case study', Report to the OECD DAC Task Force on Donor Practices, University of Birmingham, processed, September.

Odedokun, Matthew. 2003 Analysis of Deviations and Delays in Aid Disbursements. *Journal of Economic Development* 28(1) pp137-169

OECD. 2003. *Harmonising Donor Practices for Effective Aid Delivery: Good Practice Papers*. DAC Guidelines and Reference Series

Pallage, Stéphane, and Michel A. Robe, 2001a, "Foreign Aid and the Business Cycle," Review of International Economics, Vol. 9 (November), pp. 636–68.

Pallage, Stéphane, and Michel A. Robe 2001b, "On the Welfare Cost of Business Cycles in Developing Countries"

Ramey G. and V. Ramey. 1995. "Cross-country evidence on the link between volatility and growth". *American Economic Review* 85(5) pp1138 -51.

United Kingdom House of Commons.2002. "The Effectiveness of EC Development Assistance". Select Committee on International Development Ninth Report 1999 – 2000 Session.

http://www.publications.parliament.uk/pa/cm199900/cmselect/cmintdev/669/66904.htm

United Nations General Assembly. 2001. Programme of Action for the Least Developed Countries for the Decade 2001-2010 adopted by the Third United Nations Conference on the Least Developed Countries held in Brussels from 14 to 20 May 2001

#### First Draft

#### **ANNEX 1: FIGURES USING LEVELS**



Figure 1.1: Volatility of GDP, sub-Saharan Africa and OECD aggregates, 1962 – 2002

Figure 2.1: Volatility of Aid and GDP, sub-Saharan Africa 1960 - 2002





Figure 2.2: Volatility of Aid and OECD GDP, sub-Saharan Africa 1960 – 2002

Figure 2.3: Volatility of Aid and GDP, Least Developed Countries 1980 - 2002



#### First Draft



Figure 2.4: Volatility of Aid and Tax Revenue, sub-Saharan Africa 1960 - 2002