

# **MACROECONOMICS OF SCALING UP AID FLOWS: MOZAMBIQUE CASE STUDY**

**Carlos N. Castel-Branco (team leader) and José Sulemane  
with the participation of  
Francisco Fernandes, Amílcar Tivane and Eugénio Paulo<sup>1</sup>**

Maputo, 16 December 2005

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<sup>1</sup> Dr. Carlos Castel-Branco, team leader, Assistant Professor at the Faculty of Economics of the Eduardo Mondlane University (UEM) in Maputo. Dr. José Sulemane, National Director in the Ministry of Planning and Development and Senior Lecturer at the Faculty of Economics of UEM. Francisco Fernandes, Senior Consultant on Public Finance Management. Amílcar Tivane and Eugénio Paulo, Economists in the Ministry of Planning and Development and Junior Lecturers at the Faculty of Economics of UEM. The authors would like to thank Professor Tony Killick and Mr. Paolo de Renzio (ODI) for their extensive support and critical comments to this paper.

## 1. Introduction

This case study is part of a larger study about the macroeconomics of scaling up aid flows, which has been commissioned by the Department for International Development of the British Government (DFID) and implemented by the Overseas Development Institute (ODI).

The study tries to answer the following initial questions:

- How much additional aid-funded expenditure can be absorbed and how quickly can it be injected?
- How do current conditions constrain the capacity to scale-up aid flows and the rate at which this can occur?
- What policy instruments or actions are required to mitigate the adverse effects of higher aid flows?

In order to answer such questions, the study addresses the following issues:

- What has been happening with aid in Mozambique?
- In which ways is aid affecting public revenue and expenditure, and how is this affecting economic performance?
- Is aid helping the economy and government expenditure to move towards or away from sustainability and gradual elimination of aid dependency?
- Is public expenditure helping productive capacity to grow and the private sector to develop, or are these processes not, or only weakly, related?

Recent studies<sup>2</sup> have been focused on the analysis of the interaction between fiscal and monetary policies to mitigate or even to prevent potentially adverse macroeconomic impacts on the recipient economy of a substantial increase in aid flows. The studies, which have looked with particular emphasis at the

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<sup>2</sup> McKinley, T. 2005. Why is 'the Dutch Disease' always a disease? The macroeconomic consequences of scaling up ODA. Working Paper no. 10. International Poverty Centre. UNDP; Heller, P. 2005. "Pity the Finance Minister": Issues in managing a substantial scaling up of aid flows. IMF Working Paper WP/05/180; IMF. 2005a. The macroeconomics of managing increased aid inflows: experiences of low-income countries and policy implications. Policy Development and Review Department (Approved by Mark Allen). August 8.

“Dutch Disease” problem, have been developed around the aid absorption and spending framework.<sup>3</sup>

In addition to the short term management of aid inflows, these studies have also raised another fundamental issue, namely that of aid allocation. Thus, the studies argue that potentially adverse macroeconomic effects of scaling up aid flows could be avoided altogether if aid is utilized to promote economic expansion and productivity improving activities.<sup>4</sup>

The Mozambican case study will look at how these two sets of issues, short term management of aid inflows and the medium to long term impact of aid allocation, affect the behavior of the Mozambican economy.

The study will also analyze the medium to long term growth impact of aid inflows and compare and relate it with the impact of inflows of foreign direct investment (FDI). There are three main reasons why the study looks at aid and FDI inflows together. First, aid and FDI represent very large inflows of external capital, are the main determinants of public and private investment, respectively, and are becoming increasingly important in shaping the structure and dynamics of economic growth in Mozambique. Second, the macroeconomic of either of them is likely to be affected by the other; in other words, any impact aid may have is not isolated from the impact of FDI and other sources of external capital. Third, aid is significantly more responsive to government policy decisions with respect to allocation of capital than FDI; hence, given the allocation of FDI, aid can be an extremely important instrument to promote a broader base for investment and growth in Mozambique, promote linkages and develop complementary investment.

The report is organized into six main sections. Following this introduction, the second section is centered on the short-term management of aid inflows, using the absorption and spending analytical framework<sup>5</sup> and official and IMF data sources on Mozambique. The third describes and analyses trends in total external capital flows (TECF), with emphasis on aid and FDI, over the last decade and a half.

The fourth section discusses the relationship between aid flows and public finances. The fifth analyses the relationship between aid and FDI, on the one hand; and economic growth, the balance of payments and international trade, on the other hand. The last section draws the relevant conclusions from the study.

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<sup>3</sup> IMF 2005.

<sup>4</sup> McKinley 2005 and IMF 2005a.

<sup>5</sup> McKinley 2005 and IMF 2005a.

The remaining sections look at trends in the dollar value of total external capital flows (TECF), and the relationship of such flows with different macroeconomic aggregates, and draw the main conclusions of the study. TECF includes total aid, or aid, (comprising grants and concessional loans); foreign direct investment (FDI) and commercial borrowing. Given that commercial borrowing is policy constrained due to stability targets, in our analysis of TECF we only consider total aid and FDI.

Debt relief is excluded from our analysis of trends in aid flows in order to focus the analysis on actual flows of new resources. Thus, debt relief has been subtracted from OECD/DAC aid trend data, using OECD/DAC data on debt relief (debt relief is not reflected in the Government of Mozambique (GoM) Fiscal Framework (FF) record of aid flows).

After 1994, OECD/DAC and FF data series tend to converge. Additionally, FF data series are longer than OECD/DAC's, whose series end in 2003. Finally, the FF data series are more consistent with other macroeconomic aggregates in Mozambique. Thus, after comparing the two series in Graph 1, we only use the FF data for further analysis.

There are problems with data consistency (in addition to serious deficiencies with respect to data availability and accessibility) – variations, particularly the large ones, are not always easy to explain, and we are not sure about whether they reflect statistical error or actual variations. Mozambique's data series on aid are not very reliable – figures vary with relative significance between different domestic sources; explanations for the variations are not always clear, systematic and logical; and each source has something to say about the unreliability of the data from the other sources. To make sure that at least the data are consistent – so that any errors are consistent too, and we can concentrate on the trends – we only use data from four sources, namely: OECD/DAC data-base (for OECD/DAC aid data and debt relief); FF and IMF data for aid, GDP, revenue and expenditure; Bank of Mozambique monetary data; and the Balance of Payments (BoP) data for FDI.

## **2. Coordination and management of aid inflows**

### ***2.1. Analytical framework for short term management of aid inflows***

The IMF has used the absorption-spending analytical framework (ASAF) to study the coordination of fiscal, monetary and exchange rate policies in response to fast and large increases in aid inflows in heavily aid dependent,

low income countries.<sup>6</sup> This framework provides a starting point to analyze the consequences of an aid surge for inflation and the behavior of nominal and real exchange rates. Hence, ASAF can be a practical tool to analyze the extent of the “Dutch Disease” effect resulting from scaling up aid inflows.

The section focus on the elements of the ASAF relevant to the Mozambican economy: small, open, with a flexible exchange rate.

Taking the balance of payment identity (current account + capital account =  $\Delta$  foreign asset reserves), and decomposing it into its aid and non-aid components, aid inflows can be used in three alternative ways:

- To increase reserves of foreign assets;
- To increase non-aid current account deficit; or
- To increase non-aid capital outflows.

In the IMF ASAF, *absorption* refers to the non-aid current account deficit, or the difference between final domestic expenditures and national income. Hence, for any given level of aid an increase in reserves or non-aid capital outflows results in a reduction in absorption.

For a given fiscal policy, absorption is controlled by the central bank through its decision about how much of aid dollars to sell, and through its interest rate policy. The control mechanism depends on the exchange rate regime. For a flexible regime, the monetary authorities can choose to accumulate reserves or sell aid dollars. The larger the amount of aid dollars going to reserves the less the scope for absorption.

*Spending* is defined in the IMF ASAF as the widening of the fiscal deficit (excluding aid) accompanying an increment in aid. Spending is a government-determined outcome, as it captures the extent to which the government uses aid to finance an increase in expenditures or a reduction in taxation.

Therefore, *absorption* and *spending* are distinct though related concepts and policy choices. If aid comes in kind, or if the government spends aid dollars directly on imports, spending and absorption are equivalent.

Alternatively, the government may receive aid money and sell it to the central bank. In this case the government decides how much of the local currency

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<sup>6</sup> IMF 2005a.

counterpart to spend domestically while the central bank decides how much of the aid dollars to sell on the foreign exchange market. As a result, absorption and spending may differ.

When aid is received, central bank net domestic assets fall as the government account is credited with the domestic currency equivalent of the aid, while net foreign assets increase. If the inflow of aid is entirely spent on imports of goods and services the initial changes in net domestic and foreign assets are reversed, leaving base money unchanged but a larger fiscal deficit (before grants). Under a floating exchange rate regime, aid would have no direct effect on the exchange rate. An indirect effect might be to ease the demand for foreign currency, which may lead to appreciation of the nominal and real exchange rates – however, if aid is absorbed such an indirect impact will be balanced by an increase in demand for foreign currency and no lasting changes in the exchange rates need to happen.

Increased imports financed through aid might ease domestic inflationary pressures especially for economies, like the Mozambican economy, which are heavily dependent on imports of basic consumer and investment goods and services. Thus, although reliance on imports has its own disadvantages, it can provide an important short-term lifeline until productive capacity and trade are restored.

For any economy, it is likely that aid is spent on both imported and domestically produced goods and services, on tradable and non-tradable goods and services. Hence, it is unlikely that aid is one hundred per cent absorbed. In this case net foreign assets, and hence base money, should initially increase by the amount spent domestically. The inflationary consequences of such an increase in base money depend on whether and how quickly the increased government expenditures lead to increased output, and on whether and how the central bank intervenes.

A large and rapid increase in output diminishes, and could possibly reverse, inflationary pressures, depending also on the structure of output and the balance between mass consumer, luxury goods and investment goods.<sup>7</sup>

On the other hand, the central bank could sterilize aid inflows by selling aid dollars to the public, thus reducing net foreign assets; or could sell bonds and thus reduce net domestic assets. In any case, base money could be reduced although at the cost of appreciation of the nominal and real exchange rates.

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<sup>7</sup> Kalecki, M. 1976. *Essays on Developing Economies*. Harvester Press: Sussex and Jersey; Sen, A. 1992. *Shocks and Instability in an Agriculture-constrained Economy*. in J. Breman, and S. Mundle (eds.). *Rural Transformation in Asia*. Oxford University Press: Delhi.

The inflationary consequences of government spending from an aid surge also depend on the demand for money: an increase eases inflationary pressures.

Taken together, different combinations of absorption and spending out of incremental aid define the policy response to an aid surge and the consequences for macroeconomic stability. The following are the four basic cases:

- *Aid absorbed and spent:* The fiscal deficit (before aid) increases and the higher deficit is financed by aid. The non-aid current account deficit also increases, financed by aid. Since the incremental aid is spent mostly through imports, base money may not change significantly. Thus, inflation and currency appreciation need not happen. However, the current account and the fiscal deficit will be at a higher larger. The real exchange rate might appreciate if the sale of aid dollars leads to nominal appreciation, but nominal appreciation may not happen if demand for imports increases – either for consumer or investment goods and services. Hence, if incremental aid is absorbed and spent in ways that increase economic activity – output, productivity and imports – inflationary and appreciation pressures may be eased and reversed altogether.
- *Aid is neither absorbed nor spent:* There is no expansionary impact on aggregate demand, and no pressure on the exchange rate. The authorities could choose this option to build international reserves; neither increasing government expenditures nor lowering taxes. This option is extremely unlikely in most circumstances given the considerable spending and import needs of aid-dependent, low income countries. It is also very unlikely that aid would continue to flow at high levels into a country which would neither absorb nor spend it.
- *Aid is absorbed but not spent:* This could be used to stabilize the economy. The authorities can sell aid dollars to sterilize the monetary impact of domestically financed fiscal deficits. The result would typically be slower monetary growth and lower inflation; the impact on the real exchange rate would depend on whether aid dollars would be spent on imports or non-tradable goods and services. Although private consumption may increase, there is no guarantee of any significant expansion in investment.
- *Aid is spent but not absorbed:* money supply would increase as a result of international reserves increasing. Inflationary pressures would ensue unless productive capacities and output could expand very quickly.

## 2.2. *Mozambican experience*

The analysis that follows covers the period between 1990 and 2004. It looks at fiscal, monetary and the external sector variables in order to arrive at some understanding of the links between the fiscal, monetary and exchange rate policies in response to an increase in aid in Mozambique.

The 16 year war of destabilization undertaken by the South African regime of apartheid against Mozambique, which started only one year after Mozambique gained independence, ended in 1992. By that time, the infra-structures, social fabric and productive capacities of the country had been devastated by the war.

Immediately after the war, aid inflows were allocated mostly to special programs: demobilization and integration of tens of thousands of soldiers, reintegration of millions of refugees, rehabilitation of basic infra-structures. After the first, multiparty general elections, in 1994, aid allocation started to shift away from emergency towards more strategic and longer term goals. However, it was only after the adoption of PARPA I,<sup>8</sup> in 2001, that a very basic outline of an aid allocation strategy was formulated, which was focused aid around a set of priorities namely: primary education, health, water and sanitation, roads, agriculture and governance. Given the fragility of the social, economic and infra-structural conditions in the country, emergency aid continued to be important under extreme pressures created by climatic conditions (such as cyclical severe floods and draughts). The bottom line is that thirteen years after the end of the war, Mozambique is still heavily dependent on aid.

Table 1 shows the aid accounting. There are two moments in which the concept of aid surge can be applied. The first, between 1991 and 1995, is the post-war period in which special programs (demobilization, integration, re-integration, re-training, rebuilding infra-structures, etc.) took place. The second, between 1999 and 2003, can be partly explained by emergency programs required to cope with the severe floods of 2000-2001 and the severe draught that followed. The surge in the year of 1999 can also be explained by the cost impact of the second multiparty general elections in the country.

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<sup>8</sup> PARPA (Plano de Acção para a Redução da Pobreza Absoluta), is the Mozambican PRSP (Poverty Reduction Strategy Paper). PARPA I (2001-2005) is going to be followed by PARPA II (still under formulation and discussion and supposed to cover the period 2006-2009).



Table 1: Aid accounting in Mozambique (% of GDP and millions of US\$)

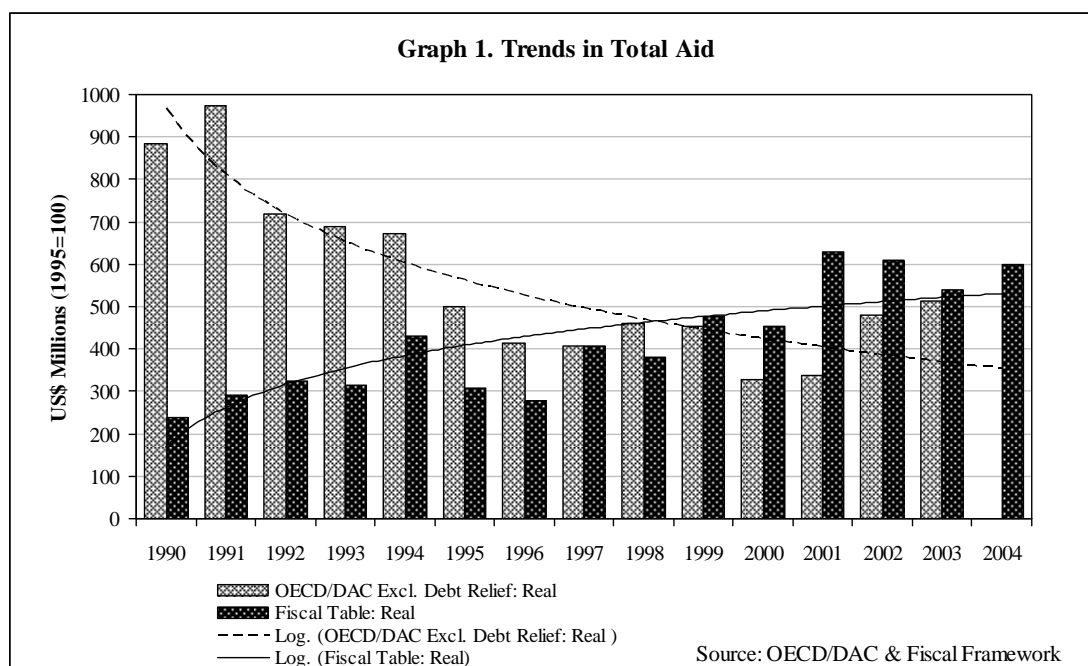
Year	Aid in Budget % GDP	Gov. Exp % GDP	Gov. Rev % GDP	Fiscal Bal Excl Grants % GDP	Fiscal Bal After Grants % GDP	Imports G&S Mil US\$	Exports G&S Mil US\$	Imports G&S exc LP Mil US\$	Exports G&S exc LP Mil US\$	CA Before Grants Mil USD	CA Before Grants % GDP	Dom. Fin % GDP	Foreign Reserves Mil USD
1990	9,2	25,5	11,8	-11,3	-2,9	1004,8	242,4	1004,8	242,4	-856,1	57,6	4,5	232,6
1991	11,0	24,3	11,4	-10,5	-0,4	1039,9	324,6	1039,9	324,6	-822,9	40,8	1,9	240,6
1992	13,6	29,4	13,9	-13,2	-0,3	998,8	318,1	998,8	318,1	-816,9	42,5	1,8	233,4
1993	12,1	28,8	13,6	-13,0	-1,4	1110,3	318,2	1110,3	318,2	-923,9	47,1	3,0	187,2
1994	13,9	30,8	11,5	-17,5	-3,5	1226,3	361,8	1226,3	361,8	-996,9	46,0	5,4	177,5
1995	10,6	25,1	11,7	-11,4	-1,3	949,8	414,0	949,8	414,0	-644,7	28,1	2,8	195,3
1996	7,1	20,7	10,8	-8,9	-1,9	1032,5	475,1	1032,5	475,1	-649,8	22,4	2,8	344,1
1997	9,4	23,9	11,5	-11,4	-2,1	1020,3	486,5	1020,3	486,5	-616,9	17,9	3,0	517,4
1998	9,4	21,6	11,3	-9,6	-1,5	1318,5	493,9	1231,2	459,6	-953,9	24,1	0,9	608,5
1999	12,6	24,7	12,0	-11,8	-0,1	1561,2	579,0	1046,8	503,1	-1106,0	27,0	0,1	651,6
2000	7,8	26,7	12,9	-10,6	-2,8	1516,7	689,4	1340,2	562,2	-1020,2	27,4	5,9	725,1
2001	13,7	32,1	12,4	-16,6	-2,8	1575,3	952,8	1350,0	512,3	-848,4	23,0	6,0	715,6
2002	11,8	30,0	12,4	-14,0	-3,7	1778,9	1018,7	1416,9	550,7	-1363,4	33,3	5,7	819,2
2003	10,2	26,5	12,9	-13,2	-3,6	1799,7	1191,8	1496,1	542,5	-773,4	16,2	3,4	998,5
2004	8,9	24,4	12,2	-11,5	-3,4							3,4	1130,4

Sources: IMF Staff Reports (various); IMF International Financial Series (various), Fiscal Tables.

Graph 1 shows aid trends in Mozambique in money terms (as opposed to share of GDP as in Table 1). The graph shows that:

- Aid flows recorded by OECD/DAC fell over the period up to 2001, and started to recover from 2002. Given that the series ends in 2003, we do not know whether the recovery has continued through to 2004;
- Over the same period, aid flows recorded by the FF have increased steadily;
- As a result of these opposing trends, the data from the two sources tend to converge. Convergence trends could be made clearer if the OECD/DAC series is extended through to 2004;
- Apart from any statistical error, the two opposing trends reflect two different processes. First, FF aid data is often estimated within the fiscal framework model. This means that there is a systematic bias in the way FF records (or, rather, estimates) aid flows, and FF data trends tend to

be smoother, even if less accurate, than OECD/DAC trends. Second, and most importantly, a larger and increasing share of aid flows goes through the budget, via direct budget support (roughly, one third of recorded aid flows) or program/project (roughly, two thirds of recorded aid flows). Thus, the upward FF trend does not necessarily indicate that total inflows of aid are increasing, but it may only indicate that total inflows of aid *recorded by the budget* are increasing.



According to data in table 1, most of aid has been spent. If a comparison is made between 1996-1998 and 1999-2004, it can be observed that there is an increase in aid of about 2.2% of GDP, public spending increases by 5.3% of GDP and the fiscal deficit before grants increases by 3%. Thus, aid is financing non-aid fiscal deficit.

As aid also been absorbed? Between 1996-1998 and 1999-2004, the current account (CA) deficit before grants increased by 3.9% of GDP. This percentage change in the CA deficit was higher than the percentage change in aid inflows. However, it should be noticed that between 1998 and 2000, the CA deficit before grants and including large projects (LPs) was significantly higher than the CA deficit excluding LPs. This difference is due to the import intensity of the construction phase of LPs, which were, at this stage, not yet able to export. Thus, a significant part of the CA deficit was being paid for by FDI. From 2001, the CA deficit including LPs became significantly smaller than the CA excluding LPs because exports from LPs accelerated.

As a matter of fact, when LPs are included the CA deficit is found to have fallen by 39% between 1999 and 2003, as a result of the export dynamic of projects such as the large aluminium smelter Mozal. When LPs are excluded, the CA deficit increases, over the same period, by more than 1.7 times.

Thus, the dynamics of the CA deficit is by no means only related to aid inflows because two large projects, aluminium and natural gas, have become strong determinants of imports and exports. Thus, a considerable part of the CA deficit is caused, or dealt with, by the product cycle dynamics of large FDI based projects. This is not to say that aid is not, still, a crucial factor in enabling the economy to run a large CA deficit; but aid is no longer the only factor as the role played by narrowly based FDI is increasing very fast.

One needs to know what happened to foreign asset reserves to be more conclusive about the absorption of aid.

During the same period, international reserves increased substantially as a result of a cautionary central bank policy. Given that the economy runs a large CA deficit during the entire period even when LPs are taken into account, it is unlikely that the increase in export revenue determines the trend in foreign asset reserves.

Building foreign reserves to the equivalent of about half a year of imports is part of the stabilization package agreed with the IMF. Given the CA deficit, foreign reserves are built by reducing absorption of aid inflows, which is partly enabled by the FDI dynamics discussed above.

In a lecture about the monetary policy in Mozambique delivered at the Faculty of Economics of the Eduardo Mondlane University in Maputo, in 2002, one of the most senior members of the board of the Bank of Mozambique argued that increasing foreign reserves out of aid was a cautionary decision taken against the unpredictability and volatility of aid flows. The argument runs as follows: given that aid is not a sovereign resource, is unpredictable and volatile and is more responsive to political decisions by donors than economic needs of Mozambique, it would be in the best interest of the Mozambican economy to accumulate reserves. The accumulation of reserves would help to make aid flows smoother, control inflation and protect the economy against periods of "aid draught".

While no one has argued strongly against this general line of the argument, there have been criticisms about the implementation of the "cautionary policy", mostly related to the extent that the economy can be squeezed of resources and reserves built before investment and growth start to be negatively affected. One line of criticism is related to the way "half year of imports" is calculated. Given that between 40% and 50% of imports are

related to LPs and financed directly by foreign direct investment (FDI), then such LP related imports should be excluded from the calculation. These imports would not be made without FDI and are financed by FDI, such that the economy does not have to protect itself against the risk of not being able to import LP related goods and services as aid plays no role in financing such imports. Hence, the calculation of the half year worth of imports should exclude LP related imports. If this argument is considered, the money value of reserves would fall and absorption would increase.

Thus, we may conclude, from this analysis, that aid is not entirely absorbed because of the cautionary policy adopted by the central bank in agreement with the IMF stability packages.

Table 2: Summary of available official monetary data

Year	Discount Rate	Money Mkt Rate	Treasury Bill Rate	Deposit Rate	Lending Rate	Inflation Average	Inflation End of Period	Exchange Rate End of Per.	Exchange Rate Avrge	Credit Growth	Credit GDP	TCNE	TCRE	M2 Growth
1990						43,7	47,1	1879						
1991						33,3	35,2	2033	1957					
1992						45,1	54,5	2951	2628					
1993						42,3	43,6	5343	4081					
1994	69,7			33,38		63,1	70,1	6651	6152					
1995	57,75			38,84		46,2	57,0	10890	9022			100,0	100,0	
1996	32			18,14		48,5	16,2	11377	11294	40,1	10,9	121,0	85,6	21,6
1997	12,95			25,43		7,4	5,8	11543	11546	52,4	13,6	121,2	83,6	23,9
1998	9,95			8,22	24,35	1,5	-1,0	12366	11850	24,2	14,3	120,4	84,5	17,6
1999	9,95	9,92		7,86	19,63	2,9	6,2	13300	12689	29,7	16,8	126,2	89,0	35,1
2000	9,95	16,12	16,97	9,7	19,04	12,7	11,4	17140	15689	30,1	19,4	153,4	99,3	42,4
2001	9,95	25	24,77	15,01	22,73	9,1	21,9	23320	20707	22,9	18,2	197,0	120,2	29,7
2002	9,95	20,4	29,55	17,99	26,71	16,8	9,1	23854	23666	4,2	15,0	219,7	117,2	20,1
2003	9,95	13,34	15,31	12,15	24,69	13,4	13,8	23857	23782	-1,4	12,6	229,0	112,1	23,4
2004	9,95	9,87	12,37	9,91	22,08	12,6	9,1	18899	22581	-5,6	9,8	223,7	100,2	6,1

Sources: IFS (various); Own calculations (Nominal and Effective Exchange Rates. INE (Inflation).

Note: an increase in the NEER and REER means depreciation.

In the absence of more direct, specific and disaggregated monetary data, one can attempt an indirect approach and try to understand policy issues through the analysis of behavior of some economic variables. Table 2 shows that the rate of inflation has tended to fall, but has been very unstable. In the last four years of the series, inflation has first increased and then started to fall again.

It can be argued that the rise in inflation in 2001 (Table 2) is matched by an almost doubling of on budget aid (as percentage of GDP) in the same year

(Table 1).<sup>9</sup> In accordance with the IMF framework, inflation could be explained by the impact of lack of absorption or/and spending of aid on base money.

However, one should be cautious against being too simplistic in this analysis. Quite apart from the fact that aid data is seriously and famously not accurate,<sup>10</sup> there are four other factors that call for caution when trying to match aid inflows and inflation in Mozambique. First, as it was already argued, an increase in on budget aid does not necessarily imply an increase in overall aid by the same magnitude, as it involves also a re-allocation effect from off budget to on budget. Thus, other things being equal it is quite possible that on budget aid increases significantly without any substantial increase in the overall inflow of aid. If this is the case, a significant increase in on-budget aid may not change base money and so may not create inflationary pressures.

Second, the period under analysis was affected by the infamous great floods of 2000/2001, which were followed by a severe draught that affected not only Mozambique but also the entire Southern African region. Thus, one would expect that emergency aid would increase and consumer price indices (CPI) would rise during such a period without this implying that both trends were necessarily and linearly related. This argument can find further support on two facts. On the one hand, approximately two thirds of the "CPI basket" are goods from the class of "food, beverages and tobacco". On the other hand, price increases in this class of goods were the most important determinants of inflation during the period 2000-2003, because of relative scarcity resulting from the floods, draughts and their aftermath, and also because of the exchange rate devaluation impact on the domestic prices of foodstuffs that were imported in the absence of domestic production.

Third, inflation trends in Mozambique are extrapolated from CPI estimates for the three larger cities of the country. If one considers that foodstuff price indices in urban areas are more sensitive to relative scarcities of food products in the market than in rural areas, then one has to consider that the structure of CPI measurements would exacerbate the extent of inflationary pressures brought about by floods and draughts to the urban areas. This would necessarily call attention to the need to be cautious about making strong statements on the real extent of inflation and its determinants.

Fourth, tables 1 and 2 and graph 1 show that while on budget aid has been increasing steadily since 1990 and aid as percentage of GDP has been relatively stable, inflation has fallen significantly during the overall period.

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<sup>9</sup> See, for example, IMF 2005a.

<sup>10</sup> For example, compare Table 1 and the two series in Graph 1.

Hence, a lot more has to be understood about the relationship between aid and inflation before one can make any strong statements about the magnitude of causal relationships linking the two trends.

This is not to say that aid and inflation may not be related at all, and that monetary and fiscal policies do not matter. What has so far been argued is that one has to be cautious about making these links because there are other important factors to take into account besides aid and inflation trends (namely how aid and inflation are measured, as well as other more structural factors that may play an important role in the determination of the behavior of consumer prices).

One factor that is of concern, however, is how the Bank of Mozambique deals with inflationary pressures or with the fear of inflationary pressures. Between September 2004 and January 2005, the domestic currency appreciated 18% relative to the US dollar, but only mildly vis-à-vis the South African Rand, the Euro and the Japanese Yen. From February to October 2005, the domestic currency depreciated by 23%. In the last two weeks of November, the Metical depreciated further, by almost 20%, but central bank intervention forced an appreciation of about 19% to bring its value vis-à-vis the US dollar to approximately the same as in early November. Thus, in less than one year the Metical suffered four major shocks that strongly affected business performance, expectations and confidence, but that at the end brought the currency to approximately the same level, vis-à-vis the US dollar, as of August 2004.

What are the causes of such shocks? There is some relationship between inflows of external resources and the behavior of the exchange rate, as it would be expected. However, this relationship, which is weak in the sense that total external capital inflows (TECF) increase significantly faster than the currency appreciates, depends on various other issues – volatility of TECF between periods, unpredictability within periods, the allocation of such resources, and policies followed by the monetary authorities in face of unpredictable and volatile inflows of external resources. Thus, although a significant increase in aid flows may have an impact on the real exchange rate (RER), such an impact depends not only on the scale and speed of scaling up, but also on volatility, predictability and allocation of resources, as well as on monetary policies.

An IMF report<sup>11</sup> argues that the currency shock that took place between September 2004 and January 2005 was partly to do with the strong depreciation of the US\$ (hence, the Metical appreciated strongly vis-à-vis the

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<sup>11</sup> International Monetary Fund (IMF). 2005b. Mozambique - First Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility (January 28, 2005): pp. 6 and 18.

US dollar but only mildly vis-à-vis the Rand, the Euro and the Yen). However, the shock was also, and mostly, blamed on four other reasons:

- *The scale of aid and FDI inflows* – however, according to the data available, the combined amount of aid and FDI in 2004 was not larger than in 2003 (aid increased by less than 10% and FDI fell by almost one third). Additionally, both aid and FDI fell in 2004, relative to 2003, as percentage of GDP;
- *The late disbursement of aid commitments for 2004, which mostly took place from late August* – thus, although the total amount of external capital inflows was not higher than in 2003 (and was clearly lower as a percentage of GDP), the fact that disbursements were concentrated in the last quarter of the year may have had a significant impact on the exchange rate;
- *Government sale of treasury bills to collect revenue* (partly to reduce the negative impact of delayed aid disbursements on inelastic expenditure), also contributed to reduce liquidity in the economy and increased the relative value of the domestic currency;
- *The above mentioned causes may have been exacerbated by the policy of aid sterilization and excess reserves* followed by the central bank – particularly given that the central bank may have been suddenly faced with an unpredictable and large amount of aid concentrated in a very short period of time – and by the *adoption of a floating exchange rate mechanism*.

IMF (2005a) also argues that the monetary authorities in Mozambique have been overcautious about inflation targets, which has led to policies that may be conducive to creating some exchange rate instability and to damaging business expectations and confidence.

These arguments can be summarized as follows: the monetary impact of inflows of external capital depends on the scale of incremental inflows, the distribution of such external resources along the budget cycle (which creates significant pressures in different moments of the budget cycle), the predictability and volatility of the inflow of resources (which builds expectations and reaction behavior) and the policies of the monetary authorities.

The November 2005 currency shock seems to be due partly to the same range of problems as mentioned above. In particular, during the period external reserves had grown to the equivalent of seven months of imports including LPs or nine months excluding LPs. Different analysts have argued that the

strong depreciation was also due to psychological reaction to uncertainty associated with the meticalization of the economy, such that economic agents are holding foreign assets rather than meticaís and transferring them abroad.<sup>12</sup>

There seems to be scope for a range of factors having created the latest currency shocks. Nonetheless, central bank policy played a major role in forcing the appreciation of the currency. In addition to reforming regulation, the central bank also reduced foreign assets by US\$ 27 million between the 11<sup>th</sup> and the 25<sup>th</sup> of November, sold approximately US\$ 33 million to the interbanking exchange market, and sold US\$ 31 million worth of treasury bonds.<sup>13</sup> As a result, the exchange rate appreciated.

Table 2 also shows that treasury bonds yield higher interests than deposits and savings. Adding to this that there are fiscal incentives to holding treasury bonds, the banks prefer to hold them as part of their portfolio than to mobilize saving deposits. Although this behavior may help to contain inflationary pressures, it may create some currency instability and reduces the ability of the economy to quickly respond to output demand pressures – for example, by reducing incentives and capacity of domestic firms to invest.

Additionally, table 2 also shows that the spread between savings and lending rates is high, which is an indication of the concentration of the financial sector (3 banks control more than 70% of all bank operations). The expected negative impact of these factors on investment and growth is only minimized by the increasingly dominant role played by aid in financing public investment and by FDI in determining private investment. The relationship between these two ways of promoting investment will be analyzed in the next sections.

The above analysis seems to indicate that the magnitude and relevance of the impact of large increases in inflows of external resources depend not only on the how large incremental inflows are but also on other crucial variables, namely:

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<sup>12</sup> “Meticalization” is the term used by the central bank to characterize the process by which “dollarization” is abandoned and the domestic currency takes central stage in domestic transactions. In 2005, the central bank adopted a series of policy measures to promote the meticalization of the economy, namely a regulation that imposes severe limitations on the issuing of credit in foreign currency for consumption and for investment by non-exporting domestic firms; reform of the norms that regulate the interbanking monetary market, amongst other measures. Additionally, the Parliament also approved the law that introduces the exchange rate from the current Metical to the Metical with a reduced number of digits (three zeros will be eliminated, such that 1000 current meticaís will be equivalent to 1 new metical).

<sup>13</sup> Banco de Moçambique. 2005. Comunicado n° 9/2005 de 05 de Dezembro.



- Whether inflows are predictable within periods and steady between periods;
- How resources are allocated, namely:
  - Whether increasingly via direct budget support or other aid modalities, as this has an impact the planning of fiscal and monetary policies;
  - Whether increasingly focused on production and productive capacity building, as this has an impact on how resources are spent, demand and transactions generated, output grows and new resources are created.
- Whether the financial management capacity of the government improves to the level required to manage significantly higher inflows of resources without creating serious bottlenecks or losing control – of course, being able to absorb and spend significantly higher levels of inflows of aid without creating severe inflationary pressures requires not only good coordination between fiscal and monetary polices, but also adequate allocation of aid to help improve, quickly, the productive response of the economy;
- Whether monetary policies followed are strictly short-term and influenced by unpredictable and volatile huge flows of resources.

One can conclude this section by arguing that aid in Mozambique is both absorbed and spend, although not *perfectly*. Fear of inflation pressures has led the central bank to pursue overcautious anti-inflation policies (through sterilization). Experience-based expectations regarding aid unpredictability and volatility have led to an overcautious policy related to building up of foreign reserves. Exchange rate instability has ensued.

Thus, although Mozambique can absorb and spend more aid, it needs significantly better and better coordinated monetary policies to deal with inflows of resources. This will also require better planning of disbursement of resources throughout the budget cycle and a stringent adherence of aid donors to such planning, as well as the ability to use aid to develop productive capacities in the economy.

### 3. Trends in Total External Capital Flows: AID and FDI

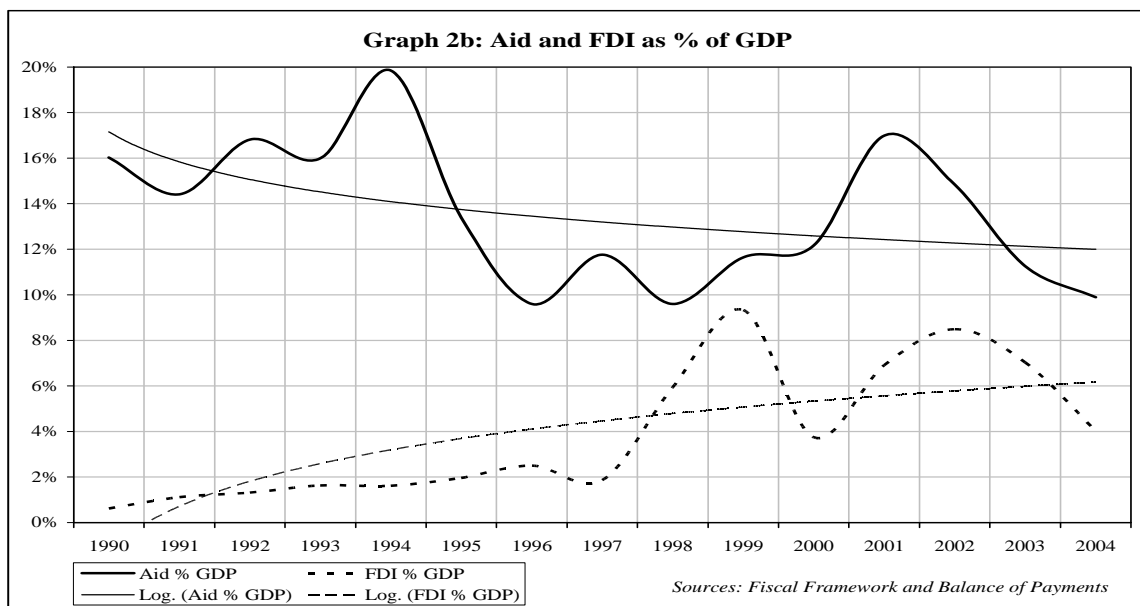
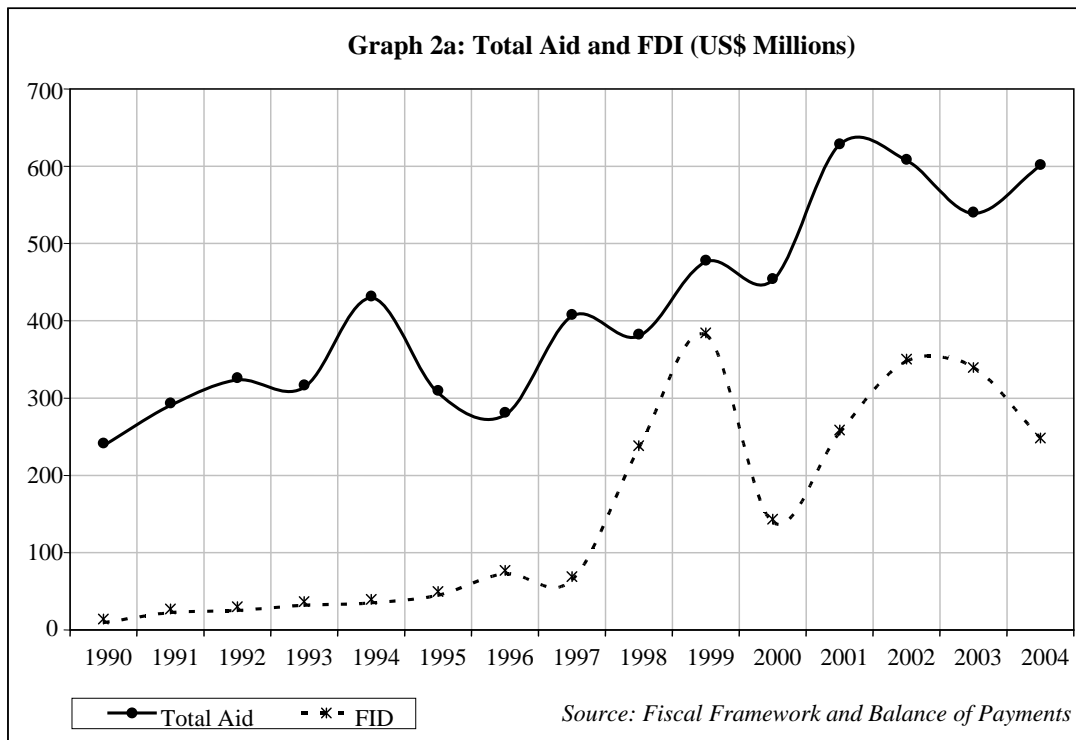
Graphs 2a and 2b show the general weight of TECF in Mozambican. Graph 2a compares total aid (as recorded by the Fiscal Framework (FF)) and FDI flows. FDI is becoming a very significant source of capital, particularly from 1998. However, FDI inflows are significantly more unstable than aid's. This instability reflects the fact that FDI inflows are heavily concentrated in a **few mega** projects, which have absorbed well over 75% of FDI.<sup>14</sup> If FDI is distributed through many and smaller projects, the trend of FDI in the economy, over time, tends to be smoother and steadier than any individual project cycle. As they stand, trends in overall FDI inflows are similar to project trends. The peaks of 1998/1999 and 2002/2003 reflect the construction phase of Mozal I and then Mozal II and Sasol.<sup>15</sup>

Graph 2b shows aid and FDI trends as percentage of GDP. In both cases, trends vary significantly in direction and in value. However, over the period aid flows tend to fall as percentage of GDP, while FDI flows tend to increase. In practice, this means that aid flows recorded by FF are increasing, on average, more slowly than the GDP growth rate, whereas FDI is, on average, increasing faster than GDP growth rate. Given that FDI tends to be heavily concentrated in a few mega projects, as mentioned earlier, these trends in aid and FDI flows have an impact not only on the rate but also on the structure of economic growth and on the structure of income distribution – growth and income distribution resulting from the growth pattern tend to become more narrowly focused (this will be discussed later).

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<sup>14</sup> Castel-Branco, C. 2005a. A Evolução da Economia Nacional. Conference presentation at the “Conferência Económica BIM: Moçambique, Ambiente de Investimento. Maputo 14 of September; 2004a. *What is the Experience and Impact of South African Trade and Investment on Growth and Development of Host Economies? A View from Mozambique.* (<http://www.sarpn.org.za>); 2004b. *Business and Productive Capacity Development in Economic Growth and Industrialization: the Case of Mozambique* (mimeo); 2003. *Indústria e Industrialização em Moçambique: Análise da Situação Actual e Linhas Estratégicas de Desenvolvimento.* (<http://www.sarpn.org.za> and <http://www.italcoopmoz.org>); and 2002b. *Economic Linkages between Mozambique and South Africa.* (<http://www.sarpn.org.za>); Castel-Branco, C. and N. Goldin. 2003. *The Impact of the Mozal Aluminium Smelter on the Mozambican Economy* (Report).

<sup>15</sup> Mozal is a large aluminium smelter, whose majority share holder is BHP Billiton (the larger aluminium and non-precious metals producer in the World). Sasol is a large fuel company from South Africa, which transforms natural gas and coal into synthetic liquid fuels. In Mozambique, the Sasol project is extracting natural gas from the reserves in Pande and Temane and transporting the most of it to Sasol's refinery in Secunda (South Africa). Together, the two projects have cost about as much as the size of the Mozambican economy – roughly, US\$ 4.2 billions.

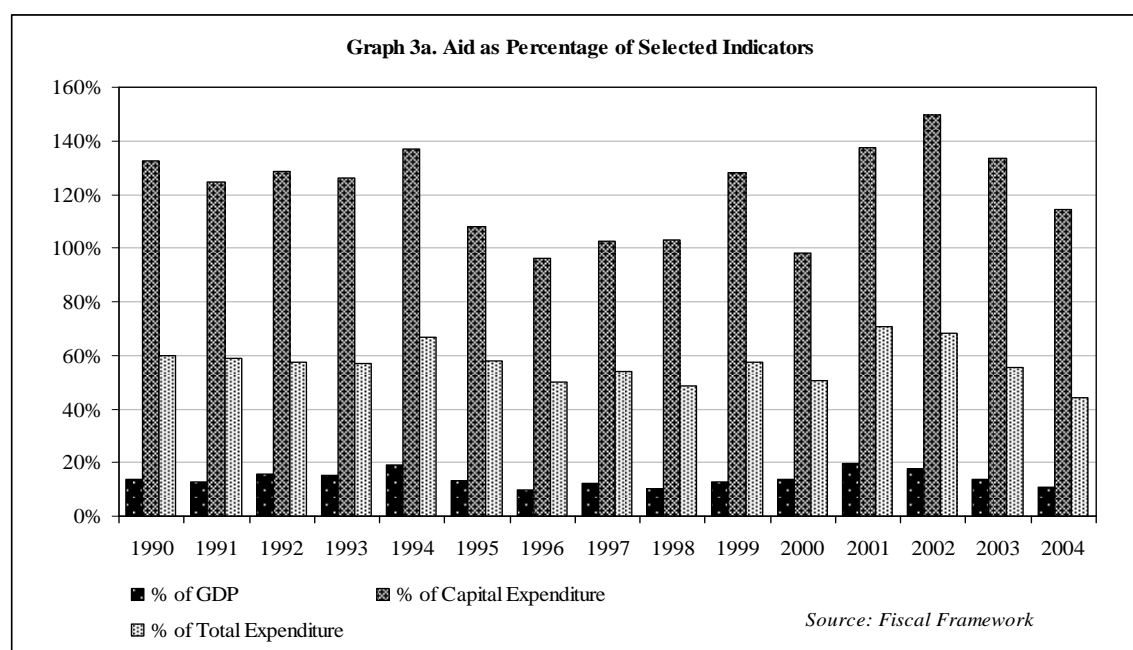


#### 4. Aid Flows and Public Finances

This section looks at the relationship between aid flows and different public finance indicators. The section shows that public finances, particularly capital expenditure, are heavily dependent on aid. Given the focus of public

investment – infra-structures and social sectors<sup>16</sup> – and the structure of FDI – heavily focused on a few mega projects - aid plays a crucial role in the determination of the patterns of growth and income distribution. The section also shows that current expenditure is far more inelastic than capital expenditure such that it is the later that adjusts downwards when aid falls or increases only slightly. Given that two thirds of current expenditure is made of wages and salaries, the most inelastic component of public expenditure, in the downward aid cycle the stat may be paying civil servants that cannot perform their tasks because of shortage of resources to finance goods and services and investment. The section also argues that the destabilizing effect of sudden and large changes in aid flows depends on whether it direct budget support (DBS) or program/project aid that change.

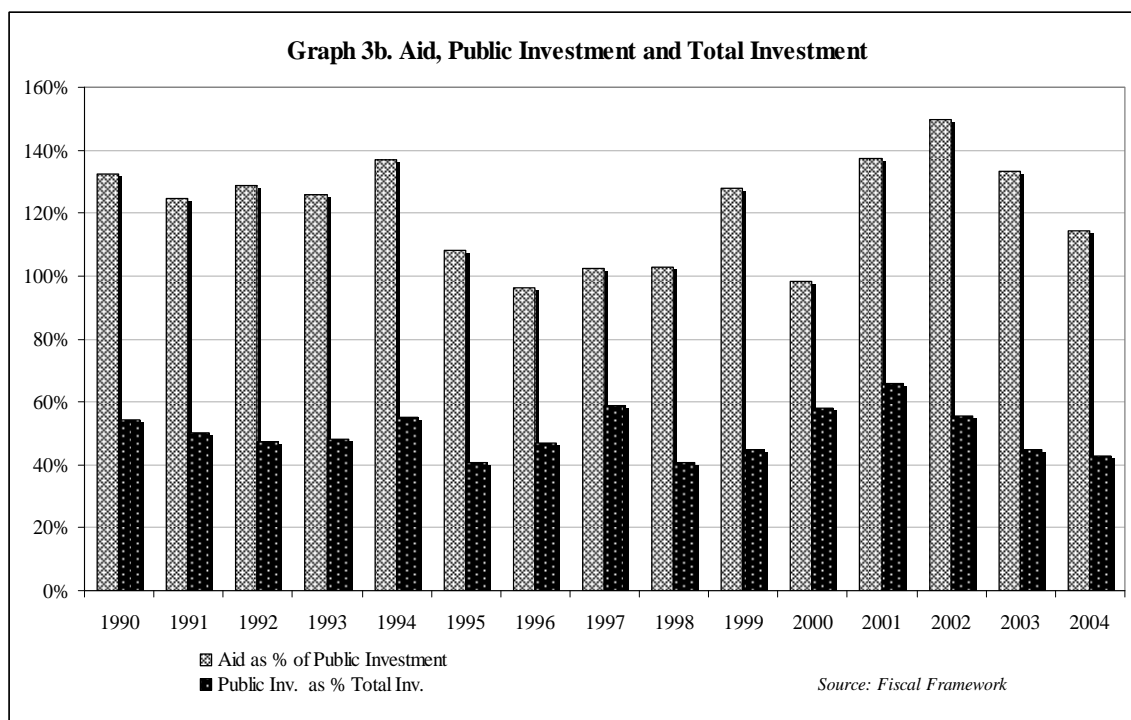
Graphs 3a through 3d show aid as ratios of different macroeconomic aggregates. Graph 3a shows aid as percentage of GDP, total public expenditure and public capital expenditure. The trends of the three ratios are similar and closely related, showing how important aid flows are for sustaining GDP growth and public expenditure. Bearing in mind the likelihood of statistical error or inconsistent recording of data, peaks in the ratios are associated with specific events: second multiparty, general elections in 1999; the great floods of 200/2001.

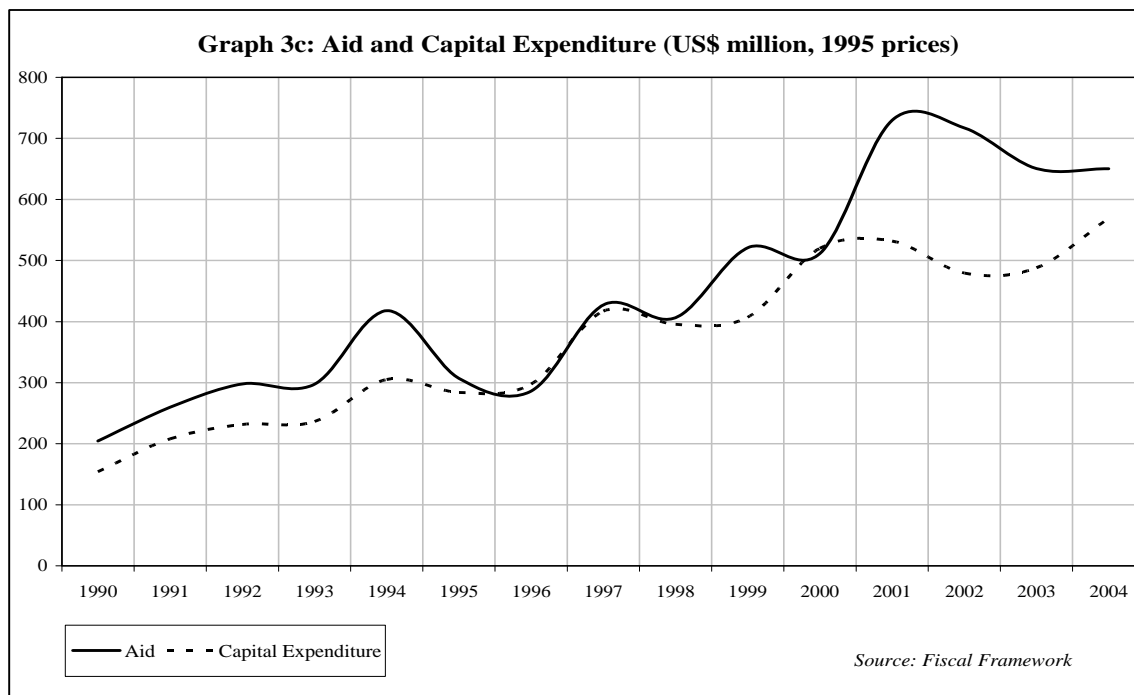


<sup>16</sup> Two thirds of Mozambique's public expenditure are allocated to the priority sectors set in the PARPA (Mozambique's Poverty Reduction Strategy Paper). Such sectors are education, health, roads and infra-structures, good governance and rural development (See GoM. 2001. *Plano de Acção para a Redução da Pobreza Absoluta 2001-2005*. See, also, the annual Public Budget and the Medium Term Fiscal Framework).

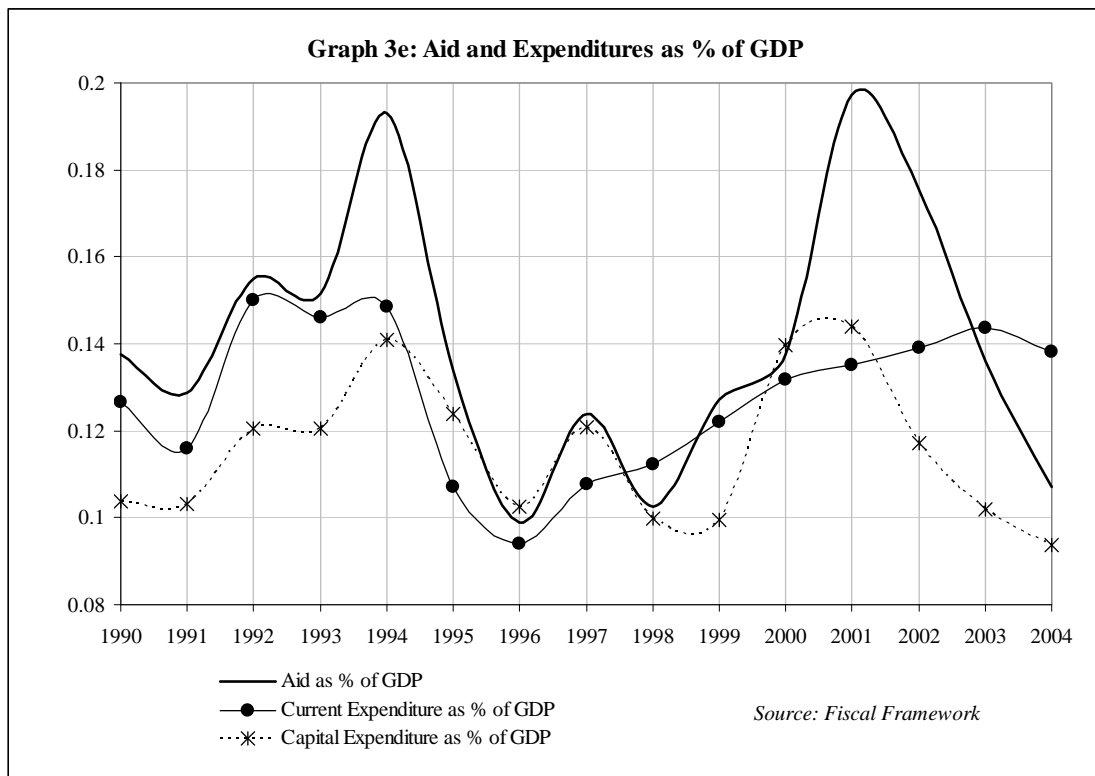
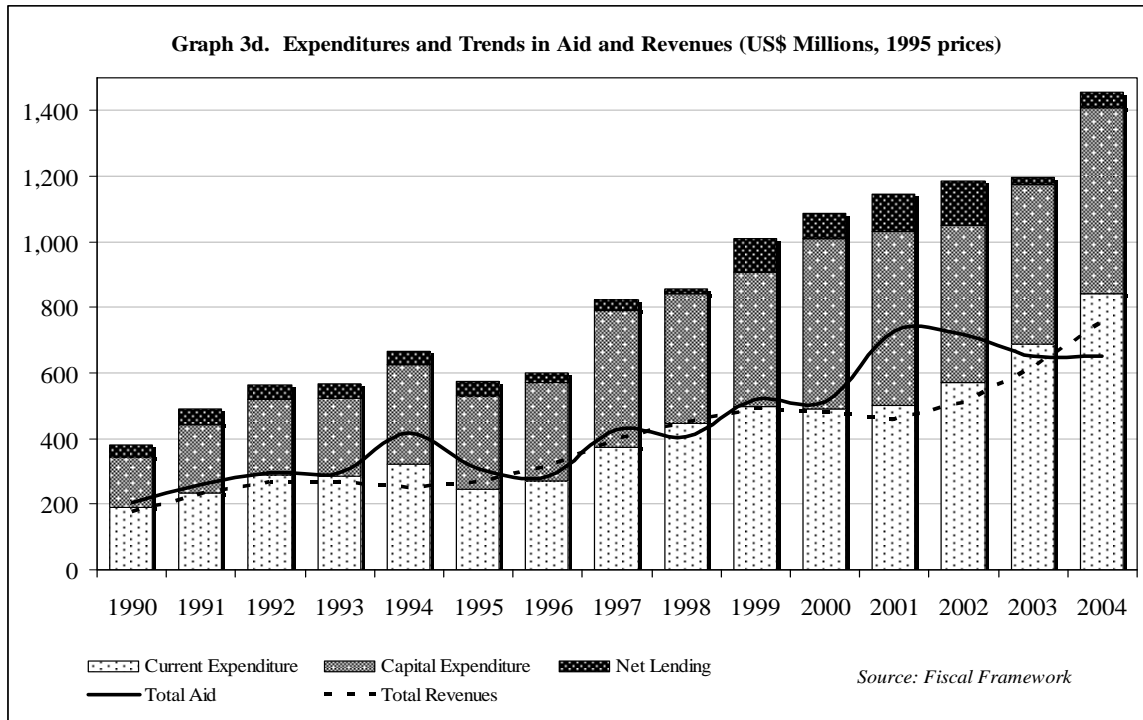
Furthermore, if we consider that only one third of FF recorded aid is direct budget support (DBS) – this is, totally uncommitted and free to be used by the government as necessary – then the exact destabilizing impact of aid fluctuations depends on whether it is DBS that falls or expands. Furthermore, unless all aid is recorded in the budget and a large share of it is GBS, government policy may be misinformed and/or, to varying degrees, ineffective.

Graph 3b shows that the weight of public investment in total investment (public and private) depends on the flow of aid. This should be expected because public revenue is barely enough to finance public current expenditure (as will be shown later); two thirds of FF recorded aid is program/project, associated; and, therefore, all public investment is financed through aid. Given that public investment is, on average, 45%-50% of total investment, aid is a crucial determinant of capital formation in Mozambique. Additionally, given that public investment tends to be spent on infra-structures and social sectors, aid is an even more important determinant of long term patterns of growth and income distribution. Graph 3c confirms the picture shown in 3b – it is clear that public investment follows the pattern of aid flows.





Graph 3d shows the relationship between aid and domestic public revenue, on one hand, and the different categories of public expenditure on the other hand. For most of the period, in 8 of the 15 years, the budget records a small current deficit – public revenue is less than current expenditure. The graph also shows that in 2004 the current deficit was the largest since 1994, although this was only the second time in the time-series that domestic revenue exceeded aid revenue. Thus, aid finances investment and the current deficit. Furthermore, when aid flows increase significantly, public investment also expands. However, when aid flows fall or increase only slightly public investment tends to fall due to inelastic public current expenditure. This conclusion is also confirmed by graph 3e.



This picture, of inelastic current expenditure forcing capital investment to contract, is worse than the graph shows because an unknown percentage of expenditure recorded as “capital” – program and project related – consists of different types of hidden current expenditure (top up salaries, fuel, phone

bills, and so on).<sup>17</sup> Different and unreliable estimates put the “current expenditure component” of “capital expenditure” figure at between 20% and 30% of recorded capital expenditure. If we consider that two thirds of current expenditure is wages and salaries, the most inelastic of the expenditure components, it is often the case that when aid falls or increases only slightly the state may be forced to pay people who cannot perform their tasks due to shortage of resources to pay for goods and services and for investment.

## 5. Aid, FDI and Patterns of Economic Growth

This section analyses the relationship between aid, FDI and economic growth. FDI comes into the analysis because it has become a significant source of productive investment finance and, as shown earlier, its weight on the economy, though unstable, is increasing. The section argues that trends of aid, FDI and GDP growth are closely related through the mechanism of investment. However, FDI impact on growth is smaller than aid’s because of three major factors: significant FDI flows only start in the second third of the series; the levels of FDI are still smaller than aid’s; and each monetary unit of FDI generates less value added than an equivalent monetary unit of aid because of FDI heavy concentration on capital and import intensive mega projects, which generally generate few jobs and other domestic linkages. Aid – which has a larger impact on aggregate growth due to its scale, impact on public and private consumption, and concentration on labor intensive construction of infra-structures and delivery of services – has had little impact in changing and broadening the pattern of economic growth because it has been focused on broad infra-structure and social investment without any direct and short to medium term relationship with any specific growth model.<sup>18</sup> Thus, whereas FDI has a smaller impact on aggregate growth but a bigger impact on the structure of productive capacities, aid has a larger impact on aggregate growth but a much smaller impact on the structure of productive capacities.<sup>19</sup>

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<sup>17</sup> Some current expenditure is hidden under capital expenditure because of the agreed fiscal stability targets, between the Government of Mozambique (GoM) and the IMF, that set the level of current expenditure in relation to GDP and domestic public revenue; pressures created by capital expenditure on current expenditure, and the inability to meet current expenditure demands of investment within the levels of expenditure set by the fiscal stability target; and The, still, large proportion of aid that is tied to investment and specific programs.

<sup>18</sup> See Castel-Branco, C. 2005b. *Infra-estrutura, Tecnologia, Desenvolvimento e o Papel do Futuro Graduado* (Inaugural Class of the Academic Year in the Instituto Superior de Transportes e Comunicações).

<sup>19</sup> See, also, Castel-Branco 2002b, 2003, 2004a and 2004b and 2005a, and Castel-Branco and Goldin 2003.



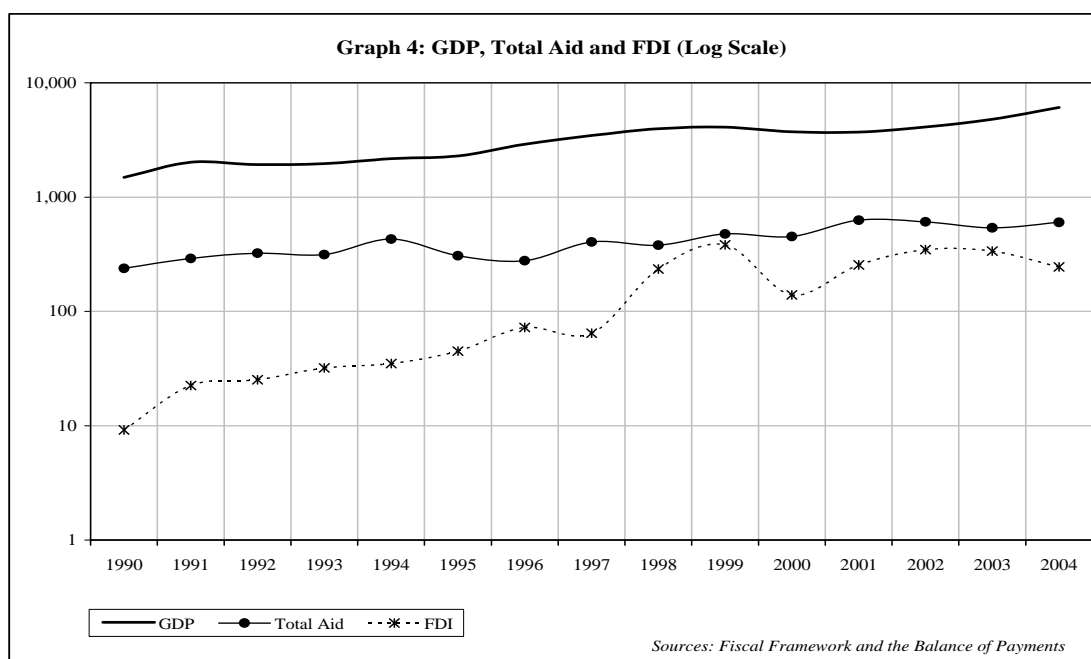
Furthermore, the section also investigates the relationship between external trade and growth because such a relationship is important to understand the mechanisms by which TECF and investment affect growth.

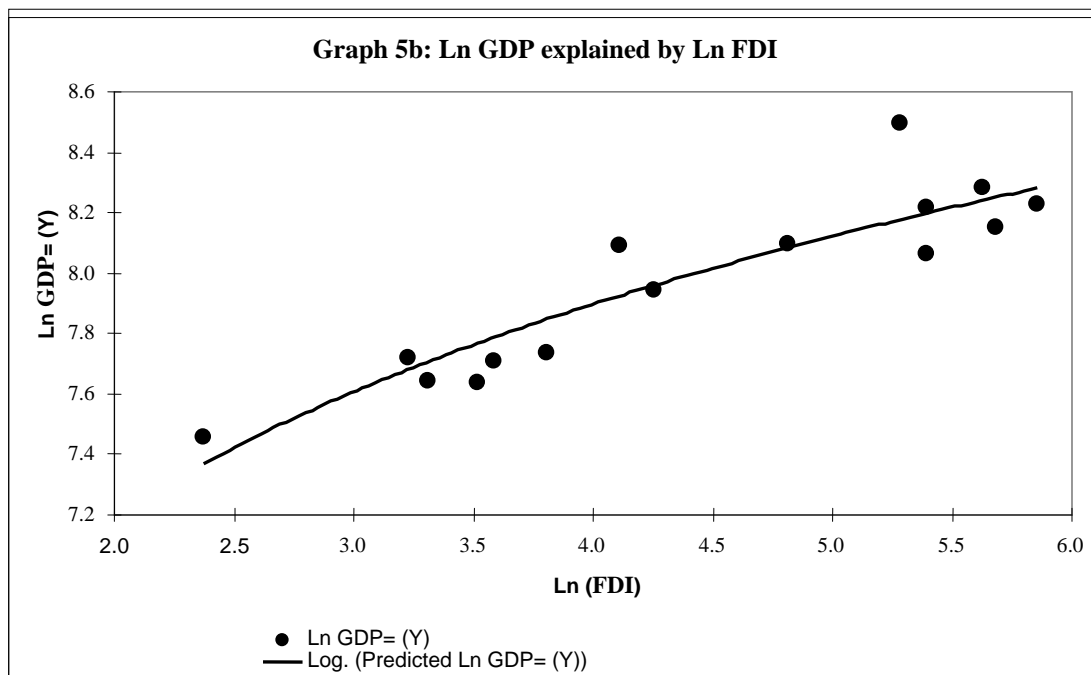
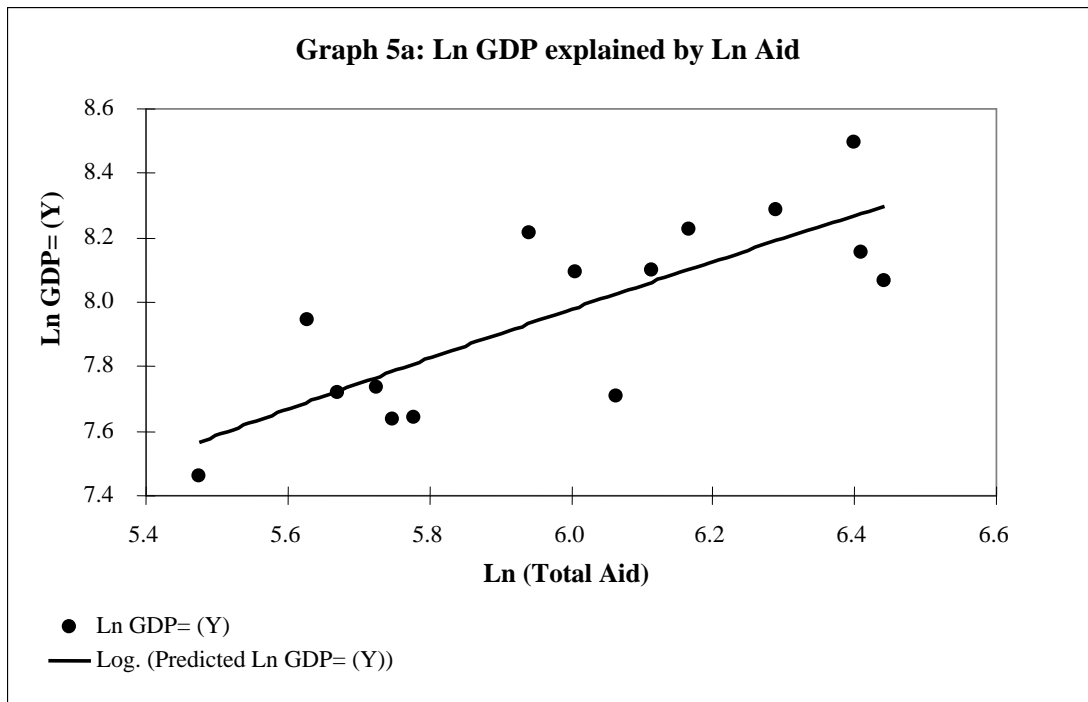
Graph 4 (in logarithmic scale) shows that trends of aid, FDI and GDP growth are closely related, and that FDI is becoming an increasingly important source of investment finance. These relationships are, then, confirmed by the simple regression analysis that follow (Graphs 5a to 5c), and that relate GDP growth with aid, with FDI and with the combined TECF (TECF = Aid+FDI).

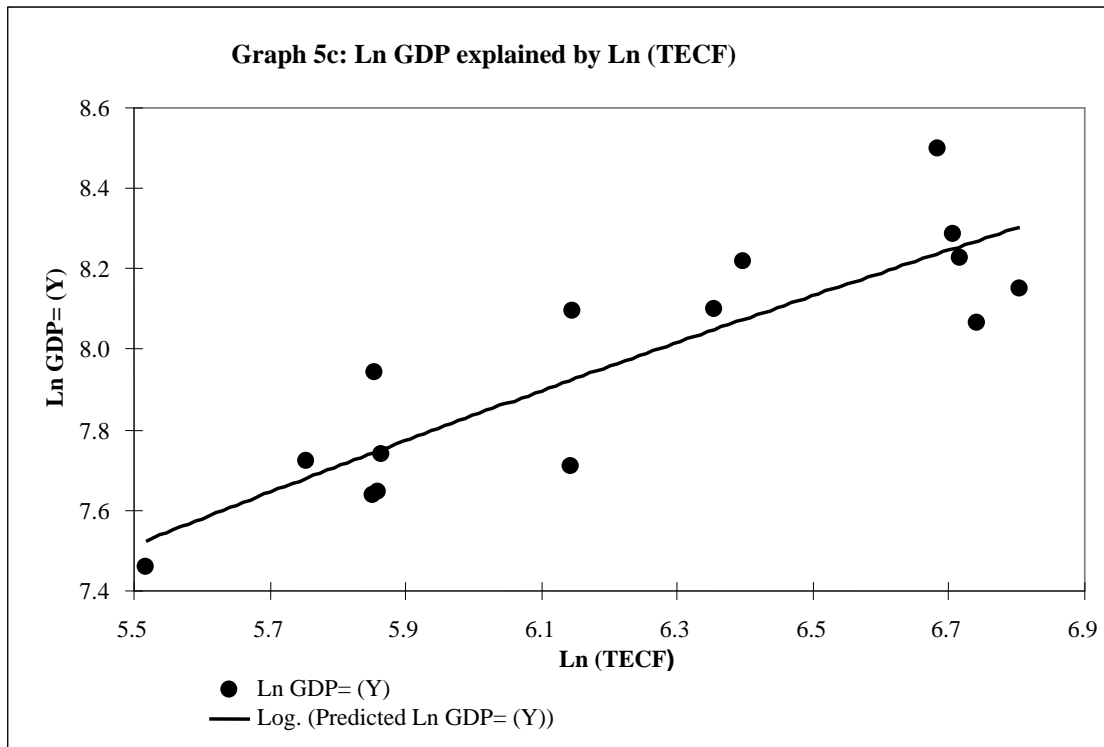
The three simple models that follow show, clearly, that:

- The impact of aid on GDP growth is stronger than the impact of FDI - whereas a change in one unit of aid results in a change in 0.75 unit in GDP; a change in one unit of FDI changes GDP by only 0.25 unit;
- The  $Y - Y(\text{FDI})$  equation has a better fit than the other two, despite having a smaller impact on GDP;
- Despite the limited number of observations, 15, the results are statistically significant.

The summary of the statistical results of the three regressions is presented in table 1 (below).







**Table 1: Summary of the result of the regression analysis  $Y = Y(\text{Aid, FDI, TECF})$**   
**Dependent variable:  $\ln(\text{GDP})$**

	<b>Coefficients</b>	<b>Standard Error</b>	<b>t Stat</b>	<b>P-value</b>	<b>Lower 95%</b>	<b>Upper 95%</b>
Intercept	3.46	0.98	3.53	0.00	1.34	5.58
<b>Ln (Total Aid)</b>	0.75	0.16	4.60	0.00	0.40	1.10
Adjusted R Square	0.59					
Standard Error	0.19					
Observations	15					
Intercept	6.87	0.14	48.29	0.00	6.56	7.18
<b>Ln (FDI)</b>	0.25	0.03	7.90	0.00	0.18	0.32
Adjusted R Square	0.81					
Standard Error	0.13					
Observations	15					
Intercept	4.24	0.60	7.12	0.00	2.95	5.52
<b>Ln (TECF)</b>	0.60	0.10	6.28	0.00	0.39	0.80
Adjusted R Square	0.73					
Standard Error	0.15					
Observations	15					
<b>Correlation</b>	<b>Ln GDP= (Y)</b>	<b>Ln (Total Aid)</b>	<b>Ln (FDI)</b>	<b>Ln (ECF)</b>		
Ln GDP= (Y)	1					
Ln (Total Aid)	0.79	1				
Ln (FDI)	0.91	0.83	1			
Ln (TECF)	0.87	0.96	0.947065	1		

Thus, GDP growth is highly correlated with external capital inflows, and more so with aid. The analysis so far shows that this correlation is stronger with aid because of its larger scale, but also that because of its stronger linkages to the economy – namely through local employment, consumption (both private and public), fiscal linkages and utilization of other domestic resources and capacities.

On the other hand, FDI has a smaller impact on GDP growth because of the structure and dynamics of FDI projects and high fiscal incentives, but it has a stronger impact than aid on shaping the type of productive capacities that develop because of its focus on direct productive investment.

Therefore, in order to sustain high rates of economic growth, broaden the development basis and improve income distribution across the country and social groups, aid has to become more focused on supporting the development of direct productive capacities – for example, by financing industrial and technological services through the budget – and FDI needs to become more involved in other areas of industry and agro-industry. The literature shows that FDI follows, rather than starts, change in growth dynamics.<sup>20</sup> Thus, there is a very crucial role to be played by aid inflows in not only accelerating but, more importantly, changing and broadening economic growth and development in Mozambique.

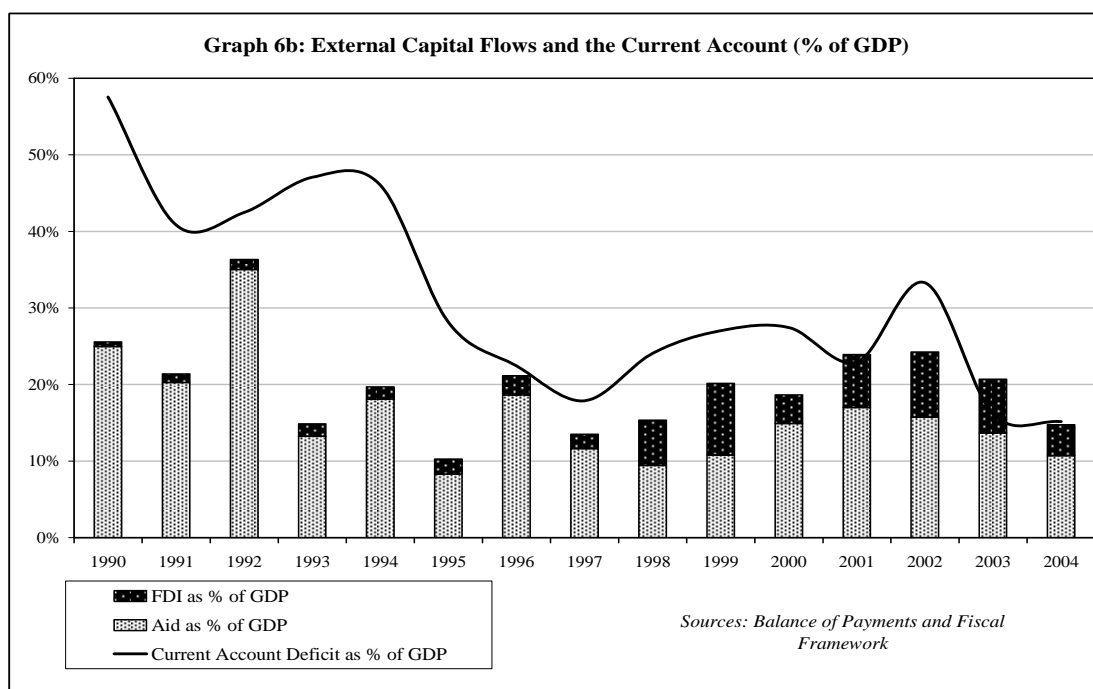
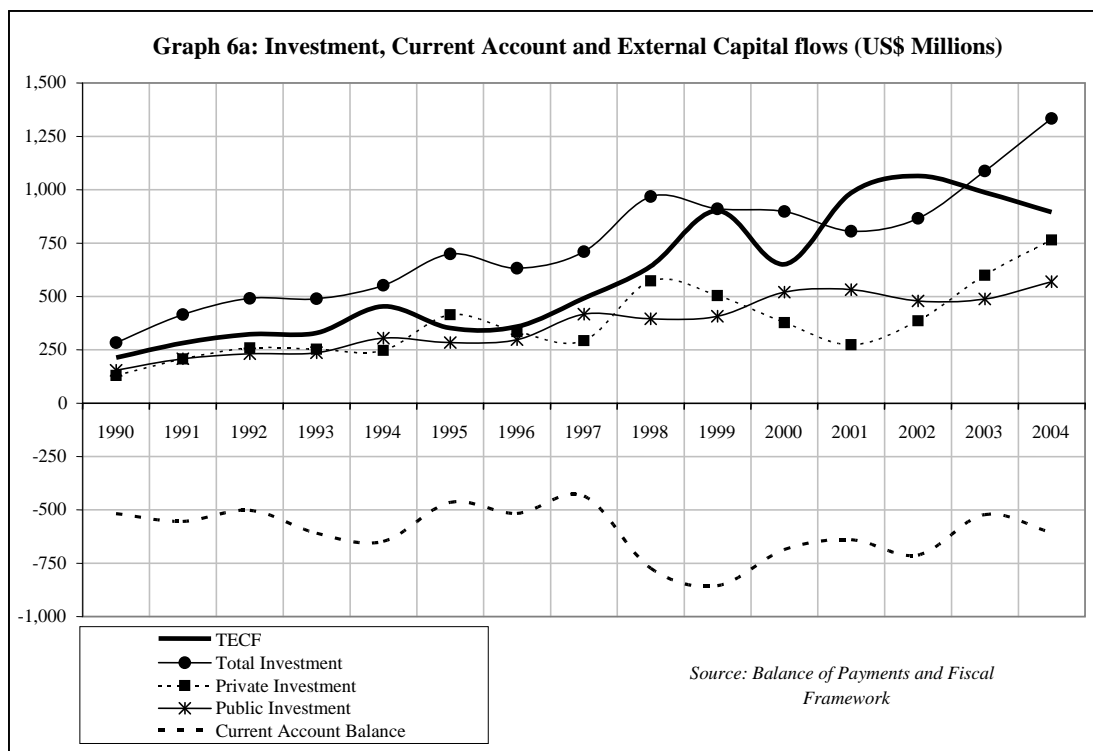
Graph 6a shows that TECF and total investment are closely related, and that the total investment and the current account deficit are also directly and closely related. Thus, the ability of the economy to grow depends on access to inflows of external capital, given that economic expansion is closely associated with imports of investment goods. This means that the economy not only faces shortages of savings, but also shortage of technological and productive capacities – these capacities have to be imported. Although the positive impact of mega projects in tackling the current account deficit is noticeable from 1999, these projects do not tackle the problem of technological, productive and entrepreneurial capacities in general – hence, economic growth arising from other sources different from mega projects and not dominantly export oriented will continue to have a negative impact on the current account balance.

Graph 6a also shows that the dynamics of investment in the economy has been driven by private investment in the later years. Private investment is driven by mega projects which do not tend to strengthen and broaden domestic capacities – although some important linkages have been developed

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<sup>20</sup> See, for example, UNCTAD. 2000. *Capital Flows and Growth in Africa*. United Nations: New York and Geneva; 1999a. *Foreign Direct Investment in Africa – Performance and Potential*. United Nations: New York and Geneva; and 199b. *African Development in a Comparative Perspective*. UNCTAD (Geneva) and James Currey (Oxford).

in the economy. Thus, aid can play a crucial role in broadening the development basis of the economy by, for example, financing the provision of production oriented services by the government (technological, informational, training and policy coordination) that firms outside of very large projects cannot have access to.



Graph 6b shows that from 1996 the current account deficit is mostly covered by aid and FDI, and that the FDI share of TECF is increasing. Thus, as investment increases the current account deficit tends to increase as long as investment is not concentrated in export oriented mega projects. Given that FDI tends to be concentrated in mega projects, as the share of FDI in TECF increases so does the tendency of external capital flows to concentrate productive and trade capacities in very large, capital intensive projects. Aid, particularly if allocated to production and trade related services, could play a role in broadening the development basis.

These points can be further understood when we analyze the evolution of exports over the period (graph 7a). Excluding mega projects, the current account deficit is significantly higher than with mega projects included; and exports are significantly lower and stagnant. It can be argued that a mega project based strategy is, therefore, a better alternative for tackling fundamental macroeconomic issues – high investment, fast growth and external trade balance. However, we have also to consider that medium term growth potential of mega projects is limited, and so is the potential of such projects to generate employment, input-output, technological and fiscal linkages. As a result, the economy retains little of what is generated by mega projects, such that the surpluses generated by such projects are not necessarily available for the economy as a whole.<sup>21</sup> Furthermore, if exports become so concentrated around three commodity-based, export-oriented mega projects, the economy as a whole will become significantly more vulnerable to market volatility and shocks. Graph 7b, which analyzes trends in the export coverage of imports, confirms these conclusions.

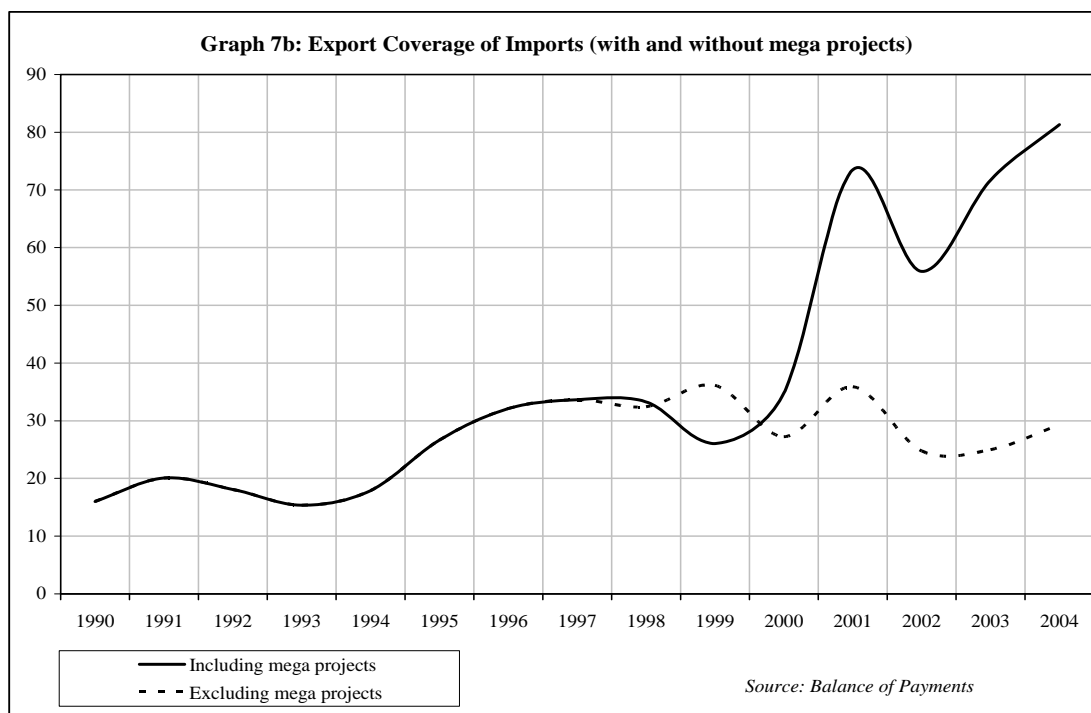
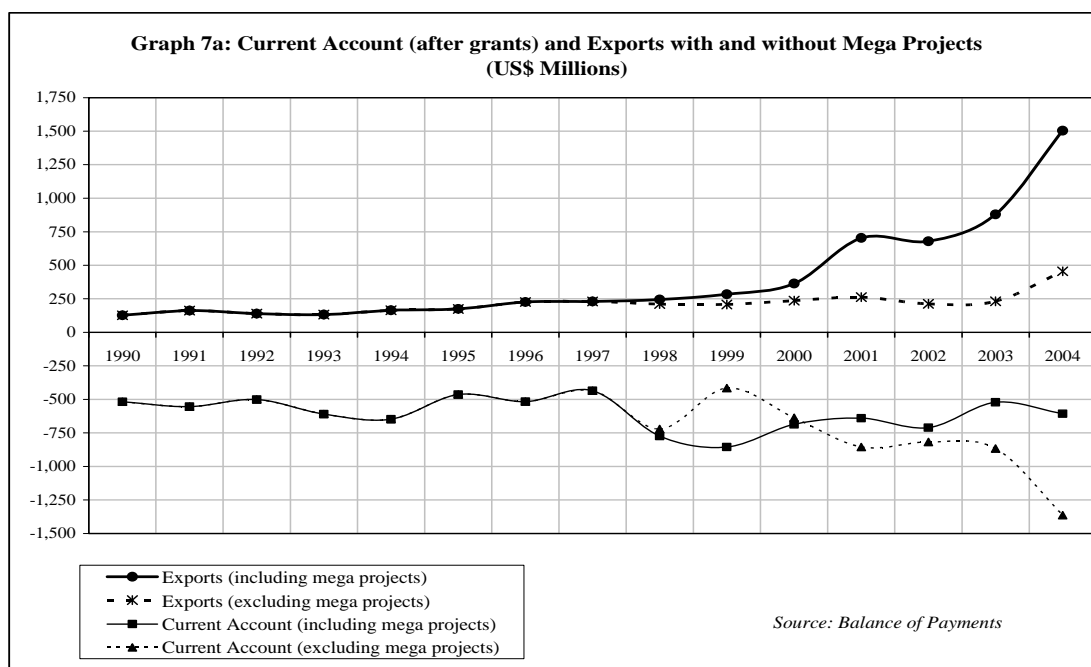
It has been argued that export stagnation outside mega projects might be an indication of the presence of “Dutch Disease” – inflows of external capital due to aid and mega projects may make the other sectors non-competitive. There are at least three problems with this hypothesis. First, in section two of this paper no strong evidence of “Dutch Disease” or associated symptoms (increasing inflation and exchange rate appreciation as a result of aid inflows) have been found.

Second, the hypothesis that Dutch Disease may explain export performance in Mozambique is too simplistic. In fact, sectors that are growing fast are those dependent on FDI, that are of large scale, that operate within oligopolistic or monopolistic conditions, and which do not depend on (seriously constrained)

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<sup>21</sup> In the case of Mozal, the economy as a whole only retains (in the form of wages, input-output and fiscal linkages) approximately 20% of Mozal’s trade surplus (Castel-Branco and Golding 2003).

local productive capacities. Outside such conditions, no sector of the economy is growing fast, and most are either stagnant or collapsing.<sup>22</sup>



<sup>22</sup> Castel-Branco, CN 2002a. The Political Economy of Industrial Policy. The Mozambican case. Unpublished PhD Thesis. School of Oriental and African Studies (Dept. of Economics). Univ. of London; Castel-Branco 2003, 2004a and 2004b.



Third, the economy is starved of crucial capacities – technological, financial, entrepreneurial, informational, skills, certification and quality systems, organization of supply chains, and so on. Very large projects benefit from linkages with international corporations, which address many of the issues mentioned, and/or they can create the conditions if necessary. Medium and small projects do not necessarily benefit from the same international linkages and cannot afford to create all the conditions they need to operate successfully.<sup>23</sup>

Nonetheless, the currency shocks that took place in 2004 and 2005 have been blamed for significant losses for already established large exporters – besides aluminium, they were cotton, tobacco and sugar exporters.

Thus, aid is a very important determinant of GDP growth, but has had little impact in shaping the structure and dynamics of growth, productive capacity development and trade. FDI, on the other hand, has had less impact on aggregate GDP growth than aid, but has been much more effective at shaping the structure and dynamics of growth, productive capacity building and trade. However, FDI is not a perfect substitute for aid – it is not a freely available resource, responds more strongly to corporate strategy than to national policies, and is not focused on broadening the development basis of the economy. Thus, aid is crucial not only because of scale, but also because of the way it can be used by the government and through a planning and budgeting process that is responsive to national priorities. In this connection, aid can be an instrument to help broaden the development basis (growth, trade and income distribution) as well as to strengthen more positive linkages with the dynamics of FDI.

## 6. Conclusions

Our analysis, which depends on a statistical basis that is poor and poorly developed and managed, has shown that:

- Aid has been both absorbed and spent, but imperfectly. The central bank has been overcautious with inflation targets and this has led to monetary policies that squeeze the economy out of liquidity to invest and growth on a broader basis. Aid volatility and unpredictability has exacerbated the overcautious tendencies of the central, leading to

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<sup>23</sup> Government of Mozambique. 2005. Industrial Policy and Strategy 2005-2009 (draft version); Castel-Branco 2004a and b, 2003, and Castel-Branco and Goldin 2003.

policies to create too large foreign reserves. Financial speculation (more than mobilization of savings and investment) and currency instability have ensued. However, there is no strong evidence for the presence of Dutch Disease effects – inflation has been falling and sporadic surges are related to structural problems of the economy rather than with changes in base money; and the exchange rate has been unstable but is the long term trend shows depreciation rather than appreciation.

- Aid and FDI tend to increase in value, but only FDI shows a positive trend as percentage of GDP;
- Aid has been financing public capital expenditure and current deficit and, in doing so, has financed, on average, approximately 50% of total investment in Mozambique over the last 15 years;
- Due to inelastic current expenditure, particularly because of the weight of the wage bill, aid volatility and unpredictability is much more likely to affect capital expenditure;
- Aid and FDI are strongly related to aggregate growth of the economy. However, aid has a stronger impact on overall growth and FDI has a stronger impact on the structure of productive and trade capacities and dynamics;
- Aid driven growth is more related to private and public consumption and services, because two thirds of current expenditure, heavily financed by aid, is concentrated on the delivery of social services. Public expenditure is not directly related to the development of productive capacities, apart from a broad and general approach to infra-structures and human capital;
- FDI is more responsive to corporate strategy than to national investment and development policies and priorities, and tends to be narrowly focused on large projects and oligopolistic or monopolistic industries;
- Thus, aid may have to called to play a crucial role in broadening the basis of production, trade, growth and development;
- Large inflows of resources may have an impact on macroeconomic stability. However, the magnitude and direction of such an impact is not a foregone conclusion, as they depend on several other variables: predictability and volatility; allocation of resources; the development of a strong financial management capacity by the state; and fiscal and

monetary policies that are followed, and their consistency vis-à-vis medium and long term development and growth perspectives.

In brief, as long as resources are allocated towards development and strengthening of information, coordination and productive-trade capacities, and the increase in inflows of aid are matched by the strengthening of financial management capacities, predictability and an increasing share of on-budget and direct budget support, scaling up inflows of aid may not have to create serious macroeconomic disturbances.