THE IMPLEMENTATION OF IMF PROGRAMMES: A CONCEPTUAL FRAMEWORK AND A POLICY AGENDA

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Abstract

The success of IMF supported programmes has conventionally been assessed by examining their effects on intermediate variables such as fiscal deficits, monetary growth and exchange rates, and final outcomes, such as the balance of payments, inflation and economic growth. However, little or no distinction has been made between those countries that implement the conditions incorporated into programmes and those that do not. More recently greater attention has been paid to implementation on the assumption that in order to work programmes need to be implemented. Empirical studies have begun to include political economy variables in an attempt to explain implementation. They have used the concept of ‘ownership’ to provide a theoretical framework. This paper provides an alternative conceptual framework based on the marginal benefits and costs of implementation. It goes on to discuss a range of policies that might be expected to improve implementation.
1. INTRODUCTION

The International Monetary Fund exercises a pervasive influence over economic policy in many developing and emerging economies. The influence is at its greatest when governments turn to it for direct financial assistance. This may be forthcoming under different lending facilities but will be conditional on the agreement and then the implementation of a programme of policy reform.¹ There is a large literature examining the design and impact of IMF conditionality and, as one might anticipate, considerable debate about the extent to which Fund-backed programmes work.² However, a more recent trend in the literature has been to examine the circumstances under which programmes are or are not implemented.³

This concern over implementation is apposite. In order for IMF programmes to exert a beneficial influence over economic performance one might suppose that two conditions have to be met. First, they have to be well-designed. Second, they have to be implemented.⁴ While early research on conditionality focused on the economic design of programmes and their impact on intermediate policy variables and ultimate

¹ For a summary of the Fund's facilities see IMF (2000).
² For reviews of this literature see, for example, Killick (1995) and ul Haque and Khan (1998). Bird (2001a) examines the extent to which the evidence justifies the claim made by ul Haque and Khan that IMF programmes on balance work. He concludes that a case may be made that they work only in a fairly limited way. They may strengthen the balance of payments but do not appear to have a significant beneficial effect on inflation and economic growth. Other factors such as the poor record on completion, the tendency towards IMF recidivism and the lack of a catalytic effect on other financial flows suggest that judged against many of their own objectives IMF programmes frequently do no work.
³ See, for example, Ivanova, Mayer, Mourmouras and Anayiotas (2001). However, as the authors acknowledge, their study builds on earlier research directed towards explaining the success or failure of World Bank programmes (Dollar and Svensson, 2000). These studies are examined in some length in what follows.
⁴ Of course if programmes are badly designed, not implementing them could be a good thing. A pressing question for future research is the extent to which the success of programmes in terms of final economic outcomes or the future evolution of policy variables such as fiscal deficits, monetary expansion and the real exchange rate depends on implementation. If it does, the focus of attention needs to be on improving the rate of implementation. If not, rather more fundamental questions may be asked about the design of conditionality and the rationale of IMF programmes. What is the purpose of conditionality if it has no significant impact on economic performance?
economic outcomes, there was little or no attempt to distinguish between those programmes that were carried through to completion and those that were not. This is an important shortcoming, especially when evidence suggests that a large number of programmes remain uncompleted (Mussa and Savastano, 2000). A logical next step is therefore to try and understand what factors determine the degree of implementation.

Early on, the Fund attributed poor implementation to a 'lack of political will' on behalf of the governments concerned. But, from a policy point of view, this does not get us very far unless we also understand what factors determine political will. Other studies were therefore critical of the lack of precision and attempted to analyse why governments might sign an agreement but then fail to implement it (Bird, 1998, 2002). They did this by examining the evolution of the costs and benefits involved. At the margin, a government may rationally discontinue a programme where the costs of continuing to implement it are perceived to outweigh the benefits. The costs and benefits will have a political dimension and implementation therefore needs to be viewed in the context of domestic political economy.

Meanwhile, similar ideas found expression in the concept of 'ownership'.

Governments are more likely to implement programmes that they own, and are more likely to abandon programmes that they feel have been imposed upon them and which they have been coerced to follow by their immediate needs for external finance.

However 'ownership', rather like 'political will', is difficult to measure and impossible to quantify with any precision. It is necessary, therefore, to look behind ownership and

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examine the variables that influence a government's commitment to a particular programme of policy reform and its ability to implement it within an evolving domestic political environment.

The purpose of this paper is to provide a conceptual framework within which the determinants of implementation may be analysed. The framework suggested differs from that offered elsewhere which focuses on ownership and the role of conditionality in constraining those opposed to economic reform. Indeed, the analysis in this paper suggests that there is an important distinction to be made between ownership and implementation. Since a policy objective is to increase the degree to which programmes supported by the IMF are implemented by the governments that sign up to them, the paper also explores the implications of the conceptual framework for policy. A reasonably clear agenda for reforming conditionality emerges. The paper is not empirical in nature and no attempt is made to formalise the analysis in a testable way. However, it is noted in passing that many of the findings from contemporary empirical studies are consistent with the predictions that emerge from the conceptual framework devised here.

The layout of the paper is as follows. Section 2 examines alternative ways of measuring implementation. It briefly investigates the record on implementation and assesses the extent to which the failure to implement programmes is a problem that policy needs to address. Section 3 briefly examines the literature on implementation, much of which is empirical in nature. Section 4 constructs a conceptual framework within which implementation may be analysed. Section 5 builds on this framework to examine the implications for the design of IMF conditionality and proposes an agenda
of policies to improve the implementation of Fund-backed programmes. Finally, Section 6 offers some concluding remarks that place the proposals in the context of current reform within the IMF.

2. IMPLEMENTATION: MEASUREMENT AND RECORD

2.1 Measuring implementation

Measuring the implementation of IMF-backed programmes is far from straightforward. The most convenient and widely used measure is the proportion of committed resources that are disbursed, or the rate of completion (Killick, 1995, Mussa and Savastano, 2000, and Bird 2002). An advantage of this approach is that it provides continuous data. However, there are problems with it. Resources may not always be drawn on in spite of the fact that economic policy reform is undertaken. Indeed, a 'failure' to complete a programme in terms of the disbursement of resources may reflect economic 'success' in the sense that finance from the IMF is no longer required. Some programmes agreed with the Fund will be precautionary or will turn precautionary and in these cases there is no intention to draw resources from the Fund; it would therefore be inappropriate to evaluate them in terms of disbursements relative to commitments. In contrast, a programme may be completed in the sense of using all the agreed resources in spite of a government failing to fully implement all the conditions originally laid down. The IMF may feel that substantial progress has been made and may allow modest deviations from targets to be accommodated through the use of waivers or modifications to the initial programme.
Since the beginning of the 1990s another measure of implementation has become feasible as the IMF has collected data in the form of its MONA database (Monitoring Fund Arrangements) on the extent to which both the macroeconomic and structural conditions stipulated within programmes are implemented. This allows an index of implementation to be constructed. However, there are again problems with this measure; it only covers programmes that come up for review by the Executive Board and therefore excludes those that are cancelled permanently or interrupted. Since it may be assumed that it will be in these programmes that implementation is likely to be at its weakest, the MONA data will have an upward bias towards implementation. Moreover, there is only a limited amount of data as yet.

Other measures of implementation focus on whether programmes are interrupted either reversibly or irreversibly. Reversible interruption is where a review of a programme is delayed, perhaps by three months in the case of stand-bys or six months in the case of Extended Fund Facility and Poverty Reduction and Growth Facility credits, but the programme is subsequently revived. Irreversible interruption is where scheduled reviews are not completed or, even if they are, the instalments of the arrangement are not approved. This measure of implementation does not, however, tell us whether an interrupted programme is replaced by another one. Moreover, it does not provide continuous data and only allows programmes to be classified as uninterrupted, reversibly interrupted or irreversibly interrupted. Even so, it does usefully complement the implementation index based on the MONA database by capturing cases where programmes are interrupted and, as a result, not subject to further review by the Executive Board.
Although these four measures of implementation have been found to be significantly mutually correlated with one another (Ivanova, Mayer, Mourmouras and Anayiatos, 2003) the correlation coefficients tend not to be very high, suggesting that the measures are picking up different dimensions of implementation. This needs to be borne in mind when comparing studies that use different measures.

2.2 What is the record on implementation?

Data presented by Mussa and Savastano (2000) and reproduced here as Table 1 provide information about the completion rate of IMF programmes or the ratio of disbursements to commitments over the period 1973-1997. A number of features stand out. First, non-completion is quite widespread. Indeed, over the entire period covered only about 35 per cent of arrangements were fully disbursed. Second, whereas the completion rate was fairly stable over the period 1973-1987 at between 40 - 45 per cent, it fell in the subsequent time period to as little as 20 per cent. Third, the completion rate was rather higher for stand-bys than for structural adjustment lending and much higher than for extended loans.

Using the interruption measure, Ivanova et al (2003) report that in the period between 1992 and 1998, 44 per cent of all programmes experienced an irreversible interruption, while 70 per cent experienced either a major or a minor interruption. They also report that the average implementation index for programmes for which information was available was 76 per cent, with the macro implementation index at 80 per cent being significantly higher than the structural implementation index at 67 per cent. But, as noted above, these indices overstate implementation since irreversibly
interrupted programmes are not captured by the MONA database on which the index is based. Nsouli, Atoian and Mourmouras (2004) update the information provided by Ivanova et al (2003) to cover the period 1992-2002. Although, according to this more recent data, the interruption rate appears to have fallen slightly and the disbursement rate to have risen, the more recent sample contains more stand-by arrangements which tend to have fewer interruptions than EFF and PRGF programmes. In any event, and according to all the measures, the failure to fully implement programmes is quite widespread. To what extent is this a cause for concern?

Implementation will be important if it is via conditionality that the beneficial economic effects of IMF programmes are derived. It would be difficult to justify conditionality and the related costs of negotiating it, if it made little difference whether or not it was implemented. Indeed, in these circumstances the size of the loan and the signal transmitted by the size of IMF lending might appear to be more important aspects of IMF programmes. But, if it is the *announcement* rather than the *implementation* of programmes that appears to have a beneficial effect on capital flows, it is reasonable to question whether such announcement effects reflect a belief that programmes will be implemented. If so, then, in the long run, positive announcement effects are unlikely to survive a record of poor implementation.

macroeconomic outcomes especially over shorter time horizons. They claim that better implemented programmes are associated with lower inflation, and with initially weaker but then stronger balance of payments and fiscal outcomes. They find no statistically significant impact of implementation on economic growth. Chen and Thomas (2003) find that programmes that are stopped are associated with faster inflation and larger budget deficits. They also find that completed programmes exert a marginal positive effect on economic growth but not until three years after the programmes have ended. Focusing on economic growth, Dreher (2004) finds that IMF programmes are generally associated with reduced rates of economic growth, but he also finds weak evidence that compliance with conditionality mitigates this effect. However, it can hardly be the case that the IMF negotiates conditionality believing that its implementation is irrelevant. If the Fund has decided to stick with conditionality as a modality for encouraging economic reform, it must also concern itself with the implementation of conditionality and with ways of improving the record reported above. In order to design policy to improve implementation we initially need to understand the factors that influence it. A subsequent section therefore goes on to provide an informal conceptual framework within which the determinants of implementation may be identified and discussed. But first, we briefly review the existing empirical literature on implementation.

3. A REVIEW OF THE LITERATURE ON IMPLEMENTATION
The literature on the implementation of IMF-supported programmes is currently quite sparse. Most of it attempts to identify factors that are statistically significant in large sample econometric exercises, although there are also case studies that attempt to tease out more nuanced accounts of implementation. Relatively few contributions analyse implementation from a theoretical perspective (exceptions include Mayer and Mourmouras, 2002, 2003, Drazen, 2002, and Khan and Sharma, 2001). Those that do, commonly adopt a game theoretic approach in which IMF conditionality is used to constrain or influence ‘veto players’ who are in a position to disrupt the process of economic reform. However, the implication is that, with powerful opposition forces aligned against them, governments will find it more difficult to implement reform than where the opposition is weak. This suggests that implementation is a political economy phenomenon. The empirical evidence currently available is generally consistent with this claim, even though there is some ambiguity concerning the way in which political variables will exert their influence.

To date perhaps the most comprehensive single study of the implementation of IMF programmes has been conducted by Ivanova et al (2003). They analyse the implementation of 170 programmes approved between 1992 and 1998, using multiple measures of implementation in the form of reversible interruptions, irreversible interruptions, an overall index of implementation derived from the MONA database, and the ratio of disbursements to commitments. They econometrically test the effects on implementation of political conditions in the borrowing country, IMF effort, conditionality and initial and external conditions by using Probit and Tobit models, instrumenting for other variables.
They summarise their findings as follows: 'on the one hand, the implementation of IMF-supported programmes is strongly influenced by recipient countries' domestic political economy. Strong special interests, lack of political cohesion, inefficient bureaucracies, and ethno-linguistic divisions are strongly associated with weak programme implementation. The strong association between programme implementation and political economy variables is robust across different econometric specifications. On the other hand, initial economic conditions, IMF effort and the breadth and depth of conditionality do not seem to materially influence programme prospects when they are properly instrumented for.' (Ivanova et al, 2003, p4). In a more recent study Nsouli et al (2004) confirm the link between a country’s institutional and political environment and its implementation record.

In stressing the overall significance of political economy variables, this research builds on and confirms earlier work which examined the success of World Bank programmes, (Dollar and Svensson, 2000). In a similar vein, and based on a study of major interruptions in the context of 36 ESAF programmes with the IMF, Mecagni (1999) discovers that they often depend on 'political disruptions serious enough to call into question the continuing authority of the government… the nature of political upheavals and the intensity of political and ethnic turmoil varied, but all cases were characterised by a severe reduction of the authorities' ability to commit credibly to and implement adjustment policies.’ (p9). Mecagni also finds some statistical evidence to support the suggestion that the poor implementation of programmes may be linked to external shocks such as export shortfalls or shortfalls in external financing; something also found by Killick (1995).
While all these studies share the common theme that political variables are important when seeking to explain implementation, there are differences between them in terms of the precise nature of the relationships. For example, there are differences over the impact of a government’s length of tenure on implementation as well as on whether a democratic orientation makes any difference. While Ivanova et al (2003) find no statistical link, in another study of IMF programme interruptions Thomas (2002) discovers that autocratic regimes have a better record of implementation. On the other hand, Joyce (2003) finds that democracy helps and that politically more open regimes have a superior record of implementation. Using various measures of special interests within government, and unlike Ivanova et al, Joyce finds no statistically significant connection between them and implementation, nor does he find a link between the cohesion of the executive and legislative branches of government, and implementation. He does find that regimes that have been in power for longer are less likely to complete programmes, and that recently elected governments are more likely to complete them. His results also suggest that open economies are more likely to complete programmes, which he claims could suggest that proximity to the Fund's underlying economic paradigm is relevant. Finally he discovers that private capital inflows discourage implementation.

There are some resonances between the findings reported by Joyce who examined 77 programmes over the period 1975-99, and those discovered by Dreher (2003) who examines programme completion across 104 countries over the period 1975-98. Dreher finds 'no robustly significant coefficients' when he tests for political explanations in terms of government fractionalisation, the political leaning of the chief executive's party, the existence of autonomous regions, the political power of the leader, the degree of political cohesion and various other political variables. He
does, however, find some not completely robust evidence that IMF programmes are more likely to be interrupted prior to elections, and that, while democratic regimes are generally associated with less compliance, the increase in the probability of interruption at election times is less severe in democracies. He also finds that initial economic conditions in the form of government consumption relative to GDP, short-term debt relative to GDP and GDP per capita exert a statistically significant effect on implementation. Interruptions appear to vary positively with the first two of these variables and negatively with the third. Ivanova et al (2003) also find some evidence based on bivariate correlations that implementation is affected by the severity of some initial conditions but, as noted earlier, this relationship loses statistical significance once political variables are included. Earlier research by Killick (1995) suggested that the degree to which programmes are completed is positively related to the amount of finance provided by the Fund in relation to the size of the initial current account deficit, although Ivanova et al do not find a similar relationship when the size of the loan is expressed in relation to the borrowing country's quota.

In addition to the econometric research, the literature contains a number of case studies that have a bearing on implementation. Some of these have been conducted by the Fund’s Policy Development and Review Department in the context of reviewing IMF conditionality (IMF, 2001). Others have been undertaken by the Independent Evaluation Office as part of its study of the prolonged use of IMF resources (IEO, 2002). While still others have been undertaken by outside academics; a good example being Stone’s analysis of the IMF’s involvement in countries in transition during the 1990s (Stone, 2002).
While acknowledging the conventional methodological weaknesses of case studies, the mounting case study evidence does point to a range of factors as being potentially significant in explaining implementation, or the lack of it. These include: the severity of initial conditions, over ambition in terms of what programmes might realistically be expected to achieve, the gap between the policy preferences of the country’s authorities and the IMF, the occurrence of unanticipated shocks, and political economy variables such as the involvement of the political leadership, the political strength of those opposed to reform, political stability, the quality of the bureaucracy and institutions, and the stage of the electoral cycle. Political scientists have, of course, long recognised the importance of political variables in the process of economic reform (see, for example, Nelson, 1990, Haggard and Kaufman, 1992, and Williamson, 1993).

While the empirical evidence briefly surveyed above suggests a number of influences on implementation, the literature has tended not to provide a conceptual framework within which these influences may be located. The only theoretical insight from the literature is that conditionality may aid implementation when there are powerful groups opposed to the reforms incorporated in IMF programmes. It would be helpful to have a broader framework than this.

4. A CONCEPTUAL FRAMEWORK
From the viewpoint of the governments signing up to them, IMF programmes confer benefits and costs. At the time that they are signed the benefits will be perceived to outweigh the costs, but, as noted earlier, this does not mean that the programmes will be fully implemented. Disentangling the benefits and costs of implementation is quite complex. For example, is a benefit of implementation superior economic performance in terms of economic growth, inflation and other conventional macroeconomic indicators? Empirical evidence on this is unclear. So it is difficult to take this into account, except to note that governments cannot perhaps rely on better economic performance being a pay-off. In what follows we argue that, in general, governments have a preference not to turn to the IMF. They perceive IMF conditionality as a cost. That they still borrow from the IMF reveals their need for external financial assistance. Governments, after all, could pursue IMF-type policies outside the Fund. The value added from involving the Fund is the additional finance that becomes available both directly from the IMF and indirectly via any catalytic effect that operates. The additional finance will allow policies to be pursued that would have been infeasible without the Fund’s financial support. It will only be where governments need the endorsement of the Fund to pursue what would in any case have been their preferred policies that they will perceive conditionality as a benefit – or, as it is treated below, a negative cost.

In the conceptual framework developed in this section, the benefit from implementation is therefore the continuing access to IMF and related finance that in turn facilitates policy options that would otherwise be unavailable. The costs are related to conditionality, and take the form either of sub-optimal policies as perceived by governments, or the loss of sovereignty over policy design. Inasmuch as
conditionality may be a benefit, this is covered by allowing the conditionality cost to be negative. With this set up, the issues associated with the implementation of IMF programmes may be considered in the context of a simple conceptual framework.

4.1 The benefits of implementation

As illustrated in Figure 1 the benefit of negotiating a programme with the Fund is the additional financial resources to which it gives rise. Either these extra resources may be supplied directly by the Fund or they may come from the signalling effect of the programme and its impact on other capital flows. The value of the benefit depends on the availability and cost of alternative sources of finance in the absence of the Fund programme. Finance from the IMF becomes more valuable as the availability of finance from elsewhere declines. Since the first instalment of a loan from the Fund will be paid out at the outset of the programme, the MB schedule in Figure 1 starts some way up the vertical axis. The shape of MB then depends on how the marginal benefit of the programme varies over time and with the degree of implementation; is this constant or does it rise or fall, and at what rate does it rise or fall? If, for example, the loan is front-end loaded, and if the catalytic effect is a function of the announcement of the programme rather than its implementation, the MB schedule will have the features illustrated by MB1 in Figure 1, starting relatively high up the vertical axis.

The relationship between the slope of MB and the size of the catalytic effect warrants further discussion. As noted above, the marginal benefit of a Fund programme relates to the extent to which it generates additional financial flows; but what is the value
added by or the marginal return to the IMF programme? It is possible that the MB schedule could decline either in circumstances where the catalytic effect is absent, or where it is strong but depends only on the announcement of the programme rather than its implementation. Where the strength of the catalytic effect depends on the degree of programme implementation the MB schedule will be flatter (MB2) or may be upward sloping (MB3).

Similar arguments to these may be expressed in a slightly different way. Countries turn to the IMF because their balance of payments has become a binding constraint upon their ability to achieve other objectives. The benefit of an IMF programme is that this constraint is relaxed. The size of the benefit over time therefore depends on the extent to which the constraint is relaxed; it may be expressed in terms of the ability to better achieve other policy objectives. A balance of payments constraint is likely to be most effective in the midst of a BoP crisis when foreign exchange carries a high shadow price. As the crisis eases, so the BoP constraint also eases. Given this pattern, the marginal benefit from an IMF programme will be at its highest at the outset of the programme; it will gradually decline over time as balance of payments problems are overcome. Again the MB schedule may be expected to be downward sloping, and may even decline at an increasing rate, (MB4).

Three other observations may be made about the MB schedule at this point. First, governments may sometimes worry that turning to the IMF for assistance will have an adverse effect on their market access because a negative signal is transmitted suggesting that the economy is in difficulty. The catalytic effect may be negative. A government that still has some access to private markets may believe that the resulting
reduction in capital flows will exceed the additional credit coming from the IMF. Although some adjustment will need to be made for the terms associated with the alternative types of capital, the end result may be that the government believes that the net result of announcing a programme with the IMF on capital inflows will be negative. In these circumstances the MB schedule will start at a point below the horizontal axis in Figure 1 (such as MB₃). The benefits will be negative. Unless the government also believes that the implementation of the programme will nonetheless have a strong positive effect on private capital inflows, there would be little point in entering into an agreement with the Fund, since the expectation would be that the short run external financing constraint would be expected to become more binding as a result.

Second, since IMF loans are disbursed in instalments, technically the MB schedule will decline in a stepwise fashion with the benefits falling after the receipt of each tranche of the loan. The benefit from further implementation then remains in part the option of drawing on subsequent instalments. This would of course not be the case for the final tranche, implying that the marginal benefit of implementation following the final tranche falls to zero if we abstract from the catalytic effect. This has policy implications to which we return when we examine replacement programmes.

Third, it is important to emphasise the uncertainty surrounding the trajectory of economic performance. *Ex post* benefits from agreeing to a programme with the IMF may fail to match *ex ante* expectations. For example, at the time a programme is negotiated it may be expected that its implementation will have a positive effect on
other capital flows. If this effect is not forthcoming, or is muted, the actual MB schedule (MB\textsuperscript{a}) will lie below the expected MB schedule (MB\textsuperscript{e}). \(^6\)

4.2 The costs of implementation

Let us now turn to the marginal costs of an IMF programme as illustrated by the MC schedules in Figure 2. The cost of an IMF programme as perceived by the government that negotiates it may be seen in terms of the conditionality involved. Governments would generally prefer unconditional financial support. It may be assumed that there will be a discrepancy between the policies preferred by the government and those preferred by the IMF; their objective functions will differ. A government will be aiming to stay in power and may want to protect the near-term standard of living as much as possible; it will be seeking to minimise the consumption costs of adjustment and may be concerned about the distributional effects of policies. The IMF, on the other hand, will be seeking to achieve near-term balance of payments adjustment and may be expected to emphasise macroeconomic stabilisation. In a sense, the balance of payments is a constraint on achieving other objectives as far as a government is concerned but is an objective in itself for the IMF. The Fund will tend to be much less concerned about the domestic political repercussions of policies. Either as a consequence of its own institutionally preferred economic paradigm, based perhaps on a scientific evaluation of the evidence, or its agency role, representing the interests of its principal shareholders, the IMF may prefer policies of economic liberalisation and openness that do not necessarily accord with governmental

\(^6\) Bird and Rowlands (2002) provide a review of the theory behind catalysis and an empirical investigation of its quantitative importance. Although on its web site the IMF claims that the catalytic effect is significant and a key part of its overall institutional role, studies have generally failed to find strong empirical evidence of its existence.
preferences. The bigger the gap between the policy preferences of the government and those of the Fund, the bigger the cost of IMF conditionality from the government’s viewpoint. Since pre-conditions will have to have been implemented at the outset of the programme the MC schedule will also start some way up the vertical axis. The greater the government's reluctance to pursue these policies, the higher up the vertical axis the MC schedule will begin. 7

However, as noted earlier, there may be circumstances in which a government actually wants to pursue the policies favoured by the Fund on economic grounds but is concerned about domestic political opposition to them and the political costs of pursuing them. The government may then choose to involve the IMF as a way of reducing the political damage that it would encounter if it were to pursue the policies independently. Here the Fund is being used as a scapegoat or to tip the balance in favour of reform, and the costs of conditionality are negative; the MC schedule begins below and may remain below the horizontal axis, (MC2 in Figure 2). 8 In other words, the government perceives benefits from conditionality (Vreeland, 2003).

In assessing the costs of IMF conditionality two comparators exist. The first involves the policies that had previously been pursued within the country. These will probably have contributed to the economic situation in which the country is now turning to the Fund, and there may be expected to be a significant gap between these policies and

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7 A countervailing point is that in the middle of a crisis and with a binding BoP constraint, whatever their preferences governments may be forced to prioritise policies designed to strengthen the balance of payments, and at the outset of IMF programmes this could reduce the marginal cost of IMF conditionality, shifting the vertical intercept of the MC schedule back down towards the origin.  
8 Similar negative costs of conditionality could exist where certain elements within government, such as the leader or the finance ministry want to tip the balance in their favour in an internal debate about policy. The Fund's involvement may 'strengthen the hand of reformers' thus to some parts of the government IMF conditionality would have a negative cost while to others it might still be perceived as having a more regular cost.
those favoured by the IMF. The second comparator is represented by the policies that the government would have to pursue contemporaneously if IMF assistance were to be unavailable. With less external financing, these would be yet more adjustment intensive than those favoured by the Fund. To the extent that governments turning to the Fund have revealed a tendency to underestimate the extent to which BoP constraints exist, they may also have a tendency to overestimate the costs of IMF conditionality in relation to the relevant comparator, which is the policies that would need to be pursued in the absence of the Fund.

The perceived costs of conditionality may not only, however, depend on the nature of the policies incorporated in IMF programmes. Even where governments favour similar policies, they may not favour having them imposed by the Fund. In this respect, the cost of conditionality is the loss of sovereignty over the design of economic policy. Other things equal, the greater the value attached by a government to sovereignty the higher up the vertical axis the MC will schedule begin.

The shape of the MC schedule then depends on how the costs of conditionality change over time and with the degree of implementation. Assuming that the sovereignty costs do not change, costs may fall if it becomes progressively easier to implement the later stages of a programme. Adjustment may have been front-end loaded. In contrast to this, where the policies that are least palatable to the government have been deferred until later in the programme the MC schedule will slope upwards, possibly at an increasing rate, as shown by MC3. These deferred elements are likely to be the ones to which there will be the greatest political resistance.
Just as with the benefits, the costs of implementing an IMF programme may turn out to be different from those that were expected at the outset. This could be because the economic effects are different or perhaps because political opposition to the policies incorporated within the programme turns out to greater or less than anticipated. As a consequence the actual MC schedule may have a different slope or a different location. However, economic shocks may be another reason why the actual MC schedule differs from the expected one. Over time, therefore, the MC schedule may shift. Economic shocks could be either negative or positive. An export shortfall would, for example, increase the extent to which imports need to fall in order to achieve a specific current account balance of payments target. Meanwhile, the related decline in economic growth would tend to reduce tax revenue below the expected level and this would imply additional cuts in government expenditure in order to meet targets relating to the fiscal balance. Compare for example, MC_e with MC_a.

4.3 Marginal benefits and costs together

The MB and MC schedules plotted out in Figures 1 and 2 are combined in Figures 3 and 4. Figure 3 shows that governments will embark on IMF programmes if the benefits in the form of the extra finance associated with the programme are perceived to exceed the conditionality costs. Figures 3 and 4 also show why programmes may not be fully implemented. There are two possibilities. In the first case, illustrated by MB^1 and MC^1 in Figure 3, the government never intends to implement the programme fully but only up to point A where, at the margin, the costs of further implementation exceed the benefits. It will have promised more reform than it intended to deliver in order to persuade the IMF to agree to the loan. By contrast, in the second case, illustrated in Figure 4, the government intends to fully implement the programme at
its outset, only to discover that the marginal benefits are less than expected or that the marginal costs are greater than expected, such that it becomes rational to abort the programme before it is completed, as illustrated by the intersection between MB\(^a\) and MC\(^a\), reflecting the actual outcome.

But what happens if a government fails to fully implement the programme to which it has agreed; does this affect future access to IMF resources and how does this affect the probability that the current programme will be implemented? Where future access to IMF resources depends on the extent to which past programmes have been implemented, implementation carries with it the option value of future access to Fund finance. There is then an additional benefit associated with implementation and, other things being equal, this will increase the degree of implementation. Where future access does not depend on current implementation, the probability of current implementation will be adversely affected. Indeed, it may be quite rational for governments to abort current programmes if they believe that they can renegotiate another programme with a more advantageous configuration of benefits and costs as shown by the sequence of programmes in Figure 5. Here a programme will be abandoned by a government if it believes that the net benefits of negotiating a new programme exceed those of continuing to implement the existing one.

From the conceptual framework developed in this section it is possible to identify a range of factors that are likely to influence the degree to which IMF programmes are implemented. The framework can also be used to analyse the notions of commitment and ownership that have begun to feature in the literature on implementation. Poor implementation has often been attributed to a lack of commitment or a lack of ownership. These concepts are related but are not identical. Ownership implies that
governments, or indeed societies as a whole, are persuaded that the policies being pursued within the context of an IMF programme are appropriate or even optimal. Leaving to one side the question of sovereignty, which may be fundamentally inconsistent with conditionality, the degree of ownership will be reflected by how far up the vertical axis the MC schedule begins. Where Fund-backed policies are deemed reasonably appropriate by the country (widely defined), the ownership will be strong and the MC schedule will begin relatively close to the origin. Although it no doubt helps, implementation does not, however, require ownership. In the context of the conceptual framework developed in this section, implementation depends on the extent to which the marginal benefit of the programme exceeds the marginal cost. A government will have an incentive to implement programmes where there are large net benefits. This interpretation allows us to show how implementation may wane during the course of a programme if actual marginal benefits decline and actual marginal costs rise. A similar expected net benefit from a programme will be associated with greater ownership where the perceived costs are lower. Figure 6 illustrates some possible scenarios.

Having designed a conceptual framework within which the implementation of IMF programmes may be discussed, the next section goes on to examine the policy implications.

5. POLICIES TO IMPROVE IMPLEMENTATION

9 Conditionality will have a diminished role where there is strong ownership although it may still retain a signalling function and provide a way of dealing with the time-consistency problem. As noted earlier conditionality may have a more powerful role where the government is a fragile coalition of disparate factions. Note also that conditionality will be an ineffective mechanism for overcoming time inconsistency and reducing the perceived chance of governments reneging on policy promises if its implementation is poor. For similar reasons poor implementation will weaken the signalling role of conditionality that underpins its supposed catalytic effect on other capital flows.
The rationale behind the reform recommendations proposed here is to raise the benefits and reduce the costs of implementation as perceived by governments in order to provide a set of incentives to better encourage implementation. The proposals are introduced in no particular order of importance.

(i) *Take initial conditions fully into account*

Although there is some evidence that the Fund may already try to take initial conditions into account, there is enough evidence both from econometric large sample studies and case studies to suggest that it is not always done systematically. Targets are frequently over-ambitious and, as a consequence, are not achieved. The benefits from programmes turn out to be less than anticipated and the costs, in terms of adjustment, turn out to be greater. Implementation is therefore adversely affected. Although with more realistic targets fewer programmes might be agreed, the implementation of those that are should improve.

(ii) *Avoid 'excessive' conditionality*

On the basis of the conceptual framework developed in Section 4, a broadening and deepening of conditionality will increase the costs of implementation. Some observers of the Fund suggested that with the proliferation of structural conditionality during the 1980s and 1990s conditionality had become excessive, reducing the incentive for governments to comply with it (Bird, 2001 and Goldstein, 2000). Although the Fund denied the existence of any form of conditionality Laffer Curve (IMF, 2000) its recent policy of 'streamlining' conditionality suggests that it was sympathetic to the argument. In any case, empirical evidence produced by the Fund suggested only that it was the percentage of conditions fulfilled that failed to decline with increased
conditionality. Clearly with programmes containing more absolute numbers of conditions the implementation of programmes would be expected to decline in spite of the implementation rate staying the same. Evidence also suggests that structural conditions have been less well implemented than macroeconomic conditions and this might also suggest that a more parsimonious approach to Fund-designed structural conditionality would encourage better overall implementation. While the Fund might wish to retain the right to mandate macroeconomic constraints, it might also be sensible to allow governments as much discretion as possible in terms of designing other aspects of economic policy and in setting structural targets. A greater emphasis could therefore be placed on self-imposed conditionality, even though compliance with this could be monitored by the Fund. This is the broad direction in which the Fund has moved with the streamlining of conditionality. The analysis in this paper suggests it should increase the rate of implementation.

(iii) Shock-proof IMF programmes

There is substantial evidence (although not universal) that external shocks of one type or another can blow programmes off course. Negative shocks raise the costs of complying with the conditions initially laid down. Currently the Fund seeks to deal with this problem by means of waivers and programme modifications or by cancelling one programme and replacing it with another. But this way of 'solving' the problem lacks transparency and has a bias towards creating an impression of failure. The vulnerability of economies to shocks should instead be established at the outset of programmes by detailed stress analysis. Shadow programmes could be agreed that would come into effect in the event of shocks occurring. These could involve additional contingency financing, for example in the case of export shortfalls, as well as \textit{ex ante} agreements about the way in which conditionality could be modified. The
contingent changes in the design and financing of programmes would again be aimed at maintaining or indeed strengthening, the incentive for governments to continue to implement them by adjusting the actual costs and benefits to correspond more closely with those envisaged at the outset of the programme. By modifying targets in a contingent way, but one that is agreed ex ante, programmes could be presented as having been implemented rather than having failed. The stigma of failure could be avoided.

(iv) Provide additional finance

It should not be assumed that negotiating an IMF programme will have a catalytic effect on other financial flows; the evidence does not strongly support it (Bird and Rowlands, 2002). In the event, and in order to comply with targets, more adjustment is often needed than is initially assumed, and the actual costs of programmes to the countries concerned exceed the expected costs, thus discouraging implementation. Not only does the Fund need to consider ways of strengthening the link between its involvement and other financial flows by more effectively seeking to encourage private sector involvement and by putting more pressure on aid donors to deliver finance in support of IMF programmes, it also needs to contemplate providing more finance itself. This would raise the benefit as perceived by governments of both negotiating and then implementing programmes. The sequencing of financial support could also be designed to maintain an incentive to fully implement programmes. This proposal does not necessarily imply that the Fund's overall lending capacity would need to be increased; something that could encounter resistance from its shareholders. Instead, Fund lending could be better targeted on those countries that are likely to implement programmes rather than on those that are not. Moreover, if the financing needs of some larger emerging economies were to be in greater part met by regional
monetary arrangements, the Fund would be better placed financially to assist poorer countries where the aggregate demand for resources is lower (Bird and Rajan, 2002).

(v) Penalise non-implementation more heavily

Although failing to comply with the conditions of a current programme reduces access to further instalments of that loan, it does not appear to prejudice access to finance under subsequent programmes (Killick, 1995). There is therefore little or no apparent penalty for non-compliance from this point of view. Again, the existing incentive structure does not encourage full implementation. Instead, and given the reforms suggested above to neutralise the effects of external shocks, future access to IMF finance could be made conditional upon achieving specific standards of implementation in current programmes. This would raise the marginal benefit of implementation by keeping open a financing option that would otherwise close. At the same time, and assuming that conditionality is appropriately designed, improved implementation should reduce the probability that the option will have to be taken up. In addition to making future access to Fund finance under new programmes dependent on past implementation, a final disbursement of contemporary programmes might be deferred until the programme’s conditionality has been fully implemented.

(vi) Be more aware of political economy factors and take them into account.

This is a complex issue. However its complexity should not be used as a reason to ignore it. There is now a substantial body of evidence that political factors exert a potentially important impact on implementation; although, as noted in Section 3, the evidence is not entirely consistent. How should the Fund respond to the observation that domestic politics may affect implementation? There are two counter forces at work. First, the Fund does have a responsibility to try and ensure that conditions are
implemented; otherwise what is the point of conditionality? But second, it does not possess the legitimacy to become directly involved in domestic politics and needs to avoid political conditionality. Unavoidably, dealing with this dilemma means walking something of a tightrope. How can the dilemma be resolved?

Empirical studies have identified a series of political variables that, in principle, may influence implementation. They have also identified data sources that provide, albeit often imperfect information on them. Just as the Fund builds up an empirical picture of the economic performance of countries based on key economic variables, it could also build up a broadly equivalent political picture relating to political stability, the degree of democracy, the influence of groups opposed to the incumbent government, electoral cycles and so on; or alternatively it could use the data set that the World Bank is constructing. 10 An awareness of potential political impediments to implementation would allow a structured consideration of how they might be overcome, and this could form part of the Fund's discussions with governments, which would be invited to explain how they intend to deal with political constraints. The Fund would not be seeking to exert a direct influence over political variables, but would be seeking re-assurance from governments that domestic political problems would not terminally impair implementation.

Examining data on political variables would provide historical and contemporary information; but what about the future? And how should the data be interpreted? The Fund needs to build up its capacity to address such issues, although this does not

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10 The Database of Political Institutions. This has an expanding array of information. It includes data on special interests, elections, parties and ideology, although as Jim Vreeland pointed out to me the coding of ideology gives Jimmy Carter and Fidel Castro the same score! Other data sets include Polity and Freedom House which have data on democracy and autocracy. Polity allocates scores according to five different components such as openness of recruitment and competitiveness of elections with the democracy score being a sum of the five.
require it to have its own political analysts. Instead, it could set up a panel of country experts. A political risk matrix could then be constructed incorporating important political variables, and the country experts could be asked to quantify the significance of individual political risks on some form of index so that a composite political risk index could be constructed, as well as an index relating to each of the risk factors in isolation. The indexes could then form the basis for the Fund's discussions with the government in terms of the politics of implementation. There would also be a key role for the Fund's country representatives to play in commenting on the political risk index.

Clearly there would be an element of subjectivity and uncertainty in all of this but, by soliciting a number of independent opinions and by observing the variance around the mean index score, it would be possible to provide an indication of the degree of uncertainty pertaining to political risks.

Where a programme had been agreed with a government, and where the government believed it to be helpful, the Fund could also fulfil the role of 'honest broker' in terms of helping to explain publicly why a particular programme had been adopted and others rejected.

(vii)  *Introduce greater flexibility into programme design.*

A structured discussion of the domestic politics of economic reform might encourage governments to think more clearly about how potential impediments could be overcome, but it might also lead the Fund to modify the design of its preferred programme. Is it better to push for a programme that, while perceived by the Fund as optimal in an economic sense, has little or no chance of being implemented given the
political realities, or one that, while sub-optimal in terms of economic design, has a higher probability of being implemented? This might appear to be a 'no brainer' where the costs of the compromises on economic design are small and the gains in terms of the probability of implementation are large. But, in practice, the trade-off is likely to be much less straightforward. At the same time, ignoring it means that a decision in favour of 'optimal' economic design is in effect being made.

One possibility would be to move away from the current system under which countries need to comply with all the performance criteria contained in a programme in order to be eligible to continue to draw resources - unless waivers are granted or the programme is modified. Instead, governments could be given the option of receiving a proportion of the finance in return for complying with a proportion of the conditionality. Again, such a system would emphasise the positive - what has been achieved - rather than the negative - what hasn't. Governments would be offered a wider choice of policy options in terms of a range of financing and reform combinations. Conditions that the Fund regarded as non-negotiable would be mandatory. Others could be ranked as strongly recommended or recommended, with the amount of finance associated with implementing them modified accordingly.

Additional flexibility could be introduced by allowing more time to implement conditions. Rather than setting a specific time by which a reform would have to be implemented, the arrangement with the Fund would link the timing of disbursements to the timing of implemented reform. There would be ‘floating tranches’. This would be preferable to cancelling one programme and negotiating a replacement one since again it would help to avoid the psychology of failure, and could reduce negotiating costs.
(viii) **Undertake more systematic ex post evaluation of programmes**

At present, the ex post assessment of programmes within the Fund appears to be somewhat *ad hoc* and perfunctory (IEO, 2002). Hard lessons about why programmes were discontinued may not have been learned as well as they might have been, with the result that mistakes are repeated. The legacy may be the prolonged use of IMF resources amongst some countries and a sequence of failing programmes. Instead, the Fund could aim to construct a systematic bank of information as to why some programmes are not implemented and others are. As a template this could use the ideas discussed above in terms of the potential sources of poor implementation. The information could then be used more effectively to evaluate the design of future programmes.

(ix) **Other institutional reforms within the IMF**

At present within the Fund there is a relatively high degree of mobility amongst the personnel who lead missions to specific countries; turnover is rapid. Countries sometimes complain about the resultant lack of continuity. Just when someone understood the economic and political circumstances, a new mission chief arrives and the whole process starts over again. Care needs to be exercised in assessing the importance of such factors since there are other ways in which information may be shared, and turnover may have significant advantages such as avoiding inertia. However, it may not be unreasonable to suggest that greater continuity might be sought where a record of good implementation has been established. Similarly, the Fund could review its in-house training of mission personnel and provide the opportunity for mission chiefs with a successful record in relation to programme
implementation to share their views with others. In addition to this, the training of mission personnel could usefully draw on the expanding literature relating to negotiation. The Fund should not be satisfied by just designing what it perceives as appropriate policies; it should also think more seriously about the art of persuasion and negotiation. 'Getting to yes' should be of concern to any negotiator. Improving negotiation techniques could affect the recipient governments’ commitment to programmes and therefore the chances of implementation. It is easy to disregard the importance of negotiation. Economists perhaps tend to be excessively academically parochial and to pay insufficient attention to what they can learn from other disciplines. As noted earlier, improving the implementation of programmes may depend in part on showing an increased awareness of politics. But it may also require IMF missions to be more aware of the psychology of negotiation. In the context of the conceptual framework outlined in Section 4, the objective would be to influence governments’ perceptions of the benefits and costs of programmes in such a way as to raise the perceived net benefits and thereby increase the probability of implementation.

But why should mission personnel care whether the programmes they have negotiated are implemented? Is their career progression within the Fund influenced by it? At present, it would seem not. It is more important to get an arrangement than it is for it to be implemented. The implication may be that at the same time as the incentives for countries to comply are being examined, the incentives for Fund staff to concern themselves with implementation should also be reviewed.

(x)  Greater selectivity
By seeking to increase the benefits and reduce the costs of programmes, the Fund may endeavour to create a set of incentives that encourages implementation. However, there will remain cases where the Fund assesses the probability of even fairly partial implementation as being low. The discussion in (viii) above suggests that in such circumstances the Fund could opt for a truncated programme that is limited to prior actions and perhaps one consequent instalment of money. Essentially the Fund could be more selective and only endorse programmes in which there was a reasonable chance of implementation. Of course this begs its own questions. For example, what chance is ‘reasonable’? What have to be the odds on implementation before the Fund will refuse to make an arrangement? Moreover, the chance of implementation is not something that can be objectively measured. Given the IMF’s organisational structure it is likely that it would choose to err on the side of leniency and on giving the benefit of doubt to a government which commits itself to reform. However, in circumstances where countries have a track record of non-compliance the Fund needs to be able to exercise a credible threat to withhold future resources if it wants to stand a chance of strengthening the incentives that countries face to comply with conditions. At present, the perception that failing to implement a programme carries little penalty can do little other than disincentivise governments from completing them. However, alongside wielding a more effective 'stick', the Fund also needs of offer more 'carrots' to those countries that make sincere efforts to carry programmes through to completion. The policy of being more selective and being prepared to say ‘no’ should therefore be pursued in conjunction with policies designed to maximise the ability to say ‘yes’ in the belief that the resulting programmes will be implemented.

The danger is that a policy of greater selectivity could be taken too far. Clearly, in a sense, the problem of poor implementation could be resolved by shifting entirely to ex
ante conditionality. There are at least two problems with this as a way of dealing with poor implementation. First, it is in conflict with the basic rationale of the Fund that is to provide financing to enable countries to cushion the process of adjustment. This is not to argue that there is no legitimate role for prior actions or pre conditions, but rather that they should not be relied on exclusively. Second, limited as it is, the evidence suggests that where prior actions have been used more intensively, perhaps in the circumstances of a replacement programme, they have not improved overall implementation, as measured by the incidence of irreversible breakdown (Thomas, 2002).

6. CONCLUDING REMARKS

Attention has only fairly recently begun to be paid to the implementation of IMF programmes. Early studies of the effects of programmes did not distinguish between those that were implemented and those that were not. However, it has gradually been recognised that the failure of programmes could be more to do with poor implementation than intrinsically poor economic design. Having acknowledged its importance, the Fund tended to attribute poor implementation to a lack of 'political will' on the part of governments. Rather than simply cajoling them to do better, the rhetoric and reality of IMF programmes has been modified. Conditionality has been 'streamlined' and commitment and 'political will' has been repackaged as 'ownership'. Countries are more likely to implement programmes that they 'own'. The Fund's approach to 'ownership' has been to seek to involve more sections of society in the process of agreeing to the design of a programme of reform; and thereby to secure a firmer national endorsement of it.
Is this the right approach? Surely it sounds reasonable. But what if having consulted more widely, similar programmes are then put in place? Will this not exacerbate feelings of alienation? In any case, is it legitimate for the Fund to consult and perhaps ultimately negotiate with sections of society outside the government? Furthermore it is intrinsically difficult to operationalise the concept of ownership.

The argument in this paper suggests that emphasising ownership may be relatively unhelpful. Instead this paper focuses on implementation, viewing it as a positive function of its marginal benefits and a negative function of its marginal costs. This approach offers a more clearly defined reform agenda. To enhance implementation it is necessary to identify what the costs and benefits are, and then seek to modify them accordingly. Implementation may be improved by increasing the perceived benefits and reducing the perceived costs. However, while there is a simple conceptual framework, the importance of individual factors affecting benefits and costs will vary from case to case, making it unlikely that we can expect to formulate a specific model that will accurately explain implementation across the board. Individual cases will differ from one another. For example domestic politics may be important in some cases but not in others where perhaps vulnerability to external shocks may be more important.

The policy implication is that the Fund needs to be aware of the range of factors that may, in principle, influence implementation. It then needs to take them into account as necessary when programmes are being negotiated. This means that the nature of programmes and the way in which they are set up will vary in accordance with the factors that are pertinent.
It is by developing a greater understanding of the various dimensions of the political economy of implementation and by modifying programmes in the light of them that the record on implementation may be improved. This implies a multi-faceted approach to implementation. Streamlining conditionality and talking about ownership may represent moves in the right direction and a willingness to contemplate measures that are designed to improve implementation, but they may not lead to a significant change unless a more fully thought out approach is adopted which focuses on the set of incentives - both positive and negative - that confront governments and the IMF.


Bird, Graham (2002) 'The Completion Rate of IMF Programmes: What We Know, Don’t Know and Need to Know', The World Economy, Vol 25, No 6, June, 8


Ivanova, Anna, Wolfgang Mayer, Alex Mourmouras and George Anayiotos (2003), 'What Determines the Success or Failure of Fund-Supported Programs.' *IMF Working Paper*, No 08/03, Washington DC, International Monetary Fund.


Table 1. Fraction of IMF loan actually disbursed under each arrangement, distribution by quartiles

(x=fraction of total IMF loan disbursed under each arrangement) 1/

<table>
<thead>
<tr>
<th></th>
<th>x&lt;0.25</th>
<th>0.25=&lt;x&lt;0.50</th>
<th>0.50=&lt;x&lt;0.75</th>
<th>0.75=&lt;x&lt;1.0</th>
<th>Fully disbursed (x=1.0)</th>
<th>Number of arrangements</th>
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<tr>
<td>All arrangements 2/</td>
<td>36.5</td>
<td>7.1</td>
<td>5.9</td>
<td>5.9</td>
<td>44.7</td>
<td>85</td>
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<td>1973-77</td>
<td>19.4</td>
<td>16.1</td>
<td>10.5</td>
<td>12.9</td>
<td>41.1</td>
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<td>1978-82</td>
<td>12.9</td>
<td>15.8</td>
<td>19.4</td>
<td>7.9</td>
<td>43.9</td>
<td>139</td>
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<td>1983-87</td>
<td>17.5</td>
<td>15.1</td>
<td>20.6</td>
<td>14.3</td>
<td>32.5</td>
<td>126</td>
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<tr>
<td>1988-92</td>
<td>27.0</td>
<td>19.1</td>
<td>26.2</td>
<td>11.3</td>
<td>16.3</td>
<td>141</td>
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<td>1993-97 3/</td>
<td>21.6</td>
<td>15.3</td>
<td>17.6</td>
<td>10.7</td>
<td>34.8</td>
<td>615</td>
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<tr>
<td>Full period (1973-97) 3/ of which:</td>
<td>23.1</td>
<td>13.4</td>
<td>15.0</td>
<td>9.5</td>
<td>39.0</td>
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<td>Stand-by 3/</td>
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<td>22.2</td>
<td>19.0</td>
<td>15.9</td>
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<td>EFF 3/</td>
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Source: Mussa and Savastano (2000)

1/ Calculated as the ratio of the total purchases made to the full amount of IMF resources committed under each arrangement.

2/ Includes stand-by arrangements, EFF arrangements, and arrangements under the SAF and ESAF. Excludes STF arrangements, and drawings under the first credit tranche and the CCFF.

3/ The distribution of the ratio x for the 1993-97 period is biased (downward) by the inclusion of arrangements with expiration date posterior to 1997. This bias is also present in the distributions reported for the full period.
Figure 1. Benefits from IMF Programmes: Potential Paths

- MB1 / MBa
- MB2 / MBb
- MB3
- MB4
- MB5

Start of programme
End of programme
Time / Degree of implementation

Marginal Benefits

Figure 2. Costs of IMF Programmes: Potential Paths

- MC1 / MCa
- MC2
- MC3
- MC* / MC*

Start of programme
Negative External shock
End of programme
Time / Degree of implementation

Marginal Costs
Figure 3. Premature Suspension or Cancellation of IMF Programmes: Planned by Government

Figure 4. Premature Suspension or Cancellation of IMF Programmes: Unplanned by Government
Figure 5. Implementation and Subsequent Programmes

I – start of first programme
II – scheduled end of first programme
III – first programme cancelled since actual costs exceed actual benefits at the margin.
Second programme started with expected benefits exceeding expected costs

Figure 6. Ownership, Commitment and Implementation

(1) MB1 / MC1: reasonably strong ownership and commitment
(2) MB2 / MC2: weaker ownership but stronger commitment
(3) MB3 / MC3: similar ownership to (1) above but stronger commitment