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THE IMF: A BIRD'S EYE VIEW OF ITS ROLE AND OPERATIONS

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Abstract

The International Monetary Fund is the world's premier international financial institution with 184 member countries and active programmes in a significant number of them at any one time. The Fund attracts a great deal of attention, much of it critical. But the discussion is often polemic in style. Strongly held, but frequently opposing, views are expressed. This survey attempts to examine, in an objective way, the theory and evidence relating to the Fund's operations. Many aspects of the empirical research are relatively recent and a universal consensus is yet to emerge; as a consequence there is scope for disagreement to persist. However, the research is also gradually clarifying many important issues. The format for the survey is to examine the life cycle of IMF arrangements. What makes a country turn to the Fund for assistance? Should the IMF be lending? What influences the outcome of negotiations and the design of programmes? Are IMF programmes effective? And why do some countries make prolonged use of IMF resources? For completeness there is also some discussion of the history of the IMF, the extent to which Fund policies have been influenced by advances in economic theory and the Fund's systemic role. Important organizational and governance issues are also covered briefly. Although primarily adopting an economist's perspective, the survey reflects the growing recognition that in order to understand the IMF's operations, economics has to be combined with politics. Examining the IMF is an exercise in applied political economy.

1. Introduction

The International Monetary Fund (IMF) is the world's premier international financial institution. It has a global membership of 184 countries spanning all regions of the world and ranging from the world's poorest to its richest countries. It may have as many as about sixty active programmes with individual countries at any one time although the number varies from year to year. It will be involved to some extent even with countries where it does not currently have programmes since it undertakes regular consultations (under Article IV of its Articles of Agreement) with all its member countries and provides surveillance of their economic performance and policies. It also collects data on and oversees the performance of the world economy as a whole. In the clear majority of crises in emerging and developing countries the IMF will be involved; lending resources and advising on policies designed to bring about economic adjustment. This means that the Fund has a high profile.

As may be expected, it also means that the Fund has been the focus of close attention and critical examination. There are shades of opinion as well as outright disagreements on its role and the way in which it performs it. The assessments differ depending on whether the assessor is pro or anti globalisation, whether they have a 'Northern' or 'Southern' perspective, and whether they come from the political 'right' or 'left.' Those who are pro-globalisation see the Fund as a central and crucial agency for encouraging it and facilitating the benefits to which it leads, as well as for meeting the challenges to which it gives rise. Those opposed to globalisation view the Fund as an agency committed to spreading capitalism internationally and thereby contributing to global inequity. A typical Northern position may be expected to emphasize the North as the Fund's creditors and the South as its debtors, whereas a typical Southern position views the Fund as an institution that is dominated by advanced economies

which use it as a conduit for encouraging pro-North policies in the South. The political right views the Fund as providing resources to countries which enable them to postpone necessary economic reforms based on liberalising markets, and as indirectly supporting corrupt and undemocratic political regimes. In contrast, the political left sees the Fund as an institutional modality for pushing policies of economic austerity that damage economic growth and development.

Even generally respected academic economists have sharp disagreements about the IMF. In his well publicised, if somewhat intemperate book on *Globalisation and Its Discontents,* Joseph Stiglitz (2002) mounts an unremitting critique of the IMF covering almost all aspects of its operations and governance. Similarly Jeffrey Sachs, an economic adviser to the United Nations, has accused the IMF of being the 'chief enforcer of inhuman austerity conditions imposed on Africa.' (Sachs, 2004). At the other extreme, Kenneth Rogoff claims that such accusations, while persistent, are confused and wrong (Rogoff, 2004). Stanley Fischer (2004) sees the IMF playing a central role in helping to solve the problems facing the international economy; he certainly presents it as part of a solution rather than part of the problem. How can such differences of view exist and persist?

The answer is that much of the commentary on the Fund is based only loosely and selectively on underlying economic and empirical analysis. This is unsurprising. Economic analysis of the IMF is a relatively new field of study, and on many issues a consensus is yet to emerge. Anyone with a pre-formed view of the Fund may be able to find some evidential or anecdotal support for it. Where there is a vacuum created by the lack of economic consensus, politics can easily occupy it. Much that is written about the Fund is polemic in style. Even supposedly objective reviews of the IMF, most notably that undertaken by the Meltzer Commission in

2000 (IFIAC, 2000), tend toward making sweeping generalisations about the Fund's operations often without much reference to the evidence, or only censored and selective reference. The Commission's largely critical report galvanised the Fund into undertaking its own internal reviews with the objective of elucidating a medium term strategy for the institution. The debate about the IMF's role and performance is set to continue.

Given the wide range of issues that could be raised in a debate about the Fund, an immediate question is how to organise a survey? There are a number of possibilities. One would be to divide up the membership of the Fund and distinguish between countries that no longer use IMF resources (advanced economies), countries that use IMF resources infrequently (largely emerging economies) and countries that make frequent and prolonged use of IMF resources (largely low income countries). A second would pose and discuss the key questions facing the IMF. These might include the following: does the world still need the IMF; should the Fund be a financing as well as an adjustment institution; what should be the Fund's role in handling crises, should it be a crisis averter, crisis lender or crisis manager; do IMF programmes work and can they be made to work better; should the Fund discontinue long term lending to poor countries and hand over the role completely to other agencies, and is there too much overlap between the IMF and the World Bank; should the IMF be more selective in its lending and what should be the basis for selectivity; does the Fund have an appropriate portfolio of lending facilities, or is there scope for reorganisation and rationalisation; how should the Fund's operations be financed and does the quota system need reform; is IMF governance satisfactory and, if not, how should it (and can it) be changed; should the Fund seek to perform a systemic role and be the focus for international macroeconomic policy co-ordination? The list of questions could easily be extended.

Both of these structures have things to commend them. However, there are already reviews that focus on country categories (Bird, 1999a; 2005b), and some of the listed questions move into the domain of politics and involve a normative discussion of the Fund. For an economic survey it seems appropriate to place the emphasis elsewhere. Economists studying the IMF have tended to focus on a narrower range of issues. These essentially come down to examining the IMF on the one hand as a lending institution and, on the other, as an adjustment institution. They usually involve either theoretical analysis or empirical estimation, or both. Politics, of course, plays a key role in lending and in adjustment and, somewhat belatedly, economists are recognising this and attempting to accommodate it. But, up to now, they have tended to be wary of contributing to the debate about the governance of the IMF, except in terms of testing for an economic logic behind quotas and voting rights. This survey concentrates on the issues where the contribution of economics has been greatest. For completeness, other issues are mentioned and receive cursory treatment, but the bulk of the survey discusses the lending and adjustment operations of the Fund.

The lay out of the survey is as follows. Section 2 provides a brief historical overview tracing out the evolution of the Fund. It also discusses the way in which the evolution of macroeconomic theory has affected the Fund. After a succinct discussion of organisational and governance issues, Section 4 examines the IMF as a lending institution. It raises the question of whether the Fund should be lending at all, and illustrates the difficulties in assessing the optimality of IMF lending. It goes on to consider the factors that determine the demand for IMF loans as well as the supply of them. In other words what factors determine IMF arrangements? Section 5 discusses IMF conditionality and progresses to examine the effects of IMF programmes on policy variables and economic outcomes. As part of this exercise it also investigates the issues of implementation and ownership. Section 6 examines

the prolonged use of IMF resources. Finally Section 7 draws things together and discusses a future research agenda.

2. The IMF: History and Use of Economic Theory

2.1 A (Very) Brief History

The 1930s have been characterised as a period of international financial anarchy. The gold standard had been abandoned and, without the discipline that this purported to enforce, countries pursued beggar-thy-neighbour policies in the form of competitive devaluations and commercial policy motivated by mercantilist modes of thought. However, nobody seemed to gain from these policies as global unemployment rose and world trade shrank. The Bretton Woods conference in 1944 provided the opportunity to design something better and came up with the Bretton Woods system. Countries were supposed to defend par values and to have access to external finance while they corrected macroeconomic disequilibria. However, they could adjust their pegs in the event of a fundamental disequilibrium – where there was an inconsistency between internal and external targets at a particular exchange rate. The IMF was established to oversee the operation of the Bretton Woods system. It had both an adjustment role and a financing role, encouraging countries to pursue appropriate adjustment policies and supporting them with balance of payments finance. Although not initially part of the Fund's mandate, by the early 1950s the two roles were linked by the conditionality attached to many of the Fund's loans.

The 1950s and 1960s were something of a ‘golden age’ for the IMF. The world economy experienced a period of sustained economic growth. Inflation rates following the Korean conflict were generally low, and world trade was gradually liberalised and grew. The IMF seemed to be delivering what it was designed to deliver. Deeper analysis might have questioned the implied causality. Perhaps the performance of the world economy allowed the IMF to appear successful; but few questioned the role and operations of the institution. The main concern was whether international liquidity was sufficient to support a system where countries seemed reluctant to alter their currency pegs. Reform plans at the time were almost all oriented toward creating more liquidity, and culminated in the introduction of a new international reserve asset, the Special Drawing Right, in 1970. The SDR was created and allocated by the IMF and was intended to eventually take over as the principal reserve asset in the international financial system with the IMF controlling its supply. Its near-term rationale was to help avoid the collapse of the Bretton Woods system resulting from global reserve inadequacy. The timing could not have been much worse. SDRs were introduced when international reserves were rising as a consequence of expansionary US monetary policy. Confidence in the dollar waned and the ‘dollar crisis’ led to reforms, negotiated at the Smithsonian Institute in 1971, to raise the dollar price of gold – thereby effectively devaluing the dollar – and to introduce more exchange-rate flexibility via wider bands around a new set of central values. The reforms did not save the Bretton Woods system. Balance of payments disequilibria persisted and foreign exchange crises continued. In mid-1973 the attempt to defend exchange rates was abandoned and the world moved over to generalised flexible exchange rates; generalised in the sense that the dollar, yen, and European currencies floated against each other. Within Europe and amongst developing countries a preference for pegging remained.

The collapse of the Bretton Woods adjustable peg system had important implications for the IMF which, after all, had been set up to manage it. With the move over to flexible exchange rates, the growing role of private international banks in recycling petrodollars in the aftermath of the oil shock in 1973/74, the sharply reduced significance of international reserves within a regime of flexible exchange rates and capital mobility, as well as the moves towards regionalism in Europe, much of the systemic role of the Fund disappeared in the 1970s. The international monetary system was privatised, and the IMF was marginalised. But by the beginning of the 1980s a new era was beckoning for the Fund.

The Third World debt crisis of the 1980s meant that it started lending to large highly indebted Latin American economies as well as to smaller and poorer African and Asian ones. Immediately prior to the crisis it had been only low income countries that had been borrowing from the Fund. Inasmuch as the debt crisis threatened the viability of some big money centre banks in the US and elsewhere, and therefore also the stability of the international monetary system, there were those at the time who claimed that this re-created a systemic role for the Fund. As the Latin American debt crisis began to ease in the late 1980s, in spite of the IMF rather than because of it according to some critics, so the fall of Communism created a new cadre of borrowing countries, the so-called countries in transition (CITs). To this group was added the capital crisis countries of the 1990s and 2000s. Its involvement in a wider range of countries, while diversifying the Fund's portfolio of lending, also exposed it to a broader range of criticism. By the beginning of the 2000s the Meltzer Commission was arguing that it had changed insufficiently to reflect a world of highly mobile capital, that it had allowed itself to become involved in issues and in countries for which it was not designed, exhibiting mission creep, that IMF conditionality was excessive, ineffective and inefficient and that, as a result, the Fund was in need of fundamental reform.

In combination with other influential attacks, a reassessment of the Fund's role in the world economy seemed appropriate. As of early 2006 the reassessment is 'work in progress,' with the Fund trying to establish a medium term strategy based around the 'organising principle' of globalisation (IMF, 2005).

The notion of a forward-looking Fund contrasts quite sharply with the institution's history, since many of the key events that have shaped it were not widely foreseen and/or were beyond its immediate control. This applies to the breakdown of the Bretton Woods system, growing African independence, the Third World debt crisis of the 1980s, the fall of Communism at the end of the 1980s and the beginning of the 1990s, and many of the currency crises of the 1990s and early 2000s (Boughton, 2004). It may also apply to the rapid globalisation of financial markets and increasing capital mobility. The Fund's history could be presented as responding to a series of events that were largely unanticipated. Indeed its very conception was a response to the interwar depression.

2.2 The IMF and Economic Theory

If the IMF has been shaped by historical events, to what extent has it also been shaped by the evolution of economic ideas? Opinions differ, and this might be a topic worthy of closer study than it has received. Certainly the Fund likes to present itself as eclectic and as taking what is relevant for its work from developments in economic theory. Given the number of countries that belong to the Fund and the large differences between them this is surely an appropriate position to adopt. At the outset, the Fund was established by like-minded

Keynesians and it is reasonable to assume that, with the limited exchange rate flexibility allowed under the adjustable peg system, the emphasis was placed on fiscal and monetary policy to bring about stabilisation and to internationally co-ordinate macroeconomic policy. This was given sharper focus by the evolution of the monetary approach to the balance of payments during the 1950s and 1960s. But the approach had its variants. The IMF variant, encapsulated in the so-called 'Polak model,' was built on to Keynesian multiplier analysis and put fiscal deficits centre-stage, whereas the Chicago version placed greater emphasis on monetary policy.

Open economy macroeconomics was conceived within the IMF and was delivered in the form of the Mundell-Fleming model. This showed, analytically, that it was necessary to distinguish between fiscal and monetary policy, and that their effects would differ depending on the degree of capital mobility and exchange rate flexibility. It became particularly relevant as capital mobility increased and as the adjustable peg system was replaced by generalised flexible exchange rates.

Apart from its emphasis on inflation, monetarism seemed to have relatively little impact on IMF thinking. A somewhat broader approach to inflation was adopted which acknowledged the problems in controlling the supply of money. Claims that the Fund became a monetarist as well as a monetary institution were largely without foundation (Bird, 1984), as it focused on the current account and the expenditure-switching effects of devaluation. The Fund also appears to have remained agnostic with regards new classical macroeconomics. While not abandoning the idea that there was often scope for counter-cyclical policy, it has also recognised the role that stable policies play in anchoring expectations.

In terms of supply-side economics and neoliberalist economic policies the Fund's position has again been nuanced. From the mid-1980s, programmes began to incorporate structural conditionality designed to strengthen the supply side, but it does not appear to have shared the enthusiasm of some supply siders for tax cuts as a way of stimulating economic growth or for the idea of Ricardian equivalence. The Fund did not accept the notion that borrowing to finance government expenditure will have broadly the same economic impact as a tax increase, or that current account balance of payments deficits only represent an intertemporal redistribution of expenditure that can easily be accommodated by capital inflows in a world of high capital mobility. With regards 'neoliberalism' or 'market fundamentalism,' the IMF has again revealed a degree of eclecticism. While generally supporting the view that, based on the available evidence, policies of economic, financial, and trade liberalisation are superior, it seems prepared to accept that, in some countries and at some times, alternative policies may be needed. It also emphasises the importance of sequencing – suggesting that liberalisation may go too fast and in the wrong order. On capital account liberalisation, its attitude, which initially appeared to be strongly supportive, moderated in the aftermath of the East Asian crises. In this case the Fund seems to have been forced into its eclecticism by events.

In general the above discussion suggests that the Fund's claims for eclecticism have some substance. Again not everyone would agree. For example, Edwards (1989) argued that it had failed to keep up with advances in macroeconomic economic theory, such that its conditionality remained founded on basically the same analytical framework as it had in the 1950s and 1960s. Easterly (2002) argues that this framework is ill-conceived and mis-placed. But what is it? This deserves a little more discussion.

The framework is usually described as 'financial programming' and is an approach derived from the Polak model. It sets out to identify a limit on the size of the budget deficit that the government may finance by means of borrowing from the central bank. In order to assess this, the early form of financial programming assumed that governments did not finance fiscal deficits by issuing bonds or by borrowing from foreign capital markets. It also treated economic growth as exogenous, and took inflation and the velocity of circulation as given or at least predictable. This, in turn, meant that the demand for money was also predictable. With a reserves or balance of payments target imposed, the framework then defined the maximum budget deficit that could be run and financed by borrowing from the central bank consistent with the balance of payments target.

The 'model' had a number of operational advantages in terms of its minimal data requirements and the fact that through Walras's Law it did not have to specify a capital flow function. However, while, in one sense its appeal was its simplicity, it has been legitimately criticised for being over simplistic.

Governments may be able to finance deficits by issuing bonds and by external borrowing. Economic growth is likely to be endogenous with respect to macroeconomic policy. Autonomous capital inflows may affect exchange rates and therefore the current account. And, partly as a consequence, the demand for money may be unstable and unpredictable. Ironically a programming approach, which was Keynesian inasmuch as it focused on fiscal policy, could therefore be criticised for its monetarist assumption of a stable demand for money.

These weaknesses have led the Fund to point out that it only uses financial programming as a guide and a way of checking the internal consistency of policy targets. However, Easterly (2002) maintains that the identities that form the foundation of financial programming contain such large statistical discrepancies that it is of little use even in this capacity. Domestic credit creation does not have a one-to-one relationship with the money supply, the elasticity of inflation with respect to excess money growth is systematically less than one and exhibits high variance. Velocity is non-stationary, and changes in money velocity account for much of the variation in inflation. Income elasticities relating to imports vary widely. And government deficits do not have the assumed connection with domestic credit creation.

As the above discussion implies, the weaknesses of financial programming may be more significant in some countries than in others. The approach may be at its least useful in capital account crisis countries, and of relatively more use in low income countries. But even in this context 'new structuralists' argued that the Fund was trying to apply models that were designed to suit advanced economies, to developing ones where the models do not fit the facts, with the result that Fund-backed policies have deleterious effects; contractionary monetary policy leading to inflation and devaluation causing stagflation (see, for example, Taylor, 1988). Stiglitz (2002) has argued that the Fund abandoned its Keynesian credentials by advocating fiscal austerity even in a recession – although the IEO (2003) has found that the evidence is in general inconsistent with this claim. Many commentators (including Feldstein, 1998) have argued that the Fund shows insufficient flexibility and adaptability and that it has applied conventional economic remedies in circumstances where the malady has been unconventional.

The bottom line, however, is that countries come to the IMF when they are experiencing macroeconomic disequilibrium, with aggregate domestic demand exceeding aggregate domestic supply. Correcting the disequilibrium requires aggregate demand to fall relative to aggregate supply. Although, to some extent, this may be achieved by raising domestic output, it is also likely to involve compressing aggregate demand in the short run. By how much depends on the availability of external financing. The required adjustment may also be facilitated by policies aimed at switching the pattern of expenditure and output towards traded goods. Essentially it is this framework that dictates the design of Fund-backed economic policy. It shows that the financing and adjustment roles of the IMF are interdependent. Additional external financing permits a more gradual speed of adjustment. Limited financing dictates more rapid adjustment. The implication of this follows from the fact that some adjustment strategies are longer term than others. As a general rule, structural adjustment based on increasing aggregate supply will take longer than adjustment based on compressing aggregate demand. This fundamental relationship has important consequences for the design and the effects of IMF programmes. Most of the remainder of this survey concentrates on the Fund as a lending and adjustment institution. But a few other important issues should not be neglected, and we now turn to them.

3. The IMF: Systemic Role, Governance, and Resourcing

Before moving on to examine aspects of IMF lending and conditionality, there are other important issues relating to the Fund where economics has had something to contribute. In this section, however, we do little more than provide a check list of them combined with a brief commentary.

3.1 Does the World Need the IMF? Does It Have a Systemic Role?

The basic rationale for the Fund's existence hinges on the 'failure' of private international capital markets in the form of information failures, externalities and contagion, co-ordination failures, financing gaps and the failure to provide the 'public good' of conditionality. In addition, the Fund may play a role in discouraging governments from pursuing policies that would be destructive of national and international prosperity – as stipulated in its Articles of Agreement. The less significant are these concerns, the less compelling the justification for the Fund's existence. Moreover, public choice theory counsels against assuming that Fund 'success' will necessarily counteract market 'failure.' As a large international organisation, the Fund may be susceptible to bureaucratic failure. This may be the result of the Fund's own objective function which, according to this approach, incorporates power and prestige (Vaubel, 1986, 1991, 1996), or it may result from underlying organisational problems, and a lack of transparency and accountability (Willett, 2002).

The argument that the world ceased to need the IMF with the demise of the Bretton Woods system, because exchange rates became flexible and private international capital markets provided the required balance of payments financing, is unpersuasive in circumstances where balance of payments disequilibria continue to arise, where balance of payments policies have spill-over effects, and where capital markets have their own shortcomings. One has to adopt a fairly extreme stance with regards the claim that the Fund contributed to currency crises by encouraging private lenders to underestimate risks and therefore to over lend, in order to argue that the incidence of crises does not further strengthen the case for the Fund's continued existence.

Having said this, the idea of the Fund regaining the systemic role it performed in the context of the Bretton Woods system is unrealistic, not least because the characteristics of that system seem unlikely to be replicated. Under the Bretton Woods system the co-ordination of macroeconomic policy was rule-based. Nowadays the exchange rate rule no longer exists and the Fund would not seem well suited to organising discretion-based co-ordination. In addition, it is difficult to imagine the Fund being able to exert a telling impact on policy in advanced economies or in surplus countries, as part of a scheme to eliminate global imbalances. Thus, while the Fund claims that multilateral surveillance is an important part of its role, many assessments suggest that it does not play the role very effectively. For a detailed discussion of the Fund's multilateral surveillance see IEO (2006). Reform therefore needs to focus on measures that would strengthen this component of the Fund's activities or pass it over more completely to other international agencies. Another option would be for the Fund to pursue the principle of subsidiarity and explore the extent to which some of its functions, including aspects of surveillance, could be carried out by regional monetary confederations (Bird and Rajan, 2002).

3.2 Governance, Structure and Resourcing.

Studies that attempt to catalogue the desirable features of international agencies in terms of effectiveness, legitimacy, accountability and representativeness argue that the IMF is some distance from the ideal (Kenen et al, 2004). The quota system that determines subscriptions, drawing rights and voting rights is an anachronism that may be better explained by history and by politics than by economics (Bird, 1987; Kelkar, Yadav and Chaudhry, 2004; Bird and Rowlands, 2006c). The workings of the Fund can be usefully informed by reference to

principal-agent models, and agency models with multiple principals. But at present such analyses are much better in helping to explain why it has been difficult to reform the Fund's governance and structure rather than in helping to provide a way of identifying workable reforms. Reviews of the IMF's quota system have again performed better at revealing the deficiencies of existing arrangements than at coming up with proposals that represent a net improvement and at the same time will be acceptable given their distributional consequences (IMF, 2000).

Political constraints may be less binding in considering the range of the Fund's lending windows and other policy instruments. Here, suggestions that the proliferation of facilities has been excessive are being augmented by analyses of individual facilities and by empirical studies that seek retrospectively to determine whether there are statistically significant differences in the economic circumstances in which one facility is used rather than another (Bird and Rowlands, 2006b).

Similarly, and alongside the debate on quotas, there is surely scope for reassessing the means by which the Fund raises its own resources. Reforms in this area would enable it to contemplate increasing its lending capacity even where there is no general increase in quotas. In principle, the Fund could invest its own reserves or it could use them as collateral against which to borrow from private international capital markets. Conventional arguments that direct borrowing from capital markets is inconsistent with the original design of the Fund as a credit union seem largely irrelevant when the Fund's creditors and debtors are different countries. Other arguments that IMF borrowing would 'crowd out' direct capital flows to developing countries are also unpersuasive, particularly where the Fund's demand for resources would only tend to rise sharply in the event of capital account crises associated

with ‘sudden stops’ in direct lending. The need to maintain its access to private capital markets could also impose a discipline on the IMF’s portfolio of lending. Direct borrowing by the Fund might be a more effective way of mobilising private capital flows to emerging economies in the event of crises than relying on an indirect catalytic effect; an issue to which we return later (but see Bird and Rowlands, 2001b, for a fuller discussion). But should the Fund be lending at all?

4. IMF Lending and the Determinants of IMF Arrangements

4.1 Should the IMF be Lending? Moral Hazard

Moral hazard occurs where action designed to alleviate a problem creates incentives that may actually make it worse. Thus insurance designed to help deal with risk encourages people to behave in a way that increases risk. Applied to the IMF, moral hazard has been put forward as a potential danger for both debtors and creditors. The idea behind ‘debtor moral hazard’ is that countries, mindful of their potential access to IMF resources, tend to pursue over-expansionary domestic economic policies that then lead them into an economic crisis and into borrowing from the Fund. The provision of IMF finance then creates an incentive for them to substitute out of adjustment and into financing to an extent that implies sub-optimal adjustment.

‘Creditor moral hazard’ claims that the prospect of ‘bail outs’ by the IMF encourages private international capital markets to underestimate the risks associated with lending to individual countries or groups of countries and therefore to overlend. This then increases the probability

of crises occurring. The idea of creditor moral hazard became particularly fashionable in the 1990s as some commentators suggested that it was the IMF's bailout of Mexico following the crisis in 1994 that contributed to subsequent crises. The Meltzer Report claimed that it was 'impossible to overstate' the importance of moral hazard. And it has been used by some critics as a reason why the Fund should severely reduce or even curtail its lending operations. On the other hand, the existence of moral hazard has not generally been seen as being sufficiently important to abandon the provision of insurance in other contexts; so how important is it in the context of the IMF? Might IMF lending actually help to avoid crises and allow countries to pursue optimal adjustment paths in terms of avoiding measures that would be destructive of national and international prosperity and increase their commitment to economic reform?

An early advocate of the existence of debtor moral hazard was Vaubel (1983). A more recent attempt to test for moral hazard has been made by Dreher and Vaubel (2004a). They claim that evidence based on pooled time-series cross section regressions for 94 countries over 1975 – 97 suggests that higher amounts of outstanding IMF credits lead to more expansive fiscal policy, and that, controlling for other relevant influences, budget deficits and the rate of monetary expansion 'significantly fall as the country's quota with the Fund is exhausted.' They interpret this as giving support for the debtor moral hazard hypothesis. However, as Conway (2006a) points out, the results are equally likely to reflect the effect of conditionality on government behaviour. Having fewer resources undrawn could reflect superior implementation. Others have also been sceptical of debtor moral hazard arguing that it is policed by conditionality (Guitian, 1995; Fischer, 2004; Bird, 1995) – although this depends on the credibility of conditionality. The fact that the Fund often has considerable spare

lending capacity also implies that countries are reluctant to borrow from it. The incentives to borrow may, in principle, be too weak rather than too strong.

In terms of creditor moral hazard the empirical evidence suggests that a degree of agnosticism is appropriate. There have been a number of studies using different methodologies and data sets, and reporting opposing results. Thus, while some find evidence that could be consistent with creditor moral hazard – albeit with other things as well – (Eichengreen and Mody, 2000; Dell' Ariccia et al, 2002; Haldane and Scheibe, 2004; Hayo and Kutan, 2005), others do not, or they remain unconvinced by the evidence they examine (Zhang, 1999; Lane and Phillips, 2000; Kamin, 2000).

Two detailed and comprehensive surveys of the literature on creditor moral hazard related to IMF lending are available (Dreher, 2004b; Conway, 2006a). But as these show, an important part of the problem in reaching a less ambivalent conclusion is associated with methodology and measurement. How does one capture the probability of IMF intervention and the likely amount of liquidity provided? How does one measure the extent to which likely IMF involvement affects perceived risk – and is this default risk or exchange rate risk or both? A superficial answer to the last question is to examine a country's risk premium or spread. But this will be affected by other factors, and the statistical challenge is to isolate the impact of the IMF. Even the nature of the IMF's impact is unclear. If spreads narrow with IMF lending, is this because of moral hazard or because a positive sign is being transmitted about the future course of economic policy, or about the relaxation of liquidity constraints?

There could also be an inconsistency between debtor and creditor moral hazard. If debtor moral hazard is believed to exist, the prospects of it could in principle discipline creditor

moral hazard. In any event, the available empirical evidence does not support the most extreme and outspoken claims for moral hazard. It is a potential problem but not one that seems to be sufficiently important to warrant curtailing IMF lending. Indeed, the very attention that it received during the 1990s may have weakened any actual effect that creditor moral hazard has. Moreover, it is widely acknowledged that the Fund's decision not to intervene in Russia in 1998 probably weakened any impact that the IMF had on capital markets in terms of reducing perceived risks. Ironically, perhaps the most significant application of the moral hazard hypothesis to IMF lending could be the one that has received least attention in the literature. This is the moral hazard associated with waivers and with replacement programmes as well as with the prolonged use of IMF resources, where the ease with which a replacement programme can be negotiated may in principle adversely affect the incentive to implement contemporary programmes.

4.2 IMF Arrangements: A Life Cycle Schema

The remainder of this survey examines IMF arrangements at the various stages depicted in Figure 1. First of all, we examine the economics of balance of payments sustainability. Under what sets of economic circumstances might the balance of payments be expected to become unsustainable, such that governments contemplate turning to the IMF for assistance. Then we consider whether these circumstances will actually lead to an arrangement with the Fund. A problem here is that we can only observe whether or not an arrangement is put in place. While the outcome will depend on the interplay between economic and political factors affecting the demand for arrangements, as well as those affecting the supply side or the willingness of the Fund to provide financial support in the form of an arrangement, it is not possible to identify and discriminate between these influences. For example, will a left-

leaning undemocratic government be less likely to seek assistance from the Fund, or will the Fund be less likely to be willing to assist it? Will a government favoured by the US be more likely to seek help from the Fund – anticipating favouritism, or will pressure be exerted on the Fund to supply more assistance after the government has made the initial approach? Empirical studies of participation in IMF programmes therefore often incorporate a range of variables that are designed to reflect both demand side and supply side influences.

Finally we examine what happens after an arrangement has been agreed. What are the effects of IMF programmes and what factors influence the degree to which the agreed programme is implemented? Moreover, are countries likely to return to the Fund? What influences the prolonged use of IMF resources and whether countries become IMF-recidivists?

Thus in what follows we are tracing a path around Figure 1.

[Figure 1, About Here]

4.3 Referral to the IMF and Balance of Payments Sustainability

The IMF is a balance of payments agency and, in seeking to understand why countries turn to it for assistance, it seems sensible to start with their balance of payments. According to its Articles of Agreement, countries are only permitted to draw resources from the IMF where they have a balance of payments 'need'. However, the concept of need is not defined precisely. For example, it may coincide with a current account surplus. It may also vary across facilities. More useful then is the notion of balance of payments 'sustainability' (Milesi-Ferretti and Razin, 1996). To begin with it may be reasonable to assume that

countries will be under pressure to turn to the IMF when they have a current account balance of payments deficit that they can no longer sustain.

But what determines balance of payments sustainability? A country's balance of payments becomes unsustainable in circumstances where current policies cannot be continued into the indefinite future; a fundamental policy change is required. The loss of sustainability may, on some occasions, be gradual but, on others, it may be connected to a sudden discrete event. However, the sustainability of a current account balance of payments deficit depends not only on the size of the deficit and the factors that influence it, but also on a country's willingness to borrow and the willingness of creditors to lend. It follows that while conventional current account balance of payments theory helps to identify the factors that may induce a transition from sustainability to unsustainability, it may not provide the full story. It will also be necessary to consider capital account factors.

A loss of sustainability may involve increasing domestic expenditure or absorption associated with falling domestic private sector saving, increasing private sector investment or an increasing public sector deficit. It may also involve structural features such as the composition of exports and imports, the degree of openness, the size and composition of external liabilities and the nature of the country's financial structure. For example, an open economy that is heavily reliant on a limited number of exports will be vulnerable to trade shocks, which contribute to a loss of balance of payments sustainability. But current account deficits will, in principle and in isolation, be a poor indicator of unsustainability. Forward-looking agents may anticipate a reversal in the current account and may be prepared to provide the resources necessary to finance contemporary current account deficits. Sustainability will therefore depend, to a significant degree, upon a country's access to

external finance and ultimately the factors that determine it, including those that influence creditors' perceptions of return and risk.

This analysis implies that the shift from sustainability to unsustainability may be associated with developments either affecting the current or the capital account. These may increase a country's current account deficit, without there being an equivalent increase in its ability to finance it, or they may reduce its ability to finance a given current account deficit because of a loss of creditworthiness. In the former case, the principal determinants may be found in traditional balance of payments theory, although it is important to examine why capital markets are not prepared to fill the increased financing gap. In the latter case, the principal determinants may be found by examining factors influencing capital flows.

The transition towards unsustainability in the balance of payments may also be examined in terms of whether the causal factors are endogenous or exogenous. Exogenous factors may relate to the current account and include a decline in export receipts or a more general decline in the income terms of trade, or they may relate to outside factors affecting capital flows such as changes in world interest rates and contagion from crises elsewhere. Market confidence and capital flows may also be affected by endogenous factors such as a deteriorating fiscal imbalance.

One way of portraying the structure of the balance of payments and its connection to endogenous domestic factors is to combine simple national income accounting identities. Thus the current account balance is often written as:

$$X - M = (S-I) + (T-G)$$

where X is exports of goods and services, M is imports, S is private saving, I is private investment, T is tax revenue and G is government expenditure. Consequently the balance of payments identity implies that:

$$R = KA + [(S-I) + (T-G)]$$

where R is foreign reserve accumulation and KA is the balance on the capital account. Putting to one side for a moment the question of the exchange rate regime, this simple identity facilitates the analysis of various routes towards a loss of balance of payments sustainability.

A government deficit (G>T) may, for example, be financed in various ways. It may be offset by a private sector surplus (S >1) implying that the government effectively borrows from the private sector. Such a policy will be sustainable for as long as the private sector is willing directly or indirectly to purchase government debt. Hence a government deficit need not imply a current account deficit, and will not always lead a government to turn to the IMF.[1]

If the private and public sectors are jointly in deficit, then a current account deficit will result. Such an overall shortfall in domestic saving may be financed by foreign capital inflows (KA >0), either in the form of investments in domestic public debt or the domestic private sector. Again, the presence of a current account deficit (or a deficit in either its public or private components) does not automatically necessitate a need for IMF assistance.

Finally, if the capital account surplus is insufficient to finance the current account deficit, international reserves may be decumulated and may be used directly by the government to finance a fiscal deficit, or indirectly to finance a private sector deficit. As long as reserves are sufficient for the purpose, the IMF may again be avoided.

In all these cases there is either an increase in debt held by domestic or foreign investors, or a decline in government assets in the form of reduced foreign exchange reserves. All of them encounter limits on their sustainability. Reserves are finite and will eventually run out. The demand for a government's debt by foreign and domestic agents may also eventually decline, especially when there are perceived repayment problems. Foreign capital markets may become less enthusiastic about a country's private investment opportunities. The exhaustion of the debt-financing route may be gradual, accompanied by rising interest charges, or sudden, as when it is connected to a capital account crisis. In either case, however, the perceptions of investors become a crucial, and often unpredictable, determinant of sustainability. Then, to the extent that it is the loss of sustainability that leads countries to borrow from the Fund, the demand for IMF assistance is also unpredictable.

A loss of confidence within capital markets will reduce an indebted country's ability to roll over its debt. Meanwhile, an appreciation in the currency in which its debt is denominated, or a rise in global interest rates, will exogenously increase the domestic currency cost of servicing debt. This will tend to increase further both the domestic fiscal deficit and the current account deficit, and require yet more debt accumulation or reserve loss. With such a dynamic at work, debt accumulation may again become unsustainable. Where trade taxes are an important source of revenue, fiscal problems may also arise exogenously in association with trade shocks.

Exchange rate policy further complicates the analysis of balance of payments sustainability. With completely flexible exchange rates, overal1 balance of payments deficits should, in principle, be eliminated by appropriate equilibrating movements in the values of currencies.

As a consequence, countries with flexible exchange rates should avoid unsustainable external deficits. The mirror image to this is that countries attempting to peg the values of their currencies above an equilibrium level are more likely to encounter situations where the balance of payments becomes unsustainable, since they will need external finance to protect the peg.

How does the above analysis of payments sustainability help in conceptualising the demand for IMF assistance? What is clear is that, in principle, countries exhibiting similar economic characteristics may have different needs for IMF assistance. For example, countries with large trade or current account deficits may not turn to the Fund if they can finance them through private capital markets or via aid flows that effectively make the trade deficit sustainable. In contrast, countries without such access may find a similar current account deficit unsustainable, and therefore be more inclined to turn to the Fund. The routes to unsustainability, however, are various. For some countries exogenous current account shocks may be the key factor. For others, it may be longer term fiscal deficits, external debt accumulation and a gradual loss of market confidence, combined, perhaps, with exogenous shocks affecting the capital account. The probability of reaching the threshold of sustainability will also be influenced by exchange rate policy. Countries with pegged exchange rates are more likely to reach it than those that opt for flexible exchange rates.[2] Thus, while it is possible to identify a range of factors that may be associated with countries turning to the Fund, it is not possible *a priori* to identify a unique combination of these factors.

Even when faced with an unsustainable balance of payments, it is not certain that governments will turn to the IMF. Different governments will respond in different ways;

though respond they must since unsustainability means that policies have to change. Turning to the IMF for assistance is one option, but governments could also change policy independently of the Fund. In some cases the choice will be strictly constrained since debt rescheduling or aid flows may be directly linked to the negotiation or existence of an IMF programme. However, in principle, the option of not turning to the IMF remains. If, in practice, some countries exercise this option, it follows that factors influencing the sustainability of the balance of payments will empirically only provide a partial explanation of the demand for IMF assistance. A complete explanation will require us to add factors that influence a government's decision once the threshold of balance of payments sustainability has been reached.

Before turning to the politics of IMF arrangements, it may be useful to disaggregate countries according to the economic circumstances in which they turn to the Fund. The IMF has itself (IMF, 2004) distinguished between 'classic case' countries, capital account crisis countries and low-income countries. In the classic case, governments have run fiscal deficits that have resulted in inflation which, in combination with a reluctance to devalue the nominal exchange rate, has led to currency overvaluation and a current account deficit that cannot be sustained by running down reserves or by international borrowing.

In capital account crisis countries neither the fiscal deficit nor the current account deficit need be large. Inflation and monetary expansion may not be problematic. However, growth in external debt relative to reserves undermines the confidence of international capital markets and, often in conjunction with some trigger mechanism, there is a 'sudden stop' to capital outflows which leads to a crisis. Again the *status quo* becomes unsustainable.

In low-income countries an external shock related to the current account, such as a sharp deterioration in the terms of trade, possibly in combination with some degree of domestic economic mismanagement, makes the balance of payments unsustainable. Indeed, structural weakness associated with export concentration and a downward trend in the income terms of trade may mean that the balance of payments exhibits a secular deterioration.

The economic forces behind a loss of balance of payments sustainability are summarized in the top left of Figure 1, although the above discussion suggests that they will not all be important in each and every case. But they do give pointers to the pattern of IMF arrangements. Advanced economies with flexible exchange rates and, more importantly, enduring access to international capital markets are unlikely to have IMF arrangements. Emerging economies may also by-pass the Fund for as long as they enjoy market access and have high levels of reserves. When these sources of financing are eroded, however, they may be expected to turn to the Fund, especially where they are reluctant to allow the value of their currencies to depreciate. For low-income countries that are likely to encounter a binding constraint in terms of external finance, either because their international reserves are low or because they do not have access to private international capital markets, IMF arrangements are more likely to be a relatively frequent phenomenon given the vulnerability of their balance of payments to external shocks. They may also encounter other constraints as well; particularly where debt relief or aid provision is linked to the existence of IMF programmes.

4.4 The Politics of IMF Arrangements

Governments will assess the relative merits and demerits of alternative courses of action not just in terms of economics but also in terms of the political pay-offs. How will involving the Fund affect incumbent governments? What policies do governments anticipate the Fund

favouring? What will be the effects of these policies on the distribution of income and wealth? Who will be the gainers and who will be the losers? And how politically powerful are they? How many resources will the Fund provide (allowing losers to be compensated)? And will the programmes have a signalling effect that encourages others to lend? Does the government believe that it will be able to influence the design of conditionality once it gets into negotiations with the Fund? How strong is its bargaining position and does it have 'supporters' on the Fund's Executive Board? How strong is the feeling of national sovereignty over the design of economic policy? What will be the consequences of failing to implement a programme that is agreed; will waivers be granted or will a replacement programme be easily negotiated? At what stage is the political cycle; when is the next election?

While they are all potentially relevant, it is frequently difficult to answer these questions. Much of the 'evidence' about them is anecdotal and qualitative. However, it does seem plausible, or even probable, that they will exert an important influence over the demand for IMF arrangements. Even if not driving the determination of IMF arrangements, politics may play a filtering role. The final outcome will reflect a combination of economic and political factors, but not in a uniform way. Thus is one case, for example, extreme political resistance to involving the Fund may be overpowered by even more extreme economic circumstances which effectively eliminate the alternatives. In another case, the political resistance may be less but still sufficient to rule out turning to the Fund, because other alternatives still exist. Moreover, and importantly, circumstances change over time.

Conventionally the decision to turn to the Fund is presented as a country needing foreign exchange and being prepared to accept the (political) costs of conditionality in order to draw

resources from the IMF. Different views give politics a more important role. In one scenario the involvement of the Fund both as a provider of resources and policy advice 'tips the balance' in favour of reformers. In a second, a government uses the Fund as a scapegoat, blaming it for policies that it wanted to pursue itself, but was reluctant to introduce because of anticipated domestic opposition. In both the 'tip the balance' and 'scapegoat' scenarios IMF conditionality is viewed as a benefit by the incumbent government rather than a cost.

Whatever the circumstances and the motivation behind referral, let us now assume that we have moved to the right in Figure 1 and have reached the stage where the Fund has been approached for an arrangement. How will it respond?

At one level it may be unhelpful to talk about 'the' Fund, since the staff who negotiate programmes may have different motivations from the management, or the Executive Board that approves them. Neither the government nor the Fund will be unitary actors. But, at a more general level, the Fund may be seen as simply endeavouring to comply with its institutional objectives as laid down in the Articles of Agreement, negotiating programmes that will restore equilibrium (or balance of payments sustainability) while avoiding, as far as possible, measures that are destructive of national or international prosperity.[3] This approach sees the Fund as aiming to agree programmes that are technically effective and efficient; although, to an extent, political variables may come into play in assessing whether agreed programmes are likely to be implemented (more on this later). However, the benefit of any doubt in this regard will almost certainly be exercised in favour of governments. Generally speaking, there are reasons to believe - and evidence to support - the claim that the Fund will be over-optimistic about what programmes can achieve. There will be a positive bias towards

designing programmes that can then be approved (IEO, 2004; Atoian et al, 2006; Bird, 2005a).

As noted earlier, alternative approaches to analysing the Fund's motivations have been offered in the literature. One adopts a public choice interpretation (Vaubel, 1986, 1991, 1996; Willett, 2001, 2002). According to this view the Fund is an independent actor setting out to maximize its own objective function incorporating power, prestige, responsibility and resources. It is keen not only to make loans but also to apply a high level of conditionality to them. A second approach sees the Fund as acting as an agent for its major shareholders (or other principals such as private investors). The pattern of IMF lending is then claimed to serve the political and commercial interests of advanced countries - in particular the US.

In any event, the IMF may be expected to be an active rather than a passive player. It may have a different agenda from that of governments, placing greater emphasis on strengthening the balance of payments and less emphasis on the distributional consequences of economic policy.[4] It may also be working to a different time frame, looking for quicker balance of payments correction. Yet it is a moot point as to whether the active role of the Fund will influence the probability of agreements being signed. In as much as it is an attempt to constrain conditionality, the trend towards 'streamlining' since 2000 could be seen as inconsistent with the public choice approach. Furthermore, even if there were to be political influences over IMF lending within the context of a principal - agent set up, the institutional conventions of the Fund and its club-like characteristics may mean that these are more likely to be revealed in the *amount* of lending and the *nature* of conditionality associated with arrangements rather than in whether or not arrangements occur.

4.5 Empirical Evidence on the Determinants of IMF Arrangements

What does our discussion of the determinants of IMF arrangements suggest? It suggests that there is no one model. The expectation should be, therefore, that large sample regression analyses may be able to identify a range of economic, and possibly political variables that in general exert a significant impact on IMF arrangements, but that, beyond this, the explanatory and predictive power of the underlying equations will be limited. It seems likely to be combinations of contingent conditions that affect the propensity to have arrangements.

Early research into IMF lending attempted to explain the *amount* of IMF lending in terms of key economic variables, making little distinction between the demand and supply side (Bird and Orme, 1981, Cornelius, 1987). Later research, while continuing to emphasise economic determinants, used probability approaches which sought to explain whether or not countries had programmes, rather than seeking to explain the amount of lending (Joyce, 1992, Conway, 1994, Santaella, 1996, and Knight and Santaella, 1997). As studies multiplied and became more sophisticated, they also encompassed a wider range of potential explanatory variables, but these continued to emphasise the economic dimensions of IMF borrowing and lending. Over time, areas of consensus emerged. There were some economic variables that appeared to be significant according to most, if not all, studies (Bird, 1996). The mere existence of a current account balance of payments deficit certainly did not appear, in itself, to make it probable that a country would demand resources from the IMF. Beyond this, however, arrangements with the Fund did seem to be linked to low levels of reserve holdings, overvalued exchange rates, a near term record of past programmes, and low levels of income and development. Some studies further suggested that the incidence of programmes was connected positively to levels of external debt and to terms of trade shocks, although this was

not universally found to be the case empirically. Similarly, there was somewhat mixed evidence relating to the significance of fiscal deficits, monetary expansion and inflation as determinants of IMF lending.

A common feature of this genre of research (as anticipated above) was low explanatory power overall. While the percentage of correct predictions was often between 80 and 90 percent, these superficially impressive numbers corresponded roughly to the percentage of countries without agreements. Hence a blind guess of 'no agreement' would have been correct about 80 to 85 percent of the time, depending on the actual sample. Therefore, while the studies did identify important relationships and regularities, the within-sample and out-of-sample predictive capacity of the models was limited.

In an attempt to improve matters, researchers began to include political variables, in part relating to the politics of the demand for IMF assistance – as reflected, for example, by the size of the government, but more so relating to the politics of the supply side. The objective was often to test the claim that IMF lending had become politicised and was being driven by the interests of the Fund's major shareholders, in particular the United States. Some studies (most notably Thacker, 1999) found empirical support for a 'US influence', based on voting behaviour at the UN General Assembly, while others were more circumspect. Bird and Rowlands (2001), for example, did not find changes in voting proximity to the US to exert any statistically significant effect on IMF lending, although they did find simple proximity to be significant especially prior to 1990.

More recent studies build on and extend some of these ideas. Thus Barnebeck Anderson et al (2003) suggest that countries effectively bid for IMF loans by making political concessions

reflected by how they vote at the UN on issues regarded as important by the US. To measure these concessions they construct a proxy for the political bliss points of individual countries based on voting behaviour on issues which the US does not regard as important. Over the period 1986-94, and for a sample of 68 countries, they find strong empirical support for their model, claiming that it has superior explanatory power to more conventional measures of US influence. Later versions of the paper which update it find similar results although their further research suggests that the effect is limited to the Fund's non-concessionary lending. Dreher and Sturm (2006) also report a tendency for countries with IMF and World Bank programmes to vote in line with G7 countries.

Other researchers have used alternative measures of US influence such as US commercial interests (Oatley and Yackee, 2002) and military aid (Rowlands, 1995), as well as alternative dependent variables. Oatley (2003), for example, claims that US influence has an impact on the size of loans rather than their incidence, while Dreher and Jensen (2004) claim that the influence is felt on the nature of structural conditionality.[5] Stone (2002, 2004) reports similar political influences over IMF lending to transition economies and African economies and argues that the behaviour of countries while under programmes is also affected by their political relationship with influential countries on the Fund's Executive Board. While, in general, these studies focus on political influences on the supply side, i.e. on the Fund's response to governments' applications for assistance, Vreeland (2000, 2003) claims that the existence and number of opposition groups (veto players) affects a government's willingness to turn to the Fund. With more veto players, governments are more likely to turn to the Fund. He claims that this offers some support for the 'tipping the balance' and 'scapegoat' explanations of IMF lending, although others have argued that there is little systematic case study evidence in favour of these explanations (Killick, 1998). In related empirical work

Vreeland (2005) also claims that the 'domestic politics' story depends on international politics, since the Fund can only be used to help advance unpopular domestic policies when it is not being used by the US to reward 'friends'. Where it is being used in this way, the threat of losing IMF support lacks credibility.

A further recent development in the literature has been to incorporate institutional variables as well as political and economic ones to see whether there is empirical support for public choice and bureaucratic explanations of IMF lending. Based on a large sample study that includes standard economic variables, combined with a range of political and institutional variables, Bird and Rowlands (2001) report findings relating to economic determinants that are largely consistent with previous research. Although some individual political factors appear to be significant, the principal conclusion they reach is that including the selected political and institutional variables does not significantly improve the ability of the augmented model to explain IMF lending. Again this large sample exercise offers little value added over and above a straight guess of 'no program'.

What does this body of empirical evidence imply? It may imply that the equations that are used continue to be mis-specified. Important determining variables may still have been omitted. The challenge is then to find them. The reward will be an equation that accurately explains IMF lending. In another paper Bird and Rowlands (2002) make some move in this direction by examining, in detail, occasions where their initial model fails quite badly to explain the incidence of IMF arrangements. They examine the outliers; cases where a programme was put in place but was not predicted by the model and cases where no programme was introduced in spite of the model's prediction that it would be. What was missing in these cases? From this structured examination of case studies that are inconsistent

with their basic model additional potential explanatory factors are isolated and then added to the model. These include budgetary deficits and terms of trade shocks. However, these additional variables do little to increase the model's overall explanatory power.

The deficiencies of the existing empirical evidence force us to consider another possibility, and again, the one we anticipated; namely that there is no one overall explanation of IMF arrangements. Certain things are important in some cases but not in others, such that their significance effectively cancels out in large sample studies.

As a result of the empirical research that has been undertaken we know what range of factors may be involved, and economic analysis provides a guide as to how these may be combined, but as yet no study has attempted to test empirically the classic case, capital account crisis, and low income classification. At best there have been preliminary excursions into this territory. Bird and Rowlands (2006a) attempt to tease out some of the contingent combinations that are associated with IMF lending but only in a fairly rudimentary way. Less rudimentary are a number of studies that focus on sub-classes of IMF members. In particular, prolonged users of IMF resources have received attention (Bird, Hussain and Joyce, 2004; IEO, 2002; Joyce, 2001; Conway, 2005). In general and reassuringly these studies suggest that factors affecting the underlying weakness of the current account and other features of low income countries seem to be especially significant in these cases. Turning to capital account crisis countries, Bird and Rowlands (2006f) examine whether the ‘standard’ economic model for explaining IMF lending performs significantly worse in the countries that the IMF classifies as capital account crisis countries. They find that it is only in a number of the Asian crisis countries that something different seemed to be at work. For many of the

countries presented as CAC countries conventional factors have been tending to push them to the Fund.

Although research along these lines will no doubt continue, it appears unlikely that empirical investigation will identify an equation or even a small number of equations that allow the demand for IMF arrangements to be explained with any great precision. This implies that discussions about general increases in the Fund's resources will remain highly political. In terms of Figure 1 we can now move on to examine the design and impact of IMF programmes.

5. The IMF, Economic Adjustment and the Effects of IMF Programmes

5.1 IMF Conditionality: Purposes and Trends

A central component of IMF arrangements is the conditionality they embody. This leads us on to consider the IMF's role in economic adjustment in countries that borrow from it. The origins and evolution of conditionality have been explained in the Fund's own historical accounts (Horsefield, 1969; de Vries, 1986, 1987; James, 1996; Boughton, 2001). The mechanisms and procedures through which the conditions are finally agreed are succinctly summarised by Mussa and Savastano (1999). In essence, conditionality comprises three components. First, there are the 'prior actions' that a country has to undertake before a loan is made available. Second, there are the quantified 'performance criteria' which are used to provide an objective indication of whether the agreed programme of economic policy reform

is on track. And third, there are the more qualitative aspects of policy reform that are included in the 'letter of intent' that a government signs in order to gain access to Fund financial support. It is the prior actions and performance criteria that represent the hard core of conditionality since it is these that determine whether a country will be eligible to draw on the phased tranches of a Fund credit.

Many studies have examined the rationale of conditionality. Early work (for example, Bird, 1978, 1984; Williamsion, 1982) focused on it as (i) a way of ensuring that borrowers repaid their credits and that the financial integrity of the Fund would be maintained, (ii) a means for the IMF to impart its views about economic policy to countries whose revealed performance suggested that they were in need of sound advice and to encourage them to avoid policies that would be destructive of national and international prosperity, (iii) a way of rationing scarce loans when the IMF was itself short of resources, (iv) a tool for counter-cyclical global economic management, (v) a way of reassuring the Fund's principal shareholders that their subscriptions were not being wasted, and (vi) a method for signalling a commitment to policy reform to private international capital markets and aid donors, thereby encouraging them to lend additional resources directly to the Fund's clients.

Similar purposes are identified by Collier et al (1997) when talking about aid conditionality in general. They distinguish five objectives for it: (i) inducement (encouraging governments to do things differently than they would otherwise have done), (ii) selectivity (ensuring that assistance is provided only to countries with a good policy environment), (iii) paternalism (ensuring that it is used in ways deemed appropriate by donors), (iv) restraint (locking governments into approved policy reform), and, (v) signalling (providing information that would be expensive for private agents to collect and interpret). To this list could be added (vi)

monitoring (allowing progress in reform to be evaluated). Collier et al go on to argue that in some respects these purposes are mutually inconsistent, suggesting that the inducement rationale of conditionality conflicts with each of the other four objectives. Via commitment, conditionality may also be presented as a way of overcoming time consistency problems and of providing countries with assurance that financial support will be forthcoming.

Representing, one supposes, the view of the IMF itself, Guitian (1995) emphasises the part conditionality plays in enabling the Fund to comply with its Articles of Agreement, which envisage the 'temporary' use of its resources under 'adequate safeguards'. In this context he presents conditionality 'as an instrument to contain moral hazard'. Automaticity in the use of Fund resources would, so he claims, fail to ensure that member countries made the required adjustment efforts to eliminate balance of payments problems. Thus he also describes conditionality as an 'instrument to protect the quality of the (IMF's) assets' by encouraging countries to improve their economic policies in a way that helps keep liquid the Fund's own resource portfolio. Guitian's definition of the purpose of conditionality is important since it describes only a fairly modest role which concentrates on ensuring that countries are able to repay the credits they draw from the Fund. See also Khan and Sharma (2001) on this issue.

With these purposes in mind it is interesting to note that there have been evolutionary changes in IMF conditionality. It became more far-reaching in the 1980s and 1990s. In part, this was a consequence of the move towards structural adjustment and its related supply-side dimensions. The conditionality associated with the Extended Fund Facility (EFF) and, even more so, the Enhanced Structural Adjustment Facility and the Poverty Reduction and Growth Facility, involved combining additional supply-side measures with more conventional components of conditionality in the form of restraints on monetary expansion and fiscal

imbalances. Yet the trend towards greater conditionality predated the period of structural adjustment. Polak (1991) reports an increase in the average number of performance criteria from below six in 1968-77, to seven in 1974-84, to nine and a half in 1984-87. This information is updated in Table 1 which provides data on performance criteria over the period 1993-99. The trend towards greater conditionality is confirmed, particularly up until 1997. The overall increase is, in part, because of a gradual increase in quantitative performance criteria, but, over the period 1995-97, more so because of a sharp increase in structural performance criteria, from a rounded average of 2 per programme in 1995 to 7 per programme in 1997. Dreher (2005b) argues that this trend continued and suggests that over the period 1999-2001 the average number of conditions per programme was 21.

[Table 1, About Here]

Although, as the above-reported trends reveal, it is inaccurate to suggest that the increase in conditionality was associated purely with the East Asian financial crisis and the large loans that the Fund made to crisis economies, it is instructive to compare the text of the 1997 South Korean letter of intent discussed by Rodrik (1999) with, for example, the letter of intent signed by Jamaica in 1977 discussed in detail by Sharpley (1984). Although very far from providing definitive evidence, such a comparison is consistent with the claim that the period between these two episodes experienced a significant increase in conditionality. In the Jamaican case, Sharpley reports that 'the letter of intent indicated that strict demand restraint was the underlying strategy' (p. 141). Performance criteria concentrated on controlling domestic credit creation and, in particular, net bank credit to the public sector. Even the EFF agreements in 1978, 1979 and 1981 moved little beyond wage restraint and exchange rate policy. Indeed, with respect to the 1978 EFF Sharpley observes that 'the programme reflected

a preoccupation with aggregate monetary variables, the prices of traded goods and the balance of payments, but little attention was given to structural constraints and disaggregated policy measures affecting the major sectors of the economy' (p. 146). In contrast, Rodrik (1999) characterises the 1997 Korean programme as one that 'carried to its fruition, would completely overhaul the structure and governance of the Korean economy' (p. 5).

While it is not easy to judge whether conditionality became deeper in the sense that conventional performance criteria involved constraints that were more binding, the general assertion that conditionality increased from the 1970s to the late 1990s seems to be a reasonable one. There are strong signs of an upward creep in conditionality.[6]

5.2 Explaining the Increase in IMF Conditionality and the Subsequent Policy of 'Streamlining'

There are a number of potential explanations for the trend in conditionality reported in the previous section. First, it may be that the Fund became increasingly confident about the appropriate design of economic policy spanning both the demand side and the supply side. In conditions of uncertainty, the Fund may have resisted being too prescriptive, but where it believed that it knew the right answer, it may have become more prepared to promote this via conditionality. This explanation connects with some of the purposes of conditionality discussed earlier in terms of the Fund imparting its views about economic policy. It is also consistent with the inducement, selectivity, paternalism and restraint roles of conditionality. The arrival of the 'Washington Consensus' may have provided a further endorsement of Fund-favoured policies.

However, care needs to be exercised if this is the explanation for the increase in conditionality. In his standard intermediate textbook, Mankiw (1997) aptly points out that in macroeconomics there are things that we know and things that we don't know. The same could be said for microeconomics, the supply side and openness. Thus while we know that over-expansionary monetary policy will lead to inflation, we do not know just how bad modest inflation is. Moreover, unless fiscal deficits themselves lead to monetary excesses, we do not know just how bad they are either. While we know that there is no long-run trade-off between inflation and unemployment, there may be a short-run trade-off. Similarly we are uncertain about what determines the natural rate of unemployment and economic growth. While we know that overvaluation of the real exchange rate causes economic problems, we remain uncertain about the best way of eliminating it. The list could be continued to cover issues such as privatisation, openness and financial liberalisation. If increasing confidence in the general appropriateness of a specific package of economic policies does lie at the heart of the increase in conditionality, there is then a reasonable counter-argument that such confidence was misplaced. For a more detailed discussion of the uncertainties surrounding economic policy in countries involved in IMF programmes see Bird (2001c, 2002b, 2004).

Moreover, if the basic purpose of conditionality is to strengthen the current account of the balance of payments, sufficient to enable countries to repay their loans from the Fund, this could almost certainly be achieved by a more modest range of policy tools.

Another often stated objective of conditionality – again as mentioned above – is to signal a commitment to policy reform to private capital markets. Conditionality is perceived as the mechanism through which IMF programmes exert a catalytic effect on other external financial flows. In this context a second explanation of increased conditionality could be that

the IMF is trying to transmit a stronger signal. However, it is difficult to find convincing empirical support for the existence of a significant and positive catalytic effect (see below). Given the design of conditionality which emphasises the restraint of domestic aggregate demand, and the modest track record of IMF programmes in terms of strengthening economic policy and performance (again see below) this may be unsurprising. The negotiation of a programme with the IMF may be a clearer signal of economic failure, with the *degree* of conditionality indicating the *extent* of failure.

But might conditionality still impress the Fund's own shareholders? The argument here is that the IMF is acting as an agent for advanced countries that provide the vast majority of its resources. How can the Fund's principal shareholders monitor and control its lending policies? One way is via conditionality. By enhancing conditionality it may be possible to entice industrial countries to provide more resources for the Fund. In this fashion conditionality may fulfil a political function. But politics may also enter the equation if industrial countries use their influence on the Fund's Executive Board to mould the policy content of conditionality to meet their own political and economic objectives, such as greater access to developing country markets and greater investment opportunities. These objectives may be more immediately served by policies relating to open trade and foreign direct investment than by those relating to the control of monetary aggregates.[7] Enhanced political influence over IMF lending could, in principle, help explain increased conditionality during the 1980s and 1990s.

The theory of bureaucracy, as noted earlier, suggests that the Fund's management will be interested in power and prestige and may use conditionality as a conduit for achieving these objectives. Greater conditionality places greater control in the hands of the IMF. But what

constrains the assumed bureaucratic desire for more conditionality? In essence it is the option of borrowing elsewhere. If countries perceive IMF conditionality as excessive they will only turn to the Fund when they have no other choice. At the same time, anxious to make loans, the Fund will not want conditionality to reach a level where few potential clients turn to it for assistance. An hypothesis underlying the theory of bureaucracy is therefore that conditionality will increase at times when potential client countries have less access to alternative sources of finance; this provides a fourth possible explanation of the observed trend. Extensions in conditionality would have been predicted following the Third World debt crisis in the early 1980s, the Mexican peso crisis in 1994/1995, and the East Asian financial crisis in 1997/98. Dreher and Vaubel (2004b) undertake a panel data analysis of 206 letters of intent between 1997 and 2003 and find that the number of conditions depends negatively on international reserves and positively on world interest rates; a finding that could be viewed as consistent with this explanation.

A fifth explanation that suggests that conditionality may increase in a discrete rather than continuous fashion builds on the notion that economic crises emphasise the deficiencies of conditionality. A response to crisis is therefore to 'strengthen' conditionality by extending its coverage. This process does not see existing elements of conditionality being discarded but rather being supplemented by additional elements. Thus as conditionality based on the demand-side was seen to have shortcomings, it was added to, rather than replaced by supply-side conditionality. There is therefore a ratchet effect, with the growth in conditionality involving an element of inertia, and depending on the incidence of crises. But this explanation would also need to have a mechanism to explain reductions in conditionality.

A final explanation of the observed trend in conditionality draws on its role in constraining moral hazard. If moral hazard has been seen as more of a problem, perhaps increased conditionality was seen as a way of counterbalancing it. The difficulty is, of course, to get the right balance. While automaticity would indeed carry the threat of moral hazard, conditionality could be extended to a point where no such threat exists. Indeed, a situation could, in principle, be created where no country perceived the financial reward of negotiating a programme with the IMF as exceeding the conditionality cost. But while this situation would deal with moral hazard, it would also defeat the purpose of having the Fund in the first place.

Whatever the reasons for the increase in conditionality up until the end of the 1990s the Fund has attempted to reverse the trend since 2000 by adopting a policy of 'streamlining'. Critics had claimed that the increase had been excessive and had become out of step with the basic purpose of conditionality. Feldstein (1998) claimed that conditionality went far beyond what the Fund had a 'moral right' to require. Others argued that the Fund was undermining the role of domestically elected governments (Stiglitz, 2002). Finally the point was made that excessive conditionality discouraged early referral and adversely affected the ownership of programmes and therefore the incentive to implement them (Goldstein, 2003). Bird (2001a) suggested that there might be a conditionality Laffer curve, implying that a reduction in conditionality could improve the effectiveness of IMF programmes. Although the Fund maintained that there was no evidence to support this idea (IMF, 2001) and others pointed out that, in principle, conditionality could be used to foster ownership (Drazen and Isard, 2004), the policy of streamlining was in effect a response to these arguments. The policy sought to reduce the number of conditions, to focus more on conventional macroeconomic conditionality and only to include structural conditionality where it had a direct bearing on a

country's ability to achieve the macroeconomic conditions. Another part of the Fund's attempt to stimulate ownership involved encouraging governments to win a broader degree of support from civil society for the programmes that were to be implemented; streamlining was seen as a way of providing them with more discretion to accommodate this.

Has the change in policy been successful? It is probably too early to say. Early evidence suggested that structural conditions had been reduced (IEO, 2004) although there has been no significant decline in the number of prior actions. Borrowing countries report mixed views, some discerning a modest beneficial change but others failing to endorse this view. Critics have certainly argued that the change has been more cosmetic than real, and that the 'new' policy on conditionality is little if at all different from that described in an earlier set of guidelines published in 1979. To the extent that the Fund may have reduced its conditions, Killick (2004) claims that they have simply been picked up by the World Bank or aid donors so that the conditionality faced by borrowing countries has not fallen. In any case, Dreher and Vaubel (2004b) offer evidence to suggest that the outcomes of programmes are not associated with the number of conditions, implying that the problems lie with conditionality *per se* rather than the number of conditions. Better informed assessment of streamlining awaits more data. Future research on the Fund will no doubt offer a more complete evaluation, and will, in turn, offer a more objective assessment of the optimum amount and design of conditionality.

However, there remain those who argue that conditionality, even in streamlined form, is ill conceived, misplaced and ineffective. (For an earlier critique along these lines see Spraos, 1986. See also White and Morrissey, 1997, for a critical analysis based on the theory of conditionality). They would prefer to see it abandoned. Essentially they set out to make their case by critically evaluating whether conditionality has achieved any of the purposes outlined

above. They maintain that it is unnecessary to guarantee repayment, that it does little or nothing to encourage commitment and to neutralize time consistency problems and may have a negative effect on the capacity of countries to design their own policies, that it undermines and obscures ownership, and that, because there is a poor record of completion and implementation, it fails to transmit a positive signal. They also claim that it is manipulated by political influences, with governments in politically weak countries being asked to submit to greater conditionality. Dreher (2005b) provides a comprehensive critical review of conditionality reaching essentially negative conclusions about it.

A related way of assessing IMF conditionality is to assess the effects of the programmes that embody it. Has conditionality worked?

5.3 The Effects of IMF Programmes: Do They Work?

In our journey around Figure 1, we have now reached the stage where countries have turned to the IMF and have negotiated a programme, incorporating a range of policy conditions. Are the programmes effective? Logically, a prior question would be to ask whether they are actually implemented by the governments that have agreed to them. But until recently the research into the effects of IMF programmes has not sought to distinguish between those programmes that are implemented and those that are not. We shall therefore defer our discussion of implementation, having put down a marker that it is important.

Even having put implementation to one side for the moment, analyzing the effects of IMF programmes remains fraught with difficulties and these get in the way of giving a simple and straightforward assessment. The difficulties come from a number of sources. First, IMF

programmes have multiple objectives. They set out to improve macroeconomic performance; but how can this be measured? Has a programme that reduces the current account deficit but also reduces the rate of economic growth succeeded or failed? What is the social welfare function and the weights attached to different macroeconomic performance variables? Programmes also set out to encourage policy change and economic reform. But what if some policies are improved but macroeconomic outcomes deteriorate or vice versa? This is not all. Not only do IMF programmes set out to encourage adjustment, they are also intended to provide external finance that allows adjustment to be cushioned. In part, the Fund provides the finance directly, but conditionality is also designed with the intention of catalyzing other financial flows. Do these materialize? Is there a catalytic effect?

As if there were not enough here, there are also fundamental and perhaps insurmountable methodological problems in evaluation studies of IMF arrangements, and these represent the second source of difficulties. Countries that turn to the Fund, it may be assumed, are in some ways different from those that do not. Fund referral is not purely random. This means that there may be a selection bias. Moreover, although we can observe what happens in countries that involve the Fund, we can never know for certain what would have happened had they not involved the Fund. There is an underlying counter-factual problem. Evaluations of IMF programmes and conditionality have struggled to deal with these methodological problems.

The difficulties, however, continue to mount. A third source of them is that the IMF lends to different types of countries (emerging economies and low income countries) and under different facilities. Can we legitimately expect the effects of its programmes to be common across all of them? If not, evaluation studies that lump them together may obscure as much as they reveal. A degree of disaggregation is required.

Having said this, it is not all a matter of doom and gloom. The literature on the effects of IMF programmes has evolved in a way that has sought gradually to try and deal with the difficulties described above as far as they can be dealt with. Some reasonably robust conclusions have emerged. This is not to say, of course, that all the evidence points in the same direction. It is research in progress. In what follows we trace out the literature in a reasonably chronological way. We begin by saying a little more about the methodological problems. We then summarize the early studies into the effects of IMF programmes that were conducted at a high level of aggregation. Finally, we move on to examine more recent research that has tended to focus on narrower issues. In the next section we return to the question of implementation and examine whether this affects the outcomes of IMF programmes.

As noted above, underlying all research into the effects of IMF programmes is the problem of the counter-factual; what effects can be attributed to programmes *per se* as opposed to other factors. In practice, there is no completely satisfactory means of dealing with this problem. Before-and-after tests implicitly assume that other things remain constant, or that other influences may be estimated. With-without tests assume that it is possible to formulate an accurate view as to what would have happened in the absence of an IMF programme. One way of doing this is to compare countries that have negotiated Fund programmes with other countries that have not. But there is a problem in finding countries that are similar in all respects apart from the involvement of the Fund. Otherwise some attempt needs to be made to allow for differences between those countries that do and do not have programmes, in terms of their economic circumstances and how policy might evolve. This is what the 'generalized evaluation estimator' approach attempts to do by using non-programme data to

estimate a policy reaction function that may then be incorporated as a regressor. The approach therefore attempts to control for the policies that would have been pursued without the IMF. But the very decision as to whether or not to turn to the IMF itself implies a significant difference in the approach to economic adjustment as well as in the political environment in which adjustment takes place, and this is difficult to capture empirically.

Furthermore, the response to policies undertaken under the auspices of the Fund may differ from the response when the same policies are pursued independently, and, on top of this, parameter values may be affected by the policies adopted. Instead of estimating a counterfactual, other research has used instrumental variables or a Heckman two-step estimation procedure to deal with potential selection bias. But the problem here is to find appropriate instruments. Finally, a case study methodology offers yet another approach but suffers from problems of generalization.

Other difficulties that get in the way of an unambiguous assessment of the effects of IMF programmes relate to the time period over which the effects are monitored and the range of performance indicators that are studied. There is no reason to presume that programme effects follow some linear path over time or that positive effects on some economic variables will be matched by similar positive effects on others. Economic variables may move in different directions over time and superior performance in terms of one variable may be offset by inferior performance in another.

Without undertaking a detailed review, and mindful of the difficulties above, we can make a number of important generalizations about the research into the macroeconomic effects of IMF programmes. In terms of the key performance indicators, early before-and-after studies

found no significant improvement in the current account balance of payments, although both Khan (1990) and Pastor (1987) discovered significant positive effects on the overall balance of payments. With-without tests of one form or another have tended to show stronger results for the current account (Gylfason, 1987; Khan, 1990; Doroodian, 1993). Killick (1995) uses a combination of before-and-after tests and case study evidence. His results suggest that both the overall and current account balances strengthen, especially over a three-year period, in part by import compression (rather than import strangulation) but also by relatively large increases in export volume, which rise through time.

For inflation, before-and-after tests reveal a record that is generally weak, with the inflation rate increasing as frequently as it declines. The results are however, almost always statistically insignificant. With-without tests and GEE studies suggest better performance, although significance is at best, low. The demand-reducing effects of IMF programmes seem to be offset by the effects of devaluation and liberalisation.

On economic growth, although many early studies found little connection, Goldstein and Montiel (1986) found IMF programmes to have a significantly negative effect. Research by Khan and Knight (1981; 1982) based on simulating the effects of policies within the context of a model deemed representative of the IMF's client countries also predicted that demand management programmes similar to those supported by the IMF will have negative short-run effects on growth, although subsequent research by them suggested that these effects could be ameliorated by incorporating supply-side measures to protect investment (Khan and Knight, 1985). Conway (1994) finds significant differences between the short-run and long-run effects of IMF programmes on economic growth and investment, as contemporary reductions are followed by lagged increases. Killick (1995) finds a largely neutral association with

economic growth, but also reports that over a longer time-frame the association is positive (albeit of only limited statistical significance). This is somewhat surprising in light of the apparent negative effect on fixed investment, suggesting that growth has been achieved through increases in the marginal productivity of capital or that it may represent a temporary recovery from recession. Stabilization under the auspices of the Fund is generally achieved by lowering investment rather than by increasing savings. It is investment that carries the main burden of reduced absorption; private and public consumption are apparently little influenced by the negotiation of a programme with the Fund (which has some bearing on the debate over the effects of IMF-backed programmes on the poor).

Table 2 provides a summary of the results of the principal early studies updated by the IMF (2004) from ul Haque and Khan (1998). Although one can quibble about whether they have identified all the important studies, the overall picture would be widely acknowledged as reasonable.

[Table 2 – About Here]

In a review of more recent evidence, Conway (2006a) suggests that the effect of programmes on the current account has declined since the 1970s and 1980s, that the economic growth rate in borrowing countries is reduced, particularly in the first year of the programme, that the inflation rate is significantly reduced (with again this effect being felt in the 1990s rather than the 1970s and 1980s), and that the investment rate falls. Among the more recent studies, Przeworski and Vreeland (2000), using a Heckman filter, identify an enduring negative effect of programmes on economic growth. The negative effect of IMF programmes on economic growth is confirmed by Dreher (2004a). Barro and Lee (2005) adopt an IV approach and also

find that participation in IMF programmes exerts a negative effect on economic growth over the contemporaneous 5-year period, but no significant effect on investment or inflation. However, there is legitimate debate over their choice of instruments as well as the assumption that political and institutional variables, such as a country's alignment with powerful creditor countries in the IMF, only exert an impact on economic growth via their influence on IMF lending.

Moreover, as with many of the other studies, Barro and Lee only examine standbys and EFFs, and an interesting question is whether the negative growth effect is also seen in the Fund's concessionary lending to low income countries. Amongst currency crisis countries, Hutchison (2001) finds IMF programmes to be 'growth retarding', and Hutchison and Noy (2004) also report a negative growth effect but point out that this is driven by experience in Latin America. Other studies that focus on poor countries and on the IMF's Poverty Reduction and Growth Facility, and which adopt a number of different methodologies, are more agnostic about the effects of IMF involvement on growth. They even present evidence to suggest that the effect may be positive (Dicks-Mireaux et al, 2000; IEO, 2004; Bird and Mosley, 2006).

By exerting an impact on economic growth, the Fund may indirectly have an impact on poverty. But an impact on this may also be exerted via the level and composition of government expenditure. In early research Pastor (1987) had reported evidence that IMF programmes led to a more unequal distribution of income in Latin America. Vreeland (2001a) also claims that Fund programmes reduce the labour share of income. However, Garuda (2000) finds more nuanced results suggesting that in those countries that are least likely to participate in an IMF programme (as measured by a propensity score), the poor gained more in IMF users as compared to non-users. In contrast, amongst countries with a

higher propensity to use the Fund, the poor gained most in those countries that actually did not have IMF programmes. Easterly (2005) finds that IMF programmes have a counter-cyclical effect on poverty, by reducing both the rate at which people enter poverty during a period of negative economic growth, as well as the rate at which they exit from poverty during periods of positive economic growth. Other research suggests that IMF programmes may be associated with an increase in pro-poor expenditure (IEO, 2004; Bird and Mosley, 2006). For a fuller review of the connection between IMF involvement and growth and poverty, see Bird (2004). Without going down to the level of individual case studies (of which there are many), recent studies have sought to disaggregate and to examine the effects of IMF programmes in transition economies (for example, Eke and Kutan, 2005) and emerging economies (for example, Evrensel, 2005).

Another more recent strand of research into the outcomes of IMF programmes has sought to assess them against the targets that were set. Is it that outcomes fail to achieve reasonable targets or that targets may be set over-ambitiously? The evidence suggests that IMF programmes are indeed over-ambitious in a number of areas, particularly in terms of output and export growth (Atoian et al, 2006; IEO, 2003; Bird, 2005a) and studies have begun to explore the reasons for this. Is it forecasting error or is it that political economy factors encourage over-optimism? An interesting component of this research explores trade-offs between outcomes and targets. Preliminary results reported by Baqir et al (2003) imply that superior performance in terms of achieving current account targets comes at the cost of inferior performance in terms of economic growth.

5.4 The IMF and Catalytic Finance

5.4.1 Catalysis: the Theory

According to its website, the IMF believes that catalysis occurs via the modality of conditionality (see also Dhonte, 1997, for a discussion of what he presents as this 'new' role for conditionality.) Because a government has signed an agreement with the Fund, it is assumed that capital markets will perceive an increased probability that appropriate economic policies will be pursued and that, as a result, economic performance will improve, thereby justifying additional lending. Conditionality is seen as overcoming the time consistency problem that, without the Fund's monitoring, governments would be tempted to renege on policy promises. Since they will only continue to receive financial support from the IMF if they keep up their adjustment effort, governments are seen as having an additional incentive to persist with economic reform. By negotiating a programme with the Fund, it is claimed that governments can more effectively signal their commitment to reform. Negotiations with the Fund are presented as screening out those governments that are not serious about reform. As a consequence, it is claimed that IMF programmes provide capital markets with relevant additional information that they would find it difficult or costly to collect for themselves.

Governments may turn to the IMF in the midst of a liquidity crisis. Finance from the IMF helps to alleviate the shortage of foreign exchange. By enhancing liquidity and reducing the risks of default, the Fund may increase confidence in capital markets and make them more prepared to lend. The argument here is much like that associated with a conventional lender of last resort within the context of a domestic monetary system. Much of the recent theory of catalytic finance examines how both debtors and creditors may respond to an infusion of

resources from the IMF and the extent to which partial 'bail outs' will restore financial stability (see, for example, Corsetti et al, 2003; Jeanne and Zettelmeyer, 2001; Jeanne and Wyplosz, 2001; Zettelmeyer, 2000; Morris and Shin, 2003).

Furthermore, and as noted above, IMF lending may also raise the credibility of conditionality since countries will only continue to receive finance from the Fund if they persist with economic reform. Indeed, in principle, conditionality polices the moral hazard problem to which IMF lending could otherwise lead, whereby additional external finance allows governments to relax their adjustment effort and in effect substitute out of adjustment.

The relative importance of the above modalities through which catalysis is claimed to operate may be expected to vary between countries. Alleviating short-term illiquidity via IMF lending may be more important in the case of capital account confidence crises, whereas conditionality may be more important where fundamental economic reform is perceived as necessary. But just how secure is the overall case for anticipating that the IMF will perform a significant catalytic role?

Although superficially appealing, further consideration reveals a range of deficiencies in the theoretical case for catalysis as outlined above, whether based on IMF conditionality or lending. The conditionality case is undermined by a lack of credibility (Bird, 2002a). Moreover, signing an agreement with the IMF does not necessarily signal a government's commitment to the policies spelt out in the programme. Governments may sign agreements with little or no intention of complying fully with them. Indeed, an IMF programme may obscure the genuine motivations of governments. It is therefore unsound to assume that conditionality screens out governments that are uncommitted to reform. Even governments

that are committed may still find it difficult to implement agreed policies. They may encounter more domestic political opposition than they anticipated at the time the agreement was signed, or unanticipated external economic shocks may push programmes off course. Even strong commitment and full implementation does not guarantee improved economic performance. IMF programmes may lead to financial and corporate instability as a consequence of rising interest rates and the balance sheet effects of exchange rate devaluation. They may lead to recession or reduced rates of economic growth. Furthermore, many countries make prolonged use of IMF resources. Current programmes are, in this sense, a reasonable predictor of future ones. But since countries tend to borrow from the Fund when they are in economic distress, current programmes may also offer a reasonable prediction of future economic problems. Why would foreign investors be encouraged to lend in such circumstances? Is it not just as likely that the catalytic effect of IMF programmes will be negative? IMF programmes are also associated with falling domestic rates of investment. Why should foreigners invest more when domestic investors are investing less?

In principle, even the connection between IMF lending and other capital flows may be ambiguous. To the extent that it encourages greater adjustment effort and facilitates the pursuit of appropriate policies, IMF lending may perform a positive catalytic role. But governments may respond to additional IMF financing by relaxing their adjustment effort, thus impairing future economic performance. As implied above, conditionality may be ineffective in constraining this response. The point here is that there is a complex set of potential interrelationships between IMF lending, economic adjustment and other capital flows. There is a strong element of endogeneity between them, and it is difficult to know how these relationships will work out in practice.

A measured assessment of the theory of catalysis suggests a degree of agnosticism. In principle, there are certainly circumstances in which IMF lending could have a catalytic effect. These would be where conditionality engenders commitment to reform, where IMF-based policies seem likely to improve economic performance and where IMF lending reinforces adjustment effort. It seems likely that the catalytic role will be more powerful where there is less need for far-reaching structural adjustment and perhaps merely a need for additional short-term liquidity combined with stabilization. The problem is that, in principle, it is also possible to imagine circumstances in which IMF arrangements will have a negative effect on other capital flows.

From a theoretical perspective, therefore, the catalytic role does not seem to survive investigation if it is presented as a reliable, significant and universal phenomenon. But this does not rule it out in all cases. It may be relevant in certain instances. This suggests a more nuanced approach to the catalytic role which attempts to identify the circumstances in which it may work.

In discussing the catalytic role it may also be important to distinguish between the various types of other capital flow. Official flows are motivated by different factors than private flows. Different types of private capital flow (bank lending, bonds, portfolio investment and foreign direct investment) may also be determined by different things and, for this reason, it seems likely that IMF programmes, in combination with the different circumstances in which they are agreed, will have different effects on different types of capital flow. To what extent are these theoretical inferences supported by the available empirical evidence?

5.4.2 The IMF's Catalytic Role in Practice

The empirical evidence on catalysis has been surveyed elsewhere (Bird and Rowlands, 2002a, Cottarelli and Giannini, 2004, and Hovigviouian, 2003). Other research into international capital movements is also relevant, since it distinguishes between 'push' and 'pull' factors. However, none of the research into international capital mobility has felt motivated to include IMF programmes as a potential 'pull' factor (for example, Taylor and Sarno, 2005). In terms of the more direct testing of catalysis three approaches have been adopted. The first has been based on questionnaires and interviews and has simply asked money managers and aid agencies how their lending decisions are influenced by the existence of IMF programmes (Bird and Rowlands, 2002). The answer seems to be that, broadly speaking, signing an agreement with the Fund makes a country more attractive as an investment outlet than it would otherwise have been, with the amount of IMF finance being viewed as more important than the detailed nature of conditionality. However, against this, money managers are prepared to back their own judgement about a country's economic prospects when these conflict with the Fund's view. Moreover, the existence of IMF programmes never shows up as being amongst the top five factors influencing investment decisions. This implies that, to the extent that it exists, the Fund's catalytic role is rather unimportant relative to other factors.

A similar conclusion emerges from case studies that have sought to test for catalysis (Bird, Mori and Rowlands, 2000; Ghosh et al, 2002, and Hovigviouian, 2003). Certainly IMF programmes would appear to provide no guarantee of capital inflows from other sources. Instead, what really seems to matter is the government's commitment to a sound and internally consistent agenda of policy reform as perceived by capital markets. Having a programme with the Fund does not necessarily generate this perception. At the same time, it

is quite possible for governments to create it without an IMF programme. It is instructive that across a wide range of countries and over a protracted period of time there is little or no evidence to support a catalytic role from case studies. IMF programmes may, on occasions, be positively associated with official flows, but this does not necessarily imply catalysis in the conventional sense, with aid donors responding positively to IMF conditionality. Bird and Rowlands (2006e) provide a detailed empirical analysis of the impact of IMF arrangements in mobilizing foreign aid.

Case studies can, of course, be criticized for being unrepresentative – although there are now enough of them to challenge this criticism. The same may be said of questionnaires and interviews where, in addition, respondents may misrepresent their actual behaviour.

A third approach to testing for the catalytic effect attempts to overcome these potential problems by undertaking large sample regression analysis. However, this approach has its own methodological pitfalls. An underlying one is that we do not understand what it is that determines capital movements well enough to allow us to superimpose the effects of IMF programmes. There is the familiar problem of the counterfactual; we cannot be sure what capital flows would have been in the absence of IMF programmes.

Other problems are that, as suggested in the previous section, the Fund's catalytic role is likely to be nuanced, being stronger in some sets of circumstances and for some types of capital flow than others. Aggregate analysis needs to allow for such subtleties. Moreover, balance of payments accounting tells us that, with no change in international reserves, a strengthening in the current account of the balance of payments that IMF programmes set out to achieve, will be accompanied by an equivalent weakening in the capital account. There is

both a demand side and a supply side to capital flows. A decline in capital inflows may therefore reflect a reduced demand for foreign capital and not simply a reduced willingness to lend. There is also the issue of lags. Over what time period might catalysis occur? In fact, this is not a major problem since the conventional interpretation of the catalytic effect focuses on the short run impact of IMF programmes. More important is the issue of reverse causality, where it is the exit of private capital that leads to IMF lending in the first place.

Recent econometric studies have attempted to deal with these problems in various ways. Reasonably consistent results emerge that are not generally supportive of a catalytic role for the Fund. For example, Bird and Rowlands (2002a) conclude that:

> To the extent that there is a catalytic effect… it appears to be weak and partial, and dependent on the countries and capital flows involved as well as the nature of IMF involvement. The evidence… also suggests that the effects of IMF programmes are highly idiosyncratic, with some results appearing sensitive to sampling and econometric procedures. Any generalization must be viewed with caution. However, it does appear that large scale empirical research provides little support for the idea of strong, consistent and positive catalysis.

However, this study attempts to allow for selection bias and reverse causality only in a fairly informal way. Edwards (2006) corrects more formally for selection bias in a study of portfolio flows but corroborates the finding that the catalytic effect is not significantly positive.

Similarly, in another study which focuses on bonds and spreads rather than capital flows, Mody and Savaria (2002) find little to suggest that IMF programmes, on their own, transmit a significant positive signal. However, as the theoretical discussion above anticipates, they do find variations on this theme, with a positive catalytic effect being most probable when economic fundamentals are only moderately bad.

More recent research by Bird and Rowlands (2006d) uses a treatment effects model to correct for selection bias. They derive a series of testable propositions from the theory of catalysis and confirm that the catalytic effect may vary significantly across different capital flows and be dependent on contingent conditions. Their results confirm the danger of over simplification but also show that catalysis may be insufficiently reliable as a basis for policy. A problem is that if the Fund and others erroneously assume that it does play a catalytic role, adjustment programmes will be inappropriately designed and will tend to break down. This will further undermine the Fund's credibility and will weaken still more any muted catalytic effect that does exist.

5.5 The Implementation of IMF Programmes

Much of the literature on the effects of IMF programmes has failed to distinguish between those that were implemented and those that were not. Although this appears to be an alarming omission, it would not be if all programmes exhibited a good record of implementation. Testing this, of course, requires implementation to be measured, and this is not as straightforward as it might seem. Different measures may be constructed, but they all have their own shortcomings, and they are not closely correlated. The standard measure has been to calculate the proportion of an IMF loan that has been drawn and the proportion therefore

that remains undrawn. But, in principle, low disbursement could reflect economic success and a reduced need to call on IMF resources. Another measure derives an index of implementation from the IMF's MONA database (Monitoring Fund Arrangements). But there may be an upward bias with this measure since the database only covers programmes that come up for review by the Fund's Executive Board. Other measures look at whether programmes have been interrupted; but interruptions can either be reversible or irreversible. Using these measures suggests that it is not at all uncommon for countries to fail to fully implement programmes that they have agreed, although the record on implementing macroeconomic conditions appears to be significantly better than that on structural conditions.

Edwards (1989) painted a rather bleak picture with regards implementation, showing that over 1983-5 there was widespread failure to comply with either fiscal or monetary targets. For example, in no year did the rate of compliance reach 50 per cent for the target relating to the size of the government deficit relative to GDP. Subsequent research confirmed that at best only about a half of policy targets were achieved; in general, it seemed that policy variables were little influenced by IMF programmes with the record being weakest for monetary restraint. Thus, while Killick (1995) finds that IMF programmes exert a significant effect on the real exchange rate and have some impact on certain fiscal variables, although not necessarily the fiscal deficit, neither he nor Conway (1994) finds a significant effect on the rate of credit expansion.

More recent evidence reported by Mussa and Savastono (1999) and by Ivanova et al (2003) confirms that many programmes may not be fully implemented. Over 1992 – 1998, 44 per cent of all programmes experienced irreversible interruption. Although Killick (2004) reports more recent evidence that could suggest that the rate of implementation in the early 2000s

improved, he concludes that, overall, there remains a significant degree of non-completion (see also Bird, 2002c). The IEO (2004) focuses on fiscal targets and finds that, on average, programmes achieve only about one half of the intended improvements in overall and primary fiscal balances, with most of the improvement coming in the first year. However, while IMF programmes may not always achieve their policy targets, there is also some recent evidence that contrasts with Killick (1995) and suggests that they may be associated with improvements in monetary and fiscal policy (Dreher, 2005a) at least for the duration of the programme. Evrensel (2002, 2005) claims that there is policy back-sliding after programmes have ended, but finds little evidence that macroeconomic policies improve even during programme years.

But does the degree of policy implementation make a difference to the outcomes of programmes? This is clearly an important question to answer when assessing the effectiveness of conditionality.

Killick (1995) concludes that where 20 per cent or more of an agreed loan remains undrawn by the termination date there is a *prima facie* argument that the programme broke down because of non-compliance. This is broadly consistent with the Fund’s own assessment (Schadler et al, 1995; Mussa and Savastano, 1999). Killick then uses his test of compliance to see whether countries that complied with conditionality outperformed those that did not. While he finds some evidence which seems to point in this direction, it varies across different indicators of macroeconomic performance and generally fails to pass standard tests of significance.

Using different techniques, but combined with a similar approach to compliance, Conway (1994) argues that compliance does make a statistically significant positive difference. He does not, however, impose a threshold for compliance and instead uses the extent of drawdown in any year to adjust his measure of participation in an IMF programme. He, therefore, argues that spending one full year in a programme but drawing only half of the available resources is equivalent to spending half the year in the programme and drawing down all the available resources; there may be doubts about whether this adequately captures the effects of compliance.

Internal research within the Fund has concluded that, in the case of transition economies, compliance with performance criteria affects the outcome in terms of economic growth (Mercer-Blackman and Unigovskaya, 2000). Here the researchers make use of the Fund's MONA database. They construct an index of Fund programme implementation which indicates whether performance criteria were met, not met, or only met after waivers and modifications. Not only do they find a positive connection with economic growth, but they also find that their index is closely correlated with the index of reform progress used by the European Bank of Reconstruction and Development, suggesting that conditionality is in some direct or indirect way positively associated with economic progress more broadly defined.

Nsouli, Atoian and Mourmouras (2004) discover that implementation exerts an independent influence over 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. But they find no statistically significant impact of implementation on economic growth. Baqir et al (2003) find that implementation has a broadly beneficial effect on outcomes. 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 (2004a) finds that IMF programmes are generally associated with reduced rates of economic growth, but also finds weak evidence that compliance with conditionality mitigates this effect. However, for Latin America, Hutchison and Noy (2004) find that the negative effect of IMF programmes on economic growth is stronger for those that are completed.

As far as the catalytic effect of IMF programmes on private capital flows is concerned, the evidence on the influence of implementation is very limited. Bird and Rowlands (2006d) find little to suggest that implementation makes a significant difference, while as far as portfolio flows are concerned Edwards (2006) reports an asymmetry; a record of good implementation does not help to catalyse flows whereas a poor record exerts a negative effect.

Although not without exception, the available evidence implies that, at least in some key areas, superior macroeconomic outcomes may be fostered by implementation. This is modestly reassuring. What would one have concluded about conditionality if it made little significant difference whether or not countries complied with it? Even though this could mean that it is the announcement of programmes that is important, one suspects that the announcement impact would gradually be undermined by poor implementation. Conditionality would not then be dealing with time inconsistency which, as we observed earlier, is one justification for it. It would not be revealing commitment or transmitting a positive signal.

If implementation is important, it is also important to understand what factors influence it. The literature is quite sparse. Most of it attempts to identify factors that are statistically significant in large sample econometric exercises; these are limited by the availability of data. There are also case studies that attempt to tease out more nuanced accounts. Relatively few contributions analyse implementation from a theoretical perspective (exceptions include Mayer and Mourmouras, 2002, 2003, 2005; Drazen, 2002; 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. Bird (2006) offers a simple conceptual framework based on the perceived marginal costs and benefits of implementation which also emphasises the political economy aspects. The empirical evidence currently available is generally consistent with this orientation, even though there is considerable ambiguity concerning the way in which political variables exert their influence.

A comprehensive 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 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, p 4). 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 characterized by a severe reduction of the authorities’ ability to commit credibly to and implement adjustment policies.’ (p.9). 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.

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, Thomas (2002) discovers that autocratic regimes have a better record of implementation based on interruptions. 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, however, 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 fractionalization, 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, 2001a, 2001b). Others have been undertaken by the Independent Evaluation Office as part of its study of the prolonged use of IMF resources (IEO, 2002). 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 recognized the importance of political variables in the process of economic reform (see, for example, Nelson, 1990; Haggard and Kaufman, 1992; Williamson, 1993).

A more recent study confirms that the implementation of IMF programmes is a complex issue that may not easily lend itself to large sample regression analysis. Arpac, Bird and Mandilaras (2006) examine programmes across 95 countries over the period 1992 - 2004 using three separate measures of implementation; interruption, an implementation index based on the MONA database and the disbursement rate. Given that the measures are not themselves closely correlated it is unsurprising that they discern different results depending on the measure used. They find that, overall, the interruption and disbursement measures work better than the implementation index based on the MONA data base which fails to generate significant results. Using Tobit and Probit estimations as appropriate, and a 'testing down' approach which drops regressors that are not significant at the 10 per cent level or better, they investigate the significance of a wide range of economic and political variables. The economic variables include net foreign direct investment as a percentage of GDP, the rate of monetary expansion, trade as a percentage of GDP, export concentration on primary products, real GDP growth, GDP per capita, the central government balance relative to GDP, the rate of inflation, the current account balance relative to GDP, and international reserves relative to imports. Political variables include the timing of elections, political polarisation, political cohesion, democracy, political instability, the strength of special interests, regime durability, the quality of the bureaucracy, corruption, ethnic tensions and the role of the

military. Arpac et al also include as potential explanatory variables the size of IMF lending and the incidence of past IMF programmes. They find that, using interruption as their measure of implementation, only trade volume, political cohesion, and regime durability are significant. Using the disbursement ratio, export concentration on primary products, political cohesion, and the stage of the electoral cycle are the only variables found to be significant. The authors conclude that in terms of economic factors the implementation of IMF programmes is more likely where trade openness allows countries to adjust and, as Joyce (2003) suggests, where there is closer proximity between the government and the IMF about the design of economic policy (for which openness may be a proxy). Implementation is less likely where export concentration leads to balance of payments instability which may allow countries to disengage from the Fund where external trade shocks are positive, or which blow programmes off course where the shocks are negative. Political cohesion across the legislature and executive branches of government assists implementation, as the theory of implementation suggests it will (Drazen, 2002). The durability of political regimes has a negative effect, perhaps because opposition groups have more time to become organised and the pattern of gainers and losers becomes clearer. A near-term election discourages implementation. Governments may be anxious to pursue expansionary policies prior to elections and may want to establish their own sovereignty over the design of economic policy. Implementation may improve soon after elections if there is a 'honeymoon period' during which economic reform can be pursued with fewer political costs. The overall message is that the implementation of IMF programmes will not be understood by examining only economic factors. Political influences are important, and as Arpec et al point out, these may have idiosyncratic and country specific elements.

Where then do we stand on the issue of the implementation of IMF programmes. Accentuating the positive, there has been a realisation that the implementation of programmes, and not just the economic design of conditionality, is important. There is a growing amount of evidence to suggest that implementation does affect outcomes – although not without exception. And researchers have begun to examine implementation from both a theoretical and an empirical point of view. However, in many cases it is unclear exactly how a particular political variable may be expected to exert an effect. Moreover, there are large measurement and data problems both in terms of the dependent and independent variables. As with the determinants of IMF programmes, it may be unreasonable to expect large sample regression studies to detect a simple and uniform story; since there may not be one to discover. The research reported above is somewhat tentative and ambiguous because it reflects preliminary attempts to get to grips with an issue that is complex and interdisciplinary in nature.

While the empirical research on implementation provides useful evidence on the factors that may influence it, there is as yet sufficient ambiguity to prevent it from providing clear policy guidance. IMF policy has focused on 'streamlining' in order to reduce excessive conditionality and to encourage 'ownership.' However, ownership is an operatically weak term, and there is a lively and on-going debate about policy reform designed to improve implementation (see, for example, Boughton and Mourmouras, 2004; and Bird and Willett, 2004). Some observers have argued that more attention needs to be paid to the probability of implementation in the design of IMF programmes. And that this may involve the Fund making concessions with regards to what it might see as technically superior programmes (Bird and Willett, 2004).

6. Prolonged Use of IMF Resources: Recidivism and Duration

We now arrive at the final part of Figure 1. What happens after an IMF programme? Are countries able to achieve balance of payments sustainability and avoid the Fund in the future, or do their problems persist such that there is subsequent referral to the Fund? Tracing out what happens after IMF programmes could, of course, be used as another way of assessing the effectiveness of conditionality and of IMF programmes in general. The Fund's Articles of Agreement state that the use of resources should be temporary and revolving. If members make prolonged use of resources and keep on coming back to the Fund, this could be interpreted as conditionality failing to achieve one of its key objectives. As with implementation, the frequent and prolonged use of IMF resources has only begun to receive close attention since the end of the 1990s. Previously, studies of it were few and far between.

Again, as in the case of implementation, there are significant measurement problems. Since IMF facilities can be short or medium term, being under an IMF programme for a specific number of years (prolonged use) need not be the same thing as having a sequence of programmes (frequent use or recidivism). The two measures may, in practice, overlap but there is no necessary reason why they should. In addition to this, arrears make countries ineligible to borrow from the Fund with the result that a potential prolonged user or recidivist is not captured by empirical investigation.

Using the IEO's measure (IEO, 2002) of seven or more years out of ten under an IMF programme, the evidence shows that there was a pronounced increase in prolonged use during and after the 1980s, largely as a consequence of its growth amongst low-income countries – although not all prolonged users fall into the PRGF-eligible category. This led to

a debate about whether this was a matter for concern. As noted above, by some it was taken as evidence of the IMF failing to comply with its Articles and of the shortcomings of conditionality. By others, it was seen as a natural consequence of the Fund becoming involved in longer term balance of payments policy, and as consistent with the IMF's underlying mandate. They argued that longer term involvement by the Fund has positive effects on economic policy and performance and helps to persuade aid donors to provide external finance. Moreover, since much of the growth in the usage of IMF resources has been under the ESAF/PRGF, it does not prejudice the revolving nature of the Fund's general resources. Critics have countered that even sequences of programmes have not facilitated structural adjustment (Easterly, 2005) and that this record is hardly likely to impress aid donors. Critics also argue that prolonged use reflects political and institutional pressures on and within the Fund to keep lending, that there is an element of defensive lending, that there is serial over-ambition, and that dependency is encouraged, undermining domestic institution-building and the capacity to design policy independently.

6.1 The Causes of Prolonged Use

To the extent that there is a general theory underpinning IMF arrangements that identifies the characteristics that lead to the use of IMF resources, this should provide insights into the causes of prolonged use. Prolonged users will experience these characteristics more persistently. It may be anticipated, therefore, that they will exhibit elements of serial economic mismanagement, and will face deep-seated structural weaknesses that take many years to correct. These factors may, of course, be connected. For example, inefficient tax administration will limit the scope of fiscal policy. Prolonged users are also likely to be particularly vulnerable to external shocks of one kind or another, such as shortfalls in export

earnings, and to experience them frequently. In addition, they seem likely to have strictly limited access to private international capital and relatively low holdings of reserves. To the extent that there are political and institutional constraints on Fund arrangements (on either the part of governments or the IMF), these, by definition, have been overcome in the case of prolonged users. Indeed, it might be anticipated that political and institutional factors will be particularly conducive to IMF arrangements in their case. In principle, this could be the consequence of a number of potential factors. The governments of prolonged users may place relatively little value on national sovereignty with respect to policy formulation, or may require the IMF's 'seal of approval' in order to gain debt relief or additional aid. The IMF may be particularly anxious to offer continuing support for political or for institutional reasons. On top of this, the Fund may simply be disinclined to remove financial support because the quantity of resources involved is small in the case of low income countries, or because new loans are seen as being necessary in order to ensure that a country meets its outstanding obligations (defensive lending).

There is another potentially important point. Might it be that prolonged and frequent users of IMF resources are simply poor implementers? Countries that fail to implement programmes may see little economic improvement and will therefore remain engaged with the Fund over a protracted period of time.

6.2 The Evidence on Prolonged Use

To what extent is the available empirical evidence relating to the prolonged use of IMF resources consistent with the ideas outlined above? Once again, there are very few studies upon which to draw and the evidence does not allow more than suggestive answers to be

offered. In the first large scale econometric investigation of prolonged use, Bird, Hussain and Joyce (2004) discovered evidence to suggest that prolonged users tend to have the following characteristics; low per capita income and low investment rates, large current account balance of payment deficits, large fiscal deficits but relatively low government expenditure, weak terms of trade, large debt service ratios and capital outflows, low holdings of international reserves and weak governance. In a related study of countries that spent extended periods of five years or more under IMF programmes, Joyce (2001) discovers that such periods are more common in poor countries, in countries that are land-locked and in those that have a high export concentration on primary products, as well as those that are less urban.

Additional econometric investigation into the prolonged use of IMF resources has been undertaken by the Fund's Independent Evaluation Office (IEO, 2002). This reveals a tendency for prolonged users to experience relatively weak export growth, a higher incidence of terms of trade shocks and a higher export share of primary products. Prolonged users do not appear to experience higher inflation or larger fiscal deficits, nor is their government expenditure relative to GDP higher, although the composition of this expenditure does seem to be more rigid, with a larger proportion of it in the form of interest payments and defence expenditure. Prolonged users also have a higher public debt to GDP ratio and a somewhat lower tax revenue to GDP ratio. Their external debt situation, as reflected by a relatively high debt service ratio, often seems to be weaker. Prolonged users again emerge as holding relatively low international reserves.

The overall picture with regard to political characteristics in prolonged users is unclear. But the IEO reports few consistent differences between prolonged and temporary users, with the exception that prolonged users tend to experience greater political instability. The influence

of G7 countries, as proxied by aid flows as a measure of political pressure to lend, is found to be small and positive in the case of prolonged users eligible for the PRGF, but negative in the case of middle income prolonged users. Indeed, in terms of a number of variables, the IEO discovers differences between low and middle income prolonged and temporary users. For example, ethnic fractionalisation contributes to explaining prolonged use in the case of middle income countries, but not in the case of low income countries. This may in part explain why Bird et al (2004) find no connection between openness and prolonged use, since they do not distinguish between low and middle income countries.

It is not easy to distil a clear cut conclusion from the econometric evidence on prolonged use. This having been said, the weight of the evidence is broadly consistent with the following caricatures. A typical prolonged user appears to be a low income country exhibiting the conventional characteristics of a high degree of export concentration on primary products, weak terms of trade, and vulnerability to trade shocks. Fiscal variables in terms of government expenditure and tax revenue are relatively rigid and there is frequently a relatively high burden of internal and external debt. Macroeconomic variables (monetary growth and inflation) may be weak but are not significantly weaker than those found in temporary users, although fiscal deficits may be larger. Political and institutional variables may be significant in some cases, but there is little to suggest that they provide a systematic explanation of prolonged as compared to temporary use. It may be the sort of country described in these terms that makes prolonged use of IMF resources under the PRGF; a 'type one' prolonged user so to speak.

However, there may be another type of prolonged user. This 'type two' user may be less common, but arrangements with 'type two' countries may involve more resources. A typical

‘type two’ prolonged user is a middle income country that may have better, but nonetheless time-variant access to private capital. Its degree of export concentration may be less than for low income countries but, at the same time, it may be insufficiently diversified to be insulated from trade shocks or shocks emanating from the capital account. For these countries, prolonged use may take the form of a series of SBAs and EFFs with brief interludes between them, rather than PRGFs. Such countries could account for the prolonged use of GRA resources as opposed to concessionary resources.

What does the empirical evidence tell us about the links between prolonged use and implementation? Unfortunately, the answer is ‘not very much’. There are some signs of an association between the two phenomena such that prolonged users also tend to have a poor record of implementation but, by the same token, poor implementation is not limited to prolonged users; it is a feature of IMF programmes in general. Moreover, there are plenty of examples where in spite of implementing an IMF programme a prolonged user fails to exit or graduate away from the Fund. On the top of this, there is no easily discernible pattern that those formerly prolonged users that have then had periods of Fund abstinence, achieved this as a consequence of a superior record of implementation. There are in fact very few countries that fall into the category of graduating prolonged users. Morocco and Jamaica could be two possible candidates, but in neither case was graduation associated with particularly strong implementation of previous programmes.

Case study research based on a limited number of prolonged users (Pakistan, the Philippines and Senegal) forms another part of the IEO’s report (IEO, 2002) and offers additional information on its causes; although it would have been useful if the cases of prolonged use had been paired with cases of temporary use in order to try and establish differences that

could have accounted for prolonged use. It would be unwise to attempt to summarise these case studies, but much of the evidence they reveal is consistent with many of the arguments made above which are based on econometric research. Fiscal rigidities, external shocks, problems in terms of implementation arising from institutional weaknesses and domestic political opposition from vested interest groups are common. However, it is difficult to claim that these are uniquely characteristics of prolonged users; they may be features of IMF programmes in general. What might be a more particular feature of prolonged users is the continuing pressure that they are put under to have IMF programmes in place as a 'seal of approval' by aid donors, and as a component of debt reduction under the Paris Club and latterly the HIPC (Heavily Indebted Poor Countries) initiative. There is also case study evidence that prolonged involvement with the Fund may have a negative impact on domestic institutional capacity building, as a form of Fund dependence develops over time. This is consistent with econometric evidence suggesting that the probability of graduating from the Fund diminishes as more time is spent under programmes (Conway, 2000; Joyce, 2001). Technical capability may strengthen in some areas, but these may only be the areas that are fostered by involvement with the Fund and its focus on financial programming. The implication of this rather specific capacity building may be that negotiating further programmes with the Fund becomes institutionally somewhat easier. Yet, at the same time, the institutional capacity to design policy domestically that will enable countries eventually to break away from the Fund diminishes.

Is additional strain put on institutional capacity in the case of prolonged users by the inappropriate design of IMF programmes and by an excessive amount of conditionality? Is it inappropriate programme design that is leading to a cycle of poor implementation and prolonged use? This is difficult to test given the multi-faceted nature of conditionality.

However, the IEO Report again provides useful information. It reveals that conditionality as reflected by the number of prior actions, performance criteria and structural benchmarks contained in programmes is *less* strict in the case of prolonged users than it is in the case of temporary users. Both conventional macroeconomic conditionality and structural conditionality is found to be ‘softer’ for prolonged users, with structural conditionality less commonly taking the form of prior actions; implying that programmes in prolonged users exhibited greater flexibility.

In summary, prolonged use is likely to be the outcome of a complex combination of economic, political and institutional factors. At the very least one might wish to distinguish between PRGF-eligible (low-income) countries and PRGF-ineligible (middle-income) countries. But, at this stage, it is not possible to do much more than observe whether the evidence is in general, consistent or inconsistent with any particular hypothesis.

Econometric and case study evidence permits us to identify some factors that do seem to distinguish prolonged users from temporary users and others that do not. Prolonged users do in general have particularly deep-seated structural problems, and are particularly vulnerable to external shocks, but they do not seem to experience economic mismanagement to any greater extent than user countries as a whole, except perhaps in terms of fiscal deficits and the structure of government expenditure. They appear to face particularly binding constraints in terms of external financing or reserve decumulation and there is perhaps a tendency for elements of IMF dependency to develop more so than in the case of infrequent users. Moreover, the Fund has institutionally facilitated the prolonged use of its resources even where its programmes have not proved successful in terms of conventional criteria. To the extent that there is over-ambition, it is difficult to say whether this is a particular hallmark of

prolonged users. As far as it goes, the evidence does not, in general, suggest that prolonged users are in some sense burdened with excessive conditionality. On top of this, the implementation of programmes does not seem to be particularly poor in prolonged users as compared to temporary users; indeed the record may be superior. Given recent analyses of implementation, this implies that political variables are not significantly different amongst prolonged users vis-à-vis temporary users; this is also what the more direct evidence suggests, with the possible exception of political instability. Let us now return to the issue of subgroups.

Conway (2005) examines in more detail the two aspects of the use of IMF resources in terms of recidivism and duration over the period 1974-2003 using quarterly data. He again finds that it is important to distinguish between low-income and medium-income countries, reinforcing the claim made above that there are different types of users of IMF resources. Controlling for year specific effects, external shocks and pre-existing distortions, his results suggest that low-income countries have become increasingly recidivist but that there has been no significant change in the duration of their participation with the Fund once engaged. For middle-income countries, and while there is no trend towards recidivism, past participation reduces the duration of future spells with the Fund. He therefore argues that his overall results showing that the duration of IMF spells is reduced by prior participation while recidivism is increased by it need to be decomposed. They mask the behaviour of the two types of IMF user. Although Conway makes his point specifically with regards the nature of countries' involvement with the Fund in the context of recidivism and the duration of participation, it is of general relevance when analysing the Fund's operations. Empirical studies that adopt a high level of aggregation, whether to analyse the determinants of IMF arrangements or the effects of IMF programmes, may be of strictly limited use and may conceal as much as, or even more than they reveal.

7. Concluding Remarks

With such a lengthy survey it is difficult and perhaps inappropriate to draw a set of relatively brief conclusions. In many areas, as this survey has shown, more research is needed. Moreover, commentary on the Fund has shown that people can draw different and offer apparently conflicting conclusions from the same or similar sets of evidence. Having said this, it may be somewhat frustrating to end by simply arguing that research into the Fund's operations has merely served to show that more research is needed.

To minimize this frustration we can return to Figure 1 and take a final tour around it. Countries turn to the Fund for a combination of economic and political reasons. We have a reasonable idea about the list of factors that may be involved, but there is no one set of circumstances that uniquely explains and predicts referral. There may be little to be gained in trying to use large sample regression analysis to identify one simple model, even one that involves political as well as economic variables. The issue remains, however, as to whether we can identify the most common combinations of characteristics. In this sense, the Fund's distinction between classic case, capital account crisis and low-income countries may be useful as a guide. But, as yet, there is little firm empirical evidence to suggest that countries can easily be placed into these exclusive categories. We certainly need to better understand why governments make the decisions that they do about referral. Here politics as well as economics will be central but the nature of the interaction between them will vary across countries.

In responding to countries' approaches, the Fund may also be influenced by political factors, but again there is no simple model that explains the way in which these will exert their effect. It would appear that U.S. influence is more important in the context of the emerging countries that use stand-bys and extended drawings, while European influence may be more significant in the case of low-income countries or particularly favoured geographical regions such as Africa. But it may remain rather unsafe to claim that idiosyncratic political influences have been translated into a systematic political bias. Moreover, the influences may not be felt simply on whether a loan is agreed. They may be reflected in the details of the loans in terms of the number of conditions (and possibly also their depth, although this has not yet been tested). In as much as the evidence suggests that there are political influences over lending, it also suggests that the Fund's organization may be caricatured in principal-agent terms. But multiple principals and informational asymmetries in reality create considerable scope for policy discretion by the Fund's management and staff. To overcome political influences, it may be desirable to extend this discretion and provide the Fund's management and staff with greater autonomy (de Gregorio *et al*, 1999). This could also help to overcome criticisms relating to IMF governance and the excessive influence of advanced economies. But to help deal with the public choice critique, the Fund's operations would then need to become yet more transparent, and the degree of accountability would need to be raised. The IEO could, for example, take on an extended auditing role to achieve this.

In terms of the IMF providing resources, there is little doubt that, in principle, there can be moral hazard problems. But the empirical evidence suggests an agnostic position. Moral hazard problems have yet to be shown to be widely significant. Also of concern is that adjustment programmes may be starved of external financial support, implying that excessive emphasis is placed on current account correction with adverse consequences for national and

international prosperity. Indeed, the evidence for this may be seen as rather stronger than that for moral hazard. The evidence certainly implies that it is misplaced to rely on the Fund catalyzing private capital markets to lend, although there may be a stronger influence on aid in low-income countries.

Expanding the Fund's own lending has been constrained by the willingness (or unwillingness) of advanced economies to increase quotas and, as a consequence, their subscriptions to the Fund. Greater autonomy could also involve allowing the Fund to borrow directly from private capital markets. Alternatives to catalysis need to be carefully considered (Bird and Rowlands, 2004). It may also be that regional reserve pooling could be more fully exploited as an alternative to either reserve accumulation by individual countries or borrowing from the IMF. In this context regionalism may not be a stumbling block to multilateralism.

There are powerful arguments for continuing to seek to improve the design and effectiveness of conditionality and there are various ways in which this might be done which we have not explored in this survey (although the author has done so elsewhere. For example, Bird, 2004, 2001, 1995). This having been said, the results from the vast literature on the impact of IMF conditionality reveal few real surprises. If countries turn to the Fund when domestic aggregate demand exceeds aggregate supply, and if there are strict constraints on increasing aggregate supply in the short run, the bias of adjustment will be towards demand compression, and this may be expected to have a negative effect in the short run on economic growth and on investment; the evidence tends to show that it does. More interesting is some of the recent evidence that these effects may be mitigated by adjustment on the supply side, although this

in turn raises questions pertaining to institutional comparative advantage and the organisation of the international financial institutions.

There are other less fashionable, but nonetheless important organisational issues. For example, there may be scope for rationalising the Fund's range of lending facilities. Legitimate doubts exist as to whether these conveniently and accurately reflect the circumstances in which countries turn to the IMF for assistance (Bird and Rowlands, 2006b).

The available evidence shows that part of the problem with conditionality relates to the failure of countries to implement it. A switch to more *ex ante* conditionality could, in principle, help overcome this problem and the associated moral hazard problem; there may certainly be a role for prior actions to play. But taken to extremes, *ex ante* conditionality is inconsistent with the Fund's basic purpose to cushion the costs of adjustment. Instead, recognition of the importance of implementation and a growing understanding of the factors that influence it point in the direction of other reforms. In negotiating programmes, more attention needs to be paid to the chances that they will be implemented. Moreover, policy needs to identify ways of increasing the incentives to implement programmes. Economics should provide insights into designing incentive structures. In part, this involves re-examining the ease with which replacement programmes may be put in place and this could also reduce the degree of prolonged use of IMF resources. When there has been enough accumulated experience, a judgement will need to be reached on the initiative of 'streamlining' and the moves aimed at enhancing ownership; more general empirical examination will no doubt be used to complement the rather piecemeal evidence currently available. Research also needs to examine how best for the IMF to respond to non-implementation; where for example should waivers be used?

This leaves to one side the role of the Fund in advanced economies. The role is likely to be limited, and this may severely mute the impact that the Fund has on correcting global economic imbalances. It is also improbable that the Fund will be able to undertake any strong and executive function in terms of globally co-ordinating macroeconomic policy, in spite of the claims it makes about its role in multilateral surveillance. Instead the Fund's principal role is more likely to continue to be played in the countries that turn to it for assistance; emerging economies experiencing short term capital account crises and low income countries experiencing more enduring balance of payments weakness associated with the current account. The different nature of their problems implies that the Fund's financing and adjustment roles need to be adaptable and flexible.

Economic research has made a significant contribution to our understanding of the IMF's role and operations. However, it has also demonstrated that there are limits on what it can tell us about some of the most interesting questions. Why do some countries turn to the IMF in economic circumstances where others do not? What is the nature of political influence over IMF lending? Why do some countries implement the programmes they agree when others do not? To make progress in answering these questions, a genuinely political economy approach is required that integrates economics and politics. In the past, economists have perhaps been reluctant to move away from 'pure' economic analysis. Things are changing; and they will need to continue to change if objective analysis of the IMF is to make further progress. Moreover, on many of the issues, a higher level of disaggregation is required than has been generally adopted. This may not just mean that regression analysis needs to be more subtle and decomposed, but also that a case study methodology needs to be used alongside large sample investigation. Recent research into the Fund is beginning to use this methodological approach.

Although we know much more about the Fund's operations than we did, there are still plenty of questions to be answered. It will be interesting to see what value this new research adds. Another survey in ten years perhaps!

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Notes

1. An alternative financing mechanism is through monetization of the government deficit by borrowing from the monetary authority and expanding the money supply. While the balance of payments effects will depend on the exchange rate regime, a consequence of monetary expansion will be inflation, which may lead to an appreciating real exchange rate, a current account deficit and an unsustainable balance of payments.
2. This presupposes that exchange rate flexibility will eradicate the unsustainability of the balance of payments. In principle it may work on the current account by changing relative prices, in which case its impact depends on conventional foreign trade price elasticities. Even where its effect on the current account is weak because the relative price effect is neutralised in some way - for example via the inflationary consequences of exchange rate depreciation - there may still be an expenditure reducing effect which influences the current account or an effect on the capital account via interest rates or expected exchange rate changes.
3. The Articles of Agreement (Article 1) describe the purposes of the Fund in the following way:

    > Subsection (ii) To facilitate the expansion and balanced growth of international trade and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.
    >
    > (v) To give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus, providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.
    >
    > (vi) To shorten the duration and lesson the degree of disequilibrium in the international balances of payments of members.

4. At the time when governments seek financial assistance from the IMF, however, the balance of payments will have assumed a higher priority since it has become an effective constraint on their ability to achieve these objectives. The potential irony here is that the more successful the Fund is in helping to relax this constraint, the less inclined governments may be to continue to comply with IMF advice and implement IMF conditionality.

5. Other research claims that the ‘principal’ is not the US but private creditors, and that conditionality is varied to reflect their interest (Gould, 2003)
6. To describe the increase in conditionality in this way is to understate it, according to some observers. Killick (1989) talks about an ‘explosion’ in conditionality, not just in terms of the IMF but also in terms of aid donors. Early critiques of conditionality based on its design and extent include Dell (1981; 1982). See also Williamson (1982; 1983). For a response to these early criticisms see Nourzad (1981). Many of the themes raised in this paper could be applied to conditionality in general and not just to IMF conditionality.
7. Indeed to the extent that restrictionary monetary policy, alongside exchange rate depreciation, confers a competitive advantage on their perpetrators they will impose a competitive disadvantage on industrial countries.

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Table 1: IMF Conditionality – Summary of Performance Criteria, 1993 – 1999[1]

	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Number of programmes approved	22	35	30	32	21	21	20
Number of performance criteria of which:	218	367	329	415	338	258	203
Quantitative performance criteria	185	270	272	293	200	195	150
Structural performance criteria	33	97	57	122	138	63	53
Per programme:							
Number of performance criteria of which:	9.9	10.5	11.0	13.0	16.0	12.3	10.2
Quantitative performance criteria[2]	8.4	8.7	9.1	9.2	9.5	9.3	7.5
Structural performance criteria[3]	1.5	2.8	1.9	3.8	6.6	3.0	2.7

[1] The performance criteria refer to the number of different performance criteria set for the programmes approved in each year under Stand-by, Extended Facility, and SAF/ESAF

[2] Quantitative performance criteria refer to floors, ceilings, or occasionally bands on macroeconomic variables such as net international reserves, net domestic assets, and credit to governments.

[3] Structural performance criteria are microeconomic in nature. They are sometimes quantitative (e.g. increase electricity prices by 30 percent by end-March) and sometimes qualitative (e.g. issuance of implementation regulations on procurement and contracting procedures).

Data: IMF

Table 2 Summary of empirical evaluations of the effect of Fund programmes

Study	*Time period*	*Number of programmes*	*Number of countries*	*Effects on*[8]			
				Balance of payments	*Current account*	*inflation*	*Growth*
Before-after							
Reichmann and Stillson (1978)	1963-72	79	…	0	…	0	+
Connors (1979)	1973-77	31	23	0	0	0	0
Killick (1984)	1974-79	38	24	0	0	-*	0
Zulu and Nsouli (1985)	1980-81	35	22	…	0	0	0
Goldstein and Montiel (1986)	1974-81	68	58	-	-	-	-
Pastor (1987)	1965-81	…	18	+*	0	0	0
Khan (1990)	1973-88	259	69	+	+*	-	-
Killick, Malik and Manuel (1995)	1979-85	…	16	+*	+*	-*	+*
Schadler *et al.* (1993)	1983-93	55	19	+	-	-	+
Simulation/estimation							
Khan and Knight (1981)	1968-75	…	29	+	+	-	-
Khan and Knight (1985)	1968-75	…	29	+	+	-	-*
Control-group							
Donovan (1981)	1970-76	12	12	…	…	-	+
Donovan (1982)	1971-80	78	44	+	+	-	-
Goldstein and Montiel (1986)	1974-81	68	58	-	-	+	-
Gylfason (1987)	1977-79	32	14	+*	…	0	0
Loxley (1984)	1971-82	38	38	0	0	-*	0
Khan (1990)	1973-88	259	69	+*	+*	-	+
Przeworski and Vreeland (2000)	1951-90	226				0	-*
Generalized evaluation							
Goldstein and Montiel (1986)	1974-81	68	58	-	-	+	-
Khan (1990)	1973-88	259	69	+*	+*	-	+
Conway (1994)	1976-86	217	73	…	+*	-	-.+*
Bagci and Perraudin (1997)	1973-92	…	68	+*	+*	-	+*
Dicks-Mireaux *et al.* (2000)	1986-91	88	74	…	…	-	+*

Source: IMF (2004).

[1] Direction of change: (+) indicates positive effect, (-) indicates negative effect, (0) indicates no effect.
[*] indicates statistically significant results

Figure 1. IMF Arrangements: A Life Cycle Schema